

# Book of Short Papers

## SIS 2021



Editors: **Cira Perna, Nicola Salvati and Francesco Schirripa Spagnolo**



Distribuzione Software | Formazione Professionale  
Statistica | Economia | Finanza | Biostatistica | Epidemiologia  
Sanità Pubblica | Scienze Sociali  
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WWW.PEARSON.COM

*ISBN 9788891927361*

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# **Intentions of union formation and dissolution during the COVID-19 pandemic. The role of risk aversion**

## ***Intenzioni di formazione e di dissoluzione di un'unione durante la pandemia da COVID-19. Il ruolo dell'avversione al rischio***

Bruno Arpino and Daniela Bellani

**Abstract** Socio-demographic research recently addressed the role of risk preferences in demographic behaviors. No study has analyzed the relationship between risk aversion and intentions of forming a new couple and of divorcing during the COVID-19 pandemic. We examine this relationship using data collected in April 2020 with an online survey (Intergen-Covid) in three countries, Italy, France and Spain. Results of logistic regressions indicate that risk-oriented individuals are relatively more likely to intend to make these transitions compared to their risk averse counterparts.

**Abstract** *La ricerca socio-demografica ha recentemente sottolineato l'importanza del ruolo delle preferenze per il rischio per spiegare i comportamenti demografici. Nessuno studio finora ha però analizzato la relazione tra tali preferenze e intenzioni relative alla formazione di una nuova unione e alla separazione durante la crisi pandemica COVID-19. In questo studio utilizziamo i dati raccolti ad Aprile 2020 dall'indagine online "Intergen-Covid" per esaminare se l'avversione al rischio è associata alle intenzioni menzionate in tre Paesi, l'Italia, la Francia e la Spagna. I risultati delle regressioni logistiche indicano che all'aumentare della propensione al rischio aumenta la probabilità di avere intenzione di compiere ognuna delle transizioni demografiche considerate.*

**Key words:** fertility intentions, COVID-19, risk aversion

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<sup>1</sup> Bruno Arpino, Dipartimento di Statistica, Informatica, Applicazioni, Università degli Studi di Firenze; [bruno.arpino@unifi.it](mailto:bruno.arpino@unifi.it)  
Daniela Bellani, Dipartimento di Scienze Politiche e Sociali, Università di Bologna; [daniela.bellani@unibo.it](mailto:daniela.bellani@unibo.it)

## 1 Introduction

This paper aims at contributing to the literature on the determinants of intentions of forming and dissolving a union. In particular, we argue that among the (latent) preferences that are likely to explain heterogeneity in demographic intentions over and beyond standard socio-economic characteristics, risk preferences may play an important role.

As pointed out by previous research [1, 2], individuals may feel threatened or, on the contrary, encouraged by the stochastic dimension that characterizes the consequences of demographic choices, such as forming a new union. In fact, risk-taking propensity significantly affects the expected utility of decisions characterized by uncertain outcomes, regardless of individual's socio-economic background (e.g., [3]). Following this argument, we aim at explaining differences in intentions concerned with union formation and dissolution that stem from the individual preferences about the extent one is willing to accept risk – the so-called risk tolerance (the reciprocal of risk aversion).

In particular, we make use of timely data of the online survey Intergen-Covid collected during the first lockdown implemented to fight the COVID-19 pandemic. The data come from three of the most seriously hit countries in Europe (Italy, France and Spain) and were collected in April 2020. We examine whether risk aversion has an impact in influencing union formation and dissolution in this period of characterised by a high of uncertainty. As such, this period represents an ideal context to study the relationship between risk aversion and demographic intentions.

### 1.1 Hypotheses

The rationale behind the link between risk aversion and demographic intentions is that differences in individuals' propensities for risk-taking have consequences on intentions given that a certain level of risk tolerance embodies a specific calculation of (non-)monetary costs and rewards of certain demographic choices, e.g. union formation, union dissolution. In our study, we allow the utility of potential demographic choices to depend (also) on the level of subjective inclination for risk tolerance.

Given the strong uncertainty characterising expected gains and costs from forming or dissolving a couple, both union formation and dissolution could be viewed by risk-averse individuals as a risky option – especially in a context of strong uncertainty such as the COVID-19 pandemic. If this is true, we can expect that more risk averse individuals are more likely not to intend getting married/cohabitating and to divorce/separate than their less risk averse counterparts. This leads to formulating the following hypothesis:

(H1A:) More risk averse individuals are less likely to have the intention to get married/start cohabiting or divorce/separate.

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However, as suggested by several scholars, the family, as other forms of associations, may provide members with mutual insurance [4]. People may invest in the family as a way of being protected from negative events (health, income, etc.) and as a source of help and wellbeing. If marriage/cohabitation is perceived as a source of security, risk averse individuals may intend to "buy" this security by entering a partnership in order to reduce future risks. This leads to the partially competing hypothesis:

(H1B:) More risk averse individuals are more likely to have the intentions to getting married/cohabiting and less likely to have the intention to divorce/separate.

## **2 Data and empirical strategy**

Our analyses rely on the online survey Intergen-Covid [5]. Respondents were interviewed in April 2020 during the first national lockdowns. The questionnaire has been administered via CAWI (Computer Assisted Web Interviewing). The total sample size was 9,186 individuals, with approximately 3,000 respondents per country (Italy, France and Spain).

The questionnaire explores the core respondents' experiences during home confinement as well as their family-related prospects in the future. In particular, it includes questions devoted at detecting individuals' intentions to form/dissolve a union, as well individual's risk preferences. The survey company Lucid has collected the data, with the imposition of representative quotas at country level by gender, age, region of residence and educational attainment.

### **2.1 Variables**

The explanatory variable we consider is an indicator of the individual risk aversion, capturing respondents' willingness to take risks. More specifically, the following question was asked 'How do you see yourself: are you a person who is generally willing to take risks, or do you try to avoid taking risks? Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use the values in-between to indicate where you fall on the scale.' In the analyses, we consider this variable as continuous.

The dependent variables refer to the intentions to make certain demographic choices within the next three years from the time of the interview. The first dependent variable is the intention to getting married or cohabiting. In this case, we select male and female respondents, aged between 18 and 50, not married and not cohabitating at the time of interview. The working sample is  $N = 2077$ .

The second outcome variable is the intention to divorce/separate. In this case we select male and female respondents, aged between 18 and 50, married or cohabitating. The working sample in this case is  $N = 2513$ .

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In all the models we control for several variables: gender; age and its square; level of education (below secondary education ‘low’, up to high-school ‘medium’, and tertiary education ‘high’, according to the ISCED classification); respondent’s employment status (if employed or not); perceived economic situation (whether the respondent reports that he/she finds difficult to cope with present income); whether the respondent have (or not) dealt with income and/or job loss during the pandemic; whether the respondent has at least one child younger than 15. We control also for time discounting preferences. This is a measure of the extent the individual is forward looking. Respondents have to answer to the following question. ‘Are you a person who is generally willing to give up something today in order to benefit from that in the future or are you not willing to do so? Please use a scale from 0 to 10, where a 0 means you are “completely unwilling to give up something today” and a 10 means you are “very willing to give up something today”. You can also use the values in-between to indicate where you fall on the scale.’ We add fixed effects by country and a measure of the regional prevalence of COVID-19 cases cumulated at the time of the interview. In the model where the dependent variable is the intention to divorce/separate, we also control for the type of partnership, i.e., whether a marriage or a cohabitation.

## **2.2 *Method and statistical analysis***

We present some descriptive findings considering the respondents’ preferences as interpretative lens. We use country-specific weights to offer nationally representative estimates. In our sample, about 30% of the respondents has the intention to form a union, 2.3% has the intention to divorce/separate. Respondents are generally risk neutral (the average of the variable risk aversion is 4.43, linearized standard error is .14).

Our multivariate analyses rely on logistic regression to model the probability of intending (versus not) to form a union or to dissolve a union (in both cases a marriage or a cohabitation).

## **3 Empirical results**

First, we report a table with the main findings from the logistic regressions. M1 refers to the intention of forming a new partnership, M2 of separating/divorcing. Second, in order to make the interpretation of the results clearer, we show predicted probabilities graphically.

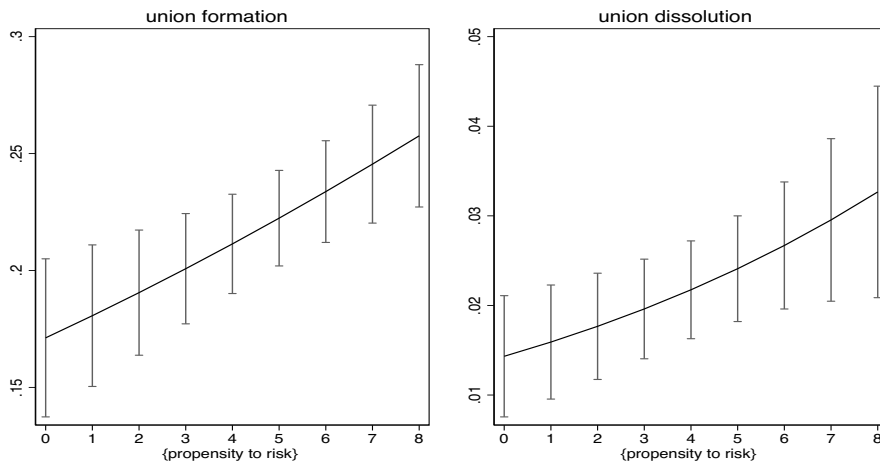
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**Table 1:** Estimates for risk aversion, log-odds (standard errors in paratheses)

	<i>M1</i>	<i>M2</i>
Risk aversion	.070** (.030)	.110* (.066)
N	2077	2513

*Note.* Controls: gender; age and its square; level of education; respondent's employment status; perceived economic situation; whether the respondent has (or not) dealt with income and/or job loss during the pandemic; whether the respondent has at least one child younger than 15; time discounting preferences, country, regional cumulated prevalence of COVID-19 cases. Model M2 additional controls for whether the respondent is married or cohabiting. Standard error in parenthesis. \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Results reported in Table 1 indicate that, during the pandemic, individuals who are more tolerant to risk are also more likely to intend forming a union and separating/divorcing. This result holds controlling for socio-economic and other standard determinants of demographic intentions. In Figure 2 we report the predicted probabilities for each intention we consider. Noticed that in each graph the y-axis has different scale reflecting the very different overall percentage of intention related to the two outcomes. We can observe that more risk tolerant individuals have a probability of about 9 percentage points higher to intend forming a union compared to those more risk-averse. Considering the intention of separating this gap is about 2 percentage points. These associations are rather strong from a substantive point of view. In fact, the predicted probability of intending to form a union is about 50% higher for the most risk-tolerant as compared to the most risk-averse. Instead, the predicted probability of intending to dissolve a union for the most risk-tolerant is about double that of the most risk-averse.



**Figure 1:** Predicted probabilities of intending to form a union (right-hand side panel) or to dissolve a union (left-hand side panel)

## 4 Conclusions

We found that the higher is the risk propensity, the higher is the probability of intending to form or to dissolve a union during the COVID-19 pandemic. Given the strong uncertainty characterising expected gains and costs of union formation and dissolution, especially in the uncertain context of the pandemic, marriage/cohabitation as well as divorce/separation could be viewed by risk-averse individuals as risky choices and they may tend to prefer maintaining the status quo.

Our findings also serve to point to the importance of considering risk aversion in demographic research to gain a more complete understanding on intentions. Adjusting for risk aversion may be also important when studying other determinants of intentions of union formation/dissolution.

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