

How Likely are Employers to Rehire Older Workers After Mandatory Retirement? A Vignette Study Among Managers

Oude Mulders, Jaap^{*1,2}, van Dalen, Hendrik P.^{1,3}, Henkens, Kène^{1,4,5}, & Schippers, Joop²

* Corresponding author:

Jaap Oude Mulders

Netherlands Interdisciplinary Demographic Institute

PO Box 11650

2502 AR, The Hague

E-mail: oudemulders@nidi.nl

Affiliations:

1 Netherlands Interdisciplinary Demographic Institute (NIDI-KNAW) / University of Groningen

2 Utrecht University School of Economics, Utrecht University

3 Tilburg School of Economics and Management (TISEM) and CentER, Tilburg University

4 Department of Sociology and Anthropology, University of Amsterdam

5 University Medical Center Groningen (UMCG), University of Groningen

Abstract

With a vignette experiment among Dutch managers we examine employers' considerations in the decision to rehire employees after mandatory retirement. We specifically focus on the effects of the employee's downward wage flexibility (i.e., the willingness to accept a lower wage) and contract flexibility (i.e., preference for a contract which allows flexible hours or employment).

The results show that employers are strongly affected by employees who offer to work for a significant lower wage, but not by the employees' preference for a particular labor contract. Employers are overall quite disinclined to rehire employees after mandatory retirement, although large differences exist between employees. Part of these differences can be explained by managers having higher retirement age norms (i.e., the maximum age at which employers consider employees suited for work in their organization).

Keywords: Bridge employment – Employers – Mandatory retirement – Older workers

JEL Classification: D22 – J23 – J26

Acknowledgements

The authors gratefully acknowledge the helpful comments of an anonymous referee and the participants at the Feedback Forum of the Netherlands Interdisciplinary Demographics Institute.

1 Introduction

Under pressure of population aging retirement policies and practices have changed in many OECD countries since the 1990s. Opportunities for early retirement under favorable conditions have largely been abolished, there is a trend towards working longer, and the prevalence of 'bridge employment' and post-retirement employment has risen sharply (OECD, 2006; Pleau & Shauman, 2012; Cahill et al., 2013). The growth in labor force participation of older workers is mainly due to increased participation of workers between the ages of 50 and 65. Though

employment after the age of 65 is also increasingly prevalent, it is still relatively rare, especially in European countries where mandatory retirement is a common practice (OECD, 2006; 2014). One of the main difficulties for older workers is regaining a position on the labor market once they have been dismissed or, as is the case in the present study, mandatory retirement ends their formal employment relation. While an increasing proportion of workers would like to continue working after mandatory retirement age and hence retire gradually from the labor market (Kantarci & Van Soest, 2008), their reemployment after mandatory retirement is ultimately in the hands of employers. In this paper, we study which factors affect employers'¹ decisions to rehire employees who want to continue working past the mandatory retirement age.

Theoretically, mandatory retirement is a necessary part of a long-term implicit contract in which earnings grow more rapidly than productivity over the life cycle (Lazear, 1979; De Hek & Van Vuuren, 2011). Young workers are de facto paid less than their worth, while older workers are paid more. This arrangement increases the costs of shirking and hence keeps the worker motivated throughout the contract period. Ending the employment contract at a collectively determined fixed age is necessary to prevent workers from 'overearning' indefinitely. Although the implicit contract cannot be observed directly, a range of evidence for the US economy compiled by Hallock (2009) suggests that this type of contract is subject to erosion but certainly has not disappeared. In the case of the Netherlands, older workers in particular still enjoy the benefits of the so-called implicit contract in terms of seniority based wage growth, tenure and employment protection (cf. Conen et al. 2012a). These elements together with mandatory retirement have been institutionalized in collective labor agreements and organizations' human resource policies.

¹ We refer to the participants of our study as 'employers', although they are mainly line managers who have the authority to make employment decisions.

The position of the older worker depends crucially on how employers assess and perceive the productive value and the price of their labor services. From earlier research we know that many employers have stereotypical views about older workers being less productive than their younger colleagues (Posthuma & Campion, 2009; Van Dalen et al., 2010; Conen et al., 2012a). These negative stereotypes seem to be reflected in employers' behavior and policies to stimulate and accommodate an extension of the working life. For example, Conen et al. (2012b) show that only 13% of European employers would consider asking their employees to work past the age of 65 should they be confronted with a shortage of personnel. Other studies show that employers are reluctant to formalize policies regarding bridge employment. They rather offer these opportunities informally to specifically valuable employees who are approaching retirement or to those who indicate their desire for bridge employment (Vickerstaff et al., 2003; Hutchens & Grace-Martin, 2006). Retirees from outside the organization are even less likely to be considered for employment, as their characteristics and skills are often hard to assess for an employer (Hutchens, 2007).

Earlier studies examining the decision making process of employers regarding the employment of (early) retirees show that employers strongly consider the employability of the applicant, in terms of health and experience with the job (e.g., Karpinska et al., 2011; 2013a). However, these studies do not distinguish between the (re)employment of insiders (i.e., former employees) and outsiders (i.e., retirees not previously connected to the firm), and do not specifically consider reemployment after mandatory retirement. Also, an important missing component in these studies is the flexibility of the employee: the willingness to accept a lower wage and to work in a flexible employment arrangement. Downward wage flexibility may crucially affect employers' decisions in this matter as the demand for older workers is strongly

related to labor costs (Conen et al., 2012a; Hutchens, 1986). Furthermore it may also be the case that employers value contract flexibility highly as this type of flexibility is particularly relevant for bridge jobs – jobs covering the period between career employment and exit from the labor force (Shultz, 2001). In understanding reemployment of older workers, we therefore focus specifically on the effects of downward wage flexibility and contract flexibility² on employers' decisions. We study the reemployment decision in a vignette experiment among Dutch employers. This method combines experimental and survey principles to elicit preference structures or evaluations (Rossi & Anderson, 1982; Van Beek et al., 1997; Wallander, 2009).

With this study we contribute to the literature on the demand for older workers and employment after retirement in three main ways. First, we focus on the demand for employees who have reached the mandatory retirement age. Continued employment with the same employer into old age is considered an appropriate way to increase the labor participation of seniors and extend their working lives (OECD, 2006), which raises questions about the appropriateness of mandatory retirement and the way it may impede employment past mandatory retirement age.

Second, our focus specifically lies with the effects of employee flexibility on employers' decisions. When mandatory retirement approaches, many factors that might influence the chance of reemployment are not or no longer under direct control of an employee. For example, older workers are unlikely to be considered for training to update their firm-specific human capital (Martin et al., 2014), and may have health problems which limit their employability. However, there are factors that *are* under the employee's control, such as downward wage flexibility and contract flexibility, and these factors may also affect their chances of reemployment. These factors have been largely ignored in previous research.

² We define 'downward wage flexibility' as the willingness to accept a lower wage; we define 'contract flexibility' as a preference for a more flexible employment contract.

Third, we consider employers' retirement age norms concerning the employability of older workers as brought on by previous experience with older workers and personal beliefs (Settersten & Hagestad, 1996). These norms may deviate from the institutionalized retirement age norm that is set by the mandatory retirement age, and may help explain some of the large differences found in employers' behavior towards retirees (Karpinska et al., 2011).

The current study took place in the Netherlands. Here, mandatory retirement is very common, with about 92% of the permanent labor contracts ending at state pension age (which is being gradually raised from 65 to reach 67 in 2021; OECD, 2014). With the increase in population aging the Dutch government is trying to facilitate post-retirement employment, as most labor contract laws and collective labor agreements do not currently apply to employees over the age of 65. The government is working on legislation that proposes applying the minimum wage for people over the state pension age, as well as increasing the options for flexible employment and shortening employers' obligation for paid sick leave from two years to six weeks (OECD, 2014).

The remainder of this paper is organized as follows. Section 2 presents the theoretical background on employers' decision making in the context of reemployment after mandatory retirement. Section 3 introduces the data and methods used to test our hypotheses. Section 4 presents the results. Section 5 concludes the paper.

2 Theoretical background

Whenever an employee indicates a desire to continue working past the mandatory retirement age, an employer is likely to weigh the pros and cons of continued employment. Since mandatory retirement formally ends the labor contract, the terms of a potential new contract are in principle open for (re)negotiation. Various factors come into play. To structure our analysis of factors that

may influence employers' decisions, we distinguish between factors that pertain to the employee who wants to continue working and factors that pertain to the organizational context and the individual employer making the actual reemployment decision.

2.1 Employee-level factors

First, we consider how employers' decisions to rehire employees after mandatory retirement are affected by the flexibility of these employees, in terms of downward wage flexibility, and contract flexibility (i.e., a preference for a certain type of employment contract). Mandatory retirement is the necessary termination point in an implicit contract, according to which employees are 'underpaid' relative to their productivity at younger ages, but 'overpaid' relative to their productivity at older ages (Lazear, 1979). Such a deferred compensation scheme discourages shirking behavior, and is beneficial to both employers and employees in the long run (Lazear, 1979; Gomez et al., 2002). However, in the case of reemployment after mandatory retirement, long-term employment is most likely considered to be unfeasible, and employers are expected to want the new wage to more accurately reflect the employee's level of productivity. We therefore expect employers to be more likely to rehire employees who indicate a willingness to accept a lower wage to continue working after retirement.

With regard to contract flexibility, employers' preferences are not so straightforward. Standard full-time employment is by many employers considered most practical with regard to scheduling jobs and workload (Siegenthaler & Brenner, 2001). However, nonstandard employment arrangements, such as part-time or on-call employment, may also have advantages (Kalleberg, 2000), and are frequently used for the employment of (early) retirees (Oude Mulders et al., 2013). Common reasons why employers have staff on part-time or on-call contracts are to

have them temporarily fill in for absent regular staff or to accommodate fluctuations in workload (Houseman, 2001). In addition, a more flexible work arrangement in combination with a lower workload may help maintain the productivity of an older worker (Skirbekk, 2008) and thus contribute to a longer period of employment after mandatory retirement. On-call contracts have the distinct advantage that they allow employers to keep their budget in check as no costs are made when no work is done. Based on this, we expect employers to be more likely to rehire those with a preference for on-call employment over those with a preference for either part-time or full-time employment. We expect no difference between the latter two.

Next to the flexibility of employees, we include a number of other employee-level factors that are expected to affect employers' decisions. These are mainly related to the concept of employability, which Fugate et al. (2004, p.16) define as "a form of work specific active adaptability that enables workers to identify and realize career opportunities." In the current study, we consider knowledge and experience of the employee, his or her level of performance until retirement, health, and social contacts. When employees possess unique knowledge and experience, and have functioned satisfactory until retirement, a higher productivity can be expected after potential reemployment, making them more attractive to employers. Likewise, employees in good health can be expected to be less risky compared to employees with weaker health status. Employees with many valuable social contacts for the organization can help employers profit from these contacts, while lacking those contacts makes an employee less valuable. All these factors are expected to contribute positively to employers' likelihood of rehiring employees after mandatory retirement.

Finally, on the employee-level we consider the effect of the employee's main motivation to continue working. We distinguish between the employee mainly working for financial reasons;

to retain the social contacts at work; to have a feeling of personal satisfaction from work; and to transfer knowledge to younger colleagues (Mor-Barak, 1995). These categories reflect motives that are commonly found in empirical work (e.g., Dingemans & Henkens, 2014; Lynch, 2012; McEvoy & Henderson, 2012). The perceived motivation of the employee to continue working may influence the employer's decision through a perceived fit or misfit with personal or organizational values.

2.2 Employer-level factors

The decision to rehire employees after mandatory retirement is embedded in a broader organizational context and is taken by an individual with certain beliefs about the skills and qualities of employees working past a certain age. These employer-level factors may affect the likelihood of reemployment after mandatory retirement for older workers. First, we consider the labor market context of the organization. A considerable level of employment protection commonly accompanies mandatory retirement policies and seniority wages (Gomez et al., 2002), which makes older workers with long organizational tenure particularly costly to dismiss. When employers need to downsize their workforce due to a recession, mandatory retirement may be welcomed as there are no costs involved, and rehiring mandatorily retired employees is not expected to be a priority (Van Dalen & Henkens, 2013). In contrast, when an organization operates in a tight labor market, employers are expected to be more likely to offer reemployment to employees approaching mandatory retirement.

Second, we consider how employers may differ in their likelihood to rehire employees as a result of their *retirement age norms*. Individual employers may differ in their attitudes and behavior towards older workers because of their own experiences with older workers in their organization, the observed attitudes and behaviors of similar others, or because of their own

personal values about the appropriateness and desirability of people working past a certain age (Settersten & Hagestad, 1996). These norms may deviate from the institutionalized retirement age norm that is set by the mandatory retirement age (often 65). We expect managers with higher retirement age norms (i.e., who consider employees to be suited for work up to a higher age) to be more likely to rehire employees after mandatory retirement.

3 Design and Methods

3.1 Data

In 2013, we gathered data on employers' hiring behavior towards former employees through the Longitudinal Internet Studies for the Social sciences (LISS) panel of CentERdata, Tilburg University. The LISS panel consists of a representative sample of Dutch inhabitants who participate in monthly internet surveys on a variety of topics. For the current study we selected individuals who had reported to be in a management position. 864 individuals were approached for participation in the survey, of which 698 responded, yielding a response rate of 81%. To ensure we only analyzed data from line managers who were involved in selection and recruitment of employees, we asked the selection questions '*Do you occupy a management position within your organization?*' and '*In the last ten years, have you had to take decisions regarding recruitment and selection of employees?*'. Respondents who were not managers anymore (n = 45) or who did not deal with recruitment and selection (n = 98) were dropped from further analysis, as well as respondents who had retired or gotten unemployed since the panel first started (n = 46), and respondents who worked as freelancers (n = 66), leaving us with 443 respondents. Table 1 presents descriptive information of the final sample.

3.2 Measures

We collected data with a vignette study (also known as a factorial survey); a method that combines survey questions with experimental methods, and is considered specifically suitable to uncover the underlying structure of human judgments in social contexts (Rossi & Anderson, 1982; Wallander, 2009). The data collection was split up into two periods to limit the risk of so-called ‘carryover effects’: when context items are asked prior to the target items in a survey, the context items may increase the accessibility of material in the mind, which is then carried over and used in answering the target items (cf. Tourangeau et al. 1989).

First, in March 2013 participants were asked to answer several questions related to their organizations’ policies and practices towards older workers and retirees, and their individual attitudes and behavior regarding the employment of older workers. For this study, we consider the *employer’s retirement age norm*, which was measured with the question ‘At what age do you consider a person too old to work in your organization for 20 hours a week or more?’ The answers were truncated between 50 and 80³. The following background information on the employer and the organization was gathered: *employer’s gender* (0 = Male; 1 = Female); *employer’s age*; *organization’s sector* (15 answering categories that were divided into three main sectors (industry; services and trade; (semi)public sector) and one ‘other’ category); the most common educational level in the organization was dubbed the *level of subordinates* (low; medium; high); and *the organization’s percentage of older workers* (defined as workers aged 50+; measured in categories: 0-10%; 10-20%; etc.).

³ We truncated *retirement age norm* to avoid problems with outliers. This did not substantively alter our results.

In the second part of data collection, in May 2013, the participants were randomly assigned to one of three experimental conditions related to the contract form, and were asked to evaluate five vignettes. The vignettes contained descriptions of employees at the age of 65 who wanted to continue working in either a full-time, part-time, or on-call employment capacity, depending on the experimental condition⁴. Seven characteristics describing the employee were included in the vignettes. Their possible values are presented in Table 2. The values of these characteristics were randomized between vignettes. Each combination of characteristics is thus equally likely, which allows us to reliably estimate the effects of each independent variable. For the *dependent variable*, respondents answered the question ‘What is the likelihood that you would rehire this employee on a(n) full-time/part-time/on-call contract?’, with the contract depending on the experimental condition. Answers ranged from 1 (very unlikely) to 11 (very likely). An example of a vignette is shown in Figure 1.

--- Table 2 ---

--- Figure 1 ---

3.3 Analysis

The data have a multilevel structure, with 2,215 vignette observations nested within 443 employers. Because multiple observations from the same respondent are not independent, standard regression analysis is very likely to result in erroneous statistical estimations. We therefore perform multilevel regression analysis to account for variance on both levels (Snijders

⁴ By design, participants were shown five descriptions of employees who all wanted to continue in either a full-time, part-time, or on-call employment arrangement. The employment arrangement is mentioned in the vignette description, as well as in the question that serves as the dependent variable (see also Figure 1).

& Bosker, 1999). In the current study, the intra-class correlation of the empty multilevel model (i.e., with no explanatory variables) is 0.43. This can be interpreted as the proportion of variance that is accounted for by the employer level, or the correlation between values of two random vignettes in the same random employer (Snijders & Bosker, 1999, p. 17). The relatively high value of the intra-class correlation tells us that the nested structure is of large influence on the dependent variable, and multilevel analysis is required to obtain accurate results. Multilevel regression analysis implies that the intercept value and the strength of the predictor variables may vary between respondents. This is tested with so-called random intercept and random slope terms. In the current study, these terms are not of prime importance, but are only included to optimize the model and therefore not reported⁵. The reported results are the unstandardized regression coefficients averaged over all respondents⁶.

4 Results

Table 3 presents the results of the multilevel regression analyses in three models. Model I contains only the effects of the vignette characteristics; Model II also contains the employers' characteristics from the survey⁷; Model III additionally contains several interaction effects between vignette-level variables⁸. Note that reference categories were set so that the reference employee is one with no downward wage flexibility, a preference for a full-time contract, low employability, wanting to continue working for financial reasons, in an organization that needs to downsize. As a result, all effects of the vignette-level variables are in the positive direction

⁵ Random slopes were considered for all vignette variables. Only those that significantly improved the model were included in the final models (Snijders & Bosker, 1999).

⁶ The coefficients should thus be interpreted in terms of likelihood of rehiring, considering the dependent variable is measured on a scale from 1 to 11.

⁷ Model II is not a significant improvement over Model I ($\chi^2(9) = 15.63$; p-value = 0.075), but this is mainly due to the variables 'sector' and 'level of subordinates' taking degrees of freedom while not explaining much.

⁸ Model III is a significant improvement over Model II ($\chi^2(4) = 18.52$; p-value = 0.001).

and are directly comparable. The age and retirement age norm of employers have been centered, so that the reference employer is 47.5 years old and holds a retirement age norm of 65.7 years.

--- Table 3 ---

First, we observe that all vignette characteristics, except contract flexibility, affect employers' decisions. As expected, employers are more likely to rehire employees after mandatory retirement who display downward wage flexibility, have valuable knowledge and experience, have performed satisfactory until retirement, are relatively healthy, have many valuable social contacts, and when the organization faces recruitment problems. These results are highly robust across models.

In line with our hypothesis, employers are more likely to rehire employees who would accept a 20% or 40% wage reduction than employees who would not accept a lower wage. However, the difference between employees accepting a 20% and a 40% wage reduction is not statistically significant. This suggests that employers attach value to employees making a substantial financial sacrifice to stay employed, but that the exact amount is of lesser importance. The effect size of an employee accepting a 40% wage reduction is approximately equally large as the employee having valuable knowledge and experience that is hard to replace, and the employee being in good health. Employers also consider the employee's main motivation in their reemployment decision: they are more likely to rehire employees who are intrinsically motivated (personal satisfaction, transferring knowledge) than employees who mainly work to retain the social contacts at work or for financial reasons. However, we should note that the effects are relatively small compared to the other employability effects. Contrary to our expectations,

contract flexibility does not affect employers' likelihood of rehiring employees after age 65: they are equally likely to rehire employees with a preference for full-time, part-time, or on-call employment. This suggests that employers base their reemployment decisions on other factors, and keep an open mind in accommodating the contract preferences of older workers.

The effects of the employer characteristics in Model II show that – as expected – employers who hold higher retirement age norms are more likely to rehire employees after mandatory retirement in their own organization. There is no significant difference between male and female employers. However, we do observe that older employers are slightly less likely to rehire employees after mandatory retirement than younger employers. This is in marked contrast to the results found by Heyma et al. (2014), who find that older Dutch managers are more likely than younger managers to hire older job seekers. However, they limit their attention to job seekers below the age of 65, which may indicate a distinction in the minds of managers and employers between older job seekers and retirees looking for a bridge job. We find no significant effects of the employing organization's sector, the most common level of subordinates, and the percentage of older workers in the organization.

Finally, we tested several interaction terms to examine whether the effects of downward wage flexibility and contract flexibility differed for employees with different characteristics, and whether the importance of the employability effects was related to the organizational labor market context. Only the significant interaction effects are presented in Model III of Table 3. We observe an interaction effect of the employee having 'hard to replace knowledge and experience' and accepting a lower wage offer. Both main effects increase in size, but a significant negative interaction effect appears, suggesting that employers are not as strongly influenced by the downward wage flexibility of an employee when he or she possesses knowledge and experience

that is hard to replace. In other words, the need for downward wage flexibility to get reemployed is smaller for employees who have unique knowledge or experience, although downward wage flexibility still increases their chances for reemployment. Also, we observe an interaction effect of the employee's performance and the organizational labor market context. The interaction effect is significant and positive, while both main effects are slightly weakened, suggesting that well performing employees are especially likely to get reemployed when there is no need for downsizing.

Figure 2 offers a graphic representation of the interaction effects and the likelihood of employers to rehire different types of employees. It shows predicted values of regression Model III of Table 3 for four stylized types of employees in different organizational contexts. That is, predicted values were calculated for employees with high employability (hard to replace knowledge and experience, good performance until retirement, good health, many valuable contacts for the organization, working for personal satisfaction) and high flexibility (40% wage reduction, on-call contract preference); high employability and low flexibility (no wage reduction, full-time contract preference); low employability (easy to replace knowledge and experience, not so good performance, not so good health, few valuable contacts for the organization, working for financial reasons) and high flexibility; and low employability and low flexibility.

--- Figure 2 ---

The figure shows that employers are very unlikely to rehire employees with low levels of employability, regardless of their flexibility and the organizational labor market context.

However, the overall scores for the reemployment of employees with a high level of employability are also relatively low, hovering around the neutral mark. This suggests that even highly employable employees may need to accept a significant wage reduction to get their employer to consider them for continued employment after mandatory retirement. Overall, it seems that employers are quite unwilling to rehire employees after mandatory retirement, except when they are highly employable, highly flexible, and the organization faces recruitment problems.

5 Conclusion and discussion

Which factors influence employers' decisions to rehire employees after mandatory retirement?

The current study has tried to answer this question with data from a vignette study among Dutch employers. A key strength of this study is its specific contextual focus – reemployment of employees after mandatory retirement – and its consideration of effects of employee downward wage flexibility and contract flexibility on employers' reemployment decisions.

The first main finding is that downward wage flexibility significantly affects employers' reemployment decisions in the context of mandatory retirement. Employers are considerably more likely to rehire employees who are prepared to accept a significantly lower wage after mandatory retirement. From a theoretical perspective, this was predicted because mandatory retirement marks the end of the implicit contract in which wages and productivity are balanced over the life cycle (Lazear, 1979), and employers probably want the post-retirement wage to be more in line with workers' productivity. Note that this does not necessarily imply that the older worker has become less productive. It merely suggests that the seniority principle of an upward sloping wage profile is not tenable and the wage level should be reconsidered once the mandatory retirement age has been reached. In contrast, employers are not more likely to rehire

employees who have flexible contract preferences, such as part-time or on-call employment compared to an employee with a fulltime contract. This suggests that employers make their reemployment decision irrespective of the preferred employment contract of the employee. Employers may perhaps be willing to accommodate the contract preferences of their older workers, as this may contribute to their work satisfaction and productivity, and as a form of reward for long organizational tenure (cf. Houseman, 2001). If so, this may help explain part of the large diversity that exists in the way organizations deal with retirement issues and the employment of older workers and retirees (Oude Mulders et al., 2013).

The second main finding is that employers are overall quite disinclined to rehire employees after mandatory retirement, although large differences exist between employers, evidenced by the relatively low scores on the dependent variable. A high level of employability of the employee and a tight labor market context seem like necessary but not always sufficient conditions for reemployment. Employees with a low level of employability are usually not considered for reemployment, regardless of their flexibility, and organizations that need to downsize have other priorities than reemploying employees after mandatory retirement. Still, there are employers who have a more positive view on employees who want to continue working after mandatory retirement. Part of this can be explained by employers having higher retirement age norms – norms considering employees to be suited for work in old age – which has proven itself to also influence employers' decision making in other contexts (Karpinska et al., 2013a; 2013b). Conversely, there are also employers that may not want to rehire employees after mandatory retirement in any circumstance.

This study has some limitations. First, an inherent limitation in vignette studies is that respondents estimate their response to hypothetical cases, which may not always translate into

actual behavior (Pager & Quillian, 2005). It is therefore important to study how employers in practice deal with employees who seek reemployment after mandatory retirement, and whether they are affected by the flexibility of the employee.

Second, we only studied the intended behavior of Dutch employers. In the Netherlands, mandatory retirement is a common feature of labor contracts, with about 92 percent of permanent labor contracts ending at state pension age (OECD, 2014). It would be interesting to see whether employers in countries with different labor market institutions and where mandatory retirement is less common react differently to employees that want to continue working after mandatory retirement age. Also, a comparison with employers' employment and retention behavior in countries that have abolished mandatory retirement (such as Australia, UK and USA) would be valuable.

Third, the organizational context in which these decisions are taken is more complex than we have suggested here. In reality, mandatory retirement can be foreseen by both employer and employee, and it is likely that informal arrangements are made before the actual date of mandatory retirement (Vickerstaff et al., 2003).

From the perspective of the employee seeking work after mandatory retirement, our results imply that employees approaching retirement may attempt to increase their likelihood of reemployment by expressing their willingness to accept a lower wage. However, our results also suggest that older workers may have a hard time finding reemployment with the same employer after mandatory retirement, even if they offer to work for a lower wage. Employees who want to continue working but are not considered highly employable, or are employed in an organization that needs to downsize may need to look for employment elsewhere. For them, mandatory retirement could be a form of involuntary retirement, which could eventually lead to decreased

satisfaction with life (Dingemans & Henkens, 2014). However, banning mandatory retirement may not solve this problem, as mandatory retirement is inherently tied to employment protection, seniority wages and occupational and state pension plans (Gomez et al., 2002), which are common features of many European labor markets. Banning mandatory retirement would imply a complete restructuring of labor market institutions.

In conclusion, this study has demonstrated which factors affect employers in rehiring older employees after mandatory retirement. Although the employer has the final say in who to hire and who to let go, it is not all in the hands of employers. This study also suggests that employees who display downward wage flexibility make themselves more attractive to employers. In other words, the price of labor at older ages matters quite a lot and hence looking at both demand and supply forces may indeed help to understand trends in working past the mandatory retirement age.

References

- Cahill, K.E., Giandrea, M.D., & Quinn, J.F. (2013). Bridge Employment. In M. Wang (Ed.), *The Oxford Handbook of Retirement* (pp. 293-310). Oxford: Oxford University Press.
- Conen, W.S., Van Dalen, H.P., & Henkens, K. (2012a). Ageing and employers' perceptions of labour costs and productivity: A survey among European employers. *International Journal of Manpower*, 33, 629-647.
- Conen, W.S., Henkens, K., & Schippers, J. (2012b). Employers' attitudes and actions towards the extension of working lives in Europe. *International Journal of Manpower*, 33, 648-665.
- De Hek, P., & Van Vuuren, D. (2011). Are older workers overpaid? A literature review. *International Tax and Public Finance*, 18(4), 436-460.

- Dingemans, E., & Henkens, K. (2014). Involuntary retirement, bridge employment, and satisfaction with life: A longitudinal investigation. *Journal of Organizational Behavior*, 35, 575-591.
- Fugate, M., Kinicki, A.J., & Ashforth, B.E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14-38.
- Gomez, R., Gunderson, M., & Luchak, A. (2002). Mandatory retirement: A constraint in transitions to retirement? *Employee Relations*, 24, 403-422.
- Hallock, K.F. (2009). Job loss and the fraying of the implicit employment contract. *The Journal of Economic Perspectives*, 69-93.
- Heyma, A., Van der Werff, S., Nauta, A., & Van Sloten, G. (2014) What makes older job seekers attractive to employers? *De Economist*, forthcoming.
- Houseman, S.N. (2001). Why employers use flexible staffing arrangements: Evidence from an establishment survey. *Industrial and Labor Relations Review*, 55, 149-170.
- Hutchens, R.M. (1986). Delayed payment contracts and a firm's propensity to hire older workers. *Journal of Labor Economics*, 4, 439-457.
- Hutchens, R.M. (2007). Job opportunities for older workers: When are jobs filled with external hires? In A. Mason & M. Yamaguchi (Eds.), *Population change, labor markets, and sustainable growth: towards a new economic paradigm* (pp. 133-159). Amsterdam: Elsevier.
- Hutchens, R.M., & Grace-Martin, K. (2006). Employer willingness to permit phased retirement: Why are some more willing than others? *Industrial and Labor Relations Review*, 59, 525-546.

- Kalleberg, A.L. (2000). Nonstandard employment relations: Part-time, temporary and contract work. *Annual Review of Sociology*, 26, 341-365.
- Kantarci, T., & Van Soest, A. (2008). Gradual retirement: Preferences and limitations. *The Economist*, 156, 113-144.
- Karpinska, K., Henkens, K., & Schippers, J. (2011). The recruitment of early retirees: A vignette study of the factors that affect managers' decisions. *Ageing & Society*, 31, 570-589.
- Karpinska, K., Henkens, K., & Schippers, J. (2013a). Hiring retirees: Impact of age norms and stereotypes. *Journal of Managerial Psychology*, 28, 886-906.
- Karpinska, K., Henkens, K., & Schippers, J. (2013b). Retention of older workers: Impact of managers' age norms and stereotypes. *European Sociological Review*, 29, 1323-1335.
- Lazear, E.P. (1979). Why is there mandatory retirement? *Journal of Political Economy*, 87(6), 1261-1284.
- Lynch, C. (2012). *Retirement on the Line: Age, Work, and Value in an American Factory*. Ithaca, New York: Cornell University Press.
- Martin, G., Dymock, D., Billett, S., & Jonhson, G. (2014). In the name of meritocracy: Managers' perceptions of policies and practices for training older workers. *Ageing & Society*, 34, 992-1018.
- McEvoy, G.M., & Henderson, S. (2012). The retention of workers nearing retirement: A job embeddedness approach. *Journal of Workplace Behavioral Health*, 27, 250-271.
- Mor-Barak, M.E. (1995). The meaning of work for older adults seeking employment: The generativity factor. *The International Journal of Aging and Human Development*, 41, 325-344.
- OECD (2006). *Live Longer, Work Longer*. Paris: OECD publishing.

- OECD (2014). *Ageing and Employment Policies: Netherlands 2014*. Paris: OECD publishing.
- Available at <http://dx.doi.org/10.1787/9789264208155-en>
- Oude Mulders, J., Henkens, K., & Schippers, J. (2013). Organizations' ways of employing early retirees: The role of age-based HR policies. *The Gerontologist* Advance Access first published on October 9, 2013. Available at <http://dx.doi.org/10.1093/geront/gnt114>
- Pager, D., & Quillian, L. (2005). Walking the talk? What employers say versus what they do. *American Sociological Review*, 70, 355-380.
- Pleau, R., & Shauman, K. (2012). Trends and correlates of post-retirement employment, 1977-2009. *Human Relations*, 66, 113-141.
- Posthuma, R.A., & Campion, M.A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35, 158-188.
- Rossi, P.H., & Anderson, A.B. (1982). The factorial survey approach: An introduction. In P.H. Rossi & S.L. Nock (Eds.), *Measuring Social Judgments: The Factorial Survey Approach* (pp. 15-67). Beverly Hills, CA: Sage.
- Settersten, R.A., & Hagestad, G.O. (1996). What's the latest? II. Cultural age deadlines for educational and work transitions. *The Gerontologist*, 36, 602-613.
- Shultz, K.S. (2001). The new contingent workforce: Examining the bridge employment options of mature workers. *International Journal of Organizational Theory and Behavior*, 4, 247-258.
- Siegenthaler, J.K., & Brenner, A.M. (2001). Flexible work schedules, older workers, and retirement. *Journal of Aging & Social Policy*, 12, 19-34.

- Skirbekk, V. (2008). Age and productivity potential: A new approach based on ability levels and industry-wide task demand. *Population and Development Review*, 34 (Supp.): 191-207.
- Snijders, T.A.B., & Bosker, R.J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London: Sage.
- Tourangeau, R., Rasinski, K.A., Bradburn, N., & D'Andrade, R. (1989). Carryover effects in attitude surveys. *Public Opinion Quarterly*, 53, 495-524.
- Van Beek, K.W.H., Koopmans, C.C., & Van Praag, B.M.S. (1997). Shopping at the labour market: A real tale of fiction. *European Economic Review*, 41, 295-317.
- Van Dalen, H.P., Henkens, K., & Schippers, J. (2010). Productivity of older workers: Perceptions of employers and employees. *Population and Development Review*, 36, 309-330.
- Van Dalen, H.P., & Henkens, K. (2013). Dilemmas of downsizing during the Great Recession: Crisis strategies of European employers. *De Economist*, 161, 307-329.
- Vickerstaff, S., Cox, J., & Keen, L. (2003). Employers and the management of retirement. *Social Policy & Administration*, 37, 271-287.
- Wallander, L. (2009). 25 years of factorial surveys in sociology: A review. *Social Science Research*, 38, 505-520.

Table 1. Descriptive statistics of employers' characteristics (N = 443).

Variable	Categories	<i>M</i> or %	<i>SD</i>
Gender	Male	66.8%	
	Female	33.2%	
Age		47.52	10.01
Retirement age norm		65.73	5.84
Sector	Industry and construction	19.0%	
	Services and trade	27.8%	
	(Semi)public sector	27.3%	
	Other	26.0%	
Level of subordinates	Low	23.5%	
	Medium	41.3%	
	High	35.2%	
Percentage of older workers		33.97	18.95

Table 2. Characteristics included in the vignettes, and their possible values.

Vignette characteristic	Possible values
Organizational context	Need to downsize No recruitment problems Recruitment problems
Downward wage flexibility	Not willing to reduce wages Willing to accept a 20% wage reduction Willing to accept a 40% wage reduction
Knowledge and experience	Easy to replace Hard to replace
Performance until retirement	Not so good Good
Health	Not so healthy In good health
Social network	Few valuable contacts for the organization Many valuable contacts for the organization
Motivation to continue working	For financial reasons To retain social contacts at work Personal satisfaction of working To transfer knowledge

Table 3. Multilevel regression results of the likelihood of rehiring employees after mandatory retirement.

		Model I		Model II		Model III	
		Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Employee-level factors							
Downward wage flexibility (ref = None)	20% reduction	0.57 ***	0.09	0.56 ***	0.09	0.73 ***	0.13
	40% reduction	0.69 ***	0.10	0.69 ***	0.10	0.86 ***	0.13
Contract flexibility (ref = Full-time)	Part-time	-0.02	0.22	-0.01	0.22	-0.01	0.22
	On-call	0.24	0.22	0.25	0.22	0.26	0.22
Knowledge and experience (ref = Easy to replace)	Hard to replace	0.69 ***	0.08	0.69 ***	0.08	0.93 ***	0.13
Performance until retirement (ref = Not so good)	Good	1.40 ***	0.09	1.40 ***	0.09	1.02 ***	0.14
Health (ref = Not so healthy)	In good health	0.70 ***	0.08	0.69 ***	0.08	0.70 ***	0.08
Social network (ref = Few valuable contacts)	Many valuable contacts	0.48 ***	0.08	0.48 ***	0.08	0.47 ***	0.08
Motivation for work (ref = For financial reasons)	Retain social contacts	0.03	0.11	0.04	0.11	0.03	0.11
	Personal satisfaction	0.33 **	0.11	0.33 **	0.11	0.33 **	0.11
	Transfer knowledge	0.30 **	0.11	0.30 **	0.11	0.30 **	0.11
Employer-level factors							
Organizational context (ref = Need to downsize)	No recruitment problems	0.46 ***	0.09	0.46 ***	0.09	0.22 †	0.13
	Recruitment problems	1.09 ***	0.09	1.09 ***	0.09	0.76 ***	0.13
Retirement age norm (centered)				0.04 *	0.02	0.04 *	0.02
Gender (ref = Male)	Female			-0.10	0.20	-0.09	0.20
Age (centered)				-0.02 *	0.01	-0.02 *	0.01
Sector (ref = Industry)	Services and trade			0.02	0.27	0.01	0.27
	(Semi)Public			-0.28	0.28	-0.29	0.28
	Other			-0.20	0.27	-0.19	0.27
Level of subordinates (ref = Low)	Medium			0.06	0.24	0.07	0.24
	High			-0.13	0.25	-0.11	0.25
Percentage of older workers (aged 50+; ref = 0-10%)				-0.04	0.05	-0.04	0.05
Interaction effects							
Hard to replace knowledge and experience + 20% wage reduction						-0.36 †	0.18
Hard to replace knowledge and experience + 40% wage reduction						-0.38 *	0.19

Good performance + no recruitment problems context					0.49 **	0.19
Good performance + recruitment problems context					0.65 ***	0.18
Constant	1.58 ***	0.19	1.98 ***	0.40	2.05 ***	0.41
Employer-level variance	2.37	0.24	2.27	0.24	2.27	0.24
Employee-level variance	2.02	0.11	2.04	0.11	2.00	0.11
Log-likelihood	-4681.33		-4673.52		-4664.26	
Number of vignettes (respondents)	2215	(443)	2215	(443)	2215	(443)

† p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Note: All models have significant random slopes for wage flexibility, knowledge, performance, health, and social network, which means that these effects differ significantly between respondents (e.g., Snijders & Bosker, 1999). The random slopes are not reported, but are available on request.

Figure 1. Example of a vignette.

The following employee has reached the mandatory retirement age of 65 within your organization. He or she would like to continue working in on a *part-time basis (two days per week)*. Please indicate, for each employee, the likelihood that you would rehire this person in a *part-time employment arrangement*.

Organizational context	
Labor context	Labor shortages
Employee	
Downward wage flexibility	20%
Knowledge and experience	Hard to replace
Functioning until retirement	Good
Social network	Few valuable contacts
Health	Not so good
Main motivation to continue working	Social contacts at work

What is the likelihood that you would rehire this employee in a *part-time employment arrangement*?

1	2	3	4	5	6	7	8	9	10	11
Very unlikely					Neutral					Very likely

Figure 2. Illustration of interaction effects.

