

Tilburg University

What comes to mind when considering looking into and/or adjusting one's pension?

Van Dijk, Eric; Zeelenberg, Marcel; Bruine de Bruin, Wand; de Rooij, Robert-Jan Bastiaan

Publication date:
2023

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

Van Dijk, E., Zeelenberg, M., Bruine de Bruin, W., & de Rooij, R.-J. B. (2023). *What comes to mind when considering looking into and/or adjusting one's pension? An empirical study among UK and US residents.* (Netspar Design Papers). Network for Studies on Pensions, Aging and Retirement (NETSPAR).

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



Network for Studies on Pensions, Aging and Retirement

NETSPAR INDUSTRY SERIES

What comes to mind when considering looking into and/or adjusting one's pension?

An empirical study among UK and US residents

Eric van Dijk, Marcel Zeelenberg, Wändi Bruine de Bruin and Robert-Jan Bastiaan de Rooij

DESIGN PAPER 231

DESIGN PAPERS are part of the **refereed Industry Paper Series**, which are refereed by the Netspar Editorial Board. Design Papers discuss the design of a component of a pension system or product. A Netspar Design Paper analyzes the objective of a component and the possibilities for improving its efficacy. These papers are easily accessible for industry specialists who are responsible for designing the component being discussed. Authors are allowed to give their personal opinion in a separate section. Design Papers are presented for discussion at Netspar events. Representatives of academic and private sector partners, are invited to these events. Design Papers are published at the Netspar website.

Colophon

Netspar Design Paper 231, July 2023

Editorial Board

Mark-Jan Boes – VU Amsterdam
Andries de Grip (chairman) – Maastricht University
Marcus Haveman (NN)
Arjen Hussem – PGGM
Kristy Jansen – University of Southern California
Agnes Joseph – Achmea
Serge Mans – AEGON
Raymond Montizaan – Maastricht University
Alwin Oerlemans – APG
Maarten van Rooij – De Nederlandsche Bank
Mariëtte Sanderse – PMT
Peter Schotman – Maastricht University
Erik Schouten – Ministry of Finance | Belastingdienst
Frank Smudde – APG
Jeroen Wirschell – PGGM
Marianne Zweers – a.s.r.

Design

B-more design

Lay-out

Bladvulling, Tilburg

Editors

Frans Kooymans, Frans Kooymans-Text and Translation and Netspar

Design Papers are publications by Netspar. No reproduction of any part of this publication may take place without permission of the authors.

CONTENTS

<i>Abstract</i>	4
<i>Samenvatting</i>	5
1. <i>Introduction</i>	6
2. <i>Approach</i>	9
3. <i>Method</i>	10
4. <i>Results</i>	12
5. <i>Discussion</i>	18
<i>References</i>	22
<i>Appendix 1: The text of the questionnaire</i>	24
<i>Appendix 2: Complete sets of results of the logistic regressions that predict looking into and adjusting one's pension</i>	28

Acknowledgements

This study was funded by a Netspar Theme Project grant (Theme 2018.04: Development and tests of a model for inertia in retirement decisions).

Affiliations

Eric van Dijk – Institute of Psychology, Leiden University

Marcel Zeelenberg – Tilburg Institute for Behavioral Economics Research, & Department of Social Psychology, Tilburg University and Department of Marketing, Vrije Universiteit Amsterdam

Wändi Bruine de Bruin – Schaeffer Center for Health Policy and Economics, University of Southern California

Robert-Jan Bastiaan de Rooij – Institute of Psychology, Leiden University

Abstract

Planning for retirement requires people to regularly examine their pension savings to see whether their plans are feasible (or still so) and whether adjustments need to be made. Little is known about how people perceive these decisions. We present the findings of a sample of US and UK participants, whom we probed for their underlying associations or motivations regarding these decisions. The findings reveal a wide range of associations that confirmed previous insights (e.g., concern for one's future, anxiety) but also identified variables that are rarely considered in pension planning research (e.g., positive emotions and feelings). A ranking in terms of prominence indicated that the relevance of associations was very similar for both types of decisions (inspecting current pension savings and adjusting the pension plan). An exploratory regression analysis suggests, however, that the actual decisions of looking into one's pension and adjusting it are differentially related to the underlying categories. The decision to look into one's pension was most strongly, and positively, related to evaluation of one's current situation. The decision to adjust one's pension was negatively related to the category of ensuring safety and security. The main results are discussed, as well as the potential implications for pension researchers and practitioners.

Samenvatting

Een goede pensioenplanning vereist dat mensen regelmatig nagaan of hun pensioen toereikend is voor gestelde doelen, waarbij ze zo nodig hun pensioen aanpassen. Er is nog weinig bekend over hoe mensen deze beslissingen tot inspectie en eventuele aanpassing ervaren. We presenteren de bevindingen van een onderzoek onder Amerikaanse en Britse respondenten die we naar hun overwegingen t.a.v. beide beslissingen vroegen. De resultaten laten een grote variëteit aan associaties zien die deels eerdere bevindingen bevestigen (b.v. een zorg omtrent de toekomst, ongerustheid), maar ook een aantal variabelen die onderbelicht zijn in pensioenonderzoek (b.v. positieve emoties en gevoelens). Een rangorde gebaseerd op het aantal malen dat een associatie genoemd werd, liet sterke overeenkomsten zien tussen beide typen beslissingen. Een exploratieve regressieanalyse toonde aan dat de daadwerkelijke beslissing om het pensioen te bekijken en de beslissing tot aanpassing verschillend gerelateerd waren aan genoemde associaties. De beslissing om het pensioen in te zien was het sterkst, en positief, gerelateerd aan de associatie van het evalueren van de eigen situatie. De beslissing om het pensioen aan te passen was enkel negatief gerelateerd aan de associatie van voorzichtigheid en veiligheid. De belangrijkste resultaten worden besproken, evenals mogelijke implicaties voor pensioenonderzoekers en beleidsmakers.

1. Introduction

Retirement pensions are intended to provide and secure financial means after one's working life. Demographic developments such as increased life expectancies and an ageing population have resulted in changes and reforms in pension systems as well as in individual behaviors. Around the globe, people retire at a later age, whether voluntarily or due to being required to do so, while facing uncertainties about the adequacy of their pensions (see e.g., World Economic Forum's white paper, 2017). These pension-related changes are often accompanied by a shift of responsibility from the public sector to the individual (Hershey, Henkens, & Van Dalen, 2007; World Economic Forum, 2017, 2018).

Knowing what one's pension will look like and, based on this information, setting goals, planning savings, and regularly checking whether one's savings are on track, are essential ingredients in retirement planning decisions. That people indeed perform these acts when needed cannot be taken for granted. To understand, predict, and possibly guide the pension decisions that people make, it is important to understand what they think about pension saving and what the main drivers are of these decisions. Previous research has already identified many associations as well as potential determinants.

While the goal of planning for one's retirement can be considered as positive, pension decisions may also induce negative feelings, such as uncertainty about the value of one's future pension or worries about having an inadequate pension (e.g., Solinge & Henkens, 2017; Van Hekken, Hoofs, & Brügger, 2022). When asked in a telephone survey (Bell, 2016) to list their biggest financial regrets, a representative sample of Americans mentioned most often "not saving for retirement early enough". In a survey among the Dutch population (Wijzer in Geldzaken, 2016), close to 50% indicated that they felt they should have invested more time and effort in planning their personal pension, which is indicative of a similar regret.

In addition, it is important to consider what motivations drive people in planning their future pension and/or finding out ways in which such outcomes can be realized. These motivations may include the desire to secure future needs, but motivation may also be lacking, for example due to overly optimistic views of one's prospects, or due to a feeling that the decision is too complex and requires more financial knowledge (e.g., Elinder, Hagen, Nordin, & Säve-Söderbergh, 2022; Van der Schors & Warnaar, 2015). The above-mentioned survey by Wijzer in Geldzaken (2016) also reveals that 40% of the Dutch respondents indicated they never had taken the time to think about their post-retirement income and expenditures, that 59% had not looked at

their online pension overview, and that 63% had not looked at the annual pension statement that they received in the mail. This could be seen as indicative of a lack of motivation, but, as we explain later, other factors may also be involved (Krijnen, Zeelenberg, Breugelmans, & Van der Schors, 2022).

The myriad of possible determinants of pension saving behavior have invited a wide range of suggestions for intervention, ranging from educating people, to persuasive messages and campaigns, and to subtle nudges (e.g., Balasuriya & Yang, 2019; Carroll, Choi, Laibson, Madrian & Metrick, 2009; Clark & Strauss, 2008; Maloney & McCarthy, 2017; Rubaltelli & Lotto, 2021; Wiener & Doescher, 2008). What these proposed measures have in common is that they require people to look into their pension at some point in time. Thus, to assist and help people in making timely decisions to build and prepare for their retirement and to secure pensions, institutions and governments may first need to convince or persuade people to look into their current pensions, and only afterwards to follow up with measures to help them in adjusting their pension decisions (when deemed beneficial).

Taking the first step, to consider one's pension is, however, not one that people readily make. This may be due to uncertainty about one's financial capabilities or a general idea that the matter is too complex (see Krijnen et al., 2022; Van der Schors & Warnaar, 2015). Often such decision is postponed, but not necessarily out of a lack of motivation to consider one's pension. Postponement can result from attributing great importance to this decision (Krijnen, Zeelenberg, & Breugelmans, 2015; see also Krijnen, Breugelmans, & Zeelenberg, 2016; Krijnen et al. 2022), but other reasons may also be involved, such as excessive optimism (Balasuriya, Gough, & Vasileva, 2014). Similar associations may accompany subsequent decisions, such as whether to make adjustments.

The current Netspar Industry Paper aims to contribute to the understanding of these steps. The underlying idea is that, to design effective policy interventions concerning pension preparation, it is firstly imperative to have adequate insight into the associations that people have towards looking into their pensions savings, and towards making adjustment decisions. These associations may connect to the decision-making itself, but also to people's beliefs associated with pensions, their experienced or anticipated emotions, and their underlying motivations. We report here on a study that assessed these associations.

In this study, we used a survey approach to tap these associations. This involved a bottom-up approach. Rather than providing respondents with a preselected list of possible associations, we asked participants to self-generate their associations. This bottom-up approach has the benefit of not restricting oneself to the "usual

suspects", that is, to factors that are typically mentioned in the scientific literature. Such bottom-up approach thus explicitly allows for the possibility that people mention associations that are potentially important but that have not been addressed or have been overlooked in the previous literature and empirical research. Put differently, it has the potential of identifying blind spots that for some reason have received less attention from researchers and experts. In our analysis, we subsequently categorized and organized the self-generated answers that our participants provided us with into meaningful categories (for a similar approach in a different domain, see Hepper, Ritchie, Sedikides, & Wildschut, 2012).

We used this bottom-up approach to tap people's associations, both for the decision of looking into their pension savings (which is more a decision to gather information) and for the decision of adjusting their pension plan. On the one hand, one might expect that how such associations relate to checking their pension savings may overlap with how they relate to adjusting versus not adjusting their pension plan. For example, if an important association for looking into one's pension savings would be a concern about one's future, such association could also surface as a determinant of adjusting versus not adjusting one's pension plan. It is also possible, however, that some associations are more important in the checking phase than in the adjustment phase. For example, one could imagine that looking into one's pension is more than adjusting connected to a positive feeling – if one is assured that one's pension is adequate. For the actual adjustment decision people may anticipate more negative feelings (such as anticipated regret of insufficient preparation, see Croy, Gerrans, & Speelman, 2015; or anticipated regret of making the wrong adjustment, see Rickwood, White, & Hughes, 2007). The current literature does not provide us with definitive cues about such differences. For that reason, too, a bottom-up approach is appropriate in this case.

2. Approach

In this Netspar Industry Paper we present the results of an online study among 300 English-speaking participants aged between 18 and 65, in which we analyzed their associations regarding their financial decisions. Half of the participants were residents, the other half were residents of the US. In this online study, we assessed their associations regarding decisions in four financial domains: pension saving, healthcare plan, utility services, and banking. Participants were randomly presented with two of these four domains. We focus here on the findings obtained from those participants who were presented with the pension saving domain¹. These participants all listed their thoughts and beliefs, emotions and feelings, behaviors and actions, and motivations regarding their decisions in this domain. Their answers to these open-ended questions were coded and categorized. The text of the questionnaire is included in Appendix 1.

1 The data we present here are part of a larger study that is funded by Netspar, in which we aim to identify the key associations regarding a broad range of financial decisions, not just pension decisions. The ultimate aim of this study is to develop a scale to measure individual differences in financial inertia, i.e., the inclination to avoid making financial decisions.

3. Method

3.1 Sample

Participants were recruited via the research platform Academic Prolific for an online study on experiences with financial decision-making. Academic Prolific is one of the largest research platforms, with a good reputation for providing high-quality data (for a recent test see Douglas, Ewell, & Brauer, 2023). The respondents live in OECD countries, mostly in the UK and the US. This explains the composition of our sample; we strove for an equal number of participants from both countries, although it was not our goal to compare the UK and the US. For their participation, British participants received £1.89 (21 minutes), while American participants received £2.19 (25 minutes)². The pre-set inclusion criteria for participation were to invite 300 participants, aged between 18 and 65, with English as first language, non-student, both nationality and current residence UK ($N = 150$) or US ($N = 150$). The data were collected in March 2020. The final sample that we analyze here consisted of 138 participants, who answered the questions with respect to their pension saving decisions. Table 1 includes the main demographic characteristics of this sample.

Table 1. Demographics final sample.

Gender,	
Male	$n = 55$
Female	$n = 81$
Other	$n = 2$
Average age, in years	34.7 ($SD = 12.1$; range 18–66)
Residence	
UK	$n = 71$
US	$n = 67$

3.2 Materials and Procedure

The questionnaire was developed using Qualtrics. After providing their informed consent to take part in the survey, participants first read a brief introduction in which they learned that we were interested in the associations they had with respect to four types of financial decisions: pension, healthcare, utility services, and banking services.

- 2 The payments to the US participants are also given in British pounds because Prolific pays all respondents in pounds, which are then converted into the currency of the respondent's home country. Exchange rate at the date of the questionnaire posting (March 30, 2020: 1 USD = £ 1.2393).

For their pension decisions, which this Netspar Industry Paper focuses on, we distinguished between two types of decisions: the decision *whether to look into one's pension savings*, and the decision *whether to adjust one's pension planning*. For each, we probed participants to list (a) their thoughts or beliefs, (b) their behaviors or actions, (c) their emotions or feelings, and (d) their motivations. For each question, participants could list up to five answers. If more than one association was included in the answer, these were split.

In addition, we obtained self-reported information on the participants' demographic aspects (gender, age, income, and residence, all separate for UK and US). After this, participants were asked to self-report whether they had looked into their pension in the previous twelve months and whether they had adjusted their pension during that time. At the end of the study, all participants were debriefed and thanked for taking part in the survey.

3.3 Categorizing the responses

The 138 participants generated in total 889 thoughts or beliefs, 829 behaviors or actions, 937 emotions or feelings, and 863 motivations (mean number of entries = 25.5; $SD = 10.2$). The number of entries that participants provided was a bit higher for the decision whether to look into their pension savings ($n = 1867$), compared to the decision whether to adjust their pension planning ($n = 1651$).

A code tree (stepwise coding scheme) was created by eight coders, for which we followed the procedure in Hepper et al. (2012); this resulted in 109 categories. A high Cohen's Kappa ($\kappa = 0.949$; $N = 15856$, $z = 733$, $p < .001$) indicated high convergence/agreement in coding, at a level that is judged to be "almost perfect" (see Landis & Koch, 1977). Given the high convergence, the labels assigned by one of the coders were used (i.e., coder 2, whose coding we agreed most with). To enable further analyses, the number of categories was reduced to 20, by grouping the 109 categories into meaningful higher-order (i.e., overarching) categories.

4. Results

4.1 Overarching categories

Table 2 shows the 20 overarching categories, with an example for each category.

Table 2. Overarching categories for associations related to pension decisions, with an illustrative exemplary response.

Category	Exemplary response
Negative feelings, anxiety, worry, frustration	<i>Anxious about making a change</i>
Future	<i>Thinking about the future</i>
Confusion, misunderstanding, uncertainty	<i>Confused about my options</i>
Careful and considered decision-making	<i>Compare and weigh different options</i>
Positive feelings and motivation	<i>Feeling proud about planning one's future</i>
Money, financial situation	<i>Orientation on money</i>
Disinterest, unmotivated, procrastination	<i>Cannot be bothered</i>
Need for safety and security	<i>Financial security</i>
Cost or value of service	<i>Quality of services</i>
Evaluation of current situation	<i>Does the current plan cause problems</i>
No choices	<i>I cannot adjust</i>
Motivation by others	<i>My significant other</i>
Hassle	<i>Hassle of changing</i>
Job situation	<i>Job security</i>
Accessibility of service	<i>Ease of use</i>
Spending money	<i>Thinking of spending habits</i>
Health	<i>Family health history</i>
Characteristics of provider	<i>Is the service trustworthy and reliable</i>
Changing situation	<i>Growing family</i>
Not applicable ¹	

1. The category 'not applicable' included responses that could not be meaningfully associated with the question or topic at hand. These were excluded from further analyses

4.2 Frequencies and rank ordering of overarching categories

As a first analysis, we ranked the 20 overarching categories (leaving out the category 'not applicable') by how often associations were assigned to these categories. We created separate orderings for associations mentioned with regard to the decision whether to check one's pension savings, and the decision whether to adjust one's pension plan. Table 3 shows the rankings for the two decisions.

A first conclusion that can be drawn from Table 3 is that the rankings are very similar for both types of pension decisions (inspecting the savings and adjusting the plan). This was also evidenced by the high Spearman's rank correlation Rho Kendall's value for this comparison ($\rho = .971, p < .001$). The correlation between the frequencies for these 20 categories, observed under both types of pension decisions, further confirms the high similarity (Pearson $r = .97, p < .001$).

Table 3. Ranking and frequency of categorized associations, separate for associations of looking into one's pension and for adjusting one's pension.

	Looking into Pension		Adjusting Pension	
	Ranking	n (%) ¹	Ranking	n (%)
Negative feelings, anxiety, worry, frustration	1	115 (83.3)	1	102 (73.9)
Future	2	92 (66.7)	5	72 (52.2)
Confusion, misunderstanding, uncertainty	3	86 (62.3)	4	76 (55.1)
Careful and considered decision-making	4	81 (58.7)	3	79 (57.2)
Positive feelings and motivation	5	80 (58.0)	2	82 (59.4)
Saving or gaining money	6	58 (42.0)	6	60 (43.5)
Money, financial situation	7	55 (40.0)	8	47 (34.1)
Disinterest, unmotivated, procrastination *	8	55 (40.0)	10	35 (25.4)
Need for safety and security	9	44 (31.9)	9	41 (29.7)
Cost or value of service	10	36 (26.1)	7	49 (35.5)
Evaluation of current situation	11	28 (20.3)	11	29 (21.0)
No choices	12	28 (20.3)	12	22 (15.9)
Motivation by others	13	21 (15.2)	13	22 (15.9)
Hassle	14	17 (12.3)	14	20 (14.5)
Job situation	15	15 (10.9)	15	12 (8.7)
Accessibility of service	16	15 (10.9)	16	12 (8.7)
Spending money	17	8 (6.0)	18	7 (5.7)
Health	18	7 (5.7)	17	11 (8.0)
Characteristics of provider	19	7 (5.7)	20	5 (3.6)
Changing situation	20	5 (3.6)	19	6 (4.3)
Not applicable ²		60		68

1. % denotes the percentage of total number participants who provided an entry in the specified category ($n/138 * 100\%$).

* For categories with an asterisk the percentage differed significantly between 'Looking into one's pension' and 'Adjusting one's pension' (χ^2 -analyses, $p < .05$).

If we zoom in on the top five categories, it is clear that the participants provided us with a mix of associations in deciding whether to look into their pension savings, or whether to adjust their pension plans. For both decisions, negative feelings dominate, which is a common finding in behavioral science (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Interestingly, however, a considerable number of participants also mentioned positive feelings. For the decision whether to adjust one's pension, positive emotions were the second most mentioned category. That associations regarding one's future are included in the top five ranking fits with the ultimate goal of pensions, namely securing future income. This association was mentioned significantly more often when participants considered whether to look into their pension than when they considered whether to adjust their pension ($\chi^2(1) = 6.01, p = .014$). The top five categories also indicate that uncertainty is an important association, as well as the motivation to make a careful and considerate decision, which fits with the goal of planning.

Of the other categories that were regularly mentioned (rankings 6 to 10) there is one that conceptually stands out, namely the association of 'disinterest, unmotivated, and procrastination'. This reflects, for at least for a subset of the participants, that pensions are not of great interest. Moreover, this was more often mentioned by participants in considering whether to look into their pension than when considering whether to adjust their pension ($\chi^2(1) = 6.60$, $p = 0.10$). We will further elaborate on the issue of disinterest in our Discussion (section 5).

4.3 Relation between associations to look into pension, and the decision to adjust one's pension

We first examined whether our participants reported having looked into their pension savings and whether they reported having adjusted their pension planning. The findings show that 44.2% (61 of 138) of the participants reported having looked into their pension savings; 54.3% (75 of 138) reported not having looked into this, and 1.4% preferred (2 of 138) not to answer the question. These findings are comparable to those reported in a Dutch sample (Wijzer in Geldzaken, 2016).

The number of participants who reported having adjusted their pension plans was understandably lower: 13.5% (20 out of 138) reported that they had done so, while 83.3% (115 of 138) reported not having done so; 2.2% (3 out of 138) preferred not to answer.

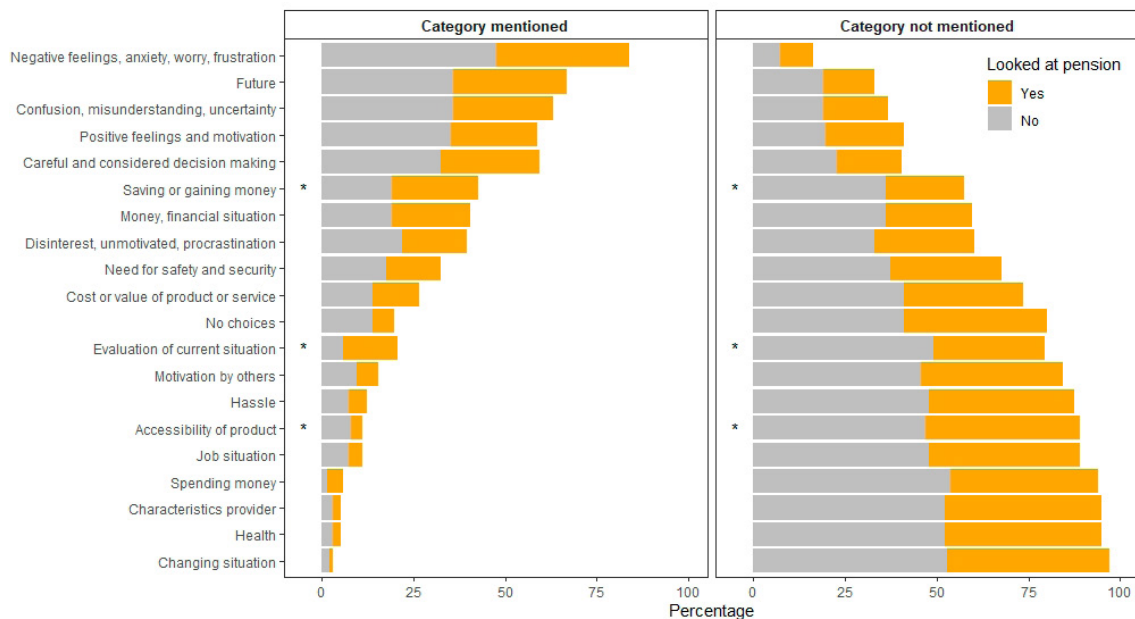
Associations and looking into one's pension

We then analyzed for each association whether participants who had mentioned that association, versus those who had not, also reported that they had looked into their pension, versus those who had not. Figure 1 depicts for each category, what percentage of the participants mentioned the category, subdivided into those who had versus those who had not looked into their pension.

The left panel bars of Figure 1 show the percentages of participants who mentioned a specific category; we then distinguished whether these participants had (yellow bar) or had not looked (grey bar) into their pension. The right panel bars show the percentage of participants who did not mention that category, where we again distinguished whether these participants had (yellow bar) or had not looked (grey bar) into their pension.

For example, the top row refers to the category mentioned most often, 'Negative feelings, anxiety, worry, and frustration'. The left panel depicts the percentage of respondents who mentioned that category, while the right panel depicts the remaining participants, who did not mention this category. The yellow and grey bars then

Figure 1. Percentage of participants who mention overarching categories for looking versus not looking into one's current pension.



Note: For categories with an asterisk, the logistic regression analysis indicated that mentioning versus not mentioning the category was a significant predictor ($p < .05$) of the decision whether to look at one's pension. Participants who indicated that they preferred not to answer whether they had looked at their pension were excluded for this analysis ($n = 2$).

show how these percentages are distributed over participants who did versus did not look into their pension.

We explored how the mention of the different categories was predictive of the decision of looking into one's pension savings. We did so by applying a logistic regression, in which we regressed the participants' decision of having looked into their pension savings (0 = no; 1 = yes) on whether the participants mentioned any of the 20 categories (0 = not mentioned; 1 = mentioned), supplemented with the demographic information on gender, age, and residence. These results should be interpreted with caution, given the large number of predictors with sometimes low frequencies, and the low numbers of participants who reported having looked into or adjusted their pensions. Below we report the significant results. In Figure 1, these are marked with an asterisk. The complete regression results are included in Appendix 2, Table A1.

The analysis showed that the decision to look into one's pension was positively related to participants' associations with the evaluation of the current situation ($B = 1.97, SE = 0.62, Z = 3.19, p = .001$), and to a lesser extent to saving or earning money ($B = 1.14, SE = 0.51, Z = 2.26, p = .02$). This suggests that these categories may

be motivators for action (i.e., to look into their pension to save money or to evaluate their current situation). The decision related negatively to mentioning the accessibility of the product ($B = -1.88$, $SE = 0.88$, $Z = -2.14$, $p = .03$). This suggests that this association may discourage action and may reflect that people associate this category with inaccessibility, thereby discouraging action.

In addition, the regression analysis showed that the decision whether to look into one's current pension savings was significantly predicted by age ($B = 0.05$, $SE = 0.02$, $Z = 2.53$, $p = .01$) and residence ($B = -1.36$, $SE = 0.53$, $Z = -2.57$, $p = .01$). The relationship with age indicated that older participants more often reported having looked more into their pension than younger participants. The relationship with residence indicated that US participants looked less into their pensions than UK participants.

Categories and adjusting one's pension

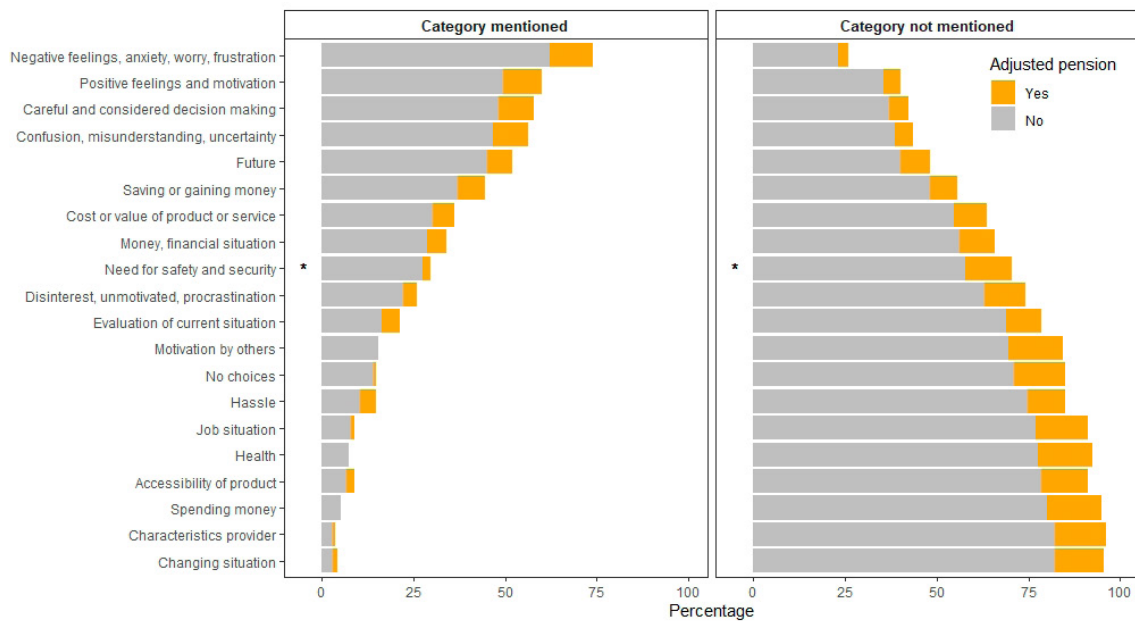
We analyzed the relation between the categories and the decision to adjust one's pension, doing so similarly as for the association with the decision to look into one's pension.

The left panel bars of Figure 2 again show the percentages of participants who mentioned a specific category, and the right panel bars again show the percentages of participants who did not mention that category. This time, however, we distinguished between whether these participants had (yellow bar) or had not adjusted (grey bar) their pension. Similar to Figure 1, the asterisks show whether we observed, for a specific category, a significant difference in the likelihood to take action, now referring to adjusting one's pension.

We explored how the mention of the different categories was predictive of the decision to adjust one's pension. We did so applying a logistic regression, in which we regressed the participants' decision to adjust pension settings (0 = no; 1 = yes) on whether they mentioned any of the 20 categories (0 = not mentioned; 1 = mentioned), supplemented with the demographic information on gender, age, and residence. Again, we wish to stress that these results should be interpreted with caution. The complete regression results are included in Appendix 2, Table A2.

This time we only observed a significant difference for the need for safety and security, which is marked by an asterisk in Figure 2. The decision to adjust one's pension was only significantly – and negatively – predicted by the association of need for safety and security ($B = -2.20$, $SE = 0.89$, $Z = -2.48$, $p = .01$). Participants who mentioned safety and security reported having adjusted their pension less often than participants who did not mention this category. A possible explanation for this finding may be that people who associate pension-related decisions with safety and

Figure 2. Percentage of participants who mentioned overarching categories, for adjusting versus not adjusting one's current pension.



Note: For categories with an asterisk, the logistic regression analysis indicated that mentioning versus not mentioning the category was a significant predictor ($p < .05$) of the decision to adjust one's pension. Participants who had indicated that they preferred not to answer whether they had adjusted their pension were excluded from this analysis ($n = 3$).

security consider changing their pension more risky, an interpretation that would connect this finding to recent research which shows that people who are risk averse are less likely to change their status quo (Bekir & Doss, 2020).

5. Discussion

In this Netspar Industry Paper we presented the results of a bottom-up inquiry into the associations that people have regarding their pensions, that is, when deciding whether to look into their pension savings and whether to adjust their pension planning to secure more (or less) savings for when they retire. This inquiry indicated that many different associations come to people's minds when considering these two types of decisions. Many can be related to variables that are typically part of studies on pension and retirement planning. In that sense, the bottom-up approach serves to corroborate factors that are also considered in the existing literature. Others are new and thereby may be considered one of the benefits of the bottom-up approach in terms of suggesting factors that might otherwise be overlooked. Both observations are important. It is important to know that factors that are considered important in the scientific literature resonate with how lay people perceive their decisions, just as it is important to know that lay persons sometimes bring up things that have not received a prominent place in the literature.

As to the corroboration of existing literature, the association with concern for one's future certainly concurs with empirical findings that suggest a pivotal role for this in retirement planning (e.g., Hershey et al., 2007). In addition, it is noteworthy that negative emotions and feelings dominate in the associations that people have with their pension decisions. People associate their pension decisions with worry and anxiety. This may of course reflect the uncertainties that people nowadays face, being confronted with ageing and changing pension structures. The association of anxiety fits with its assumed key role in retirement planning (Penn & Lent, 2020).

One of the more striking findings of our inquiry, regarding associations that have received less attention in the literature, is that it also indicated the potential role of positive emotions. It is interesting to compare these findings with the Netspar Industry Paper on emotions in pension service interactions by Eberhardt, Henkel, and Hoet (2020). Their analyses indicated that negative emotions dominated in these interactions, while positive emotions were rare. It should be noted, however, that their study did not address the emotions that people experience when considering their pension, as it focused on how people communicated with their service agents. It stands to reason that negative emotions (e.g., uncertainty, fear, regret) may be a more important driver for people to contact pension service agents (cf. Baumeister et al., 2001) and that positive emotions are less of a driver for such calls. Another issue to consider is that, in their study, the emotions were assessed by the service agents who

took the call, rather than by the callers. This setting is markedly different from the setting that we used.

The focus on negative rather than on positive emotions in pension decisions, however, is also apparent in other studies that more directly compare to this Netspar Industry Paper. Eberhardt, Post, Hoet, and Brügger (2022) recently published a conceptual model to understand people's engagement in retirement decisions. Their model specifically aims to capture people's engagement in collecting information, which includes regularly checking the sufficiency of retirement build-up for the living standard that they desire during retirement. The model did include retirement anxiety as an emotional factor that could contribute to retirement engagement, but it did not include positive emotions.³

Our findings make one wonder why positive emotions are so often overlooked. On a more general level, they concur with the broader observation that emotion research tends to concentrate more on negative than on positive emotions (Fredrickson, 2004). It could, however, also signal a biased approach, also on the part of researchers and experts, that pension decisions are assumed to be surrounded with negative associations. Stated differently, if we did not include positive emotions in our pension surveys, we would not be able to determine their potential relevance. If people also see their pensions in a positive light (and follow-up research should seek to address this matter), then measures aimed at increasing pension involvement could design new interventions (e.g., to increase or appeal to positive associations).

Our main purpose in this paper was to categorize the associations participants had with their pension. For this purpose, the current sample size was adequate, and it provided us with new insights. As we noted above, the results we obtained with respect to the relation with the actual decisions that our participants made should be seen as exploratory and interpreted with caution. Despite these limitations, our exploratory findings do suggest that associations may be different for decisions of looking into one's pension and decisions of adjusting one's pension. For example, as our preliminary findings suggest, safety concerns may be a stronger determinant of a decision to change one's pension than of a decision to look into one's pension. Accessibility of pension services may be more predictive of whether people look into their pensions than of whether they adjust their pensions. With all due reservations against overinterpretation of these findings, we suggest that it may be relevant for future research to more explicitly distinguish between these two types of decisions.

3 The model included trust in one's provider as an emotional factor, which could be seen as a positive contributor. However, we would not characterize trust as an emotion.

A call for future research is also warranted regarding other findings in the current survey. In this respect, we feel that the observed disinterest in pension decisions may require additional attention. This is not only based on our current findings, but it is also apparent in the surveys mentioned at the beginning of this paper (Bell, 2016; Wijzer in Geldzaken, 2016) and in other research in the Dutch market (e.g., Krijnen et al., 2016). In our Netspar-funded project "Development and tests of a model for inertia in retirement decisions" we aim to elaborate on this by constructing a questionnaire that taps the main determinants of the concept. Such questionnaire is based on a similar bottom-up approach as we presented here, and it will be used to predict people's actual rather than self-reported pension decisions in the context of the Netherlands. These follow-up studies will also enable us to include variables that we did not include in the current study but which could certainly be relevant, such as people's occupational status (e.g., distinguishing between employment and self-employment).

Finally, our main aim of the current study was to provide a structured and systematic inventory of the associations people in general may have regarding their pensions. For this purpose we used a combined UK and US sample. Studying and/or explaining differences between these two countries was beyond the scope of the current article. The limited number of cases for each country would also not allow reliable comparison. This does not mean that we feel that between-country differences are unimportant. Pensions differ from country to country (see e.g., OECD, 2021, 2022), and so may people's associations. In this respect it would be interesting for future research to zoom in on possible differences between the UK and the US, but with larger samples. This could also be useful to test whether the residence effect we observed in the current sample, with US residents reporting lower levels of looking into their pensions than UK residents, is robust.

It would also be interesting to expand the approach to other countries. For example, it would also be interesting for future Netspar research to investigate to what extent associations can be generalized to the Netherlands. The Dutch pension system is generally regarded as one of the best systems worldwide in terms of adequacy, sustainability, and integrity. To illustrate, in its recent comparison of 44 countries, the Global Pension Index 2022 by the Mercer CFA Institute ranked the Netherlands 2nd, the UK 10th, and the US 20th (Mercer, 2022). The quality of pension systems could, of course, affect peoples' associations. But how exactly remains to be tested. Would the sense of security about having a good pension system lead, for example, to fewer negative and more positive associations, and possibly to lower levels of looking into one's pension? We could envisage such differences. However, one should also

be aware that associations are probably not just a function of the overall quality of pension systems. It will no doubt also matter to what extent pensions consist of state pensions, occupational pensions, and personal pensions. These three pillars of retirement income differ between countries, as documented in the OECD Report 'Pensions at a Glance' (OECD, 2021). While the Netherlands and the UK show a very similar distribution over the three pillars, the US relies less on occupational pensions and more on personal pensions and savings. Moreover, pension systems around the globe are currently changing rapidly. The current pension reforms in the Netherlands will, we assume, increase interest in one's pension and probably lead to new uncertainties. It may thus more than ever be relevant to monitor differences between countries. In a broader perspective, it would also be interesting to further expand the investigations and to include not only Western countries, such as the US, UK and the Netherlands, but also non-Western countries.

References

- Balasuriya, J., Gough, O., & Vasileva, K. (2014). Do optimists plan for retirement? A behavioural explanation for non-participation in pension schemes. *Economics Letters*, *125*, 396–399.
- Balasuriya, J. & Yang, Y. (2019). The role of personality traits in pension decisions: Findings and policy recommendations. *Applied Economics*, *51*, 2901–2920.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323–370.
- Bekir, I. & Doss, F. (2020). Status quo bias and attitude towards risk: An experimental investigation. *Managerial and Decision Economics*, *41*, 827–838.
- Bell, C. (2016). *Survey: Most Americans have financial regrets, particularly about saving*. Retrieved from <http://www.bankrate.com/finance/consumer-index/financial-security-charts-0516.aspx>.
- Carroll, G., Choi, J., Laibson, D., Madrian, B., & Metrick, A. (2009). Optimal defaults and active decision. *Quarterly Journal of Economics*, *124*, 1639–1674.
- Clark, G. L. & Strauss, K. (2008). Individual pension-related risk propensities: The effects of socio-demographic characteristics and a spousal pension entitlement on risk attitudes. *Ageing & Society*, *28*, 847–874.
- Croy, G., Gerrans, P., & Speelman, C. P. (2015). A mediating role for anticipated regret in predicting retirement savings intention between groups with (without) past behaviour. *Australian Journal of Psychology*, *67*, 87–96.
- Douglas, B. D., Ewell, P. J., & Brauer, M. (2023). Data quality in online human-subjects: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA. *PLoSOne*, *18*(3): e027920.
- Eberhardt, W., Henkel, A., & Hoet, C. (2020). *Emoties en technologie in pensioendienstverlening*. Netspar Design Paper 144.
- Eberhardt, W., Post, T., Hoet, C., & Brügggen, E. (2022). Exploring the first steps of retirement engagement: A conceptual model and field evidence. *Journal of Service Management*, *33*, 1–26.
- Elinder, M., Hagen, J., Nordin, M., & Säv-Söderbergh (2022). Who lacks pension knowledge, why and does it matter? Evidence from Swedish retirement savers. *Public Finance Review*, *50*, 379–435.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *359*(1449), 1367–1378.
- Hepper, E. G., Ritchie, T. D., Sedikides, C., & Wildschut, T. (2012). Odyssey's end: lay conceptions of nostalgia reflect its original Homeric meaning. *Emotion*, *12*, 102–119.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2007). Mapping the minds of retirement planners: A cross-cultural perspective. *Journal of Cross-Cultural Psychology*, *38*, 361–382.
- Krijnen, J. M. T., Breugelmans, S. M., & Zeelenberg, M. (2016). *Overcoming inertia in retirement saving: Why now and how?* (Netspar Industry series). NETSPAR.
- Krijnen, J. M. T., Zeelenberg, M., & Breugelmans, S. M. (2015). Decision importance as a cue for deferral. *Judgment and Decision Making*, *10*, 407–415.
- Krijnen, J. M. T., Zeelenberg, M., Breugelmans, S. M. & Van der Schors, A. (2022). Intention and action in retirement preparation. *Behavioral Public Policy*, *6*(2), 191–212.
- Landis, J. R. & Koch, G. G. (1977). An application of hierarchical kappa-type statistics in the assessment of majority agreement among multiple observers. *Biometrics*, *33*, 363–374.
- Maloney, M. & McCarthy, A. (2017). Understanding pension communications at the organizational level: insights from bounded rationality theory & implications for HRM. *Human Resource Management Review*, *27*, 338–352.

- Mercer (2022). Mercer CFA Institute Global Pension Index. Retrieved from <https://www.mercer.com/our-thinking/global-pension-index-2021.html>.
- OECD (2021). *Pensions at a glance 2021: OECD and G20 indicators*. Retrieved from <https://www.oecd.org/publications/oecd-pensions-at-a-glance-19991363.htm>.
- Penn, L. T. & Lent, R. W. (2020). Retiring or rewiring? Test of a social cognitive model of retirement planning. *Journal of Counseling Psychology*, 68, 538–549.
- Rickwood, C. M., White, L., & Hughes, K. (2007). Retirement: why delay? Insights into the consumer decision-making process. In M. Thyne, K. R. Deans, & J. Gnoth (Eds.), *ANZMAC 2007: proceedings : 3Rs – reputation, responsibility and relevance* (pp. 2300–2306). University of Otago.
- Rubaltelli, E. & Lotto, L. (2021). Nudging freelance professionals to increase their retirement pension fund contributions. *Judgment and Decision Making*, 16, 551–565.
- Solinge, H., & Henkens, K. (2017). Older workers' emotional reactions to rising retirement age: The case of the Netherlands. *Work, Aging and Retirement*, 3, 273–283.
- Van der Schors, A. & Warnaar, M. (2015). *De Nederlanders en hun pensioen: Hoe mensen financieel zijn voorbereid op hun pensioen*. NIBUD Report.
- Van Hekken, A., Hoofs, J. & Brüggem, E.C. (2022). Pension participants' attitudes, beliefs, and emotional responses to the new Dutch pension system. *The Economist*, 170, 173–194.
- Wiener, J. & Doescher, T. (2008). A framework for promoting retirement savings. *Journal of Consumer Affairs*, 42, 137–164.
- Wijzer in Geldzaken (2016), *Pensioenmonitor*, Retrieved from <https://www.wijzeringeldzaken.nl/platform-wijzeringeldzaken/publicaties/wijzer-in-geldzaken-pensioenmonitor-2016.pdf>.
- World Economic Forum (2017). *We'll live to 100 – How can we afford it?* Retrieved from https://www3.weforum.org/docs/WEF_White_Paper_We_Will_Live_to_100.pdf.
- World Economic Forum (2018). *How we can save (for) the future*. Retrieved from https://www3.weforum.org/docs/WP_How_We_Can_Save_for_Our_Future_report_2018.pdf.

Appendix 1: The text of the questionnaire

Below we report the text as presented to the participants regarding their pension decisions (the texts for the other three domains were similar). Also note that for each open question, participants were presented with 5 boxes in which they could then type their answers. In the texts below these boxes are not included, but represented by 5 dots (.....)

Overview survey

During this part of the survey, we will ask you questions about your experiences with financial decision making. To this end, we will ask you questions about 2 financial domains. For each domain, we will ask you 8 open questions. As a guideline, we advise you to take about 1 minute to answer each open question.

Introduction pension

In this part of the survey, we are interested in your experience with pension decisions. Some people have the option to change one or more of their pension settings while others might have no choice in the matter. For example, some people can select their monthly inlay amount or choose a risk profile that determines how much risk the pension fund can take while investing the pensions. In contrast, people who have no choice with regards to their pension have a default setting that has been preselected by their pension provider. We are interested in your thoughts and beliefs, emotions and feelings, behaviors and actions, and motivation with respect to your pension decisions; also if you have not looked into your options or made an adjustment. Please answer the following questions by typing as many responses as you can think of in the response boxes below the questions. Use only one response box per answer. If you can think of more than five responses, you can put multiple responses in one of the boxes. If you can think of less than five examples, that is fine too.

Thoughts and beliefs

When you consider whether or not to look into your pension, what do you think about? Try to be as specific as possible. For example, instead of "nothing", explain what you think about instead.

.....

When you consider whether or not to adjust your pension, what do you think about?

.....

Emotions and feelings

When you consider whether or not to look into your pension, what do you feel? What emotions would describe you best? Try to be as specific as possible. For example, instead of "good" or "bad", describe the specific emotions you experience (e.g., fearful, anxious, happy, angry) or the feeling you have (e.g., empowered, sad, disinterested).

.....

When you consider whether or not to adjust your pension, what do you feel? What emotions would describe you best?

.....

Behaviors and actions

When you consider whether or not to look into your pension, which behaviors would describe you best? Try to be as specific as possible. For example, instead of "nothing", explain what you do instead.

.....

When you consider whether or not to adjust your pension, which behaviors would describe you best?

.....

Motivation

When you consider whether or not to look into your pension, what motivates you? Try to be as specific as possible. For example, why would you make this decision? Do you want to make this decision? What would prompt you to make this decision?

.....

When you consider whether or not to adjust your pension, what motivates you?

.....

demographics

Thank you for filling in the open questions about your experiences with financial decision making. In this (short) final part of the survey, we are interested in a select number of background variables and information regarding your past behavior with regards to financial decisions.

What is your gender?

Male

Female

Other

What is your age in years?

Age in years

Do you live in the United States of America or the United Kingdom?

USA

UK

I don't live in the USA or UK

Do you receive your income in US Dollars or British Pounds?

US Dollars (\$)

British Pounds (£)

I receive my income in a different currency

What is your (estimated) net monthly income? This includes benefits.

0-1000

1001-2000

2001-3000

3001-4000

4001-5000

5001-6000

6001-7000

7001-8000

8001-9000

9001-10000

more than 10000

Prefer not to say

Past action

In this part of the survey, we are interested in whether or not you looked into specific financial domains. These questions are with respect to the past 12 months.

Did you look into your pension?

No

Yes

Prefer not to answer

Did you adjust your pension?

No

Yes

Prefer not to answer

Appendix 2: Complete sets of results of the logistic regressions that predict looking into and adjusting one's pension

Table A1. Logistic regression results: Regressing decision to look into one's pension on demographic variables and the 20 categories.

	<i>B</i>	<i>SE</i>	<i>Z</i>	<i>p</i>
(Intercept)	-1.478	1.131	-1.306	0.192
Age	0.049	0.019	2.527	0.012
Residence	-1.358	0.529	-2.566	0.010
Gender Dummy 1 (male)*	0.965	0.500	1.930	0.054
Gender Dummy 2 (other)*	-13.529	1455.398	-0.009	0.993
Accessibility of product	-1.885	0.880	-2.142	0.032
Careful and considered decision-making	0.185	0.489	0.378	0.706
Changing situation	-0.777	1.400	-0.555	0.579
Characteristics of provider	-0.515	1.073	-0.4797	0.631
Confusion, misunderstanding, uncertainty	0.060	0.501	0.119	0.906
Cost or value of product or service	-0.515	0.603	-0.854	0.393
Disinterest, unmotivated, procrastination	0.434	0.532	0.816	0.415
Evaluation of current situation	1.971	0.617	3.194	0.001
Future	0.120	0.492	0.243	0.808
Hassle	0.091	0.779	0.117	0.907
Health	0.404	0.970	0.417	0.677
Job situation	0.287	0.862	0.333	0.739
Money, financial situation	0.638	0.501	1.273	0.203
Motivation by others	-0.565	0.636	-0.888	0.375
Need for safety and security	0.069	0.512	0.136	0.892
Negative feelings, anxiety, worry, frustration	-1.093	0.678	-1.611	0.107
No choices	-1.078	0.658	-1.638	0.101
Positive feelings and motivation	-0.625	0.483	-1.294	0.196
Saving or gaining money	1.142	0.506	2.257	0.024
Spending money	1.441	0.997	1.446	0.149

* Dummy-coding was used with female as the reference category

Table A2. Logistic regression results: Regressing decision to adjust one's pension on demographic variables and the 20 categories.

	<i>B</i>	<i>SE</i>	<i>Z</i>	<i>p</i>
(Intercept)	-3.096	1.464	-2.114	0.035
Age	0.033	0.026	1.292	0.196
Residence	-0.831	0.685	-1.212	0.226
Gender Dummy 1 (male)*	0.019	0.694	0.028	0.978
Gender Dummy 2 (other)*	-16.386	10754.013	-0.002	0.999
Accessibility of product	-0.0002	1.136	-0.0002	1.000
Careful and considered decision-making	0.771	0.710	1.086	0.278
Changing situation	2.794	1.682	1.661	0.097
Characteristics of provider	-0.566	1.562	-0.362	0.719
Confusion, misunderstanding, uncertainty	0.052	0.645	0.080	0.936
Cost or value of product or service	0.034	0.794	0.043	0.966
Disinterest, unmotivated, procrastination	0.503	0.790	0.636	0.525
Evaluation of current situation	0.336	0.779	0.430	0.667
Future	-0.226	0.670	-0.338	0.736
Hassle	0.501	0.887	0.565	0.572
Health	-19.119	2736.354	-0.007	0.994
Job situation	-0.377	1.466	-0.257	0.797
Money, financial situation	0.236	0.742	0.318	0.750
Motivation by others	-18.282	1981.402	-0.009	0.993
Need for safety and security	-2.199	0.886	-2.481	0.013
Negative feelings, anxiety, worry, frustration	0.056	0.860	0.065	0.945
No choices	-1.621	1.195	-1.357	0.175
Positive feelings and motivation	0.959	0.723	1.327	0.184
Saving or gaining money	0.013	0.653	0.021	0.984
Spending money	-17.921	3296.402	-0.005	0.996

* Dummy-coding was used with female as the reference category

OVERZICHT UITGAVEN IN DE DESIGN PAPER SERIE

- 1 Naar een nieuw pensioencontract (2011)
Lans Bovenberg en Casper van Ewijk
- 2 Langlevenrisico in collectieve pensioencontracten (2011)
Anja De Waegenaere, Alexander Paulis en Job Stigter
- 3 Bouwstenen voor nieuwe pensioencontracten en uitdagingen voor het toezicht daarop (2011)
Theo Nijman en Lans Bovenberg
- 4 European supervision of pension funds: purpose, scope and design (2011)
Niels Kortleve, Wilfried Mulder and Antoon Pelsser
- 5 Regulating pensions: Why the European Union matters (2011)
Ton van den Brink, Hans van Meerten and Sybe de Vries
- 6 The design of European supervision of pension funds (2012)
Dirk Broeders, Niels Kortleve, Antoon Pelsser and Jan-Willem Wijckmans
- 7 Hoe gevoelig is de uittredeleeftijd voor veranderingen in het pensioenstelsel? (2012)
Didier Fouarge, Andries de Grip en Raymond Montizaan
- 8 De inkomensverdeling en levensverwachting van ouderen (2012)
Marieke Knoef, Rob Alessie en Adriaan Kalwij
- 9 Marktconsistente waardering van zachte pensioenrechten (2012)
Theo Nijman en Bas Werker
- 10 De RAM in het nieuwe pensioenakkoord (2012)
Frank de Jong en Peter Schotman
- 11 The longevity risk of the Dutch Actuarial Association's projection model (2012)
Frederik Peters, Wilma Nusselder and Johan Mackenbach
- 12 Het koppelen van pensioenleeftijd en pensioenaanspraken aan de levensverwachting (2012)
Anja De Waegenaere, Bertrand Melenberg en Tim Boonen
- 13 Impliciete en expliciete leeftijdsdifferentiatie in pensioencontracten (2013)
Roel Mehlkopf, Jan Bonenkamp, Casper van Ewijk, Harry ter Rele en Ed Westerhout
- 14 Hoofdlijnen Pensioenakkoord, juridisch begrepen (2013)
Mark Heemskerk, Bas de Jong en René Maatman
- 15 Different people, different choices: The influence of visual stimuli in communication on pension choice (2013)
Elisabeth Brügggen, Ingrid Rohde and Mijke van den Broeke
- 16 Herverdeling door pensioenregelingen (2013)
Jan Bonenkamp, Wilma Nusselder, Johan Mackenbach, Frederik Peters en Harry ter Rele
- 17 Guarantees and habit formation in pension schemes: A critical analysis of the floor-leverage rule (2013)
Frank de Jong and Yang Zhou
- 18 The holistic balance sheet as a building block in pension fund supervision (2013)
Erwin Fransen, Niels Kortleve, Hans Schumacher, Hans Staring and Jan-Willem Wijckmans
- 19 Collective pension schemes and individual choice (2013)
Jules van Binsbergen, Dirk Broeders, Myrthe de Jong and Ralph Koijen
- 20 Building a distribution builder: Design considerations for financial investment and pension decisions (2013)
Bas Donkers, Carlos Lourenço, Daniel Goldstein and Benedict Dellaert

- 21 Escalerende garantietoezeggingen: een alternatief voor het StAr RAM-contract (2013)
Servaas van Bilsen, Roger Laeven en Theo Nijman
- 22 A reporting standard for defined contribution pension plans (2013)
Kees de Vaan, Daniele Fano, Herialt Mens and Giovanna Nicodano
- 23 Op naar actieve pensioenconsumenten: Inhoudelijke kenmerken en randvoorwaarden van effectieve pensioencommunicatie (2013)
Niels Kortleve, Guido Verbaal en Charlotte Kuiper
- 24 Naar een nieuw deelnemergericht UPO (2013)
Charlotte Kuiper, Arthur van Soest en Cees Dert
- 25 Measuring retirement savings adequacy; developing a multi-pillar approach in the Netherlands (2013)
MARIKE KNOEF, Jim Been, Rob Alessie, Koen Caminada, Kees Goudswaard, and Adriaan Kalwijn
- 26 Illiquiditeit voor pensioenfondsen en verzekeraars: Rendement versus risico (2014)
Joost Driessen
- 27 De doorsneesystematiek in aanvullende pensioenregelingen: effecten, alternatieven en transitiepaden (2014)
Jan Bonenkamp, Ryanne Cox en Marcel Lever
- 28 EIOPA: bevoegdheden en rechtsbescherming (2014)
Ivor Witte
- 29 Een institutionele beleggersblik op de Nederlandse woningmarkt (2013)
Dirk Brounen en Ronald Mahieu
- 30 Verzekeraar en het reële pensioencontract (2014)
Jolanda van den Brink, Erik Lutjens en Ivor Witte
- 31 Pensioen, consumptiebehoeften en ouderenzorg (2014)
MARIKE KNOEF, Arjen Hussem, Arjan Soede en Jochem de Bresser
- 32 Habit formation: implications for pension plans (2014)
Frank de Jong and Yang Zhou
- 33 Het Algemeen pensioenfonds en de taakafbakening (2014)
Ivor Witte
- 34 Intergenerational Risk Trading (2014)
Jiajia Cui and Eduard Ponds
- 35 Beëindiging van de doorsneesystematiek: juridisch navigeren naar alternatieven (2015)
Dick Boeijen, Mark Heemskerk en René Maatman
- 36 Purchasing an annuity: now or later? The role of interest rates (2015)
Thijs Markwat, Roderick Molenaar and Juan Carlos Rodriguez
- 37 Entrepreneurs without wealth? An overview of their portfolio using different data sources for the Netherlands (2015)
Mauro Mastrogiacomo, Yue Li and Rik Dillingh
- 38 The psychology and economics of reverse mortgage attitudes. Evidence from the Netherlands (2015)
Rik Dillingh, Henriëtte Prast, Mariacristina Rossi and Cesira Urzì Brancati
- 39 Keuzevrijheid in de uittreedleeftijd (2015)
Arthur van Soest
- 40 Afschaffing doorsneesystematiek: verkenning van varianten (2015)
Jan Bonenkamp en Marcel Lever
- 41 Nederlandse pensioenopbouw in internationaal perspectief (2015)
MARIKE KNOEF, Kees Goudswaard, Jim Been en Koen Caminada
- 42 Intergenerationele risicodeling in collectieve en individuele pensioencontracten (2015)
Jan Bonenkamp, Peter Broer en Ed Westerhout
- 43 Inflation Experiences of Retirees (2015)
Adriaan Kalwijn, Rob Alessie, Jonathan Gardner and Ashik Anwar Ali
- 44 Financial fairness and conditional indexation (2015)
Torsten Kleinow and Hans Schumacher
- 45 Lessons from the Swedish occupational pension system (2015)
Lans Bovenberg, Ryanne Cox and Stefan Lundbergh

- 46 Heldere en harde pensioenrechten onder een PPR (2016)
Mark Heemskerk, René Maatman en Bas Werker
- 47 Segmentation of pension plan participants: Identifying dimensions of heterogeneity (2016)
Wiebke Eberhardt, Elisabeth Brüggem, Thomas Post and Chantal Hoet
- 48 How do people spend their time before and after retirement? (2016)
Johannes Binswanger
- 49 Naar een nieuwe aanpak voor risicoprofiel-meting voor deelnemers in pensioenregelingen (2016)
Benedict Dellaert, Bas Donkers, Marc Turlings, Tom Steenkamp en Ed Vermeulen
- 50 Individueel defined contribution in de uitkeringsfase (2016)
Tom Steenkamp
- 51 Wat vinden en verwachten Nederlanders van het pensioen? (2016)
Arthur van Soest
- 52 Do life expectancy projections need to account for the impact of smoking? (2016)
Frederik Peters, Johan Mackenbach en Wilma Nusselder
- 53 Effecten van gelaagdheid in pensioen-documenten: een gebruikersstudie (2016)
Louise Nell, Leo Lentz en Henk Pander Maat
- 54 Term Structures with Converging Forward Rates (2016)
Michel Vellekoop and Jan de Kort
- 55 Participation and choice in funded pension plans (2016)
Manuel García-Huitrón and Eduard Ponds
- 56 Interest rate models for pension and insurance regulation (2016)
Dirk Broeders, Frank de Jong and Peter Schotman
- 57 An evaluation of the nFTK (2016)
Lei Shu, Bertrand Melenberg and Hans Schumacher
- 58 Pensioenen en inkomensongelijkheid onder ouderen in Europa (2016)
Koen Caminada, Kees Goudswaard, Jim Been en Marike Knoef
- 59 Towards a practical and scientifically sound tool for measuring time and risk preferences in pension savings decisions (2016)
Jan Potters, Arno Riedl and Paul Smeets
- 60 Save more or retire later? Retirement planning heterogeneity and perceptions of savings adequacy and income constraints (2016)
Ron van Schie, Benedict Dellaert and Bas Donkers
- 61 Uitstroom van oudere werknemers bij overheid en onderwijs. Selectie uit de poort (2016)
Frank Cörvers en Janneke Wilschut
- 62 Pension risk preferences. A personalized elicitation method and its impact on asset allocation (2016)
Gosse Alserda, Benedict Dellaert, Laurens Swinkels and Fieke van der Lecq
- 63 Market-consistent valuation of pension liabilities (2016)
Antoon Pelsser, Ahmad Salahnejhad and Ramon van den Akker
- 64 Will we repay our debts before retirement? Or did we already, but nobody noticed? (2016)
Mauro Mastrogiacommo
- 65 Effectieve ondersteuning van zelfmanagement voor de consument (2016)
Peter Lapperre, Alwin Oerlemans en Benedict Dellaert
- 66 Risk sharing rules for longevity risk: impact and wealth transfers (2017)
Anja De Waegenaere, Bertrand Melenberg and Thijs Markwat
- 67 Heterogeniteit in doorsneeproblematiek. Hoe pakt de transitie naar degressieve opbouw uit voor verschillende pensioenfondsen? (2017)
Loes Frehen, Wouter van Wel, Casper van Ewijk, Johan Bonekamp, Joost van Valkengoed en Dick Boeijen
- 68 De toereikendheid van pensioenopbouw na de crisis en pensioenhervormingen (2017)
Marike Knoef, Jim Been, Koen Caminada, Kees Goudswaard en Jason Rhuggenaath

- 69 De combinatie van betaald en onbetaald werk in de jaren voor pensioen (2017)
Marleen Damman en Hanna van Solinge
- 70 Default life-cycles for retirement savings (2017)
Anna Grebenchtchikova, Roderick Molenaar, Peter Schotman en Bas Werker
- 71 Welke keuzemogelijkheden zijn wenselijk vanuit het perspectief van de deelnemer? (2017)
Casper van Ewijk, Roel Mehlkopf, Sara van den Bleeken en Chantal Hoet
- 72 Activating pension plan participants: investment and assurance frames (2017)
Wiebke Eberhardt, Elisabeth Brüggén, Thomas Post en Chantal Hoet
- 73 Zerotopia – bounded and unbounded pension adventures (2017)
Samuel Sender
- 74 Keuzemogelijkheden en maatwerk binnen pensioenregelingen (2017)
Saskia Bakels, Agnes Joseph, Niels Kortleve en Theo Nijman
- 75 Polderen over het pensioenstelsel. Het debat tussen de sociale partners en de overheid over de oudedagvoorzieningen in Nederland, 1945–2000 (2017)
Paul Brusse
- 76 Van uitkeringsovereenkomst naar PPR (2017)
Mark Heemskerk, Kees Kamminga, René Maatman en Bas Werker
- 77 Pensioenresultaat bij degressieve opbouw en progressieve premie (2017)
Marcel Lever en Sander Muns
- 78 Bestedingsbehoeften bij een afnemende gezondheid na pensionering (2017)
Lieke Kools en Marike Knoef
- 79 Model Risk in the Pricing of Reverse Mortgage Products (2017)
Anja De Waegenaere, Bertrand Melenberg, Hans Schumacher, Lei Shu and Lieke Werner
- 80 Expected Shortfall voor toezicht op verzekeraars: is het relevant? (2017)
Tim Boonen
- 81 The Effect of the Assumed Interest Rate and Smoothing on Variable Annuities (2017)
Anne G. Balter and Bas J.M. Werker
- 82 Consumer acceptance of online pension investment advice (2017)
Benedict Dellaert, Bas Donkers and Carlos Lourenço
- 83 Individualized life-cycle investing (2017)
Gréta Oleár, Frank de Jong and Ingmar Minderhoud
- 84 The value and risk of intergenerational risk sharing (2017)
Bas Werker
- 85 Pensioenwensen voor en na de crisis (2017)
Jochem de Bresser, Marike Knoef en Lieke Kools
- 86 Welke vaste dalingen en welk beleggingsbeleid passen bij gewenste uitkeringsprofielen in verbeterde premieregelingen? (2017)
Johan Bonekamp, Lans Bovenberg, Theo Nijman en Bas Werker
- 87 Inkomens- en vermogensafhankelijke eigen bijdragen in de langdurige ouderenzorg: een levensloopperspectief (2017)
Arjen Hussem, Harry ter Rele en Bram Wouterse
- 88 Creating good choice environments – Insights from research and industry practice (2017)
Elisabeth Brüggén, Thomas Post and Kimberley van der Heijden
- 89 Two decades of working beyond age 65 in the Netherlands. Health trends and changes in socio-economic and work factors to determine the feasibility of extending working lives beyond age 65 (2017)
Dorly Deeg, Maaïke van der Noordt and Suzan van der Pas
- 90 Cardiovascular disease in older workers. How can workforce participation be maintained in light of changes over time in determinants of cardiovascular disease? (2017)
Dorly Deeg, E. Burgers and Maaïke van der Noordt
- 91 Zicht op zzp-pensioen (2017)
Wim Zwinkels, Marike Knoef, Jim Been, Koen Caminada en Kees Goudswaard
- 92 Return, risk, and the preferred mix of PAYG and funded pensions (2017)
Marcel Lever, Thomas Michielsen and Sander Muns

- 93 Life events and participant engagement in pension plans (2017)
Matthew Blakstad, Elisabeth Brügggen and Thomas Post
- 94 Parttime pensioneren en de arbeids-participatie (2017)
Raymond Montizaan
- 95 Keuzevrijheid in pensioen: ons brein wil niet kiezen, maar wel gekozen hebben (2018)
Walter Limpens en Joyce Vonken
- 96 Employability after age 65? Trends over 23 years in life expectancy in good and in poor physical and cognitive health of 65–74-year-olds in the Netherlands (2018)
Dorly Deeg, Maaïke van der Noordt, Emiel Hoogendijk, Hannie Comijs and Martijn Huisman
- 97 Loslaten van de verplichte pensioenleeftijd en het organisatieklimaat rondom langer doorwerken (2018)
Jaap Oude Mulders, Kène Henkens en Harry van Dalen
- 98 Overgangseffecten bij introductie degressieve opbouw (2018)
Bas Werker
- 99 You're invited – RSVP! The role of tailoring in incentivising people to delve into their pension situation (2018)
Milena Dinkova, Sanne Elling, Adriaan Kalwij en Leo Lentz
- 100 Geleidelijke uittreding en de rol van deeltijdpensioen (2018)
Jonneke Bolhaar en Daniël van Vuuren
- 101 Naar een model voor pensioen-communicatie (2018)
Leo Lentz, Louise Nell en Henk Pander Maat
- 102 Tien jaar UPO. Een terugblik en vooruitblik op inhoud, doelen en effectiviteit (2018)
Sanne Elling en Leo Lentz
- 103 Health and household expenditures (2018)
Raun van Ooijen, Jochem de Bresser en Marike Knoef
- 104 Keuzevrijheid in de uitkeringsfase: internationale ervaringen (2018)
Marcel Lever, Eduard Ponds, Rik Dillingh en Ralph Stevens
- 105 The move towards riskier pension products in the world's best pension systems (2018)
Anne G. Balter, Malene Kallestrup-Lamb and Jesper Rangvid
- 106 Life Cycle Option Value: The value of consumer flexibility in planning for retirement (2018)
Sonja Wendel, Benedict Dellaert and Bas Donkers
- 107 Naar een duidelijk eigendomsbegrip (2018)
Jop Tangelder
- 108 Effect van stijging AOW-leeftijd op arbeidsongeschiktheid (2018)
Rik Dillingh, Jonneke Bolhaar, Marcel Lever, Harry ter Rele, Lisette Swart en Koen van der Ven
- 109 Is de toekomst gearriveerd? Data science en individuele keuzemogelijkheden in pensioen (2018)
Wesley Kaufmann, Bastiaan Starink en Bas Werker
- 110 De woontevredenheid van ouderen in Nederland (2018)
Jan Rouwendal
- 111 Towards better prediction of individual longevity (2018)
Dorly Deeg, Jan Kardaun, Maaïke van der Noordt, Emiel Hoogendijk en Natasja van Schoor
- 112 Framing in pensioenkeuzes. Het effect van framing in de keuze voor beleggingsprofiel in DC-plannen naar aanleiding van de Wet verbeterde premieregeling (2018)
Marijke van Putten, Rogier Potter van Loon, Marc Turlings en Eric van Dijk
- 113 Working life expectancy in good and poor self-perceived health among Dutch workers aged 55–65 years with a chronic disease over the period 1992–2016 (2019)
Astrid de Wind, Maaïke van der Noordt, Dorly Deeg and Cécile Boot
- 114 Working conditions in post-retirement jobs: A European comparison (2019)
Ellen Dingemans and Kène Henkens

- 115 Is additional indebtedness the way to increase mortgage–default insurance coverage? (2019)
Yeorim Kim, Mauro Mastrogiacomio, Stefan Hochguertel and Hans Bloemen
- 116 Appreciated but complicated pension Choices? Insights from the Swedish Premium Pension System (2019)
Monika Böhnke, Elisabeth Brügggen and Thomas Post
- 117 Towards integrated personal financial planning. Information barriers and design propositions (2019)
Nitesh Bharosa and Marijn Janssen
- 118 The effect of tailoring pension information on navigation behavior (2019)
Milena Dinkova, Sanne Elling, Adriaan Kalwij and Leo Lentz
- 119 Opleiding, levensverwachting en pensioenleeftijd: een vergelijking van Nederland met andere Europese landen (2019)
Johan Mackenbach, José Rubio Valverde en Wilma Nusselder
- 120 Giving with a warm hand: Evidence on estate planning and bequests (2019)
Eduard Suari–Andreu, Raun van Ooijen, Rob J.M. Alessie and Viola Angelini
- 121 Investeren in menselijk kapitaal: een gecombineerd werknemers– en werkgeversperspectief (2019)
Raymond Montizaan, Merlin Nieste en Davey Poulissen
- 122 The rise in life expectancy – corresponding rise in subjective life expectancy? Changes over the period 1999–2016 (2019)
Dorly Deeg, Maaïke van der Noordt, Noëlle Sant, Henrike Galenkamp, Fanny Janssen and Martijn Huisman
- 123 Pensioenaanvullingen uit het eigen woningbezit (2019)
Dirk Brounen, Niels Kortleve en Eduard Ponds
- 124 Personal and work–related predictors of early exit from paid work among older workers with health limitations (2019)
Nils Plomp, Sascha de Breij and Dorly Deeg
- 125 Het delen van langlevensrisico (2019)
Anja De Waegenaere, Agnes Joseph, Pascal Janssen en Michel Vellekoop
- 126 Maatwerk in pensioencommunicatie (2019)
S.K. Elling en L.R. Lentz
- 127 Dutch Employers’ Responses to an Aging Workforce: Evidence from Surveys, 2009–2017 (2019)
Jaap Oude Mulders, Kène Henkens and Hendrik P. van Dalen
- 128 Preferences for solidarity and attitudes towards the Dutch pension system – Evidence from a representative sample (2019)
Arno Riedl, Hans Schmeets and Peter Werner
- 129 Deeltijdpensioen geen wondermiddel voor langer doorwerken (2019)
Henk–Wim de Boer, Tunga Kantarcı, Daniel van Vuuren en Ed Westerhout
- 130 Spaarmotieven en consumptiegedrag (2019)
Johan Bonekamp en Arthur van Soest
- 131 Substitute services: a barrier to controlling long–term care expenditures (2019)
Mark Kattenberg and Pieter Bakx
- 132 Voorstel keuzearchitectuur pensioensparen voor zelfstandigen (2019)
Jona Linde
- 133 The impact of the virtual integration of assets on pension risk preferences of individuals (2019)
Sesil Lim, Bas Donkers en Benedict Dellaert
- 134 Reforming the statutory retirement age: Policy preferences of employers (2019)
Hendrik P. van Dalen, Kène Henkens and Jaap Oude Mulders
- 135 Compensatie bij afschaffing doorsnee–systematiek (2019)
Dick Boeijen, Chantal de Groot, Mark Heemskerk, Niels Kortleve en René Maatman
- 136 Debt affordability after retirement, interest rate shocks and voluntary repayments (2019)
Mauro Mastrogiacomio

- 137 Using social norms to activate pension plan members: insights from practice (2019)
Joyce Augustus-Vonken, Pieter Verhallen, Lisa Brüggem and Thomas Post
- 138 Alternatieven voor de huidige verplichtstelling van bedrijfstakpensioenfondsen (2020)
Erik Lutjens en Fieke van der Lecq
- 139 Eigen bijdrage aan ouderenzorg (2020)
Pieter Bakx, Judith Bom, Marianne Tenand en Bram Wouterse
- 140 Inrichting fiscaal kader bij afschaffing doorsneesystematiek (2020)
Bastiaan Starink en Michael Visser
- 141 Hervorming langdurige zorg: trends in het gebruik van verpleging en verzorging (2020)
Pieter Bakx, Pilar Garcia-Gomez, Sara Rellstab, Erik Schut en Eddy van Doorslaer
- 142 Genetic health risks, insurance, and retirement (2020)
Richard Karlsson Linnér and Philipp D. Koellinger
- 143 Publieke middelen voor particuliere ouderenzorg (2020)
Arjen Hussem, Marianne Tenand en Pieter Bakx
- 144 Emotions and technology in pension service interactions: Taking stock and moving forward (2020)
Wiebke Eberhardt, Alexander Henkel en Chantal Hoet
- 145 Opleidingsverschillen in levensverwachting: de bijdrage van acht risicofactoren (2020)
Wilma J. Nusselder, José Rubio Valverde en Johan P. Mackenbach
- 146 Shades of Labor: Motives of Older Adults to Participate in Productive Activities (2020)
Sonja Wendel and Benedict Dellaert
- 147 Raising pension awareness through letters and social media: Evidence from a randomized and a quasi-experiment (2020)
Marieke Knoef, Jim Been and Marijke van Putten
- 148 Infographics and Financial Decisions (2020)
Ruben Cox and Peter de Goeij
- 149 To what extent can partial retirement ensure retirement income adequacy? (2020)
Tunga Kantarcı and Jochem Zweerink
- 150 De steun voor een 'zwareberoepenregeling' ontleed (2020)
Harry van Dalen, Kène Henkens en Jaap Oude Mulders
- 151 Verbeteren van de inzetbaarheid van oudere werknemers tot aan pensioen: literatuuroverzicht, inzichten uit de praktijk en de rol van pensioenuitvoerders (2020)
Peter Lapperre, Henk Heek, Pascal Corten, Ad van Zonneveld, Robert Boulogne, Marieke Koeman en Benedict Dellaert
- 152 Betere risicospreiding van eigen bijdragen in de verpleeghuiszorg (2020)
Bram Wouterse, Arjen Hussem en Rob Aalbers
- 153 Doorbeleggen met garanties? (2020)
Roderick Molenaar, Peter Schotman, Peter Dekkers en Mark Irwin
- 154 Differences in retirement preferences between the self-employed and employees: Do job characteristics play an explanatory role? (2020)
Marleen Damman, Dieuwke Zwier en Swenne G. van den Heuvel
- 155 Do financial incentives stimulate partially disabled persons to return to work? (2020)
Tunga Kantarcı and Jan-Maarten van Sonsbeek
- 156 Wijzigen van de bedrijfstakpensioenregeling: tussen pensioenfondsbestuur en sociale partners (2020)
J.R.C. Tangelder
- 157 Keuzes tijdens de pensioenopbouw: de effecten van nudging met volgorde en standaardopties (2020)
Wilde Zijlstra, Jochem de Bresser en Marieke Knoef
- 158 Keuzes rondom pensioen: implicaties op uitkeringssnelheid voor een heterogeen deelnemersbestand (2020)
Servaas van Bilsen, Johan Bonekamp, en Eduard Ponds

- 159 Met big data inspelen op woonwensen en woongedrag van ouderen: praktische inzichten voor ontwerp en beleid (2020)
Ioulia V. Ossokina en Theo A. Arentze
- 160 Economic consequences of widowhood: Evidence from a survivor's benefits reform in the Netherlands (2020)
Jeroen van der Vaart, Rob Alessie and Raun van Ooijen
- 161 How will disabled workers respond to a higher retirement age? (2020)
Tunga Kantarcı, Jim Been and Arthur van Soest
- 162 Deeltijdpensioenen: belangstelling en belemmeringen op de werkvloer (2020)
Hanna van Solinge, Harry van Dalen en Kène Henkens
- 163 Investing for Retirement with an Explicit Benchmark (2020)
Anne Balter, Lennard Beijering, Pascal Janssen, Frank de Jong, Agnes Joseph, Thijs Kamma and Antoon Pelsser
- 164 Vergrijzing en verzuim: impact op de verzekeringsvoorkeuren van werkgevers (2020)
Remco Mallee en Raymond Montizaan
- 165 Arbeidsmarkteffecten van de pensioenpremiestystematiek (2020)
Marika Knoef, Sander Muns en Arthur van Soest
- 166 Risk Sharing within Pension Schemes (2020)
Anne Balter, Frank de Jong en Antoon Pelsser
- 167 Supporting pension participants: Three lessons learned from the medical domain for better pension decisions (2021)
Jelle Strikwerda, Bregje Holleman and Hans Hoeken
- 168 Variable annuities with financial risk and longevity risk in the decumulation phase of Dutch DC products (2021)
Bart Dees, Frank de Jong and Theo Nijman
- 169 Verloren levensjaren als gevolg van sterfte aan Covid-19 (2021)
Bram Wouterse, Frederique Ram en Pieter van Baal
- 170 Which work conditions can encourage older workers to work overtime? (2021)
Raymond Montizaan and Annemarie Kuenn-Nelen
- 171 Herverdeling van individueel pensioenvermogen naar partnerpensioen: een stated preference-analyse (2021)
Raymond Montizaan
- 172 Risicogedrag na een ramp; implicaties voor pensioenen (2021)
Martijn de Vries
- 173 The Impact of Climate Change on Optimal Asset Allocation for Long-Term Investors (2021)
Mathijs Cosemans, Xander Hut and Mathijs van Dijk
- 174 Beleggingsbeleid bij onzekerheid over risicobereidheid en budget (2021)
Agnes Joseph, Antoon Pelsser en Lieke Werner
- 175 On the Resilience of ESG Stocks during COVID-19: Global Evidence (2021)
Gianfranco Gianfrate, Tim Kievid & Mathijs van Dijk
- 176 De solidariteitsreserve juridisch ontrafeld (2021)
Erik Lutjens en Herman Kappelle
- 177 Hoe vertrouwen in politiek en maatschappij doorwerkt in vertrouwen in pensioeninstellingen (2021)
Harry van Dalen en Kène Henkens
- 178 Gelijke rechten, maar geen gelijke pensioenen: de gender gap in Nederlandse tweedepijlerpensioenen (2021)
Suzanne Kali, Jim Been, Marika Knoef en Albert van Marwijk Kooy
- 179 Completing Dutch pension reform (2021)
Ed Westerhout, Eduard Ponds and Peter Zwaneveld
- 180 When and why do employers hire and rehire employees beyond normal retirement age? (2021)
Orlaith C. Tunney and Jaap Oude Mulders
- 181 Family and government insurance: Wage, earnings, and income risks in the Netherlands and the U.S. (2021)
Mariacristina De Nardi, Giulio Fella, Marika Knoef, Gonzalo Paz-Pardo and Raun van Ooijen

- 182 Het gebruik van data in de pensioenmarkt (2021)
Willem van der Deijl, Marije Kloek, Koen Vaassen en Bas Werker
- 183 Applied Data Science in the Pension Industry: A Survey and Outlook (2021)
Onaopepo Adekunle, Michel Dumontier and Arno Riedl
- 184 Individual differences in accessing personalized online pension information: Inertia and a digital hurdle (2021)
Milena Dinkova, Adriaan Kalwij & Leo Lentz
- 185 Transitie: gevoeligheid voor veronderstellingen en omstandigheden (2021)
Anne Balter, Jan Bonenkamp en Bas Werker
- 186 De voordelen van de solidariteitsreserve ontrafeld (2021)
Servaas van Bilsen, Roel Mehlkopf en Antoon Pelsser
- 187 Consumption and time use responses to unemployment (2021)
Jim Been, Eduard Suari-Andreu, Marike Knoef en Rob Alessie
- 188 Wat is inertie? (2021)
Marijke van Putten en Robert-Jan Bastiaan de Rooij
- 189 The effect of the Dutch financial assessment framework on the mortgage investments of pension funds (2021)
Yeorim Kim and Mauro Mastrogiacomo
- 190 The Recovery Potential for Underfunded Pension Plans (2021)
Li Yang, Antoon Pelsser and Michel Vellekoop
- 191 Trends in verschillende gezondheidsindicatoren: de rol van opleidingsniveau (2021)
Wilma J. Nusselder, José Rubio Valverde en Dorly Deeg
- 192 Toedeling van rendementen met spreiding (2021)
Anne Balter en Bas Werker
- 193 Occupational pensions, macroprudential limits, and the financial position of the self-employed (2021)
Francesco G. Caloia, Stefan Hochguertel and Mauro Mastrogiacomo
- 194 How do spouses respond when disability benefits are lost? (2021)
Mario Bernasconi, Tunga Kantarcı, Arthur van Soest, and Jan-Maarten van Sonsbeek
- 195 Pension Payout Preferences (2021)
Rik Dillingh and Maria Zumbuehl
- 196 Naar de kern van pensioenkeuzes (2021)
Jelle Strikwerda, Bregje Holleman en Hans Hoeken
- 197 The Demand for Retirement Products: The Role of Withdrawal Flexibility and Administrative Burden (2021)
Pim Koopmans, Marike Knoef and Max van Lent
- 198 Stapelen van keuzes; interacties in keuze-architectuur en tussen tijd en risico (2021)
Jona Linde en Ingrid Rohde
- 199 Arbeidsmarktstatus tussen de 65ste verjaardag en de AOW-leeftijd: verschillen tussen opleidingsgroepen (2021)
Wilma J. Nusselder, Marti K. Rado en Dorly J.H. Deeg
- 200 Geheugenloos spreiden met gelijke aanpassingen (2021)
Sander Muns
- 201 Bevoegdheidsverdeling sociale partners en pensioenfondsen bij stelseltransitie (2022)
René Maatman en Mark Heemskerk
- 202 Matchmaking in pensioenland: welk pensioen past bij welke deelnemer? (2022)
Marike Knoef, Rogier Potter van Loon, Marc Turlings, Marco van Toorn, Floske Weehuizen, Bart Dees en Jorgo Goossens
- 203 Inkomenseffecten bij en na invaren in het nieuwe pensioencontract (2022)
Sander Muns, Theo Nijman en Bas Werker
- 204 Pensioenvoorbereiding van zzp'ers tijdens de coronacrisis (2022)
Marleen Damman en Gerbert Kraaykamp
- 205 Een reële oriëntatie van het nieuwe pensioencontract (2022)
Rens van Gastel, Niels Kortleve, Theo Nijman en Peter Schotman
- 206 Infographics and financial decisions: an eye-tracking experiment (2022)
Hong Phuoc (Michael) Vo, Reinier Cozijn and Peter de Goeij

- 207 Eliciting Pension Beneficiaries' Sustainability Preferences (2022)
Rob Bauer, Tobias Ruof and Paul Smeets
- 208 No pension and no house? The effect of LTV limits on the housing wealth accumulation of the self-employed (2022)
Mauro Mastrogiacomo and Cindy Biesenbeek
- 209 Drawing Up the Bill: Does Sustainable Investing Affect Stock Returns Around the World? (2022)
Rómulo Alves, Philipp Krueger and Mathijs van Dijk
- 210 Personal life events and individual risk preferences
Paul Bokern, Jona Linde, Arno Riedl, Hans Schmeets and Peter Werner
- 211 Trust and Distrust in Pension Providers in Times of Decline and Reform. Analysis of Survey Data 2004–2021
Harry van Dalen and Kène Henkens
- 212 Diversiteit en inclusie in pensioenfondsbesturen (2022)
Tanachia Ashikali and Floortje Fontein
- 213 NDC-pensioen: bruikbaar alternatief voor Nederland? Verkenning van routes voor versterking pensioen voor allen (2022)
Casper van Ewijk, Lex Meijdam en Eduard Ponds
- 214 Visuele communicatie van onzekere pensioenuitkeringen (2022)
Lisanne van Weelden, Maaïke Jongenelen, Marloes van Moort en Hans Hoeken
- 215 Uitkeringseffecten en kostendekkende premies in het nieuwe nabestaandenpensioen (2022)
Sander Muns, Theo Nijman en Bas Werker
- 216 A comparison of pension-relevant preferences, traits, skills, and attitudes between the self-employed and employees in the Netherlands (2022)
Paul Bokern, Jona Linde, Arno Riedl, Hans Schmeets and Peter Werner
- 217 Het pensioenperspectief van basisbanen (2022)
Ton Wilthagen, Zeger Kluit en Michael Visser
- 218 Carbon Bias in Index Investing (2022)
Mathijs Cosemans and Dirk Schoenmaker
- 219 Measuring Risk Capacity (2022)
Rob Alessie, Viola Angelini and Lars Kleinhuis
- 220 Participatiehypotheken als impuls voor mobiliseren woningkapitaal: een interessante optie voor pensioenfondsen (2023)
Casper van Ewijk, Arjen Gielen, Marike Knoef, Mauro Mastrogiacomo en Alfred Slager
- 221 Trust in Pension Funds, Or the Importance of Being Financially Sound (2023)
Hendrik P. van Dalen and Kène Henkens
- 222 De pensioenvoorziening in Nederland, Duitsland, het Verenigd Koninkrijk en Zwitserland: een rechtsvergelijkend onderzoek (2023)
Jessica van den Heuvel-Warren
- 223 Sustainable Development Goals and Sovereign Bond Spreads: Investor Implications (2023)
Eline ten Bosch, Mathijs van Dijk, and Dirk Schoenmaker
- 224 Show Me My Future: Data-Driven Storytelling and Pension Communication (2023)
Kay Schroeder, Inka Eberhardt, Wiebke Eberhardt and Alexander Henkel
- 225 Shocks to Occupational Pensions and Household Savings (2023)
Francesco Caloia, Mauro Mastrogiacomo and Irene Simonetti
- 226 Vertrouwen in partijen in het Nederlandse pensioenveld: een kwalitatief onderzoek onder deelnemers, consultants en adviseurs (2023)
Jelle Strikwerda, Bregje Holleman en Hans Hoeken
- 227 Trust in the financial performance of pension funds, public perception, and its effect on participation in voluntary pension saving plans (2023)
Floor Goedkoop, Madi Mangan, Mauro Mastrogiacomo and Stefan Hochguertel

- 228 Measuring sustainability preferences of pension members – A methodological proposition and a case study of a UK pension fund (2023)
Rob Bauer, Marco Ceccarelli, Katrin Gödker, and Paul Smeets
- 229 Invaren of niet invaren door pensioenfondsen: economische en juridische aspecten (2023)
Casper van Ewijk en Mark Heemskerk
- 230 Stated product choices of heterogeneous agents are largely consistent with standard models (2023)
Bart Dees, Theo Nijman and Arthur van Soest
- 231 What comes to mind when considering looking into and/or adjusting one's pension? An empirical study among UK and US residents (2023)
Eric van Dijk, Marcel Zeelenberg, Wändi Bruine de Bruin and Robert-Jan Bastiaan de Rooij



Network for Studies on Pensions, Aging and Retirement

This is a publication of:
Netspar
Phone +31 13 466 2109
E-mail info@netspar.nl
www.netspar.nl

July 2023