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by Geoffrey Minne and Yves Saks

National Bank OF BELGIUM
Eurosystem

Older workers and retirement decisions in Belgium: mapping insights from survey data

Geoffrey Minne
Yves Saks*

Introduction

From a macroeconomic perspective, population ageing presents a major challenge for advanced economies. While this demographic trend is associated with welcome increases in life expectancy and improved health outcomes, it puts unwanted pressure on public finances. In Belgium, the main policy responses have been a curtailing of early retirement schemes and a raising of the statutory retirement age. In practice, however, there is a gap between statutory and effective retirement ages, which necessitates an examination of the key factors prompting early exit from the labour market by older workers.

Examination of the labour market through the prism of an aging workforce reveals complex dynamics affecting both supply and demand. On the demand side, one hurdle to be overcome is the hiring or retaining of older workers who may cost more than younger employees and, while they may be in a position to draw on accumulated experience, may not possess the appropriate skills for a constantly evolving working environment.

The supply side is characterised by strong heterogeneity among workers, whose ability and willingness to work longer are influenced by factors such as their level of education, sector of activity and current labour market status, not to mention their state of health and family situation. The statistical portrait of older workers in this article is sketched mainly using labour force survey (LFS) data.

This heterogeneity extends to workers' individual perceptions, which may ultimately shape their expectations and decisions concerning retirement. In the literature, self-perceived health and self-reported job satisfaction are identified as factors that influence retirement decisions.

To examine perceptions in this context, we use the Belgian sample of the Survey of Health, Ageing and Retirement in Europe (SHARE). Our analysis focuses on both the intention to retire early and the actual transition to retirement. Our results highlight the importance of the professional environment and how it is perceived by older workers in fostering a willingness to work longer. Although the actual decision to retire remains driven largely by an individual's access to a statutory pension, job dissatisfaction may be the straw that breaks the camel's back and ultimately persuades older workers to withdraw from the labour force.

* The authors are grateful for the microdata and data sourced from Statbel and Eurostat's labour force survey (LFS) and the Survey of Health, Ageing and Retirement in Europe (SHARE).

The article is structured as follows. The first section outlines changes in the employment rate of persons aged 55-64 and provides a brief overview of public policies designed to encourage longer working lives. A statistical portrait of older workers is then set out in the second section, while the third section explores the main factors driving individual retirement and early retirement decisions. The fourth and final section contains the conclusion.

1. Trends in the employment of older workers

The employment rate in Belgium for workers aged 55 to 64 has risen remarkably since the early 2000s. While only one in four people in this age group was employed in 2002, the rate jumped to almost 57 % in 2022, having seen uninterrupted growth over this twenty-year period – including during the global financial crisis and the COVID-19 pandemic.

The employment rate for older workers was particularly low in the early 2000s, especially when compared with that of prime-age workers (those aged 25-54). While the gap between Belgium and other EU countries for the employment of prime-age workers was very limited, less than one point for those with upper secondary education, the rate for older workers was well below the European average, at around 10 points.

This situation is largely the result of economic policies. The 1970s oil shocks had long-lasting negative effects on employment, which made it incredibly difficult for young people to enter the labour market. To address this issue, Belgium adopted a policy of side-lining older workers through the establishment of various early retirement schemes, primarily a collectively agreed early retirement system ("pre-pension") and a programme relying on unemployment insurance but including an exemption from the requirement to be actively seeking work (the "older unemployed" regime).

The prevailing rationale was that government could generate a net welfare gain by encouraging the withdrawal of older workers from the labour force, with the aim of replacing them with younger people. The early retirement schemes indeed stipulated that each worker benefiting from "pre-pension" status had to be replaced by a young worker. However, when companies were restructuring or facing serious financial difficulties, exceptions to this obligation were quickly introduced, and in such cases the early retirement schemes simply served as an alternative to inevitable redundancies.

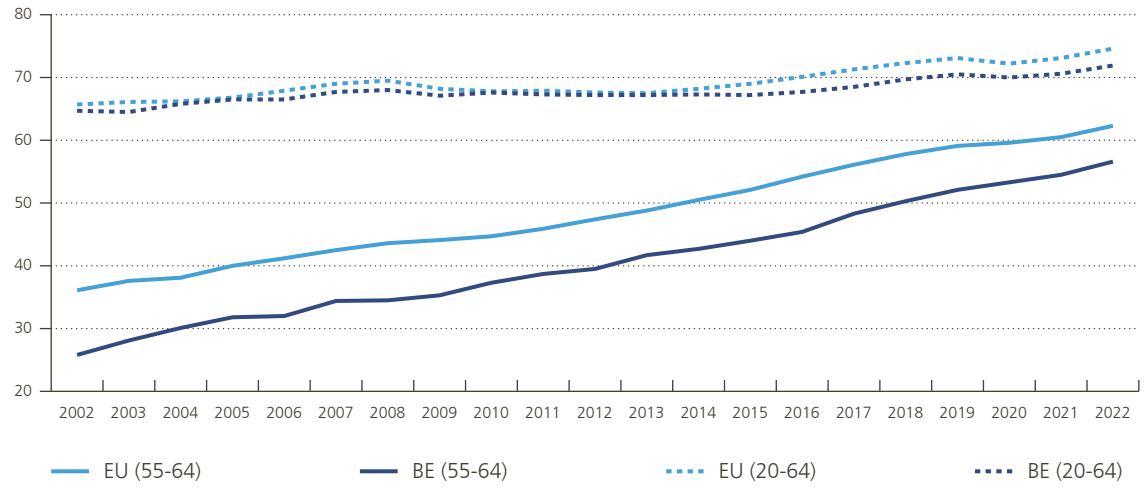
This reasoning, which prevailed in most European countries, was strongly advocated in Belgium and supported by a broad social consensus. Access to early retirement gradually came to be seen as an individual right, regardless of the collective reasoning behind it.

In the years since, numerous studies have cast doubt on the validity of this reasoning, particularly on the causal link between the withdrawal of older people from working life and easier labour market entry for younger people (Jousten et al., 2010). Reducing the employment rate of older people can help to boost the employment rate of younger people only if the latter are hired for positions vacated by the former and have similar skills or if, in other words, these two groups are substitutable. Most studies do not, however, support this hypothesis (Kalwij, Kapteyn and Vos, 2010).

Figure 1

Employment rates of workers aged 55-64 have improved sharply

(% of the corresponding population)



Source: Eurostat (labour force survey).

The policy of side-lining older workers has become increasingly costly, particularly in the light of population ageing. Shortening the duration of working life, despite the fact that life expectancy has increased, has put significant pressure on public finances, in particular on the sustainability of pension expenditure (Deroose et al. (2023) for a recent overview). Therefore, since the late 1990s, policies favouring early retirement have very gradually been reversed, while social security programmes and pension schemes around the world have been redesigned to create stronger incentives to delay retirement. The gradual increase in the retirement age for women from 60, in 1997, to 65 is an example of an early Belgian reform, with full harmonisation with the retirement for men being achieved in January 2009.

The real turning point for Belgium was the adoption of the Generation Pact in December 2005.[1] Drawing on the EU's Lisbon strategy (2001), Belgian policymakers began to acknowledge the issue of population ageing and adopted a package of active ageing policies, despite strong opposition from labour unions (Dejemeppe et al., 2015). Other European countries, such as the Netherlands, had begun this work ten years earlier.

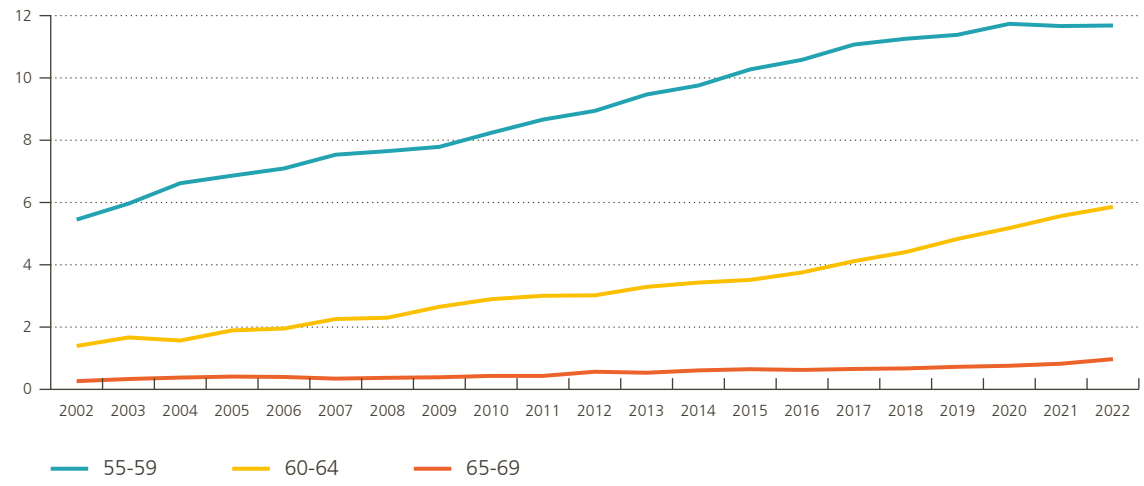
The four key policy aims of the Generation Pact were to restrict access to early retirement schemes, reduce certain employer social security contributions for older workers, introduce a pension bonus for working after the age of 62, and facilitate access to part-time time-credit.

1 Act on the Intergenerational Solidarity Pact.

Figure 2

Older persons in employment in Belgium, by age group

(% of total employment)



Source: Statbel (labour force survey).

As a result of these activation policies and incentives to work longer, the percentage of people aged 55 to 59 in work has risen sharply, from 5.5 % of total employment in 2002 to almost 12 % in 2022. Similarly, the proportion of persons aged 60-64 in work rose over the same period, from 1.4 % of all people in employment in 2002 to almost 6 % in 2022. However, older age groups still represent only a very marginal share of the employed in Belgium. The 65-69 age group accounted for barely 1 % in 2022, and even less in terms of hours worked. By way of comparison, the share of this age group in employment for the European Union was 2 % in 2022.

In addition to the statutory context (including the curtailing of early retirement schemes), two important and necessary conditions for an individual to continue working at an older age are sufficiently good health and skills that remain attractive to employers. Although health information is not available in the labour force survey (which is one of the reasons that led to the development of SHARE, the survey used in the remainder of this article), it provides a longitudinal perspective on the educational level of the population. The survey has been conducted annually since 1983. [2]

The level of education of the population has steadily improved in Belgium over the observation period. The percentage of individuals with less than secondary education has fallen sharply; by 2022, this group represented barely 28 % of the general population. The steady increase in the level of educational attainment is a driving force behind the increase in the employment rate. A cohort-based analysis would further enhance this argument. On average, cohorts that have entered the labour market since the 1990s have a higher level of education than those that have retired and more often possess the skills required by the market. Higher levels of educational attainment are associated with positive economic, labour market and social outcomes for individuals and with a greater likelihood of participation in lifelong learning and continuing education.

2 The labour force survey has been modified over time, including changes to the wording of questions, the addition or removal of specific variables, and changes to the data collection process. The survey was overhauled in 2017 in Belgium and is now a rotating panel. These various changes led to breaks in the series, particularly in 2008, 2014 and 2017. The survey was simplified further in 2021.

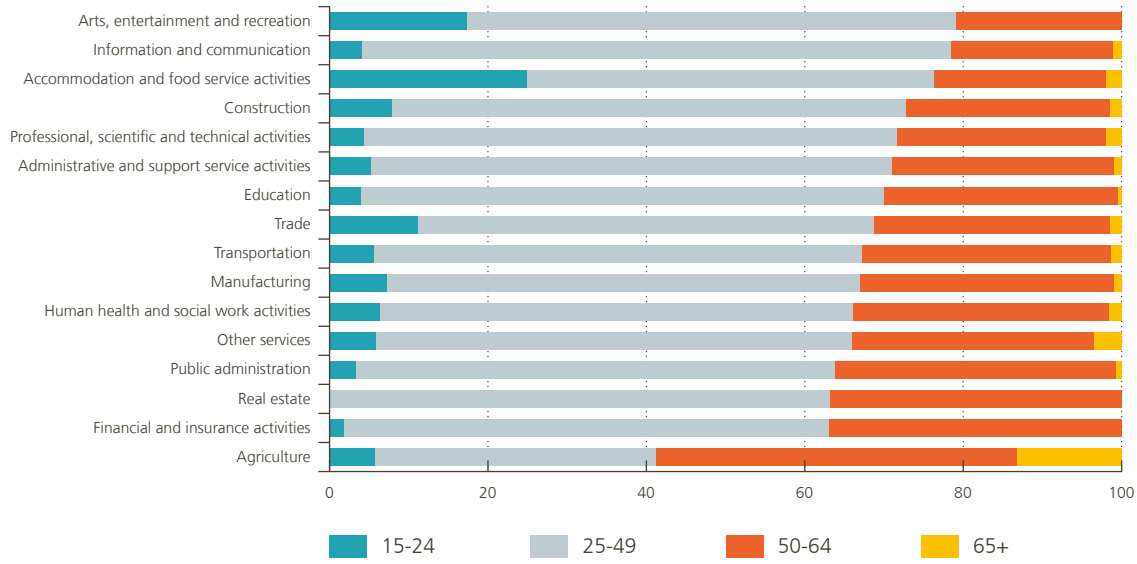
2. A statistical portrait of older workers

Seniors (aged 55-64) are mainly employed in five sectors: health and social work (16 %), manufacturing (12 %), retail (11 %), education (10 %), and public administration (10 %). The age structure within sectors is presented in Figure 3. The proportion of older workers is relatively lower in construction, accommodation and food service activities, ICT, and the arts and entertainment. This distribution can be explained by the nature of the tasks involved in each sector (physical work, atypical working hours, etc.) or a lack of skills required for cutting-edge technological sectors. People working beyond the age of 65 are mainly employed in the health sector and in (retail) trade.

Figure 3

Age structure by sector of employment

(2022, %)



Source: Statbel (labour force survey).

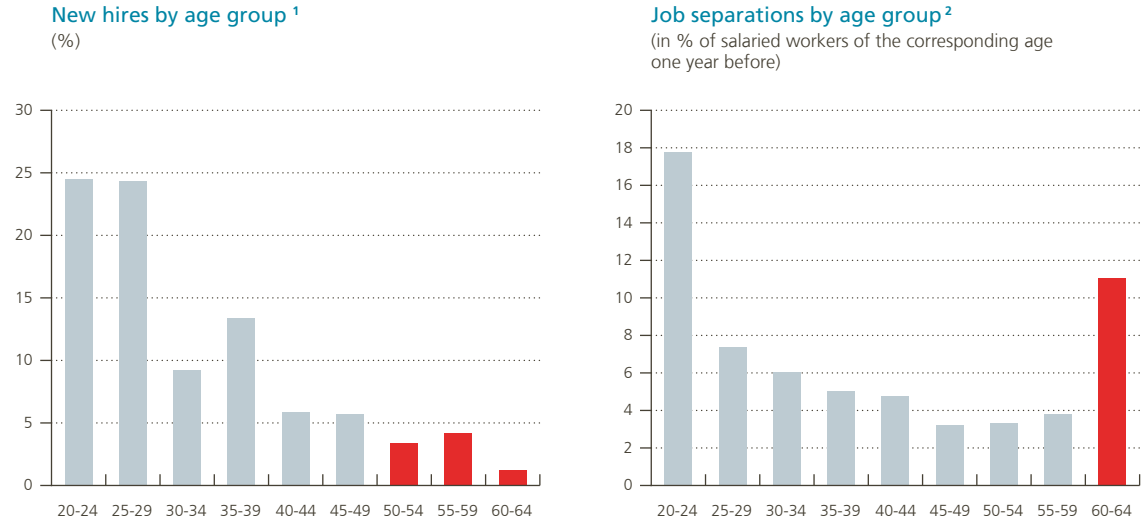
Part-time work is more common among older workers. While 34 % of prime-age women in Belgium work part time, this figure rises to 48 % for women aged 55 to 64. For men, too, older workers are more likely to work part time, with 17 % of those aged 55 to 64 doing so. Part-time workers represent a majority of men and women still in work beyond the age of 65.

For older people who are no longer in work, it remains difficult to find a new job. Data from the labour force survey allow us to break down the number of new hires by age group. Barely 9 % of new hires are aged 50 or over. This figure is very low, particularly when compared with similar European countries.

Figure 4

Seniors are underrepresented among new hires

(%, Belgium, 2021)



Source: Statbel (labour force survey).

1 Persons in employment since 3 months or less.

2 Due to an economic reason (end of contract, redundancy or company restructuring).

The labour force survey also looks at the reasons why individuals leave employment. Among respondents who had recently lost their job for an economic reason (e.g. end of the employment contract, redundancy or company restructuring), people in older age groups still appear to be overrepresented. Job separations among those in salaried employment the previous year were over 11 % for the 60-64 age group, much higher than for the 45-59 age group, for which this percentage was around 3.5 %.

Companies' hiring policies depend on the relative cost of workers. Older workers, particularly those with high qualifications, may have correspondingly high expectations regarding their remuneration. In some cases, their past remuneration may reflect a return on very specific qualifications, which are not necessarily transferable to a new employer, or pertain to a different sector of the economy. Furthermore, it is well documented that participation in continuing education tends to decrease across older age groups. Companies' internal policies may also reflect their perceptions about older workers, in some cases bias as to their state of health or ability to integrate into younger teams.

The European Working Conditions Survey (EWCS), coordinated by Eurofound, provides an overview of working conditions in Europe among different age groups. According to the 2015[3] EWCS survey, Belgium ranked highly among workers aged 55 to 64, particularly in terms of pay, job stability and the guarantee offered by unemployment insurance in the event of redundancy. The results were also satisfactory regarding the quality of the employer's infrastructure and policies on health and safety at work. In other words, for workers aged 55-64, working conditions are not a factor explaining the lower employment rate of this age group in Belgium compared with other European countries.

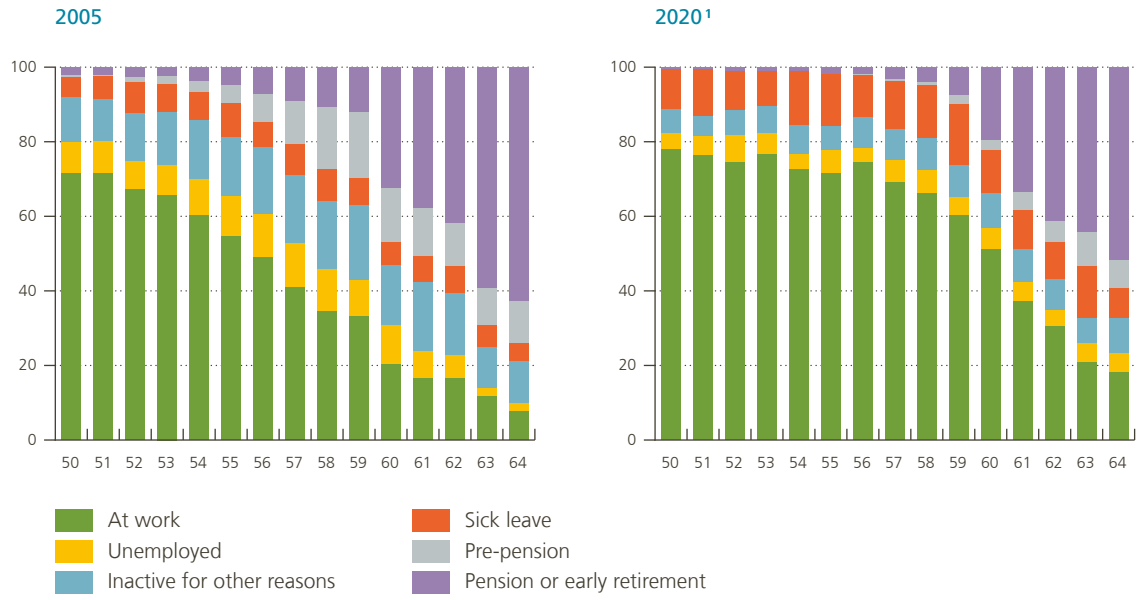
3 The 2021 EWCS was carried out during the COVID-19 pandemic and focused on working conditions during that period.

The labour force survey provides an overview of a respondent's socio-economic status at a given age, based on self-reported information. This status is thus subjective and may not correspond to the person's "official" status, which is not covered by the survey. Statbel has refined the possible answers so as to be able to distinguish between inactive seniors who are pensioners or early pensioners, people in early retirement schemes, and other inactive individuals such as those on sick leave or disability. Figure 5 compares the situation in 2005 with that in 2020.

Figure 5

The labour market status of persons aged 50 to 64 is strongly related to statutory retirement and early retirement schemes

(% of the corresponding population in Belgium)



Source: Statbel (labour force survey).

1 Due to simplification of the survey in 2021, it is not possible to produce the same results with the last available release.

As expected, the proportion of older people in employment was higher at all ages in 2020 than in 2005. Likewise, there were fewer people in early retirement schemes (mostly pre-pension) in 2020 than before, due to a gradual tightening of the conditions to access them. The conditions to access statutory retirement and early retirement have also been tightened, through a raising of the statutory retirement age for women and an increase in length of career requirements across the board. On the other hand, the percentage of people declaring themselves to be ill or disabled has also risen, at all ages, in the 50-64 age group.

The following section draws on another survey, one that targets solely older workers, to examine the impact of self-perceived health and working conditions on the decision to retire.

3. Extent to which older workers' perceptions shape retirement decisions

Assessing working conditions objectively is important. Nonetheless, these conditions remain open to interpretation, and the same situation can be interpreted differently by different individuals. The assessment may thus vary with a worker's age or health, with considerable heterogeneity having been seen in this respect. In the literature, perception is key when it comes to withdrawal from the labour force. Self-rated health (Dwyer and Mitchell, 1999, Pietiläinen et al. 2011), subjective life expectancy (Hurd et al. 2004, O'Donnell et al. 2008), and self-reported job satisfaction (Siegrist et al. 2006, Sohier et al. 2022) have all been found to influence the decision to retire. Survey data are useful to assess the influence of perception ; to study the situation in Belgium, we rely on data from SHARE (the Survey of Health, Ageing and Retirement in Europe).[4] This is a cross-national panel dataset from respondents aged 50 and over from 28 countries, including Belgium.[5] The survey has been conducted eight times in Belgium on a regular basis since 2004.

With the exception of the survey conducted during the COVID-19 pandemic, data collection is based on individual computer-assisted interviews. The survey provides longitudinal microdata on various issues, such as mental and physical health, socioeconomic status, retrospective employment history, and decisions regarding retirement. Some questions or modules also require selected members of the respondent's household to participate. The COVID-19 pandemic broke out during the eighth wave of the survey, and fieldwork had to be halted in March 2020. At that time, only about 70 % of the expected longitudinal interviews across countries had been completed, thus reducing the sample size and impacting the comparability of data from this wave.

The Belgian sample from the eighth survey wave was composed of approximately 2 000 people interviewed as main respondents. About one-third were French-speaking and two-thirds Dutch-speaking. As the survey targets individuals from older generations, the average age of respondents at the time of the interviews was around 70. Given that life expectancy is higher for women, they were slightly overrepresented in the sample (56 % of respondents). The longitudinal aspect of the data is a significant advantage of the survey, and a substantial share of respondents have been interviewed in multiple waves. More precisely, two-thirds of survey participants were interviewed for the first time in or before 2011.

Weights based on region, age group, and gender are available for each country and wave (Malter and Börsch-Supan, 2015). Our descriptive statistics make use of these weights.[6] To narrow our focus on the later stages of careers, we concentrate on main respondents and limit our sample to respondents aged 50 years or older. In order to obtain a sample associated with a more comparable set of questions across survey waves and to avoid too large a time period between them, we consider the waves from 2011 to 2019/2020 in our analysis. Data relating to the wave conducted in 2022 will be available in 2024.

4 This paper uses data from SHARE waves 1, 2, 3, 4, 5, 6, 7 and 8 (DOIs : 10.6103/SHARE.w1.800, 10.6103/SHARE.w2.800, 10.6103/SHARE.w3.800, 10.6103/SHARE.w4.800, 10.6103/SHARE.w5.800, 10.6103/SHARE.w6.800, 10.6103/SHARE.w7.800, 10.6103/SHARE.w8.800, 10.6103/SHARE.w8ca.800) ; see Börsch-Supan et al. (2013) for methodological details.(1) SHARE data collection is funded by the European Commission, DG RTD through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3 : RII-CT-2006-062193, COMPARE : CIT5-CT-2005-028857, SHARELIFE : CIT4-CT-2006-028812), FP7 (SHARE-PREP : GA No 211909, SHARE-LEAP : GA No 227822, SHARE M4 : GA No 261982, DASISH : GA No 283646) and Horizon 2020 (SHARE-DEV3 : GA No 676536, SHARE-COHESION : GA No 870628, SERISS : GA No 654221, SSHOC : GA No 823782, SHARE-COVID19 : GA No 101015924) and by DG Employment, Social Affairs & Inclusion through VS 2015/0195, VS 2016/0135, VS 2018/0285, VS 2019/0332, and VS 2020/0313. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the US National Institute on Ageing (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN271201300071C, RAG052527A) and various national funding sources is gratefully acknowledged (see www.share-project.org).

5 More information on the survey is available at https://share-eric.eu/.The Centre de Recherche en Économie Publique et de la Population at the University of Liège and the Centrum voor Sociaal Beleid Herman Deleeck at the University of Antwerp are responsible for supervising the survey in the Wallonia-Brussels Federation and Flanders, respectively.

6 For purposes of this article, the regular survey waves and general weights were used, the only exception being the section on the impact of the COVID-19 pandemic which was based on the two thematic waves of the survey.

3.1 Statutory, effective and expected pension ages

In Belgium, the statutory pension age is currently set at 65 for those retiring on or before 31 January 2025, at 66 for those retiring between 1 February 2025 and 31 January 2030, and at 67 for those retiring on or after 1 February 2030. It remains possible to retire before reaching the statutory pension age if certain conditions related to length of career are fulfilled.[7] Therefore, effective and statutory pension ages may differ. Moreover, in the past, various early retirement schemes existed which have been gradually curtailed. As a result, for the current population of retirees, the labour market exit age is relatively low compared to the statutory pension age.

In the latest wave of SHARE (2019/20), the average effective retirement age of respondents was 60.7 years. This has progressively increased over the various survey waves, rising from 60.1 years in 2011. Due to successive government reforms that have made early retirement schemes less accessible, the percentage of people taking early retirement has dropped, influencing the trend noted here. The ages of 60 and 65 are key milestones in pension schemes in Belgium and concern a proportionally higher number of individuals: two-thirds of the distribution of our sample is between these two ages. Additionally, it is worth noting that seven times as many people retired before the age of 60 than after 65. Therefore, the distribution is asymmetrical given that early retirement was more common and, on average, further away in years from the statutory retirement age than delayed retirement.

Compared with Sweden, Denmark, the Netherlands and Germany, Belgium ranks relatively low in this regard. It should be noted that recent government reforms have, by definition, had only a limited impact on the average retirement age in our sample, as this number is based on all retirees, including those who retired well before the reforms were implemented.

Looking at the expected pension age of respondents who were still working at the time of the survey,[8] the results also reveal a significant upward shift. In the eighth and last available survey wave, the average expected age for a statutory pension was 64.3, up from 62.8 in 2011. This trend stems from factors such as an increase in the statutory pension age and improvements to working conditions and healthcare, leading to better self-perceived health. The increase between 2011 and 2019/20 was greater in Belgium than in France, Germany or Sweden, and the gap with comparable countries decreased over time (except with Italy). Strikingly, the expected age for early retirement or a pre-retirement pension increased even more, climbing from 59.2 to 62.0 years. Moreover, the survey data do not suggest that a reduction in reliance on pre-retirement pension schemes was compensated by earlier recourse to disability insurance.

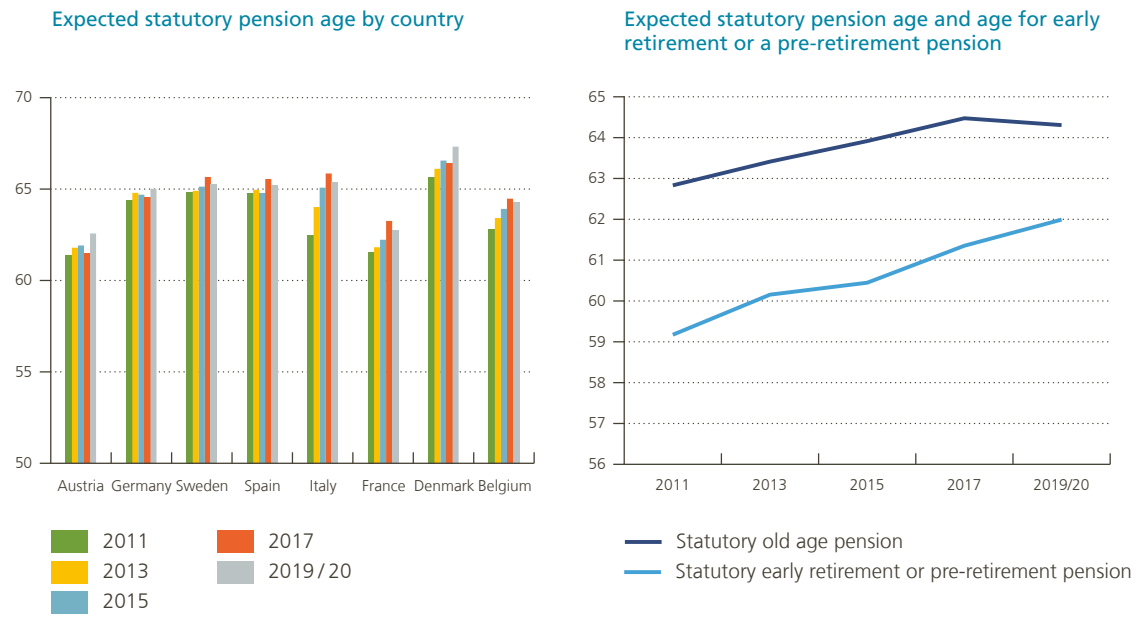
7 Alongside the statutory pension system, several exemptions or alternative systems exist for specific categories of people, such as a survivor's pension or early pension schemes for certain miners, seafarers and civil aviation flight personnel.

8 This age was determined based on the answer to the following question in the survey: "At what age do you expect to start collecting pension payments for the first time?".

Figure 6

Expected pension ages

(in years)



Source: SHARE (Belgian sample, waves 4 to 8).

The expected pension age has seen a similar increase for both genders. In the waves prior to 2011, men had a higher average expected age for both statutory and pre-retirement pensions. From 2011 to 2019/2020, the expected statutory pension increased by 1.50 years for men, while for women, it rose by 1.52 years. Gender-based differences are, on average, statistically insignificant. The absence of gender differences since 2011 can be attributed, at least in part, to government reforms implemented between 1997 and 2009, which gradually aligned the statutory retirement age.

3.2 Decision to retire mainly driven by access to a statutory pension

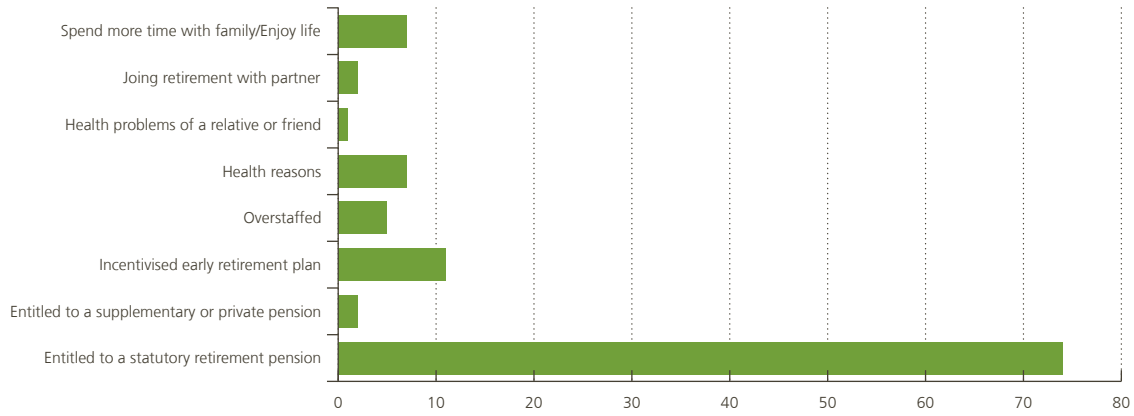
SHARE investigates what lies behind decisions to retire, with a particular focus on those who have already retired. The insights collected from respondents provide valuable perspectives on the factors influencing their decisions and, in that respect, the results are marked by a certain stability between survey waves. To avoid emphasising differences linked to changes in the sample, we favour an average over the five most recent surveys. In the survey, respondents who identify as retirees are asked about their reasons for deciding to retire.

One of the primary reasons cited for retirement was eligibility for a statutory pension. This was the most common reason given by far, mentioned by an average of 74 % of respondents in recent waves, and underscores the influence that both age and career length can have on the decisions of older workers to retire. The possibility to benefit from an early retirement scheme with special incentives or bonuses was the second most frequently cited reason, mentioned by 11 % of respondents; this figure stood at 14 % in 2011 and thus decreased slightly over the observation period. These two reasons are generally mentioned more frequently in Belgium than in other European countries.

Figure 7

Reasons for retirement or early retirement

(% of respondents that selected each category, multiple answers were possible, weighted data per wave, average for the last five waves)



Source: SHARE (Belgian sample, waves 4 to 8).

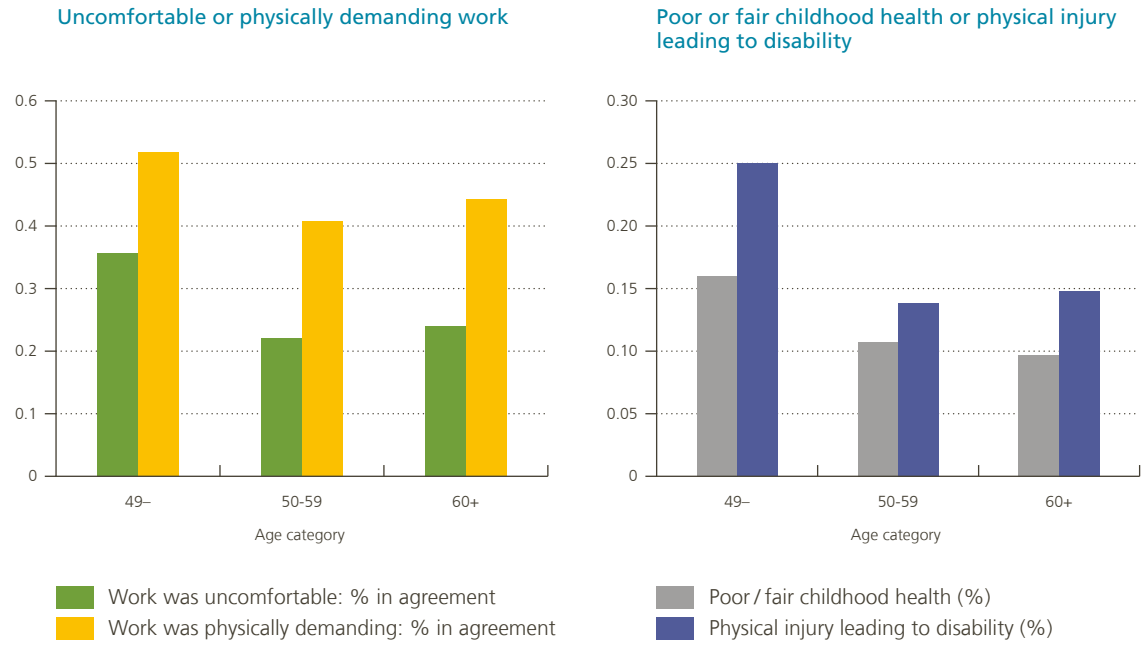
Factors associated with personal health and the desire for more free time were mentioned by 7 % of retired respondents, highlighting the potential impact of an individual's level of health and personal well-being on their decision to retire. However, these factors are generally considered to have a limited influence at the macro level. Interestingly, the concept of joint retirement with a partner has emerged as an increasingly influential factor, as suggested by Cetin and Jousten (2022), albeit for a minority of survey respondents on average. Over time, this reason has gained prominence, along with the increase in female labour market participation and the number of dual-income households.

For some workers, remaining in employment can be a challenging endeavour, and unfortunate events can sometimes force them to withdraw from the workforce for extended periods. Health problems, accidents or physical limitations may prevent some individuals from working until an advanced age. The SHARE data include modules that focus on life histories and key aspects such as childhood health or employment history (SHARELIFE modules). The data reveal that very early retirement concerns only a small fraction of workers, as less than 4 % of main respondents declared that they retired before the age of 50. In this group, respondents with fragile health during childhood, who suffered physical injuries leading to disabilities, or who spent careers in jobs they considered to be physically demanding or uncomfortable are overrepresented.

Figure 8

Self-reported retirement age by category and share of retired respondents mentioning past health issues or difficult jobs

(in %, unweighted data)



Source: SHARE (Belgian sample, various waves) associated to the SHARELIFE modules in wave 7 (2017).

Decisions concerning retirement often depend on multiple factors rather than a single dominant one. Even reasons less frequently cited by respondents can be of marginal significance, contributing to the complexity of retirement choices. To gain a better understanding of the decisive factors for individuals still in the workforce and to quantify the role of each of these factors, it is necessary to analyse the survey responses of older workers and consider simultaneously the various dimensions, using an econometric model. In the following two sections, we examine older workers' retirement decisions through two different lenses: the desire to retire as soon as possible and actual retirement actions. The former represents an intention that may or may not materialise, while the latter pertains to an objective change in working status between two survey waves. Given that our analysis covers both aspects, we included in our sample only respondents who participated in at least two consecutive survey waves.

3.3 Working conditions are a decisive factor with regard to the intention to retire early

The willingness of those aged 50 or over to retire early is gauged by their answer to the following question: "*When you think about your current job, would you like to retire as early as possible from this job?*". Respondents who answer in the affirmative are classified as willing to retire; our sample is limited to those who declared that they are currently employed, whether as an employee or self-employed. In the last five available waves, about one third of Belgian respondents expressed a desire to retire as early as possible. Variability in retirement aspirations is closely linked to demographic factors. Notably, a higher percentage of men expressed a desire for early retirement. However, it is important to bear in mind that more women than men are categorised among the unemployed, homemakers, and long-term sick. The intention to retire early peaks

between 55 and 59 years of age, and after 60 years of age the sample drops significantly as many respondents in practice leave the workforce. The percentage of workers older than the statutory pension age in our sample was very small, with less than one percent over the age of 65. Employment type and sector of activity also emerged as distinguishing factors. Self-employed individuals tend to express less interest in early retirement, while employees (in both the public and private sectors) display a stronger preference. Workers in the services sectors appear less willing to retire early. These trends have remained relatively stable throughout the various survey waves. Across European countries, substantial differences can be observed: in some countries, such as Italy, a very high percentage of respondents[9] is willing to retire early. In this context, Belgian respondents tend to fall at the lower end of the distribution.

Why do some workers wish to retire early? The answer to this question is significant from a policy-making perspective, as an ageing population puts an increasing strain on public finances. In the literature, numerous factors are cited as either pushing older workers out of the labour force or pulling them towards retirement. A challenge lies in quantifying these factors using survey data. Our methodology and choice of variables draw inspiration from Sohier et al. (2022) and Wels (2016). Nevertheless, we have chosen smaller scales for our variables to accentuate the binary nature of the questions, as opposed to using detailed Likert agreement scales, thereby enhancing the readability of the results. The effective dataset includes several survey waves – from the fourth (2011) to the eighth (2019-20), among others – in order to ensure a sufficient sample size.[10]

In addition to the control variables related to the personal situation of respondents, i.e. household size, gender and region (for which the language of the respondent is used as a proxy), we considered the following categories of influencing factors in our empirical approach:

- **Statutory pension:** In Belgium, the statutory old age pension (OAP) depends mainly on an individual's age and length of career. In practice, our variables included the respondent's reported age (in years) and the number of years they contributed to the statutory pension (qualifying years for an OAP). Additionally, we created a binary dummy variable (OAP dummy) to indicate whether the respondent was eligible for the statutory old age pension in the year of the survey.[11]

- **Mental and physical health:** Health problems can arise for various reasons and manifest themselves in different ways, necessitating a comprehensive approach to the construction of our variables. We approximated the variables reflecting the level of a respondent's (physical and mental) health using two continuous indices, each ranging from 0 (poor health) to 100 (good health). These indices were constructed using a dimensionality reduction algorithm and several survey questions. More precisely, for mental health, we used twelve binary questions covering topics such as depression, pessimism, risk of suicide, sleep quality, and tearfulness, among others. For physical health, we used ten binary questions about activities in which respondents may experience difficulty, such as "lifting or carrying weights over 5kg" or "walking 100m". On top of these two variables, we considered a global self-assessment question related to health with a variable that can take one of three values: "poor or fair", "good or very good", and "excellent".

- **Partner's retirement decision:** To examine the influence of a spouse's decisions regarding retirement, we introduced a categorical variable that reflects the work status of the respondent's partner. This variable was derived from information about the respondent's marital status (single, in a relationship or widowed) and the work status of their partner (retired, employed or other).

9 In some southern countries, notably Italy and Greece, pension reforms have been implemented over the last two decades. The survey results reflect these developments, as the effective pension age increased significantly in these countries, and the percentage of respondents wishing to retire as early as possible is higher than average.

10 Another reason was to ensure comparable results with the next section, which required us to exploit the panel dimension of the SHARE data.

11 As government reforms have changed the eligibility conditions, the variable pertaining to access to the old age pension (OAP) was made time dependent. Several exceptions to the regular conditions exist, and respondents may be entitled to an OAP despite not having reached the required age or having contributed for a sufficient number of years. That being said, the survey data do not reflect this level of granularity.

- **Employment status and education:** Factors associated with skills, knowledge and the capacity to undergo training are assumed to enhance an individual's employability and delay retirement. We began by approximating each respondent's level of education by considering their response to the following question: "*How many years have you spent in full-time education?*". Secondly, we used three binary variables indicating whether the respondent is a public servant, private-sector employee or self-employed, as proxies for employment status.

- **Professional satisfaction and working conditions:** We first considered responses to a general question regarding the respondent's current level of job satisfaction. The variable was coded so as to create a dissatisfaction dummy, encompassing respondents who expressed dissatisfaction with their current jobs. The dissatisfaction score was based on their assessment of their primary job. In addition to the assessment of overall job satisfaction, the survey assesses various other aspects, including the effort-reward balance, time pressure and professional prospects. To gauge the perception of working conditions, we therefore incorporated responses to nine related questions.

Table 1

Recoding of SHARE variables concerning working conditions into a binary variable on self-perceived difficult working conditions

Variable	In % of respondents perceiving the condition as difficult	SHARE wording
Job dissatisfaction *	6	All things considered I am satisfied with my job.
Physically demanding	38	My job is physically demanding.
Time pressure	44	I am under constant time pressure due to a heavy workload.
Insufficient freedom	24	I have very little freedom to decide how I do my work.
Lack of skills development *	32	I have an opportunity to develop new skills.
Inadequate support *	28	I receive adequate support in difficult situations.
Lack of recognition *	28	I receive the recognition I deserve for my work.
Inadequate salary *	29	Considering all my efforts and achievements, my salary or earnings are adequate.
Insufficient prospects	47	My job promotion prospects or prospects for job advancement are poor.
Insufficient security	13	My job security is poor.

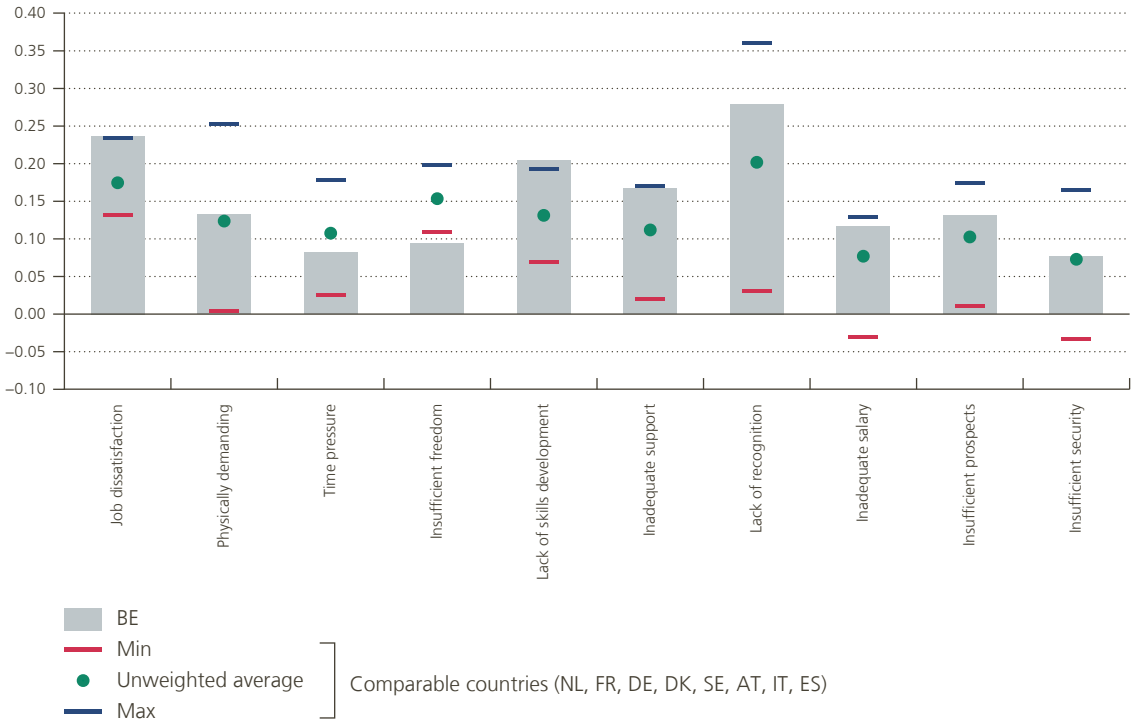
Source: SHARE (Belgian sample, waves 4 to 8).
Note: Statements marked with an asterisk were recoded so that a higher score indicates difficult working conditions. Possible answers were "strongly agree", "agree", "disagree" or "strongly disagree", which we regrouped into a binary agree/disagree response.

Compared with other countries, the connection between the willingness to retire early and a respondent's perception of their professional environment is notably stronger in Belgium, with a higher correlation coefficient on average than in comparable countries. From this perspective, a lack of professional recognition emerges as a significant variable.

Figure 9

Average pairwise correlation coefficient between the binary variable on willingness to retire early and the dimensions related to job dissatisfaction and difficult working conditions

(weighted data per survey wave, average over the various survey waves)



Source: SHARE (waves 4, 5, 6 and 8).

Note: For the seventh wave, the sample was limited, and some countries did not have a sufficiently large sample size to calculate every correlation coefficient.

Assessing the impact of individual factors requires an econometric specification. The random-effects logit estimator is a suitable tool given the binary nature of the dependent variable and the inherent unobserved heterogeneity among respondents, which is common in survey data. Some individual characteristics may indeed go unobserved in survey data and remain time-invariant, leading to inefficient estimates. Mundlak's correction of the random-effects logit estimation offers a means to address this issue.[12] The estimations are presented in terms of odds ratios (OR) in Model 1 of Table 2, where an odds ratio greater than one indicates an increased likelihood regarding the willingness to retire. The primary explanatory variables in this estimation encompass working conditions, health status, demographic characteristics, and the employment status of the respondent's partner. Applying Mundlak's correction to the random-effects logit estimation method allows us to assess the impact of changes in these variables on the probability of declaring a willingness to retire as early as possible.

Based on the logistic regression estimates, it appears that factors pertaining to a respondent's access to a statutory old age pension, age and length of their career do not exhibit significant coefficients. This suggests that proximity to the pension age or eligibility for statutory pension benefits does not significantly increase the likelihood of older workers being inclined to withdraw early from the labour market in Belgium. While the odds

12 This correction entails adding the individual means of all time-varying variables to the regression (Mundlak, 1978).

ratio is relatively close, this result contrasts with the findings of Sohier et al. (2022), who observed a positive effect when studying EU countries.

In the latter regression, several other factors emerge with significant coefficients: self-employed status, gender, Flemish language, years of education, self-perceived fair or poor health, and job dissatisfaction. Regarding self-employed status, the inclination to postpone retirement may be attributed to historical disparities in pension entitlements, institutional structures, and broader opportunities for more flexible employment (Zwier et al., 2020). A higher level of education typically correlates with a later career start and is often associated with improved working conditions, resulting in a reduced propensity for early retirement. Self-assessed health status plays a significant role: the perception of one's own health as poor or fair is associated with a stronger likelihood of expressing a willingness to retire. Consequently, initiatives to promote health and disease prevention are expected to impact positively both the capacity and the willingness to work for an extended period.

Table 2

Random-effects logit estimations with "willingness to retire early" and "transition to retirement" as dependent variables

Varable	Model 1 Willingness to retire early		Model 2 Effective retirement	
	Odds ratio	St. errors	Odds ratio	St. errors
OAP access dummy	0.936	(0.427)	1.651	(0.984)
Age in years	1.035	(–0.124)	1.323*	(0.216)
OAP qualifying years	1.031	(0.033)	1.057*	(0.034)
Civil servant	0.982	(0.411)	0.918	(0.505)
Self-employed	0.241*	(0.201)	0.244	(0.217)
Good or very good health	1.951	(0.907)	2.436	(1.610)
Fair or poor health	4.580**	(2.776)	3.361	(2.635)
Physical health index	0.987	(0.014)	0.986	(0.018)
Mental health index	0.981	(0.012)	0.989	(0.014)
Female	0.639**	(0.139)	0.734	(0.329)
Flemish language	0.455***	(0.098)	1.241	(0.311)
Household size	1.275	(0.306)	0.890	(0.311)
Years of education	0.887***	(0.028)	0.976	(0.029)
Retired partner	1.417	(1.057)	1.009	(0.787)
Partner with other job status	1.350	(0.69)	1.148	(0.737)
No partner or widowed	1.113	(1.492)	17.250	(34.780)
Job dissatisfaction	9.129***	(6.585)	2.89	(2.256)
Mean predicted probability (in %)	31.1		12.0	
Probability of correct classification (in %)	73.1		91.2	
Observations	1 523		1 528	
Respondents	1 091		1 094	

Source: SHARE (Belgian sample, waves 4 to 8) and authors' own calculations.

Note: The estimates are expressed in odds ratios. Mundlak's correction is applied, and both time effects and a constant term are included in the estimations but not mentioned in the table. OAP stands for statutory old age pension. The probability of correct classification is based on a simple logit model. Robust clustered standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Having a partner who is retired is associated with a positive but statistically insignificant effect, primarily due to a substantial dispersion among respondents. It is important to note that the sample size may pose a significant limitation here. International literature based on similar data suggests the existence of a small but significant spousal spillover effect (Michaud, 2003; Atalay et al., 2019; Cetin, 2021). Furthermore, additional analyses conducted using Belgian administrative data revealed that joint retirement is primarily associated with a strong preference for leisure (Cetin and Jousten, 2022).

Job dissatisfaction stands out as one of the most influential factors affecting the willingness to retire early. The percentage of respondents dissatisfied with their job is relatively low, with only 6 % of the sample indicating disagreement or strong disagreement with overall job satisfaction. However, it is noteworthy that an older worker who is dissatisfied with their job is nine times more likely to express a willingness to retire as early as possible compared to one who is satisfied. Focusing on the marginal effect, job dissatisfaction increases the probability of early retirement by 30 percentage points – a probability of 59 % compared to 29 % for a satisfied worker – therefore affecting a relatively small but important segment of the population. To delve deeper into this finding, we have incorporated binary variables to account for various dimensions of a respondent's working conditions (the full table of results is available in the annexes). These additional variables complement the general satisfaction measure as an individual may, for instance, have a physically demanding job but still report satisfaction with it. The coefficients related to job satisfaction remain statistically significant.

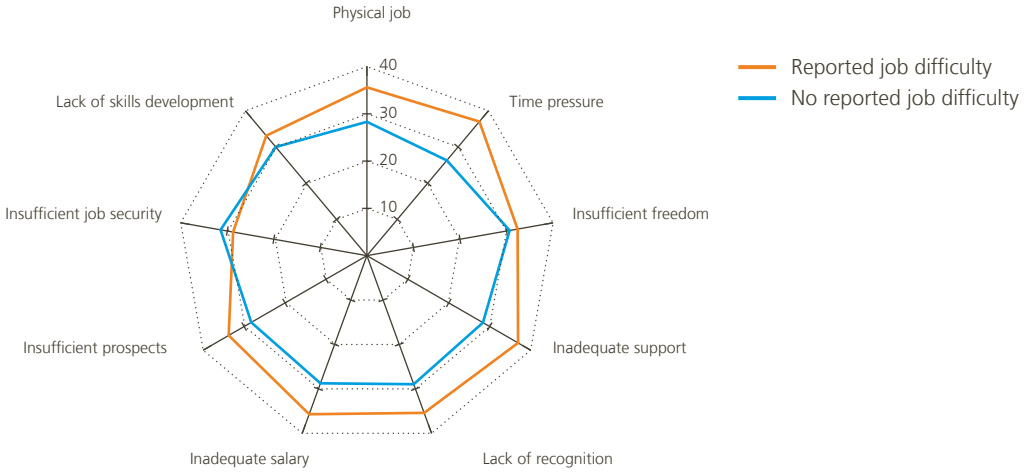
From a broader perspective, older workers who perceive their working conditions as difficult generally exhibit a higher probability of wishing to retire early, which aligns with the initial findings of Siegrist et al. (2006) and Sohier et al. (2022). However, the extent of this influence varies depending on the specific categories of working conditions under consideration. Odds ratio estimates indicate that older workers identify certain job-related difficulties as significant determinants of potential early retirement, e.g. a lack of recognition from superiors, insufficient support during trying situations, and time pressure stemming from a heavy workload. Difficult working conditions can in theory be linked to the employer's situation (e.g. restructuring or financial problems) or to the economy in general (e.g. a period of recession or a lockdown). This could also affect an individual's willingness to retire earlier, but the data do not allow us to control for these aspects.

To gain deeper insight into the impact of working conditions, we calculated the average predicted probability from our models if all respondents were to report (or not to report) each category of job-related difficulty. Thus, if all respondents felt inadequately supported in difficult work situations, the probability of intending to retire early would be 37 %, compared to a 26 % probability if they felt adequately supported. The determinant related to time pressure exhibits a similar pattern. The categories of a physically demanding job, a lack of recognition, inadequate salary, and limited prospects tend to have a positive influence on the inclination towards early retirement, although their odds ratios do not reach statistical significance in the model incorporating all variables. Conversely, a lack of opportunities to develop skills, job insecurity, and limited decision-making autonomy have a relatively modest effect. These results suggest that, in addition to labour market initiatives promoting good health, it is crucial to consider the effects of psycho-social factors in the workplace as individuals approach retirement age. These factors may serve as catalysts for workers to exit the labour market early.

Figure 10

Predicted probability of willingness to retire as early as possible if all respondents were to report or not to report each job-related difficulty

(in %, based on equation 10 in Table 2)[1]



Source: SHARE (Belgian sample, waves 4 to 8) and authors' own calculations (further results in the annexes).

1 Considering each variable separately in the econometric estimations can lead to omitted-variable bias, while considering all variables together can lead to multicollinearity, as they are strongly correlated. We opted for a model including all variables, as the change in standard error was relatively limited.

The income level of respondents and their sector of activity are known to influence retirement decisions, and, ideally, we should adequately control for these factors in our regression analysis. However, these variables are notoriously difficult to capture in a survey as they are perceived as sensitive or difficult to assess. As a robustness test, we introduced variables related, on the one hand, to income level (deciles over the sample, based on the self-reported total income received by the household in the previous month) and the ability to cover living expenses (dummy variables with responses such as "with great difficulty", "with some difficulty", "fairly easily" and "easily"), and, on the other hand, to the sector of activity (industry, construction, market services and non-market services). This adjustment resulted in a 39 % to 46 % reduction in the sample size: the results are provided in the annexes (Table 4).[13] The main conclusions remain unchanged: job dissatisfaction plays a major role in willingness to leave the labour market. Similarly, including workers above the statutory pension age could introduce selection bias, as less motivated workers may gradually phase out as the age of respondents increases. To address this concern, we conducted a robustness test by limiting the sample to respondents aged between 50 and 60 years, which covered most of our initial sample. The coefficients remained quite consistent in this restricted sample, affirming the robustness of our findings.

3.4 Age and career length remain the key factors affecting the decision to retire

It is crucial to distinguish between an individual who intends to retire and lacks the will to continue working, on the one hand, and one who is taking practical steps towards retirement, on the other. While the preceding section shed light on the former situation, we now shift our focus to the latter. To measure the effective transition to retirement, data from two consecutive survey waves were used, gathered from respondents

13 The odds ratio – and corresponding standard errors associated with the variables of the sectors of activity in the regression targeting the effective retirement age – reach relatively high levels.

who declared themselves as being employed in the first of these two waves. This variable takes the value of 1 if, in the second survey wave, the respondent declared himself or herself to be "*retired (including various categories such as retired from own work, semi-retired, partially retired, early retired, or pre-retired)*" and 0 if another employment status was selected. In other words, we used the same sample here as in the previous section for which the willingness to retire was estimated.

This newly created variable is closely linked to the willingness to retire as early as possible. However, even though the correlation coefficient between these two dummy variables is statistically significant (0.12, p-value = 0.0), it remains relatively weak. In our effective sample, only one out of every ten respondents who expressed a desire to retire as early as possible actually retired before the subsequent survey wave. This implies that a significant share of working respondents continued to participate in the labour market despite their stated preference to retire early. This discrepancy may be attributed, among other factors, to financial obligations, financial uncertainty, or concerns regarding the eligibility criteria for early or statutory retirement.

To ensure comparability with our results regarding the willingness to retire, we used the same estimation method (random-effects logit model, incorporating Mundlak's correction) and included the same set of explanatory variables as in the previous specifications. The results are presented in Table 2 and reveal significant differences compared with the previous model : only the variables related to entitlement to the statutory old age pension have coefficients significantly greater than one. This indicates, as expected, that individuals with longer careers have substantially higher odds of transitioning into retirement. In terms of the average marginal effect, increasing the age of the respondent by one year (beyond 50) results in a 1.8 percentage point increase in the probability of the transition to retirement. Similarly, increasing career length by one year leads to a 0.4 percentage point increase in this probability. Although these two variables represent distinct characteristics, they are inherently linked. For instance, a career length of more than 35 years is unlikely for a person aged 50. According to our estimates, the average predicted probability of retirement remains low, below 55 years, regardless of career length. As age increases, the number of qualifying years for the statutory pension becomes increasingly influential in the probability of transitioning to retirement. For individuals aged between 65 and 69, 10 or fewer qualifying years is associated with a 19 % probability of retiring, compared with a 60 % probability when this figure exceeds 45 years.

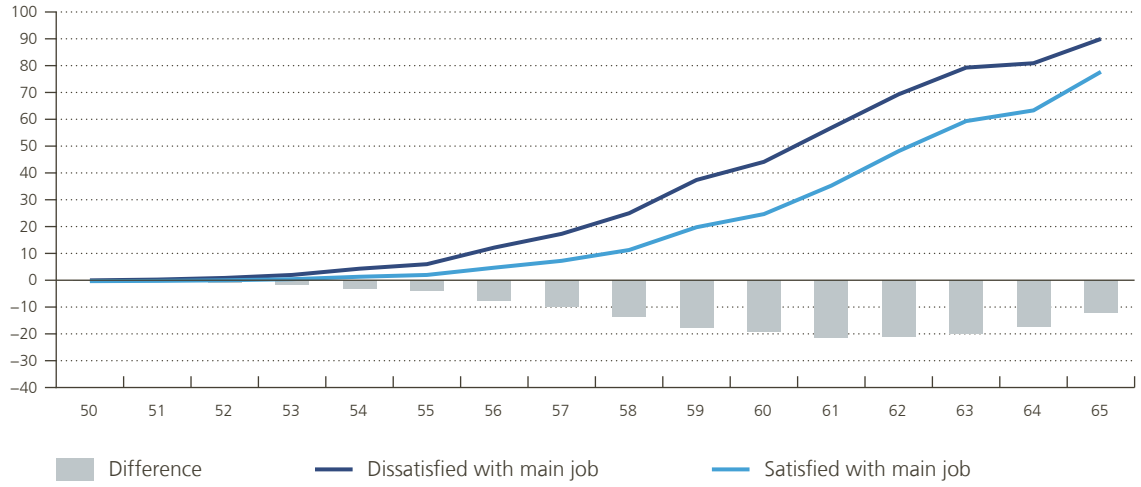
The variable related to job dissatisfaction has a positive but non-significant coefficient, implying that job dissatisfaction has a stronger impact on the willingness to retire early than on the effective decision to retire. However, it is worth noting that the effect of job dissatisfaction may vary depending on a person's age. This variation could reinforce the age effect, even though the correlation between job dissatisfaction and age is close to zero. While the gap is very narrow at the ages of 50 or 55, in absolute terms, it increases to 20 percentage points between the ages of 60 and 63, which is statistically significant at a 10 % threshold.[14] This suggests that the role of job dissatisfaction in retirement decisions grows more important over time rather than serving as the primary trigger.

14 Job dissatisfaction lowers the probability from 6.5 % to 2.5 % at the age of 55. This could be seen as non-negligible in itself, but it should be acknowledged that the economic and statistical significance of the gap is more substantial at a later age.

Figure 11

Predicted probability of effective retirement by age and level of job satisfaction or dissatisfaction

(probability in % and difference in percentage points, based on Model 2 in Table 2)



Source: SHARE (Belgian sample, waves 4 to 8) and authors' own calculations.

Despite the fact that fewer variables have a significant coefficient, the model performs significantly better when targeting the dependent variable of effective retirement compared to that of willingness to retire early. The share of correctly classified observations reaches 91 % for the second model, in contrast to 73 % for the first model.[15] The second model, driven primarily by variables defining access to a statutory pension, exhibits stronger predictive power; for its part, the first model is associated with greater unexplained variation in the dependent variable. This does not come as a surprise, as the second model mainly reflects an administrative decision for which the criteria are essentially age and length of career, while the first model concerns determinants of willingness to retire early.

In Belgium, various social security benefits could *de facto* serve as a means for eligible workers to withdraw from the labour force. Consequently, some workers may leave the labour market permanently, receiving their primary income from disability or sickness benefits, unemployment insurance, or unemployment benefits with supplementary payments by the (former) employer. Access to these schemes has become more restricted over the last two decades, but respondents to the survey may have benefited from them in the past. As a robustness test, we considered retirement in a broader sense, including the unemployed and the long-term sick (even when the shift to inactive status was not necessarily permanent). The results are relatively similar, but the marginal effect of career length and gender decrease somewhat.

In this context, inclusion of the variables related to income or sector of activity to test robustness suggests that length of career – but not age – has a significant effect on the transition to retirement. It should be borne in mind, however, that the reduction in sample size could be related to sample selection bias.

15 The share of correctly classified observations is performed with a predicted probability that incorporates the actual estimated value for the random intercept (mixed-effects models) and a threshold fixed at 0.5.

3.5 The COVID-19 pandemic was not a game-changer for retirement

How did the pandemic affect decision-making on retirement? In theory, the outbreak of the pandemic (which, from a purely public health perspective, had a more severe effect on older people) could have downgraded respondents' perceptions of their level of health in the short run; this, in turn, could have led to an increase in the willingness to retire early. Moreover, the new ways of working triggered by or more rapidly adopted due to the pandemic (as discussed by Coppens et al., 2021) could have rendered obsolete some of the (non-digital) skills of older workers, negatively impacting their employability. Conversely, measures increasing flexibility in terms of working time and location could have improved respondents' work-life balance, alleviated certain health issues, and facilitated family life, thereby delaying the decision to retire.

These hypotheses do not, however, seem to be confirmed by Belgian macroeconomic data, as the number of pensioners did not grow abnormally in 2020 or 2021. The annual growth rate in recent years does not appear to be an outlier in the time series, whether looking at the public or private pension systems.

As suggested by Botelho and Weißler (2022), SHARE data make it possible to assess how the pandemic influenced the decision-making of some older workers regarding when to retire. Ad hoc surveys were conducted in March-April 2020 and June-August 2021, focusing specifically on the consequences of the pandemic for individuals aged 50 and older. During this period, 82 % of recent Belgian retirees reported that they had retired as originally planned, 17 % that they had retired earlier than planned, and only 2 % that they had retired later than planned. According to respondents, the reasons for early retirement were directly related to the pandemic in only a limited number of cases. However, early retirement was more common among workers who reported having relatively poorer health or a depressed mood, suggesting that perceptions of heightened health risks linked to the pandemic may have influenced their choices.

We note that only 2 % of older workers retired later than planned because of the pandemic, indicating that most older workers did not mitigate the effects of heightened economic uncertainty by delaying retirement. This figure is significantly lower in Belgium than in many European countries; it reached 9 % in Sweden, 7 % in France and 6 % in Germany.

All in all, the survey data suggest that the pandemic did not have a very strong impact on older Belgian workers' decisions to retire. The effect was also relatively weak in neighbouring countries, although slightly more pronounced. However, the COVID-19 pandemic confirms that health concerns continue to be a key factor for older workers regarding when to retire and that significant external health shocks may influence economic behaviour.

4. Conclusion

While the employment rate for individuals aged 55 and over increased from 25 % in 2000 to 57 % in 2022, Belgium still lags behind the European average, and there is a significant gap between the statutory and effective retirement ages.

The labour force survey provides detailed insight into the labour market status of individuals. The 50-64 age group accounts for a large proportion of persons in employment in agriculture, the financial sector and public administration. This age group is also more likely to work part-time than others. However, employer demand for this segment remains low: the over-50s account for less than 9 % of new hires, and the job separation rate is proportionally higher for those aged 59 to 64. In this context, retention policies which encourage older people to remain in employment are likely to be more effective, including from a cost perspective, than measures designed to help persons aged 55 to 64 return to work.

The survey also shows that more older people are declaring themselves to be inactive due to illness or disability, compared with the situation in 2005, while the proportion of people under 65 indicating that they benefit from an early retirement scheme, a statutory pension or statutory early retirement has fallen, in line with the changes in these schemes.

The willingness and ability of older workers to remain in the labour force vary significantly among individuals. Heterogeneity is marked for older workers, as health inequalities and the physical demands of certain occupations have more impact towards the end of one's career. Our analysis confirms that the decision to retire is primarily influenced by access to a statutory pension and that many workers retire when they reach a key age threshold that corresponds to the statutory pension age.

While access to a statutory pension is the primary factor influencing labour market exit at the individual level, other factors such as the decision of a partner to retire, professional status and level of education all have a non-negligible and more indirect effect on the decision to retire. Of these factors, job dissatisfaction and difficult working conditions tend to weigh significantly on the willingness of older workers to stay in work and can ultimately trigger an early exit from the labour market. While the working environment may not exert a strong direct effect on the effective decision to retire, at least in our results, it could still have an indirect effect through individual willingness to participate in the labour market and self-assessed employability.

These results should be interpreted with caution as the decision on when to leave the labour market is not entirely under a worker's control. Strikingly, the survey data do not contain much information on respondents' (previous) employers, which makes it impossible to determine whether, for example, a restructuring plan or the financial situation of a failing company could have influenced an individual's intention to retire early and their working conditions. The use of employer-employee statistics represents an interesting avenue for future research.

Government reforms that make it harder to qualify for retirement or early retirement are often presented as effective. However, they may not be well received by workers and employers. In addition, they can be inconsequential if not accompanied by an increase in demand for older workers and could have a nonlinear effect on the effective pension age. Measures aimed at improving the working conditions or employability of older workers, in terms of both skills and relative cost, can be valuable tools to increase the employment rate of older workers.

Annexes

Table 3

Random-effects logit estimations with "willingness to retire early" and "transition to retirement" as dependent variables

Variable	Willingness to retire early				Transition to retirement			
	Odds ratio	St. errors	Odds ratio	St. errors	Odds ratio	St. errors	Odds ratio	St. errors
OAP access dummy	1.075	(0.635)	1.041	(0.736)	0.364	(0.245)	1.140	(0.978)
Age in years	0.945	(0.146)	1.028	(0.166)	1.601	(0.619)	1.019	(0.205)
OAP qualifying years	1.009	(0.043)	1.101	(0.076)	1.123*	(0.0717)	1.112**	(0.0560)
Civil servant	0.514	(0.417)	0.925	(0.632)	1.576	(3.595)	0.883	(0.508)
Self-employed	0.0891	(0.151)	0.128	(0.167)	0.530	(1.372)	0.146	(0.182)
Good or very good health	1.141	(0.732)	6.138**	(4.441)	1.074	(0.985)	7.644	(10.23)
Fair or poor health	2.754	(2.211)	5.284*	(4.724)	2.221	(2.498)	4.940	(6.706)
Physical health index	0.989	(0.0175)	0.998	(0.0212)	0.996	(0.0217)	0.984	(0.0291)
Mental health index	0.964**	(0.0165)	0.981	(0.0155)	1.016	(0.0314)	0.993	(0.0199)
Woman	0.607*	(0.164)	1.084	(0.325)	0.543	(0.769)	1.351	(0.511)
Flemish language	0.475***	(0.127)	0.474**	(0.142)	2.035	(1.737)	0.788	(0.281)
Household size	1.204	(0.319)	1.073	(0.347)	1.070	(0.555)	0.986	(0.574)
Years of education	0.911**	(0.0341)	0.896***	(0.0371)	0.983	(0.0404)	0.954	(0.0419)
Retired partner	1.095	(1.210)	3.740	(4.088)	1.133	(1.259)	6.055*	(5.983)
Partner with other job status	0.989	(0.625)	4.925**	(3.780)	1.688	(1.542)	5.158**	(3.332)
No partner or widowed	1.160	(1.551)	9.070	(14.29)	19.25	(56.38)	8.152	(16.400)
Job dissatisfaction	4.620**	(3.485)	15.02***	(13.00)	4.665	(7.699)	5.341*	(5.347)
Some difficulty in making ends meet	0.865	(0.693)			3.020	(5.571)		
Fair ease in making ends meet	0.594	(0.524)			2.411	(4.958)		
Ease in making ends meet	0.961	(0.865)			2.606	(5.101)		
Income decile	1.019	(0.0967)			1.078	(0.142)		
Construction			0.784	(1.367)			0.164	(0.454)
Market services			1.715	(2.408)			52.54***	(70.23)
Non-market services			3.826	(5.209)			136.8***	(196.2)
Mean predicted probability (in %)	29.7		30.0		10.7		9.2	
Observations	930		827		933		830	
Respondents	722		692		725		694	

Source: SHARE (Belgian sample, waves 4 to 8) and authors' own calculations.

Note: The estimates are expressed in odds ratios. Mundlak's correction is applied, and both time effects and a constant term are included in the estimations but not mentioned in the table. OAP stands for old age pension. Robust clustered standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4

Random-effects logit estimations with "willingness to retire early" as a dependent variable

Variable	Odds ratio										
	1	2	3	4	5	6	7	8	9	10	11
OAP access dummy	0.936 (0.426)	0.945 (0.429)	0.933 (0.437)	0.932 (0.422)	0.982 (0.446)	0.952 (0.437)	0.988 (0.46)	0.916 (0.426)	0.861 (0.406)	0.969 (0.437)	0.88 (0.442)
Age	1.035 (0.124)	1.046 (0.126)	1.046 (0.128)	1.032 (0.123)	1.031 (0.124)	1.016 (0.124)	1.028 (0.122)	1.037 (0.124)	1.019 (0.125)	1.038 (0.124)	1.045 (0.139)
Qualifying years for a statutory pension	1.031 (0.0328)	1.03 (0.0326)	1.03 (0.0338)	1.034 (0.0334)	1.029 (0.0337)	1.037 (0.0341)	1.036 (0.0347)	1.033 (0.0339)	1.033 (0.034)	1.03 (0.0328)	1.032 (0.0384)
Civil servant	0.986 (0.412)	1.037 (0.444)	1.106 (0.462)	0.987 (0.41)	1.032 (0.44)	0.979 (0.409)	1.011 (0.424)	1.034 (0.427)	0.885 (0.381)	0.983 (0.406)	1.125 (0.515)
Self-employed	0.242* (0.201)	0.222* (0.191)	0.264 (0.218)	0.244* (0.202)	0.221* (0.188)	0.224* (0.186)	0.302 (0.252)	0.223* (0.183)	0.181* (0.159)	0.26 (0.214)	0.216 (0.205)
Perceived health: good or very good	1.959 (0.909)	1.866 (0.873)	1.946 (0.921)	1.978 (0.923)	2.006 (0.926)	2.075 (0.979)	1.874 (0.879)	1.966 (0.935)	1.97 (0.948)	1.999 (0.928)	1.905 (0.957)
Perceived health: fair or poor	4.552** (2.756)	4.172** (2.541)	4.568** (2.806)	4.457** (2.706)	4.666** (2.826)	4.686** (2.891)	4.874*** (2.972)	4.634** (2.845)	4.379** (2.714)	4.540** (2.731)	4.446** (2.887)
Physical health index	0.987 (0.0142)	0.986 (0.0141)	0.985 (0.0145)	0.987 (0.0142)	0.987 (0.0144)	0.991 (0.0144)	0.989 (0.0139)	0.985 (0.0141)	0.988 (0.0143)	0.989 (0.014)	0.988 (0.0152)
Mental health index	0.981 (0.0125)	0.981 (0.0126)	0.984 (0.0127)	0.981 (0.0124)	0.979* (0.0125)	0.980 (0.0126)	0.982 (0.0124)	0.980 (0.0127)	0.978* (0.0128)	0.980 (0.0124)	0.976* (0.0136)
Woman	0.638** (0.137)	0.618** (0.135)	0.650** (0.142)	0.645** (0.138)	0.639** (0.138)	0.652** (0.142)	0.674* (0.142)	0.624** (0.135)	0.629** (0.138)	0.631** (0.134)	0.638* (0.149)
Flemish language	0.455*** (0.0979)	0.416*** (0.0917)	0.447*** (0.0984)	0.439*** (0.0945)	0.488*** (0.105)	0.463*** (0.101)	0.528*** (0.112)	0.446*** (0.0968)	0.425*** (0.0938)	0.436*** (0.0931)	0.469*** (0.112)
Household size	1.264 (0.299)	1.288 (0.303)	1.267 (0.306)	1.246 (0.292)	1.267 (0.302)	1.204 (0.293)	1.24 (0.296)	1.268 (0.305)	1.26 (0.282)	1.288 (0.298)	1.164 (0.278)
Years of education	0.887*** (0.0278)	0.899*** (0.0281)	0.879*** (0.0284)	0.891*** (0.0277)	0.904*** (0.0279)	0.884*** (0.0284)	0.891*** (0.0276)	0.889*** (0.028)	0.891*** (0.0284)	0.890*** (0.0277)	0.906*** (0.031)
Retired partner	1.417 (1.057)	1.619 (1.218)	1.526 (1.149)	1.398 (1.037)	1.431 (1.076)	1.552 (1.195)	1.453 (1.065)	1.466 (1.088)	1.521 (1.153)	1.441 (1.055)	1.876 (1.506)
Partner with other job status	1.346 (0.687)	1.373 (0.709)	1.316 (0.666)	1.317 (0.673)	1.408 (0.731)	1.307 (0.666)	1.331 (0.668)	1.31 (0.671)	1.399 (0.739)	1.356 (0.685)	1.345 (0.728)
No partner or widowed	1.347 (1.668)	1.593 (1.986)	1.773 (2.263)	1.414 (1.753)	1.519 (1.914)	1.413 (1.773)	1.666 (2.281)	1.476 (1.875)	1.882 (2.393)	1.707 (2.145)	3.13 (4.49)
Job dissatisfaction	9.126*** (6.586)	9.425*** (6.839)	7.594*** (5.538)	8.911*** (6.465)	8.510*** (6.166)	6.698** (5.154)	7.031*** (5.101)	11.08*** (8.296)	9.519*** (6.546)	8.631*** (6.112)	7.387*** (5.652)
Physically demanding		1.998 (0.868)									1.923 (0.923)
Time pressure			2.690*** (0.981)								2.651*** (0.999)
Insufficient freedom				1.029 (0.374)							1.168 (0.46)
Lack of skills development					1.533 (0.598)						1.326 (0.597)
Inadequate support						2.751*** (0.917)					2.132** (0.797)
Lack of recognition							2.421** (0.894)				1.766 (0.7)
Inadequate salary								2.070* (0.86)			1.867 (0.87)
Insufficient prospects									1.976** (0.67)		1.651 (0.589)
Insufficient security										1.072 (0.301)	0.777 (0.244)
Observations	1 523	1 523	1 523	1 522	1 521	1 517	1 519	1 520	1 478	1 499	1 468
Respondents	1 091	1 091	1 091	1 090	1 089	1 088	1 088	1 090	1 067	1 070	1 063

Source: SHARE (Belgian sample, waves 4 to 8).

Note: The estimates are expressed in odds ratios. Mundlak's correction is applied, and both time effects and a constant term are included in the estimations but not mentioned in the table. OAP stands for old age pension. Robust clustered standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

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Conventional signs

%	per cent
et al.	and others

List of abbreviations

Countries or regions

AT	Austria
BE	Belgium
DE	Germany
DK	Denmark
ES	Spain
EU	European Union
FR	France
IT	Italy
NL	The Netherlands
SE	Sweden

Abbreviations

COVID-19	Coronavirus
EWCS	The European Working Conditions Survey
LFS	Labour Force Surveys
OAP	Old-age pension
OR	odds ratios
SHARE	Survey of Health, Ageing, and Retirement in Europe

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