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# Employers' Retirement Age Norms in European Comparison

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# Empirical Article

# Employers' Retirement Age Norms in European Comparison

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## Abstract

Policies incentivizing longer working lives can remain ineffective if employers are not able and willing to employ an aging workforce. Depending on what employers consider appropriate age norms for work and retirement, they may be more willing to recruit and retain older workers. This study investigates how these retirement age norms differ across Europe and how they are related to country- and gender-specific pension policies and employment practices. The study uses data from the European Social Survey round 9 (collected in 2018) for 27 countries. Employers are identified as self-employed with personnel and managers who supervise others. The data include questions about the ages of when someone is too young to retire and when someone is too old to work. These items are combined and used in a set of multilevel interval regression models to analyze: (a) How employers' retirement age norms differ from those of employees and (b) How employers' retirement age norms vary across countries. The results indicate that, overall, employers have higher retirement age norms than employees, but that the difference narrows substantially once controlled for other factors. Employers' retirement age norms are positively related to countries' gender-specific statutory retirement ages and older-worker employment rates. In the case of statutory retirement ages, this association is stronger among employers than among various socioeconomic groups of employees.

**Keywords:** employers, age norms, retirement, extending working lives, Europe

## INTRODUCTION

In recent decades, employment of older workers has grown in almost all industrialized countries, while their effective retirement ages have deferred. This is mostly good news for policymakers in times when populations are aging, and the sustainability of pension and welfare systems depends on increasing the active working population to support the growing numbers of retirees. At least several factors lie behind the increases in older-worker employment. Younger cohorts are better educated and healthier, enabling them to continue to work longer (Boissonneault et al., 2020). In addition, almost all industrialized countries have implemented reforms in their pensions systems aimed at changing possibilities and incentives to retire later and participate in the labor market longer (Ebbinghaus, 2015).

In recent policy debates and in the literature, growing attention is also paid to the role of employers in making reforms to extend working lives successful (Henkens, 2022). Policies incentivizing employees to work longer can end up being ineffective unless there are employers who are able and willing to employ and retain them (Van Dalen et al., 2010). However, there has been relatively little research on the role of employers in hindering or promoting the aim of longer working lives from an international comparative perspective.

Ebbinghaus and Hofäcker (2013) argued that since the late 1990s, a paradigm shift in policymaking has taken place from "early exit" to "extended working lives" in industrialized countries. A paradigm shift implies not only a change in policies and regulations. For real institutional change, there needs to be a change in the norms and ideas of those actors and stakeholders who have to implement policies and abide by the new rules (Hall, 1993). Until the early 2000s, the norm of early exit was strongly rooted among both employees and employers (Ebbinghaus, 2006; Radl, 2012). For extending working lives to be sustainable as the new pension policy paradigm, both employees and employers need to have internalized the norm that early exit is no longer desirable, and that working longer is the new normal.

Not all European countries have been as successful in extending working lives as others, implying that the paradigm has not shifted everywhere to the same degree. As pension reforms mostly aim at changing the behavior of employees and retirees, comparative studies have, for good reason, investigated how pension reforms change individuals' employment and retirement behavior in particular (Kuitto & Helmdag, 2021). Unfortunately, only limited comparative evidence is available on the cross-national differences in employers' attitudes and behavior toward an aging workforce (Conen et al., 2012; Oude Mulder et al., 2017; Principi et al., 2020; Van Dalen et al., 2010, 2015).

Studies that specifically examined the impact of pension rules or changes in employers' norms and attitudes over time typically focus on single countries only (Järnefelt et al., 2022; Solem et al., 2020; Van Dalen et al., 2019).

This article takes a comparative approach to explain the retirement age norms of European employers in times of extending working lives. In this study, employers are individuals who are self-employed with personnel or managers who supervise other employees. The aim is to investigate the extent to which the age norms of employers regarding work and retirement are related to cross-national variation in the shift toward extending working lives. Taking the countries' gender-specific statutory retirement ages and employment rates of older workers as proxies for the policy shift in extending working lives, the study examines whether employers have aligned their age norms accordingly.

The study utilizes European Social Survey (ESS) data collected in 2018 (Round 9) for 27 countries. This recent round of data collection contained a rotating module with questions about the timing of life, including two questions particularly relevant to this study: when is someone considered too young to retire and when are they too old to work? Operationalizing the retirement age norm as an interval between these two ages, the analysis concentrates on the questions whether there exist retirement age norms that are specific to employers, whether these norms differ between countries, and whether countries' policies and practices are related to employers' retirement age norms.

## Theory and Background

### Age norms and how they affect the timing of work and retirement

Age norms, sometimes also referred to as age-based timetables or social age deadlines, shape individuals' ideas, and expectations about the suitable timing of major life course transitions, such as into marriage, into parenthood, from education to work, and from work to retirement (Settersten, 2003). In postmodern societies, they continue to shape people's behavior as social norms (Liefbroer & Billari, 2010). Some age norms become institutionalized in policies and laws (Kohli, 2007). It is also possible that age norms result from regulation. Policy can provide a signal about the expected behavior at a certain age. For example, a recent study from Finland showed that statutory retirement ages set a social norm, which individuals internalize and act upon, even if financial incentives to postpone retirement are introduced (Gruber et al., 2022).

Age norms do not need to be regulated to affect individual behavior or policymaking. For example, the early exit culture that was dominant in many European countries in the 1980s and 1990s was often the result of an implicit agreement between the government, employers, and employees. Exit from the labor market years before the statutory retirement age was considered just and desirable from both an individual as well as a societal perspective (Ebbinghaus, 2006). Even when not regulated in the law, this early exit culture with low retirement age norms has proven difficult to change (Oude Mulders et al., 2018).

The influence of societal and policy-driven age norms and stereotypes on individual retirement behavior is not always direct. Recent studies have emphasized the need to incorporate the workplace as a mesolevel when investigating the link between factors at a societal level and retirement behavior at the individual level (Boehm et al., 2021; Henkens, 2022; Turek et al., 2022). Workplaces do not only create "hard" opportunities and constraints for workers to continue employment, but also affect interpersonal relations and everyday practices that incentivize older workers to retire or not (Turek et al., 2022).

Retirement age norms can play a role in both these "hard" and "soft" opportunities and constraints for older workers in workplaces. Age norms about the expected and suitable time for retirement can brand people who work close to or beyond this age as too old to work. Older workers are often believed to lack physical strength, be unable to learn new things, or be unproductive, even if this is not necessarily true (Posthuma & Campion, 2009). Not only might others hold these stereotypes about older workers, but also older workers might believe this themselves as well (Vickerstaff & Van der Horst, 2021), leading to "self-discrimination" and a wish for retirement (Turek et al., 2022).

Variation in retirement age norms and their impact between workplaces can be due to the nature of the work performed in the organization, for example, when skills are required that are believed to be found to a lesser extent among older workers (Turek & Henkens, 2020). There can also be differences between workplaces in the degree to which organizational culture and context condone or reinforce negative age stereotypes, regardless of the type of work performed.

In the organizational context, employers and managers (as individual persons) exert influence on the actions of (older) workers by taking decisions about hiring, managing, and firing. Studies have found that employers' age norms play a role in their preferences or decisions to recruit older workers (Karpinska et al., 2013a; Murphy & DeNisi, 2021; Oude Mulders, 2019; Taylor & Walker, 1998; Turek & Henkens, 2020) and implementation of measures to support and retain older workers in their organization (Jensen et al., 2019; Karpinska et al., 2013b; Lössbroek et al., 2019; Oude Mulders et al., 2017). Even if age norms are not translated in actual decisions or workplace policies, they may be reflected in attitudes, discourse, day-to-day actions, or lack of action (e.g., by NOT creating an age-friendly workplace; Cadiz et al., 2022; Stypińska & Turek, 2017; Turek et al., 2022), thereby affecting older workers' possibilities for employment and incentives for retirement (Van Solinge & Henkens, 2007; Vickerstaff & Van der Horst, 2021).

### Employer-specific retirement age norms

Oude Mulders et al. (2018) listed various factors that shape retirement age norms, including observed behavior and norms of others in society, personal values, and individual experiences with older workers, but also institutional factors and pension regulations. First, it can be expected that a considerable part of variation in employers' retirement age norms between countries is explained by the dominant social and cultural norms of the societies they live in. It is even possible that there is no such thing as *employer-specific* retirement age norms. In one of the few studies that simultaneously investigated employers and employees, Van Dalen et al. (2010) found similar perceptions of older workers' positive and negative characteristics among both groups. This may imply that their retirement age norms are also similar.

At the same time, employers constitute a particular socioeconomic group in society with possibly different characteristics than the average employee. Such other characteristics are, at least to some extent, confounding factors that shape the age norms of employers. Radl (2012), found substantial differences in retirement age norms in Western European societies by various sociodemographic factors. Similarly, employers' age norms may differ from those of employees because they differ as a group in terms of, for instance, gender, age, level of education, income, and health.

The current study addresses the question whether employers have specific retirement age norms given their role in recruiting, managing, and retiring older workers. This active role in extending working lives could influence their retirement age norms to be different from those of employees. Several mechanisms might be at play. Lazear (1979) argued that there is an implicit contract between employers and employees, where lower wages at the beginning of the employment contract are compensated by higher wages as tenure increases. While productivity is unlikely to grow indefinitely, wages under this model continue to increase. Therefore, Lazear argues, a worker should retire at the point when lifetime wages (plus investment in training) equal lifetime productivity. From this perspective, employers have an economic interest in a lower retirement age, while employees should benefit financially from continuing to work beyond that age.

At the same time, intergroup contact theory (Pettigrew, 1998) predicts that if employers deal with older workers on an everyday basis, this may help to mitigate age stereotypes and create more positive attitudes toward older workers. Studies have found that in organizations with a greater share of older workers, employers tend to invest more in retaining measures (Oude Mulders et al., 2017; Van Dalen et al., 2015) and are more likely to recruit older workers (Van Borm et al., 2021). Norms might shift upwards in times when the workforce is aging, labor supply is becoming tighter, and retiring workers are difficult to replace (Conen et al., 2011; Moen et al., 2017; Taylor et al., 2013; Van Dalen et al., 2010). Following these mechanisms, employers are likely to have more positive age norms concerning work and retirement than employees who are not necessarily in contact with older workers and are not confronted with the economic benefits or necessity of an older workforce.

## Employers and the paradigm shift toward extending working lives

Raising statutory retirement age is one of the most common policy instruments to extend working lives across Europe. It involves a change in the rules that employers must incorporate in their norms and behavior. Studies in the Netherlands and Norway showed that raising retirement age caused concerns and objections with employers (Solem et al., 2020; Van Dalen et al., 2019). In Finland, a gradual shift of the minimum retirement age from 63 to 65 increased the share of employers who considered this age too high (Järnefelt et al., 2022). Employers might be weary of high retirement ages, as it could involve costs due to the need to adjustments at the workplace or the (perceived) lower performance of older workers on certain tasks (Oude Mulders et al., 2018). At the same time, a rise in statutory retirement in Norway was found to evoke little direct reaction in employer attitudes or behavior toward older workers (Solem et al., 2020), suggesting that employers

relatively quickly adapt their norms and expectations after a reform.

Employment rates of older workers have increased in most European countries during past decades, especially among women. In addition to reforms in pension systems, educational expansion and improvements in health and life expectancy have contributed to rises in labor market participation rates (Boissonneault et al., 2020). It is likely that, as the employment of older workers increases, employers adjust their retirement age norms upwards. It should be noted that the direction of causality in the relation between employment rates and age norms can be topic of speculation. The experience of having a growing older workforce might change retirement age norms. Yet, it is also possible that higher retirement age norms among employers lead them to recruit and retain older workers more often, thereby raising employment rates.

If employers' positive retirement age norms contribute to higher older worker employment rates (and not just vice versa), this would mean that employers can be considered an active driving force of extending working lives rather than just a subject of change (Van Dalen et al., 2010). At the same time, it is often assumed that societal age norms are "sticky" and adapt slowly across time (Radl, 2012, p. 768). Therefore, it is useful to observe how employers' retirement age norms are related not just to employment rate levels, but also to recent changes in older-worker employment rates.

If the employment situation of older workers influences age norms, we can expect retirement age norms to be lower in countries with more drastic recent increases in employment rates compared to countries with possibly similar employment rates but more stability in recent employment rates. Hence, in this case, there is a lag effect, where retirement age norms have not yet adjusted to current older-worker employment rates. There should be no difference in this lag effect between employers and employees if it is merely the employment situation of older workers that shapes age norms. However, if we assume that employers' retirement age norms also shape employment opportunities for older workers, we can expect this lag effect to be smaller or non-existent for employers. In other words, in that case, employers' retirement age norms had already shifted priorly, which could have contributed to a rise in employment rates.

## DATA AND METHODS

### Data and sample selection

The study uses data from the ESS round 9 that was collected in 2018. This round of data collection is particularly suitable for this study, as it included a rotating module with questions about the timing of life and respondents' perceptions of various life-course transitions. Thirty countries participated in round 9. This study focuses on countries that are members of the European Union, the European Economic Area, and/or the OECD. Especially the European Commission and the OECD have been active proponents of longer working lives, aiming to impact the employment and retirement policies of their member states. Furthermore, harmonized macrolevel data from these organizations is used in the study's multilevel analysis (see below on the independent variables). Serbia and Montenegro are not part of either organizations. Romania was excluded due to a very low number of employers in the data (less than 1%).

This leaves 27 countries, forming a balanced representation of countries from different geographical parts of Europe with substantial variety in their pension systems and labor market situation for older workers (the full list of countries can be found in Table 1).

Employers are identified as those who were either self-employed and having at least one employee or managers who supervised others. Managers are included as employers, because besides persons owning or leading a business, also managers make decisions about recruiting and retaining workers—perhaps even more so than the business owners themselves. Supervising managers are identified according to ISCO-08 occupational classifications (see Table A1) in combination with a variable that asks about supervision responsibility in the job. Respondents who were retired, unemployed, or otherwise outside the labor market at the time of the survey, but who could be identified as employers and supervising managers in their last held job, are also included as employers.

Employees are included in the analyses as a comparison group. They were identified as those who were in salaried employment relationship or working for a family business in their current or last held job. Managers who did not supervise anyone were included as employees. The self-employed with

**Table 1.** Number of observations and share of employers by country.

| Country | Total number of observations | Employers, count | Employers, % |
|---|---|---|---|
| Austria | 2,123 | 156 | 7.4 |
| Belgium | 1,394 | 121 | 8.7 |
| Bulgaria | 1,885 | 102 | 5.4 |
| Croatia | 1,511 | 133 | 8.8 |
| Cyprus | 608 | 60 | 9.9 |
| Czech Republic | 1,901 | 159 | 8.4 |
| Denmark | 1,329 | 115 | 8.7 |
| Estonia | 1,052 | 178 | 16.9 |
| Finland | 1,516 | 145 | 9.6 |
| France | 1,685 | 92 | 5.5 |
| Germany | 1,908 | 242 | 12.7 |
| Great Britain | 1,791 | 236 | 13.2 |
| Hungary | 1,431 | 79 | 5.5 |
| Iceland | 718 | 137 | 19.1 |
| Ireland | 1,915 | 320 | 16.7 |
| Italy | 1,739 | 202 | 11.6 |
| Latvia | 850 | 99 | 11.7 |
| Lithuania | 1,611 | 116 | 7.2 |
| Netherlands | 1,328 | 195 | 14.7 |
| Norway | 1,153 | 179 | 15.5 |
| Poland | 1,130 | 163 | 14.4 |
| Portugal | 873 | 89 | 10.2 |
| Slovakia | 863 | 69 | 8.0 |
| Slovenia | 1,050 | 104 | 9.9 |
| Spain | 1,234 | 135 | 10.9 |
| Sweden | 1,281 | 137 | 10.7 |
| Switzerland | 1,262 | 202 | 16.0 |
| Total | 37,141 | 3,965 | 10.7 |

no personnel were excluded from the analysis. Although this group would make an interesting comparison to employers with personnel, their sample size was relatively small (only around 5% of observations). Those who never held a job were excluded from the analysis. This leaves a total of 37,141 employers and employees. Table 1 shows the sample sizes and shares of employers per country.

### Dependent variables

The dependent variables come from the ESS rotating module on timing of life and are based on two questions: (a) "Before what age would you say a woman/man is generally too young to retire permanently?" and (b) "After what age would you say a woman/man is generally too old to be working 20 hours or more per week?" The questions were administered to respondents as a split ballot. One half of the respondents received the question about women and the other half received the question referring to men, independent of the gender of the respondent.

The responses are numerical values, ranging from ages 1 to 100 (for "age, too young to retire") and 2 to 107 (for "age, too old to work"). In case of the question on too young to retire, the respondent can also answer "one is never too young," "one should never retire permanently," or "one should never be in paid work." The question about too old to work provides additional response options for "one is never too old" and "one should never work."

The combination of these two items is particularly suitable for this study, as the questions measure social age norms by referring to appropriate ages in general. The items do not address the respondent's individual preferences or intentions for work and retirement, although it cannot be fully excluded that respondents answer with their own situation in mind (Radl, 2012, p. 761). The variables are used to construct intervals with "age, too young to retire" as the lower boundary and "age, too old to work" as the upper boundary. These intervals indicate the age range within which it is acceptable if someone works or decides to retire, while below the lower boundary, it would be considered abnormal for someone to retire and above the upper boundary someone is no longer expected to work. It is assumed that these boundaries inform employers' recruitment and management decisions. Using these age intervals should provide a more relevant indication of retirement age norms than when using single age boundaries or perceived ideal retirement ages. When asked directly about an ideal age for retirement, the respondents' answer might be strongly shaped by the statutory retirement age in their country.

### Individual- and company-level independent variables

In the first part of the analysis, employees are treated as a single group. However, since employees are a heterogenous population, additional distinction is made between types of employees according to the classification of European Socio-economic Groups (ESeG) (Meron et al., 2014). The ESeG classification is the result of a coordinated effort by European national statistical institutes to design a meaningful and comparable division into socioeconomic groups based on information on status of employment and occupation (two-digit ISCO categories). This study distinguishes, in addition to employers, between managers (without supervisory

responsibilities) and professionals, technicians and associated professionals, clerks and skilled service employees, skilled industrial employees, and lower-status employees. More details on the classifications can be found in Table A1. In case the respondent is retired or otherwise not employed, the socioeconomic group refers to the job last held.

To test for the possibility that confounders explain the differences in age norms between employers and employees, a series of control variables is included in the analysis. The control variables should also reduce some of the effects of the respondents relating the questions about age boundaries to their own situation or personal retirement preferences. The distributions of the control variables among employers and various groups of employees are described in Table 2.

Gender is included in the analysis as a dummy variable. Employers are more often men, while Radl (2012) found that men in general have lower retirement age norms. Age and age-squared are entered as continuous variables. Employers tend to be older than employees, which can also be observed in Table 2. Van Dalen and Henkens (2019) found that employers become more positive about older workers as they age, although older cohorts may have lower retirement age norms. Overall, around 54% of the study population is older than 50 years old. For employers, this percentage is more than 60. An additional control is added for labor market status, distinguishing between being employed, being retired, or other. It is possible that those who retired early had lower retirement age norms. The "other" category includes those who were unemployed, permanently sick or disabled, performing household work, or otherwise outside the labor market.

Level of education is a categorical variable consisting of four levels: lower secondary or less, upper secondary, advanced vocational, and tertiary. Employers are higher educated than most employee groups, apart from other managers and professional. At the same time, it should be noted that all levels of education are relatively strongly represented among employers. Higher education overall is related to greater possibilities for and possibly more positive perceptions on later retirement (Riekhoff & Kuitto, 2022).

A variable for marital status consists of five categories: married to a spouse who is employed, married to a spouse who is not employed (i.e., unemployed, inactive, or retired), divorced, widowed, or single. Radl (2012) found lower retirement age norms among those who were married but whose spouse was inactive or retired. Table 1 shows that employers in this study were more often married to a spouse who is not employed and less likely to be single compared to employees.

Establishment size is a variable consisting of three categories: companies with less than 10 employees, with 10 to 100 employees, and with more than 100 employees. Various studies have shown that managers in larger companies tend to be more positive about an aging workforce and larger companies tend to offer more opportunities to continue working (Fleischmann et al., 2015; Järnefelt et al., 2022; Jensen et al., 2019; Oude Mulders, 2019; Oude Mulders et al., 2017). The variable for domicile distinguishes between three places of residence of the respondent: big city or suburbs, town or small city, and village or countryside. This variable controls for a potential urban-rural divide in age norms.

Finally, controls were added for subjective general health (1 = very bad to 5 = very good) and perceived household income (1 = very difficult on present income to 4 = living comfortably on present income) (original variables reverse-coded). Those in better health and with higher income are likely to be more positive about longer working lives. On average, employers' health and subjective income are only surpassed by those of other managers and professionals. To control for industry of (self-)employment, dummies were included for ten industries based on NACE classifications.

## Macrolevel variables

Table A2 presents the macrolevel data on the policy and labor-market dimensions of extended working lives. Comparative data on EU member states' gender-specific statutory retirement ages for 2017 are retrieved from the 2018 European Commission Pension Adequacy Report (European Commission, 2018, p. 126). For countries that were not part of the EU (i.e., Iceland, Norway, and Switzerland), the 2019 OECD Pensions at a Glance report (OECD, 2019, p. 141) was used to retrieve the corresponding ages. Defining statutory retirement ages is not always straightforward, as some countries apply age brackets due to flexible retirement ages (e.g., Sweden and Finland), eligibility depending on contribution period (e.g., France and Spain) or, for women, on the number of children (e.g., Czech and Slovak Republics). Therefore, two different types of statutory retirement age indicators were constructed: one with the lowest possible age of retirement and a second with the average possible age of retirement in case a statutory retirement age bracket applies. In the regression models, statutory retirement ages were transformed to be centered on age 65.

Data on gender-specific employment rate level of the age group 55–64 in 2018 were retrieved from the Eurostat database. Recent changes in the employment rates were calculated as the relative change in employment rates between 2010 and 2018. Relative changes are studied rather than percent point changes because it is assumed that, for example, a 10% point change in the employment rates has a more substantial impact in a country with an initial employment rate of 20% than in a country with an initial employment rate of 50%. In the first case, the relative change would be 50%, while in the second case, it would only be 20%. The employment variables were mean-centered in the regression models.

## Methods

Radl (2012) studied retirement age norms with round 3 of the ESS data from 2006, which included the same rotating module with questions on the timing of life. Focusing on the question about the age for being too old to work, Radl argued that linear regression models cannot apply to these data because the true, unobserved values for the responses "should never work" and "never too old to work" are unknown. To deal with the censored nature of these data, Radl applied tobit regression models. The current article builds on his approach, while expanding it in several ways and applying it to the more recent round of ESS data.

While age norms for being too old to work provide an important indication of an upper "deadline" for employing older workers, this study also looks at the norm for being too young to retire. It is possible that when employers consider someone old enough to retire (even if not too old to work), they will be less likely to recruit them or invest in training. To analyze the age norm intervals between the perceived ages for being too young to retire and being too old to work, interval

**Table 2.** Descriptive statistics of control variables by socioeconomic group.

| | Employers | Other managers and professionals | Technicians and associate professionals | Clerks and skilled service employees | Skilled industrial employees | Lower status employees | Total |
|---|---|---|---|---|---|---|---|
| Gender, % | | | | | | | |
|   Men | 67.4 | 46.3 | 45.0 | 30.9 | 77.5 | 37.5 | 49.6 |
|   Women | 32.6 | 53.7 | 55.0 | 69.1 | 22.5 | 62.5 | 50.4 |
| Age, mean (SE) | 54.89 (0.42) | 48.36 (0.31) | 50.23 (0.35) | 51.00 (0.39) | 51.31 (0.38) | 47.94 (0.38) | 50.12 (0.16) |
| Labor market status, % | | | | | | | |
|   Employed | 63.0 | 71.7 | 65.5 | 57.8 | 57.1 | 48.9 | 59.7 |
|   Retired | 30.5 | 19.7 | 24.0 | 25.3 | 28.2 | 22.6 | 24.5 |
|   Other | 6.6 | 8.6 | 10.5 | 16.9 | 14.8 | 28.5 | 15.8 |
| Education, % | | | | | | | |
|   Lower secondary | 17.5 | 3.4 | 11.2 | 24.6 | 43.4 | 49.5 | 27.4 |
|   Upper secondary | 30.8 | 11.8 | 44.2 | 46.9 | 46.0 | 37.9 | 36.3 |
|   Advanced vocational | 14.5 | 13.2 | 23.7 | 14.6 | 7.8 | 7.0 | 12.6 |
|   Tertiary | 37.2 | 71.6 | 20.9 | 13.9 | 2.8 | 5.6 | 23.7 |
| Marital status, % | | | | | | | |
|   Married, spouse employed | 36.5 | 39.1 | 34.2 | 31.0 | 26.0 | 22.1 | 30.5 |
|   Married, spouse not employed | 31.9 | 20.1 | 23.8 | 23.6 | 29.5 | 23.0 | 24.8 |
|   Divorced | 9.7 | 8.4 | 10.0 | 10.7 | 8.4 | 9.9 | 9.5 |
|   Widowed | 5.9 | 4.0 | 5.1 | 6.5 | 7.6 | 8.9 | 6.6 |
|   Single | 16.1 | 28.4 | 26.8 | 28.2 | 28.5 | 36.2 | 28.7 |
| Establishment size, % | | | | | | | |
|   Less than 10 employees | 49.0 | 12.8 | 18.8 | 22.3 | 21.1 | 40.7 | 26.9 |
|   10–100 employees | 28.3 | 44.6 | 40.3 | 44.4 | 45.2 | 42.3 | 41.8 |
|   More than 100 employees | 22.7 | 42.5 | 41.0 | 33.4 | 33.7 | 17.1 | 31.3 |
| Domicile, % | | | | | | | |
|   Big city or suburbs | 30.5 | 38.4 | 32.6 | 29.9 | 20.9 | 28.3 | 29.9 |
|   Town or small city | 31.9 | 32.0 | 34.6 | 35.7 | 34.4 | 35.2 | 34.1 |
|   Village or countryside | 37.6 | 29.6 | 32.8 | 34.5 | 44.7 | 36.6 | 36.0 |
| Health, mean (SE) | 3.85 (0.02) | 3.99 (0.02) | 3.82 (0.02) | 3.76 (0.02) | 3.64 (0.02) | 3.69 (0.02) | 3.78 (0.01) |
| Subjective income, mean (SE) | 3.39 (0.02) | 3.44 (0.01) | 3.26 (0.02) | 3.12 (0.02) | 2.91 (0.02) | 2.81 (0.02) | 3.12 (0.01) |
| Industry, % | | | | | | | |
|   Agriculture, forestry, and fishery | 4.3 | 0.7 | 0.7 | 0.6 | 1.6 | 8.2 | 3.0 |
|   Manufacturing and mining | 16.2 | 9.6 | 16.6 | 7.9 | 49.3 | 7.7 | 17.9 |
|   Construction, electricity, waste, sewage, and water | 11.2 | 3.2 | 6.2 | 3.2 | 22.6 | 4.0 | 8.2 |
|   Trade, accommodation, and food service | 23.1 | 4.2 | 8.9 | 8.5 | 8.3 | 44.1 | 17.7 |
|   Transport, storage, and communication | 8.0 | 8.3 | 6.9 | 12.3 | 11.8 | 5.0 | 8.5 |
|   Financial, business, and administrative services | 15.5 | 17.1 | 19.0 | 19.6 | 1.9 | 11.8 | 13.6 |
|   Public administration and defense | 3.1 | 5.9 | 11.8 | 11.5 | 1.0 | 2.7 | 5.7 |
|   Education | 4.6 | 31.0 | 3.5 | 6.3 | 0.2 | 3.0 | 8.2 |
|   Health and social work | 6.5 | 15.5 | 20.5 | 23.8 | 0.6 | 4.5 | 11.2 |
|   Other | 7.5 | 4.5 | 6.0 | 6.3 | 2.8 | 9.1 | 6.1 |
| Total (%) | 10.4 | 17.9 | 14.6 | 15.4 | 18.2 | 23.5 | 100.0 |

*Note.* Population and post-stratification weights applied.

regression is applied. This method belongs to the same family of nonlinear regression as tobit regression. It is suitable for analysis of outcome variables of which the "true" value is unknown, but the lower and upper values of some interval within which the value is situated are given. Similar to tobit regression, this method can incorporate censored values in the data when the lower or upper boundaries of the intervals are not known. Responses that someone is never too young to retire, should never work or is never too old to work can be dealt with by left- and right-censoring.

Figure 1 provides some examples of how this is represented in the data. In most cases, the respondents state an age for "too young to retire" that is lower than the age for "too old to work." The difference between two values can be large, such as in example respondent 1, or smaller, such as in respondents 2 and 3. It is also possible that the respondent's "age, too young to retire" and "age, too old to work" are the same, in which case there is no interval but an exact value. The respondent's age-norm interval can be higher (respondent 2) or lower (respondent 3). In respondent 4, the value for age of "too old to work" of around 40 is given, but the respondent answered that "someone is never too young to retire." In this case, the lower boundary is left-censored. In respondent 5, the age when someone is too young to retire is around 60, but he/she also stated that one is never too old to work. In this case, the upper boundary is right-censored.

Some additional conditions and restrictions were set. In case of answering "age, too young to retire" with "should never retire permanently," the lower boundary value was set to 100, equal to the maximum value responded on this item. A response to "age, too young to retire" with "should never be in work" was treated the same way as "never too young to retire," meaning that the lower boundary of the interval was left-censored. If the respondent answered "age, too old to work" with "should never work," the upper boundary for this item was set to zero. In some cases, a higher age for being too young to retire was provided than the age for being too old to work. In interval regression analysis the value for the lower boundary cannot be higher than the value for the upper boundary. Therefore, in such cases, the lower boundary was set to equal the upper boundary. Interval regression also cannot handle simultaneous censoring at both ends, while there were cases where respondents answered that someone is never too young to retire and never too old to work. In these cases, the lower interval bound was set to zero and right censoring was kept.

The benefit of interval regression is that it allows analyzing age norms not as having a single value but rather as consisting of intervals within which the individual accepts and expects

someone to retire. Moreover, interval regression can deal with data that is left- and right-censored. Nevertheless, models produce a single predicted value, which should represent the "true" value of the retirement age norm within the interval. In this study, this value should be taken as a quantification and approximation of the norm by the models, not as an exact value. An additional difficulty in interpretation of outcomes is that, as shown in Figure 1, intervals can be narrower or broader but have the same midpoint. Still, a difference between two persons in one boundary will indicate a difference in age norms even if the other boundary is the same. When aggregating to a group level and comparing these groups, the differences become more visible. In the case of this article the main aim is to compare countries and groups of employers and employees.

An additional extension of Radl's (2012) approach in this study is the incorporation of macrolevel factors affecting retirement age norms in this study. Given the multilevel nature of the data with individuals nested in 27 countries, multilevel mixed models are applied (Snijders & Bosker, 2012). Apart from accounting for the nesting of observations within countries, multilevel interval regression models operate similarly to single-level interval regression. Random intercepts are included at the country level. In the models with cross-level interactions of individual-level socioeconomic groups with a country's statutory retirement ages and employment rates, random slopes for the socioeconomic group variable are introduced (Heisig & Schaeffer, 2019).

Missing data were substantial for several variables, especially for the dependent variables (see Table A3). In this case, multiple imputations are the preferred approach to produce unbiased parameter estimates and accurate standard errors (Newman, 2014). For the interval regression models, missing values were imputed for all variables using 20 iterations with multiple imputations by chained equations, using all variables that were used in the models and with country-fixed effects (Royston & White, 2011). Alternatively, models were estimated without imputations but with listwise deletions of cases with missing values. These models, presented in an online appendix, show no substantial differences in results from the models with imputations.

## RESULTS

### Descriptive analysis of cross-country differences in employers' retirement age norms

Figure 2 plots the means of the dependent variables for employees and employers and by country. The countries are sorted by the interval averages of employers' age norm means
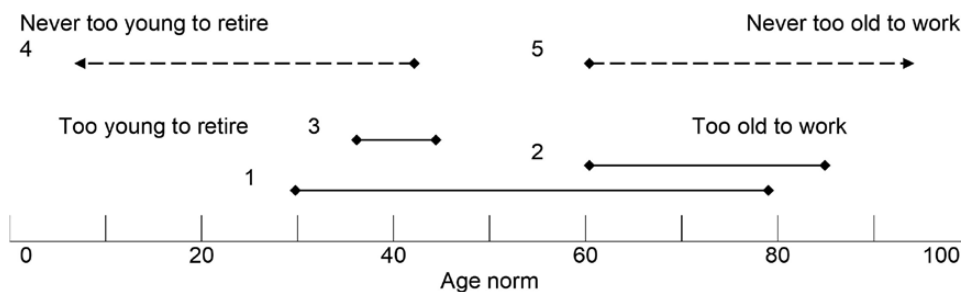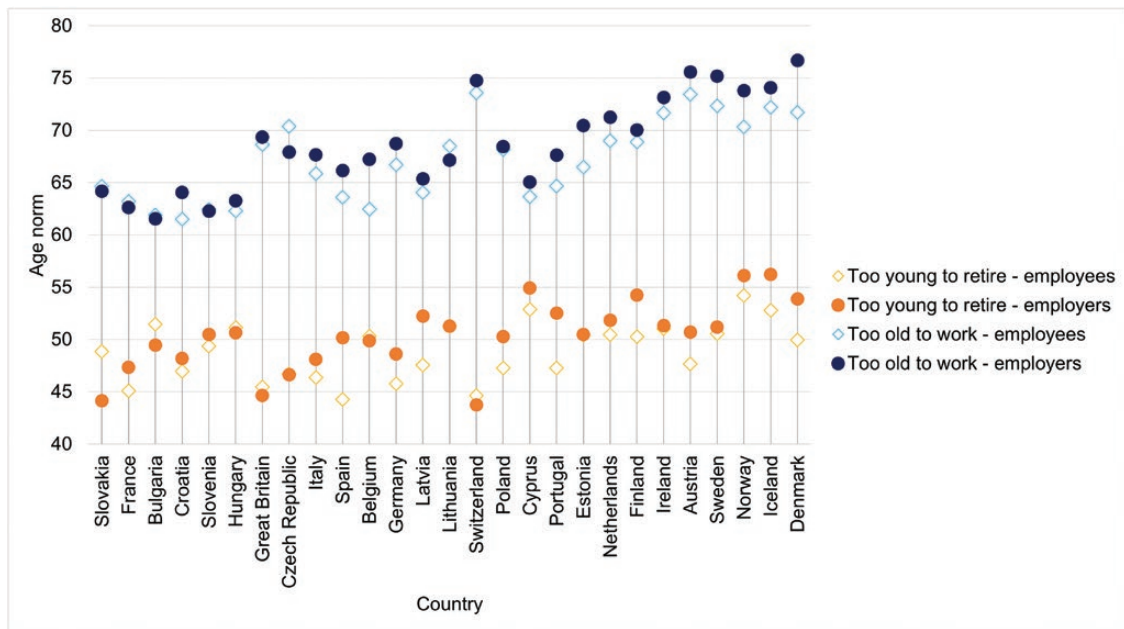


**Figure 1.** Examples of retirement age norm intervals.

**Figure 2.** Mean employee and employer norms regarding ages when "too young to retire" and "too old to work", by country.

in a country.[1] Several observations can be made from Figure 2, but note that some caution is warranted, as the numbers of employers were low in some countries, especially in Cyprus and Slovakia (see Table 1). There is substantial variation in employers' age norms across Europe. Among the countries with the lowest employer age norms, we find Slovakia (44 is too young to retire and 64 is too old to work), France (47 and 63), Bulgaria (ages 49 and 62), and Croatia (ages 48 and 64). The Nordic countries rank among the countries with the highest average retirement age norms (Denmark: ages 54 and 77, Iceland: ages 56 and 74, Norway: ages 56 and 74, and Sweden: ages 51 and 75).

There is no obvious association between employers' lower and upper age norm boundaries. The pairwise correlation coefficient for countries' average ages of too young to retire and too old to work is 0.28. In some countries, the average interval is relatively narrow, such as in Cyprus (10.2 years), Slovenia (11.8 years), Bulgaria (12.1 years), and Hungary (12.6 years). In other countries, the gaps are much wider, such as in Switzerland (31.0 years), Austria (24.9), Great Britain (24.7 years), and Sweden (24.0 years). Especially Switzerland stands out with one of the lowest average age norms for too young to retire and one of the highest age norms for too old to work. Country-average age norm intervals of employers (18.3 years) do not differ substantially from those of employees (18.2 years).

There is relatively strong correlation between countries' employer and employee age norms ($r = 0.70$ for age when too young to retire and $r = 0.92$ for age when too old to work). This suggests that societal norms play an important role in simultaneously determining employees' and employers' retirement age norms. Yet, employers' retirement age norms were overall higher than those of employees. The difference in age norms for too young to retire between employers

and employees were greatest in Spain (5.9 years), Portugal (5.3 years), Latvia (4.7 years), and Finland (4.0 years). In the age norms for being too old to work, these differences were greatest for Denmark (4.9 years), Belgium (4.8 years), Estonia (4.0 years), and Norway (3.5 years). In some countries, employees had on average more positive age norms than employers. This is especially the case in Slovakia, Bulgaria, Switzerland, and Great Britain (for age too young to retire), as well as Czech Republic, Lithuania, France, and Slovakia (for age too old to work).

## Multilevel interval regression models

The interclass correlation coefficients (ICC) of the empty multilevel interval regression models give a further indication of how much of the retirement norms is explained by the national level. For the empty model including all respondents, the ICC indicates that 8.7% of the variance can be explained by country-level factors. For the empty model including only those who responded to the age norm questions regarding men, the corresponding value is 9.4%, and for women 9.2%. These values suggest that national societal norms and cultures of aging play a role but certainly not exclusively.

In Table 3, all individual-level variables are included in the models. Model 1 shows that employers' retirement age norms were around half a year higher than the age norms of employees (i.e., $b = 0.509$). When splitting the employees into more detailed socioeconomic groups (Model 2), we find no statistically significant differences of employers' age norms with those of other managers and professionals or technicians and associated professionals, while employers' retirement age norms were around six months higher than those of clerks and skilled service employees, 1.2 years higher than those of skilled industrial employees, and around 11 months (0.9 years) higher than those of lower status employees. Among the control variables, relevant positive associations are found for being a woman, age, level of education, self-rated health, being single, and feeling about household income. Those who were otherwise not employed as well as individuals whose spouse did not

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[1]To calculate the country means for both variables, left-censored values were set to zero and right-censored values to 100. Data were weighted with ESS's post-stratification weights.

**Table 3.** Multilevel interval regression models for age when too young to retire and age when too old to work.

| | | All | | Concerning men only | | Concerning women only | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Employers (ref. employees) | | 0.509** | | 0.350 | | 0.664* | |
| | | (0.179) | | (0.243) | | (0.263) | |
| Socioeconomic group (ref. employers) | Other managers and professionals | | 0.115 | | 0.070 | | 0.161 |
| | | | (0.217) | | (0.295) | | (0.322) |
| | Technicians and associate professionals | | −0.233 | | 0.012 | | −0.491 |
| | | | (0.222) | | (0.300) | | (0.337) |
| | Clerks and skilled service employees | | −0.521* | | −0.512 | | −0.521 |
| | | | (0.230) | | (0.321) | | (0.333) |
| | Skilled industrial employees | | −1.175*** | | −1.082*** | | −1.271*** |
| | | | (0.227) | | (0.304) | | (0.329) |
| | Lower status employees | | −0.884*** | | −0.395 | | −1.355*** |
| | | | (0.220) | | (0.302) | | (0.324) |
| Response concerning (ref. women) | Men | 2.925*** | 2.933*** | | | | |
| | | (0.106) | (0.106) | | | | |
| Respondent's gender (ref. male) | Female | 0.291* | 0.234* | 0.263 | 0.173 | 0.319 | 0.288 |
| | | (0.114) | (0.118) | (0.154) | (0.159) | (0.171) | (0.176) |
| Age | | 0.152*** | 0.152*** | 0.141*** | 0.143*** | 0.164*** | 0.163*** |
| | | (0.022) | (0.022) | (0.028) | (0.028) | (0.031) | (0.031) |
| Age$^2$ | | −0.001** | −0.001** | −0.000 | −0.000 | −0.001** | −0.001** |
| | | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Labor market status (ref. employed) | Retired | −0.365 | −0.373 | −0.694** | −0.700** | −0.056 | −0.066 |
| | | (0.199) | (0.199) | (0.265) | (0.265) | (0.299) | (0.299) |
| | Other | −0.567*** | −0.528** | −0.866*** | −0.840*** | −0.225 | −0.163 |
| | | (0.165) | (0.166) | (0.214) | (0.214) | (0.253) | (0.254) |
| Education (ref. lower secondary) | Upper secondary | 0.603*** | 0.487** | 0.233 | 0.171 | 0.954*** | 0.782*** |
| | | (0.153) | (0.154) | (0.202) | (0.205) | (0.231) | (0.233) |
| | Advanced vocational | 1.193*** | 0.904*** | 0.677** | 0.465 | 1.697*** | 1.326*** |
| | | (0.193) | (0.199) | (0.260) | (0.267) | (0.286) | (0.295) |
| | Tertiary | 2.231*** | 1.730*** | 1.855*** | 1.497*** | 2.603*** | 1.962*** |
| | | (0.182) | (0.198) | (0.239) | (0.260) | (0.270) | (0.300) |
| Marital status (ref. married, partner employed) | Married, p. not employed | −0.403* | −0.394* | −0.338 | −0.341 | −0.475 | −0.462 |
| | | (0.168) | (0.168) | (0.225) | (0.225) | (0.252) | (0.252) |
| | Divorced/separated | −0.022 | −0.007 | 0.264 | 0.271 | −0.306 | −0.293 |
| | | (0.188) | (0.188) | (0.256) | (0.256) | (0.289) | (0.289) |
| | Widowed | −0.257 | −0.227 | −0.130 | −0.123 | −0.344 | −0.312 |
| | | (0.243) | (0.243) | (0.328) | (0.328) | (0.360) | (0.360) |
| | Single | 0.318 | 0.334* | 0.279 | 0.281 | 0.372 | 0.400 |
| | | (0.164) | (0.164) | (0.217) | (0.217) | (0.243) | (0.243) |
| Establishment size (ref. <10 employees) | 10–100 | −0.098 | −0.102 | −0.204 | −0.182 | 0.047 | 0.018 |
| | | (0.135) | (0.136) | (0.182) | (0.183) | (0.200) | (0.200) |
| | >100 | 0.038 | −0.003 | −0.165 | −0.179 | 0.289 | 0.226 |
| | | (0.155) | (0.156) | (0.210) | (0.210) | (0.237) | (0.237) |
| Domicile (ref. big city or suburbs) | Town or small city | 0.056 | 0.077 | −0.015 | 0.007 | 0.120 | 0.139 |
| | | (0.136) | (0.137) | (0.182) | (0.182) | (0.202) | (0.202) |
| | Village or countryside | 0.182 | 0.220 | 0.274 | 0.311 | 0.0837 | 0.115 |
| | | (0.137) | (0.138) | (0.179) | (0.179) | (0.203) | (0.203) |

**Table 3.** Continued

| | All | | Concerning men only | | Concerning women only | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Self-rated health | 0.506*** | 0.495*** | 0.496*** | 0.486*** | 0.512*** | 0.497*** |
| | (0.071) | (0.071) | (0.092) | (0.092) | (0.102) | (0.102) |
| Subjective income | | 0.584*** | 0.543*** | 0.562*** | 0.536*** | 0.619*** | 0.566*** |
| | | (0.078) | (0.079) | (0.104) | (0.106) | (0.112) | (0.113) |
| Constant | 45.99*** | 47.00*** | 49.38*** | 49.97*** | 45.49*** | 46.95*** |
| | (0.878) | (0.905) | (1.050) | (1.095) | (1.199) | (1.243) |
| Industry dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| ICC | 0.075 | 0.074 | 0.080 | 0.080 | 0.076 | 0.075 |
| N countries | 27 | 27 | 27 | 27 | 27 | 27 |
| N | 37,141 | 37,141 | 18,409 | 18,409 | 18,732 | 18,732 |

*Note.* $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. Standard errors in brackets.

work held lower retirement age norms. The respondents' establishment size or domicile showed no significant associations.

Models 1 and 2 in Table 3 show that, among the whole study population, retirement age norms were around 2.9 years higher when asked about men than when asked about women. To check whether employers' age norms differ when they are asked about either men or women, analysis was also performed separately by the split ballot variable. Models 3 and 5 in Table 3 show that the difference in retirement age norms between employers and employees was only statistically significant in case the questions concerned women. Models 4 and 6 indicate that, if the question concerned men, age norms differed significantly only between employers and skilled industrial employees (1.1 years) For women the differences in retirement age norms of employers with skilled industrial employees and lower status employees were 1.3 and 1.4 years, respectively.

In addition, the gender-specified models indicate that higher-educated respondents displayed higher retirement age norms especially when asked about women, while the differences by educational background were smaller when respondents were asked about men. One possible explanation is that those with higher education also have more progressive gender norms and see greater potential for women being employed and working until a later age. If respondents were retired or otherwise not employed, they tended to have lower retirement age norms concerning men, while no statistically significant differences between labor market statuses were found for retirement age norms concerning women.

## Cross-level interaction models

To investigate how employers' age norms are related to a policy environment of extending working lives and whether this relation is different for employees, the socioeconomic group variable (now allowing for random slopes) interacted with the country's gender-specific macrolevel variables. This means that if the respondent were assigned the age-norm questions about men (women), their socioeconomic group interacted with the male (female) statutory retirement ages and employment rates. The detailed results are reported in Table A4. Models 1 and 2 in Table A4 show the results of the interactions with the two statutory retirement age indicators.

In both models, the country's gender-specific statutory retirement ages are positively related to retirement age norms and in both models, this relation is stronger among employers than among the employee groups, although only statistically significantly so for technicians and associated professionals, and clerks and skilled service employees. Figure 3 based on Model 2 displays this clearly. Employers' retirement age norms increase with around half a year for each year that the statutory retirement age is higher, with a difference of almost four years in retirement age norms between countries with gender-specific statutory retirement age of 60 and countries where it is 67.

Model 3 in Table A4 shows the coefficients of interacting the socioeconomic group variable with the gender-specific employment rates of age group 55–64 in the included countries. It indicates that, while there is a positive association between employment rates and retirement age norms, there were no statistically significant differences in the slope of this relation between employers and the four groups of employees. As shown in Figure 4, the slope was somewhat steeper among skilled industrial employees. Overall, the higher the older-worker employment rates of men and women in a country, the higher retirement age norms of both employers and employees.

To observe whether employer retirement age norms are less "sticky" than those of employees, Model 4 in Table A4 includes a cross-level interaction term for socioeconomic group and the recent relative change in gender-specific older-worker employment rates, while controlling for the level of employment rates in 2018. The results suggest that in countries that recently saw larger relative increases in older-worker employment, retirement age norms tended to be lower than in countries that experienced no or little change, regardless of the actual current employment rate in the country. Although the downward slope is somewhat steeper for employers than for the various groups of employees (except lower-status employees), the differences do not reach statistical significance.

## DISCUSSION AND CONCLUSIONS

The aim of this study was to investigate employers' retirement age norms in European comparison. While across Europe the
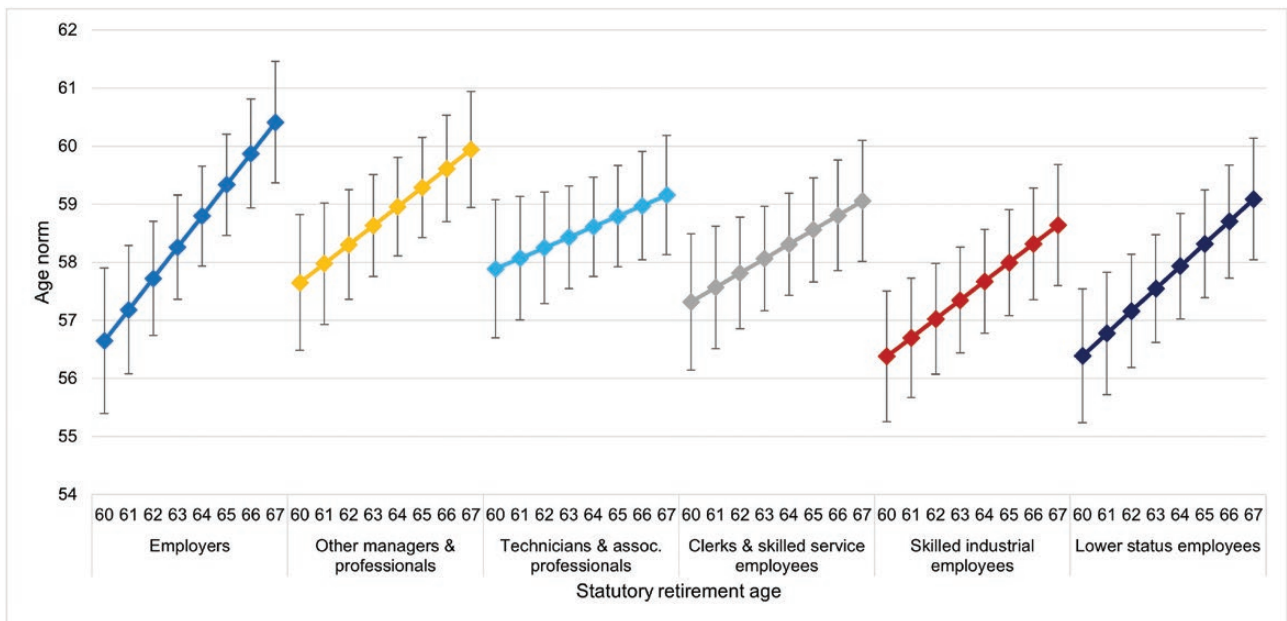
**Figure 3.** Interactions between socioeconomic group and countries' gender-specific statutory retirement ages. *Note.* Presented are margins with 95% confidence intervals, based on Model 2 in Table A4.
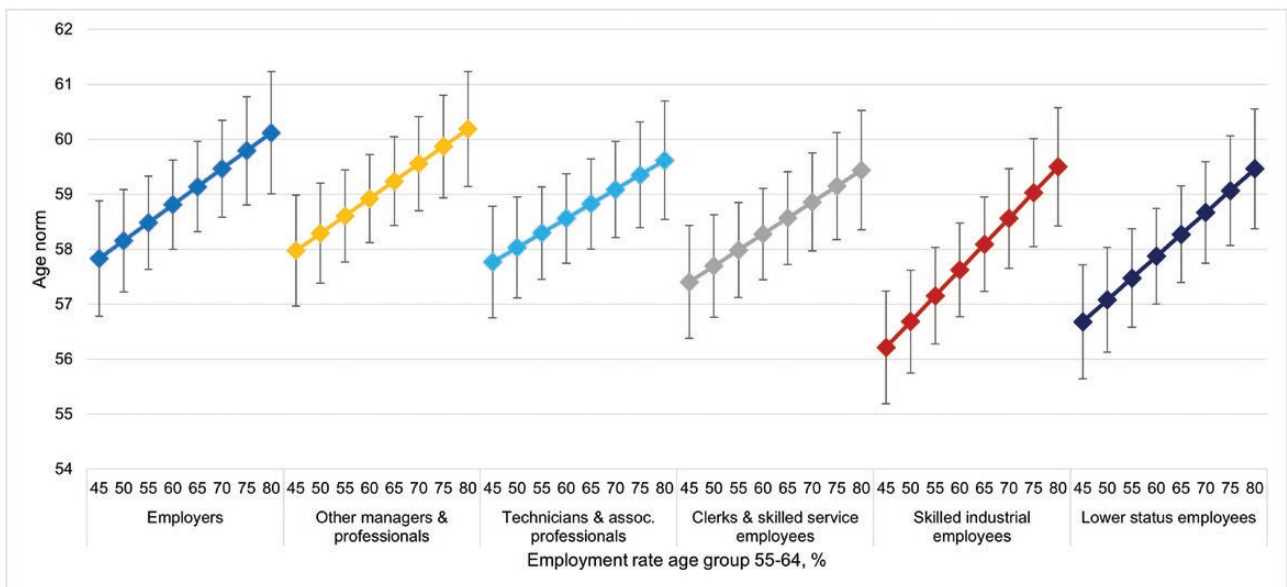


**Figure 4.** Interactions between socioeconomic group and countries' gender-specific employment rates in age group 55–64. *Note.* Presented are margins with 95% confidence intervals, based on Model 3 in Table A4.

policy paradigm has shifted from early retirement to extended working lives, employers are needed to recruit and retain an aging workforce. Believing that workers are old enough to retire and too old to work could mean that employers are not willing to do so (Karpinska et al., 2013a, 2013b; Oude Mulders, 2019). The study builds on the analytical approach of Radl (2012), who pointed out the need for methods that deal with the censored nature of the age norms data. One of the innovative features of this study is that it expands that analytical approach by incorporating both lower and upper boundaries of retirement age norms.

The results confirmed that employers' retirement age norms varied across Europe. Part of this variance is not

specific to employers. Countries' societally and culturally determined age norms play a considerable role, as employers' age norms strongly correlate with retirement age norms of employees from the same country. Simultaneously, country-specific variance in the multilevel models remained relatively low, indicating that differences between individuals within countries are essential.

Employers have on average higher retirement age norms than employees. Differences remained when controlling for other factors, especially between employers and skilled industrial employees as well as lower-status employees. Furthermore, even if part of the higher retirement age norms of employers is not due to their particular role in hiring and

firing (older) workers, the results show that employers as a distinct group are generally more positive about working longer and retiring later than their employees.

The models with cross-level interactions showed that employers' age norms were higher in countries where statutory retirement ages were higher (while among employees such associations were weaker or insignificant). These results are in line with previous studies that found that norms about retirement behavior are shaped by a country's statutory retirement age (Gruber et al., 2022). It is possible that employers in particular take the statutory retirement age as a point of reference for their retirement age norms for practical and pragmatic reasons, as age discrimination legislation in Europe has tightened in recent decades and opportunities for early exit of employees have become more restricted (Ebbinghaus and Hofäcker, 2013). Although employers might generally oppose the idea of rising retirement ages, they have little choice but to adjust their expectations and behavior to the changing situation (Järnefelt et al., 2022; Solem et al., 2020).

While the study found that employers' retirement age norms are generally higher than those of employees, it produces no evidence that employers' higher retirement age norms are a precursor to greater employment of older workers. Employers' retirement age norms were positively related to a country's older-worker employment rates, but so were the retirement age norms of employees. Furthermore, employers' retirement age norms were similarly "sticky" to those of employees. Van Dalen et al. (2010, p. 360) concluded more than a decade ago that "most employers will not be a major driving force for extending the working life." The current study concurs that, while employers' retirement age norms seem to adapt to a changing reality of longer working lives, their retirement age norms may contribute little to shaping that new reality.

The findings suggest difficulties for countries with low statutory retirement ages and older-worker employment rates. In absence of reforms, employers' retirement age norms in these countries could remain low and might further dampen willingness to recruit and retain older workers. One aspect that needs more attention, in future research as well as in policymaking, is how age norms are intertwined with gender norms across Europe. The results showed that, overall, age norms about men's retirement were higher than about women's retirement. Previous studies have shown how gender and age intersect and that women suffer more age discrimination in employment (Duncan & Loretto, 2004; Stypińska & Turek, 2017). Especially in countries with low female statutory retirement ages and employment rates, there might still be many, especially among older generations and in lower socioeconomic strata, who consider that women should not be in paid work in the first place.

The split models also showed that socioeconomic group and level of education played a greater role in retirement age norms toward women's retirement than toward that of men, suggesting that, while across socioeconomic boundaries many agree on the expected retirement ages of men, norms are more heterogeneous when it comes to women. At the same time, as in many countries statutory retirement ages are rising and being evened out between men and women, it can be expected that norms about women's retirement are also changing. Since especially employers' retirement age norms correlate with countries' statutory retirement ages, it is possible that gendered age discrimination in recruitment and retainment will diminish in the future.

There are some further limitations to this study. Interval regression analysis provides new possibilities to study retirement age norms, but the method has its challenges as well, especially regarding differences between broad and narrow intervals, and the interpretation of the predicted values. In addition, the approach in this study assumes that respondents attach equal value to the lower and upper thresholds. It is possible, however, that respondents feel more strongly about either the lower or upper boundary of the age norm interval.

Although cross-country differences in employers' age norms were found, it is unclear whether there are also differences between countries in how age norms are translated in recruitment and retention decisions at an organizational level. At the macrolevel, not only statutory retirement ages guide employers' behavior. More attention should be paid to restrictions and opportunities that employers encounter in recruiting and retaining older workers, for example, through legislation, bureaucracy, and subsidies. Future studies could also incorporate other institutional factors at the country level that shape employer perceptions and behavior, such as the economic conjuncture, age discrimination and employment protection legislation, or the presence of active aging policies.

To understand how working lives can be extended in a way that is inclusive for all older workers, a multilevel perspective is needed that incorporates macro (policy and culture), meso (organizational), and micro (individual) levels (Boehm et al., 2021; Henkens, 2022). Previous studies have tended to concentrate on these levels separately or on the impact of the macro- or mesolevel on the microlevel. As employers play an important role in decision-making at the mesolevel, this study fills an important gap in the literature by showing how their age norms differ from those of employees, how their age norms vary across countries, and how the policy environment at the macrolevel is related to their retirement age norms. If the policy paradigm is to shift to extended working lives, policies should pay attention to not only promoting higher retirement age norms among employers but also ensure that these norms are translated into inclusive employment practices.

## SUPPLEMENTARY MATERIAL

Supplementary material is available online at *Work, Aging, and Retirement*.

## DATA AVAILABILITY

The data used for this study is publicly available from https://www.europeansocialsurvey.org/. The Stata do-files for this study are available from the author upon request.

# References

Boehm, S. A., Schröder, H., & Bal, M. (2021). Age-related human resource management policies and practices: Antecedents, outcomes, and conceptualizations. *Work, Aging and Retirement*, 7(4), 257–272. https://doi.org/10.1093/workar/waab024

Boissonneault, M., Mulders, J. O., Turek, K., & Carriere, Y. (2020). A systematic review of causes of recent increases in ages of labor market exit in OECD countries. *PLoS One*, 15(4), e0231897. https://doi.org/10.1371/journal.pone.0231897

Cadiz, D. M., Brady, G. M., Yaldiz, L. M., Zaniboni, S., & Truxillo, D. M. (2022). Age stereotypes do matter: Looking through the lens of the attraction–selection–attrition model. *Work, Aging and Retirement*, 8(4), 339–342. https://doi.org/10.1093/workar/waac009

Conen, W. S., Henkens, K., & Schippers, J. J. (2011). Are employers changing their behavior toward older workers? An analysis of employers' surveys 2000–2009. *Journal of Aging & Social Policy*, 23(2), 141–158. https://doi.org/10.1080/08959420.2011.551612

Conen, W. S., Henkens, K., & Schippers, J. (2012). Employers' attitudes and actions towards the extension of working lives in Europe. *International Journal of Manpower*, 33(6), 648–665. https://doi.org/10.1108/01437721211261804

Duncan, C., & Loretto, W. (2004). Never the right age? Gender and age-based discrimination in employment. *Gender, Work & Organization*, 11(1), 95–115. https://doi.org/10.1111/j.1468-0432.2004.00222.x

Ebbinghaus, B. (2006). *Reforming early retirement in Europe, Japan and the USA*. Oxford University Press.

Ebbinghaus, B. (2015). The privatization and marketization of pensions in Europe: A double transformation facing the crisis. *European Policy Analysis*, 1(1), 56–73. https://doi.org/10.18278/epa.1.1.5

Ebbinghaus, B., & Hofäcker, D. (2013). Reversing early retirement in advanced welfare economies: A paradigm shift to overcome push and pull factors. *Comparative Population Studies*, 38(4), 841–880. https://doi.org/10.12765/CPoS-2013-24

European Commission (2018). *Pension Adequacy Report 2018. Current and future income adequacy in old age in the EU, Volume I*. Publications Office of the European Union.

Fleischmann, M., Koster, F., & Schippers, J. (2015). Nothing ventured, nothing gained! How and under which conditions employers provide employability-enhancing practices to their older workers. *The International Journal of Human Resource Management*, 26(22), 2908–2925. https://doi.org/10.1080/09585192.2015.1004100

Gruber, J., Kanninen, O., & Ravaska, T. (2022). Relabeling, retirement and regret. *Journal of Public Economics*, 211, 104677. Online ahead of print. https://doi.org/10.1016/j.jpubeco.2022.104677

Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative Politics*, 25(3), 275–296. https://doi.org/10.2307/422246

Heisig, J. P., & Schaeffer, M. (2019). Why you should always include a random slope for the lower-level variable involved in a cross-level interaction. *European Sociological Review*, 35(2), 258–279. https://doi.org/10.1093/esr/jcy053

Henkens, K. (2022). Forge healthy pathways to retirement with employer practices: A multilevel perspective. *Work, Aging and Retirement*, 8(1), 1–6. https://doi.org/10.1016/j.jpubeco.2022.104677

Järnefelt, N., Riekhoff, A.-J., Laaksonen, M., & Liukko, J. (2022). Työnantajien näkemyksiä eläkeiästä ja työurien pidentämisestä: Työnantajatutkimuksen tuloksia vuosilta 2004, 2011 ja 2021. *Eläketurvakeskuksen tutkimuksia 01/2022*. https://urn.fi/URN:ISBN:978-951-691-344-8.

Jensen, P. H., De Tavernier, W., & Nielsen, P. (2019). To what extent are ageist attitudes among employers translated into discriminatory practices: The case of Denmark. *International Journal of Manpower*. https://doi.org/10.1108/IJM-10-2018-0365

Karpinska, K., Henkens, K., & Schippers, J. (2013a). Hiring retirees: Impact of age norms and stereotypes. *Journal of Managerial*

*Psychology*, 28(7/8), 886–906. https://doi.org/10.1108/jmp-07-2013-0223

Karpinska, K., Henkens, K., & Schippers, J. (2013b). Retention of older workers: Impact of managers' age norms and stereotypes. *European Sociological Review*, 29(6), 1323–1335. https://doi.org/10.1093/esr/jct017

Kohli, M. (2007). The institutionalisation of the life course: Looking back to look ahead. *Research in Human Development*, 4(3–4), 253–271. https://doi.org/10.1080/15427600701663122

Kuitto, K., & Helmdag, J. (2021). Extending working lives: How policies shape retirement and labour market participation of older workers. *Social Policy & Administration*, 55(3), 423–439. https://doi.org/10.1111/spol.12717

Lazear, E. P. (1979). Why is there mandatory retirement?. *Journal of Political Economy*, 87(6), 1261–1284. https://doi.org/10.1086/260835

Liefbroer, A. C., & Billari, F. C (2010). Bringing norms back in: A theoretical and empirical discussion of their importance for understanding demographic behaviour. *Population, Space and Place*, 16(4), 287–305. https://doi.org/10.1002/psp.552

Lössbroek, J., Lancee, B., Van der Lippe, T., & Schippers, J. (2019). Understanding old-age adaptation policies in Europe: The influence of profit, principles and pressures. *Ageing & Society*, 39(5), 924–950. https://doi.org/10.1017/S0144686X17001295

Meron, M., Amar, M., Laurent-Zuani, A.-C., Holý, D., Erhartova, J., Gallo, F., Lindner, E., Záhonyi, M., Váradi, R., & Huszár, A.et al (2014). *Final report of the ESSnet on the harmonisation and implementation of a European socio-economic classification: European Socio-economic Groups (ESeG)*. Insee.

Moen, P., Kojola, E., & Schaefers, K. (2017). Organizational change around an older workforce. *The Gerontologist*, 57(5), 847–856. https://doi.org/10.1093/geront/gnw048

Murphy, K. R., & DeNisi, A. S. (2021). Do age stereotypes predict personnel decisions? The state of the evidence. *Work, Aging and Retirement*, 8(4), 323–330. https://doi.org/10.1093/workar/waab019

Newman, D. A. (2014). Missing data: Five practical guidelines. *Organizational Research Methods*, 17(4), 372–411. https://doi.org/10.1177/1094428114548590

OECD (2019). *Pensions at a glance 2019: OECD and G20 indicators*. OECD Publishing.

Oude Mulders, J. (2019). Employers' age-related norms, stereotypes and ageist preferences in employment. *International Journal of Manpower*, 41(5), 523–534. https://doi.org/10.1108/ijm-10-2018-0358

Oude Mulders, J., Henkens, K., & Schippers, J. (2017). European top managers' age-related workplace norms and their organizations' recruitment and retention practices regarding older workers. *The Gerontologist*, 57(5), 857–866. https://doi.org/10.1093/geront/gnw076

Oude Mulders, J., Henkens, K., & Van Dalen, H. (2018). How do employers respond to an aging workforce? Evidence from surveys among employers, 2009–2017. In S. J. Czaja, J. Sharit, J. James, & J. Grosch (eds), *Current and emerging trends in aging and work* (pp. 281–296). Springer.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49(1), 65–85. https://doi.org/10.1146/annurev.psych.49.1.65

Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35(1), 158–188. https://doi.org/10.1177/0149206308318617

Principi, A., Bauknecht, J., Di Rosa, M., & Socci, M. (2020). Employees' longer working lives in Europe: Drivers and barriers in companies. *International Journal of Environmental Research and Public Health*, 17(5), 1658. https://doi.org/10.3390/ijerph17051658

Radl, J. (2012). Too old to work, or too young to retire? The pervasiveness of age norms in Western Europe. *Work, Employment and Society*, 26(5), 755–771. https://doi.org/10.1177/0950017012451644

Riekhoff, A.-J., & Kuitto, K. (2022). *Educational differences in extending working lives: Trends in effective exit ages in 16 European countries*. Finnish Centre for Pensions, Studies 02/2022.#x00A0;https://urn.fi/URN:ISBN:978-951-691-345-5

Royston, P., & White, I. R. (2011). Multiple imputation by chained equations (MICE): Implementation in Stata. *Journal of Statistical Software*, 45(4), 1–20. https://doi.org/10.18637/jss.v045.i04

Settersten, R. A. (2003). Age structuring and the rhythm of the life course. In: J. T Mortimer & M. J. Shanahan (Eds.) *Handbook of the life course. Handbooks of sociology and social research* (pp. 81–98). Springer.

Snijders, T. A., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage.

Solem, P. E., Salomon, R. H., & Aargaard Terjesen, H. C. (2020). Does a raised mandatory retirement age influence managers' attitudes to older workers? *Nordic Welfare Research*, 5(2), 122–136. https://doi.org/10.18261/issn.2464-4161-2020-02-05

Stypińska, J., & Turek, K. (2017). Hard and soft age discrimination: The dual nature of workplace discrimination. *European Journal of Ageing*, 14(1), 49–61. https://doi.org/10.1007/s10433-016-0407-y

Taylor, P., Mcloughlin, C., Brooke, E., Di Biase, T., & Steinberg, M. (2013). Managing older workers during a period of tight labour supply. *Ageing & Society*, 33(1), 16–43. https://doi.org/10.1017/S0144686X12000566

Taylor, P., & Walker, A. (1998). Employers and older workers: attitudes and employment practices. *Ageing & Society*, 18(6), 641–658. https://doi.org/10.1017/S0144686X98007119

Turek, K., & Henkens, K. (2020). How skill requirements affect the likelihood of recruitment of older workers in Poland: The indirect role of age stereotypes. *Work, Employment and Society*, 34(4), 550–570. https://doi.org/10.1177/0950017019847943

Turek, K., Oude Mulders, J., & Stypińska, J. (2022). Different shades of discriminatory effects of age stereotypes in the workplace: A multi-level and dynamic perspective on organizational behaviors. *Work, Aging and Retirement*, 8(4), 343–347. https://doi.org/10.1093/workar/waac019

Van Borm, H., Burn, I., & Baert, S. (2021). What does a job candidate's age signal to employers? *Labour Economics*, 71, 102003. https://doi.org/10.1016/j.labeco.2021.102003

Van Dalen, H. P., Henkens, K., Henderikse, W., & Schippers, J. (2010). Do European employers support later retirement? *International Journal of Manpower*, 31(3), 360–373. https://doi.org/10.1108/01437721011050620

Van Dalen, H. P., Henkens, K., & Oude Mulders, J. (2019). Increasing the public pension age: Employers' concerns and policy preferences. *Work, Aging and Retirement*, 5(3), 255–263. https://doi.org/10.1093/workar/waz004

Van Dalen, H. P., Henkens, K., & Schippers, J. (2010). Productivity of older workers: Perceptions of employers and employees. *Population and Development Review*, 36(2), 309–330. https://doi.org/10.1111/j.1728-4457.2010.00331.x

Van Dalen, H. P., Henkens, K., & Wang, M. (2015). Recharging or retiring older workers? Uncovering the age-based strategies of European employers. *The Gerontologist*, 55(5), 814–824. https://doi.org/10.1093/geront/gnu048

Van Solinge, H., & Henkens, K. (2007). Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 62(5), S295–S303. https://doi.org/10.1093/geronb/62.5.s295

Vickerstaff, S., & Van der Horst, M. (2021). The impact of age stereotypes and age norms on employees' retirement choices: A neglected aspect of research on extended working lives. *Frontiers in Sociology*, 6. https://doi.org/10.3389/fsoc.2021.686645