

Extended abstract European Population Conference

Work histories and fertility: An analysis of the duration of precariousness and the instability of employment careers

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ABSTRACT – The vast majority of studies that link economic uncertainty and fertility have been based on indicators of employment status at one point in time. One may, however, assume that it is in particular the trajectories of economic uncertainty that matter for fertility choices. It is thus important to include more dynamic measures of work histories in order to truly understand their influence on fertility. In this paper, we study how and to what extent work histories have an effect on first birth rates in addition to, and potentially in interaction with, the current employment status. We focus on the duration of unemployment and non-permanent employment as well as on instability in the employment career. Analyses are based on Dutch full-population register data. We select all inhabitants of the Netherlands who left education in 2006 and follow them until 2018. Event history models show the importance of work histories of men and women for first birth rates.

1. Introduction

To fully understand how employment influences fertility, both an individual's current status and his or her work history have to be considered (Ciganda, 2015; Busetta et al., 2019). As nearly all studies that link fertility and employment have been rather static, measuring employment status at a specific point in time, we know little about how the history of employment affects fertility. Therefore, the aim of this study is to examine how and to what extent work histories have an effect on first birth rates in addition to, and potentially in interaction with, the current employment status. We build on recent studies that incorporated aspects of the employment career to understand fertility decisions (Özcan et al., 2010; Pailhé and Solaz, 2012; Ciganda, 2015; Dupray and Pailhé, 2018; Busetta et al., 2019) in several ways. First, whereas most studies have focused on the duration of employment states, we also examine how the instability of the employment career affects fertility. Second, in addition to distinguishing between employment and unemployment, we also differentiate permanent and non-permanent employment (e.g. temporary employment, self-employment), which is key to identifying precarious work histories (Mattijssen & Pavlopoulos, 2019). Third, we not only investigate the effects of current employment and work histories separately, but also examine how the two interact. This way, we are able to situate the current status within the wider employment career. Finally, we base our analyses on Dutch register data on the full population, which – in contrast to survey data – do not suffer from problems associated with small sample sizes, selective nonresponse, recall bias (when using retrospective questioning), and sample attrition (in panel surveys).

2. Theoretical background

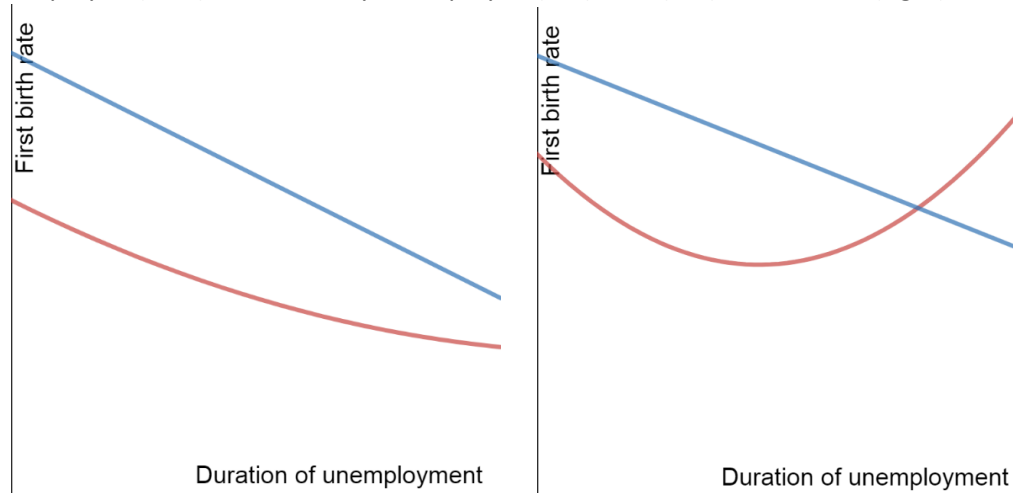
Current employment status – Current unemployment and non-permanent employment may influence fertility in at least two ways (Kalmijn, 2011). First, individuals in unemployment and non-permanent employment often have a lower income than permanent employees, which may make them unable to afford the costs to raise a child (income effect) but may also reduce the opportunity costs of having children (price effect; Becker, 1981). Second, unemployment and non-permanent employment often

cause insecurity about future employment, and this uncertainty may either cause individuals to delay childbearing until a more secure position has been achieved (Blossfeld et al., 2005) or make them compensate for uncertainty in employment by adopting an 'alternative career' as parent (Friedman et al., 1994). As the relevance of each of these mechanisms is likely gendered, separate analyses will be conducted for men and women.

Work history: duration – Two theoretical mechanisms predict opposing effects of the duration of unemployment and non-permanent employment on fertility behavior. Based on the scarring hypothesis (previously tested for the effects of the duration of unemployment on life satisfaction (Clark et al., 2001; Knabe & Rätzel, 2011)) it can be expected that fertility rates will decrease with the duration of precarious employment. According to this view, it is especially long-term precariousness that makes people delay childbearing, as this has likely drained resources and made individuals more insecure about their future economic situation (Adsera, 2011; Ciganda, 2015). In contrast, the habituation hypothesis predicts that fertility increases with longer durations of precarious employment, as individuals get used to the situation or reevaluate the requirements for childbearing (Pailhé and Solaz, 2012). As a result, they may end up fulfilling their childbearing desires despite their precarious employment situation (cf. Friedman et al., 1994). Which of these two mechanisms is dominant may depend on the length of precarious employment and the current employment status. Whereas the scarring effect will likely become relevant immediately after an individual enters precarious employment, the habituation effect may take some more time to start working. Together, this may lead to a non-linear, U-shaped effect of the duration of precarious employment on fertility rates. Regarding the current employment status, the scarring effect may be present both among those who are currently in a precarious position and those who are not, whereas the habituation hypothesis is more relevant for those who are currently in a precarious position. Furthermore, the effect of the duration of precariousness may depend on the gender of the person who experiences precarious employment. The scarring effect may be stronger among men, who are often seen as the primary breadwinners of the family. Women, in contrast, may be more likely to reevaluate their preferences about employment and childbearing, and choose an 'alternative career' as mother when faced with long-term precariousness (Pailhé and Solaz, 2012). All hypothesized effects are visualized in Figure 1 for the duration of unemployment. We expect that the effects of duration are clearest for unemployment, and will examine to what extent the duration of non-permanent employment shows similar effects.

Work history: instability – In addition, the stability of the employment career may matter for fertility (Ciganda, 2015). We expect that lower fertility rates will be observed among those who have experienced instable employment careers with many job changes, as instability drains resources, leads to a general feeling of unpredictability of the future, and makes it hard to plan ahead. As was the case with duration, the effect of instability may depend on the current employment status. We expect a stronger negative effect of instability on first birth rates for individuals who are currently unemployed or in non-permanent employment, as these individuals will have little hope that their employment career will become more stable in the (near) future.

Figure 1 – Hypothesized effects of the duration of unemployment on first birth rates for currently employed (blue) and currently unemployed (red) men (left) and women (right)



3. Data and methods

Our analyses are based on Dutch register data on the full population (Bakker et al., 2014). We select all those residing in the Netherlands who left full-time education in 2006 and had not conceived a child before that time. We follow them until they conceive a first child or until the end of our observation period in 2018. Our dependent variable measures whether a person conceived a first child (1) or not (0) for each month in this period. Current employment status is based on a monthly indicator of an individual’s employment position, distinguishing (1) permanent employment; (2) non-permanent employment; and (3) unemployment. Additional analyses will further break down these categories by examining whether effects differ for temporary workers and the self-employed, and for the unemployed depending on the type of benefit they receive.

The duration of unemployment and the duration of non-permanent employment are measured as the number of months spent in these respective states during the previous three years. The instability of the employment career is measured by Elzinga and Liefbroer’s (2007) turbulence measure applied to the number of job changes in the previous three years, with more recent job changes given a higher weight.

All models control for age, age squared, the number of months spent in education over the previous three years, ethnicity, education level, number of working hours, and sector of employment. We furthermore control for the current relationship status, distinguishing between individuals who are (a) not cohabiting and not married; (b) cohabiting but not married; and (c) married.

Discrete-time event history models are specified to estimate the effects of current employment and work histories on first birth rates. Main and interaction effects are added to the models in a stepwise manner.

4. Results

Register data are prepared for analyses at the moment (fall 2019) and expected to be ready for analyses latest January 2020. Some first existing descriptive statistics show the feasibility of our approach. First, linking information on the average age at leaving education (Statistics Netherlands, 2019) to first birth rates by age and educational group (Statistics Netherlands, 2012) shows that for all educational groups and for both genders, the vast majority of first births fall within our observation period. Second, as we

observe our sample during both an economic crisis and a period of increasing flexibility of the Dutch labor market, much variation exists in the employment careers of individuals in our sample (Mattijssen & Pavlopoulos, 2019).

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