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Seniority wages and the role of firms in retirement☆

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ABSTRACT

In general, retirement is seen as a pure labor supply phenomenon, but firms can have strong incentives to send expensive older workers into retirement. Based on considerations about wage costs and replacement costs, we discuss steep seniority wage profiles as incentives for firms to dismiss older workers before retirement. Conditional on individual retirement incentives, e.g., social security wealth accrual rates or health status, the steepness of the wage profile will have different incentives for workers as compared to firms to maintain the employment relationship. Using an instrumental variable approach to account for selection of workers in our firms and for reverse causality, we find that firms with higher labor costs for older workers have on average a lower job exit age and a higher incidence of golden handshakes.

1. Introduction

Retirement decisions are typically seen as a labor supply phenomenon and most scholars have focused on individual retirement incentives. There is a large literature on the influence of health (e.g., Currie and Madrian, 1999), individual productivity (Burtless, 2013), working conditions (Schnalzenberger et al., 2014), the generosity of social security systems in terms of pensions (Van Soest and Vonkova, 2014) or retirement age regulations (Mastrobuoni, 2009 or Staubli and Zweimüller, 2013).

In spite of this research focus on – voluntary – labor supply effects, surveys often reveal that a large proportion of workers state their early retirement was not a voluntary decision (Dorn and Sousa-Poza, 2010 using ISSP data or Marmot et al., 2004 for England). Differentiating between voluntary and involuntary retirement may not be very clear for survey respondents; their answers may reflect retirement regulations, but also a role of firms, which is important in several respects: Leaving out labor demand in retirement processes is unwise given the big policy problem of early retirement rates across Europe; in particular, investigating the role of wage costs and wage schedules opens up important policy channels.

In this paper, we want to study the role of labor demand in individual retirement decisions. In particular, we investigate whether a steep cross-sectional seniority wage profile in a firm leads to a markedly lower job exit age of its workforce, using high-quality administrative data for the universe of Austrian workers and firms. We tackle the endogenous nature of a firm's wage structure by

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instrumenting with labor market shocks a decade ago. We are also able to study the causal relationship between seniority wage profiles and the incidence of entering into a disability pension, phased retirement or the probability of receiving a golden handshake. Particularly the latter directly points towards an active role of the firm in retirement behavior, because a golden handshake is a voluntary payment to workers and, as such, an exclusive choice variable of the firm.

Previous research on labor demand effects in retirement has been directed towards different issues: Bartel and Sicherman (1993), Bello and Galasso (2015) and Bellmann and Janik (2010) explore the role of technology and trade shocks on retirement. The role of seniority wage profiles in retirement decisions has not been studied directly. Hakola and Uusitalo (2005) and Hallberg (2011) are related to our topic, as they study the impact of non-wage labor costs on retirement age. Hakola and Uusitalo (2005) analyze the introduction of an experience-rating of early retirement benefits in Finland and find a significant reduction of early job exits of older workers. This implies a firm's impact on retirement, as workers need to be laid off before obtaining early retirement benefits at all. Hallberg (2011) exploits variations in age-dependent collective fee costs across companies in Sweden to show how non-wage costs affect early retirement probabilities.[1]

Other studies are related to seniority wage profiles in relation to labor demand in general. There is widespread evidence that steep seniority wage profiles have an impact on hiring behavior and retention of workers. Hirsch et al. (2000) show that older workers have substantial entry barriers in occupations with steep wage profiles and pension benefits. Zwick (2012) shows that establishments with steeper seniority profiles hire less elderly workers, hire more younger workers and, thus, have a longer job tenure of its workers. Kramarz et al. (1996) show that evolutions of employer-specific wage policies are correlated with changes of the workforce in terms of experience and seniority.

In a theoretical life-cycle of workers, firms are indifferent with regard to the retirement age of their workers as long as age-wage profiles correspond to age-productivity profiles. This is not the case otherwise; incentives for firms to lay off older workers may arise, whenever age-wage profiles exceed age-productivity profiles. A prototypical seniority wage profile has been constructed by Lazear (1979): here, workers and firms adhere to an implicit contract, whereby workers' wages are below their marginal product at the beginning and higher at the end of their career with the firm.[2]

In our study, we focus on cross-sectional age-wage profiles in firms rather than such a Lazear-type seniority wage schedule. A steep cross-sectional wage structure in a firm – i.e. higher current costs of elderly workers relative to replacement costs – will exert large incentives for firms to reduce the workforce of elderly workers and replace them with younger – cheaper – ones.[3] On the other hand, elderly workers in such firms predominantly have an incentive to stay longer. While higher wages in the worker's late career should increase labor supply, at least for inter-temporal substitution reasons, incentives from pension claims are less clear-cut. A firm effect on individual retirement can only be separated from the individual retirement decision if individual incentives from pensions are addressed properly within the empirical framework.

Our results show that steep wage gradients in firms indeed cause earlier job exit of elderly workers. Such workers leave the firm earlier and typically stay in the unemployment register until finally retiring. Together with an increase in voluntary golden handshakes we can conclude that firms do play a role in retirement behavior of their workers.

2. Institutional background and data

Compared to other OECD countries, Austria shows a relatively low effective retirement age and high net replacement rates. The average pension in Austria for men is 76.6% of an average worker's earnings (compared to the total OECD average of 54.5 %, values for 2012). With a statutory retirement age of 65, Austrian men retire on average at age 60.6 (value for 2014), taking advantage of early retirement options due to long periods of social security contributions and disability pensions.

Particularly for blue-collar workers, disability insurance is a frequent pathway into retirement. An individual with health problems can access disability pension conditional on having a severe health impairment that lasts for at least 6 months and implies a reduced work capacity of at least 50% relative to a healthy person within comparable education in any occupation.[4] It is difficult for firms to influence the entry into disability retirement, because eligibility is checked by independent medical doctors.

Concerning the relatively low retirement age in Austria, Hofer and Koman (2006) conclude that the low labor force participation among the elderly can be attributed to some extent to disincentives of the Austrian pensions system, which provides too many incentives to retire early. Hanappi (2012) computed the social security wealth and accrual rates for Austria. He finds that the social security wealth peaks at age 63 for men, hence creating strong disincentives to work longer than 63.

The generosity of the Austrian pension system also appears in other relevant dimensions: In order to smooth the transition into retirement, there are old-age part-time schemes for older employees, where working time reductions of elderly workers are subsidized – often leading to early retirement altogether (Graf et al., 2011). Special severance payments (golden handshakes) paid to the worker in case of leaving the job bring along tax advantages to the employer and the employee.

For our analysis we use data from the Austrian Social Security Database (ASSD) containing comprehensive information on all employment and income data necessary to calculate pensions – and the social security wealth at each point in time. It covers the universe of Austrian workers together with firm identifiers, which allows the construction of a firm's workforce in detail from 1971 to 2012 (Zweimüller et al., 2009). We use all male[5] blue-collar and white-collar workers aged 57 to 65 who retired in the period 2000 to 2009 and worked in private sector firms.[6] We exclude workers from small firms with less than 15 workers and from firms without workers below age 25, because no reliable seniority wage schedule can be constructed in such firms.

When we define our "retirement age" we do not explicitly look at the age at actual retirement, but consider the age of the worker when he exits from the last job before retirement – and restrict

[1] Other studies implicitly related to the wage structure look at firing penalties or subsidies of older workers, e.g., Behaghel et al. (2008) or Schnalzenberger and Winter-Ebmer (2009).

[2] See also Hutchens (1999), who models the firm's impact on early retirement decisions of its workers by emphasizing the role of the social security system, which may effectively subsidize workforce reductions similar to non-experience-rated unemployment insurance.

[3] Such a substitution of older by younger workers is always possible in a frictionless labor market; but also in a market with frictions (long-term contracts or hiring and firing costs) provided that productivity-corrected wage differentials between old and young are large enough.

[4] Above the age-threshold of 57 the same individual qualifies for disability benefits if the ability to work is reduced by more than 50% relative to a healthy person with comparable education in a similar occupation.

[5] We do not use female workers, because part-time work is very common among women in Austria, and we have missing working time information.

[6] We do not go beyond the year 2009 in our analysis to exclude any potential impact of the economic crisis on retirement.