Employment conditions and non-coresidential partnership in very-low fertility countries: Italy and Japan

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Abstract

Objective: Our study analyses the relationship between employment conditions and non-coresidential partnership status among women and men in two very-low fertility countries: Italy and Japan.

Background: Having a partner is the initial stage of any subsequent family formation. Several studies have reported that precarious employment conditions have negative effects on both union formation and fertility; however, less is known about the previous step, namely, having a non-coresidential partner.

Method: We use two nationally representative surveys and examine the association between employment condition and partnership status among individuals aged 23–43 who have not yet had children and are not currently cohabiting or married at the survey, employing logistic regression models.

Results: Our results suggest that employment conditions do not have statistically significant associations with partnership status except women who have a precarious employment status (i.e. those who do not know their contract type) as well as unemployed/inactive women in Japan and self-employed men in Italy. We interpret our findings as suggesting that in Italy, employment conditions do not significantly matter for starting a relationship for both men and women, likely due to the prevalence of employment uncertainty among young Italians. As for Japanese women, those who are unemployed/inactive, as well as those who do not know their contract type, may face challenges in finding a partner with their desired earning capacity.

Conclusion: This is one of the few studies focusing on non-coresidential partnership as the initial step of further family formation.

Key words: non-coresidential partner, employment conditions, Italy, Japan
1. Introduction

Employment is a key factor affecting life-course events such as union formation. In response to globalisation, labour-market flexibility has risen, heightening employment uncertainty in many countries. Several studies have found a generally negative association between employment (or, more broadly, economic) uncertainty and union formation, which is particularly strong among men and slightly changes according to the institutional context (e.g. Piotrowski et al., 2015 for Japan; Noguera et al., 2006 and Vignoli et al., 2016 for Italy; Kalmijn, 2011 for various European countries). However, these previous studies tend to compare married individuals and/or those cohabiting with those who are single, combining individuals who do and do not have a partner into one category. Therefore, while there is widespread evidence regarding how employment conditions are associated with union formation – defined as starting a cohabitation or marry – much less is known about the “previous step”, that is, the association between employment conditions and partnership status (i.e. having a non-coresidential partner or not). We argue that shedding light on the association between employment conditions and having a non-coresidential partner will improve our understanding of the employment – union formation link, which could be particularly relevant also in terms of policy interventions.

Having a partner is the first step to building a stable union (e.g. a cohabitation and/or marriage); accordingly, studying the characteristics of partnered and unpartnered individuals before they enter into a stable union is crucial for understanding their future union trajectories. In addition, the link between employment conditions and having a non-coresidential partner is not straightforward. A stable employment condition could be a relevant prerequisite for finding a partner, making employment conditions a decisive factor in selecting individuals into partnership or singlehood. Alternatively, it may become a fundamental element only when couples decide to turn their relationship into cohabitation or marriage, as the winnowing hypothesis suggests (Blackwell & Lichter, 2000, 2004). Country- and gender-specific hypotheses about the sign and the magnitude of the association between employment conditions and non-coresidential partnership can be formulated (see details in hypothesis section below).

Studying the characteristics associated with having a partner is relevant for several reasons. First, the presence of a partner matters for well-being, possibly providing physical and emotional support, social networks and other resources (e.g. Perelli-Harris & Styczynski, 2018; Soons et al., 2009). Second, and more generally, having a non-coresidential partner is the first step to family formation. A major societal challenge in high-income countries is fertility decline below the replacement level, which will significantly impact future pension and health care systems. In particular, East Asian and Southern European countries (represented in this paper by Japan and Italy) have had persistently low fertility (i.e. with fertility rates below 1.5) and are thus called “very-low” fertility countries. Generally, delayed or forgone union formation has a negative impact on both the timing of childbearing and eventually completed fertility in countries characterised by a strong traditional link between marriage and fertility, as is the case of Southern Europe and East Asia (Sobotka et al., 2011). In fact, the lack of a (stable) partnership is one of the main obstacles to the realisation of fertility desires (Esteve et al., 2021; Testa, 2007) and one of the key reasons for remaining childless in these “very-low” fertility countries (Berrington, 2017; National Institute of Population and Social Security Research; NIPSSR hereafter, 2017). Despite the importance of having a partner, the factors connected to partnership status have received considerably less scholarly attention compared to union formation processes and fertility dynamics.

Among the few existing studies about the correlates of non-coresidential partnership status, employment conditions are deemed an important criterion for choosing a partner, possibly with different patterns and to different extents among men and women (e.g. Brinton et al., 2021; Castro-Martín et al., 2008; Liebrott et al., 2015). Therefore, this study extensively analyses the association between employment conditions and non-coresidential partnership status (i.e. having a non-coresidential partner or not). We refer to non-coresidential partnership instead of LAT in this paper. Also note that non-coresidential partnership encompasses a diverse range of individuals, including those who live apart unintentionally, those who do so intentionally, and those who are unsure about living together in the future. In Italy and Japan, where marriage intentions remain high, most non-coresidential relationships can be seen as a transitional phase toward forming a union, whether through cohabitation or marriage (Raymo et al., 2015; Regnier-Loilier & Vignoli, 2018). Research conducted across ten European countries similarly suggests that non-coresidential relationships are viewed as a stage in the union formation process (Liebrott et al., 2015). Therefore, we assume that most of our analytical sample having a non-coresidential partner is in a transitional phase toward forming a union, although the data do not allow us to disentangle the reasons why they are living apart.
coresidential partnership status among childless individuals by sex, comparing two very-low fertility counties: Italy and Japan. We argue that the comparison between Italy and Japan is particularly insightful because the two countries share a set of similarities: they have had very low (and even lowest low) fertility rates over the last 30 years, and they are typically considered “traditional” societies, in which the male-breadwinner model prevails (León & Migliavacca, 2013; Tsutsui, 2016). Notwithstanding this, the Italian and Japanese labour markets display interesting differences in terms of unemployment rates and female participation (as we will discuss in the next paragraphs). Unravelling the possibly different associations between employment conditions and non-coresidential partnership formation in the two countries and by gender may thus improve our understanding of the complex interconnections between the spheres of employment and family formation in very-low fertility contexts.

2. Background

2.1 Employment uncertainty and having a partner

Classical demographic theories about marriage argue that men’s economic resources associated with their employment conditions improve the feasibility of marriage (Dixon, 1971; Easterlin, 1980) and that men’s specialisation in market work mirrors women’s specialisation in nonmarket work (Becker, 1973). Oppenheimer (1988) formulated another influential hypothesis, contending that uncertainty deriving from unstable employment careers – especially on the man’s side – jeopardises assortative mating, with negative consequences for marriage. However, Oppenheimer also suggests that as female labour-market participation increases and men’s employment uncertainty rises, men may assign a positive value to women’s earning power in the labour market.

There is ample evidence supporting the negative relationship between uncertain employment conditions and entry into marriage. For men, most studies have revealed that unemployment or fixed-term employment is negatively associated with entry into marriage (Blossfeld et al., 2005; Bracher & Santow, 1998; Kalmijn, 2011; Kalmin & Luijkx, 2005; Oppenheimer, 2003; Sasser & Goldscheider, 2004; Schneider et al., 2019), albeit, in some cases, fixed-term employees were found to have similar chances of getting married as those with permanent contracts (Baron & Rapp, 2019). Regarding women, studies have argued that the connection between economic resources and their decision to marry is influenced by gender-egalitarian norms in society (Goldscheider et al., 2015; Oppenheimer, 1988; Sweeney, 2002). In societies that adhere to traditional expectations of men as breadwinners and women as housemakers, women with significant financial means and promising careers may hesitate to marry because they anticipate having to sacrifice their careers for marriage. Research conducted through cross-national (Ono, 2003) and cross-cohort (Fukuda, 2013; Sweeney, 2002) comparisons shows that in societies where gender-egalitarian norms are more prevalent, women’s economic resources, derived from their earnings or employment, are positively associated with their likelihood of getting married. While these studies suggest a convergence in gender-role expectations regarding marriage, other research highlights that the link between economic resources and marriage entry remains weaker for women than men (Shafer & James, 2013).

In contrast with marriage, which aims for long-term relationships, cohabitation can be seen as a temporary stage in family formation. People may place less importance on employment conditions and future employment certainty when deciding whether to live together and postpone marriage to better (i.e. less uncertain) times (Oppenheimer, 1988; Perelli-Harris et al., 2010). Some studies support these expectations: unstable employment conditions such as unemployment, inactivity or insecure employment contracts are less correlated with entry into cohabitation than entry into marriage for both men and women (Bracher & Santow, 1998; Kalmijn, 2011; Kalmin & Luijkx, 2005; Oppenheimer, 2003; Schneider et al., 2019). However, in line with the expectations of the Second Demographic Transition Theory (SDT; Lesthaeghe, 2020; Van de Kaa, 1987), recent evidence shows that cohabitation is gaining relevance as a family-arrangement alternative to marriage rather than a pre-marital experience in Europe (Di Giulio et al., 2019), but not in Japan (Raymo et al., 2009). Nevertheless, cohabitation is not always a lifestyle choice: in some cases, it involves unstable relationships, in which the long-term commitment of marriage is obstructed by employment/economic uncertainty. According to this “pattern of disadvantage” narrative (Perelli-Harris & Gerber, 2011), rather than
being a choice that reflects new values, cohabitation is practised by the least educated and most socially disadvantaged individuals, while marriage remains a prerogative of the highly educated.

Few studies have examined the relationship between employment conditions and non-coresidential partnership status. For example, Liefbroer et al. (2015) revealed that unemployed individuals are less likely to have a non-coresidential partner. In a similar vein, Brinton et al. (2021) reported that majority of female participants in a qualitative survey expressed a desire to marry a man with a stable full-time job and a permanent contract. However, other studies found no such association of employment conditions with having a partner among women (Castro-Martín et al., 2008) or a weaker correlation among women than among men (Ghaznavi et al., 2020), indicating potential gender-related distinctions in this context.

2.2 Winnowing hypothesis

A winnowing hypothesis was postulated by Blackwell and Lichter (2004), suggesting that “the criteria for selection into dating and cohabiting relationships may be considerably different – and perhaps less stringent – than for marriage” (p721). The hypothesis is underpinned by exchange theory and the distinct purposes of each type of relationship, i.e. dating, cohabitation, and marriage. In the dating or marriage market, individuals come with their desired characteristics towards a potential partner, such as occupation, income, and attractiveness, and exchange these assets, or in other words, judge each other based on these criteria. Generally, marriage or cohabitation represents a more committed stage of a relationship compared to dating, leading to differences in behaviour between the dating and marriage markets (Blackwell & Lichter, 2004). When individuals seek a partner for marriage, the search criteria become more stringent, resulting in assortative mating. Influential works by Becker (1973) and Oppenheimer (1988) suggest that these desired criteria may also change depending on expected gender roles and other job-related factors. In this study, we propose three hypotheses based on this winnowing hypothesis, taking into account potential cultural differences between Italy and Japan.

2.3 Country-specific contexts

2.3.1 Italy

Starting in the late 1980s, the Italian labour market went through a strong deregulation process that increased notably the levels of uncertainty in individuals’ employment careers. Several laws (“Treu Law”, L.196/1997; “Biagi Law”, L.30/2003) were promoted to foster new, flexible but less protective forms of employment, aiming to raise employment rates by creating additional jobs (see e.g. Barbieri & Scherer, 2009). However, the few positive consequences of deregulation were limited to a brief “honeymoon effect” (Barbieri & Cutuli, 2016), while the already existing division between insiders and outsiders in the labour market was reinforced among the young. In sum, the “partial and targeted” labour-market deregulation (Esping-Andersen & Regini, 2000) did not improve the employment statistics; instead, it increased precarious employment and raised the general level of uncertainty (Barbieri et al., 2015; Alderotti et al., 2024). Between 2002 and 2009, the share of temporary contracts in total employment grew by 31.9% in Italy (compared to 7.5% in the EU) and further rose by 14.7% after the Great Recession between 2009 and 2016 (compared to 5.2% in the EU; Eurostat, 2019). The Italian labour market is characterised by moderate-to-high unemployment rates (see details in Figure A1 in Appendix). Unemployment rates exhibit a similar trend between men and women, although women’s unemployment is generally higher than men’s. Women’s employment rates have increased over the last decades (from 35.1% in 1980 to 48.1% in 2016), but the percentage of working women remains relatively low compared to most other European countries. The youth unemployment rate (age 15–24 years) is high and has risen remarkably during the Great Recession, from 18% (men) and 23% (women) in 2007 to 41% and 45% (respectively) in 2014, then dropping sharply again to approximately 30% for both sexes, as seen in Figure A1. In comparison, the unemployment rates for individuals aged 25–34 years and 35–49 years are much lower but have not recovered much yet after the sharp rise due to the Great Recession.

From a demographic point of view, Italy is well-known for its latest-late transition to adulthood (Billari et al., 2002). Union formation dynamics are characterised by a clear preference for marriage, which has a strong central role both as a major reason to leave the parental home and as a type of first union (Billari & Rosina, 2004). Cohabitation began to spread in the country during the second half of the 1990s, along with the rise of marital instability and nonmarital fertility (Guetto et al., 2016). Nevertheless, the diffusion of cohabitation
was slower than in the rest of Europe due to familial and social pressure to marry and the prolonged lack of legal recognition of civil unions (Dalla Zuanna et al., 2005; Vignoli & Salvini, 2014). Over the last few years, the popularity of marriage has been decreasing, accompanied by increasing diversity in union patterns, including living apart together (LAT) relationships (Régnier-Loilier & Vignoli, 2018), and a slow process of secularisation (Pirani & Vignoli, 2016; Vignoli et al., 2016). Finally, there is no recent evidence about partnership formation dynamics in Italy (apart from a few studies of dating among university students, e.g. Mogi & Vignoli, 2021), but official statistics show that the share of single persons has more than doubled between 1996 and 2016, reaching 7.9% of the population (Istat, 2016).

2.3.2 Japan

Japan’s unemployment rate has historically remained very low compared to other high-income countries. The youth unemployment rate was halved from 10% in 2004 to 2021 for men and from 8% for women (Figure A1). The low youth unemployment rate results from the involvement of schools in matching students with employers (Ryan, 2001). Most students apply for jobs and receive offers from employers before graduation. In this process, schools are heavily involved in matching students with employers (Brinton & Kariya, 1998; Rosenbaum & Kariya, 1989). Although the recession of the 2000s slightly weakened it, this school-to-work matching system persists (Brinton, 2011).

The unemployment rates among individuals aged 25–34 and 35–49 years have been stable at a low level. However, employment insecurity among employed workers has grown since the late 1990s. For example, the number of contract workers and dispatched workers has increased especially among young people (Houseman & Osawa, 2003; Osawa et al., 2013). These workers have fixed-term contracts with their employers and face a higher risk of losing their employment (Kambayashi & Kato, 2016). Studies have argued that the rise in insecure employment leads young people to delay family formation (Piotrowski et al., 2015).

In addition to later and less marriage, people are less likely to be in a relationship. The percentage of never-married people who do not have a romantic partner increased from 50% to 70% among men and 42% to 60% for women between 1997 and 2015 (NIPSSR, 2017). Some of these individuals do not want to be in a relationship (Ghaznavi et al., 2020), but there is little evidence regarding whether their share has increased. Studies also report that insecure employment is linked to not having a partner and not showing interest in romantic relationships (Ghaznavi et al., 2020).

Despite the decline in romantic relationships, people continue to value marriage strongly. Approximately 90% of unmarried people still want to get married in the future (NIPSSR, 2017). The proportion of those who think that marriage is essential to a fulfilling life is not decreasing (Choe et al., 2014). Alternative partnerships such as cohabitation are not very prevalent, and cohabitation is primarily a transitory stage for couples planning to get married (Raymo et al., 2015).

3. Hypotheses

Italy and Japan represent two distinctive socio-economic contexts, each characterized by unique labour market structures, cultural norms, and policies pertaining to employment and family dynamics. Existing literature underscores these differences, highlighting, for instance, the prevalence of lifetime employment in Japan contrasted with the prevalence of flexible and often precarious employment arrangements in Italy (see e.g. Barbieri & Scherer, 2009; Kambayashi & Kato, 2017), albeit employment uncertainty has been recently on the rise also in Japan (Piotrowski et al., 2015). Moreover, empirical evidence suggests that the impact of employment uncertainty on partnership formation varies across different cultural and institutional settings, with country-level peculiarities in labour market regulations moderating individual-level consequences of employment instability on union formation (Hsu & Engelhardt, 2024). Accordingly, we formulate two opposing hypotheses regarding the association between employment conditions and non-coresidential partnerships in Italy and Japan.

The first hypothesis relates to the Italian context and is based on the winnowing hypothesis (Blackwell & Lichter, 2000, 2004), which posits that the criteria for selection into dating are less strict than for marriage. Several studies in Europe are in the same line of the winnowing hypothesis that cohabiting couples are more

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heterogeneous than married ones (e.g., Hamplova, 2009). Furthermore, the selection criteria regarding the employment conditions of a potential dating partner may not be as stringent in a country where economic instability is widespread, such as Italy. In such a context, people may be more accustomed to uncertainty, both personally and socially, and thus less influenced by the current employment conditions when taking personal and/or family-related decisions. For example, Vignoli et al. (2022) examined how the exposure to different hypothetical future economic scenarios (positive or negative with respect to not being exposed to any scenario) influences individuals’ fertility intention in Italy and Norway using a laboratory experiment setting. They found that the exposure to the negative future economic scenarios plays a less crucial role in Italy compared to the one in Norway when the actual macro-economic context is less favourable. Therefore, we hypothesise that individuals with more insecure employment conditions (i.e. fixed-term employment and unemployment/inactivity) have similar chances of having non-coresidential partners as those with more secure employment (i.e. permanent contract) in Italy. This is our first hypothesis (H1).

Although the winnowing hypothesis assumes that individuals have different criteria for a partner to date and a partner to marry, it is also possible that individuals aim to find a partner with whom they can eventually establish a stable partnership and marry. In this scenario, people may carefully assess potential partners’ characteristics during the initial dating stage. This is a reasonable case in Japan due to two prevailing trends: 1) the majority of people desire to get married (NIPSSR, 2022); and 2) women are less likely to date men who have a lower potential for marriage (Brinton et al., 2021). Consequently, our second hypothesis (H2) posits that individuals with insecure employment conditions in Japan are significantly less likely to have non-coresidential partners compared to those with more secure employment.

We also consider the potential role of gender differences on our hypotheses. Both Italy and Japan can be considered as societies with traditional gender norms, lagging behind in gender equality (with respect to, e.g., Northern European countries), and in which the male breadwinner model still prevails (León & Migliavacca, 2013; Tsutsui, 2016). According to the Global Gender Gap Report, Italy ranks 63rd and Japan 116th among the countries covered (World Economic Forum, 2022). Therefore, we hypothesise that the association between employment conditions and having a non-coresidential partner will be more pronounced among men than women. This is our third hypothesis (H3).

4. Data and methods

In this study, we use two different nationally representative surveys. For Italy, we employ the Family and Social Subjects Survey carried out by the Italian National Statistical Office (Istat) in 2016. The survey is the most up-to-date data source for studying employment and partnership in Italy, and it includes retrospective information about individuals’ employment, union (i.e. cohabitations and marriages) and fertility histories in monthly detail. Unfortunately, the lack of information about previous non-coresidential partnerships prevent us from adopting a longitudinal approach to carry out the analyses. For Japan, we relied on the Japanese Life-course Panel Survey (JLPS) conducted by the Institute of Social Science at the University of Tokyo. JLPS is a panel survey administered every year since 2007 and targeting individuals who were aged 20–40 years in 2007 (i.e. born in 1966–1986). These surveys are suitable for our research purposes as they both collect information on respondents’ non-coresidential partnerships and their past employment status.

We chose the 2010 wave for the Japanese data to collect the past employment history for the previous 3 years (as the panel started in 2007). For the sake of comparability, we selected individuals in both countries who were between 23 and 43 years old at the time of the interview, and who had not yet had any children and were not currently living with a partner (either cohabiting or married). The analytical sample is limited to this age range because the sample of Japanese data was restricted to the population born between 1966 and 1986. After removing respondents with missing values for the variables used (43 cases for Italy and 74 for Japan), the working sample is composed as follows: 1,605 women and 2,001 men for Italy; 638 women and 577 men for Japan.

There might be a selection bias, particularly among older age group because many of that group already are out of our sample selection by having children and/or being in cohabiting or marital union. For a sensitivity test, we conducted the same analyses for individuals aged 23-34. The results confirm our main results and are shown in Table A1 in Appendix.
Our main independent variable of interest is employment condition (1: permanent contract; 2: fixed-term contract; 3: self-employed; 4: unemployed or inactive; 5: employed but unknown contract term, hereafter ‘unknown’). The employment conditions are observed at the time of the beginning of the relationship for those who have a non-coresidential partner and one year before the survey for the others. The outcome is the non-coresidential partnership status (0: no partner; 1: having a non-coresidential partner).

To estimate the association between employment conditions and having a non-coresidential partner, logistic regression models are used controlling for age and age squared as continuous variables, educational attainment at the time of the survey (1: low; 2: medium; 3: high; 4: in school), immigrant status (0: born in the country; 1: born outside of the country), parents’ educational attainment measured as the highest educational attainment of the parents when both are available and as the only available one when one is missing (1: low; 2: medium; 3: high; 4: both missing), and previous experiences of entering into a union (either cohabiting and married). Finally, we control for sex and interact this variable with employment conditions in order to get sex-specific estimates of the relationship between employment conditions and non-coresidential partnership status. The descriptive statistics of these control variables are shown in Table A5 in the Appendix. We present the average marginal effects (AMEs) from the estimated results of the logistic regression models to effectively interpret the results (Long & Freese, 2014).

5. Results

5.1 Descriptive findings

The distribution of employment conditions by sex in Italy and Japan is presented in Table 1. The most striking difference between the two countries is the share of permanent contractors and unemployed/inactive population. Permanent contractors are more common among both sexes in Japan (more than 50%) than in Italy (approximately 30%), whereas Italy has a higher share of unemployed/inactive population: 40% and 47% for men and women, respectively, compared to 11% and 7%, respectively, in Japan. Fixed-term contracts are more common among women in both countries, with a larger difference between men and women in Japan (approximately 10 percentage points [pp], compared to 1.6 pp in Italy). Conversely, self-employment is more common among men than among women in both countries.

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4 Although we acknowledge that unemployment and inactivity refer to different employment conditions, we were not able to separate the two categories due to limitations in the Italian data. The Japanese data show that unemployed women do not have a significant association with partnership status, while women in an inactivity status present a significant association with it (see Table A2). Thus, it might be important to separate unemployed and inactivity statuses, particularly among women, in future research. However, we also need to acknowledge that much previous research has not been able to distinguish them, mostly due to data limitations (e.g. Alderotti, 2022; Bussetta et al., 2019; van Wijk et al., 2022). In addition, Bolano and Vignoli (2021) using Australian data presented that the probabilities of entering into a first union are not statistically significantly different between unemployed and inactive individuals, for both men and women. Thus, we cannot directly assume that our results shown in Table A2 using Japanese data can be applied to Italian data as well.

5 In Japan, employment condition is often measured by nominal status, namely, what a worker is referred to as in their workspace (e.g. Labour Force Survey). Most studies distinguish between regular (seishain) and non-regular (hiseishain) employees (e.g. Piotrowski et al., 2015). Therefore, we conducted a robustness check using nominal status as employment status in Japan (see Table A3 in Appendix).

6 The Italian retrospective data include information about the beginning of the current relationship and the beginning and end of each employment spell in monthly detail. While the Japanese survey asks about the length of the relationship in months, employment is only recorded each year of the survey. We identified the employment status at the beginning of the current relationship (i.e. in 2010) relationship based on the employment status in the survey year closest to the beginning of the relationship. In addition, Japanese data cannot provide the employment status at the time of beginning the relationship for those with a relationship longer than 41 months (35.6%). Thus, for these individuals, we use the employment status in 2007, the year of the first wave, as an approximation.

7 As a sensitivity analysis to test our measurement of employment conditions, we measured the employment conditions one year before the survey for all the analysed cases. The results are shown in Table A4 in Appendix. The advantage of our current model is that it reduces the possibility that individual’s partnership status affects their employment status. Our model allows us to reduce this possibility for those who are not in a non-coresidential partnership at the time of the survey. The disadvantage is that the timing of the measurement of employment status varies by current partnership status. For example, if some yearly fluctuating factors (e.g. economic situation) affect the employment status, this will lead to some bias in the effect of employment status. As our aim of this study is to analyse the association of employment conditions with partnership status, we employed the current model for our main analyses.

8 This information is not available for Japan. However, because the number of migrants in Japan is small (1.4 percent of the total population in 2015; Statistics Bureau of Japan, 2016), the impact of immigrant status would not matter much in the association between employment conditions and having a non-coresidential partner in Japan.
Table 1: Distribution of employment status by sex in Italy and Japan

<table>
<thead>
<tr>
<th>Status</th>
<th>Italy</th>
<th>Japan</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Permanent</td>
<td>653</td>
<td>481</td>
<td>312</td>
<td>347</td>
</tr>
<tr>
<td></td>
<td>(32.63)</td>
<td>(29.97)</td>
<td>(54.07)</td>
<td>(54.39)</td>
</tr>
<tr>
<td>Fixed-term</td>
<td>279</td>
<td>250</td>
<td>70</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>(13.94)</td>
<td>(15.58)</td>
<td>(12.13)</td>
<td>(22.10)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>276</td>
<td>127</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(13.79)</td>
<td>(7.91)</td>
<td>(7.80)</td>
<td>(2.35)</td>
</tr>
<tr>
<td>Unemployed/Inactive</td>
<td>792</td>
<td>748</td>
<td>65</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>(39.58)</td>
<td>(46.60)</td>
<td>(11.27)</td>
<td>(7.37)</td>
</tr>
<tr>
<td>Unknown</td>
<td>88</td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14.73)</td>
<td>(13.79)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,001</td>
<td>1,605</td>
<td>577</td>
<td>638</td>
</tr>
</tbody>
</table>

Note: Row percentages are shown in parentheses

Figure 1: Proportion of individuals who have a non-coresidential partner by employment conditions and sex in Italy and Japan

Note: Author’s own calculations using Japanese Life-course Panel Survey and the Family and Social Subjects Survey

Figure 1 shows the proportion of individuals who have a non-coresidential partner by employment conditions and sex in Italy and Japan. First, the women in Japan with a permanent contract have the highest proportion of having a non-coresidential partner than other women in Japan. The share of having a non-coresidential partner gradually decreases among fixed-term and self-employed Japanese women, with the unemployed/inactive group displaying the lowest percentage. Second, both in Italy and Japan, the share of men with a permanent contract who have a non-coresidential partner is significantly lower than for other
statuses (except Japanese self-employed), even compared to the unemployed/inactive group. Italian women and Japanese men exhibit a similar trend.

5.2 Employment conditions and partnership status

Table 2 shows the AMEs of employment conditions on partnership status by sex and country, estimated via logistic regression models with the aforementioned control variables. In this study, the AME is the difference between the predicted probability of having a non-coresidential partner for those who have a permanent contract and those who are temporarily employed, self-employed, unemployed/inactive and do not know their contract status. For example, the AME of unemployed/inactive Italian men is -0.034, which means that the predicted probability of having a partner is 3.4 pp lower for an unemployed man than for a man with a permanent contract.

Table 2: Average marginal effects of employment conditions on non-coresidential partnership status by sex for Italy and Japan (estimated via a logistic regression model with all control variables)

<table>
<thead>
<tr>
<th>Employment conditions (Ref: Permanent)</th>
<th>Italy Men</th>
<th>Italy Women</th>
<th>Japan Men</th>
<th>Japan Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-term</td>
<td>0.030</td>
<td>-0.023</td>
<td>0.007</td>
<td>-0.090</td>
</tr>
<tr>
<td></td>
<td>[-0.037;0.097]</td>
<td>[-0.097;0.051]</td>
<td>[-0.108;0.121]</td>
<td>[-0.182;0.002]</td>
</tr>
<tr>
<td>Self-employed</td>
<td>0.101 ***</td>
<td>-0.035</td>
<td>-0.094</td>
<td>-0.075</td>
</tr>
<tr>
<td></td>
<td>[0.032;0.168]</td>
<td>[-0.129;0.059]</td>
<td>[-0.224;0.035]</td>
<td>[-0.321;0.172]</td>
</tr>
<tr>
<td>Unemployed/Inactive</td>
<td>-0.034</td>
<td>-0.003</td>
<td>-0.048</td>
<td>-0.178 **</td>
</tr>
<tr>
<td></td>
<td>[-0.084;0.015]</td>
<td>[-0.062;0.056]</td>
<td>[-0.161;0.065]</td>
<td>[-0.307;0.049]</td>
</tr>
<tr>
<td>DNK/NA</td>
<td>-0.064</td>
<td>-0.118 *</td>
<td>-0.064</td>
<td>-0.118 *</td>
</tr>
<tr>
<td></td>
<td>[-0.164;0.035]</td>
<td>[-0.226;0.009]</td>
<td>[-0.164;0.035]</td>
<td>[-0.226;0.009]</td>
</tr>
</tbody>
</table>

Note: 95% confidence intervals are shown in parentheses. *** p < .001, ** p < .01, * p < .05. The results including other control variables are shown in Table A6 in Appendix

Neither Italian men nor Italian women show statistically significant differences in the probability of having a partner between those with a permanent contract and those with other employment conditions, except for self-employed men. Self-employed Italian men are 10 pp more likely to have a non-coresidential partner than their counterparts with a permanent contract. Thus, we find support in favour our first hypothesis (H1).

While the AMEs of fixed-term employment and unemployment/inactivity are not statistically significant, they indicate that men having a fixed-term contract are 3 pp more likely to have a non-coresidential partner and unemployed/inactive men are 3.4 pp less likely to have a non-coresidential partner compared to men with a permanent contract. In substantive terms – when considering the magnitude of the AME in relation to the average probability of having a non-coresidential partner, which is approximately 37% in Italy (as seen in the descriptive statistics in Table A5 – this translates to an 8% greater probability of having a non-coresidential partner for the former and 9% lower probability for the latter. Similarly, among women, those with a fixed-term employment are 2.3 pp (-6% in substantive terms) less likely to have a non-coresidential partner, while self-employed women are 3.5 pp less likely to have a non-coresidential partner (-9.5%) than those with a permanent contract.

Further, the association between employment conditions and non-coresidential partnership status among Japanese men has low statistical significance, whereas Japanese women exhibit a clear trend whereby those without a permanent contract are less likely to have a non-coresidential partner. Particularly, unemployed and inactive individuals have an almost 18 pp lower predicted probability of having a non-coresidential partner than permanent contractors. Additionally, Japanese women who do not know their contract type and those who are unemployed/inactive follow a similar trend, and their predicted probability is 12 pp lower than the reference category. Lastly, Japanese female respondents with a fixed-term contract and those who are self-employed show a 9 pp and 7.5 pp lower predicted probability of having a non-
coresidential partner, respectively. Therefore, we find support for our second hypothesis (H2), but only among females.

In comparison to the average probability of Japanese women having a non-coresidential partner, which is 33% as reported in Table A5, fixed-term employed and self-employed women have probabilities 27% and 23% lower, respectively, of having a non-coresidential partner. While none of the results for Japanese men attain statistical significance, they still indicate a relationship between employment conditions and having a non-coresidential partnership. For example, self-employed men and unemployed/inactive men are 9.4 pp (-28% in a substantive term) and 4.8 pp (-14.5%) less likely, respectively, to have a non-coresidential partner.

Our third hypothesis (H3) about gender differences cannot be fully supported; instead, our results show no significant gender difference in Italy and the opposite trend in Japan as we hypothesized (namely, in Japan, men do not show any statistical associations between employment conditions and having a non-coresidential partner, while women with less favourable employment conditions are less likely to have a non-coresidential partner).

6. Discussion

This study examined the association between employment conditions and having a non-coresidential partner in Italy and Japan, two very-low fertility countries. Several studies have demonstrated that precarious employment conditions have negative effects on both union formation (e.g. Vignoli et al., 2016) and fertility (e.g. Alderotti et al., 2021). However, its effect on the initial step of family formation, having a non-coresidential partner, has received less attention. The present study contributes to filling this gap in the literature.

We tested three hypotheses: H1) individuals with unstable employment conditions (i.e. fixed-term employment and unemployment/inactivity) have similar chances of having non-coresidential partners as those with secure employment conditions (i.e. permanent contract) in Italy; H2) individuals with less stable employment conditions are significantly less likely to have non-coresidential partners compared to those with more secure employment conditions in Japan; H3) the association between employment conditions and having a non-coresidential partner will be more pronounced among men than women.

Our results indicate that employment conditions chiefly matter for having a non-coresidential partner only among Japanese women. Thus, we find empirical support in favour of our hypotheses H1 and H2, but not for H3. We interpret our results as following. First, Italian men and women and Japanese men do not display any statistical differences between permanent contractors and other employment conditions, except for self-employed Italian men. We interpret the lack of statistical associations between employment conditions and non-coresidential partnership in Italy as indicating that employment conditions do not matter for starting a relationship in Italy because precarious contracts and unemployment/inactivity spells are especially common among youth. As shown by the existing literature (e.g. Vignoli et al., 2016), employment security plays a role later in the life course, affecting the decision to start a cohabitation and/or get married, however, people do not require their partners to be already settled in the labour market at the time of starting a partnership. Put differently, considering the high proportion of unemployed/inactive individuals at the beginning of a partnership in Italy, it can be inferred that people understand the job market situation well and accept it. This hypothesis is partially supported by the high mobility of young Italians in the labour market: within our analytical sample, among unemployed and inactive Italians at the beginning of their partnership, 26% of men and 16% of women had found a job (of any type) one year later and 45% for men and 35% for women did so three years later (see Table A7 in the Appendix). Although Japanese men display a similar trend, we refrain from speculating about these results because of the small number of cases.

Secondly, Japanese women who are unemployed/inactive, do not know their contract type or have a fixed-term contract have a lower probability (18 pp, 12 pp and 9 pp, respectively) of having a non-coresidential partner than their counterparts who have a permanent contract. This suggests that it is difficult for these women to find an “attractive” partner. Matsuda and Sasaki (2020) contend that female non-regular employees, a category that most corresponds to fixed-term employees, have fewer opportunities to meet a potential partner in their workplace. Japanese women place more importance on a future marital partner’s earning capacity than men do (NIPSSR, 2017). Because workers in workplaces with a higher share of fixed-term employees are paid less and have fewer opportunities for promotions (Yu, 2013), they are less likely to meet a potential partner with their desired earning capacity in their workplace. The lack of places to meet partners...
may explain why unemployed/inactive or fixed-term employees are less likely to have a partner than those with a permanent employment.

Lastly, the finding that Italian self-employed men are the category with the highest likelihood of having a non-coresidential partnership is not surprising, in light of previous studies showing that permanently employed and self-employed men have very similar (high) probabilities of entry into marriage (Vignoli et al., 2016). Therefore, self-employed men are not only as likely as permanent contractors to enter into a stable union, but, taking a step back, they are also the most likely to have a partner before beginning a coresidential union.

Becker (1973) and Oppenheimer (1988) did not define the partnership characteristics of individuals in “the marriage market”, specifically whether an individual does not have a partner or does have a partner but is seeking one for marriage. One of the important contributions of Blackwell and Lichter (2000, 2004) is that they implicitly proposed the existence of different partnership markets, with distinct goals such as dating, cohabitation, and marriage. Building on this foundation, our findings further contribute to this body of literature by suggesting the different role of partnership markets by country and gender. Women in Japan are more inclined to view the partnership market as a marriage market, wherein they seek a partner for marriage. This is because women with a permanent contract have the highest likelihood of having a non-coresidential partner and this trend aligns with the hypothesis in the marriage market (Oppenheimer, 1988). In contrast, individuals in Italy are close to what winnowing hypothesis (Blackwell and Lichter, 2000, 2004) assumes, implying that partnership and marriage market may operate under distinct mechanisms or criteria in different contexts.

We are aware of several limitations to this paper. First, the data do not provide a complete history of employment and partnership. Neither the employment history over three years for Japan nor the history of past partners for those who did not have a partner at the time of the survey for Italy is available, which hinders the use of event-history models. As a sensitivity check, we analysed the transition to non-coresidential partnership using the Japanese data, which include employment status and relationship status across panel waves. The results show that the negative effects of unemployment remain significant for Japanese women, but there are some differences in such an association (see Appendix Table A8). Second, selection into unemployment/inactivity or fixed-term employment may affect the results. If those who do not prefer having a partner are more likely to remain unemployed or in fixed-term employment, for example, the negative association between employment conditions and having a partner will be overestimated. Finally, the process of leaving home may play an important role in the association between employment conditions and having a non-coresidential partner; however, the data used in this study do not permit the inclusion of such information in our analyses.

Despite the aforementioned limitations, this study offers a valuable contribution to the understanding of the link between employment and family formation dynamics in low-fertility contexts with a comparative approach. Understanding the determinants of non-coresidential partnership formation is vital, especially in high-income countries characterised by low fertility, because the formation of a stable union is fundamental to starting a family and finding a (non-coresidential) partner is the initial step. Although mainly descriptive, our findings will hopefully foster further research on the role of employment (or other potential determinants) in starting a non-coresidential partnership to provide a clearer and more comprehensive understanding of the processes leading to family formation.

Acknowledgments

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Data availability statement

The Japanese Life-course Panel Survey (from 2007-2019 at the time of writing) can be available at the Center for Social Research and Data Archives, Institute of Social Science, the University of Tokyo (https://csrda.iss.u-tokyo.ac.jp/english/). Users can download the data for research or educational purposes if their applications are allowed. The full dataset of the Istat Multipurpose Household Survey on: Famiglie, Soggetti Sociali e Ciclo di Vita (2016 wave) is not publicly available and cannot be distributed for reproduction purposes. Access to the microdata is granted free of charge upon formal request for “scientific use files” by members of a recognized research institution, as indicated on the following website: https://www.istat.it/en/analysis-and-products/microdata-files. Additional information, metadata, and a toy dataset can be found at the following website: https://www.istat.it/en/archivio/236643. The data used were obtained within the Research Protocol “Aspetti socio-economici e dinamiche familiarì in Italia,” formalized between Istat and a network of Universities (the state Universities of Bari, Florence, and Padua and Bocconi University in Milan).

References

Berrington, A. (2017). Childlessness in the UK. In M. Kreyenfeld & D. Konietzka (Eds.), Childlessness in Europe: Contexts, Causes, and Consequences (pp. 57–76). Springer, Cham. https://doi.org/10.1007/978-3-319-44667-3_3


Information in German

Deutscher Titel
Beschäftigungsbedingungen und Partnerschaften mit getrennten Haushalten in Ländern mit sehr niedriger Fertilität: Italien und Japan

Zusammenfassung


Hintergrund: Das Vorhandensein eines Partners ist die erste Stufe jeglicher anschließenden Familienbildung. Mehrere Studien haben berichtet, dass prekäre Beschäftigungsbedingungen negative Auswirkungen auf sowohl die Partnerbildung als auch die Fertilität haben; jedoch ist weniger über den vorherigen Schritt bekannt, nämlich das Vorhandensein eines Partners ohne gemeinsamen Haushalt.

Methode: Wir verwenden zwei national repräsentative Umfragen und untersuchen die Verbindung zwischen Beschäftigungsbedingungen und Partnerschaftsstatus bei Personen im Alter von 23 bis 43 Jahren, die noch keine Kinder haben und zum Zeitpunkt der Umfrage nicht zusammenleben oder verheiratet sind, unter Verwendung von logistischen Regressionsmodellen.

Ergebnisse: Unsere Ergebnisse legen nahe, dass Beschäftigungsbedingungen keine statistisch signifikanten Zusammenhänge mit dem Partnerschaftsstatus haben, außer bei Frauen, die einen prekären Beschäftigungsstatus haben (d. h. diejenigen, die ihren Vertragstyp nicht kennen), sowie bei arbeitslosen/inaktiven Frauen in Japan und selbstständigen Männern in Italien. Wir interpretieren unsere Ergebnisse so, dass in Italien die Beschäftigungsbedingungen für den Beginn einer Beziehung für sowohl Männer als auch Frauen nicht signifikant sind, wahrscheinlich aufgrund der Verbreitung von Beschäftigungsunserheit unter jungen Italienern. Was japanische Frauen betrifft, könnten Arbeitslose/Inaktive sowie diejenigen, die ihren Vertragstyp nicht kennen, Schwierigkeiten haben, einen Partner mit dem gewünschten Einkommenspotenzial zu finden.

Schlussfolgerung: Dies ist eine der wenigen Studien, die sich auf Partnerschaften mit getrennten Haushalten als ersten Schritt weiterer Familienbildung konzentrieren.

Schlagwörter: Partnerschaft mit getrenntem Haushalt, Beschäftigungsbedingungen, Italien, Japan