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Unemployment and Marital Breakdown: The Spanish Case

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\textbf{Abstract:} This paper explores the relationship between a job loss and marital breakdown using Spanish panel data. The Great Recession in Spain has had severe consequences, representing an interesting framework to analyse the relationship between job loss and marital breakdown. Not only do we study whether being unemployed is associated with marital breakdown but, also, we examine the effect of job losses. In contrast with other papers examining this issue for other countries, results reveal that in Spain it is the working status of women which plays a role in the marital break-up decision. Results suggest that the probability of marital breakdown decreases when women are non-working. The same is observed when we consider a change in the working status of women from employed to unemployed and from employed to inactive. For men, only the change from employed to inactive appears to be negatively related to the probability of marital breakdown.

\textbf{Keywords:} Marital breakdown, unemployment, job loss, inactivity.

\textbf{JEL:} J12, J20

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1. Introduction

The Great Recession following the global financial crisis of 2007-2008 severely affected many countries; one of them Spain, where the unemployment rate has remained above 16% to the present day, reaching a maximum of 26% in 2013 (INE, Instituto Nacional de Estadística), triple that of the pre-crisis period. Whereas, for instance, in the United States (US) the maximum rate was around 10% in 2009 and in 2016 had returned close to the pre-crisis level of 4-5% (US Bureau of Labor Statistics), continuing to follow a downward trend to the current 3.8% (May 2018). The Spanish case constitutes an interesting scenario for studying the effects of losing a job in an adverse labour market situation in which, as the media and politicians have suggested, the family is helping to overcome the financial problems. In this setting, we wonder whether a job loss is positively (or negatively) related with marital breakdown.

From a theoretical point of view, the relationship between unemployment and the probability of marital instability is ambiguous; see for a review, González-Val and Marcén (2017; 2018), Jensen and Smith (1990) and Kraft (2001). Based on the specialization of housework, Becker et al. (1977) argue that unemployment could affect marital stability through a variety of mechanisms which may differ by gender. The Beckerian framework predicts an increase in the probability of marital breakdown when there is a male job loss, whereas increasing the participation of women in the labour market should increase the probability of marital break-up. Under the Nash-Bargaining approach, (Andaluz et al., 2017; Lundberg and Pollak, 1993; Manser and Brown, 1980), a higher probability of marital breakdown is not expected when the threat point falls at the same rate as marriage after a job loss (Kraft, 2001). When marriage is considered as insurance against economic hardship, a job loss may lead to a decrease in the probability of marital break-up (Stevenson and Wolfers, 2007). Recently, Ariizumi et al. (2015) indicate that the sign of the relationship between marital disruption and unemployment depends on the balance of the economic crisis impacts against the gains derived from marriage and the options outside marriage. Alternatively, Amato and Beattie (2011) propose the psycho-social stress perspective and the cost of divorce perspective. The first perspective leads to a positive association between unemployment and the probability of marital breakdown, although the effect should be greater when the variables are lagged, since the stress of decreasing employment opportunities takes time to affect marital stability. From the cost-of-divorce perspective, a job loss can generate economic constraints, making access to a potentially costly marital break-up more difficult; for this reason, unemployment should be inversely related to the probability of marital break-up.
None of the prior theoretical studies consider such an extreme scenario as that observed in Spain, with quite high unemployment rates and liberal divorce legislation. In Spain, there was a significant divorce law reform introducing the unilateral divorce in 2005 that reduced the costs of divorce, making it very accessible. Therefore, the Spanish case is also attractive because the marital break-up decision is not driven by costly divorce processes. Obtaining a divorce because of a job loss of a partner is easier in Spain than in other countries because of the legal framework.

In our analysis, we use Spanish microdata from 2008 to 2014, covering the worse years of the economic recession. We first analyse the relationship between being non-working and marital breakdown. In this setting, there can be some endogeneity concerns if, for example, the variations in working status are driven by the marital status of individuals. To mitigate these concerns, we extend our analysis to the effect of job losses, which can be considered as unexpected, on marital breakdown. We carry out all our analysis by gender since, as mentioned above, some theoretical frameworks suggest different effects of male and female unemployment on the likelihood of marital break-up. Additionally, we explore the potential different effects of negative (job loss) and positive (a change from being non-working to being employed) shocks on marital stability.

2. Data

We use data from the “Encuesta de Condiciones de Vida”, the Spanish version of the European Union Statistics on Income and Living Conditions (EU-SILC) for the period 2008-2014. The EU-SILC collects comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion and living conditions, following each individual over four years. We choose data for the period 2008-2014 because it covers the period of the severe economic crisis (unemployment rates increased from 11.25% in 2008 to 24.44% in 2014). In addition, this is a period when the aforementioned divorce law reform enacted in 2005 came into effect. We select individuals aged 28 to 59, therefore, of working age. Since Spanish people tend to leave the nest later in life, we have chosen individuals older than 28. The retirement age in Spain is 65, so our sample of individuals is under that age. We exclude single individuals. After matching individual records, the final sample consists of 15,578 observations of 4,368 respondents (couples).

1 The mean age at first marriage in the period considered for men and women in Spain is around 33 and 31 years old, respectively (INE).
2 We only consider heterosexual couples.
3 The number of marital break-ups in the sample was around 2.2 per 1,000 observations on average, which is similar to the Spanish divorce rate during the period considered (INE).
Table 1 shows the summary statistics of our main sample, containing women aged 44 years old on average and men aged 46 years old. Around 33% of the women have a tertiary level of education, a percentage quite similar to that of men (30%). They have on average 1.5 children and 45% live in a very populated area (with population greater than 500,000 inhabitants). With respect to our variables of interest, the working status, only in the case of almost 6% of the couples both spouses are non-working, while 40% of the couples have only one spouse non-working. There are gender differences since 42% of women are non-working whereas only 18% of men have that status. Dissimilarities are also observed in the accumulated number of years working: only 12 for women and 22 for men.

More interesting descriptive data can be observed in Table 2, in which we split the sample between those whose marriage has broken up at some point, and those in “intact” marriages during the sample period. As can be observed, marital breakdown takes place when women are aged 44 and men 48, on average. Comparing both groups, we do not observe important differences with respect to age, level of education, place of residence and number of years working. Those in intact marriages conceive 0.6 more children, which supports the argument of Bellido et al. (2016), who found that children play a role in marital stability. When both individuals are non-working they are more likely to be in intact marriages. This is not observed when only one spouse is non-working although there are again important gender differences. Women who are non-working are more likely to be in intact marriages but non-working men are more likely to divorce or separate. This may point to a different effect on marital stability depending on who is the non-working member of the couple.

3. Empirical strategy

A priori, the relationship between the working status and the probability of marital break-up is not clear. Initially, let us assume the following model:$^4$

\[
Marital\ Dissolution_{ijt} = \beta_1 + \beta_2 Nonworking_{ijt} + \mu X_{ijt} + \eta_j + \theta_t + u_{ijt}
\]  \hspace{1cm} (1)

where the dependent variable is a dummy that takes value 0 if couple $i$, who lives in region $j$, is married in year $t$ and value 1 the year $t$ in which the couple $i$ divorces or separates. $Nonworking_{ijt}$ is our variable of interest, and represents the working status of one or both members of the couple $i$ in year $t$, we revisit this issue below. $\beta_2$ would

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$^4$ We use a linear probability model for simplicity, as usual in the literature studying the likelihood of marital breakdown. Results are similar using probit/logit models.
be positive (negative) depending on whether the working status situation increases (decreases) the probability of marital breakdown. The vector $X_{ijt}$ includes a range of the spouses’ characteristics, such as age of men and women, level of education of both of them (secondary and tertiary, lower than secondary is excluded), the number of children, and whether the respondent lives in a very populated area. All these variables may have an impact on the likelihood of marital breakdown for reasons independent of working status. The model also includes region ($\eta_j$) and year fixed effects ($\theta_t$) to control for unobserved characteristics that vary at the regional level and over time. $u_{ie}$ is the error term.

4. Results

Table 3 presents the estimates of equation 1. As can be seen in column 1, for those couples having both members non-working (inactive or unemployed), the probability of marital breakdown does not appear to be affected since the estimated coefficient is not statistically significant. The same is observed in column 2 when all controls are added into the regression. Therefore, this result may indicate that the financial constraints that not having a job may generate are not a significant factor in determining the probability of marital break-up. It is also possible that the opposite predicted relationships between a job loss and marital breakdown (positive or negative) could be operating as a counterbalance. If this were happening here, similar estimates should also be detected in a less restrictive situation when only one of the spouses is non-working. Columns 3 and 4 (with/without controls, respectively) report the estimations, where our variable of interest is that only one spouse (either the man or the woman) is inactive or unemployed. The coefficients are not statistically significant either.

Gender differences in the response to a job loss may be driving these findings. From the Beckerian approach (Becker et al., 1977), the gender perspective in the behaviour of spouses to a job loss is not unrealistic. For example, an increase in the probability of marital breakdown as a consequence of male non-working situations may be compensated by a decrease in the likelihood of marital break-up caused for female non-working status. To check this, we separately explore the relationship between the male/female non-working situation and the probability of marital breakdown in columns 5 and 6 of Table 3 (with/without controls, respectively). Results indicate a negative relationship between the women’s non-working status and the probability of marital breakdown whereas in the case of inactive or unemployed men the estimated coefficient.

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5 Results do not change when we exclude all these variables.
6 According to the literature (Bellido et al., 2016), the number of children has an effect on the probability of marriage breakdown. Surprisingly, the other controls do not appear to be statistically significant.
is not statistically significant, albeit positive. Thus, the separation of gender work status is of interest in this analysis. Our findings point to marriage as an insurance only for female unemployment or inactivity during the Spanish Great Recession.

As mentioned above, the use of the working status can generate endogeneity concerns, because it is possible to argue that the marital status of individuals can affect their working status (Schaller, 2013; González-Val and Marcén, 2017, 2018). To tackle this issue, we also explore whether changes in the working status have an effect on the probability of marital breakdown. This is possible since we are using panel data. These changes can be considered as unexpected since the exact time when a job loss takes place is difficult to predict when individuals get married. Results are presented in column 1 of Table 4 where we find a negative relationship between the job loss of women and the probability of marital breakdown and no effect in the case of men.

Another issue not examined previously is the fact that there can be a gap between the job loss and the marriage break-up (González-Val and Marcén, 2017; 2018). In the case of those individuals that are unemployed, if they cannot find a job during several periods, the probability of marital breakdown could increase as times goes by. The duration of this lag is not theoretically clear; for this reason, we follow the prior literature studying the lagged impact of unemployment on several demographic variables and we add the non-working situation lagged from 1 to 2 years (Amato and Beattie, 2011; González-Val and Marcén, 2017; 2018; Schaller, 2013). We can explore whether unexpected job losses are positively (or negatively) related to marital breakdown over time.

Table 4 displays the results of this lag-specification. We find a lag of one period in the effect of female job losses but not for men’s, see columns 2 and 3. Additionally, we have included in the analysis supplementary information on the working behaviour of the members of the couple, which can be an indicator of the expectations of spouses. First, we include two variables that measure women and men’s years of unemployment/inactivity in column 4. Coefficients picking up their effect are not statistically significant. However, when the years of work of both members of the couple are added to the analysis (column 5), we detect gender differences. Women’s behaviour is important since the greater the number of years working the higher the probability of marital breakdown. This can also point to the argument that when women are economically independent, for example, because they have worked for several years, they do not need the marriage as insurance making separation and divorce more likely.

Note that the maximum duration of unemployment benefits in Spain is two years and individuals remain in the sample a maximum of four years.
In this framework, positive shocks, that is, when spouses get a job, could also have an effect on the probability of marital breakdown. In Table 5, we have incorporated both negative (job loss) and positive shocks (getting a job) in order to check whether only the negative shocks matter. We observe no effect in the case of the positive shocks. Our findings regarding the other variables are maintained. Again, only the female job losses appear to be negatively related to marital breakdown. A lag of one period in the relationship and a positive effect of the number of years that women have worked are still observed.

Up to this point, we have jointly considered the unemployment and inactivity situation. However, it can be surmised that a job loss from employment to an unemployment situation (actively searching for a job) or to an economically inactive status can generate different effects on the probability of marital breakdown. For those who are economically inactive, the approach that considers marriage as insurance against economic hardship can play a more important role. This may be relevant in this study since women are more likely to be inactive because, for instance, traditionally they are more likely to care for their children. In Spain, the female active population was around 53% in the period considered, while that of men was 67%. To address this issue, we explore the effect of movements from a job loss to unemployment or inactivity in Table 6 (columns 1 and 4). The coefficients are the same in the case of women’s job losses, pointing to no differences in the association with marital breakdown likelihood, but they are different in the case of men. As can be seen in column 4, when men’s working status changes from employed to inactive the probability of divorce decreases, whence it may be inferred that the inactivity protects marriage against separation or divorce regardless of the gender of the individuals, but unemployment has a similar effect only for women. Regarding the lag-specification, results are presented in columns 2, 3, 5 and 6 of Table 6. For women, we find a lag of one period in the effect of a job loss (regardless of whether this job loss causes unemployment or inactivity). The same is observed for men’s job losses from employment to inactivity but not for job losses from employment to unemployment. The argument with respect to the view of marriage as insurance can also be applied here.

5. Conclusions

From 2008 to 2014, the Great Recession in Spain had strong negative effects. Spain is also a country with quite low divorce costs, which makes this country an attractive framework to study the consequences of job losses on marital breakdown. To run this
analysis we used panel data from the EU-SILC for a sample of individuals aged 28 to 59.

In contrast to the findings of Kraft (2001), who found that men’s work status is more important for marital stability than that of women using German data, we find that women’s inactivity and unemployment are factors negatively related with the probability of marital breakdown after considering the working status of individuals, but also when unexpected job losses are considered from employment to unemployment or inactivity. In the case of men, only unexpected job losses from employment to economic inactivity appear to decrease the probability of marital breakdown. These findings may point to the view of marriage as insurance (Stevenson and Wolfers, 2007) in a setting of very extreme economic downturns when individuals are not working or actively searching for a job. From our results, we can also conclude that the working status of women appears to be more important than that of men in the marital break-up decision in Spain.

References


Table 1. Summary Statistics. Main Sample

<table>
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<th>Variables</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>7.443</td>
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<td>59</td>
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<tr>
<td>Men’s age</td>
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<td>59</td>
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Observations/Respondents 15,578/4,368

Notes: Spanish data from the EU-SILC, period 2008-2014. Our sample incorporates individuals aged 28 to 59.

Table 2. Summary Statistics. Main Sample
(‘Divorced or Separated’ – ‘Intact marriage’ subsamples)

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<th>‘Intact marriage’ subsample</th>
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Notes: Spanish data from the EU-SILC, period 2008-2014. Our sample incorporates individuals aged 28 to 59.
Table 3. The relationship between the breakdown of marriage and the working status of both members of the couple

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Notes: Our sample incorporates individuals aged 28 to 59. Robust standard errors, clustered by region, are in parentheses. Significant at the *10%, ** 5% and *** 1% level.
### Table 4. The relationship between the breakdown of marriage and job loss (unemployment and inactivity): Adding more controls

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<td>-0.003***</td>
<td>-0.003***</td>
<td>-0.002***</td>
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<td>unemployed/inactive t</td>
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<td>(0.001)</td>
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<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
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<td>-0.004***</td>
<td>-0.002***</td>
<td>-0.003**</td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>(0.003)</td>
<td>(0.003)</td>
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<td>0.004</td>
<td>0.008</td>
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Notes: Our sample incorporates individuals aged 28 to 59. Robust standard errors, clustered by region, are in parentheses. Significant at the *10%, ** 5% and *** 1% level.
Table 5. The relationship between the breakdown of marriage and negative and positive shocks in the working status

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<td>From employed to unemployed/inactive t</td>
<td>-0.002*** (0.001)</td>
</tr>
<tr>
<td>From employed to unemployed/inactive t-1</td>
<td>-0.004* (0.002)</td>
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<tr>
<td>From employed to unemployed/inactive t-2</td>
<td>0.007 (0.009)</td>
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<tr>
<td><strong>Men’s Negative shock:</strong></td>
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</tr>
<tr>
<td>From employed to unemployed/inactive t</td>
<td>-0.002 (0.002)</td>
</tr>
<tr>
<td>From employed to unemployed/inactive t-1</td>
<td>0.001 (0.006)</td>
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<tr>
<td>From employed to unemployed/inactive t-2</td>
<td>-0.005 (0.004)</td>
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<td><strong>Positive shocks</strong></td>
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<td>Women: From unemployed/inactive to employed</td>
<td>0.003 (0.005)</td>
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<td>Men: From unemployed/inactive to employed</td>
<td>-0.005 (0.004)</td>
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<td>Women’s Years working</td>
<td>0.0002** (0.0003)</td>
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<td>Men’s Years working</td>
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<td>Women’s years of job loss</td>
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<td>Men’s age sq/100</td>
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<tr>
<td><strong>R-squared</strong></td>
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Notes: Our sample incorporates individuals aged 28 to 59. Robust standard errors, clustered by region, are in parentheses. Significant at the *10%, ** 5% and *** 1% level.
Table 6. The relationship between the breakdown of marriage and job loss (unemployment and inactivity separately)

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<td></td>
</tr>
<tr>
<td>From employed to employed t</td>
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<td>-0.003***</td>
<td>-0.003**</td>
<td>From employed to employed t-1</td>
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<td>-0.003***</td>
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</tr>
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<td>-0.004**</td>
<td>-0.004**</td>
<td>From employed to employed t-1</td>
<td>-0.004***</td>
<td>-0.003***</td>
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<td>(0.002)</td>
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<td><strong>Men Loss:</strong></td>
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<td>Women’s age sq/100</td>
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<tr>
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<tr>
<td>Living in a very populated area</td>
<td>0.00003</td>
<td>0.0004</td>
<td>0.001</td>
<td>Living in a very populated area</td>
<td>0.00002</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.018**</td>
<td>-0.022**</td>
<td>-0.013</td>
<td>Constant</td>
<td>-0.018**</td>
<td>-0.021**</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.010)</td>
<td>(0.020)</td>
<td></td>
<td>(0.006)</td>
<td>(0.010)</td>
</tr>
<tr>
<td><strong>Region Dummies</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td><strong>Region Dummies</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Year Dummies</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td><strong>Year Dummies</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>15578</td>
<td>10991</td>
<td>6943</td>
<td><strong>Observations</strong></td>
<td>15578</td>
<td>10991</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.003</td>
<td>0.004</td>
<td>0.007</td>
<td><strong>R-squared</strong></td>
<td>0.003</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Notes: Our sample incorporates individuals aged 28 to 59. Robust standard errors, clustered by region, are in parentheses. Significant at the *10%, ** 5% and *** 1% level.