



45

The Four Pillars

Research on Social Security, Insurance and Retirement

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Retirement, Health, and the Quality of Work in Europe

by Axel Börsch-Supan¹, Agar Brugiavini and Enrica Croda²
and Johannes Siegrist³

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1. Introduction

Retirement patterns are very different among European countries in spite of similar trends in mortality. Some countries exhibit very early retirement while others manage to keep older individuals working. How much of these differences are driven by pension rules? How much by health differences across countries? How much by quality of work? This article sheds light on the relative weight of these popular explanations by exploiting the richness of the Survey of Health, Ageing and Retirement in Europe (SHARE).

Much has been written about the influence of pension rules on early retirement. Social security and pension arrangements create opportunities for employees to retire at various ages, using pathways created by old age pensions, disability pensions, sickness and unemployment benefits. On the employers' side, it is often cheaper to dismiss older rather than younger workers when a company is forced to restructure because severance payments can be lower to older workers than younger workers when early retirement and disability benefits are generous. The work by the team around Gruber and Wise (1999, 2004, 2007⁴) and the OECD study based on this work by Blöndal and Scarpetta (1998) have shown how powerful these economic incentives are in creating early retirement.

Pension incentives, however, are not everything. There is substantial cross-national variation in morbidity and invalidity. Healthy life expectancy varies more than standard life expectancy, and invalidity rates are very different across countries. It is widely believed that older workers are physically and mentally worn out, such that early retirement payments, partially through unemployment and disability provisions, are badly needed. Moreover, poor quality of work has been indicated as one of the main determinants of individual decisions to stop working and retire. Although physical working conditions have dramatically improved during the recent decades, it is claimed that there is more work-related stress leading to a higher prevalence of mental disorders than a generation ago. In many countries, depression is the main reason for work-related disability, and its incidence varies a great deal across countries. High work pressure, monotonous jobs, poor incentives and high job instability certainly influence employees' decisions to depart from jobs as early as they can.

It is important for social policy to shed light on the relative weight of these competing but not mutually excluding explanations. Higher life expectancy calls for a later retirement age in order to keep the balance between time spent working and time spent in retirement approximately constant. If bad health and poor work quality are standing in the way of restoring this balance, social policy cannot only focus on laws increasing the retirement age but must also address health prevention and better work quality.

¹ Corresponding author: axel@borsch-supan.de, MEA – University of Mannheim.

² Ca' Foscari University of Venice.

³ University of Düsseldorf.

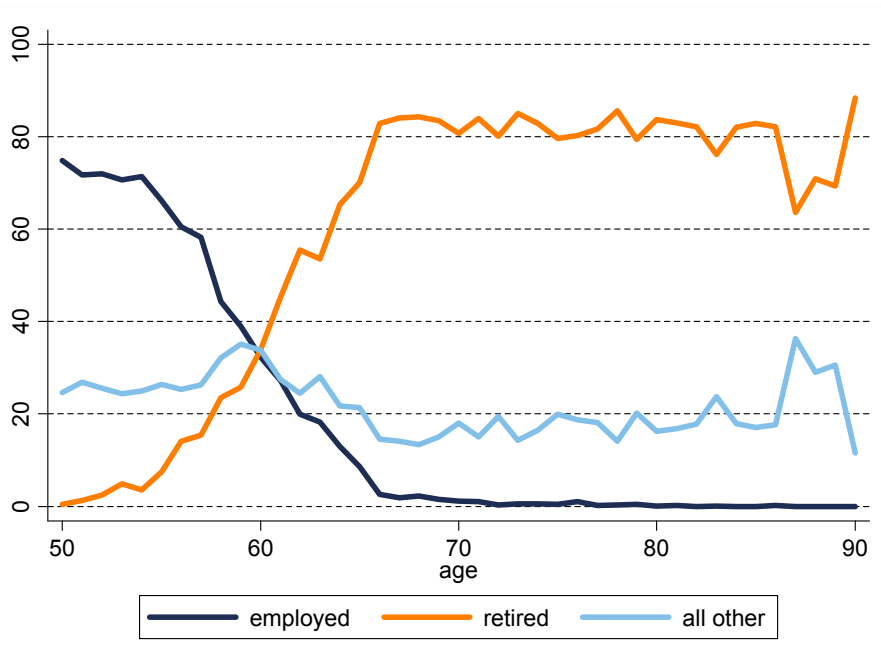
⁴ See references at the end of the article.

We use data from the Survey of Health, Aging and Retirement in Europe (SHARE). Its strict harmonization permits a precise comparison of work and retirement patterns across countries. Moreover, SHARE includes comprehensive subjective and objective health measurements, as well as rich data on work quality. We use the first two waves of SHARE with some 35,000 individuals aged 50 and over in 13 countries.⁵

2. Work and retirement patterns of older Europeans

Already at age 60, there are as many people in retirement as they are at work, and there is virtually nobody working anymore after age 66, see Figure 1.

Figure 1: Self-reported economic activity by age



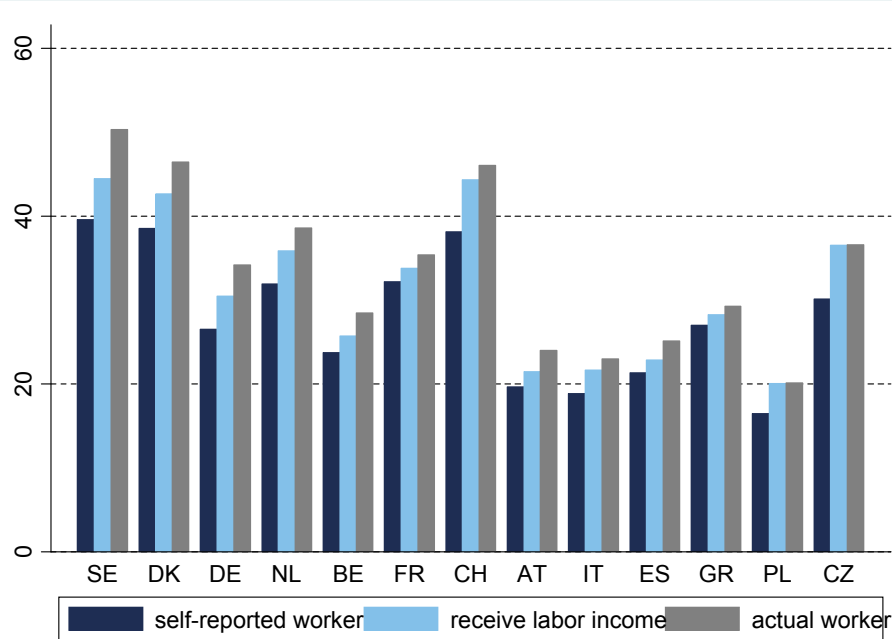
Percentage of individuals who self-report as being employed, retired or other activity status. **Source:** Authors' calculations using SHARE 2006. Whole sample. Population-weighted data.

Poland, the Mediterranean countries and Austria feature a particularly low labour force participation of individuals aged 50 and over, while Switzerland and the Scandinavian countries have a relatively high share of individuals still working (see Figure 2). The proportion of those individuals who self-report that they are still active ranges from 40 per cent in Sweden to only 16 per cent in Poland.

Retirement, however, is not as black and white as depicted by Figure 1. Figure 2 also shows that many who classify themselves as “retired” receive some labour income and/or work at least some hours. Previous estimates of “unused capacity” of older workers may therefore be exaggerated. A striking result of Figure 2, however, is that the Mediterranean countries do not have most “bridge jobs” after retirement; but Sweden, Denmark and Switzerland already have high old-age employment. This is an important result: there appears to be a lot more flexibility about working in old-age than suggested by many discussions about later retirement ages.

⁵ For a description, see Börsch-Supan et al. (2005 and 2008). Methodological aspects are detailed in Börsch-Supan and Jürges (2006). See also www.share-project.org.

Figure 2: Economic activity by country



Percentage of individuals who self report as being employed or self-employed, receive labour income, or work a positive number of hours.

Source: Authors' calculations using SHARE 2006. Whole sample. Population-weighted data.

3. Health and retirement

Are the differences in old-age labour force participation visible in Figure 2 precipitated by bad health? The SHARE data are an excellent basis to understand the relation between activity status of older individuals and health because they provide a broad battery of self-reported and objectively measured physical and mental health indicators. Figure 3 shows the distribution of work activities by restricting the attention to individuals who are in “good health”. This is defined by two indicators: (i) self-reported absence of health conditions that limit the ability to work (“healthy”), and (ii) absence of any limitation in doing 14 activities (“functioning”).⁶

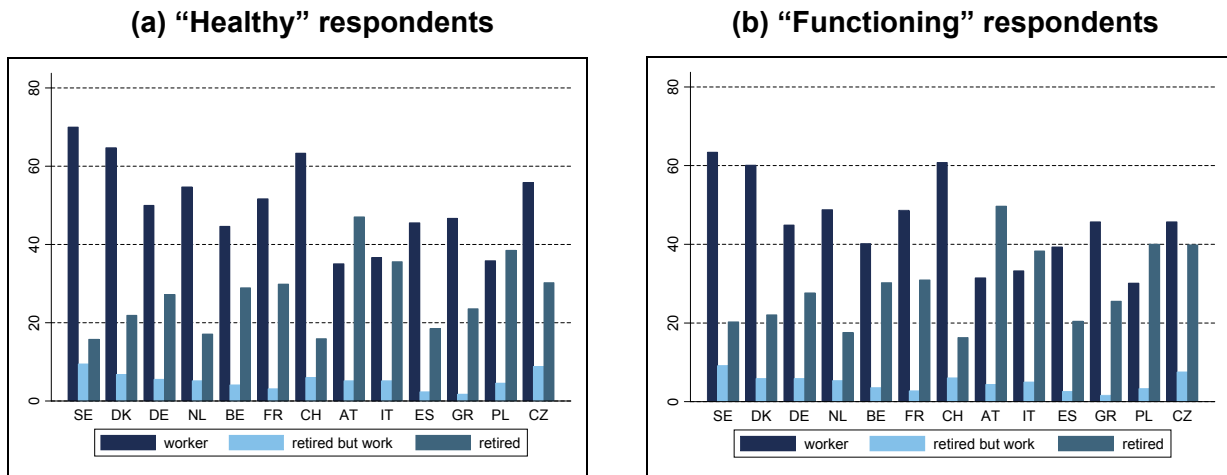
A strikingly high frequency of Austrians, Polish, and Italians self-report as healthy and have no functional limitations but report themselves as fully retired. This is true even for people in very early retirement younger than age 60. This finding rules out health as a major driver of early retirement differences across the 13 European countries in SHARE.

Moreover, this finding holds even in the clearest case in which health should play a major role in precipitating early retirement, namely disability pensions. Figure 4 shows the prevalence of disability benefits among respondents between ages 50 and 65 on the horizontal axis.⁷ The cross-national differences are large. Very high recipiency rates exist in Denmark, the Netherlands, and Sweden where between 13 per cent and 16 per cent of individuals aged between 50 and 65 receive disability benefits. Austria, Belgium, Germany, Greece, France, and Italy have much lower recipiency rates, between 3 per cent and 9 per cent.

⁶ Activities of daily living are those tasks usually performed for oneself in the course of everyday life, including bathing or showering, dressing, eating, getting in and out of bed or a chair, using the toilets and other personal care activities. Instrumental activities of daily living are those daily tasks that enable an individual to live independently and include preparing a hot meal, shopping for groceries, making telephone calls, taking medications, doing work around the house or garden, using a map to figure out how to get around in a new place, and managing money, such as paying bills and keeping track of expenses.

⁷ For a precise definition of disability benefits in each SHARE country, see Börsch-Supan (2007).

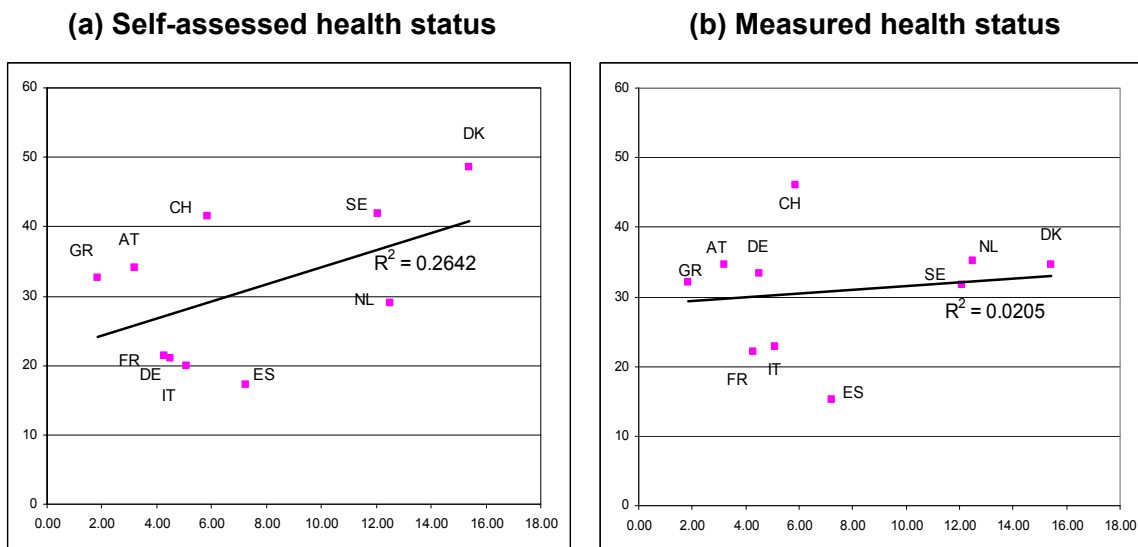
Figure 3: Economic activity and physical health



Percentage of "healthy" (panel a) and "functioning" (panel b) individuals who self-report as being employed or self-employed and work a positive number of hours, as being retired but work a positive number of hours, or are fully retired.

Source: Authors' calculations using SHARE 2006. Age 50-69. Population-weighted data.

Figure 4: Health and disability benefit reciprocity, by country



Source: Authors' calculations using SHARE 200.

The lack of the expected correlation with health is striking: on the vertical axis of Figure 4, we show the percentage of individuals who are in good or very good health. The left hand panel uses self-reported health status, the right hand panel a composite indicator of all objective health measures in SHARE. There is no statistical relation at all for the objective measure and, even more striking, a positive slope for the subjective measure. One would expect a strong negative correlation if bad health were the main driver of receiving disability benefits. This is not the case.

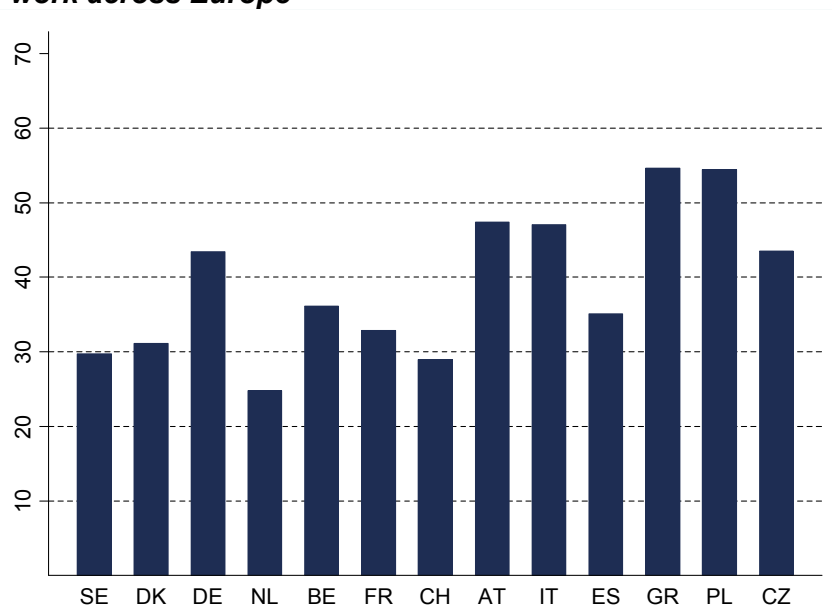
4. Quality of work and retirement

SHARE is the first longitudinal survey that allows us to investigate the relationship between quality of working conditions, health and individual retirement decisions. The questionnaire contains several questions that can be used to evaluate the quality of an individual work environment. We use an

indicator which measures the imbalance between the efforts a worker puts into his/her job and the rewards (including lack of esteem, promotion prospects and job security in addition to reduced salary) he or she receives in return.⁸

Figure 5 shows the wide variation in quality of work across European countries. Each bar represents the percentage of individuals in a country reporting an imbalance between high effort and low reward in their job. Countries with more than 50 per cent of all respondents exhibiting effort-reward imbalance are considered as exposing their workers to poor quality of employment. If this percentage ranges between 40 and 50, overall quality of work in a country is considered to be poor. In countries with a percentage of imbalance ranging from 30 to 40, the overall quality of work can be considered to be medium or fair, whereas countries with a prevalence below 30 per cent are considered as exposing people to an overall high quality of work. Very poor quality of employment is present in Greece and Poland. In Italy, Austria, Germany and the Czech Republic, overall quality of work is still rather poor, whereas it is fair in Denmark, Belgium, France and Spain. Three countries, Sweden, the Netherlands and Switzerland, show high overall quality of work.

Figure 5: Quality of work across Europe



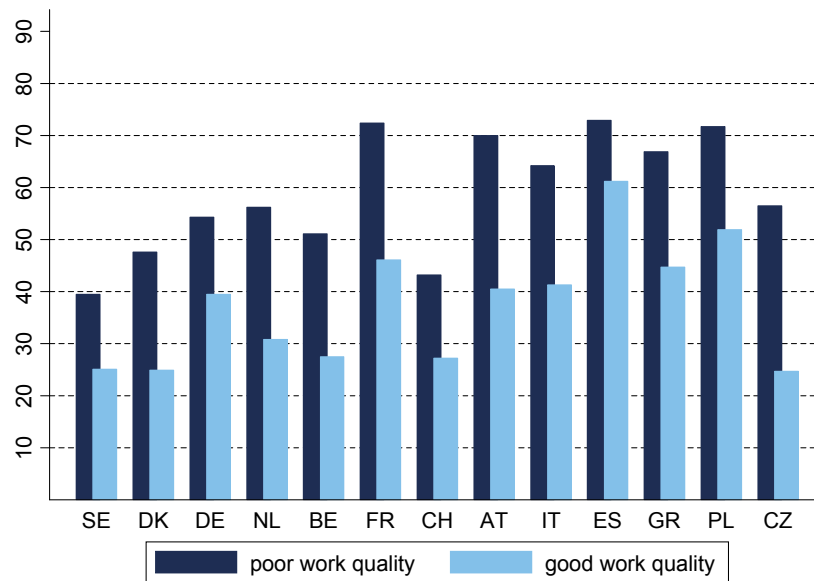
Percentage of individuals who are currently working and report poor quality of work. A job is defined as being a job with poor work quality if the effort-reward imbalance ratio is higher than 1.

Source: Authors' calculations using SHARE 2006. Population-weighted data.

Is there any correlation between quality of work and early retirement? SHARE asks all respondents who are currently working, whether they would like to retire as early as possible from that job. Figure 6 shows the percentage of individuals who desire to retire early by quality of work, where for simplicity we only distinguish between good and poor work quality according to whether individuals report a “positive” or a “negative” effort-reward imbalance. Although variations in the prevalence across countries are perhaps not surprising, it is striking to find that, in all countries, workers who are exposed to poor quality of work consistently express their desire of leaving the job as early as possible, compared to workers with better quality of work.

⁸ This indicator is based on the so called effort-reward imbalance model developed by Johannes Siegrist. See, for instance, Siegrist and Wahrendorf (2008).

Figure 6: Intended early retirement by quality of work



Percentage of individuals who are currently working and would like to retire as early as they can from the current job, by work quality. A job is defined as being a job with poor work quality if the effort-reward imbalance ratio is higher than 1 and a job with good work quality if the effort-reward imbalance ratio is equal to or lower than 1.

Source: Authors' calculations using SHARE 2006. Population-weighted data.

5. Conclusions

Earlier work has shown how powerful economic incentives are in creating early retirement because social security and pension arrangements create opportunities for employees to retire at early ages. Many, however, dispute this view and argue that it is bad health and adverse work conditions which drive individuals into early retirement.

The evidence presented in this article shows that early retirement does not correlate well with health. Unused labour capacity is especially large in countries such as Austria, Poland and the Mediterranean countries in which many healthy individuals are not in the labour force. We do, however, find evidence that early retirement is correlated across countries with poor work quality as measured by a mismatch between the efforts of a worker and the rewards given in return.

The social policy implications are clear. If Europeans want to reduce the already high tax and contribution burdens in the light of population ageing and make their pension systems more sustainable, they should exploit the unused capacity of individuals who self-report to enjoy a good functional health status. Moreover, in particular the Mediterranean countries, Poland and Austria, which feature low old-age labour force participation and poor quality of work, need to address how work quality can be improved.

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