

Are female-breadwinner couples always less stable? Evidence from French administrative data

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Introduction

Two dramatic changes have transformed gendered patterns of employment and breadwinning in couple-households in recent decades. First, dual-earner couples became widespread with the massive entry of women in the labor market. Second, there has been an increase of couples with women more educated than their partners in the developed world ([1],[2]). These two trends implicate that female-breadwinner couples are structurally becoming more widespread ([3]).

Because female breadwinning challenges long-lived social norms regarding conservative gender roles, scholars have theorized that female-breadwinner couples would be more exposed to the risk of union dissolution compared to couples in other earning arrangements. However, recent work found interesting fading patterns. First, the female-breadwinner penalty is less strong among recent American marriage cohorts ([4]), suggesting a decreasing penalty over time. Second, some studies found no evidence of a female-breadwinner penalty in union dissolution among cohabiting couples ([5]). Finally, previous studies also showed that the risk of union dissolution is highest for female-breadwinner couples in contexts where gender equality is not supported by institutional arrangements ([6],[7]) and where support for the male-breadwinner norm is high ([8]).

France represents an interesting case study for several reasons: as elsewhere, female breadwinning represents a non-negligible earning arrangement (as of 2017, women earn more than their partner in one in four couples); three partnership forms (i.e. marriage, cohabitation, and registered partnership) exist; female employment and dual earning have been common, socially accepted and publicly supported in France for decades now.

Using a unique administrative panel data source (the French Permanent Demographic Sample for the period 1st Jan 2011-1st Jan 2017, which links censuses, vital events registrations, housing and income tax declarations), with an unconventionally high number of couples (representing 4% of the total French population) and separations events (more than 100,000), this article aims at investigating whether female-breadwinner couples are more likely to separate compared to other couple types. This is the first study –to our knowledge– that tests whether the female-breadwinner penalty in union dissolution also holds in France.

Moreover, the originality of our paper is threefold. First, the large sample size allows us to define very precisely the woman's share of couples' total income. This precision allows us to consider how the risk of union dissolution varies across the distribution of partners' relative earnings, hence going beyond the two groups (female breadwinner versus all others couples) or three groups comparison (male breadwinners, equal earners and female breadwinners) often used in the literature. Furthermore, because our measures of earnings and incomes are based on fiscal records, our data is immune to self-reporting bias typical of survey data where e.g. men tend to over report and women to underreport their incomes ([9],[10]). Second, previous studies found that the female breadwinner penalty in union dissolution is common to both married and cohabiting couples, but with heterogeneity in counterfactuals: while male breadwinning is more stabilizing for married couples, equal earning is more stabilizing for cohabiting couples ([11],[12],[13]). Beyond comparing female breadwinning to diverse counterfactual groups, this paper further distinguishes between three types of couples: marriages, (informal) non-marital cohabitations and registered partnerships. Such distinction allows us to investigate if the female-breadwinner penalty observed for cohabiting couples in previous studies also holds for non-married couples in more formal registered partnerships. Finally, we study a diversity of life-stages, ranging from 20 to 80+ years, bringing to light unexplored age effects on the risk of union dissolution of female-breadwinner couples. All previous studies have investigated the link between partners' relative incomes and divorce focusing on active ages. It is however worth studying union stability at later ages too because "gray" divorces are becoming more and more common ([14]), and because retirement can be a 'turning point' in late life associated with increased risk of union dissolution ([15]), above and beyond changes in partners' relative employment and incomes.

Research questions

This paper first aims at filling a general research gap on the association between female breadwinning and union dissolution for the French context: Are female-breadwinning couples more likely to separate in France, a country where dual earning has been common and socially supported for years now?

Second, despite cohabiting couples are becoming more widespread across the developed world, the association between the risk of union dissolution and partners' relative incomes has mainly been studied for married couples. Moreover, in France a third form of union (i.e. registered partnership) exists. Our second research question is thus the following: Does the risk of union dissolution for female-breadwinner couples differ across union types (married, registered partnerships and cohabiting couples)?

Third, we adopt a dynamic approach that considers changes in and out of female breadwinning all along the life course. This approach allows us to answer to our third research question: Does the relationship between female breadwinning and union dissolution change over different life-stages?

Finally, female-breadwinner couples denote couples with women earning more than their male partners. This broad definition of female breadwinners, however, encompasses two essentially different couple types: dual-earner couples with women out-earning their partners, and couples where women are the sole wage earner. We will refer to this particular couple as '*pure*' female breadwinners. 'Pure' female breadwinners tend to have low household incomes, lower than those of male breadwinners, and low levels of education, whereas women as main earners tend to have higher household incomes, comparable to those of men as main earners, and high levels of education ([16]). Our fourth and final research question is thus the following: Are 'pure' female-breadwinner couples where women are the sole earner, more exposed to the risk of union dissolution compared to dual-earner couples where women out-earn their partners?

Results

We apply logistic models on the yearly risk of union dissolution. Standard errors are clustered at the individual level. Our dependent variable accounts for whether a coresidential partnership in time t dissolves the following year $t+1$. We identify this event with a change in the marital status declared in the tax returns for married and registered partnerships, and by a change in household composition for cohabiting unions. In the observation window 95,538 unions dissolutions occur (36,016 divorces, 5,343 registered partnership break ups and 54,179 separations). On average, each year, around 1.4% of couples dissolved in our sample.

Our primary independent variable is the woman's share of the couples' total incomes. For each partner, income is defined by the sum over the year of all the individual incomes (from wage, positive self-employment income, unemployment allowances and retirement pension) declared in the fiscal return. To include both relative incomes and relative employment status in one unique indicator, we build a discrete scale of the woman's share of couple's incomes that includes 'pure' male breadwinners (i.e., the woman's share is 0 to 5%) and 'pure' female breadwinner (i.e., the woman's share is 96 to 100%), along with a range of intermediate situations. We use an eleven-item categorization (with 9 intermediate positions in 10% intervals ranging from (5%-15%] to (85-95%]).

In order to answer to our research questions and because we can expect the associations between female breadwinning and risk of union dissolution to be stratified by crucial variables, we also considered several interactions of couples' income arrangements: with man' employment situation, couple's total income quintiles, marital status and couple's mean age (robustness checks were performed on a subsample including interactions between couples' income arrangements with union duration and education).

Our results confirm that female-breadwinning couples are more likely to separate in France, a country where dual earning has been common and socially supported for decades now. All other things being equal, couples in which the woman's share of the couple's total income is higher than 55% are significantly more unstable than all other couples (Fig. A). Our results hold whatever the counterfactual couples considered, either equal-earners couples or male-breadwinner couples. We do not find any sign of a fading effect among the younger cohorts (Fig. E), as suggested by previous research ([4]) and by our own expectations. The relationship between men and women's relative economic status and union dissolution seems fairly stable over the life-course, at least for the generations we could observe. The female-breadwinner penalty is always present and robust to the inclusion of different control variables, interaction effects and model specifications.

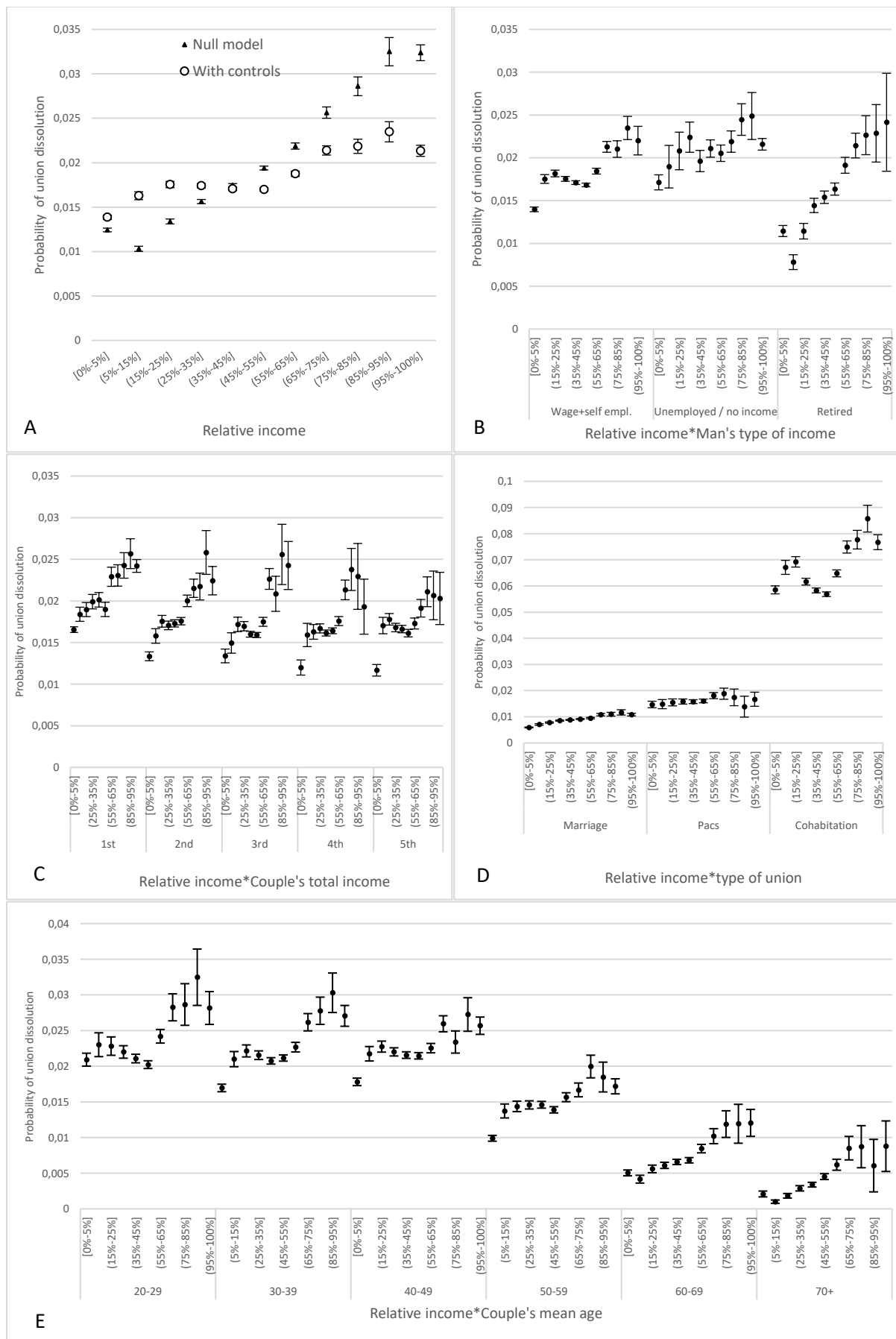
Although we expected the female-breadwinner penalty for couple stability to be less salient for unmarried couples (which are on average more egalitarian), evidence shows that the effect is observed for every type of couples (Fig. D). The higher risk of union dissolution for female-breadwinner couples hold across various marital arrangements (marriage, non-marital cohabitation, registered partnership). However, some interesting stabilizing effects for dual-earner couples are observed for cohabitations and registered partnerships as long as partners have roughly similar earnings. This is an interesting sign of evolving behaviors and norms. Because previous literature does not consider so many classes in the female share, or usually opposes female breadwinner couples to all other couples, this feature has not been emphasized previously.

Female breadwinning hides two different realities: 'pure' female-breadwinner women with a non-working man, and dual-earner couples where women out-earn men. The mechanisms behind a possible higher risk of separation for such couples in comparison to couples in other earning arrangements might sensibly differ for these two couple types. Both couple types deviate from 'rigid' gender roles but economic precariousness and uncertainty characterize only 'pure' female breadwinners ([17]). We approach the issue by performing different specifications. First, we isolate this group in our scale of female income share. Second, we interacted male employment status and the female breadwinner scale (Fig. B), distinguishing between employed men, not employed and already retired men. Third, we observe the female-breadwinner penalty all along the household income distribution (Fig. C). The magnitude is larger for lowest income, meaning that the two effects mentioned possibly cumulated for poorest couples. All results show that the 'pure' female breadwinner are specific because of their characteristics, and different risk of dissolution but does not drive the overall separation-promoting effect observed for all female breadwinner couples. In other words, the deviation from traditional gender roles when the bargaining power within couple is contrary to the norm, might be the main factor, while the economic precariousness would play as a secondary and additional one.

Our work also points that the counterfactual couples are a very heterogeneous group for which dissolution risk has possibly evolved. A traditional division of work (i.e. when the woman is out of the labor force or has very limited monetary resources) is always associated with lower risk of dissolution. The risk of dissolution increases with the woman's share of couple's total incomes. But on this increasing trend, we observe an interesting plateau or even a stability premium for dual-earner couples where female incomes are substantial or roughly equal than male incomes. Interestingly, the premium observed for equal-earner couple is mainly visible for registered partnerships and overall for cohabitants, and is less salient for married couples. The fact that the stability premium is observed for unmarried couples is in line with their more egalitarian values. A plateau is also visible for married couples. In terms of couple age, this plateau for couples whose partners have similar income is also much more observable for youngest couples than oldest. While female breadwinning always increases the risk of dissolution and male breadwinner always decreases this risk, equal-earnings seem protective for the couples only in some situations for the moment: youngest and non-married but might generalize in the future. This result is in line with results showing that woman's employment situation is becoming more important and the profile of "stable couples" is changing with the widespread of dual-earner model. The increasing gradient with female income share will probably becoming U-shaped in the future and couples whose partners have similar incomes might become in the future most stable partnerships.

Our work presents some limitations. First, our administrative data does not allow us to control for partners' gender ideology and hence future studies shall test whether the female-breadwinner penalty linked to union dissolution disappears once gender ideology is controlled for. Second, our age approach is limited since the observation window from 2010 to 2017 is not large enough to distinguish age from generation effects. Third, we are not able to disentangle whether the separation is rather at the initiative of the woman who might be more free and has the financial autonomy to escape from an unhappy couple, or from the man's initiative because he would not dare the situation of being the lower earner because of the gender role deviation of such a situation. Both mechanisms are possibly at work. More qualitative work or panel survey asking about divorce initiation might be good complements to go further. However, the consistent higher dissolution for female breadwinner couple in diverse circumstances is clearly an indication that the deviation from norms has difficulties to be accepted even in a country such as France where female employment is largely accepted and supported by the family policies.

Figures: Predictive margins of union dissolution according to woman's relative income share (A), for each of the levels in the interaction of woman's relative income share and man's type of income (B), couple's total income (C), type of union (D), and couple's mean age (E), logit models



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