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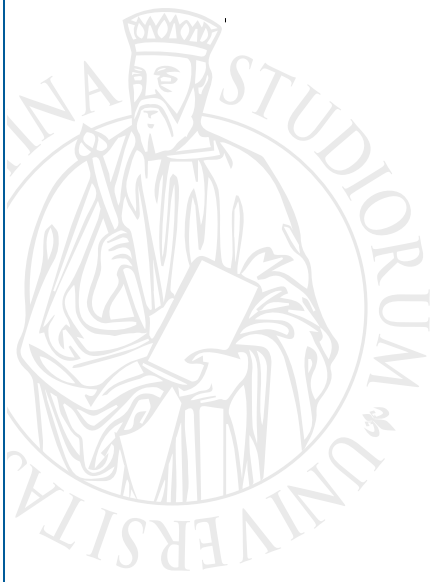

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First Union Formation in Australia:
Actual Constraints or Perceived Uncertainty?

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Abstract

The present study adds to the growing literature on union formation in case of uncertainty by proposing an operational distinction between actual constraints and perceived uncertainty regarding the future. Using longitudinal data from 17 waves of the Household, Income and Labour Dynamics in Australia survey, we empirically disentangle objective employment-related constraints, their subjective perception, and perceived uncertainty about the future on the hazard of entry into the first union. Our results corroborate the notion that, alone, objective measures give only a partial and possibly inaccurate perspective: the specter of the future also matters. Relevant differences in selection into first union are observed according to the level of uncertainty faced by individuals. Moreover, our findings reveal a nonlinear relationship between uncertainty and family formation. Faced by either very low or very high uncertainty, individuals who are employed tend to invest their resources in family formation—a trend which may well be respectively encouraged or discouraged by the state of the labor market. With mid-levels of uncertainty, individuals may instead prefer to invest into the labor market and postpone union formation.

Keywords: Employment conditions; Perceived employment uncertainty; First unions; Australia.

Introduction

The link between family dynamics and economic conditions has received renewed attention in the era of uncertainty (Mills and Blossfeld 2013). Kohler and colleagues (2002) were among the firsts to argue that individual-level economic uncertainty contributed to delay union formation and childbearing in early adulthood in favor of a prolonged residence in the parental home so as to better pursue higher education or job stability (see also Blossfeld et al. 2005). Comolli et al. (2019) advocated that the recent rise in uncertainty is a result of today's world becoming much more interconnected than before. Similarly, Vignoli et al. (2020) argued that the increasing speed, dynamics, and volatility of globalization outcomes—and the exponential rate of technological change—makes it increasingly difficult for individuals to imagine their future, and choose between alterative family formation strategies.

We contribute to this growing literature on the economic uncertainty/family dynamics nexus in two ways. First, we focus on the first step towards family formation: the entry into first union. Various studies have shown that youth unemployment, term-limited working contracts, and unstable employment inhibit childbearing (Barbieri et al. 2015; Kreyenfeld and Andersson 2014; Özcan et al. 2010; Pailhé and Solaz 2012; Vignoli et al. 2012). These studies, however, have tended to focus on a selected group—those already in established couples (e.g., Busetta et al. 2019; Vignoli et al. 2019). As unemployment and jobs with uncertain conditions often reflect a partnership sorting mechanism, individuals—especially men—with truly unstable careers are more likely to not be in a co-residential relationship (Kim 2017; Piotrowski et al. 2015; Vignoli et al. 2016). Hence, much of the recent literature on fertility has disregarded a crucial first step into the family formation process, namely the selection into first union (Kohler et al. 2002). As such, the current study pursues this line of enquiry by stepping back in the life course and scrutinizing patterns of union formation in case of uncertainty.

Second, we propose an operational distinction between objective constraints and perceived uncertainty about the future. Economic uncertainty has been customarily considered an individual risk factor, mainly related to unfavorable labor market conditions, such as unemployment, short-term contract jobs, or a combination of these factors (Scherer 2009; Kreyenfeld et al. 2012; Mills and Blossfeld 2013). Recent advances also consider subjective measures of employment conditions (Kreyenfeld 2010; Bhaumik and Nugent 2011; Hofmann and Hohmeyer 2013; Fahlén and Oláh 2018). Aside from the perception of security of one's own employment situation, however, economic uncertainty is primarily defined as a lack of clarity about future economic prospects (Bloom 2014), or, simply put, unknown probability distributions to possible outcomes (Beckert 1996). In a context in which (bounded) rational calculations of opportunities and constraints concerning family decisions are obfuscated by increasing uncertainty, recent advances in family demography posit that actors' choices are influenced by the "shadow of the future", namely the (more or less) uncertain expectations of the future (Bernardi et al. 2019; Vignoli et al. 2020). We follow such a debate by empirically disentangling objective constraints, their subjective perception, and perceived uncertainty about the future.

The empirical analysis focuses on Australia by utilizing longitudinal data from the Household, Income and Labour Dynamics in Australia (hereafter referred to as the HILDA survey). The country is characterized by a stable economy. The Great Recession of 2008 had little or no effect on its economy and labor market participation—for instance, unemployment rates remained hovering at around 6% (against approximately 4% before the 2008 financial crisis). From 2000 to 2016, female labor force participation rose from 65% to 72%, while male participation in the labor market remained at approximately 82% (data from the Australian Bureau of Statistics – Labor Force 2000–2016). Having a relatively stable labor market that is only slightly affected by the macro-level economic and financial fluctuations makes Australia

an interesting case study. Our analysis thus provides new insights to whether and how individual-level perceived uncertainty influence family-building processes, net of objective actual constraints, in a relatively stable economic and financial context.

Australia, as a context, is also interesting since it is a country with a high incidence of non-standard employment (Buddelmeyer et al. 2015). This study considers two forms of contingent (Polivka and Nardone 1989) employment: casual employment and fixed-term contracts. Casual employment contracts are relatively common in Australia. In 2019, there were 2.6 million casual workers who accounted for 24.4% of total employees (data from the ABS – Australian Bureau of Statistics). This type of contract is especially prevalent among young workers: in 2016, almost 80% of employees aged 15–19 and 40% of 20–24-year-old workers were in casual employment. Despite they are entitled to a wage premium to compensate unstable hours worked and the absence of entitlements to various employment benefits, and despite the fact there is a large presence in the Australia labor market of individuals with a long history of "stable causal" employment (ACTU 2012), casual jobs are seen as insecure and poorly paid and with poor employment perspective (Buddelmeyer and Wooden 2011; Watson 2013). Casual workers are likely to suffer fluctuations in their earnings with irregular and insufficient work hours, have poor mental health, and lower levels of job satisfactions (Buddelmeyer et al. 2015); in addition, they are not entitled to paid leave (including maternity leave). Fixed-term workers are instead entitled to welfare protection measures similar to those with permanent contracts but face the uncertainty of being considered redundant at the end of each term.

This paper focuses on the entry into first union. We consider both legal marriages ("marriage") and de facto relationships ("de facto"). The latter—defined in Australia by the Family Law Act 1975 – 4AA—refers to a couple cohabiting on a genuine domestic basis but without being legally married. While certain Australian states and territories ask couples to

register a de facto relationship, it is not compulsory. In practice, couples in de facto relationships and legal marriages have equal rights before the law. In Australia, being in a de facto relationship is often a pre-step before marriage. In 2017, almost 80% of married couples cohabited before getting married. In the mid-1970s, this figure was closer to 16% (ABS data). McDonald and Evans (2003) found a similar pattern between marriage and de facto when comparing several Australian cohorts. A de facto relationship can thus be seen as a "try before you buy" phase (Perelli-Harris et al. 2014). For this reason, and since we study the transition to the first union that is likely to be a cohabitation, we consider entrance in first union as either entrance in first de facto or first legal marriage, whichever occurs first.

Employment uncertainty and union formation

Employment uncertainty may hinder or delay family formation (Ranjan 1999). Patterns of union formation represent adaptations to accelerated globalization, rapid economic restructuring (e.g., the gig economy and the decline in stable jobs), and growing income and wealth inequality (Sassler and Lichter 2020). The implications for marriage and cohabitation of the Great Recession and its recovery have received a great deal of scholarly attention in recent years (Cherlin et al. 2018; Schneider and Hastings 2015). In line with the globalization perspective (Blossfeld et al. 2005; Mills and Blossfeld 2013), marriage—a resource-intensive and long-term commitment—is likely to be postponed when people face employment uncertainty until their outlook on life is more optimistic (Golsh 2003; Vignoli et al. 2016). According to the uncertainty hypothesis developed by Oppenheimer (1988), uncertainty is embodied by (especially men's) unstable careers, as indicated by low-status jobs, non-employment, and irregular and temporary employment. This employment uncertainty impedes assortative mating and may therefore delay marriage. Furthermore, the spread of job precariousness jeopardizes financial resources, thus potentially acting as a barrier to marriage

or a wedding ceremony (Livi Bacci 2008). American research generally supports the view that poor economic prospects for men and women are associated with a delay in marriage in favor of cohabitation (see Sassler and Leichter 2020). European results suggest that working in nonregular or fixed-term jobs, or garnering only temporary work contracts, significantly reduces the likelihood of entering into marital unions (Piotrowski et al. 2015; Vignoli et al. 2016). For example, Bukodi (2012) showed that job instability or downward career trajectories tend to depress the marriage rates among those entering marriage-age cohorts in the United Kingdom. Studies on socio-economic determinants of first union formation in Australia report results in line with those found in other contexts: individuals with unstable employment conditions—in particular unemployed males and/or those with lower levels of education—are more likely to postpone union formation (e.g., Evans 2015; Heard 2011).

Despite this boom in the literature, the empirical evidence on the economic uncertainty/union formation nexus remains inconclusive. Past research has failed to recognize that individuals, depending on the extent to which they feel and tolerate uncertainty, might differ in their reactions and decision-making in uncertain economic situations (Bernardi et al. 2009; Kreyenfeld 2010). Beckert and Bronk (2018) recognized that the presence of uncertainty is one of the salient characteristics of a capitalist society. However, the need for individuals to make decisions remains, regardless of whether uncertainty hinders the possibility of rational calculations concerning future events. Imagination and the ability to devise and anticipate different scenarios play a major role in future-planning. In this framework, assessing the degree of perceived employment uncertainty means evaluating the expectations attached to different aspects of employment life.

Another crucial limitation of previous studies is that they have tended to overlook the role of the *strength of uncertainty*. Bhaumik and Nugent (2006) posited that the "net effect of uncertainty" on the value of the option to postpone family formation depends on the degree of

uncertainty: a moderate increase in uncertainty would increase the chances of postponing or avoiding pregnancy, but, beyond a certain threshold, further increases are of less significance when individuals have little to lose, and may instead even raise the probability of childbirth. According to the narrative inspired by the socio-psychological uncertainty reduction theory developed by Friedman and colleagues (1994), the decision to marry may indeed serve as a strategy to reduce biographical uncertainty. This theory contends that uncertainty reduction is an immanent value whose reduction will always be sought by rational actors. Accordingly, women may respond to unfavorable employment prospects by choosing the "alternative career" of wives (and mothers) to give structure to an otherwise uncertain life course. While previous research has, at best, tested a monotonically positive or negative relationship between economic uncertainty and family formation, this paper will explicitly consider the possibility of a non-monotonous relation. This is intended as an effective and interesting alternative view with which to explain the economic uncertainty/family formation nexus.

Against this backdrop, the present study addresses two research questions:

1) Objective or perceived (future) uncertainty? What is the relative importance of perception of employment uncertainty on entrance into first union?

2) Does the relationship between uncertainty and family formation follow a non-monotonous pattern?

Data

This paper draws on longitudinal data from the first 17 waves of the HILDA survey. HILDA is a nationally representative household-based panel study which began in 2001. Each year, the study collects a variety of information from each person aged 15 and older living in the household at the time of the interview. As a baseline (2001), 13,969 people from 7,682

households were interviewed. In 2011, a top-up sample of 2,153 households were added (Watson and Wooden 2002).

We considered individuals aged between 15–35 who could possibly enter into their first union (9,459 individuals who had never been in a legal marriage or de facto relationship before). We started at age 15 as, by law, 16 is the minimum age at which a person can legally marry in Australia.

We further excluded those who would have been in education throughout the entire observational period (449) due to the study's interest in examining the effect of employment uncertainty on family formation. Hence, we selected individuals who were, at least potentially, active on the labor market.

In order to have the same set of individuals for all the analysis—and since our interest lies in both subjective and objectives measures of uncertainty, and their prospective effect—we only kept a record when the respondent reported both sets of measures (which occurred in 95.58% of all cases). Since we lagged the measures of one wave in order to avoid reverse causality issues, we restricted the analysis only to those with valid information on at least two consecutive waves. We ended up with an analytic sample of 5,855 individuals (2,727 women and 3,128 men) for a total of 24,775 respondent-wave observations.

Variables

Outcome variable. We estimated the transition into first union (either a de facto relationship or legal marriage) using a discrete time event history model. The outcome variable is coded as a 0 (being single) or 1 (being in a union).

Uncertainty measures. Unlike previous studies, our aim was to test the relative importance of both subjective and objective working uncertainty measures. The measures used in the present study were as follows:

a) *Employment status and characteristics* (objective employment condition). We considered whether the person was unemployed or outside the labor force. Additionally, HILDA distinguishes among permanent or ongoing contracts, fixed-term, casual basis, and being self-employed. Due to the prevalence of young workers in casual employment and the peculiarities of this type of non-standard working contract, we will consider fixed terms contracts and casual contracts as two separate forms of contingent employment.

b) *Subjective measures*. We explored three possible subjective measures: the satisfaction over actual job security, and two forward-looking measures of employment uncertainty. One refers to satisfaction regarding current employment condition, and two refer to future employment prospects.

1. Satisfaction of job security. The question reads as follows: "I want you to pick a number between 0 and 10 to indicate how satisfied or dissatisfied you are with your job security." The variable ranged from 0 to 10. Since the distribution of the responses is highly skewed (distribution of responses is available upon request) we have discretized the variable into low satisfaction (from 0 to 5) and high satisfaction (6 to 10).
2. Probability of losing a job. Q: "I would like you to think about your employment prospects over the next 12 months. What do you think is the percent chance that you will lose your job during the next 12 months? By loss of job, I mean getting fired, being laid off or retrenched, being made redundant, or having your contract not renewed."

3. Probability of finding a job. Q: “I would like you to think about your employment prospects over the next 12 months. What do you think is the percent chance you will find a suitable job during the next 12 months?”

The responses ranges from 0 to 100. The distribution of responses is highly skewed with peaks around round numbers (0, 5, 10, 20, 50 and so on). Considering the distribution of responses (available upon request) and for ease of interpretation, we discretized the probability of losing one’s job into three categories (no chances of losing job, below 50%, 50% and over). The chance of finding a job was discretized into four categories: “heavily discouraged of finding a job” (0 to 10% chance); “discouraged” (from 10 to 50%); “optimistic” (50 to 80%); “very optimistic” (80% and over). See Table 1 (below) for descriptive statistics of subjective and objective measures of uncertainty.

Sociodemographic characteristics. In the multivariate model, we controlled both for the age (in its quadratic form) and socioeconomic status of the respondent. In particular, the level of education of each respondent was coded in three levels (compulsory or below, diploma, bachelor or above) and parental occupational level (highest level between parents) using the ISCO-based classification mentioned below. We further controlled for the most recent occupational level, using the ISCO-88 one-digit level code for the current (at *t-1*) or most recent type of occupation. We distinguish between high skilled white collar (ISCO codes 1, 2, or 3); low skilled white collar (ISCO codes 4 and 5); high skilled blue collar (ISCO codes 6 and 7), and low skilled blue collar (ISCO codes 8 and 9).

Method

We used a discrete time event history model to analyze the effect of experiencing uncertainty in the labor market on the propensity of entering into first union.

A discrete time event history model is analogous to a random effect logit model, we estimated then the following models:

$$\Pr(First\ Union_{i,t}) = \alpha + u_i + \boldsymbol{\beta} * Contract_{i,t-1} + \boldsymbol{\gamma} * \boldsymbol{X}_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

$$\Pr(First\ Union_{i,t}) = \alpha + u_i + \boldsymbol{\beta} * Perception_{i,t-1} + \boldsymbol{\gamma} * \boldsymbol{X}_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

$$\Pr(First\ Union_{i,t}) = \alpha + u_i + \boldsymbol{\beta} * Contract * Perception_{i,t-1} + \boldsymbol{\gamma} * \boldsymbol{X}_{i,t-1} + \varepsilon_{i,t} \quad (3)$$

In these models, *u* represents the random effects, while **X** is the aforementioned set of time varying and time invariant sociodemographic characteristics. All time varying covariates were lagged so as to avoid possible issues of reverse causality.

As a first step, we estimated the effect of employment condition on the likelihood of first union. The second step involved examining the perception of employment uncertainty. Lastly, we estimated the final model with both objective and subjective measures. Since we established three measures of perceived uncertainty, models 2 and 3 were run separately for each perceived measure. As we suspected the effect would be strongly gendered, we stratified the analysis by gender.

We computed the average marginal effects (AMEs) to interpret any changes across groups (Mood, 2010). AME expresses the effect on P (Y = 1) as a categorical covariate changes from one category to another or as a continuous covariate increases by one unit, averaged across the values of the other covariates introduced in the model.

We defined entering into a union as either starting one's (first) de facto relationship or legally marrying one's partner—whichever was the first to occur. Legal marriage and beginning a de

facto relationship could be considered as two competing events since legal marriage implies a stronger commitment than a de facto (Baxter et al. 2015). However, in our sample—and as shown elsewhere (Perelli-Harris et al. 2014, Evans 2015)—being in a de facto seems to be a pre-step before marriage. In several cases, the transition from single to de facto is followed (in a relatively short amount of time) by the transition from de facto to marriage. Since the two events do not seem to be in direct competition, and as the legal rights for both sets of couples are the same, we decided to refer to both as a (first) union formation event. Nevertheless, as robustness checks we opted to run both a competing risk model with both types of unions, and considering entrance in first union in terms of getting legally married, a resource-intensive and long-term type of commitment. Once done, we found no specific pattern to suggest a different attitude between legal marriage and de facto in our study (results available upon request). Moreover, since in our data legal marriage often comes after a de facto (i.e., we have few cases in which the first union was directly a legal marriage), to have more robust estimates our empirical strategy is to consider both legal marriage and de facto as entry into the first union.

Results

Descriptive results

In our analytic sample, 41.47% of women reported a temporary casual job, against 30.28% for men (see Table 1). Women were also more often outside of the labor force (8.38% versus 6.79%). Nevertheless, both men and women reported similar levels of uncertainty. On a scale of 0 to 10, respondents of both genders reported approximately an 8-point level of satisfaction of job security and, if unemployed, the perceived chance of finding a suitable job (resilience) in the next 12 months was at roughly 73%. The perceived chance of losing job among the

employed for both genders was approximately 12%. Dividing by employment condition, perceived uncertainty is higher among those in contingent jobs. For instance, among men the perceived chance of losing job next year is around 13% for fixed terms and casual workers (13.3% and 13.2% respectively) and 9% for those with a permanent position. Similarly, men in causal employment reports a satisfaction of job security around 7.8 points versus 8.3 of workers with an on-going contract.

[TABLE 1 HERE]

Thanks to the longitudinal perspective of the data, we were able to verify whether the subjective measures could be viewed as reliable indicators of employment positioning. Table 2 compares the response at time (*t-1*) with the employment condition in the following wave. By way of a reference, we also reported on the transition probabilities between employment conditions (i.e., being employed or not). Non-standard employments (casual and fixed terms) are by definition uncertain (Polivka and Nardone, 1989), and characterized by a lack of guarantee of permanency. 16% of those in a casual employment are not employed in the following year against 10.30% among fixed terms workers and 7.79% of those with a permanent position. The results for all three subjective indicators showed that respondents were able to correctly evaluate their condition. For instance, an increase in optimism about the chance of finding a job was linked to an increase in actually finding one, as shown by the following assessment. However, feeling secure in one's position (perceived high job security satisfaction or low/zero chances of losing the job) does not completely protect against actual job loss (which occurred in roughly 11% of cases). See also Dickerson and Green (2012) for a general discussion on the validity of subjective measures of employment insecurity.

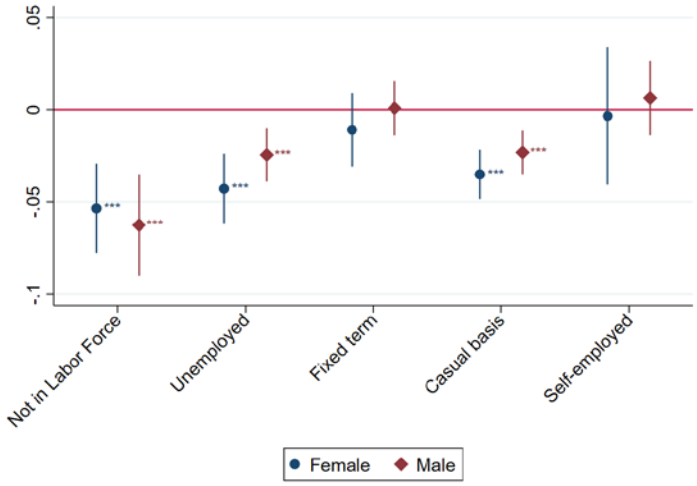
[TABLE 2 HERE]

Multivariate Model

Employment condition. In the first model specification, we considered the link between structural conditions (i.e., the type of contract) and the propensity of union formation. Figure 1 depicts the average marginal effects of objective labor market positioning on union formation. As expected, being outside the labor force or being unemployed were shown to hinder the transition to first union for both men and women. We found an AME of -0.063 and -0.053, respectively, for men and women outside the labor force and of -0.025 and -0.043 for the unemployed. Similar behavior was observed amongst self-employed workers and those with an ongoing contract. The type of non-standard employment plays a role. With respect to workers with ongoing permanent contracts, a precarious worker with a casual job is more likely to postpone the entrance in a union (AME of -0.023 among men and of -0.035 among women). Notably, we instead found no statistically significant differences in the propensity to start the first union between permanent workers and those with fixed-term contracts. This finding is substantial, as it evidences the importance of recognizing temporary workers as constituting a heterogeneous group. The two types of contingent contracts (causal and fixed term) are indeed different. Casual employees have no right to paid leave and have a tendency to work more hours. Conversely, fixed-term workers have similar employment protection to permanent workers and, as mentioned above, have the right to ask for an ongoing position after a certain number of years of fixed-term employment with the same employer.

The effects of the control covariates were as initially expected, thereby providing us with an indirect validation of the statistical model itself. Age has a positive and nonlinear effect on the probability of starting first union. Higher levels of education or highly skilled jobs (ISCO code 1, 2, and 3) facilitate the creation of first union (Evans 2015). The full results for the multivariate model can be found in the appendix.

Fig. 1 Probability of entering into a first union by types of contract. Average Marginal Effect.



Note. Reference category: Permanent position. Model controlling for age (quadratic form), level of education, occupational level and parental background. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

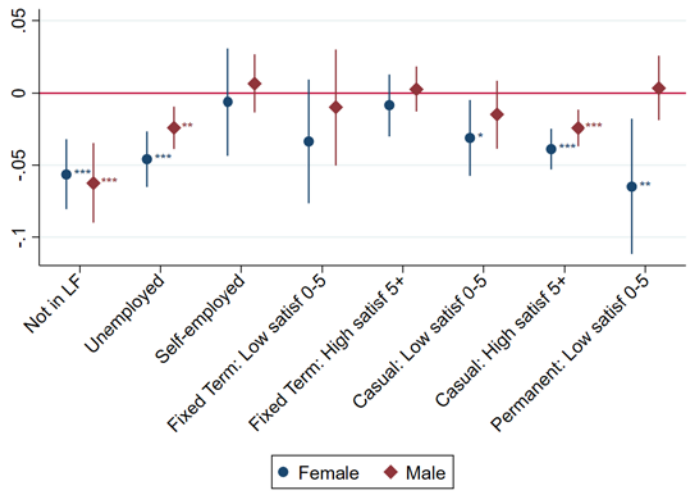
Job satisfaction. Whereas the satisfaction regarding one's current job alone (model 2) seemed to have no relevant association with the transition to first union among men (see Table 3 - Model 2 in the appendix), women who reported lower levels of job security satisfaction had a decreased chances of entering into a union (AME of -0.022).

Considering both employment condition and the subjective measure of job security (model 3), it is interesting to observe their effects on workers with permanent contracts (see Figure 2 or Table 3 – Model 3 for complete results). Employed women, even with low levels of job security satisfaction (score below 5), tended to postpone entering into first union (average marginal effect of -0.065). While it should be noted that the estimates were not statistically precise, it is worth examining the relevance of perceived job security among temporary workers with fixed-term contracts. For both men and women, the lower the levels of satisfaction, the higher the chance of postponing a union.

Due to the distribution of the responses (with an average satisfaction level of approximately 8), it is not possible to further distinguish among those with lower satisfaction levels. The

results (available on request) do not change significantly were we to divide the group of satisfied workers into mid- (5–8) and high-level (8+).

Fig. 2 Probability of entering into a first union by employment condition and satisfaction. Average Marginal Effects



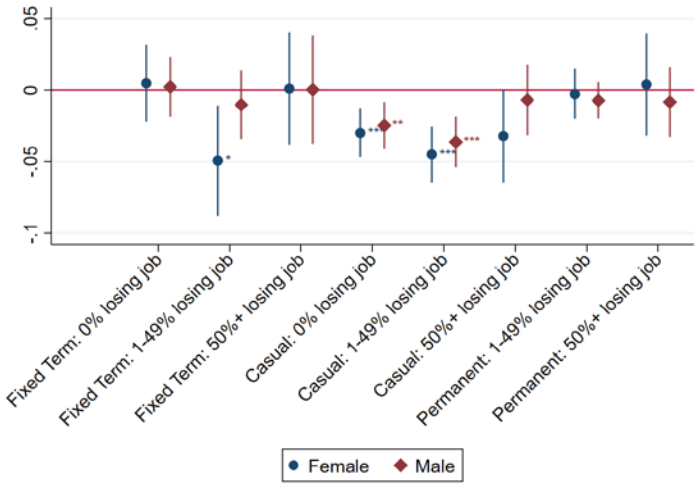
Note. Reference category: Permanent position and high level of satisfaction. Model controlling for age (quadratic form), level of education, occupational level and parental background. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Perceived uncertainty: Chances of losing one's job. Perceived job uncertainty refers to the probability of losing one's job. The results from model 2 (see Table 4 - Model 2) suggest the presence of a nonlinear relationship between perceived uncertainty and union formation. Once the level of uncertainty in job security begins to increase, so does the likelihood of starting a union decline (AME of approximately -0.01 in Model 2 for both men and women). However, this probability increases again after a certain level (50% in our case).

Model 3 examines both actual and perceived constraints (Figure 3, and Table 4 for complete results). The reference category is someone with a clear and stable condition, namely, an individual with an ongoing position who declares a 0% chance of losing their job in the next year. Except for those with ongoing contracts, this non-monotonous pattern of the association

between perceived uncertainty and entrance in first union is observed both for casual and fixed-term workers of both genders.

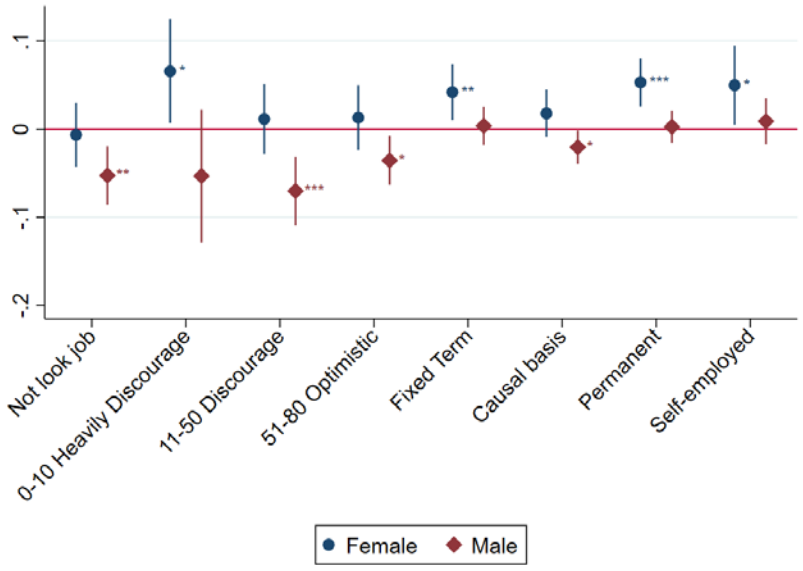
Fig. 3 Probability of entering into first union by employment condition and perceived job uncertainty. Average Marginal Effect



Note. Reference category: Permanent position and no chance of losing job. For readability purposed AME for those self-employed, unemployed or outside labor force are not reported. Model controlling for age (quadratic form), level of education, occupational level and parental background. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Perceived uncertainty: Probability of finding a job. A state of unemployment was typically associated with the lowest probability of starting a union in the following year. That said, the perceived chances of reemployment are important (see Figure 4 or Table 5 for the full results). Both men and women seem to first focus on family formation during times of high uncertainty in the labor market—something particularly visible among women. The results were in line with an uncertainty reduction narrative (Friedman et al. 1994). Increasing the perceived chances of finding a job (i.e., reducing uncertainty), had the effect of reducing unemployment's negative impact. Highly discouraged female workers (unemployed women who reported a below 10% probability of finding a job) reported high chances of starting a union.

Fig. 4 Probability of entering into a first union by perceived chances of finding a job. Average Marginal Effects



Note. Reference category: Unemployed and very optimistic (80% and more) of finding a job. Model controlling for age (quadratic form), level of education, occupational level and parental background. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Robustness checks

The results remained substantively unchanged after our running of several robustness checks (available upon request). In terms of the statistical model and sample used, to control that the effect was not solely age-related, we re-ran the analysis to include individuals up to the age of 50. Rather than looking at the condition only from the previous wave, we used the employment uncertainty from the two previous years (*t-1* and *t-2).* While we excluded those in education during the entire observational period from our analytical sample, including also these cases (449), the results remain similar. This study considers three different measures of uncertainty. In order to have the same analytic sample over the different specifications, we included only the cases (the wave) in which the information on all the key measures were available. We re-ran the model without imposing this constraint either by using a different

sample for each model or imputing the missing values. Once again, the results remained unchanged.

Furthermore, we tested different cut-off points for the subjective measures of uncertainty. For example, we recoded the chance of finding job as 0–20, 20–40, 40–60, 60–80, 80% and over. We further differentiated between those satisfied with their job security into two categories: mid- (5–7) and highly-satisfied (8+). Alternatively, while keeping two categories, we changed the cut-off point to 8. The perception of losing one's job was split into five categories instead of three: no chance, 1–20%, 20–40%, 40–60%, 60–80%, 80% chance and over. Due to the distribution of the responses and the fact that the questions were posed only to those already concerned with their positions (i.e., the question around chance of finding a job was asked only to unemployed/active job seekers; and satisfaction of job security and the chance of losing one's job only to employees), we cannot simply use the numeric scale available in the survey.

As mentioned above, instead of considering a first union as either a legal marriage or de facto relationship, we ran both a competing risk model to distinguish between the two types of unions and considering only the transition to a legal marriage as first union formation event. No substantive differences were found.

Conclusions

The current study is one of the first attempts to examine the effect of uncertainty on family formations in a dynamic, prospective, and multidimensional manner. Using detailed information on contract types—considered to be a marker of objective measure of uncertainty—along with perceived uncertainty about the future, we were able to open the

black box, as it were, of the heterogeneous group of temporary workers and the role of perceived uncertainty.

The temporary workers group should not be regarded as a monolith, and selection into union was instead observed according to the level of uncertainty individuals face. In Australia, casual workers—despite usually enjoying a wage premium to wage premium to compensate unstable hours worked and the absence of entitlements to various employment benefits —are those who feel more precarious in our sample. These results are in line with those of Buddelmeyer et al. (2015) that found causal workers having the lowest level of job satisfactions among non-standard workers. Indeed, both men and women delayed entrance into first union at similar rates to those observed for unemployed respondents.

The relationship between uncertainty and family formation seems to be nonlinear—being uncertain does not necessary delay union formation. Our results highlight the presence of three "levels" of uncertainty, displaying a sort of U shape relationship between uncertainty and accelerated union formation.

Low uncertainty: This is the "ideal" situation for forming a union. Our results support the empirical evidence behind the socioeconomic union formation differential. Those with better economic prospects—such as low actual and perceived levels of employment uncertainty—are more attractive on the marriage market. Also among those who are unemployed and then by definition with a disadvantage labor market positioning, increasing the chances of finding a job (i.e., reducing their uncertainty) brings to an increase chance of entrance into first union. In line with the literature on second demographic transition (e.g., Blossfeld 1995; Goldstein and Kenney 2001), we found evidence to suggest that working and economic security seem to enhance marriage chances among both men and women in a similar fashion. This would suggest, at least in an Australian context, the existence of gender equality towards chances of union formation in the presence of labor market uncertainty.

High uncertainty: In cases of very high uncertainty, individuals tend to invest their resources into family formation—a fact possibly due to their being discouraged by the situation in the labor market. This is particularly strong among women. Our empirical results highlight this while looking at the perception of finding a job in the next 12 months among the unemployed. This result (visible especially among women) seems to be in line with an uncertainty reduction narrative (Friedman et al. 1994). Women have a tendency to "focus" primarily on family life if the uncertainty of the labor market is too high.

Middle uncertainty: When the state of the labor market is ambiguous, union formation is typically postponed. This is coherent with the uncertainty hypothesis of Oppenheimer (1988). Regarding objective uncertain situations, in terms of unemployment or temporary (casual) jobs, individuals tent to delay union formation. This could be due to an inability to predict how the married life will be and if there would be able to economically contribute to it. A similar behavior was observed among people somewhat uncertain about their futures. We found evidence of delayed union formation among the unemployed who were only partially discouraged in finding suitable employment opportunities ("discouraged of finding a job"), as well as the employed who partly worried about losing their job in the foreseeable future (less than 50% of losing job). When individuals are uncertain about their work, but still have a chance to either exit unemployment or retain their jobs, they may decide to invest their (material and immaterial) resources on the labor market while reducing those for the marriage market.

In Australia, entry into marriage (legal or de facto) is a step more likely to be taken by those with strong economic prospects, or envisaged by those with very poor employment prospects who regard union as a sign of stability in an otherwise unstable life situation. This potential, non-linear path dependency between union formation and employment uncertainty might help

reconcile some contrasting empirical findings. It offers an interesting and alternative view from which to understand the economic uncertainty/family formation nexus.

Additionally, our study advances the importance of considering—besides structural employment conditions and their subjective perception—how different future expectations influence family formation decisions. In sociological and demographic studies, "economic uncertainty" remains an elusive and highly debated notion, often operationalized by unfavorable labor market conditions. In economics, it is identified by the inability to assign probabilities to outcomes influencing one's own economic situation (Beckert 1996; Knight 1921), which in turn leads to uncertainty about future economic prospects (Bloom, 2014). Yet the need for decision-making remains even if uncertainty hinders the possibility of a rational calculation regarding future events (Beckert and Bronk 2018). Our results suggest that future expectations, and the ability to anticipate different scenarios in the employment sphere, play a major role in union formation. The use of prospective measures of uncertainty thus offers a promising path of inquiry for the study of family life courses in the era of uncertainty. Importantly, individuals have shown themselves to have a sound grasp over their level of uncertainty: the HILDA panel design allowed us to verify that those more worried about losing their job were in fact at a higher risk of actual job loss.

While our findings have contributed to the literature on employment uncertainty and family formation, our study is not without its limitations. First, marital status is self-reported. An individual might be in a stable long-term relationship, either living together or apart, in something akin to a de facto relationship but may not report it as it is often not compulsory to do so. This may well have led to the under-reporting of cases of union formation. Nevertheless, considering only legal marriages for the robustness check showed that the patterns remained similar. Second, and despite the fact that subjective evaluations are

backdated by one year, the perception of uncertainty might still be endogenous with respect to the chances of union formation. A person in a stable relationship—a condition that may accelerate the likelihood of starting a union per se—could well underestimate their level of uncertainty on the labor market. Vice-versa, those who have an unstable or no relationship (or, those "uncertain" of their family life) may tend to project and overestimate their uncertainty onto the labor market. Third, selection issues may have been present due to latent traits such as personality, risk propensity, or intelligence that may have been associated with "success" both on the marriage and labor market. Finally, due to the small-scale sample size, we could not further distinguish the workers according to job prestige. However, we could expect that, among the heterogeneous group of temporary workers, those with highly skilled and top-level professions may be more materially and immaterially wealthy so as to aid a successful performance on the union market. In any event, our multivariate model controlled for the level of education and ISCO classification of the current/recent job as proxy for skills level.

Notwithstanding these limitations, this study provides evidence for the heterogeneity of family behavior of temporary and non-temporary workers, and of the relevance for including perceptions of uncertainty while studying family-related behaviors. We advance existing research on family life course by looking at the first critical step of family formation, namely the transition into first union—as opposed to other studies that have focused directly on fertility behaviors. Our results cannot be reconciled with any notion of a simple, uniform, and unidirectional relationship between uncertainty and union formation. Instead, they emphasize the need for a multi-dimensional approach. We conclude that the sole use of objective measures (structural constraints) gives only a partial, and perhaps inaccurate, perspective. The specter of the future appears central to union formation behaviors—at least in Australia.

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TABLES

Table 1. Subjective and objective uncertainty measure by gender. Pooled data

	Female	Male
Objective measure: type of contract		
Not in Labor Force (LF)	8.38%	6.79%
Unemployed	14.43%	17.06%
Permanent	27.93%	35.24%
Fixed-term	6.24%	7.51%
Casual Basis	41.47%	30.28%
Self-employed	1.55%	3.11%
Subjective measures		
Satisfaction of job security (0–10)*	8.06 (1.9)	8.05 (SD 1.88)
Percent chance of losing a job (0–100)*	11.17 (SD 38.00)	12.30 (SD 37.63)
Percent chance of finding a job (0–100)**	72.67(SD 26.61)	73.53 (SD 25.5)
Subjective measure recoded		
Satisfaction Job security		
Not in LF/Unemployed	22.81%	23.85%
Low satisfied: 0–5	7.71%	7.58%
High satisfied 5+	67.93%	65.46%
Self-employed	1.55%	3.11%
Percent chance of losing job		
Not in LF/Unemployed	22.81%	23.85%
Self-employed	1.55%	3.11%
No chance (0%)	40.80%	34.85%
Low chance (1–49%)	28.74%	31.49%
High chance (50%+)	6.10%	6.70%
Percent chance of finding a job		
Employed	77.19%	76.15%
Not working, not looking for job	6.49%	5.24%
Heavily Discouraged (0–10%)	0.75%	0.73%
Discouraged (10–50%)	4.02%	4.16%
Optimistic (50–80%)	5.29%	6.92%
Very optimistic (80%+)	6.26%	6.80%

Note: The percentage refers to the lagged value as used in the multivariate model.
* refers only to employees; ** the respondent is a job seeker.

Table 2. Perceived uncertainty at previous wave and current employment condition. Pooled data. Percentage by row

	Current employment condition	
	Unemployed/Outside Labor Force	Employed
Satisfaction of job security (*t*-1)		
Low satisfied (0–5)	17.22	82.78
High satisfied (6–10)	11.43	88.57
Percent Chance of Losing a Job (*t*-1)		
No chance of losing job (0%)	11.29	88.71
1–50% chance of losing job	11.60	88.40
50% and more chance of losing job	18.33	81.67
Percent Chance of Finding a Job (*t*-1)		
Heavily Discouraged (0–10%)	64.48	35.52
Discouraged (10–50%)	52.27	47.73
Optimistic (50–80%)	44.64	55.36
Very optimistic (80%+)	31.82	68.18
Employment condition (*t*-1)		
Fixed terms	10.30	89.70
Casual basis	16.18	83.82
Permanent	7.79	92.21
Self-employed	15.80	84.20
Not employed	43.48	56.52

Note: the question regarding percent chance of finding a job was asked to those currently unemployed and active in the labor market. The questions on chance of losing employment and job security satisfaction were asked to those currently working.

APPENDIX

Table 3. Probability of entering a first union. Subjective measure: Satisfaction of job security. Average Marginal Effects. Stratified by gender

	Men			Women		
VARIABLES	(1) Objective condition – Type of contract	(2) Subjective measure – Satisfaction job security	(3) Type of contract and subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Satisfaction job security	(3) Type of contract, subjective measure
Type of contract (t-1)						
Ref. Permanent						
Not in LF	-0.063***			-0.053***		
	(0.014)			(0.012)		
Unemployed	-0.025***			-0.043***		
	(0.007)			(0.010)		
Fixed-term	0.001			-0.011		
	(0.008)			(0.010)		
Casual basis	-0.023***			-0.035***		
	(0.006)			(0.007)		
Self-employed	0.006			-0.003		
	(0.010)			(0.019)		
Satisfaction of job security (t-1)						
Ref. High satisfaction (5+)						
Not employed (Not LF/Unemployed)		-0.024***			-0.029***	
		(0.006)			(0.008)	
Self-employed		0.011			0.009	
		(0.010)			(0.019)	
Low satisfied (0–5)		0.000			-0.022**	
		(0.008)			(0.010)	
Type of Contract and Satisfaction Job Security (t-1)						
Ref. Permanent position and high satisfaction						
Not in LF			-0.062***			-0.056***
			(0.014)			(0.012)
Unemployed			-0.024***			-0.046***
			(0.007)			(0.010)
Self-employed			0.007			-0.006
			(0.010)			(0.019)
Fixed-term: Low satisfied (0–5)			-0.010			-0.034
			(0.020)			(0.022)
Fixed-term: High satisfied (5+)			0.003			-0.009
			(0.008)			(0.011)
Casual: Low satisfied (0–5)			-0.015			-0.031**
			(0.012)			(0.013)
Casual: High satisfied (5+)			-0.024***			-0.039***
			(0.006)			(0.007)
Permanent: Low satisfied (0–5)			0.003			-0.065***
			(0.011)			(0.024)
DEMOGRAPHICS						
Age	0.047***	0.034***	0.032***	0.056***	0.059***	0.056***
	(0.006)	(0.003)	(0.003)	(0.008)	(0.008)	(0.008)
Age squared	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Level of Education						
Ref. Compulsory or below						
Diploma	0.007	0.009*	0.008	0.025***	0.027***	0.024***
	(0.006)	(0.005)	(0.005)	(0.007)	(0.007)	(0.007)
Bachelor or above	0.017***	0.019***	0.019***	0.013	0.014*	0.013
	(0.007)	(0.006)	(0.006)	(0.008)	(0.008)	(0.008)
Current or most recent job skill level						
Ref. High Skilled white collar						
Low skilled blue collar (ISCO codes 8 and 9)	-0.018***	-0.022***	-0.019***	-0.008	(0.014)	-0.003
	(0.007)	(0.006)	(0.007)	(0.012)	-0.012	(0.014)
High skilled blue collar (ISCO codes 6 and 7)	-0.003	0.000	-0.002	-0.046	(0.011)	-0.008
	(0.007)	(0.006)	(0.006)	(0.028)	-0.048*	(0.012)
Low skilled white collar (ISCO codes 4 and 5)	-0.016***	-0.019***	-0.015**	-0.016**	(0.028)	-0.047*
	(0.006)	(0.006)	(0.006)	(0.007)	-0.019***	(0.028)
Parental background. Job skill level						
Ref. High skilled white collar						

VARIABLES	Men			Women		
	(1) Objective condition – Type of contract	(2) Subjective measure – Satisfaction job security	(3) Type of contract and subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Satisfaction job security	(3) Type of contract, subjective measure
Parents. Low skilled blue collar	0.023***	0.018**	0.017**	0.028***	0.030***	0.029***
	(0.008)	(0.008)	(0.008)	(0.010)	(0.010)	(0.010)
Parents. High skilled blue collar	0.019**	0.017**	0.017**	0.041***	0.043***	0.041***
	(0.008)	(0.008)	(0.008)	(0.011)	(0.011)	(0.011)
Parents. Low skilled white collar	0.008	0.007	0.006	0.018**	0.019***	0.018**
	(0.006)	(0.005)	(0.005)	(0.007)	(0.007)	(0.007)
Parents. No info	0.011	0.013	0.012	-0.004	-0.003	0.029***
	(0.009)	(0.008)	(0.008)	(0.014)	0.030***	(0.010)
Number of individuals	3,128	3,128	3,128	2,727	2,727	2,727
Number of observations	13,520	13,520	13,520	11,255	11,255	11,255

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Note: Since job security satisfaction was asked only to the employed, we added two additional categories to account for unemployed or self-employed respondents.

Table 4. Probability of entering a first union. Subjective Measure: Probability of losing a job. Average Marginal Effects. Stratified by gender

	Men			Women		
VARIABLES	(1) Objective condition – Type of contract	(2) Subjective measure – Chance of losing a job	(3) Type of contract and subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Chance of losing job	(3) Type of contract, subjective measure
Type of contract (t-1)						
Ref. Permanent						
Not in LF	-0.063***			-0.053***		
	(0.014)			(0.012)		
Unemployed	-0.025***			-0.043***		
	(0.007)			(0.010)		
Fixed-term	0.001			-0.011		
	(0.008)			(0.010)		
Casual basis	-0.023***			-0.035***		
	(0.006)			(0.007)		
Self-employed	0.006			-0.003		
	(0.010)			(0.019)		
Chance of losing job if employed (t-1)						
Ref: No chance (0%) of losing job						
Not employed (Not in LF/Unemployed)		-0.028***			-0.032***	
		(0.007)			(0.008)	
Self-employed		0.007			0.007	
		(0.010)			(0.019)	
Low chances (1–49%)		-0.009*			-0.013**	
		(0.005)			(0.006)	
High chances (50%+)		0.000			-0.001	
		(0.008)			(0.011)	
Type of contract and chance of losing job (t-1)						
Ref: Permanent position and 0% chance of losing job						
Not in LF			-0.066***			-0.054***
			(0.014)			(0.013)
Unemployed			-0.028***			-0.044***
			(0.008)			(0.010)
Self-employed			0.003			-0.004
			(0.011)			(0.019)
Fixed-term: 0% chance of losing job			0.002			0.005
			(0.011)			(0.014)
Fixed-term: 1–49% chance of losing job			-0.010			-0.049**
			(0.012)			(0.020)
Fixed-term: 50%+ chance of losing job			0.000			0.001
			(0.019)			(0.020)
Casual: 0% chance of losing job			-0.025***			-0.030***
			(0.008)			(0.009)
Casual: 1–49% chance of losing job			-0.036***			-0.045***
			(0.009)			(0.010)
Casual: 50%+ chance of losing job			-0.007			-0.032*
			(0.013)			(0.017)
Permanent: 1–49% chance of losing job			-0.007			-0.003
			(0.007)			(0.009)
Permanent: 50%+ chance of losing job			-0.008			0.004
			(0.012)			(0.018)
DEMOGRAPHICS						
Age	0.047***	0.049***	0.047***	0.056***	0.059***	0.056***
	(0.006)	(0.006)	(0.006)	(0.008)	(0.008)	(0.008)
Age squared	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Level of Education						
Ref. Compulsory or below						
Diploma	0.007	0.008	0.007	0.025***	0.026***	0.024***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Bachelor or above	0.017***	0.017***	0.018***	0.013	0.014*	0.014*
	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
Current or most recent job skill level						
Ref. High skilled white collar						
Low skilled blue collar (ISCO codes 8 and 9)	-0.018***	-0.022***	-0.019***	-0.008	-0.012	-0.007

VARIABLES	Men			Women		
	(1) Objective condition – Type of contract	(2) Subjective measure – Chance of losing a job	(3) Type of contract and subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Chance of losing job	(3) Type of contract, subjective measure
	(0.007)	(0.007)	(0.007)	(0.012)	(0.011)	(0.012)
High skilled blue collar (ISCO codes 6 and 7)	-0.003	-0.002	-0.004	-0.046	-0.047*	-0.046
	(0.007)	(0.007)	(0.007)	(0.028)	(0.028)	(0.028)
Low skilled white collar (ISCO codes 4 and 5)	-0.016***	-0.020***	-0.016***	-0.016**	-0.019***	-0.015**
	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Parental background. Job skill level						
Ref. High skilled white collar						
Parents. Low skilled blue collar	0.023***	0.024***	0.023***	0.028***	0.028***	0.027***
	(0.008)	(0.008)	(0.008)	(0.010)	(0.010)	(0.010)
Parents. High skilled blue collar	0.019**	0.018**	0.018**	0.041***	0.042***	0.040***
	(0.008)	(0.008)	(0.008)	(0.011)	(0.011)	(0.011)
Parents. Low skilled white collar	0.008	0.009	0.007	0.018**	0.019***	0.018**
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Parents. No info	0.011	0.011	0.010	-0.004	-0.004	-0.004
	(0.009)	(0.009)	(0.009)	(0.014)	(0.014)	(0.014)
Number of individuals	3,128	3,128	3,128	2,727	2,727	2,727
Number of observations	13,520	13,520	13,520	11,255	11,255	11,255

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Note: since the subjective measure is reported only for the employed, we added two additional categories in Model 2 to account for the self-employed and unemployed.

Table 5. Probability of entering a first union. Subjective measure: Probability of finding a job. Average Marginal Effects. Stratified by gender

	Men			Women		
VARIABLES	(1) Objective condition – Type of contract	(2) Subjective measure – Finding a job	(3) Type of contract – Subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Finding a job	(3) Type of contract – Subjective measure
Type of contract (t-1)						
Ref. Permanent						
Not in LF	-0.063***			-0.053***		
	(0.014)			(0.012)		
Unemployed	-0.025***			-0.043***		
	(0.007)			(0.010)		
Fixed-term	0.001			-0.011		
	(0.008)			(0.010)		
Casual basis	-0.023***			-0.035***		
	(0.006)			(0.007)		
Self-employed	0.006			-0.003		
	(0.010)			(0.019)		
Chances of finding a job if unemployed (t-1)						
Ref: Very optimistic (80% or more)						
Employed		-0.006			0.033**	
		(0.009)			(0.013)	
Not working and not looking for a job		-0.053***			-0.007	
		(0.017)			(0.018)	
Heavily discouraged (0–10%)		-0.054			0.063**	
		(0.038)			(0.030)	
Discouraged (10–50%)		-0.071***			0.011	
		(0.020)			(0.020)	
Optimistic (50–80%)		-0.035**			0.014	
		(0.014)			(0.019)	
Type of contract and perception of chances of finding a job if unemployed (t-1)						
Ref: Very optimistic of finding a job (80%+)						
Not working, not looking for a job			-0.053***			-0.007
			(0.017)			(0.018)
Heavily discouraged (0–10%)			-0.053			0.065**
			(0.038)			(0.030)
Discouraged (10–50%)			-0.070***			0.011
			(0.020)			(0.020)
Optimistic (50–80%)			-0.036**			0.013
			(0.014)			(0.019)
Fixed-term			0.004			0.042***
			(0.011)			(0.016)
Causal basis			-0.021**			0.018
			(0.010)			(0.014)
Permanent			0.002			0.053***
			(0.009)			(0.014)
Self-employed			0.009			0.050**
			(0.013)			(0.023)
DEMOGRAPHICS						
Age	0.047***	0.050***	0.047***	0.056***	0.059***	0.056***
	(0.006)	(0.006)	(0.006)	(0.008)	(0.008)	(0.008)
Age squared	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Level of Education						
Ref. Compulsory or below						
Diploma	0.007	0.008	0.007	0.025***	0.027***	0.025***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Bachelor or above	0.017***	0.015**	0.016**	0.013	0.014*	0.014*
	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
Current or most recent job skill level						
Ref. High Skilled white collar						
Low skilled blue collar	-0.018***	-0.021***	-0.017**	-0.008	-0.015	-0.009
	(0.007)	(0.007)	(0.007)	(0.012)	(0.011)	(0.012)
High skilled blue collar	-0.003	-0.001	-0.003	-0.046	-0.048*	-0.046*
	(0.007)	(0.007)	(0.007)	(0.028)	(0.028)	(0.028)
Low skilled white collar	-0.016***	-0.021***	-0.016***	-0.016**	-0.020***	-0.016**

VARIABLES	Men			Women		
	(1) Objective condition – Type of contract	(2) Subjective measure – Finding a job	(3) Type of contract – Subjective measure	(1) Objective condition – Type of contract	(2) Subjective measure – Finding a job	(3) Type of contract – Subjective measure
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Parental background. Job skill level						
Ref. High skilled white collar						
Parents. Low skilled blue collar	0.023***	0.026***	0.025***	0.028***	0.029***	0.028***
	(0.008)	(0.008)	(0.008)	(0.010)	(0.010)	(0.010)
Parents. High skilled blue collar	0.019**	0.019**	0.019**	0.041***	0.043***	0.041***
	(0.008)	(0.008)	(0.008)	(0.011)	(0.011)	(0.011)
Parents. Low skilled white collar	0.008	0.009	0.008	0.018**	0.019***	0.018**
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Parents. No info	0.011	0.012	0.011	-0.004	-0.005	-0.005
	(0.009)	(0.009)	(0.009)	(0.014)	(0.014)	(0.014)
Number of individuals	3,128	3,128	3,128	2,727	2,727	2,727
Number of observations	13,520	13,520	13,520	11,255	11,255	11,255

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Note: since the subjective measure is reported only for the unemployed, we added two additional categories in Model 2 to account for the inactive or employed (of any type).