Netspar

Network for Studies on Pensions, Aging and Retirement

NETSPAR INDUSTRY SERIES

A comparison of pension-relevant preferences, traits, skills, and attitudes between the self-employed and employees in the Netherlands

Paul Bokern, Jona Linde, Arno Riedl, Hans Schmeets and Peter Werner

DESIGN PAPER 216

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 216, October 2022

Design
B-more design

Lay-out
Bladvulling, Tilburg

Editors
Frans Kooymans, Frans Kooymans-Text and Translation and Netspar

CONTENTS

Acknowledgement
This project has received funding from Netspar (Netspar Theme Grant "Understanding and improving pension savings by combining incentivized experiments, survey, and administrative big data - A general employed population sample with a focus on the self-employed"). The authors declare having no conflict of interest.

Affiliations
Paul Bokern – Maastricht University and Statistics Netherlands
Jona Linde – Maastricht University
Arno Riedl – Maastricht University
Hans Schmeets – Maastricht University and Statistics Netherlands
Peter Werner – Maastricht University

Abstract

The group of self-employed persons in the Netherlands is diverse and growing. In this paper, we report on a large survey, including incentivized experiments, among the Dutch working population (N=4,282) to analyze important pension-relevant preferences, traits, skills, and attitudes of the self-employed compared to employees. Our data contain a rich set of measures, including economic preferences, social preferences, personality traits, cognitive skills, financial skills, financial well-being, and attitudes toward pension saving. Data from the survey are enriched with demographic and socio-economic variables from register data provided by Statistics Netherlands. The exploratory analysis investigates differences between employees and the self-employed, where we distinguish between self-employed persons without personnel (solo self-employed), self-employed persons with personnel, and owner-managers.

The results show that compared to employees, the self-employed in the Netherlands indicate having a higher willingness to take risks, are more patient, and are more optimistic (stated preferences). Interestingly, when using measures based on behavior (revealed preferences), differences between the self-employed and employees are smaller or even vanish. Regarding pensions, the self-employed consider themselves more knowledgeable, save extra or intend to do so in the future, feel more responsible for their own pension, but some groups of the self-employed tend to regard solidarity as less important than employees.

There is considerable heterogeneity within the group of self-employed. Compared to other self-employed persons, the solo self-employed characterize themselves as having less financial security and a tendency of lower trust in institutions. The self-employed with personnel exhibit higher negative reciprocity and lower trust in public institutions than other groups of self-employed. Owner-managers tend to show higher negative reciprocity, higher financial literacy, and lower financial anxiety than other groups of self-employed. The self-employed do not differ on average from employees as to other characteristics, such as self-control, overconfidence, and information avoidance.

Samenvatting

Een vergelijking van pensioenrelevante voorkeuren, karaktereigenschappen, vaardigheden en attitudes tussen zelfstandigen en werknemers in Nederland

De groep zelfstandigen in Nederland is divers en groeit. In dit artikel gaan we dieper in op pensioenrelevante voorkeuren, karaktereigenschappen, vaardigheden en houdingen van Nederlandse zelfstandigen in vergelijking tot werknemers. Daarvoor maken we gebruik van een grootschalig steekproefonderzoek onder de Nederlandse beroepsbevolking (N=4,282) en hanteren, naast een enquête, experimentele methoden met echte financiële prikkels. Onze data bevatten een groot aantal kenmerken, waaronder economische en sociale voorkeuren, persoonlijkheidskenmerken, cognitieve vaardigheden, financieel welzijn, en houdingen ten opzichte van pensioensparen. Gegevens uit het onderzoek zijn verrijkt met demografische en sociaaleconomische variabelen uit registergegevens van het Centraal Bureau voor de Statistiek (CBS). De exploratieve analyse heeft betrekking op een vergelijking tussen werknemers en zelfstandigen, waarbij onderscheid wordt gemaakt tussen zelfstandigen zonder personeel (zzp), zelfstandigen met personeel (zmp), en directeur-grootaandeelhouders (dga).

De resultaten laten zien dat, in vergelijking tot werknemers, zelfstandigen in Nederland aangeven een grotere bereidheid te hebben om risico's te nemen en geduldiger en optimistischer zijn. Het is interessant dat deze verschillen kleiner worden of zelfs verdwijnen als de kenmerken worden gebaseerd op gedrag (*revealed preferences*) in plaats van zelfinschatting (*stated preferences*). Met betrekking tot houdingen ten opzichte van pensioen schatten zelfstandigen zichzelf in als beter geïnformeerd, geven aan meer te doen aan pensioensparen of de intentie daartoe te hebben, en voelen zich meer verantwoordelijk voor hun eigen pensioen, maar sommige groepen zelfstandigen vinden solidariteit minder belangrijk dan werknemers.

Er bestaat een grote heterogeniteit binnen de groep zelfstandigen. In vergelijking met andere zelfstandigen, kenmerken zzp'ers zich door minder financiële zekerheid en een neiging tot lager vertrouwen in instituties. Zmp'ers daarentegen beoordelen zichzelf met hogere negatieve reciprociteit en lager vertrouwen in publieke instituties dan andere groepen zelfstandigen. Dga's tonen hogere negatieve reciprociteit, hebben meer financiële kennis en geven aan zich minder zorgen te maken over hun financiële situatie dan andere zelfstandigen. Zelfstandigen onderscheiden zich echter niet van werknemers ten aanzien van andere kenmerken, waaronder de mate van zelfbeheersing, overmoed en informatievermijding.

1. Introduction

In 2022, nearly one sixth of the Dutch working population is self-employed.[1] Over the past two decades, this share increased from 12 to 16 percent (Statistics Netherlands, 2021), and it is projected to keep increasing over the coming decade (Bosch et al., 2012; SER, 2010; Van Stel & de Vries, 2015). As the number of self-employed keeps rising, there is a growing concern about the socio-economic position of this group, including the adequacy of their retirement savings (e.g., Ministry of Social Affairs and Employment, 2021). The self-employed tend to make little use of traditional pension saving instruments (Zwinkels et al., 2017) and have significantly lower pension replacement rates than employees (de Bresser & Knoef, 2015; Knoef et al., 2017; Knoef et al., 2016; Zwinkels et al., 2017).

In response to this concern, the adequacy of retirement saving by the self-employed is addressed in the proposed pension reform in the Netherlands (Ministry of Social Affairs and Employment, 2022). In particular, the new pension agreement contains a clause that stipulates that pension funds may experiment with simplification of retirement saving for the self-employed in the second pillar. The aim of these experiments is to stimulate the self-employed to build up sufficient retirement savings. This experiment lasts up to four years, after which the effects will be evaluated and decisions will be made about more structural changes. Participation in the experiments by the self-employed is voluntary.

An important aspect for the design and success of these experiments is to understand why the self-employed currently have relative low pension replacement rates compared to employees. Previous studies propose three possible reasons for this (see Table 1). First, current retirement saving options may not be attractive because they are considered too expensive (Ministry of Social Affairs and Employment, 2016), or the administrative burden is too high (Koopmans et al., 2021). Second, the self-employed may simply differ in their preferences for saving or taking risks (Linde, 2019; Ministry of Social Affairs and Employment, 2013).[2] If these are the reasons for low replacement rates, then policies targeted at stimulating pension saving among the self-employed

1 This statistic is in line with the definition of self-employment used by Statistics Netherlands, which classifies an individual as self-employed if the person works for own account and risk. This includes self-employed without personnel ("zzp"), self-employed with personnel ("zmp"), owner- managers ("dga") with and without personnel, contributing family workers, and other self-employed. Individuals who receive income from both employment and self-employment are classified according to the income source that constitutes the largest share of their income. The working population is comprised of individuals aged 15 to 75.

Table 1. Potential reasons why self-employed persons have lower pension replacement rates compared to employees, as identified in previous literature

Reason	Underlying Causes	Source
Attractiveness of available retirement saving options	Expensiveness	Ministry of Social Affairs and Employment (2016), Linde (2019)
	Administrative burden	Koopmans et al., 2021
Preferences	Saving preferences (i.e., less or more liquid savings)	Ministry of Social Affairs and Employment (2013), Linde (2019)
	Risk preferences	Linde (2019)
Behavioral biases and cognitive limitations	Impatience (present bias)	Ministry of Social Affairs and Employment (2013), Linde (2019)
	Procrastination	Ministry of Social Affairs and Employment (2013), Linde (2019)
	Overconfidence / over-optimism	Linde (2019)
	Loss aversion	Linde (2019)
	Financial Literacy	Ministry of Social Affairs and Employment (2013)

would need to reduce the related costs and the administrative burden, or otherwise make saving more financially attractive to be successful. Policies that aim to stimulate pension saving by the self-employed through nudges and/or changes in the choice architecture (e.g. Linde, 2019) may be less successful because the underlying cause for having lower pension replacements rates is personal preferences or financial and time constraints.[3] Third, there could be reasons related to behavioral biases and cognitive limitations (e.g., time inconsistency, procrastination, overconfidence, etc.), in which case policies should be designed to address those biases and limitations (Linde, 2019; Ministry of Social Affairs and Employment, 2013).

The access to sectoral pension funds proposed in the pension agreement provides the self-employed the possibility of a new means of saving. According to the first set of reasons discussed above, the perceived attractiveness of this option would be an important driver for take-up. Access to sectoral pension funds may then be viewed as a good option because such funds tend to have lower costs compared to individual saving options. If the second set of reasons is most relevant, self-employed persons may be hesitant to enter sectoral funds as they may not want their savings being tied

2 There is some evidence that suggests that it is not preferences for saving that explain the lower replacement rates of the self-employed. For instance, De Bresser and Knoef (2015) found that the self-employed prefer to have higher rather than lower levels of consumption after retirement compared to employees. Mastrogiacomo (2016) finds that the self-employed have comparable goals and expectations as employees in terms of income after retirement, but that they generally save too little to reach those goals.

3 Such proposals could still be beneficial if a different choice architecture helps to reduce the administrative burden.

up in a fund that caters to the possibly quite different preferences of employees. If the third set of reasons related to bounded rationality is most important, the choice architecture that is used to offer the self-employed access to sectoral funds would be an important aspect to take into account.

In this paper, we focus on the second and third sets of reasons – preferences and behavioral biases and cognitive limitations – of the self-employed that could explain the relatively low replacement rates. Previous studies on this topic mostly draw conclusions from international literature that study *employees* in countries where they are responsible for their own pension. These findings are then extrapolated to the Dutch self-employed. Evidence from the literature on entrepreneurship, however, suggests that the self-employed may differ from employees in terms of personality characteristics (e.g., Beugelsdijk & Noorderhaven, 2005; Simoes et al., 2016). An important question is therefore to what extent the employed and the self-employed in the Netherlands differ in terms of preferences and behavioral biases and cognitive limitations. The degree of similarity between employed and self-employed persons determines to what extent findings from employees in other countries can be extrapolated to the Dutch situation. Most studies that focus on behavioral characteristics of the self-employed have considered one or only few preferences and beliefs, and, to the best of our knowledge, no study so far has elicited a comparable comprehensive set of measures as we do, which also focuses on possible heterogeneity across different groups of self-employed individuals.

Using data from a large survey, including incentivized experiments, on the Dutch working population, we conduct an empirical comparison of Dutch employees and self-employed persons. Our data contain a rich set of measures, including economic preferences (risk, higher-order risk, time, ambiguity aversion), social preferences (solidarity, altruism, and reciprocity), personality traits (self-control, trust, overconfidence, optimism, and information avoidance), and cognitive skills (financial literacy, financial management, and cognitive reflection). We also include questions concerning attitudes regarding pension saving and financial well-being. The answers to these questions will help to provide a better understanding why the self-employed tend to have lower retirement replacement rates and are reluctant to participate in pension schemes. Moreover, we take heterogeneity within the group of self-employed persons into account by differentiating between solo self-employed, self-employed with personnel, owner managers, and individuals who are both employed and self-employed.

The results show that compared to employees, the self-employed in the Netherlands state that they are more willing to take risks, more patient, and more optimistic, although there is no noticeable difference when using measures based

on behavior.[4] Moreover, there is heterogeneity within the group of self-employed persons. The solo self-employed see themselves as having less financial security and a tendency toward lower levels of trust in institutions than other self-employed persons. The self-employed with personnel exhibit higher negative reciprocity and lower trust in public institutions compared to both employees and owner-managers. Owner-managers tend to show higher negative reciprocity, higher financial literacy, and lower financial anxiety than all other groups except the self-employed with personnel. The self-employed do not differ on average from employees on other characteristics considered in this study, such as self-control, overconfidence, information avoidance, and information management.

The remainder of the paper is structured as follows. Section 2 discusses related literature on the determinants of becoming self-employed. Section 3 presents the procedures of our study and the design of experiments and survey items. Section 4 discusses the results, where we compare the various types of self-employed persons with employees. Section 5 discusses implications of the results.

4 Self-employed persons are on average somewhat more likely to make risky choices in our incentivized tasks.,However, this difference is small and not robust, and appears to be explained by demographic and socio-economic differences between employees and self-employed persons.

2. Related Literature

Most studies comparing employees and self-employed persons do so in the context of the investigation of the determinants of being self-employed. Simoes et al. (2016) provide an overview of both the empirical and the theoretical literature.[5] They distinguish between seven categories of determinants: (1) basic individual characteristics, (2) family background, (3) personality characteristics, (4) cognitive skills, (5) health condition, (6) migration background, and (7) access to financial resources. We largely follow their taxonomy as we summarize their findings and additional, more recent, literature.[6]

Basic individual characteristics

Empirical research has been conducted into the role of basic individual characteristics as a determinant for self-employment. Simoes et al. (2016) review the effect of sex, age, marital status, and having children. As to sex, it is consistently found that men are more likely to become self-employed than women (e.g., Koellinger et al., 2013; Leoni & Falk, 2010; Stefanović & Stošić, 2012; Verheul et al., 2012). The relationship between age and self-employment is found to exhibit an inverse-U shaped pattern in several longitudinal studies, meaning that people are more likely to become self-employed with increasing age but that the effect reverses at a certain point (Blanchflower, 2004; Caliendo et al., 2014; Georgellis et al., 2005). As to marital status, the majority of studies document a positive relationship between being self-employed and being married (e.g., Ahn, 2010; Eliasson & Westlund, 2013; Özcan, 2011). Finally, there is some evidence that having young children relates positively with self-employment (Lin et al., 2000; Wellington, 2006).

Migration background

Simoes et al. (2016) report that the above-average likelihood of immigrants to become self-employed is a "widely accepted and studied fact" (p. 793). This positive relationship between self-employment and migration background has for instance been documented in the United States for foreign-born individuals (Fairchild, 2009)

5 Following Simoes et al. (2016), we use the term "determinants" of self-employment here, although causality is not always established in the papers that they review.

6 Under the heading "personality characteristics", we distinguish between economic preferences, social preferences, and personality traits, to be more consistent with the remainder of the paper. Moreover, we leave out (2) family background, (5) health condition, and (7) access to financial resources because we do not have data to address these topics in this paper. See Simoes et al. (2016) for a review on those topics.

and in Sweden for non-Western immigrants (Andersson & Hammarstedt, 2011; Joona, 2010). It is important to note, however, that the majority of these studies (and the studies cited therein) are country-specific and report data from the year 2000 or earlier. The relationship observed may be specific to the country or to the period of investigation. Indeed, critical questions have been posed concerning this apparent stylized fact (Naudé et al., 2017). For example, Constant and Zimmermann (2006) report lower self-employment rates among immigrants compared to native Germans, also using data from 2000. Naveed et al. (2019) study self-employment rates in Canada over the period 1993-2004. They find a higher share of self-employed persons among immigrants in 1993, but the gap narrows over the period studied and the rates converge in 2004. A recent report by OECD/European Commission (2021) shows that self-employment rates for immigrants and natives in European countries are country-specific, with a majority of countries having either higher self-employment rates among natives or similar rates between both groups. The report shows little difference in the percentage of self-employed persons among natives and non-natives in the Netherlands.

Personality characteristics

The role of personality characteristics as a determinant of self-employment has been widely studied (e.g., Brandstätter, 2011; Rauch & Frese, 2007; Simoes et al., 2016). We briefly review empirical evidence on the relationship between self-employment and the personality characteristics that are included in our analysis. These include economic preferences (risk, higher-order risk, time, ambiguity aversion), social preferences (positive and negative reciprocity), and personality traits (self-control, trust, overconfidence, optimism).[7]

Economic preferences

A personality characteristic that has received much attention as a determinant of self-employment is risk preference. The empirical studies reviewed by Simoes et al. (2016) predominantly find that individuals with lower levels of risk aversion are more likely to become self-employed (Ahn, 2010; Brown et al., 2011; Ekelund et al., 2005). However, there is evidence suggesting that this effect needs to be nuanced as results may depend on the measure used (e.g., Astebro et al., 2014; Bokern et al., 2021; Georgalos, 2018) or the theory of decision-making under risk that is assumed

7 We also have measures for altruism, solidarity, and information avoidance, but we have not found any other studies that investigate these personality characteristics as a determinant for self-employment.

(e.g., Hamböck et al., 2017). For example, in a sample of Dutch entrepreneurs, managers, and employees, Koudstaal et al. (2016) find that, while entrepreneurs view themselves as less risk-averse than others, they do not make less risk-averse choices than managers in incentivized choice tasks. Charness et al. (2020) do not find any relationship between risk aversion and self-employment for five different measures of risk aversion, including one hypothetical question and four incentivized choice tasks in a representative sample of the Dutch population.

Higher-order risk preferences (prudence and temperance) have been studied far less in the context of self-employment.[8] Noussair et al. (2013) elicit higher-order risk preferences in a large demographically representative sample of the Dutch population and do not find any relationship with self-employment.

There is some empirical evidence of a relationship between time preferences and self-employment. Andersen et al. (2014) elicit time preferences in an incentivized way in a field experiment with Danish entrepreneurs. Their results suggest that entrepreneurs are on average more patient than the general population.

The evidence concerning the relationship between ambiguity aversion and self-employment is mixed. Using survey questions, some studies find a negative relationship between ambiguity aversion and self-employment (Begley & Boyd, 1987; Chye Koh, 1996; Schere, 1982), while others find no relationship (Babb & Babb, 1992). More recent studies investigate this relationship using incentivized experiments and report no differences between self-employed persons and a control group (Holm et al., 2013; Koudstaal et al., 2016).

Social preferences

The role of positive and negative reciprocity as determinants of being self-employed has been studied before. Positive reciprocity refers to rewarding the kind actions of others, while negative reciprocity relates to punishing the unkind actions of others (Dohmen et al., 2008). Caliendo et al. (2012) study the relationship between reciprocity and self-employment using survey questions in a German representative sample. They find no relationship between self-employment and positive reciprocity, and weak evidence that self-employed persons show lower negative reciprocity than the

8 Higher-order risk preferences determine how prudent and temperate people are under expected utility theory. Prudence can be interpreted as downside risk aversion, which implies precautionary saving. A prudent individual therefore prefers to increase their savings when there is higher background risk (Kimball, 1990; Noussair et al., 2013). Temperance concerns the relationship between portfolio risk and background risk. In particular, a temperate individual will take less investment risk when background risk increases (Kimball, 1993; Noussair et al., 2013).

employed. Their results also suggest a weak positive relationship between negative reciprocity and the probability of exiting self-employment.

Personality traits

The relationship between self-control and self-employment recently started to get attention. Baron et al. (2016) investigate the role of self-control as a mediator for self-efficacy. They find that entrepreneurs with higher self-control are better able at restraining themselves from setting unattainable goals and therefore have better-performing companies. This paper does not directly study self-control as a determinant for self-employment, but it suggests that individuals with higher self-control may be more successful in setting up and maintaining their own business. Van Gelderen et al. (2015) investigate the role of self-control in the intention-action gap of entrepreneurs and find that self-control positively moderates the relation between intention and action. Thus, individuals with higher self-control are more likely to act on their intention to set up their own business than those with lower self-control.

Trust is considered a critical trait for entrepreneurship and consequently has received much attention in the entrepreneurship literature (see Welter, 2012 for a review). However, as discussed by Welter (2012), there are many different definitions of trust, so it has been studied in many forms. We consider studies that investigate either generalized trust (trust in other people) or institutional trust (trust in public, private, or political institutions) as a personality trait and investigate its relationship with self-employment. Nakhaie et al. (2009) use survey questions to measure trust in others in a sample of Canadian minorities and do not find any relationship between trust and self-employment. Caliendo et al. (2012) measure trust in a German representative sample, also using survey questions, and find that entrepreneurs trust other people more and that this positively affects the likelihood of being self-employed. Batsaikhan (2017) measures trust in other people in a sample of Mongolian entrepreneurs, using an incentivized trust game, and finds that there is a positive relationship between trust and business success. Price (2012) measures political trust (trust in government) using survey questions and finds a positive relationship between trust and self-employment among black Americans.

Overconfidence and optimism are two related personality traits that have been studied in the context of self-employment (Frese & Gielnik, 2014; Simoes et al., 2016). Moore and Healy (2008) define three types of overconfidence. First, people may overestimate their own performance, ability, level of control, or chances of success (overestimation). Second, people may believe that they are better than others

(overplacement or better than average).[9] Third, people may report excessive certainty regarding the accuracy of their beliefs (overprecision). Optimism is a personality trait that is not specific to any project but reflects a general view that "good things will happen" (Astebro et al., 2014). Empirically, however, overconfidence and optimism are hard to distinguish, and the terms have been used interchangeably in previous literature (Astebro et al., 2014). For example, Cooper et al. (1988) asked entrepreneurs to state the odds of their own business succeeding and find that a third of the respondents perceives those odds as 10 out of 10, despite reporting much lower odds for the success of other companies similar to their own. It is not clear whether this measures overconfidence or optimism. Astebro et al. (2014), in reviewing the empirical literature, conclude that there is some evidence suggesting a positive relationship between self-employment and either optimism, overestimation, or overplacement. Evidence on the relationship between self-employment and overprecision is mixed.

Cognitive skills

The empirical results regarding the role of education as a determinant of self-employment are ambiguous. Some studies find a positive relationship between educational attainment and self-employment, whereas others find a negative or no relationship (Simoes et al., 2016; Van Der Sluis et al., 2008), or even a U-shaped relation, meaning that both individuals with low and high levels of education are more likely to become self-employed than those with an intermediate education level (Poschke, 2013). Finally, it has also been suggested that the relation between educational level and self-employment may depend on the country of investigation (Cowling, 2000).

A cognitive skill that only recently started to gain attention as a potential determinant for self-employment is financial literacy. Ćumurović and Hyll (2019), using German survey data, find a positive relationship between financial literacy and being self-employed. They use educational attainment as an instrumental variable to establish causality. Riepe et al. (2020) investigate the role of financial literacy and its interaction with risk aversion, using both Dutch survey data and data from an incentivized experiment. In both samples, they observe a moderating effect of financial literacy on risk aversion. In particular, risk aversion was found to play a role in the likelihood of being self-employed for individuals with below-average financial literacy scores, but no such relationship was found for individuals with above-average financial literacy scores. Struckell et al. (2022) find a positive relationship between

9 Both overestimation and overplacement are related to the Dunning-Kruger effect, which suggests that in particular those with little knowledge or skill for a task are likely to overestimate or overplace their own performance in that task (Kruger & Dunning, 1999).

financial literacy and self-employment in a large representative sample of the United States.

In Table 2 we summarize the empirical literature discussed.

Table 2. Overview of determinants of self-employment

Basic Individual Characteristics
Sex (+ for men), Age (inverse-U shape), Marital status (+ for married), Having children (+)
Migration Background
Migration background (ambiguous)
Economic Preferences
Risk aversion self-assessment (-), Risk aversion choice task (0), Prudence (0), Temperance (0), Patience (+), Ambiguity aversion (0)
Social Preferences
Positive reciprocity (0), Negative reciprocity (-)
Personality Traits
Self-control (+), Personal Trust (+), Institutional Trust (+), Overconfidence (+), Optimism (+)
Cognitive skills
Education (ambiguous), Financial literacy (+)

Note: The table presents the direction of relationship based on previous empirical evidence for a non-exhaustive list of determinants of self-employment.
"0" = no relationship, "-" = negative relationship, "+" = positive relationship.

3. Procedures

The data in this study were collected in a two-wave online survey in May and June of 2020, conducted with the aid of research agency Flycatcher. Statistics Netherlands selected a stratified random sample of 18,000 Dutch employees and 18,000 self-employed persons, who were invited to participate in the study. In total, 4,282 (12%) Dutch residents completed both waves.[10] Data from the survey are enriched with demographic and socio-economic variables from register data of Statistics Netherlands.

Using the register data, we classified 2,224 (52%) as employed, 1,480 (35%) as self-employed, 388 (9%) as both employed and self-employed[11], and 190 (4%) as other (e.g., student, retiree, unemployed).[12] We excluded participants classified as other because they are neither employed nor self-employed. Within the group of self-employed persons, we classified 832 (56%) as solo self-employed, 217 (15%) as self-employed with personnel, 302 (20%) as owner-manager, 24 (2%) as contributing family worker, and 105 (7%) as other self-employed. We excluded contributing family workers because that group is too small for meaningful analysis and other self-employed because there is no clear definition of which persons this group consists of. This leaves 3,963 individuals for our analysis.

The two waves of the survey included different sets of incentivized elicitation tasks. One out of five participants, among those who completed both waves, was randomly selected to receive a payment, based on their decisions in one randomly selected task. In addition, one iPad was raffled off among those participants who completed both waves. Earnings ranged from € 0 up to €186 depending on the task. The average earning among the participants selected for payment was €78. Participants were fully informed about these procedures in advance.

In addition to the incentivized experiments, both waves included a battery of survey questions. We asked some of the survey questions in both waves.[13] In those cases,

10 We discuss the issue of non-response in Section 4.

11 Participants who earn income both as employee and self-employed are classified as "both".

12 We classify individuals based on register data from 2019, which is closest to the collection date of the survey data. The sample for the survey was drawn, however, at the end of 2019 using occupation data from 2018, which was the most recent data available at the time. Consequently, a small set of individuals is classified as other, despite the sample being drawn from a population of employed and self-employed persons.

13 Two types of survey questions were asked in both waves. First, questions related to the COVID-19 crisis were asked twice in order to capture changes in beliefs or behavior concerning the developments of the pandemic. Second, questions eliciting economic and social preferences were asked twice to reduce measurement error.

we take either the average of both questions or show results for both. We discuss our measures below. Exact wording of the survey questions (in Dutch) and details on the experiments can be found in Appendix A.1 and Appendix A.2, respectively.

Economic preferences

In terms of economic preferences, we measured preferences for risk, higher-order risk, time, and ambiguity aversion.

We elicited risk preferences using both survey questions and incentivized behavioral measures. The self-reported survey questions (stated risk preference) are based on the work by Dohmen et al. (2011). Participants identified themselves as being more or less willing to take risk on an 11-point Likert-scale ranging from "not at all willing to take risks" (0) to "very willing to take risk" (10) in a general domain and several specific life domains. The specific domains included willingness to take risk in their occupation, health, personal finances, and job-related finances. We asked these questions in both waves of the study and average the response for our analysis. For convenience, to facilitate comparison of our risk preference measures, we reverse the scoring of the survey measure by subtracting it from 10 (the largest value on the Likert-scale). Hence, a higher value of our proxy for stated risk preference implies more risk aversion, i.e. a lower willingness to take risk.

The incentivized behavioral measure for risk preferences (revealed risk preference) consisted of five different multiple price lists (MPLs) in the tradition of Holt and Laury (2002). An MPL is a list of binary decision situations. In the case of risk preferences, participants are asked to choose between a safer and riskier lottery in each decision situation. The list is designed such that either the safer or the riskier lottery becomes more attractive when moving down the list. The point where the participant switches to the option that becomes more attractive provides an indication of the risk preference. In this study, participants made ten choices in each MPL. We take the average number of safe lottery choices over all five MPLs as a measure for risk preference. The experiment was conducted in the second wave.

Higher-order risk preferences were elicited using an incentivized behavioral measure identical to the one developed by Noussair et al. (2013). Prudence was elicited with five binary decision situations. In each decision situation, participants were confronted with a lottery that would yield a high or a low outcome with equal probability. Participants were then asked to choose whether they wanted to add a zero-mean lottery to the state of high wealth or to the state of low wealth. Prudent decision-makers would prefer to add the lottery to the state of high wealth. Temperance was elicited with another five binary decision situations. In this case, participants

were confronted with a lottery that would yield the same outcome with equal probability. Participants were then asked to choose whether they wanted to aggregate or disaggregate two identical zero-mean lotteries. Temperate decision-makers would prefer disaggregation of the lotteries. We take the average number of prudent (temperate) choices as a measure for prudence (temperance). The experiment was conducted in the second wave.

Time preferences were elicited using both survey questions and an incentivized behavioral measure. The self-reported survey questions (stated time preference) are based on the work by Falk et al. (2016). Participants identified themselves as being more or less willing to give something up today to benefit from it in the future on an 11-point Likert-scale ranging from "not at all willing" (0) to "very willing" (10). The question was asked twice, once referring to the near future and once referring to the distant future. We asked these questions in both waves of the study and average the response for our analysis. Additionally, we asked participants about their inclination to procrastinate. Participants were asked to indicate to what extent a statement describes them on an 11-point Likert-scale ranging from "does not describe me at all" (0) to "describes me perfectly" (10). The statement elicited whether participants have the tendency to delay tasks, even when they know it would be better to perform them right away. This question was asked in the first wave.

The incentivized behavioral measure for time preferences (revealed time preference) consisted of two different MPLs in the spirit of Coller and Williams (1999). Participants were asked to make nine binary decisions between €75 at an early date (8 weeks from the day of participation) and varying amounts at a later date (16 or 24 weeks from the day of participation). Moving down the list, the amounts at the later date increased, yielding interest rates between 0% and 26.7% over the delay period.[14] The point where the participant switched to the option at the later date provides an indication of their time preference. We take the average number of later date choices over both MPLs as a measure for time preference. The experiment was conducted in the second wave.

Ambiguity aversion was elicited using an incentivized behavioral measure consisting of two MPLs, following Cettolin and Riedl (2019). In both MPLs, participants faced eleven decision situations, where they were asked to choose between a risky lottery with known probabilities of winning and an ambiguous lottery with unknown probabilities of winning. In addition, participants could state indifference between both

14 The implied annual interest rates range up to 365% for the 8-week delay and up to 116% for the 16-week delay.

lotteries, in which case a fair random device chose between the options for them. The probabilities in the lotteries were displayed on a screen with red and blue balls in urns. The urn representing the risky lottery contained 10 red or blue balls in a known and displayed proportion. The urn representing the ambiguous lottery contained 10 red or blue balls as well, but in an unknown proportion. To indicate this, the urn was made opaque. Participants were informed that the proportion of red and blue balls in the ambiguous urn stayed the same within each MPL as well as between the two MPLs. The proportion of red and blue balls in the risky urn varied from all red in the first row of both MPLs to all blue in the last row. The two MPLs differed only with respect to the color associated with winning the lottery. We take the average number of risky urn choices over both MPLs as a measure for ambiguity aversion. The experiment was conducted in the first wave.

Social preferences

Regarding social preferences, we measured solidarity preferences, altruism, and negative and positive reciprocity.

Solidarity preferences were elicited with a modified version of the solidarity game introduced by Selten and Ockenfels (1998). Participants were anonymously matched with another participant in the study and were confronted with one of the following four possible situations. Either both participants would win an amount of €80 (with 50% probability), or the one participant would win an amount of €80 and the matched other nothing or vice versa (both with 20% probability), or both would receive nothing (with 10% probability). Following Riedl et al. (2019), we then elicited solidarity preferences towards different age groups using the strategy method (Selten, 1967). Specifically, for the situation in which only one participant in the pair received money (and, thus, the other nothing), they had to decide how much they were willing to transfer to (a) a young participant (between 16 and 34 years), (b) a middle-aged participant (between 35 and 64 years), and (c) an old participant (65 years and older). Here, we take the average amount of money sent over all age groups as a measure for solidarity preferences. The experiment was conducted in the first wave.

Altruism and positive and negative reciprocity were elicited using non-incentivized survey questions based on Falk et al. (2016). For altruism, participants self-identified as being more or less willing to give to a good cause without expecting anything in return on an 11-point Likert-scale ranging from "not at all willing" (0) to "very willing" (10). The question was asked in both waves of the study. We use the average response for our analysis. For reciprocity, participants were asked to indicate to what extent a statement describes them on an 11-point Likert-scale from "does

not describe me at all" (0) to "describes me perfectly" (10). The statements elicited whether they are willing to return a favor (positive reciprocity) and are willing to take revenge (negative reciprocity) for a nice and mean act, respectively, towards them. Both questions were only asked in the first wave.

Personality traits

Regarding personality traits, we measured self-control, trust, optimism, overconfidence, and information avoidance.

Self-control was elicited using the brief self-control scale (Tangney et al., 2004). This scale is composed of 13 statements that aim to capture how much self-control individuals have (e.g., whether they can resist temptation or instead have a hard time breaking bad habits). Participants were asked to indicate the extent to which each statement reflected how they typically are on a 5-point Likert-scale ranging from "not at all" (1) to "very much" (5). The items are converted into an aggregate scale by taking the sum of all responses. The questions were asked in the second wave.

Generalized and institutional trust were elicited with survey questions used by Statistics Netherlands (2012). Generalized trust was elicited with a binary question that asked participants whether they think people can be trusted in general. The binary answer possibilities stated "you cannot be careful enough" (0) or "most people can be trusted" (1). Institutional trust was measured by asking participants to indicate their level of trust in several institutions on a 4-point Likert-scale ranging from "no trust at all" (1) to "a lot of trust" (4). The institutions included the justice system, police, the Lower House of Parliament, banks, pension funds, large companies, the scientific community, the current pension system, and the future pension system.[15] We conducted an exploratory factor analysis to investigate whether we can reduce the number of variables into fewer factors. We find clear evidence in favor of three factors: trust in public institutions (justice system, police, Lower House of Parliament, and the scientific community), trust in private institutions (banks and large companies), and trust in the pension system (pension funds, current pension system, future pension system). The individual items are converted into scales by taking the sum of the individual items in each factor. The questions were asked in the second wave.

15 In the last item, participants could also answer "I don't know". At the time of the survey, a change in the Dutch pension system was under discussion. We therefore asked about trust in both the old and the new system as one question would have been ambiguous. However, as there was no decision on the new system at the time of the survey, participants are likely to be unsure about what this would look like, which is why we included the option "I don't know".

We define overconfidence as overestimating one's own performance (Moore & Healy, 2008). To measure it, participants were asked to judge, after answering a set of financial literacy questions (see "Cognitive skills" below), how many they thought they had correct. In particular, we take the number of answers that the participant thinks to have correct and subtract the actual number of correct answers. A positive score therefore indicates overconfidence and a negative score underconfidence. These questions were only asked in the second wave.

Optimism was elicited using an adapted version of the Scale Optimism-Pessimism-2 (SOP2; Kemper et al., 2017). This scale consisted of two questions where participants were asked to indicate how optimistic and pessimistic they are in general on an 11-point Likert-scale ranging from "not optimistic at all" (0) to "very optimistic" (10) and "not pessimistic at all" (0) to "very pessimistic" (10).[16] The answers are converted into a scale by reversing the scores of the pessimism question and then taking the sum of both responses. The questions were only asked in the second wave.

Information avoidance was elicited using an adapted version of the information preferences scale proposed by Ho, Hagmann & Loewenstein (2018, 2021). This scale consists of three items that each describe a hypothetical scenario.[17] Participants were asked for each scenario to indicate how likely they were to seek information on a 5- point Likert-scale ranging from "definitely would seek to avoid information" (1) to "definitely would seek information" (5). The answers are converted into a scale by reversing the scoring and taking the sum of all responses. The questions were asked in the second wave.

Cognitive skills

Regarding cognitive skills, we measured financial literacy, financial management, and cognitive reflection.

Financial literacy was measured using five multiple-choice financial literacy questions (Lusardi & Mitchell, 2014). The questions assessed participants' knowledge on financial matters concerning interest rates, stocks, and mortgages. The number of correct answers is used as a measure of financial literacy. The questions were asked in the second wave.

Financial management was elicited using a scale proposed by Antonides et al. (2011). This scale consists of four statements that aim to capture how individuals deal with financial affairs (e.g. paying bills on time). Participants were asked to indicate

16 The original scale by Kemper et al. (2017) used a 7-point Likert-scale.

17 The original scale by Ho et al. (2021) consists of 13 items.

the extent to which they agreed with each statement on a 5-point Likert-scale ranging from "totally disagree" (1) to "totally agree" (5). The items are converted into a scale by taking the sum of all responses. The questions were asked in the second wave.

Cognitive reflection was measured using the cognitive reflection test (CRT; Frederick, 2005). Frederick (2005) designed the CRT to measure a type of cognitive ability. It consists of three questions with a seemingly intuitive answer that is wrong. Individuals who take time to reflect on their answer may eventually realize that the intuitive answer is wrong and should be able to provide the correct answer. Cognitive reflection thus measures participants' ability to override an intuitive heuristic. The number of correct answers is used as a measure of cognitive reflection. The questions were asked in the second wave.

Pension

The survey contained several questions concerning participants' attitudes toward pension saving. We first asked people to assess how much knowledge they have about their own pension on a 5-point Likert-scale ranging from "very little" (1) to "very much" (5). Then we asked whether participants saved over and above their regular pension savings in the past months (yes/no) and whether they planned to do so in the next year, this on a scale from "very unlikely" (1) to "very likely" (5).[18] The other items were statements where people had to indicate the extent to which they agreed with each statement on a 5-point Likert-scale ranging from "totally disagree" (1) to "totally agree" (5). The statements concerned the perceived own responsibility to accrue sufficient pension income (responsibility), the importance of solidarity for pensions (solidarity), the perceived influence they have on their own pension (influence), and whether they enjoy thinking about their pension (engagement).

Financial well-being

Regarding financial well-being, we measured financial anxiety and financial security. Financial anxiety was elicited using a scale proposed by Fünfgeld and Wang (2009). The scale consists of four statements that aim to capture the anxiety that an individual may experience when dealing with financial matters (e.g. feeling unsure

18 Note that these questions rely on an individual's own regular pension savings. Results from these questions should be interpreted accordingly. It does not allow us to conclude anything about the amount of pension savings or how these pension savings compare to other individuals. We can merely infer whether an individual saved more or intended to save on top of what they perceive to be their regular pension savings.

regarding the jargon used by financial experts). Participants were asked to indicate the extent to which they agreed with each statement on a 5-point Likert-scale ranging from "totally disagree" (1) to "totally agree" (5). The answers are converted into one scale by taking the sum of all responses. The questions were asked in the second wave.

Financial security was elicited using a scale proposed by Strömbäck et al. (2017). The scale consists of three questions that aim to capture how confident individuals are with respect to their financial affairs (e.g. confidence about their financial situation). Participants were asked to indicate the extent to which they agreed with each statement on a 5-point Likert-scale ranging from "totally disagree" (1) to "totally agree" (5). The answers are converted into one scale by taking the sum of all responses. The questions were asked in the second wave.

We summarize our measures in Table 3.

Table 3. Summary of measured preferences, traits, skills, and attitudes

Attitudes	Measure	Source
Economic Preferences		
Risk Preference	MPL Average # Safe Choices	Holt and Laury (2002)
Risk General	Likert Item (0-10)*	Dohmen et al. (2011)
Risk Occupation	Likert Item (0-10)*	Dohmen et al. (2011)
Risk Health	Likert Item (0-10)*	Dohmen et al. (2011)
Risk Personal Finances	Likert Item (0-10)*	Dohmen et al. (2011)
Risk Job Finances	Likert Item (0-10)*	Dohmen et al. (2011)
Prudence	MPL # Prudent Choices	Noussair et al. (2013)
Temperance	MPL # Temperate Choices	Noussair et al. (2013)
Time Preference	MPL Average # Patient Choices	Coller and Williams (1999)
Time Near Future	Likert Item (0-10)*	Falk et al. (2016)
Time Far Future	Likert Item (0-10)*	Falk et al. (2016)
Procrastination	Likert Item (0-10)	Falk et al. (2016)
Ambiguity Aversion	MPL Average # Risky Urn Choices	Cettolin and Riedl (2019)
Social Preferences		
Solidarity	Solidarity Game Average € Sent	Riedl et al. (2019)
Altruism	Likert Item (0-10)*	Falk et al. (2016)
Positive Reciprocity	Likert Item (0-10)	Falk et al. (2016)
Negative Reciprocity	Likert Item (0-10)	Falk et al. (2016)
Personality Traits		
Self-Control	13 Item Likert Scale (1-5)	Tangney et al. (2004)
Personal Trust	Binary Question	Statistics Netherlands (2012)
Trust in Public Institutions	4 Item Likert Scale (1-4)	Statistics Netherlands (2012)
Trust in Private Institutions	2 Item Likert Scale (1-4)	Statistics Netherlands (2012)
Trust in Pension Institutions	3 Item Likert Scale (1-4)	Statistics Netherlands (2012)
Optimism	2 Item Likert Scale (0-10)	Kemper et al. (2015)
Overconfidence	Overestimation Financial Literacy	Anderson et al. (2017)
Information Avoidance	3 Item Likert Scale (1-5)	Ho et al. (2020)

Cognitive Skills		
Financial Literacy	5 Financial Literacy Questions	Lusardi and Mitchell (2014)
Financial Management	4 Item Likert Scale (1–5)	Antonides et al. (2011)
Cognitive Reflection	3 Item Cognitive Reflection Test	Frederick (2005)
Pension Attitudes		
Pension Knowledge	Likert Item (1–5)	–
Pension Extra Saving	Binary Question	–
Pension Saving Intention	Likert Item (1–5)	–
Pension Responsibility	Likert Item (1–5)	–
Pension Solidarity	Likert Item (1–5)	–
Pension Influence	Likert Item (1–5)	–
Pension Engagement	Likert Item (1–5)	–
Financial Well-Being		
Financial Anxiety	4 Item Likert Scale (1–5)	Fünfgeld and Wang (2009)
Financial Security	3 Item Likert Scale (1–5)	Strömbäck et al. (2017)

* These items were asked in both waves; the responses are averaged.

4. Results

In this section, we discuss characteristics of the self-employed population and compare them to employees. We first present descriptive statistics of our sample and discuss whether and how these differ when using weights to correct for response bias. Thereafter, we present mean comparisons for the preferences, traits, skills, and attitudes that we elicited. We summarize the findings in Section 5 and discuss implications of the results.

Demographic differences: weighted and unweighted data

Statistics Netherlands provided a stratified random sample of 18,000 employees and 18,000 self-employed persons, representative of the Dutch employee and self-employed populations. Of the invited individuals, 4,282 (12%) completed both waves of the study (of which 3,963 are considered in this study). In order to correct for non-response, Statistics Netherlands developed linear weighting models, separately for employees and self-employed persons, taking into account several important demographic variables.[19]

Table 4 reports the demographic composition of our sample using weighted and unweighted data. It shows that the demographic composition of the total sample does not differ strongly for weighted and unweighted data. The most notable difference is that there is an underrepresentation of non-native individuals, in particular those with a non-Western background. When looking at sub-groups we can observe some dissimilarity, though small, between the weighted and unweighted data. For example, there is a slight overrepresentation of males in our sample of employees, while there is a small underrepresentation of males in our sample of self-employed persons with personnel. Consequently, differences in characteristics between these two groups may be less pronounced when looking at the unweighted data compared to the weighted data, if the characteristic correlates with sex. In order to take into account the non-response of our survey, we continue our analysis with weighted data.[20]

Comparing the demographic characteristics of employees and different types of self-employed persons, we can make several observations. First, the proportion of

19 The weighting model is based on the following demographic characteristics: migration background, sex*age, type of household*place in household, wealth, residence*urbanity, and income.

20 Using weighted data is recommended when the purpose of a study is to provide descriptive statistics of a population (Solon et al., 2015).

Table 4. Demographic composition of the weighted and unweighted sample

	Total	Employee	Both	Solo	Self-Employed	
					With personnel	Owner manager
	%	%	%	%	%	%
Sex						
Male	55 [58]	53 [56]	52 [52]	62 [59]	65 [60]	85 [84]
Female	45 [42]	47 [44]	48 [48]	38 [41]	35 [40]	15 [16]
Marital Status						
Not married	38 [34]	39 [37]	36 [35]	35 [31]	27 [25]	23 [20]
Married	52 [57]	50 [54]	57 [57]	54 [57]	68 [70]	67 [69]
Widowed	1 [1]	1 [1]	0 [0]	0 [0]	1 [0]	1 [1]
Divorced	9 [9]	10 [8]	7 [7]	11 [11]	4 [5]	9 [10]
Children						
0	35 [33]	36 [36]	34 [34]	33 [31]	21 [20]	15 [15]
1	14 [13]	14 [13]	13 [13]	14 [14]	13 [13]	14 [13]
2	35 [36]	35 [36]	34 [32]	32 [33]	38 [40]	43 [44]
3 or more	16 [19]	15 [15]	19 [22]	21 [22]	28 [28]	27 [28]
Migration Background						
Native	80 [87]	79 [86]	85 [87]	80 [86]	79 [87]	87 [91]
Western	11 [9]	11 [9]	8 [9]	11 [10]	4 [5]	8 [7]
Non-Western	9 [4]	10 [5]	6 [4]	9 [4]	17 [8]	4 [2]
Education Level						
Low	5 [4]	5 [4]	4 [4]	4 [4]	3 [2]	2 [2]
Middle	26 [22]	28 [25]	21 [19]	21 [19]	24 [22]	13 [13]
High	46 [48]	44 [46]	55 [55]	51 [51]	37 [35]	52 [51]
Unknown	24 [26]	23 [25]	19 [22]	24 [26]	36 [41]	33 [34]
	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
Age						
Weighted	45 (0.2)	45 (0.3)	46 (0.6)	50 (0.4)	50 (0.6)	53 (0.5)
Unweighted	[47] (0.2)	[44] (0.3)	[45] (0.8)	[48] (0.5)	[48] (0.7)	[51] (0.5)
Income*						
Weighted	38,169 (406)	37,040 (465)	39,585 (1,060)	39,046 (843)	48,171 (1,988)	56,075 (4,364)
Unweighted	[41,800] (482)	[39,356] (493)	[41,934] (1,217)	[40,190] (841)	[51,421] (2,109)	[57,145] (3,949)
N						
Weighted	6,754,042	5,327,245	532,066	561,397	151,623	181,711
Unweighted	[3,963]	[2,224]	[388]	[832]	[217]	[302]

Note: Numbers without [with] square brackets represent weighted [unweighted] data. Percentages do not always add up to 100 due to rounding. *Spendable household income corrected for size and composition of the household. Not married refers to "single" and Married includes registered partnerships.

men compared to women is larger in all groups of self-employed persons. The share of men and women is particularly disproportional for owner-managers. Second, the proportion of married individuals and individuals with at least one child is higher in all groups of self-employed persons. These differences are particularly pronounced for self-employed persons with personnel and owner-managers. Finally, the self-employed are on average older than employees. All of these observations are consistent with previous literature. In addition, in line with the report by the OECD/European Commission (2021), there are few differences in the share of natives when comparing employees with self-employed persons without personnel and those with personnel. Among owner-managers, however, the share of natives is larger. Moreover, looking at the proportion of individuals with a Western and non-Western migration background, we observe that the share of non-Western is much larger among self-employed persons with personnel.

Empirical Strategy

For purposes of comparing elicited preferences, traits, skills, and attitudes of employees and self-employed persons we take the following approach. We present weighted mean comparisons separately for economic preferences, social preferences, personality traits, cognitive skills, pension attitudes, and financial well-being. To test for differences in means, we run a linear or logistic regression (depending on the type of variable of interest), with occupational status as independent variable. In addition, we re-run the regression with demographic control variables to investigate whether the achieved results are robust to controlling for differences in demographic composition.[21] For both analyses, we report the *p*-value of a joint significance (Wald) test of factors in the occupational status variable. In case the joint significance test implies that at least two groups are different at the 5% significance level, we conduct pairwise comparisons using Wald tests with a Benjamini-Hochberg (BH) correction for multiple hypothesis testing (Benjamini & Hochberg, 1995).[22] A table with all

21 We control for sex, age, standardized spendable household income, marital status, migration background, education level, and number of children.

22 A correction for multiple hypothesis testing is applied because we test a large number of exploratory hypotheses in this section. The Benjamini-Hochberg correction is widely used in cases where a large number of hypotheses are simultaneously tested (Chen et al., 2017). In this procedure, the *p*-values of all hypotheses tests are ranked in ascending order and the formula *[m/(m+1-i)]*p* is applied to each individual *p*-value, where *m* is the number of hypothesis tests, *i* is the rank of the *p*-value, and *p* is the *p*-value. The corrected *p*-values can then be compared to the critical value (Benjamini & Hochberg, 1995).

BH-corrected *p*-values can be found in Appendix A.3.[23] When discussing the results below, the reported *p*-values refer to BH- corrected *p*-values from pairwise comparisons on the weighted data without control variables, unless otherwise specified.

Economic preferences

Table 5 reports weighted means for economic preferences. Previous studies mostly find that individuals with lower levels of stated risk aversion are more likely to be self-employed, whereas for revealed preference measures the results are mixed. Our comparisons largely corroborate these results. All types of self-employed persons report on average a greater willingness to take risk (be less risk-averse) than employees in general, in their occupation, their health, and job-related and personal finances (p=0.028, p=0.006 for self-employed persons with personnel and owner-managers, respectively, in the health domain, and p<0.001 otherwise). Importantly, these differences are also economically relevant. The solo self-employed and self-employed with personnel are about one third of a standard deviation more willing to take risk in general compared to employees; for owner-managers this is more than half of a standard deviation. As one would expect, the differences between employees and self-employed persons are particularly pronounced for risk-taking in the domains of occupation and job-related finances, and least pronounced in the health domain. Individuals who are categorized as both employed and self-employed are between employees and self-employed without and with personnel in all domains.

In accordance with their self-reported willingness to take risk, the self-employed make on average slightly less risk-averse choices compared to employees in the revealed preference measure (Risk MPL: p=0.005, p=0.155, p=0.039 for solo self-employed, self-employed with personnel, and owner-managers, respectively). The economic significance is relatively small, however, with a difference of about only one tenth of a standard deviation. Moreover, the difference between owner-managers and employees is not robust to adding controls, and none of the differences are robust to using unweighted data. These results imply that, if anything, there is only

23 As a robustness check, we also run regressions with and without control variables on the unweighted data and perform a Kruskal Wallis (KW) test on the unweighted data. The KW test is a non-parametric test for comparing whether multiple independent samples come from the same distribution (Kruskal & Wallis, 1952). In case the KW test implies that at least two groups are different, we conduct pairwise comparisons using Dunn's test with BH correction for multiple hypothesis testing (Benjamini & Hochberg, 1995; Dinno, 2015; O. J. Dunn, 1964). Table A.2 reports BH-corrected *p*-values for all tests. We only discuss results from our robustness checks in case of major discrepancies between test results.

Table 5. Mean comparison for economic preferences

				Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner-manager	*p*-value	With control p-value
Risk MPL	5.9 (1.67)	5.9	5.9	5.7	5.7	5.7	0.004	0.035
Risk General	4.5 (1.80)	4.6	4.3	4.0	3.9	3.6	<0.001	<0.001
Risk Occupation	4.5 (2.13)	4.7	4.3	3.6	3.9	3.4	<0.001	<0.001
Risk Health	6.6 (2.21)	6.7	6.4	6.2	6.2	6.3	<0.001	<0.001
Risk Personal Finances	5.7 (2.15)	5.9	5.5	5.0	4.7	4.6	<0.001	<0.001
Risk Job Finances+	5.5 (2.25)	5.7	5.4	4.7	4.4	4.0	<0.001	<0.001
Prudence	4.3 (1.27)	4.3	4.4	4.4	4.1	4.2	0.035	0.048
Temperance	3.3 (1.74)	3.3	3.3	3.2	3.1	2.9	0.009	0.360
Time MPL	4.3 (2.58)	4.3	4.6	4.2	4.1	4.3	0.261	0.467
Time Near Future	7.0 (1.64)	6.9	7.1	7.2	7.2	7.5	<0.001	<0.001
Time Distant Future	6.2 (1.80)	6.1	6.2	6.5	6.5	6.5	<0.001	<0.001
Time Procrastination	4.8 (2.55)	4.8	5.0	5.0	4.8	4.5	0.017	0.058
Ambiguity MPL	5.2 (1.07)	5.2	5.2	5.2	5.2	5.2	0.931	0.955

Note: Participants were given the option "not applicable". In total, 329 (8%) gave this answer, of which 278 (85%) were employees, 24 (7%) both, 20 (6%) solo self-employed, 3 (1%) self-employed with personnel, and 4 (1%) owner-manager. These participants are not taken into account for this measure.

a very small difference in elicited risk preferences between employees and self-employed persons using incentivized tasks.

For higher-order risk preferences, Noussair et al. (2013) did not find a relationship between self-employment and prudence and temperance in a sample of Dutch self-employed persons. In our sample, the differences are also small. Specifically, when comparing the average number of prudent choices of employees with subgroups of self-employed persons, no significant differences are found (p=0.168, p=0.135, and p=0.930 for solo self-employed, self-employed with personnel, and owner-managers, respectively). Regarding temperance, there is some evidence that owner-managers are more temperate compared to employees (p=0.001), but this difference is not robust to adding controls.

Similar to risk preferences, we find a discrepancy between stated and revealed measures for time preferences. All self-employed persons indicate being more patient on average than employees in both the short and the long run (p=0.072, p=0.009

for self-employed with personnel in the near future and distant future respectively, p=0.001 for owner-managers in the distant future, and p<0.001 otherwise). Yet, employees and self-employed persons exhibit a similar average number of patient choices in the incentivized choice task. This result contrasts with Andersen et al. (2014), who find that entrepreneurs in their Danish sample choose more patiently in a revealed preference measure.[24] When it comes to procrastination, the solo self-employed tend to be slightly more prone to this than employees (p=0.061), but this difference is not robust to adding controls. The self-employed with personnel and owner-managers view themselves in a similar way as employees do (p=1.000 and p=0.120 respectively).

Consistent with previous literature, no differences are found for revealed ambiguity aversion.

Social Preferences

Table 6 reports weighted means for our measures of social preferences. We observe little difference between employees and self-employed persons in the elicited social preferences. In particular, the self-employed send on average similar amounts of money to others in the solidarity game and rate themselves similar in terms of altruism and positive reciprocity. This is consistent with Caliendo et al. (2012), who also found no relationship between positive reciprocity and self-employment in a sample of German self-employed persons.

Interestingly, we do find that self-employed with personnel and owner-managers rate themselves about one third of a standard deviation higher on negative reciprocity compared to employees (p<0.001 in both). In contrast, the solo self-employed rate

Table 6. Mean comparison for social preferences

					Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner-manager	p-value	With control p-value
Solidarity	26.1 (16.41)	25.9	26.2	27.1	26.1	25.9	0.636	0.751
Altruism	6.3 (2.22)	6.2	6.5	6.4	6.2	6.4	0.087	0.218
Positive Reciprocity	8.4 (1.58)	8.4	8.4	8.5	8.5	8.5	0.126	0.098
Negative Reciprocity	3.4 (2.44)	3.4	3.5	3.5	4.2	4.3	<0.001	<0.001

24 A potential explanation is that Andersen et al. (2014) conduct structural estimations of the discount factor, also controlling for curvature of the utility function, while we simply compare the average number of patient choices of participants.

themselves similar to employees (p=0.680), but clearly lower than self-employed with personnel (p=0.001) and owner-managers (p<0.001). The former result contrasts with the finding of Caliendo et al. (2012), who report weak evidence of lower negative reciprocity among German self-employed persons.

Personality traits

Table 7 reports the weighted means for the personality traits that we elicited. Owner-managers rate themselves slightly higher on self-control compared to employees (p=0.004), but the difference is not robust to adding controls. The solo self-employed and employed with personnel rate themselves almost identical to employees (p=1.000 for both). This result contrasts with previous literature, which provides indirect evidence of a positive relationship between self-control and self-employment.

In terms of generalized trust, we observe that the solo self-employed (p=0.002) and owner-managers (p=0.013) are on average more likely to trust others than employees, but these differences are not robust to adding controls. This finding is in line with results found in a sample of Canadian minorities (Nakhaie et al., 2009) but contrasts with the positive relationship found in a German representative sample (Caliendo et al., 2012).

Concerning institutional trust, we see interesting differences in patterns among the types of self-employed persons. The solo self-employed indicate having lower trust on average in public and private institutions than employees (p=0.055 and p<0.001, respectively). The difference is most pronounced for trust in private institutions, with a difference of about one third of a standard deviation. The solo self-employed also have lower trust on average in pension institutions (p<0.001 when adding controls). The self-employed with personnel indicate having lower trust on average in public institutions (p=0.032) but are otherwise similar to employees (p=0.271 for trust in private institutions). Owner-managers indicate having slightly lower trust on average in private institutions compared to employees (p=0.023), but this difference is not robust to adding controls. Otherwise, owner-managers are very similar to employees.

Previous empirical evidence suggests that there is a positive relationship between self-employment and optimism. In line with this, we find that the self-employed rate themselves as more optimistic than employees (p=0.009, p=0.003, and p<0.001 for solo self-employed, self-employed with personnel, and owner-managers, respectively). Moreover, there are clear differences between the types of self-employed persons. The solo self-employed rate themselves about one tenth of a standard deviation higher than employees, while this amounts to more than one third of a standard deviation for owner-managers.

Table 7. Mean comparison for personality traits

					Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner-manager	p-value	With control p-value
Self-Control	44.9 (7.43)	44.9	44.8	45.0	45.4	46.3	0.042	0.693
Personal Trust*	0.75 (0.43)	0.73	0.80	0.80	0.77	0.81	0.001	0.314
Trust in Public Institutions	12.0 (1.98)	12.1	12.0	11.8	11.7	12.3	0.003	0.003
Trust in Private Institutions	4.8 (1.22)	4.8	4.7	4.4	4.7	4.6	<0.001	<0.001
Trust in Pension Institutions+	6.7 (1.91)	6.8	6.8	6.5	6.6	6.9	0.058	<0.001
Optimism	13.7 (3.14)	13.6	13.7	14.0	14.4	14.8	<0.001	<0.001
Overconfidence	-0.06 (1.02)	-0.08	-0.04	-0.04	0.07	-0.01	0.398	0.571
Information Avoidance	7.6 (2.64)	7.6	7.4	7.6	7.7	7.7	0.750	0.662

Note: *This is a binary variable, so a logistic regression was run. +Participants were given the option "don't know" for one of the variables included in this scale. In total 791 (20%) gave this answer, of whom 442 (56%) were employees, 86 (11%) both, 170 (21%) solo self-employed, 46 (6%) self-employed with personnel, and 47 (6%) owner-manager. These participants are not taken into account for this measure.

Similarly, empirical evidence to date suggests that there is a positive relationship between self-employment and overconfidence. Overall, we do not find much overconfidence in our sample, meaning that participants in our survey do not under- or overestimate the number of financial literacy questions that they have correct. Hence, it is perhaps not surprising that we also do not find differences between employees and the self-employed in terms of overconfidence.[25] A possible explanation for the discordance with previous literature is that our measure specifically addresses overestimation of financial literacy and that individuals are relatively good at estimating how many of these type of questions they have correct.

No differences between employed and self-employed persons are found for information avoidance.

Cognitive skills

Table 8 reports the weighted means for our measures of cognitive skills. Empirical evidence to date suggests that there is a positive relationship between self-employment and financial literacy. In line with this, we find that owner-managers score higher

25 This result corroborates a recent study by Gignac (2022), which does not find support for the so-called Dunning-Kruger effect – which would suggest that individuals who score lower are more prone to overestimate their own ability – for financial literacy in a US sample.

Table 8. Mean comparison for cognitive skills

					Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner manager	p-value	With control p-value
Financial Literacy	3.3 (1.18)	3.3	3.3	3.5	3.4	4.0	<0.001	<0.001
Financial Management	16.6 (2.46)	16.6	16.7	16.4	16.5	16.7	0.177	0.038
Cognitive Reflection	1.5 (1.11)	1.5	1.5	1.6	1.5	1.8	<0.001	0.454

on financial literacy compared to employees (p<0.001). They also score higher than the other types of self-employed persons (p<0.001 for all). The solo self-employed score slightly higher than employees do (p<0.001), but this difference is not robust to adding controls.

Owner-managers also score higher on the Cognitive Reflection Test (CRT) compared to employees (p<0.001) and other types of self-employed persons (p=0.003, p=0.006 compared to solo self-employed and self-employed with personnel, respectively). However, this difference is not robust to adding control variables. In particular, controls for sex and educational level contribute substantially to explaining differences in cognitive reflection, in line with previous literature (e.g., Frederick, 2005).

Concerning self-assessed financial management, we find that the solo self-employed rate themselves slightly lower than employees (p=0.006 when adding controls). No differences are observed between employees and other types of self-employed persons.

Pension Attitudes

Table 9 reports the weighted means for attitudes toward pension saving. There are clear differences between employees and the self-employed in these attitudes. All types of self-employed persons indicate that they have more knowledge, responsibility, and influence concerning their own pension, are more likely to have saved on top of their regular pension, and are more likely to have the intention to save on top of their regular pension (p<0.001 for all). Interestingly, the ratings of solo self-employed and self-employed with personnel regarding pension engagement are only higher than those of employees when not controlling for other variables (p=0.026 and p=0.001, respectively, without controls and p=1.000 and p=0.256, respectively, with controls). Concerning the importance of solidarity for pensions, the solo self-employed do not differ from employees (p=1.000), whereas the self-employed with personnel and owner-managers deem it less important (p<0.001 for both).

Table 9. Mean comparison for pension attitudes

					Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner manager	p-value	With control p-value
Pension Knowledge	2.9 (1.02)	2.8	2.9	3.2	3.2	3.5	<0.001	<0.001
Pension Extra Saving*	0.25 (0.43)	0.22	0.27	0.35	0.43	0.37	<0.001	<0.001
Pension Extra Saving Intention	2.3 (1.45)	2.2	2.5	2.7	2.8	2.7	<0.001	<0.001
Pension Responsibility	3.6 (0.98)	3.5	3.7	4.0	4.1	4.3	<0.001	<0.001
Pension Solidarity	3.5 (0.97)	3.6	3.5	3.6	3.3	3.3	<0.001	<0.001
Pension Influence	3.5 (1.04)	3.5	3.6	3.9	3.9	4.2	<0.001	<0.001
Pension Engagement	3.4 (1.04)	3.4	3.5	3.5	3.6	3.9	<0.001	<0.001

Note: *This is a binary variable, so a logistic regression was run.

Financial Well-Being

Table 10 reports the weighted means for financial well-being. Financial well-being is found to differ across different types of self-employed persons. Owner-managers are substantially less anxious about financial matters compared to employees and all other groups (p<0.001 for all). The other types of self-employed persons do not substantially differ from employees (p=0.077 or higher). In terms of financial security, the solo self-employed rate themselves as less financially secure compared to employees, self-employed persons with personnel, and owner-managers (p<0.001 for all). Owner- managers rate themselves as more financially secure compared to employees (p<0.001), but this difference is not robust to adding controls.

Table 10. Mean comparison for financial well-being

					Self-Employed		Wald Test	
	Total (SD)	Employee	Both	Solo	With personnel	Owner manager	p-value	With control p-value
Financial Anxiety	9.5 (2.94)	9.5	9.5	9.5	9.1	8.2	<0.001	0.002
Financial Security	11.1 (2.38)	11.2	11.0	10.7	11.5	11.7	<0.001	<0.001

5. Discussion

The number of self-employed persons in the Netherlands is growing. At the same time, there is a growing concern about the retirement saving adequacy of the Dutch self-employed. They tend to make little use of traditional pension savings instruments and have significantly lower pension replacement rates than other people in the Netherlands.

In this paper, we compare the Dutch self-employed population to employees, on a wide range of individual characteristics that could play a role in explaining these lower pension replacement rates. To get at these characteristics we use both incentivized experimental measures and stated (i.e., self-assessed) preferences and attitudes. The results show both differences and similarities between these two groups, as well as within the different subgroups of self-employed persons. Table 11 provides an overview of characteristics where at least one type of self-employed persons differs on average from employees.

All types of self-employed workers indicate having a higher willingness to take risks (i.e., are less risk averse), being more patient, and being more optimistic compared to employees. The differences are most pronounced for owner-managers and least pronounced for the solo self-employed. These characteristics may provide some explanation for the lower observed pension replacement rates. Individuals who indicate having a higher willingness to take risk may be willing to forego saving now if they expect higher earnings later, even if this future income is uncertain. The higher levels of optimism among the self-employed may reinforce this effect because they may be more likely to expect the future to be favorable. At the same time, more patience implies that the self-employed are willing to give up current income for future benefit. For many self-employed persons, however, there is also a trade-off between setting money aside for pension and investing it in their own business.

It is important to note that the differences between self-employed persons and employees observed in our self-assessment risk preference and patience measures are not corroborated by our incentivized behavioral measures. Discrepancy between stated and revealed measures is a common finding in the literature for risk preferences (e.g., Astebro et al., 2014; Bokern et al., 2021; Georgalos, 2018), and it has also been observed for time preferences (Bauer et al., 2020). A potential reason for this is that stated preferences relate to an individual's self-perceived behavior whereas incentivized behavioral measures relate to actual behavior (e.g., Ajzen & Fishbein, 1977). Whether stated preferences are more relevant than revealed preferences, or instead vice versa, is up for discussion and depends on the question at hand. In case

of pension saving it also depends on the objective of the pension fund. If pension funds or other pension product providers want to attract the self-employed to build up pension in the second or third pillar, it may be best to take into account perceived preferences as this may lead to offering a product that the self-employed like. On the other hand, if stated and revealed preferences diverge and the overall welfare of the client is the major objective, then a more paternalistic attitude might be warranted. That suggests that consideration should be given to revealed preferences as the basis of pension policy.

For other characteristics, we observe quite some heterogeneity within the group of self-employed persons. The solo self-employed characterize themselves as having slightly lower financial management skills and lower financial security compared to employees. In addition, they have lower trust in public, private, and pension institutions. The self-employed with personnel characterize themselves as having higher negative reciprocity and lower trust in public institutions. Owner-managers report higher levels of negative reciprocity, lower trust in private institutions, higher financial literacy, and lower financial anxiety. The self-employed do not differ on average from employees on other characteristics considered in this study, including self-control, overconfidence, information avoidance, and information management.

These results have several implications. First, extrapolating results from employees to the self-employed population appears to be warranted on the many characteristics where we do not find significant differences. Second, the lower score on financial security for the solo self-employed compared to employees and other types of self-employed persons reinforces the concern about the socio-economic position of this group and suggest that it is a perceived inability rather than unwillingness that prevents pension saving. On the contrary, the self-employed with personnel and owner-managers rate themselves similar or slightly lower on financial anxiety and similar or slightly higher on security compared to employees. Third, the lower levels of trust in institutions, especially among the solo self-employed, should be addressed to increase the willingness of this group to join second pillar pension savings in a pension fund voluntarily. In this respect, it would be interesting for future research to investigate whether the level of trust differs between different types of pension institutions (e.g., between regular pension funds and *Premie Pensioen Instellingen*, PPIs).

In our survey, we also asked participants several questions concerning their pension. Table 12 provides an overview of these questions and summarizes how the self-employed differ from employees. Given that in the Netherlands the self-employed are responsible for their own pension, it does not come as a surprise that they

Table 11. Summary of main results on economic preferences, social preferences, cognitive skills, and financial well-being

	Solo	Self-Employed with Personnel	Owner-Manager
Risk Aversion (stated)	-	-	-
Patience (stated)	+	+	+
Negative Reciprocity	0	+	+
Trust in Public Institutions	-	-	0
Trust in Private Institutions	-	0	-
Trust in Pension Institutions	-	0	0
Optimism	+	+	+
Financial Literacy	0	0	+
Financial Management	-	0	0
Financial Anxiety	0	0	-
Financial Security	-	0	0

Note: The table summarizes measures for which we find differences on average between self-employed and employees. "0" = no difference compared to employees, "-" = lower compared to employees", "+" = higher compared to employees.

Table 12. Summary of main results on pension attitudes

	Solo	Self-Employed with Personnel	Owner-Manager
Pension Knowledge	+	+	+
Pension Extra Saving	+	+	+
Pension Extra Saving Intention	+	+	+
Pension Responsibility	+	+	+
Pension Solidarity	0	-	-
Pension Influence	+	+	+
Pension Engagement	0	0	+

Note: the table summarizes measures for which we find differences on average between self-employed and employees. "0" = no difference compared to employees, "-" = lower compared to employees", "+" = higher compared to employees.

indicate having more knowledge about their pension, a higher sense of responsibility, and the feeling that they have more influence, compared to employees. The self-employed are also more likely to have saved on top of their regular pension savings and more likely to have the intention to do so in the near future. The solo self-employed and self-employed with personnel do not differ, however, from employees on how much they wish to think about their pension.

What consequences these attitudes have for actual pension saving behavior is an open question. At face value, the observations that the self-employed have more pension knowledge, feel more responsibility for their pension, and are more likely

to save on top of their regular pension savings seem at odds with the empirical observation that the self-employed have lower pension replacement rates compared to employees. However, given that most employees do not make an active decision concerning their pension, these observations do not necessarily imply that the self-employed have higher pension savings compared to employees. Further research is required to draw conclusions about the impact of the observed pension attitudes and their implications for replacement rates.

In conclusion, the results presented in this paper provide direct evidence of characteristics of the self-employed and how these compare to employees in the Netherlands. An important open question is to what extent these characteristics can explain the lower replacement rates observed and to what extent this can be explained by deliberate decision-making or by financial or time constraints. In addition, we see great heterogeneity among the self-employed. An interesting avenue for further research is to investigate this heterogeneity at a more granular level, such as by sector.

References

Ahn, T. (2010). Attitudes toward risk and self-employment of young workers. *Labour Economics*, *17*(2), 434-442. https://doi.org/https://doi.org/10.1016/j.labeco.2009.06.005

Ajzen, I. & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*(5), 888-918. https://doi.org/10.1037/0033-2909.84.5.888

Andersen, S., Di Girolamo, A., Harrison, G. W., & Lau, M. I. (2014). Risk and time preferences of entrepreneurs: evidence from a Danish field experiment. *Theory and Decision*, *77*(3), 341-357. https://doi.org/10.1007/s11238-014-9446-z

Anderson, A., Baker, F., & Robinson, D. T. (2017). Precautionary savings, retirement planning and misperceptions of financial literacy. Journal of Financial Economics, 126(2), 383-398. https://doi.org/https://doi.org/10.1016/j.jfineco.2017.07.008

Andersson, L. & Hammarstedt, M. (2010). Self-employment matching: an analysis of dual-earner couples in Sweden. *Economics Bulletin*, *30*(3), 2197-2209.

Andersson, L. & Hammarstedt, M. (2011). Transmission of self-employment across immigrant generations: the importance of ethnic background and gender. *Review of Economics of the Household*, *9*(4), 555-577. https://doi.org/10.1007/s11150-010-9102-5

Antonides, G., de Groot, M. I., & van Raaij, F. W. (2011). Mental budgeting and the management of household finance. *Journal of Economic Psychology*, *32*(4), 546-555. https://doi.org/https://doi.org/10.1016/j.joep.2011.04.001

Astebro, T., Herz, H., Nanda, R., & Weber, R. A. (2014). Seeking the Roots of Entrepreneurship: Insights from Behavioral Economics. *Journal of Economic Perspectives*, *28*(3), 49-70. https://doi.org/10.1257/jep.28.3.49

Babb, E. M. & Babb, S. V. (1992). Psychological traits of rural entrepreneurs. *The Journal of Socio-Economics*, *21*(4), 353-362. https://doi.org/https://doi.org/10.1016/1053-5357(92)90004-Q

Barnir, A. & McLaughlin, E. (2011). Parental self-employment, start-up activities and funding: exploring intergenerational effects. *Journal of Developmental Entrepreneurship*, *16*(03), 371-392. https://doi.org/10.1142/s1084946711001884

Baron, R. A., Mueller, B. A., & Wolfe, M. T. (2016). Self-efficacy and entrepreneurs' adoption of unattainable goals: The restraining effects of self-control. *Journal of Business Venturing*, *31*(1), 55-71. https://doi.org/https://doi.org/10.1016/j.jbusvent.2015.08.002

Batsaikhan, M. (2017). Trust, trustworthiness, and business success: lab and field findings from entrepreneurs. *Economic Inquiry*, *55*(1), 368-382. https://doi.org/https://doi.org/10.1111/ecin.12359

Bauer, M., Chytilová, J., & Miguel, E. (2020). Using survey questions to measure preferences: Lessons from an experimental validation in Kenya. *European Economic Review*, *127*, 103493. https://doi.org/https://doi.org/10.1016/j.euroecorev.2020.103493

Begley, T. M. & Boyd, D. P. (1987). A comparison of entrepreneurs and managers of small business firms. *Journal of management*, *13*(1), 99-108.

Benjamini, Y. & Hochberg, Y. (1995). Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society: Series B (Methodological)*, *57*(1), 289-300. https://doi.org/https://doi.org/10.1111/j.2517-6161.1995.tb02031.x

Beugelsdijk, S. & Noorderhaven, N. (2005). Personality Characteristics of Self-Employed; An Empirical Study. *Small Business Economics*, *24*(2), 159-167. https://doi.org/10.1007/s11187-003-3806-3

Blanchflower, D. G. (2004). Self-Employment: More may not be better. *National Bureau of Economic Research Working Paper Series*, *No. 10286*. https://doi.org/10.3386/w10286

Bokern, P., Linde, J., Riedl, A., Schmeets, H., & Werner, P. (2021). A survey of risk preference measures and their relation to field behavior. *Netspar Industry Paper Series (Survey Paper 58)*.

Bosch, N., Roelofs, G., Vuuren, D. van, & Wilkens, M. (2012). *De huidige en toekomstige groei van het aandeel zzp'ers in de werkzame beroepsbevolking*. https://www.cpb.nl/publicatie/de-huidige-en-toekomstige-groei-van-het-aandeel-zzp-ers-in-de-werkzame-beroepsbevolking

Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, *51*(3), 222-230. https://doi.org/https://doi.org/10.1016/j.paid.2010.07.007

Brown, S., Dietrich, M., Ortiz-Nuñez, A., & Taylor, K. (2011). Self-employment and attitudes towards risk: Timing and unobserved heterogeneity. *Journal of Economic Psychology*, *32*(3), 425-433. https://doi.org/https://doi.org/10.1016/j.joep.2011.02.015

Brown, S., Farrel, L., & Sessions, J. G. (2006). Self-Employment Matching: An Analysis of Dual Earner Couples and Working Households. *Small Business Economics*, *26*(2), 155-172. http://www.jstor.org/stable/40229460

Bruce, D. (1999). Do Husbands Matter? Married Women Entering Self-Employment. *Small Business Economics*, *13*(4), 317-329. https://doi.org/10.1023/A:1008179214572

Caliendo, M., Fossen, F., & Kritikos, A. (2012). Trust, positive reciprocity, and negative reciprocity: Do these traits impact entrepreneurial dynamics? *Journal of Economic Psychology*, *33*(2), 394-409. https://doi.org/https://doi.org/10.1016/j.joep.2011.01.005

Caliendo, M., Fossen, F., & Kritikos, A. S. (2014). Personality characteristics and the decisions to become and stay self-employed. *Small Business Economics*, *42*(4), 787-814. https://doi.org/10.1007/s11187-013-9514-8

Cettolin, E. & Riedl, A. (2019). Revealed preferences under uncertainty: Incomplete preferences and preferences for randomization. *Journal of Economic Theory*, *181*, 547-585. https://doi.org/https://doi.org/10.1016/j.jet.2019.03.002

Charness, G., Garcia, T., Offerman, T., & Villeval, M. C. (2020). Do measures of risk attitude in the laboratory predict behavior under risk in and outside of the laboratory? *Journal of Risk and Uncertainty*, *60*(2), 99-123. https://doi.org/10.1007/s11166-020-09325-6

Chye Koh, H. (1996). Testing hypotheses of entrepreneurial characteristics. *Journal of Managerial Psychology*, *11*(3), 12-25. https://doi.org/10.1108/02683949610113566

Coller, M. & Williams, M. B. (1999). Eliciting Individual Discount Rates [journal article]. *Experimental Economics*, *2*(2), 107-127. https://doi.org/10.1023/a:1009986005690

Constant, A. & Zimmermann, K. F. (2006). The Making of Entrepreneurs in Germany: Are Native Men and Immigrants Alike? *Small Business Economics*, *26*(3), 279-300. https://doi.org/10.1007/s11187-005-3004-6

Cooper, A. C., Woo, C. Y., & Dunkelberg, W. C. (1988). Entrepreneurs' perceived chances for success. *Journal of Business Venturing*, *3*(2), 97-108. https://doi.org/https://doi.org/10.1016/0883-9026(88)90020-1

Cowling, M. (2000). Are entrepreneurs different across countries? [Article]. *Applied Economics Letters*, *7*(12), 785-789. https://doi.org/10.1080/135048500444804

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334. https://doi.org/10.1007/BF02310555

Ćumurović, A. & Hyll, W. (2019). Financial Literacy and Self-Employment. *Journal of Consumer Affairs*, *53*(2), 455-487. https://doi.org/https://doi.org/10.1111/joca.12198

de Bresser, J. & Knoef, M. (2015). Can the Dutch meet their own retirement expenditure goals? *Labour Economics*, *34*, 100–117. https://doi.org/https://doi.org/10.1016/j.labeco.2015.03.014

Dinno, A. (2015). Nonparametric pairwise multiple comparisons in independent groups using Dunn's test. *Stata Journal*, *15*(1), 292–300. www.stata-journal.com/sjpdf.html?article=st0381

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual Risk Attitudes: Measurement, Determinants, and Behavioral Consequences. *Journal of the European Economic Association*, *9*(3), 522–550. https://doi.org/10.1111/j.1542-4774.2011.01015.x

Dohmen, T., Falk, A., Huffman, D., & Sunde, U. W. E. (2008). Representative trust and reciprocity: prevalence and determinants [https://doi.org/10.1111/j.1465-7295.2007.00082.x]. *Economic Inquiry*, *46*(1), 84–90. https://doi.org/https://doi.org/10.1111/j.1465-7295.2007.00082.x

Dunn, O. J. (1964). Multiple Comparisons Using Rank Sums. *Technometrics*, *6*(3), 241–252. https://doi.org/10.1080/00401706.1964.10490181

Dunn, T. & Holtz-Eakin, D. (2000). Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links. *Journal of Labor Economics*, *18*(2), 282–305. https://doi.org/Doi 10.1086/209959

Ekelund, J., Johansson, E., Järvelin, M.-R., & Lichtermann, D. (2005). Self-employment and risk aversion – evidence from psychological test data. *Labour Economics*, *12*(5), 649–659. https://doi.org/https://doi.org/10.1016/j.labeco.2004.02.009

Eliasson, K. & Westlund, H. (2013). Attributes influencing self-employment propensity in urban and rural Sweden. *The Annals of Regional Science*, *50*(2), 479–514. https://doi.org/10.1007/s00168-012-0501-9

Eren, O. & Sula, O. (2012). The Effect of Ability on Young Men's Self-Employment Decision: Evidence from the NELS. *Industrial Relations: A Journal of Economy and Society*, *51*(4), 916–935. https://doi.org/https://doi.org/10.1111/j.1468-232X.2012.00706.x

Fairchild, G. B. (2009). Residential Segregation Influences on the Likelihood of Ethnic Self–Employment. *Entrepreneurship Theory and Practice*, *33*(2), 373–395. https://doi.org/10.1111/j.1540-6520.2009.00295.x

Fairlie, R. W. & Krashinsky, H. A. (2012). Liquidity constraints, household wealth, and entrepreneurship revisited. *Review of Income and Wealth*, *58*(2), 279–306. https://doi.org/https://doi.org/10.1111/j.1475-4991.2011.00491.x

Falk, A., Becker, A., Dohmen, T., Huffman, D., & Sunde, U. (2016). *The Preference Survey Module: A Validated Instrument for Measuring Risk, Time, and Social Preferences* (IZA DP No. 9674). (IZA, Issue. https://www.iza.org/publications/dp/9674/the-preference-survey-module-a-validated-instrument-for-measuring-risk-time-and-social-preferences

Frederick, S. (2005). Cognitive Reflection and Decision Making. *Journal of Economic Perspectives*, *19*(4), 25–42. https://doi.org/10.1257/089533005775196732

Frese, M. & Gielnik, M. M. (2014). The Psychology of Entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 413–438. https://doi.org/10.1146/annurev-orgpsych-031413-091326

Fünfgeld, B. & Wang, M. (2009). Attitudes and behaviour in everyday finance: evidence from Switzerland. *International Journal of Bank Marketing*, *27*(2), 108–128. https://doi.org/10.1108/02652320910935607

Georgalos, K. (2018). Entrepreneurship Under Risk and Uncertainty: A Review of the Experimental Evidence. In A. Tur Porcar & D. Ribeiro Soriano (Eds.), *Inside the Mind of the Entrepreneur: Cognition, Personality Traits, Intention, and Gender Behavior* (pp. 59–74). Springer International Publishing. https://doi.org/10.1007/978-3-319-62455-6_5

Georgellis, Y., Sessions, J. G., & Tsitsianis, N. (2005). Windfalls, Wealth, and the Transition to Self-Employment. *Small Business Economics*, *25*(5), 407–428. https://doi.org/10.1007/s11187-004-6477-9

Gignac, G. E. (2022). The association between objective and subjective financial literacy: Failure to observe the Dunning–Kruger effect. Personality and Individual Differences, 184, 111224. https://doi.org/https://doi.org/10.1016/j.paid.2021.111224

Hamböck, C., Hopp, C., Keles, C., & Vetschera, R. (2017). Risk aversion in Entrepreneurship Panels: Measurement Problems and Alternative Explanations. *Managerial and Decision Economics*, *38*(7), 1046–1057. https://doi.org/https://doi.org/10.1002/mde.2844

Ho, E., Hagmann, D. & Loewenstein, G. (2018). *Measuring Information Preferences* (SSRN 3249768). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3249768

Ho, E., Hagmann, D. & Loewenstein, G. (2021). Measuring Information Preferences. *Management Science*, *67*(1), 126–145. https://doi.org/10.1287/mnsc.2019.3543

Holm, H. J., Opper, S., & Nee, V. (2013). Entrepreneurs Under Uncertainty: An Economic Experiment in China. *Management Science*, *59*(7), 1671–1687. https://doi.org/10.1287/mnsc.1120.1670

Holt, C. A. & Laury, S. K. (2002). Risk Aversion and Incentive Effects. *The American Economic Review*, *92*(5), 1644–1655. http://www.jstor.org/stable/3083270

Hundley, G. (2006). Family Background and the Propensity for Self-Employment. *Industrial Relations: A Journal of Economy and Society*, *45*(3), 377–392. https://doi.org/https://doi.org/10.1111/j.1468-232X.2006.00429.x

Joona, P. A. (2010). Exits from Self-Employment: Is There a Native-Immigrant Difference in Sweden? *International Migration Review*, *44*(3), 539–559. https://doi.org/10.1111/j.1747-7379.2010.00817.x

Kemper, C. J., Wassermann, M., Hoppe, A., Beierlein, C., & Rammstedt, B. (2017). Measuring Dispositional Optimism in Large-Scale Studies. *European Journal of Psychological Assessment*, *33*(6), 403–408. https://doi.org/10.1027/1015-5759/a000297

Kimball, M. S. (1990). Precautionary Saving in the Small and in the Large. *Econometrica*, *58*(1), 53–73. https://doi.org/10.2307/2938334

Kimball, M. S. (1993). Standard Risk Aversion. *Econometrica*, *61*(3), 589–611. https://doi.org/10.2307/2951719

Knoef, M., Been, J., Caminada, K., Goudswaard, K., & Rhuggenaath, J. (2017). De toereikendheid van pensioenopbouw na de crisis en pensioenhervormingen. *Netspar Industry Paper Series (Design Paper 68)*.

Knoef, M., Been, J. I. M., Alessie, R. O. B., Caminada, K., Goudswaard, K., & Kalwij, A. (2016). Measuring retirement savings adequacy: developing a multi-pillar approach in the Netherlands. *Journal of Pension Economics and Finance*, *15*(1), 55–89. https://doi.org/10.1017/S1474747214000341

Koellinger, P., Minniti, M., & Schade, C. (2013). Gender Differences in Entrepreneurial Propensity*. *Oxford Bulletin of Economics and Statistics*, *75*(2), 213–234. https://doi.org/https://doi.org/10.1111/j.1468-0084.2011.00689.x

Koopmans, P., Knoef, M., & Lent, M. v. (2021). The Demand for Retirement Products: The Role of Withdrawal Flexibility and Administrative Burden. *Netspar Design Paper Series (Design Paper 197)*

Koudstaal, M., Sloof, R., & van Praag, M. (2016). Risk, Uncertainty, and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment. *Management Science*, *62*(10), 2897–2915. https://doi.org/10.1287/mnsc.2015.2249

Kruger, J. & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*(6), 1121–1134. https://doi.org/10.1037/0022-3514.77.6.1121

Kruskal, W. H. & Wallis, W. A. (1952). Use of Ranks in One-Criterion Variance Analysis. *Journal of the American Statistical Association*, *47*(260), 583–621. https://doi.org/10.1080/01621459.1952.10483441

Le, A. T. (1999). Empirical Studies of Self-Employment. *Journal of Economic Surveys*, *13*(4), 381–416. https://doi.org/https://doi.org/10.1111/1467-6419.00088

Leoni, T. & Falk, M. (2010). Gender and field of study as determinants of self-employment. *Small Business Economics*, *34*(2), 167–185. https://doi.org/10.1007/s11187-008-9114-1

Lin, Z., Picot, G., & Compton, J. (2000). The Entry and Exit Dynamics of Self-Employment in Canada. *Small Business Economics*, *15*(2), 105–125. https://doi.org/10.1023/A:1008150516764

Linde, J. (2019). Voorstel keuzearchitectuur pensioensparen voor zelfstandigen *Netspar Industry Paper Series (Design Paper 132)*.

Lusardi, A. & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Ministry of Social Affairs and Employment (2013). *Pensioen van zelfstandigen. Onderzoek naar de oorzaken van beperkte pensioenopbouw van zelfstandigen en mogelijke oplossingsrichtingen hiervoor*.

Ministry of Social Affairs and Employment (2016). *Onderzoek vrijwillige voortzetting pensioenfonds voor zelfstandigen*.

Ministry of Social Affairs and Employment (2021). *Antwoord op vragen van het lid Smeulders over ''experimenten met pensioenregelingen voor zelfstandigen'' [Kamerstuknummer 2021D12457]*. Retrieved from https://www.tweedekamer.nl/kamerstukken/kamervragen/detail?id=2021Z01992&did=2021D12457

Ministry of Social Affairs and Employment (2022). *Aanbieding wetsvoorstel toekomst pensioenen [Kamerbrief 2022-0000088663]*. Retrieved from https://www.rijksoverheid.nl/onderwerpen/pensioen/documenten/kamerstukken/2022/03/30/aanbieding-wetsvoorstel-toekomst-pensioenen

Moore, D. A. & Healy, P. J. (2008). The trouble with overconfidence. *Psychological Review*, *115*(2), 502–517. https://doi.org/10.1037/0033-295X.115.2.502

Nakhaie, R., Lin, X., & Guan, J. (2009). Social Capital and the Myth of Minority Self-Employment: Evidence from Canada. *Journal of Ethnic and Migration Studies*, *35*(4), 625–644. https://doi.org/10.1080/13691830902765244

Naudé, W., Siegel, M., & Marchand, K. (2017). Migration, entrepreneurship and development: critical questions. *IZA Journal of Migration*, *6*(1), 5. https://doi.org/10.1186/s40176-016-0077-8

Naveed, A., Ahmad, N., Esmaeilzadeh, R., & Naz, A. (2019). Self-Employment Dynamics of Immigrants and Natives: Individual-level Analysis for the Canadian Labour Market. *Sustainability*, *11*(23), 6671. https://www.mdpi.com/2071-1050/11/23/6671

Noussair, C. N., Trautmann, S. T., & van de Kuilen, G. (2013). Higher Order Risk Attitudes, Demographics, and Financial Decisions. *The Review of Economic Studies*, *81*(1), 325–355. https://doi.org/10.1093/restud/rdt032

OECD/European Commission (2021). *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-employment*. OECD Publishing. https://doi.org/https://doi.org/10.1787/71b7a9bb-en

Özcan, B. (2011). Only the lonely? The influence of the spouse on the transition to self-employment. *Small Business Economics*, *37*(4), 465. https://doi.org/10.1007/s11187-011-9376-x

Parker, S. C. (2008). Entrepreneurship among married couples in the United States: A simultaneous probit approach. *Labour Economics*, *15*(3), 459–481. https://doi.org/https://doi.org/10.1016/j.labeco.2007.03.004

Poschke, M. (2013). Who becomes an entrepreneur? Labor market prospects and occupational choice. *Journal of Economic Dynamics and Control*, *37*(3), 693–710. https://doi.org/https://doi.org/10.1016/j.jedc.2012.11.003

Price, G. N. (2012). Race, Trust in Government, and Self-Employment. *The American Economist*, *57*(2), 171–187. https://doi.org/10.1177/056943451205700203

Rauch, A. & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, *16*(4), 353–385. https://doi.org/10.1080/13594320701595438

Riedl, A., Schmeets, H., & Werner, P. (2019). Preferences for Solidarity and Attitudes Towards the Dutch Pension System: Evidence from a Representative Sample. *Netspar Design Paper*, *128*.

Riepe, J., Rudeloff, M., & Veer, T. (2020). Financial literacy and entrepreneurial risk aversion. *Journal of Small Business Management*, 1–20. https://doi.org/10.1080/00472778.2019.1709380

Schere, J. L. (1982). Tolerance of Ambiguity as a Discriminating Variable Between Entrepreneurs and Managers. *Academy of Management Proceedings*, *1982*(1), 404–408. https://doi.org/10.5465/AMBPP.1982.4976860

Selten, R. (1967). Die Strategiemethode zur Erforschung des eingeschränkt rationalen Verhaltens im Rahmen eines Oligopolexperiments. *Beiträge Zur Experimentellen Wirtschaftsforschung*, 136–168.

SER (2010). Zzp'ers in beeld: Een integrale visie op zelfstandigen zonder personeel. (Advies 10/04).

Simoes, N., Crespo, N., & Moreira, S. B. (2016). Individual determinants of self-employment entry: what do we really know? *Journal of Economic Surveys*, *30*(4), 783–806. https://doi.org/https://doi.org/10.1111/joes.12111

Solon, G., Haider, S. J., & Wooldridge, J. M. (2015). What Are We Weighting For? [Article]. *Journal of Human Resources*, *50*(2), 301–316. https://doi.org/10.3368/jhr.50.2.301

Statistics Netherlands (2012). Sociale Samenhang 2012 Vraagteksten en schema's. (versie 1.1). https://www.cbs.nl/nl-nl/onze-diensten/methoden/onderzoeksomschrijvingen/aanvullende-onderzoeksbeschrijvingen/vragenlijsten-sociale-samenhang-en-welzijn-2012

Statistics Netherlands (2021). *StatLine: Arbeidsdeelname; kerncijfers* [Dataset]. https://opendata.cbs.nl/statline#/CBS/nl/dataset/82309NED/table?ts=1642077837205

Stefanović, S. & Stošić, D. (2012). Specifics and challenges of female entrepreneurship [Article]. *SPECIFIČNOSTI I IZAZOVI ŽENSKOG PREDUZETNIŠTVA.*, *50*(3), 327–343. https://mu.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=85862807&site=ehost-live&scope=site

Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, *14*, 30–38. https://doi.org/https://doi.org/10.1016/j.jbef.2017.04.002

Struckell, E. M., Patel, P. C., Ojha, D., & Oghazi, P. (2022). Financial literacy and self- employment – The moderating effect of gender and race. *Journal of Business Research*, *139*, 639–653. https://doi.org/https://doi.org/10.1016/j.jbusres.2021.10.003

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. *Journal of Personality*, *72*(2), 271–324. https://doi.org/10.1111/j.0022-3506.2004.00263.x

Van der Sluis, J., Van Praag, M., & Vijverberg, W. (2008). Education and entrepreneurship selection and performance: a review of the empirical literature. *Journal of Economic Surveys*, *22*(5), 795-841. https://doi.org/https://doi.org/10.1111/j.1467-6419.2008.00550.x

Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, *30*(5), 655-673. https://doi.org/https://doi.org/10.1016/j.jbusvent.2015.01.003

Van Solinge, H. (2014). Who opts for self-employment after retirement? A longitudinal study in the Netherlands. *European Journal of Ageing*, *11*(3), 261-272. https://doi.org/10.1007/s10433-013-0303-7

Van Stel, A. & de Vries, N. (2015). The economic value of different types of solo self-employed: A review. *The handbook of research on freelancing and self-employment*, 77-84.

Verheul, I., Thurik, R., Grilo, I., & van der Zwan, P. (2012). Explaining preferences and actual involvement in self-employment: Gender and the entrepreneurial personality. *Journal of Economic Psychology*, *33*(2), 325-341. https://doi.org/https://doi.org/10.1016/j.joep.2011.02.009

Wellington, A. J. (2006). Self-employment: the new solution for balancing family and career? *Labour Economics*, *13*(3), 357-386. https://doi.org/https://doi.org/10.1016/j.labeco.2004.10.005

Welter, F. (2012). All you need is trust? A critical review of the trust and entrepreneurship literature. *International Small Business Journal*, *30*(3), 193-212. https://doi.org/10.1177/0266242612439588

Zwinkels, W., Knoef, M., Been, J., Caminada, K., & Goudswaard, K. (2017). Zicht op zzp-pensioen. *Netspar Industry Paper Series (Design Paper 91)*.

Appendix

A.1 Survey Questions

Table A.1. Exact wording of survey questions

Trait	Wording
Risk	*Scale: 0 "totaal niet bereid om risico's te nemen" – 10 "zeer bereid om risico's te nemen"*
General	Kunt u mij vertellen in hoeverre u, in het algemeen, bereid of niet bereid bent om risico's te nemen? (R)
Domain-specific	Mensen kunnen zich in verschillende situaties anders gedragen. Hoe beoordeelt u uw bereidheid om risico's te nemen in de volgende zaken
Occupation	... in uw persoonlijke financiële zaken? (R)
Health	... in uw werkgerelateerde financiële zaken? (R)
Personal Finances	... in uw beroepskeuze? (R)
Job Finances	... in uw gezondheid? (R) [met optie "niet van toepassing"]
Time	*Scale: 0 "totaal niet bereid om zo te handelen" – 10 "zeer bereid om zo te handelen"*
	We vragen u nu naar uw bereidheid om op een bepaalde manier te handelen. In welke mate bent u bereid om
Near Future	... iets op te geven dat vandaag voordelig is voor u, om er dan in de nabije toekomst meer van te kunnen profiteren?
Distant Future	... iets op te geven dat vandaag voordelig is voor u, om er dan in de verre toekomst meer van te kunnen profiteren?
Time (cont'd)	*Scale: 0 "beschrijft me in het geheel niet" – 10 "beschrijft me perfect"*
	Hoe goed beschrijft ieder van de volgende uitspraken u als persoon?
Procrastination	... Ik heb de neiging om taken uit te stellen, zelfs al weet ik dat het beter zou zijn ze meteen uit te voeren.
Altruism	*Scale: 0 "totaal niet bereid om zo te handelen" – 10 "zeer bereid om zo te handelen*
	We vragen u nu naar uw bereidheid om op een bepaalde manier te handelen. In welke mate bent u bereid om
	... aan een goed doel te geven zonder daarvoor iets terug te verwachten?
Reciprocity	*Scale: 0 "beschrijft me in het geheel niet" – 10 "beschrijft me perfect"*
	Hoe goed beschrijft ieder van de volgende uitspraken u als persoon?
Positive	Wanneer iemand me een dienst bewijst, ben ik bereid tot een wederdienst.
Negative	Als ik zeer onrechtvaardig word behandeld, neem ik wraak bij de eerste gelegenheid, zelfs als er kosten aan verbonden zijn.
Self-Control (α = 0.80)	*Scale: 1 "beschrijft me in het geheel niet" – 5 "beschrijft me perfect"*
	Hoe goed beschrijft ieder van de volgende uitspraken u als persoon? 1) Ik kan verleidingen goed weerstaan. 2) Ik vind het moeilijk om slechte gewoontes te doorbreken. (R) 3) Ik ben lui. (R) 4) Ik zeg ongepaste dingen. (R) 5) Ik doe, als ze leuk zijn, bepaalde dingen die slecht voor me zijn. (R) 6) Ik weiger dingen die slecht voor me zijn. 7) Ik zou willen dat ik meer zelfdiscipline had. (R) 8) Mensen zouden zeggen dat ik een ijzeren zelfdiscipline heb. 9) Plezier weerhoudt mij er soms van om mijn werk af te krijgen. (R) 10) Ik heb moeite om mij te concentreren. (R) 11) Ik kan efficiënt werken richting langetermijndoelen. 12) Soms kan ik mijzelf er niet van weerhouden iets te doen, zelfs als ik weet dat het verkeerd is. (R) 13) Ik handel vaak zonder over alle mogelijke alternatieven na te denken. (R)

Personal Trust	*Binary: 0 "Men kan niet voorzichtig genoeg zijn" – 1 "De meeste mensen zijn wel te vertrouwen"*
	Vindt u over het algemeen dat de meeste mensen wel te vertrouwen zijn of vindt u dat men niet voorzichtig genoeg kan zijn in de omgang met mensen?
Institutional Trust	*Scale: 1 "helemaal geen vertrouwen" – 4 "heel veel vertrouwen"*
	Wilt u voor elk van de volgende instellingen aangeven hoeveel vertrouwen u hierin heeft? Hoeveel vertrouwen heeft u in
Public	... het rechtssysteem ... de politie ... de Tweede Kamer ... de wetenschap
Private	... banken ... grote bedrijven
Pension	... pensioenfondsen ... het huidige Nederlandse pensioenstelsel ... het toekomstige Nederlandse pensioenstelsel [met optie "ik weet het niet"]
Optimism	*Scale: 0 "totaal niet optimistisch" – 10 "zeer optimistisch"*
	Optimisten zijn mensen die de toekomst met vertrouwen tegemoetzien en vooral verwachten dat er goede dingen gebeuren. Hoe zou u uzelf beschrijven? Hoe optimistisch bent u in het algemeen?
Optimism (cont'd)	*Scale: 0 "totaal niet pessimistisch" – 10 "zeer pessimistisch"*
	Pessimisten zijn mensen die de toekomst vol twijfel tegemoetzien en vooral verwachten dat er slechte dingen gebeuren. Hoe zou u zichzelf omschrijven? Hoe pessimistisch bent u in het algemeen? (R)
Overconfidence	*Scale: 0 "0 vragen correct" – 5 "5 vragen correct"*
	In vraag 1-5 heeft u antwoorden gegeven op vragen over financiële kennis. Hoeveel van de vijf vragen denkt u correct te hebben beantwoord?
Information Avoidance ($\alpha = 0.57$)	*Scale: 1 "Zou absoluut informatie zoeken" – 5 "Zou absoluut vermijden informatie te zoeken"*
	1) Informatie kan nuttig zijn. Sommige mensen zoeken zulke informatie, zelfs als het ertoe kan leiden dat ze er achteraf spijt van hebben, terwijl anderen zulke informatie vermijden. Hoe zou u uzelf omschrijven? 2) Tien jaar geleden had u de mogelijkheid om te investeren in twee fondsen: Fonds A en Fonds B. In de afgelopen tien jaar heeft u al uw spaargeld geïnvesteerd in Fonds A. Zou u willen weten hoeveel u gehad zou hebben als u in Fonds B had geïnvesteerd? 3) U kocht een elektronisch apparaat in een winkel tegen een redelijke, maar niet bijzonder lage prijs. Er is een maand verstreken en het artikel kan niet meer worden geretourneerd. U ziet hetzelfde apparaat in een andere winkel weergegeven met een bordje met 'UITVERKOOP'. Wilt u weten voor welke prijs u het had kunnen kopen?
Financial Literacy 1	*Multiple Choice: meer dan €102, precies €102, minder dan €102, weet ik niet, ik wil het niet zeggen*
	Veronderstel dat u 100 euro op een spaarrekening heeft en de rente is 2% per jaar. Hoeveel denkt u dan dat u na vijf jaar op de spaarrekening heeft, ervan uitgaande dat u al het geld op deze rekening laat staan?
Financial Literacy 2	*Multiple Choice: meer dan vandaag, precies hetzelfde als vandaag, minder dan vandaag, weet ik niet, ik wil het niet zeggen*
	Veronderstel dat de rente op uw spaarrekening 1% per jaar is en de inflatie is gelijk aan 2% per jaar. Zou u dan na 1 jaar meer, precies hetzelfde of minder kunnen kopen dan vandaag met het geld op de rekening?
Financial Literacy 3	*Multiple Choice: waar, niet waar, weet ik niet, ik wil het niet zeggen*
	Waar of niet waar? Een aandeel van een bedrijf geeft normaal gesproken een zekerder rendement dan een beleggingsfonds dat alleen in aandelen belegt.

Financial Literacy 4	*Multiple Choice: waar, niet waar, weet ik niet, ik wil het niet zeggen*
	Waar of niet waar? Een hypotheek met 15 jaar looptijd vereist hogere maandelijkse afbetalingen dan een hypotheek met 30 jaar looptijd, maar de rente over de totale looptijd is lager.
Financial Literacy 5	*Multiple Choice: die zouden moeten stijgen, die zouden moeten dalen, die zouden gelijk moeten blijven, weet ik niet, ik wil het niet zeggen*
	Als de rente stijgt, wat zou er dan moeten gebeuren met de obligatiekoersen?
Financial Management (α = 0.61)	*Scale: 1 "helemaal oneens" – 5 "helemaal mee eens"*
	1) Ik beheer mijn dagelijkse financiële zaken op een zeer georganiseerde manier. 2) Ik ben zeer impulsief en vaak verleid tot het kopen van dingen waar ik eigenlijk geen geld voor heb. (R) 3) Ik betaal mijn rekeningen nooit te laat. 4) Ik betaal liever artikelen op krediet dan te wachten tot ik het geld heb gespaard. (R)
Cognitive Reflection 1	*Open Question (correct answer is 5)*
	Een knuppel en een bal kosten samen €110. De knuppel kost €100 meer dan de bal. Hoeveel kost de bal?
Cognitive Reflection 2	*Open Question (correct answer is 5)*
	Als vijf machines er vijf minuten over doen om vijf onderdelen te maken, hoe lang doen honderd machines er dan over om honderd onderdelen te maken?
Cognitive Reflection 3	*Open Question (correct answer is 47)*
	Een vijver is deels bedekt met waterleliebladeren. Iedere dag verdubbelt de hoeveelheid waterleliebladeren. Als het 48 dagen kost voordat de waterleliebladeren de hele vijver bedekt hebben, hoe lang kost het dan voordat de waterleliebladeren de halve vijver bedekt hebben?
Pension	*Scale: 1 "Zeer weinig" – 5 "Zeer Veel"*
Knowledge	Hoeveel kennis heeft u over uw eigen pensioen?
Pension (cont'd)	*Binary: 0 "nee" – 1 "ja"*
Extra Saving	Hebt u de afgelopen maanden, naast uw reguliere pensioenopbouw, extra gespaard voor uw pensioen?
Pension (cont'd)	*Scale: 1 "Zeer onwaarschijnlijk" – 5 "Zeer waarschijnlijk"*
Saving Intention	Hoe waarschijnlijk is het dat u het komende jaar, naast uw reguliere pensioenopbouw, extra gaat sparen voor uw pensioen?
Pension (cont'd)	*Scale: 1 "helemaal mee oneens" – 5 "helemaal mee eens"*
Responsibility	Het is vooral mijn eigen verantwoordelijkheid om te zorgen dat ik voldoende pensioen opbouw.
Solidarity	Bij pensioenen vind ik solidariteit (het rechtvaardig verdelen van de lusten en lasten tussen arm en rijk, jong en oud) belangrijk.
Influence	Ik heb geen invloed op mijn eigen pensioenopbouw. (R)
Engagement	Ik denk liever niet na over mijn pensioenopbouw. (R)
Financial Anxiety (α = 0.74)	*Scale: 1 "helemaal mee oneens" – 5 "helemaal mee eens"*
	1) Ik word onzeker van de vaktaal van financiële experts. 2) Ik maak mij zorgen over financiële en geldzaken. 3) Ik stel financiële beslissingen meestal uit. 4) Na het maken van een beslissing, ben ik onzeker of ik de juiste beslissing heb gemaakt.

Financial Security (α = 0.83)	*Scale: 1 "helemaal mee oneens" – 5 "helemaal mee eens"*
	1) Ik voel me comfortabel in mijn huidige financiële situatie. 2) Ik heb vertrouwen in mijn financiële toekomst. 3) Ik heb er vertrouwen in dat ik genoeg geld heb om mezelf te onderhouden tijdens mijn pensioen, ongeacht hoe lang ik leef.

Note: R indicates that the scale is reversed. α refers to Cronbach's alpha (Cronbach, 1951), which provides an indication of scale reliability.

A.2 Experiments

Table A.2. Risk MPL 1

Lottery	Option A				EV(A)	Option B				EV(B)
	p	€	p	€		p	€	P	€	
#1	0.1	€80	0.9	€64	€66	0.1	€154	0.9	€4	€19
#2	0.2	€80	0.8	€64	€67	0.2	€154	0.8	€4	€34
#3	0.3	€80	0.7	€64	€69	0.3	€154	0.7	€4	€49
#4	0.4	€80	0.6	€64	€70	0.4	€154	0.6	€4	€64
#5	0.5	€80	0.5	€64	€72	0.5	€154	0.5	€4	€79
#6	0.6	€80	0.4	€64	€74	0.6	€154	0.4	€4	€94
#7	0.7	€80	0.3	€64	€75	0.7	€154	0.3	€4	€109
#8	0.8	€80	0.2	€64	€77	0.8	€154	0.2	€4	€124
#9	0.9	€80	0.1	€64	€78	0.9	€154	0.1	€4	€139
#10	1	€80	0	€64	€80	1	€154	0	€4	€154

Note: The columns labeled EV(A) and EV(B) list the expected value of the related lottery.

Table A.3. Risk MPL 2

Lottery	Option A				EV(A)	Option B				EV(B)
	p	€	p	€		p	€	p	€	
#1	0.1	€99	0.9	€41	€ 47	0.1	€134	0.9	€19	€31
#2	0.2	€99	0.8	€41	€ 53	0.2	€134	0.8	€19	€42
#3	0.3	€99	0.7	€41	€ 58	0.3	€134	0.7	€19	€54
#4	0.4	€99	0.6	€41	€ 64	0.4	€134	0.6	€19	€65
#5	0.5	€99	0.5	€41	€ 70	0.5	€134	0.5	€19	€77
#6	0.6	€99	0.4	€41	€ 76	0.6	€134	0.4	€19	€88
#7	0.7	€99	0.3	€41	€ 82	0.7	€134	0.3	€19	€100
#8	0.8	€99	0.2	€41	€ 87	0.8	€134	0.2	€19	€111
#9	0.9	€99	0.1	€41	€ 93	0.9	€134	0.1	€19	€123
#10	1	€99	0	€41	€ 99	1	€134	0	€19	€134

Note: The columns labeled EV(A) and EV(B) list the expected value of the related lottery.

Table A.4. *Risk MPL 3*

Lottery	Option A				EV(A)	Option B				EV(B)
	p	€	p	€		p	€	p	€	
#1	1	€52			€52	0.5	€30	0.5	€130	€80
#2	1	€57			€57	0.5	€30	0.5	€130	€80
#3	1	€63			€63	0.5	€30	0.5	€130	€80
#4	1	€68			€68	0.5	€30	0.5	€130	€80
#5	1	€73			€73	0.5	€30	0.5	€130	€80
#6	1	€78			€78	0.5	€30	0.5	€130	€80
#7	1	€82			€82	0.5	€30	0.5	€130	€80
#8	1	€88			€88	0.5	€30	0.5	€130	€80
#9	1	€94			€94	0.5	€30	0.5	€130	€80
#10	1	€101			€101	0.5	€30	0.5	€130	€80

Note: The columns labeled EV(A) and EV(B) list the expected value of the related lottery.

Table A.5. Risk MPL 4

Lottery	Option A				EV(A)	Option B				EV(B)
	p	€	p	€		p	€	p	€	
#1	1	€39			€39	0.33	€20	0.67	€110	€80
#2	1	€46			€46	0.33	€20	0.67	€110	€80
#3	1	€56			€56	0.33	€20	0.67	€110	€80
#4	1	€64			€64	0,33	€20	0,67	€110	€80
#5	1	€70			€70	0,33	€20	0,67	€110	€80
#6	1	€75			€75	0,33	€20	0,67	€110	€80
#7	1	€79			€79	0,33	€20	0,67	€110	€80
#8	1	€84			€84	0,33	€20	0,67	€110	€80
#9	1	€88			€88	0,33	€20	0,67	€110	€80
#10	1	€93			€93	0,33	€20	0,67	€110	€80

Note: The columns labeled EV(A) and EV(B) list the expected value of the related lottery.

Table A.6. Risk MPL 5

Lottery	Option A				EV(A)	Option B				EV(B)
	p	€	p	€		p	€	p	€	
#1	0.5	€90	0.5	€70	€80	0.5	€103	0.5	€35	€69
#2	0.5	€90	0.5	€70	€80	0.5	€109	0.5	€35	€72
#3	0.5	€90	0.5	€70	€80	0.5	€115	0.5	€35	€75
#4	0.5	€90	0.5	€70	€80	0.5	€122	0.5	€35	€79
#5	0.5	€90	0.5	€70	€80	0.5	€128	0.5	€35	€82
#6	0.5	€90	0.5	€70	€80	0.5	€131	0.5	€35	€83
#7	0.5	€90	0.5	€70	€80	0.5	€138	0.5	€35	€87
#8	0.5	€90	0.5	€70	€80	0.5	€153	0.5	€35	€94
#9	0.5	€90	0.5	€70	€80	0.5	€170	0.5	€35	€103
#10	0.5	€90	0.5	€70	€80	0.5	€186	0.5	€35	€111

Note: The columns labeled EV(A) and EV(B) list the expected value of the related lottery.

Table A.7. Prudence MPL

Lottery	Option A				Option B			
	p	€	p	€	p	€	p	€
#1	0.5	€90 + [0.5*€20;0.5*-€20]	0.5	€60	0.5	€90	0.5	€60 + [0.5*€20;0.5*-€20]
#2	0.5	€90 + [0.5*€10;0.5*-€10]	0.5	€60	0.5	€90	0.5	€60 + [0.5*€10;0.5*-€10]
#3	0.5	€90 + [0.5*€40;0.5*-€40]	0.5	€60	0.5	€90	0.5	€60 + [0.5*€40;0.5*-€40]
#4	0.5	€135 + [0.5*€30;0.5*-€30]	0.5	€90	0.5	€135	0.5	€90 + [0.5*€30;0.5*-€30]
#5	0.5	€65 + [0.5*€20;0.5*-€20]	0.5	€35	0.5	€65	0.5	€35 + [0.5*€20;0.5*-€20]

Table A.8. Temperance MPL

Lottery	Option A				Option B			
	p	€	p	€	p	€	p	€
#1	0.5	€90 + [0.5*€30;0.5*-€30]	0.5	€90 + [0.5*€30;0.5*-€30]	0.5	€90	0.5	€90 + [0.5*€30;0.5*-€30] + [0.5*€30;0.5*-€30]
#2	0.5	€90 + [0.5*€30;0.5*-€30]	0.5	€90 + [0.5*€10;0.5*-€10]	0.5	€90	0.5	€90 + [0.5*€30;0.5*-€30] + [0.5*€10;0.5*-€10]
#3	0.5	€90 + [0.5*€30;0.5*-€30]	0.5	€90 + [0.5*€50;0.5*-€50]	0.5	€90	0.5	€90 + [0.5*€30;0.5*-€30] + [0.5*€50;0.5*-€50]
#4	0.5	€30 + [0.5*€10;0.5*-€10]	0.5	€30 + [0.5*€10;0.5*-€10]	0.5	€30	0.5	€30 + [0.5*€10;0.5*-€10] + [0.5*€10;0.5*-€10]
#5	0.5	€70 + [0.5*€30;0.5*-€30]	0.5	€70 + [0.5*€30;0.5*-€30]	0.5	€70	0.5	€70 + [0.5*€30;0.5*-€30] + [0.5*€30;0.5*-€30]

Table A.9. Time MPL 1

Lottery	Option A		Option B	
	€	Delay Period	€	Delay Period
#1	€75	8 weeks	€75	16 weeks
#2	€75	8 weeks	€76	16 weeks
#3	€75	8 weeks	€77	16 weeks
#4	€75	8 weeks	€79	16 weeks
#5	€75	8 weeks	€81	16 weeks
#6	€75	8 weeks	€84	16 weeks
#7	€75	8 weeks	€87	16 weeks
#8	€75	8 weeks	€91	16 weeks
#9	€75	8 weeks	€95	16 weeks

Table A.10. Time MPL 2

Lottery	Option A		Option B	
	€	Delay Period	€	Delay Period
#1	€75	8 weeks	€75	24 weeks
#2	€75	8 weeks	€76	24 weeks
#3	€75	8 weeks	€77	24 weeks
#4	€75	8 weeks	€79	24 weeks
#5	€75	8 weeks	€81	24 weeks
#6	€75	8 weeks	€84	24 weeks
#7	€75	8 weeks	€87	24 weeks
#8	€75	8 weeks	€91	24 weeks
#9	€75	8 weeks	€95	24 weeks

Table A.11. Ambiguity MPL 1

Lottery	Option A	Indifference	Option B
	Urn A composition (balls)		Urn composition (balls)
#1	10 red ; 0 blue	0,5*option A ; 0,5 option B	Unknown
#2	9 red ; 1 blue	0,5*option A ; 0,5 option B	Unknown
#3	8 red ; 2 blue	0,5*option A ; 0,5 option B	Unknown
#4	7 red ; 3 blue	0,5*option A ; 0,5 option B	Unknown
#5	6 red ; 4 blue	0,5*option A ; 0,5 option B	Unknown
#6	5 red ; 5 blue	0,5*option A ; 0,5 option B	Unknown
#7	4 red ; 6 blue	0,5*option A ; 0,5 option B	Unknown
#8	3 red ; 7 blue	0,5*option A ; 0,5 option B	Unknown
#9	2 red ; 8 blue	0,5*option A ; 0,5 option B	Unknown
#10	1 red ; 9 blue	0,5*option A ; 0,5 option B	Unknown
#11	0 red ; 10 blue	0,5*option A ; 0,5 option B	Unknown

Note: Participants are informed that the winning color in this list is red and that the proportion of red and blue balls in the ambiguous urn stay the same within each and between both MPLs.

Table A.12. Ambiguity MPL 2

Lottery	Option A	Indifference	Option B
	Urn composition (balls)		Urn composition (balls)
#1	10 red ; 0 blue	0,5*option A ; 0,5 option B	Unknown
#2	9 red ; 1 blue	0,5*option A ; 0,5 option B	Unknown
#3	8 red ; 2 blue	0,5*option A ; 0,5 option B	Unknown
#4	7 red ; 3 blue	0,5*option A ; 0,5 option B	Unknown
#5	6 red ; 4 blue	0,5*option A ; 0,5 option B	Unknown
#6	5 red ; 5 blue	0,5*option A ; 0,5 option B	Unknown
#7	4 red ; 6 blue	0,5*option A ; 0,5 option B	Unknown
#8	3 red ; 7 blue	0,5*option A ; 0,5 option B	Unknown
#9	2 red ; 8 blue	0,5*option A ; 0,5 option B	Unknown
#10	1 red ; 9 blue	0,5*option A ; 0,5 option B	Unknown
#11	0 red ; 10 blue	0,5*option A ; 0,5 option B	Unknown

Note: Participants are informed that the winning color in this list is blue and that the proportion of red and blue balls in the ambiguous urn stay the same within each and between both MPLs.

A.3 Additional Results

Table A.13. BH corrected p-values

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Risk	(1) W Wald	1.000	**0.005**	0.155	**0.039**	**0.030**	1.000	0.138	0.059	1.000	1.000
	(2) W Wald w/ control	1.000	**0.010**	0.726	1.000	**0.015**	1.000	0.267	1.000	0.444	1.000
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Risk General	(1) W Wald	**0.004**	**0.000**	**0.000**	**0.000**	0.060	1.000	**0.041**	**0.000**	**0.003**	0.450
	(2) W Wald w/ control	**0.001**	**0.000**	**0.000**	**0.000**	0.088	1.000	0.084	**0.001**	**0.045**	1.000
	(3) UNW Wald	**0.000**	**0.000**	**0.000**	**0.000**	0.587	0.723	0.080	**0.000**	**0.001**	0.307
	(4) UNW Wald w/control	**0.000**	**0.000**	**0.000**	**0.000**	0.527	1.000	0.128	**0.004**	**0.045**	1.000
	(5) UNW Dunn	**0.000**	**0.000**	**0.000**	**0.000**	0.652	0.401	0.091	**0.000**	**0.000**	**0.047**
Risk Occupation	(1) W Wald	**0.013**	**0.000**	**0.000**	**0.000**	**0.000**	0.181	0.299	**0.000**	0.413	**0.013**
	(2) W Wald w/ control	**0.003**	**0.000**	**0.000**	**0.000**	**0.000**	0.224	0.128	**0.000**	0.306	**0.014**
	(3) UNW Wald	**0.000**	**0.000**	**0.000**	**0.000**	**0.001**	**0.014**	1.000	**0.000**	0.251	**0.001**
	(4) UNW Wald w/control	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.028**	1.000	**0.000**	0.295	**0.002**
	(5) UNW Dunn	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.002**	1.000	**0.000**	0.114	**0.000**
Risk Health	(1) W Wald	0.266	**0.000**	**0.028**	**0.006**	0.443	1.000	1.000	1.000	1.000	1.000
	(2) W Wald w/ control	0.094	**0.000**	**0.000**	**0.000**	0.134	1.000	0.131	0.214	1.000	1.000
	(3) UNW Wald	**0.013**	**0.000**	**0.021**	**0.011**	1.000	1.000	1.000	1.000	1.000	1.000
	(4) UNW Wald w/control	**0.002**	**0.000**	**0.000**	**0.000**	1.000	1.000	0.664	1.000	1.000	1.000
	(5) UNW Dunn	**0.004**	**0.000**	**0.015**	**0.002**	1.000	1.000	1.000	1.000	1.000	1.000
Risk Personal Finances	(1) W Wald	**0.014**	**0.000**	**0.000**	**0.000**	**0.006**	0.228	**0.000**	**0.000**	**0.008**	1.000
	(2) W Wald w/ control	**0.005**	**0.000**	**0.000**	**0.000**	**0.007**	0.318	**0.001**	**0.000**	0.243	1.000
	(3) UNW Wald	**0.000**	**0.000**	**0.000**	**0.000**	**0.036**	0.180	**0.001**	**0.000**	**0.001**	1.000
	(4) UNW Wald w/control	**0.000**	**0.000**	**0.000**	**0.000**	**0.021**	0.253	**0.002**	**0.000**	0.075	1.000
	(5) UNW Dunn	**0.000**	**0.000**	**0.000**	**0.000**	**0.029**	0.087	**0.001**	**0.000**	**0.000**	0.556
Risk Job Finances*	(1) W Wald	0.104	**0.000**	**0.000**	**0.000**	**0.000**	0.549	**0.000**	**0.000**	**0.000**	0.140
	(2) W Wald w/ control	**0.038**	**0.000**	**0.000**	**0.000**	**0.000**	0.890	**0.000**	**0.000**	**0.001**	0.450
	(3) UNW Wald	**0.002**	**0.000**	**0.000**	**0.000**	**0.000**	0.975	**0.000**	**0.000**	**0.000**	**0.028**
	(4) UNW Wald w/control	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.000**	**0.000**	**0.003**	0.247
	(5) UNW Dunn	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	0.394	**0.000**	**0.000**	**0.000**	**0.016**
Prudence	(1) W Wald	1.000	0.168	0.135	0.930	1.000	**0.013**	0.098	0.525	0.057	1.000
	(2) W Wald w/ control	1.000	0.079	0.209	1.000	1.000	**0.019**	0.240	1.000	0.055	1.000
	(3) UNW Wald	1.000	0.054	0.471	0.478	1.000	**0.022**	0.272	0.284	**0.014**	1.000
	(4) UNW Wald w/control	1.000	**0.019**	1.000	1.000	0.790	0.055	0.994	1.000	**0.041**	1.000
	(5) UNW Dunn										

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Temperance	(1) W Wald	1.000	1.000	0.178	**0.001**	1.000	1.000	0.464	**0.029**	**0.048**	1.000
	(2) W Wald w/ control										
	(3) UNW Wald	1.000	1.000	0.145	**0.001**	1.000	0.609	0.167	**0.003**	**0.012**	1.000
	(4) UNW Wald w/control										
	(5) UNW Dunn	1.000	1.000	0.059	**0.001**	0.458	0.251	**0.043**	**0.001**	**0.010**	1.000
Time	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Time Near Future	(1) W Wald	0.326	**0.000**	0.072	**0.000**	0.963	1.000	1.000	**0.012**	0.084	0.175
	(2) W Wald w/ control	0.411	**0.000**	**0.017**	**0.000**	0.148	1.000	0.705	**0.010**	0.462	0.916
	(3) UNW Wald	0.277	**0.000**	0.638	**0.000**	0.771	1.000	1.000	**0.007**	0.074	**0.030**
	(4) UNW Wald w/control	0.121	**0.000**	**0.025**	**0.000**	0.057	1.000	1.000	**0.004**	0.413	0.162
	(5) UNW Dunn	0.077	**0.000**	0.587	**0.000**	0.738	0.430	1.000	**0.002**	**0.012**	**0.003**
Time Distant Future	(1) W Wald	1.000	**0.000**	**0.009**	**0.001**	0.097	1.000	0.132	0.090	1.000	1.000
	(2) W Wald w/ control	1.000	**0.000**	**0.001**	**0.000**	**0.005**	1.000	**0.020**	**0.010**	1.000	1.000
	(3) UNW Wald	1.000	**0.000**	0.067	**0.002**	0.210	1.000	0.680	0.108	1.000	1.000
	(4) UNW Wald w/control	0.514	**0.000**	**0.000**	**0.000**	**0.004**	1.000	0.050	**0.010**	1.000	1.000
	(5) UNW Dunn	0.608	**0.000**	0.082	**0.000**	0.179	1.000	0.916	0.057	1.000	0.960
Time Procras-tination	(1) W Wald	0.584	0.061	1.000	0.120	1.000	0.876	1.000	**0.023**	**0.002**	0.807
	(2) W Wald w/ control										
	(3) UNW Wald	0.557	1.000	1.000	0.052	1.000	0.662	0.380	**0.010**	**0.012**	1.000
	(4) UNW Wald w/control										
	(5) UNW Dunn	0.218	0.489	1.000	**0.017**	1.000	0.386	0.196	**0.003**	**0.004**	0.466
Ambiguity	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Solidarity	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn	0.054	**0.001**	1.000	1.000	1.000	0.372	1.000	0.213	0.056	1.000

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Altruism	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald	**0.004**	**0.008**	1.000	0.121	1.000	0.076	**0.023**	1.000	1.000	0.154
	(4) UNW Wald w/control	0.078	0.302	0.393	0.456	1.000	0.051	**0.017**	1.000	1.000	0.058
	(5) UNW Dunn	**0.001**	**0.002**	0.782	0.106	0.627	**0.013**	**0.003**	0.674	1.000	0.061
Positive Reciprocity	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Negative Reciprocity	(1) W Wald	1.000	0.680	**0.000**	**0.000**	1.000	**0.001**	**0.002**	**0.000**	**0.000**	1.000
	(2) W Wald w/ control	1.000	1.000	**0.000**	**0.001**	1.000	**0.003**	**0.016**	0.050	**0.006**	1.000
	(3) UNW Wald	1.000	0.932	**0.000**	**0.000**	0.863	**0.001**	**0.000**	**0.000**	**0.000**	1.000
	(4) UNW Wald w/control	1.000	0.717	**0.000**	**0.000**	1.000	**0.005**	**0.002**	**0.003**	**0.009**	1.000
	(5) UNW Dunn	1.000	0.865	**0.000**	**0.000**	0.638	**0.001**	**0.000**	**0.000**	**0.000**	1.000
Self-Control	(1) W Wald	1.000	1.000	1.000	**0.004**	1.000	1.000	1.000	0.058	**0.039**	0.625
	(2) W Wald w/ control										
	(3) UNW Wald	1.000	0.262	0.802	**0.000**	1.000	1.000	1.000	**0.005**	**0.041**	0.353
	(4) UNW Wald w/control										
	(5) UNW Dunn	1.000	0.137	0.702	**0.000**	0.537	1.000	1.000	**0.006**	**0.038**	0.168
Personal Trust	(1) W Wald	**0.046**	**0.002**	1.000	**0.013**	1.000	1.000	1.000	1.000	1.000	1.000
	(2) W Wald w/ control										
	(3) UNW Wald	**0.007**	**0.003**	1.000	**0.017**	1.000	1.000	1.000	1.000	1.000	1.000
	(4) UNW Wald w/control										
	(5) UNW Dunn	**0.003**	**0.001**	0.445	**0.007**	1.000	1.000	0.796	1.000	1.000	0.822
Trust in Public Institutions	(1) W Wald	1.000	0.055	**0.032**	0.108	0.661	1.000	0.213	0.296	**0.002**	**0.001**
	(2) W Wald w/ control	0.482	**0.003**	**0.005**	1.000	1.000	1.000	0.507	1.000	0.232	0.098
	(3) UNW Wald	1.000	**0.009**	**0.009**	0.221	0.359	1.000	0.074	0.301	**0.002**	**0.001**
	(4) UNW Wald w/control	0.756	**0.001**	**0.006**	1.000	0.700	1.000	0.241	1.000	0.096	**0.044**
	(5) UNW Dunn	1.000	**0.017**	**0.000**	0.096	0.305	0.051	**0.005**	0.134	**0.002**	**0.000**
Trust in Private Institutions	(1) W Wald	1.000	**0.000**	0.271	**0.023**	**0.001**	**0.024**	1.000	1.000	0.066	1.000
	(2) W Wald w/ control	0.930	**0.000**	0.291	0.169	**0.018**	0.138	1.000	1.000	0.100	1.000
	(3) UNW Wald	**0.044**	**0.000**	**0.041**	**0.016**	**0.005**	0.141	1.000	1.000	0.058	1.000
	(4) UNW Wald w/control	0.062	**0.000**	0.076	0.168	0.092	0.775	1.000	1.000	0.140	1.000
	(5) UNW Dunn	**0.016**	**0.000**	**0.021**	**0.004**	**0.003**	0.067	1.000	1.000	**0.044**	1.000

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Trust in Pension Institutions	(1) W Wald										
	(2) W Wald w/ control	1.000	**0.000**	**0.011**	0.054	0.088	1.000	0.074	0.350	1.000	1.000
	(3) UNW Wald	1.000	**0.004**	**0.034**	0.835	0.066	1.000	0.079	1.000	**0.005**	**0.010**
	(4) UNW Wald w/control	1.000	**0.000**	**0.000**	0.137	**0.021**	0.676	**0.005**	0.832	1.000	0.165
	(5) UNW Dunn	1.000	**0.001**	0.052	0.322	**0.008**	1.000	**0.041**	1.000	**0.001**	**0.012**
Optimism	(1) W Wald	1.000	**0.009**	**0.003**	**0.000**	0.572	0.514	0.052	**0.000**	**0.000**	0.637
	(2) W Wald w/ control	1.000	0.064	**0.032**	**0.000**	0.669	0.979	0.126	**0.002**	**0.011**	1.000
	(3) UNW Wald	1.000	0.078	**0.001**	**0.000**	1.000	0.084	**0.024**	**0.000**	**0.000**	1.000
	(4) UNW Wald w/control	1.000	0.873	**0.022**	**0.000**	1.000	0.213	0.093	**0.004**	**0.006**	1.000
	(5) UNW Dunn	0.293	**0.008**	**0.000**	**0.000**	1.000	**0.048**	**0.028**	**0.000**	**0.000**	1.000
Over-confidence	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Information Avoidance	(1) W Wald										
	(2) W Wald w/ control										
	(3) UNW Wald										
	(4) UNW Wald w/control										
	(5) UNW Dunn										
Financial Literacy	(1) W Wald	1.000	**0.000**	0.111	**0.000**	0.095	1.000	0.561	**0.000**	**0.000**	**0.000**
	(2) W Wald w/ control	1.000	0.416	1.000	**0.000**	0.193	1.000	1.000	**0.000**	**0.000**	**0.000**
	(3) UNW Wald	1.000	**0.010**	0.244	**0.000**	0.142	1.000	0.429	**0.000**	**0.000**	**0.000**
	(4) UNW Wald w/control	1.000	0.918	1.000	**0.000**	0.376	1.000	1.000	**0.000**	**0.000**	**0.000**
	(5) UNW Dunn	1.000	**0.010**	0.572	**0.000**	0.066	1.000	0.564	**0.000**	**0.000**	**0.000**
Financial Management	(1) W Wald										
	(2) W Wald w/ control	1.000	**0.006**	0.489	0.552	0.151	1.000	0.852	1.000	1.000	1.000
	(3) UNW Wald										
	(4) UNW Wald w/control	0.690	**0.002**	0.267	0.653	1.000	1.000	1.000	1.000	1.000	1.000
	(5) UNW Dunn										
Cognitive Reflection	(1) W Wald	1.000	**0.011**	1.000	**0.000**	0.689	1.000	1.000	**0.001**	**0.003**	**0.006**
	(2) W Wald w/ control										
	(3) UNW Wald	1.000	0.267	1.000	**0.000**	1.000	1.000	1.000	**0.001**	**0.001**	**0.004**
	(4) UNW Wald w/control										
	(5) UNW Dunn	1.000	0.162	1.000	**0.000**	1.000	1.000	1.000	**0.000**	**0.001**	**0.002**

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Pension Knowledge	(1) W Wald	1.000	**0.000**	**0.000**	**0.000**	**0.001**	1.000	**0.005**	**0.000**	**0.000**	**0.002**
	(2) W Wald w/ control	1.000	**0.000**	**0.042**	**0.000**	**0.025**	1.000	0.105	**0.000**	0.082	0.639
	(3) UNW Wald	0.536	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.002**	**0.000**	**0.000**	**0.001**
	(4) UNW Wald w/control	1.000	**0.000**	**0.016**	**0.000**	**0.031**	1.000	0.124	**0.000**	**0.019**	0.185
	(5) UNW Dunn	0.276	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.000**	**0.000**	**0.000**	**0.001**
Pension Extra Saving	(1) W Wald	0.141	**0.000**	**0.000**	**0.000**	0.063	0.068	**0.001**	**0.021**	1.000	0.753
	(2) W Wald w/ control	0.365	**0.000**	**0.000**	0.083	0.254	0.401	**0.024**	1.000	1.000	0.078
	(3) UNW Wald	**0.024**	**0.000**	**0.000**	**0.000**	0.063	0.088	**0.001**	**0.028**	1.000	0.887
	(4) UNW Wald w/control	0.093	**0.000**	**0.000**	**0.006**	0.187	0.398	**0.015**	1.000	1.000	0.193
	(5) UNW Dunn	**0.018**	**0.000**	**0.000**	**0.000**	**0.024**	**0.029**	**0.000**	**0.010**	1.000	0.332
Pension Extra Saving Intention	(1) W Wald	0.062	**0.000**	**0.000**	**0.000**	0.143	0.783	**0.023**	0.070	1.000	1.000
	(2) W Wald w/ control	0.075	**0.000**	**0.000**	**0.004**	0.173	1.000	0.107	1.000	1.000	1.000
	(3) UNW Wald	**0.018**	**0.000**	**0.000**	**0.000**	**0.040**	1.000	**0.030**	**0.009**	1.000	1.000
	(4) UNW Wald w/control	**0.022**	**0.000**	**0.000**	**0.000**	**0.018**	1.000	0.106	0.123	1.000	1.000
	(5) UNW Dunn	**0.014**	**0.000**	**0.000**	**0.000**	**0.023**	0.981	**0.014**	**0.013**	1.000	1.000
Pension Responsibility	(1) W Wald	**0.004**	**0.000**	**0.000**	**0.000**	**0.000**	0.889	**0.000**	**0.000**	**0.000**	0.093
	(2) W Wald w/ control	**0.007**	**0.000**	**0.000**	**0.000**	**0.000**	0.805	**0.000**	**0.000**	**0.001**	0.376
	(3) UNW Wald	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	0.163	**0.000**	**0.000**	**0.000**	0.131
	(4) UNW Wald w/control	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	0.349	**0.000**	**0.000**	**0.001**	0.425
	(5) UNW Dunn	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	**0.032**	**0.000**	**0.000**	**0.000**	**0.040**
Pension Solidarity	(1) W Wald	0.713	1.000	**0.004**	**0.000**	0.647	**0.005**	0.369	**0.026**	**0.000**	1.000
	(2) W Wald w/ control	0.627	1.000	**0.011**	**0.000**	1.000	**0.029**	0.577	0.066	**0.001**	1.000
	(3) UNW Wald	1.000	1.000	**0.001**	**0.000**	1.000	**0.001**	**0.019**	**0.003**	**0.000**	1.000
	(4) UNW Wald w/control	1.000	1.000	**0.001**	**0.000**	1.000	**0.007**	**0.040**	**0.009**	**0.001**	1.000
	(5) UNW Dunn	1.000	1.000	**0.000**	**0.000**	1.000	**0.000**	**0.006**	**0.002**	**0.000**	1.000
Pension Influence	(1) W Wald	**0.021**	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.028**	**0.000**	**0.001**	**0.007**
	(2) W Wald w/ control	**0.030**	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.003**	**0.000**	**0.002**	**0.019**
	(3) UNW Wald	**0.000**	**0.000**	**0.000**	**0.000**	**0.008**	1.000	**0.011**	**0.000**	**0.000**	**0.015**
	(4) UNW Wald w/control	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	1.000	**0.001**	**0.000**	**0.000**	**0.037**
	(5) UNW Dunn	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.938	**0.001**	**0.000**	**0.000**	**0.004**
Pension Engagement	(1) W Wald	0.081	**0.026**	**0.001**	**0.000**	1.000	0.248	0.487	**0.000**	**0.000**	**0.004**
	(2) W Wald w/ control	0.197	1.000	0.256	**0.000**	1.000	1.000	1.000	**0.008**	**0.000**	0.057
	(3) UNW Wald	0.466	**0.002**	**0.000**	**0.000**	1.000	0.133	**0.037**	**0.000**	**0.000**	**0.015**
	(4) UNW Wald w/control	1.000	0.543	0.087	**0.000**	1.000	0.843	0.965	**0.001**	**0.000**	0.149
	(5) UNW Dunn	0.203	**0.000**	**0.000**	**0.000**	0.480	0.126	**0.021**	**0.000**	**0.000**	**0.004**

Variable	Test	Employee# Both	Employee# Solo	Employee# W/Personnel	Employee# Owner	Solo# Both	Solo# W/Personnel	W/Personnel# Both	Owner# Both	Owner# Solo	Owner# W/Personnel
Financial Anxiety	(1) W Wald	1.000	1.000	0.079	**0.000**	1.000	0.147	0.340	**0.000**	**0.000**	**0.002**
	(2) W Wald w/ control	1.000	1.000	1.000	**0.000**	1.000	0.339	0.655	**0.001**	**0.000**	0.141
	(3) UNW Wald	1.000	0.619	0.449	**0.000**	1.000	0.093	0.152	**0.000**	**0.000**	**0.001**
	(4) UNW Wald w/control	0.463	0.206	1.000	**0.000**	1.000	0.318	0.383	**0.000**	**0.000**	**0.046**
	(5) UNW Dunn	0.722	0.315	0.366	**0.000**	1.000	0.086	0.133	**0.000**	**0.000**	**0.000**
Financial Security	(1) W Wald	1.000	**0.000**	0.064	**0.002**	0.192	**0.000**	**0.042**	**0.005**	**0.000**	1.000
	(2) W Wald w/ control	0.113	**0.000**	1.000	1.000	0.300	**0.001**	0.191	0.770	**0.006**	1.000
	(3) UNW Wald	**0.005**	**0.000**	1.000	**0.014**	0.370	**0.000**	**0.013**	**0.000**	**0.000**	1.000
	(4) UNW Wald w/control	**0.000**	**0.000**	1.000	1.000	0.743	**0.003**	0.132	**0.027**	**0.000**	1.000
	(5) UNW Dunn	**0.010**	**0.000**	1.000	**0.000**	0.208	**0.000**	**0.025**	**0.000**	**0.000**	0.099

Note: W=weighted, UNW=unweighted. Table shows BH corrected p-values for all measures. We conduct five different tests. (1) Pairwise Wald test of the respective factors in the occupational status variable after linear/logistic regression on the weighted data. (2) Pairwise Wald test of the factors in the occupational status variable after linear/logistic regression with controls on the weighted data. (3) Pairwise Wald test of the factors in the occupational status variable after linear/logistic regression on the unweighted data. (4) Pairwise Wald test of the factors in the occupational status variable after linear/logistic regression with controls on the unweighted data (5) Dunn's test. Rows are empty in case the preceding joint significance Wald test ((1) – (4)) or Krusal Wallis test ((5)) yielded $p>0.05$.

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)
Marike 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 Brüggen, 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 Kalwij
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 Kalwij, 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 Brüggen, 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 risicoprofielmeting 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 pensioendocumenten: 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 Mastrogiacomo

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 Brüggen, 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 Brüggen, 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, Maaike 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 Maaike 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 Brüggen and Thomas Post

94 Parttime pensioneren en de arbeidsparticipatie (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, Maaike 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 pensioencommunicatie (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, Maaike 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, Maaike 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 Mastrogiacomo, Stefan Hochguertel and Hans Bloemen

116 Appreciated but complicated pension Choices? Insights from the Swedish Premium Pension System (2019)
Monika Böhnke, Elisabeth Brüggen 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, Maaike 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 langlevenrisico (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 Mastrogiacomo

137 Using social norms to activate pension plan members: insights from practice (2019)
Joyce Augustus-Vonken, Pieter Verhallen, Lisa Brüggen 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)
Marike 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)
Wilte Zijlstra, Jochem de Bresser en Marike 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 Deeltijdpensioen: 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 pensioen-premiesystematiek (2020)
Marike 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 pensioen-vermogen 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 pensioeninstituties (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, Marike 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, Marike 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 keuzearchitectuur 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 pensioenfonds 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 pensioenfonds-besturen (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, Maaike Jongenelen, Marloes van Moort en Hans Hoeken

215 Uitkeringseffecten en kostendekkende premies in het nieuwe nabestaanden-pensioen (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

Netspar

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

October 2022