

# Understanding the Persistent Inequalities in Job Security Linked to Women’s Employment Trajectories around Motherhood: A Sequence Analysis Approach

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## Abstract

Despite a persistent ‘motherhood penalty’ on women’s labor market outcomes, structural changes in the labor market have also created new divisions of labor, leading to growing inequalities in job stability among employed mothers. Meanwhile, despite an extensive literature on mothers’ employment after childbirth, most studies focus on single events and fail to capture the diverse and dynamic changes in mothers’ labor market attachment from a life course perspective. Using retrospective information on employment histories from the Spanish Fertility Survey 2018 (EF-2018), this study examines how motherhood affects women’s employment trajectories differently after their first birth in Spain by looking at changes in job quality, distinguishing between different types of employment contracts. We also examine whether and to what extent the persistent inequalities in job security can be explained by differences in women’s socio-demographic and occupational characteristics prior to childbirth. Our results show that women from earlier cohorts, without a migrant background, with higher education, and with more egalitarian ideologies have higher levels of job security after childbirth. These findings highlight the underlying inequalities that lead to differential impact of motherhood on women’s employment conditions, which can inform future policy recommendations in the context of increasing social inequality.

**Keywords:** Job security, inequalities, maternal employment, life course, sequence analysis.

## 1. Introduction

Motherhood has been identified in the literature on female labour supply as a major event that negatively affects mothers’ labour market careers in majority populations across Europe (Kil et al., 2018; Vidal-Coso, 2019). Due to gendered patterns of care, where mothers typically take primary responsibility for childcare, women are more likely than their male counterparts to face challenges in their careers after the birth of their first child, such as higher levels of

unemployment and job instability (Budig & England, 2001; Dill & Frech, 2019; Yu & Kuo, 2024). However, this ‘motherhood penalty’ may not affect all members equally, but will vary according to women’s socio-economic background and labour market attachment before childbirth. For example, previous study showed that there is a strong path-dependency of women’s employment trajectories around the transition to parenthood (Kil et al., 2018), thus women employed in precarious working conditions such as undeclared work and temporary fixed-term jobs before childbirth may be more likely to experience employment interruptions or even exit from the labour market (Herrarte et al., 2012). In this regard, women with a migrant background and those with lower levels of education may be particularly disadvantaged in the labour market and thus more vulnerable to job instability (Giraldo et al., 2015; Schober & Scott, 2012; Vidal-Coso, 2019). Despite the existing literature on the impact of the transition to motherhood on women’s employment trajectories (Cabello-Hutt, 2020; Killewald & Zhuo, 2019; Lu et al., 2017), previous research has mainly focused on the level of women’s involvement in paid work (e.g. employed *vs.* unemployed, full-time *vs.* part-time, and occupational status), while changes in women’s job security after childbirth remain underexplored topic, which is crucial for women’s economic well-being and life satisfaction. This is particularly true in countries with increasing structural labour market changes, such as Spain, due to its highly segmented labour market and the high incidence of temporary employment (Polavieja, 2005).

To fill this gap, this study takes a life-course perspective to capture the short-term employment trajectories of mothers 24 months after childbirth and to study what factors shape these employment patterns. We use rich retrospective data on women’s employment histories from the Spanish Fertility Survey 2018 (EF-2018), a nationally representative sample of the reproductive age population (18-55 years), to address the following questions: What are the common employment trajectories patterns of work around the transition to motherhood in the short term? And what factors shape these different employment patterns? To answer the first question, we use sequence and cluster analysis to construct a typology of employment trajectories since the birth of the first child over the course of two years. We then use multinomial logistic regression models to examine the associations between individual socio-demographic characteristics and the clusters identified. Our results show important differences in employment changes around the transition to motherhood across immigrant background, educational attainment and birth cohort groups.

## 2. Data and Methods

The Spanish Fertility Survey 2018 (EF-2018) contains detailed retrospective information at the individual level, including women’s human capital, gender role attitudes and employment history. Respondents were asked to retrospectively report the starting and ending dates of up to 5 employment histories and four different contract states are observed: (1) permanent contract, (2) fixed-term/no contract, (3) self-employed and (4) unemployed. We used this information to reconstruct their employment trajectories. Given that our study focused on maternal employment, we excluded those respondents who were not employed in the month of their birth. Our analysis sample consisted of 3,175 individuals.

First, we use sequence analysis (Brauner-Otto et al., 2023) to map complex employment

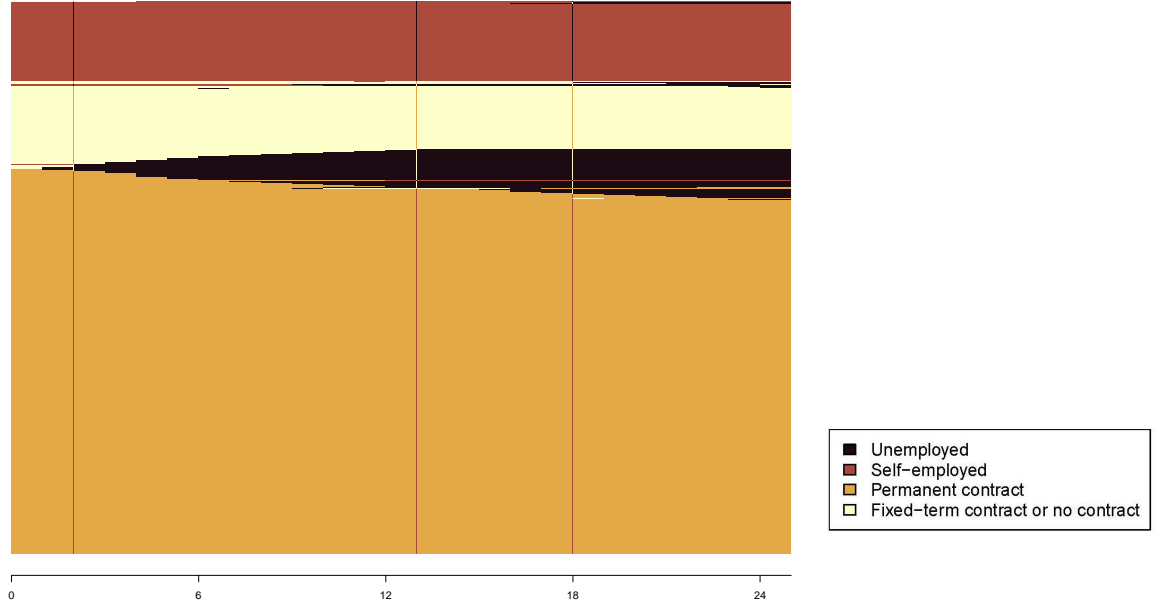


Figure 1: All sequences by months among fist-time mothers ( $N = 3,314$ ).

trajectories and identify typical employment patterns in terms of contract type in the first two years (24 months) after the first birth. We reconstructed employment biographies that reflect the occurrence and frequency of different statuses: permanent contract, temporary contract or no contract, self-employed, unemployed. Second, we used optimal matching (OM) to measure the dissimilarity of our observations. Third, we used agglomerative hierarchical clustering using the TraMineR package in R (Gabadinho et al., 2011) to identify clusters in our data.

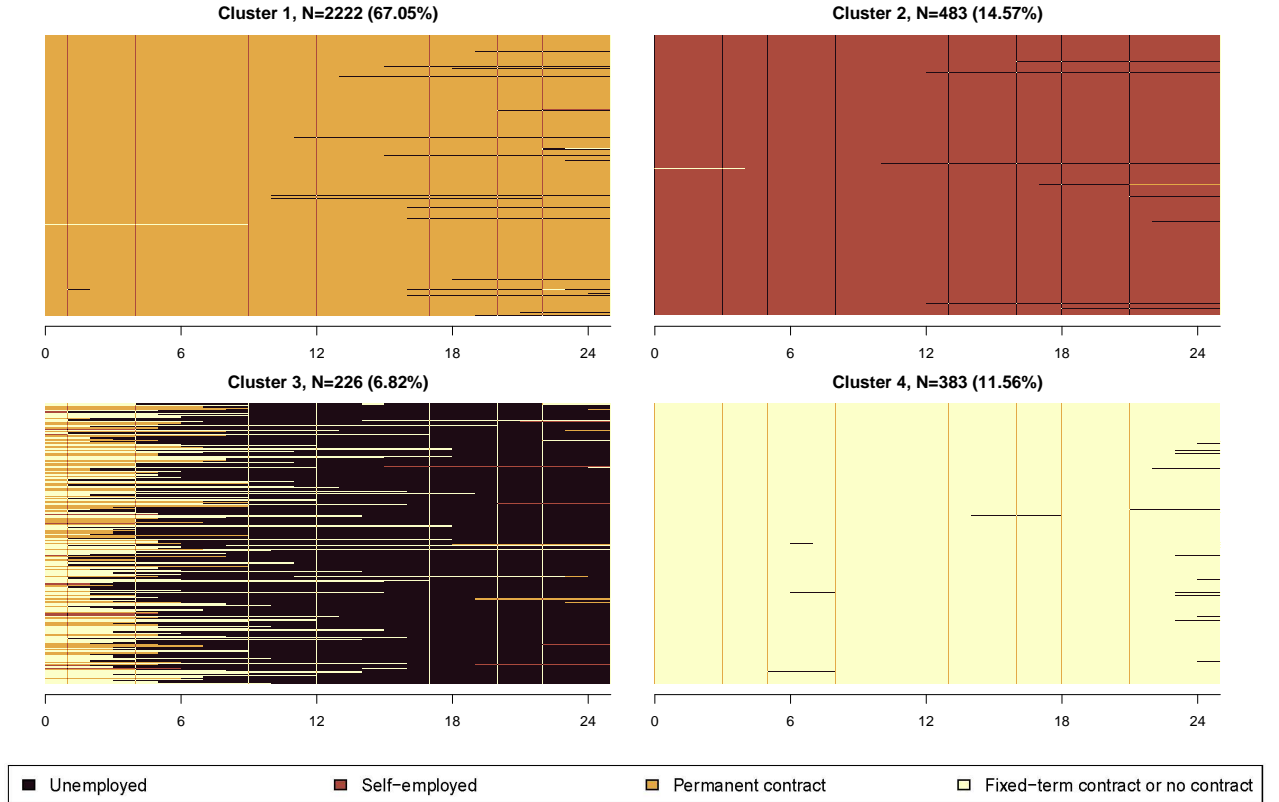


Figure 2: Cluster typology of employment trajectories among employed women 24 months following birth of first child.

After identifying clusters, we used multinomial logistic regression analysis with clusters as the

dependent variable. For example, we consider immigrant background as a dichotomous variable distinguishing between immigrant and native-born mothers. Another independent variable of our main interest is the educational attainment, which was measured as the highest level of education completed by the respondent. We then classified respondents as having completed primary school, lower or upper secondary, or tertiary education. We also control for the individual's birth cohort (1962-1969, 1970-1979, or 1980-1998) as well as women's attitudes towards gender roles, measured by respondents' answers to the following normative statements: *A woman's priority should be her family rather than her career* (agree, disagree, neither agree nor disagree).

### 3. Results

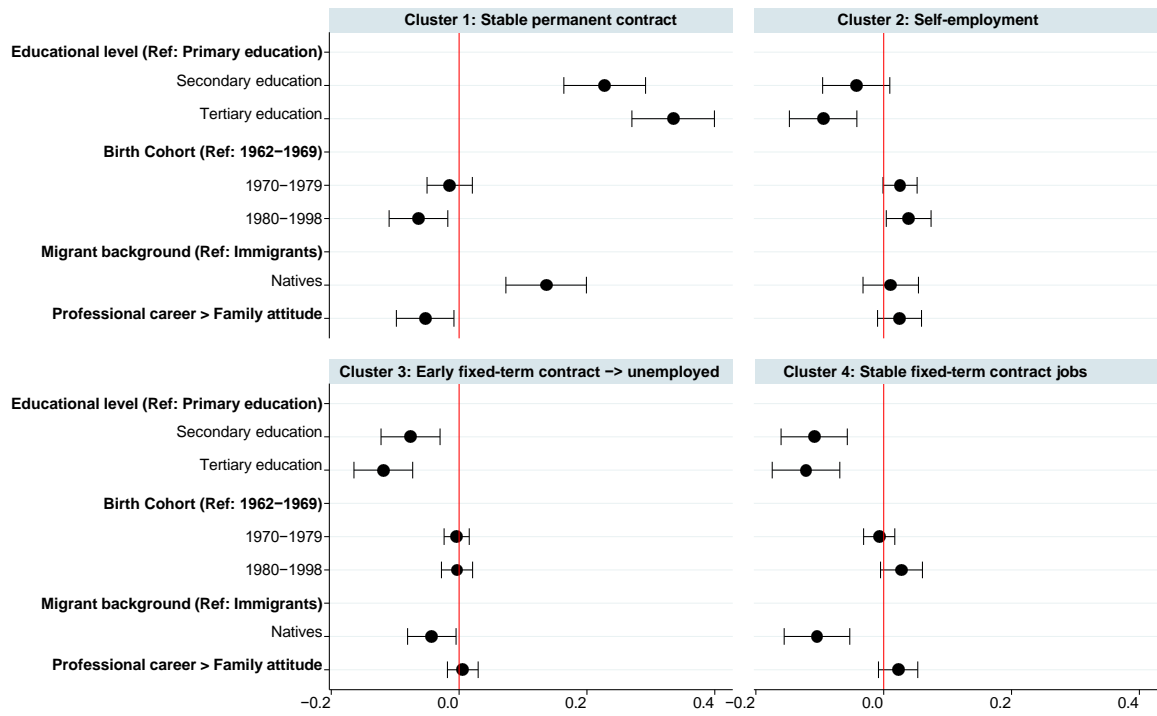


Figure 3: Employment trajectories and individual characteristics: average marginal effects (AME) by cluster. *Notes:* Reference categories of model covariates are immigrants, primary education, and 1962-1969 birth cohort.

Figure 2 visually shows how employed women changed their job contracts in the 24 months following first childbirth. Our study identified four post-birth employment trajectories that emerge from the sequence and cluster analysis. These results confirm that while the transition into motherhood is crucial in shaping subsequent labor market behaviors, the impact of the transition to motherhood on women's employment transitions varies considerably depending on their pre-birth labour market attachment (Fiori & Di Gessa, 2023; Maes et al., 2021), with those women with temporary contracts prior to childbirth being more vulnerable and more likely to leave employment after childbirth. These findings also confirm the segmented nature of the Spanish labour market (Barbieri et al., 2015; Herrarte et al., 2012; Jiménez-García & Levatino, 2023), which can consequently exacerbate the inequalities in terms of labour force participation.

Figure 3 presents the results of a multinomial regression analysis, expressed as average marginal effects (AME), predicting cluster membership. We found that differences in the stability of women’s employment trajectories around the transition to parenthood can be largely explained by both individual characteristics and structural factors, with women from earlier cohorts, without migrant background, with higher education and more egalitarian ideologies showing a higher degree of job security after childbirth.

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