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Retiree health insurance for public school employees: Does it affect retirement?☆,☆☆

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ABSTRACT

Despite the widespread provision of retiree health insurance for public sector workers, little attention has been paid to its effects on employee retirement. This is in contrast to the large literature on health-insurance-induced "job-lock" in the private sector. I use the introduction of retiree health insurance for public school employees in combination with administrative data on their retirement to identify the effects of retiree health insurance. As expected, the availability of retiree health insurance for older workers allows employees to retire earlier. These behavioral changes have budgetary implications, likely making the programs self-financing rather than costly to taxpayers.

1. Introduction

In the U.S., as in many other OECD countries, public sector pension funds are severely underfunded.[1] At the same time, the funds set aside to pay for the health insurance promised to retired state and local government employees, like teachers, represent an even smaller fraction of the estimated future health care liabilities than pension funds do pension liabilities (Clark and Morrill, 2010). While the promised pension benefits to public employees are considered constitutionally protected in many states, retiree health insurance is not. Therefore, facing considerable deficits and a poor economic climate, state and local governments may decide to discontinue, significantly scale back, or otherwise alter retiree health insurance programs for their employees.

Economic theory would predict that the offer of retirement-contingent health insurance to public sector employees would decrease public sector employment of older workers for two reasons. First, there is an income effect of subsidized health insurance that discourages work. Second, health insurance that is tied to retirement from the public employer does not preclude employment in the private sector; the reduction of "job-lock" may lead employees to retire from the public sector but continue to work elsewhere. This option may be particularly attractive to older workers if private sector jobs offer more flexible hours than public employers.

However, there has been relatively little research into the magnitude of any effects of retiree health insurance on *public sector* employment. Research on similar programs, e.g. Medicare, COBRA and the Veterans Affairs insurance expansion, provides some indication (Gustman and Steinmeier, 1994; Karoly and Rogowski, 1994; Madrian, 1994; Gruber and Madrian, 1995; Lumsdaine et al., 1996; Rust and Phelan, 1997; Blau and Gilleskie, 2001, 2006, 2008; Boyle and Lahey, 2010; Robinson and Clark, 2010; Strumpf, 2010; Coe et al., 2013; Martin and Woodbury, 2013; Nyce et al., 2013). This

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[1] Novy-Marx and Rauh (2009) estimate U.S. public pension funds are $3 trillion underfunded. For information on OECD public pensions, see http://www.oecd.org/finance/private-pensions/47827915.pdf.

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literature has generally shown that health insurance availability for retirement-aged individuals induces retirement, though the magnitudes of the effects vary across settings.[2] Yet, this work has focused on private sector employees. Differences between both public employee retiree health insurance plans and the other types of insurance studied and public and private employees suggest the effects of retiree health insurance may be different across the public and private sectors. For example, research has shown that public sector employees are particularly responsive to the nonlinearities in their pension benefits (Costrell and Podgursky, 2009; Brown, 2010; Koedel et al., 2013; Grissom et al., 2013a,b) and are more knowledgeable about their retirement benefits (DeArmond and Goldhaber, 2010) than their counterparts in the private sector.

More recently, two studies have focused specifically on the effects of retiree health insurance on the labor supply of public sector retirees. Leiserson (2013) uses administrative data on public bureaucrats in Pennsylvania to investigate how employee exit responds to retiree health insurance eligibility. He leverages both the inherent variation caused by standing eligibility requirements for pensions and the retiree health insurance program and a natural experiment caused by an increase in the service requirement for retiree health insurance eligibility (but not pension eligibility) from 15 to 20 years. Shoven and Slavov (in this issue) use data on all federal, state and local government employees from the Health and Retirement Study coupled with data on pension and retiree health insurance availability and generosity to determine the effects of retiree health insurance on the labor supply of older workers between ages 55 and 64. Both studies find that the availability of public employer provided retiree health insurance increases the likelihood that employees will be either out of the labor force or at least no longer working at their public employer.

The current study contributes to this emerging literature because, as described more below, I use administrative data on the single largest group of public sector workers, namely, teachers and other public school employees.[3] I also leverage a natural experiment different in nature than those used by Leiserson and Shoven and Slavov. Its counterfactual is a world without retiree health insurance in the public sector. Also, similar to the other studies, the nature of my data allows me to pay careful attention to other endogenous factors that may be driving retirement, e.g. pension eligibility and generosity. Moreover, the weakness of my study – my use of data and identifying variation from the early 1980s when labor supply patterns of older workers were likely somewhat different than they are today – does not plague the other studies. As such, the findings of all three studies can be combined to more fully understand the relationship between retiree health insurance and public sector employee labor supply.

To be more specific, in this paper, I provide direct evidence about how public sector retiree health insurance availability affects the labor supply of public employees by examining the introduction of retiree health insurance for public school employees in Illinois. Today, former employees of Illinois Public Schools (IPS) who receive retirement benefits from the Illinois Teacher Retirement System (TRS) can participate in a health insurance plan called the Teachers Retirement Insurance Program. The state legislators introduced this retiree health insurance program for teachers and other public school employees, which I call TRHIP, in January of 1980 and permitted the first enrollments on July 1, 1980.[4] At the time, premiums for enrollees were 50 percent subsidized. In order to enroll, former IPS employees needed to be receiving retirement benefits from the TRS and have at least 8 years of creditable service with the TRS.

Using administrative data from IPS, I use a differences-in-differences framework to compare the labor supply of teachers old enough and with enough accumulated experience to be eligible for TRHIP to those who were ineligible (because they were too young or had too little experience to be eligible for retirement benefits and THRIP) just before and after the TRHIP was introduced. I control for age and experience fixed effects, thereby capturing any systematic variation in labor supply across the lifecycle and career. The identifying assumption is that, conditional on employee characteristics, there were no other concurrent policies or environmental factors that disproportionately affected the labor supply of teachers eligible for THRIP. Importantly, using historical TRS documents, I can confirm there were no concurrent policy changes by the Illinois TRS related to either pension benefit size or eligibility. To further support the identification assumption, I examine pre-treatment trends in differences in labor supply of the ineligible and eligible public school employees and find no differences.

The outcome of interest is the retirement from the IPS system, which is synonymous with leaving one's career job. I find that eligibility for retirement-contingent health insurance induces a clear shift in the age profile of retirement for public school employees. Before retiree health insurance is introduced, the exit rate of employees from IPS is highest at age 65, when eligibility for Medicare begins. After TRHIP is introduced, the exit rate of employees who continue to be employed at age 65 decreases 40 percent, from 0.51 to 0.29. At the same time, exit rates when employees first become eligible for retirement benefits at age 55 were just 0.054 before the TRHIP was introduced. Afterwards, the exit rate at this age, which now determines not just eligibility for retirement benefits but also retiree health insurance, jumps to 0.098, an increase of 81 percent. As we would have expected, some employees move forward their timing of retirement when retiree health insurance becomes available.

In Section 2, I provide an overview of the Illinois teacher pension and retiree health insurance programs as they exist today, and their historical genesis. I describe the data in Section 3 and the empirical methodology in Section 4. I present results in Section 5 before discussing implications, including how these changes in labor supply affect cost calculations, in Section 6 and concluding with a brief discussion of the applicability of the results in today's economy in Section 7.

[2] Evidence from Medicare on labor supply of older Americans is limited, likely in part due to the fact that it is difficult to disentangle the eligibility for Medicare from the eligibility for Social Security and other retirement contingent programs for which people become eligible at age 65. Some existing studies generally overcome this problem using identification assumptions based on functional form and find positive effects (Rust and Phelan, 1997; French and Jones, 2011; Blau and Gilleskie, 2008). An exception is recent work by Coe et al. (2013) who use the decoupling of Medicare and Social Security eligibility that resulted from the increase in the full retirement age for collecting Social Security benefits in a differences-in-differences strategy. They find that Medicare eligibility increases retirement at age 65 by 2.6 percentage points. Similarly, Gruber and Madrian (1995) find that continuation-of-coverage mandates for employees ages 55–64 increase retirements.

[3] The BLS reports that in May of 2013, there were about 19 million state and local government workers, 53 percent of which were education related employees. http://www.bls.gov/news.release/empsit.t17.htm.

[4] The name Teachers Retirement Insurance Program was introduced in 1995 when the state created the Teachers' Health Insurance Security Fund as an agency (separate from the pension fund) responsible for collecting state, district and employee contributions, managing the investment of funds and providing payment for the healthcare received by members. Before that, the retiree health insurance program was managed by the TRS and generically called the retiree health insurance program. For consistency, and to distinguish it from the program available only after 1995, I will refer to the program as the teachers' retiree health insurance program (TRHIP) throughout the paper.