Labor market trajectories after age 50 and their relationship with health and early retirement in Spain

As a response to increases in life expectancy and decreases in fertility, governments in the Global North are raising the statutory retirement age as a way to sustain social security systems. This one-size-fits-all policy has the risk of perpetuating existent health inequalities. Even though life expectancy is increasing overall, it is not increasing at the same rate for everyone. People with lower education and lower income levels have lower life expectancies and lower healthy life expectancies, that is lower amount of years spent without a disease. At the same time, different jobs produce different outcomes in terms of health and employment security. Employment insecurity is related to worse health outcomes and future employment insecurity. Raising the retirement age without considering the complex dynamics that link work to health has the consequence of perpetuating health inequalities later in life.

In Spain, retirement age has been rising slowly from 65 to an expected 67 in 2027 and, with it, the minimum number of years of tax contributions from 35 to 38. This policy is justified by sustainability of the social security system since the number of older people is increasing faster than the number of contributors. However, the policy has been criticised for not considering the diversity of working lives and exit mechanisms from the labor market. Life course research points to cumulative effects of working lives on health and on the attachment to the labor market later in life. There is evidence that differential in employment attachment exists between sexes, health status and occupational category.

The overall aim of this study is to assess the relationship of late labor market trajectories (the decade of the 50´s) in Spain with the likelihood of exiting the labor force before the statutory retirement age of 65. We aim to identify types of late-life labor trajectories, describe characteristics of people who experience an early labor market exit and identify the reasons why people exit the labor market earlier: through inactivity, unemployment, disability, death or early retirement using social security system records in Spain.

Methods

Database description

We used the data from Continuous Sample of Working Lives (CSWL) from the social security system in Spain. The CSWL contains information on employment and pensions of a 4% sample of individuals (about 1.2 million) in contact with the social security system. The samples function as a panel survey, the first sample was extracted in 2004 and if individuals continue contact with the social security through employment-related contributions or pensions they will form part of subsequent CSWLs. If people lose contact for a specific year and then work or receive a pension again, they will form part of the CSWL. For this study we used the CSWL from 2004 to 2020 and individuals who were born between 1941 and 1954.

Study Sample

The study sample consists of people in the 1941-1954 birth cohort. This birth cohort reached the statutory retirement age of 65 during years 2006 to 2019 (figure 1). The

CSWL includes all workers with a formal contract with an employer and all self-employed workers who are affiliated with the social security system. For the purpose of this study, we excluded all individuals who did not have an occupational category recorded with the social security system as this is a key independent variable in the study. Individuals who worked as self-employed during the years of the study observation period (2004 to 2020) did not have an occupational category recorded in the social security records, hence do not form part of the study sample.

Labor market variables

The CWLS contains dates of periods of employment, unemployment receiving benefits, disability and retirement. Periods of inactivity were calculated using gaps between dates in which the individuals are in contact with the social security system. In some instances, people may have two jobs at the same time or overlapped periods of employment and unemployment. For the purpose of this study, we will not quantify twice the overlapped days, but calculate time in each state as mutually exclusive. States include: employment, unemployment (with benefits), inactivity and disability (with benefits). Annual states were calculated based on the longest time spent in each state (>6months).

Occupational category was determined using the international standard classification of occupations (ISCO-08). The CSWL reports 13 categories, which we grouped into three ISCO categories: 1) Managerial and professional occupations, 2) intermediate jobs and 3) routine jobs. Individuals may have employment periods in different occupational categories throughout the observation period, however we assigned individuals the highest occupational category recorded during the period of observation (2004-2020). We assume that the occupational category recorded by the employer reflects the level of skill of the employee, hence choosing the highest category obtained may better reflect the level of skill of workers and in this sense the opportunities for work.

Statistical approach

Analyses were stratified by sex because women and men in the aforementioned birth cohort have had different labor market participation with women having lower attachment to the labor market than men. We used sequence analysis to build labor market trajectories from ages 50 to 59. Sequence analysis takes into account the timing and the sequencing in which events happen. In this study, the events are composed by the annual labor market states in a person´s late labor trajectory: employment, unemployment, disability and inactivity. We used optimal matching and clustering analysis to build typologies of late labor market trajectories.

We plan to assess the association between type of late labor market trajectory and having an early exit from the labor market through any potential mechanism: disability, retirement or death.

Years of observation	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
1991	50													
1992	51	50												
1993	52	51	50											
1994	53	52	51	50										
1995	54	53	52	51	50									
1996	55	54	53	52	51	50								
1997	56	55	54	53	52	51	50							
1998	57	56	55	54	53	52	51	50						
1999	58	57	56	55	54	53	52	51	50					
2000	59	58	57	56	55	54	53	52	51	50				
2001	60	59	58	57	56	55	54	53	52	51	50			
2002	61	60	59	58	57	56	55	54	53	52	51	50		
2003	62	61	60	59	58	57	56	55	54	53	52	51	50	
2004	63	62	61	60	59	58	57	56	55	54	53	52	51	50
2005	64	63	62	61	60	59	58	57	56	55	54	53	52	51
2006	65	64	63	62	61	60	59	58	57	56	55	54	53	52
2007	66	65	64	63	62	61	60	59	58	57	56	55	54	53
2008	67	66	65	64	63	62	61	60	59	58	57	56	55	54
2009	68	67	66	65	64	63	62	61	60	59	58	57	56	55
2010	69	68	67	66	65	64	63	62	61	60	59	58	57	56
2011	70	69	68	67	66	65	64	63	62	61	60	59	58	57
2012	71	70	69	68	67	66	65	64	63	62	61	60	59	58
2013	72	71	70	69	68	67	66	65	64	63	62	61	60	59
2014	73	72	71	70	69	68	67	66	65	64	63	62	61	60
2015	74	73	72	71	70	69	68	67	66	65	64	63	62	61
2016	75	74	73	72	71	70	69	68	67	66	65	64	63	62
2017	76	75	74	73	72	71	70	69	68	67	66	65	64	63
2018	77	76	75	74	73	72	71	70	69	68	67	66	65	64
2019	78	77	76	75	74	73	72	71	70	69	68	67	66	65
2020	79	78	77	76	75	74	73	72	71	70	69	68	67	66

Figure 1. Timeline of labor market trajectories observations. Study sample includes individuals in the 1941 to 1954 birth cohort. Labor market trajectories are composed of the states which individuals experienced during ages 50 to 59 (purple area). Age 65 is the statutory retirement age in Spain (gray area). Potential early exits from the labor market will be observed after age 59 and before age 65 (orange area).

Preliminary findings

1. About 80% of the study population were employed at the beginning of their 50´s. As people get older, they transition to unemployment, inactivity or disability and a lower number of individuals remain employed.

2. We found 4 types of labor trajectories for women and four for men (figure 2). Figure 2 depicts the four different types of trajectories. For women we observe the following trajectories 1) Mostly employed, 2) Mostly unemployed, 3) Mostly inactive and 4) Mostly with disability. For men the same trajectories played out.

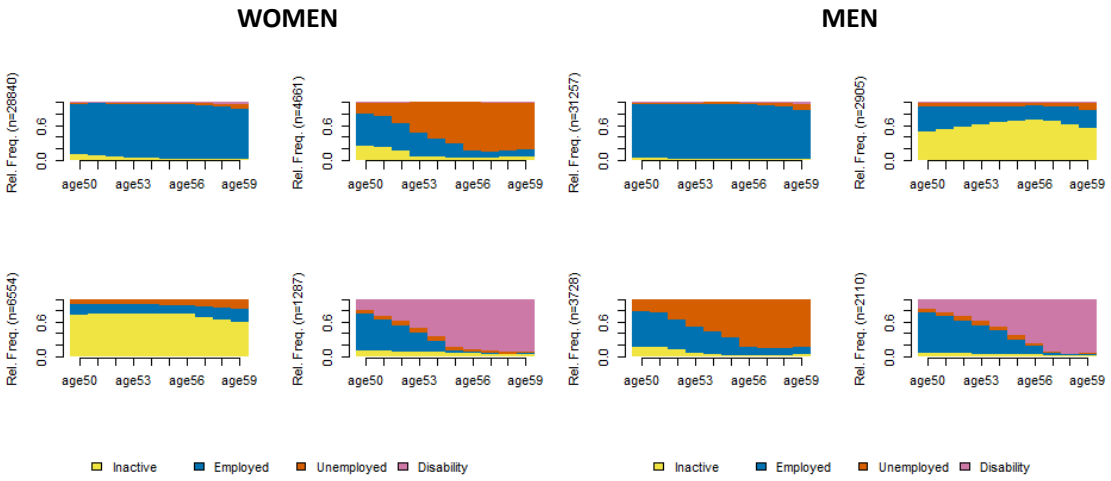

Figure 2. State distribution of labor market trajectories from ages 50 to 59 by gender.

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