Contents lists available at ScienceDirect

The Journal of the Economics of Ageing

journal homepage: www.elsevier.com/locate/jeoa

Full Length Article The long reach of education: Early retirement

Steven Venti^{a,*}, David A. Wise^b

^a Dartmouth College and NBER, Department of Economics, Dartmouth College, 6106 Rockefeller Hall, Hanover, NH 03755, United States ^b Harvard University and NBER, National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138, United States

A R T I C L E I N F O

Article history: Available online 12 September 2015

Keywords: Education Retirement Disability Insurance Social Security

ABSTRACT

The goal of this paper is to draw attention to the long lasting effect of education on economic outcomes. We use the relationship between education and two routes to early retirement - the receipt of Social Security Disability Insurance (DI) and the early claiming of Social Security retirement benefits - to illustrate the long-lasting influence of education. We find that for both men and women with less than a high school degree the median DI participation rate is 6.6 times the participation rate for those with a college degree or more. Similarly, men and women with less than a high school education are over 25 percentage points more likely to claim Social Security benefits early than those with a college degree or more. We focus on four critical "pathways" through which education may indirectly influence early retirement - health, employment, earnings, and the accumulation of assets. We find that for women health is the dominant pathway through which education influences DI participation. For men, the health, earnings, and wealth pathways are of roughly equal magnitude. For both men and women the principal channel through which education influences early Social Security claiming decisions is the earnings pathway. We also consider the direct effect of education that does not operate through these pathways. The direct effect of education is much greater for early claiming of Social Security benefits than for DI participation, accounting for 72% of the effect of education for men and 67% for women. For women the direct effect of education on DI participation is not statistically significant, suggesting that the total effect may be through the four pathways.

© 2015 Elsevier B.V. All rights reserved.

Introduction

The central goal of this paper is to draw attention to the long lasting influence of education. It is of course not news that education is an important determinant of a person's life course. The focus in this paper is the relationship between the level of education and two routes to early retirement. One is through the Social Security Disability Insurance program (DI), with very few people leaving DI once accepted. The second is through the early claiming of Social Security retirement benefits by those who have not already retired through the DI program. These routes are used disproportionately by those who are ill-prepared to work longer because of health or other reasons. The analysis brings to the fore just how important and long-lasting the influence of education can be. The magnitude of the "education effect" on these retirement outcomes is likely to be surprising to many readers. The results illustrate not only the enormous influence of education but also that change in the breadth and depth of education may play an important role in

* Corresponding author. E-mail address: sfv@dartmouth.edu (S. Venti). improving preparation for retirement in the future. To confront a wide range of problems that we face it will likely be necessary to address the critical role played by education. Early retirement is simply an example to bring attention to the far-reaching influence of a key foundation for well-being throughout the life course.

Although the focus of this paper is on the far reaching effect of education, the outcome we consider – early retirement – is itself an important policy issue for at least two reasons. First, delaying retirement can have a positive effect on the financial sustainability of the Social Security system. In addition, the nearly 8% increase in benefits for each year that claiming is delayed provides a substantial benefit to those for whom delaying claiming is feasible.

We begin by considering the relationship between education and the receipt of DI benefits for persons between the ages of 50 and 62. Then we consider the early claiming of Social Security benefits by persons between the ages of 62 and 65 who are not receiving DI benefits at 62. Education may affect DI participation and early claiming of Social Security benefits in many ways. For both routes to retirement we emphasize four critical pathways – health, employment, earnings, and the accumulation of assets – through which education may indirectly influence early retirement





decisions. Education may affect DI decisions or the early claiming of Social Security benefits indirectly through each of these pathways. But education may also have an additional direct effect on both routes to retirement that does not operate through the designated pathways. We estimate both the direct and indirect influence of education on these routes to retirement. In doing so we use two different estimation methods to provide estimates of the upper and lower bounds for the direct and indirect effects of education.

Several recent papers – Autor et al. (2008), Goldin and Katz (2008), and Acemoglu and Autor (2012) for example – emphasize the changing education composition of the workforce and its lasting effects in the labor market. They consider the relationship between educational trends and the restructuring of the U.S. labor market in recent decades. In particular, they highlight the concern that the growth in the education of the workforce has failed to keep pace with the growth of high-skill jobs. One widely studied consequence has been growing earnings inequality or "job polarization." Here, we emphasize another critical aspect of the effect of education and routes to retirement.

We recognize that the pathway approach that we present is only one possible way of exploring the relationship between education and DI participation and between education and the early claiming of Social Security benefits. There are at least two issues that arise in this regard. One is that we focus attention on four pathways, but there may be others. For example one of the pathway variables to DI participation (and perhaps more so to early claiming of Social Security benefits) might be life expectancy. That is, education affects life expectancy which in turn affects the decision to delay receipt of Social Security benefits. We do not include life expectancy but we do include health which is strongly related to life expectancy

A second, and related issue, is the extent to which the relationship between education and each of the pathways is causal. For example, education and earnings are strongly related, but the extent to which this relationship is causal has been a longstanding issue in economics. Card (1999), in his survey of the literature on the effect of education on earnings, puts it this way: "it is very difficult to know whether the higher earnings observed for better-educated workers are *caused* by their higher education, or whether individuals with greater earning capacity have chosen to acquire more schooling." Another example is that childhood health may affect both educational attainment and late-life health. Thus part of what may appear to be an effect of education may actually be the effect of health. In the analysis that follows we measure the association between education and each pathway (and the association between each pathway and early retirement), but we make no attempt to determine the proportion of the association that might be considered causal. In this paper "education" is taken to be a *marker* for all that accompanies education without attempting to explore the mechanisms underlying the strong positive association between education and pathways to retirement. Rather, the goal is to highlight the magnitude of the relationship between education and an important life event - early retirement.

For ease of exposition, however, we often use the term "effect" to describe the relationship (either indirectly through the pathways or directly) between education and DI or early claiming of Social Security benefits.

The remainder of the paper is in four sections. Section 1 presents descriptive data that help to motivate and support the more formal analysis that follows. Section 2 presents the analysis of DI participation. Section 3 presents the analysis of the early claiming of Social Security benefits. Section 4 is a summary and discussion.

Descriptive data

The descriptive data emphasize the substantial relationship between education and the pathway variables – health, employment, earnings, and assets – through which education is assumed to influence DI participation and the early claiming of Social Security benefits. We begin by describing the striking relationship between education and DI participation and early claiming of Social Security benefits and then turn to the relationship between education and the pathway variables.

Disability Insurance and early claiming of Social Security benefits

Table 1 shows the proportion of women and men who ever applied for and who ever received DI, by level of education and health status. The table is based on pooled data for the years 1994–2010 from the Health and Retirement Study (HRS). Health status is indicated by health quintile which is based on a health index that is explained below. The top panel shows the proportion of persons age 50–62 who ever applied for DI benefits. The middle panel shows the proportions that received DI. Both education and health are strongly related to DI receipt. The range of proportions across health quintiles exceeds the range of proportions across education groups. For example, among women 47% of those in the lowest health quintile receive DI, but only 3% of those in the top health quintile receive DI. For men the respective percentages are 56% and 4%. For women, 25% of those with less than a high school (HS) degree receive DI compared to 5% for women with a college education. Of men with less than a high school degree, 27% receive DI compared to 5% for those with a college degree or more. A key feature of the table is that within each health quintile, persons with low levels of education are much more likely to receive DI than those with more education. For example, for women in the poorest health, 51% with less than a high school degree receive DI compared to 35% for those with a college degree or more. In the top health quintile 11% of women with less than a high school degree receive DI, but only 1% of women with a college degree or more receive DI. The pattern for men is very similar

An interesting feature of Table 1 is that the percentage of applicants that are approved (the ratio of the middle panel to the top panel) is much higher for those with more education. This suggests that given application, more educated applicants are "more" disabled that less educated applicants. The types of functional limitations that prevent re-employment in white collar jobs may be quite different (and perhaps more severe) than those that prevent a return to work in blue collar jobs. We do not have detailed information on the type of disability to verify this explanation, but the issue deserves additional research.

The bottom panel of Table 1 shows the proportion of persons – not on DI at age 62 – claiming Social Security benefits before the normal retirement age. Overall 71% of women with less than a HS degree claim Social Security benefits early but only 44% of those with a college degree or more claim early. For men, 66% of those with less than a HS degree claim Social Security benefits early compared to only 40% of those with a college degree or more. Again, there is considerable variation in early claiming rates within each health quintile.

The pathway variables and education

The empirical model we develop below considers how education may influence DI participation, and then the early claiming Download English Version:

https://daneshyari.com/en/article/7360072

Download Persian Version:

https://daneshyari.com/article/7360072

Daneshyari.com