



Network for Studies on Pensions, Aging and Retirement

Pension Payout Preferences

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Abstract

In this study we examine to what extent different pension payout options appeal to people. We focus on three payout plans that are currently available or have been announced in the Netherlands. These options are a at-rate annuity, a high/low annuity-based profile, and a partial lump sum at retirement with a lower annuity pension thereafter. We make use of a vignette study, where participants advise a household similar to theirs about the pension payout options, under several scenarios. These scenarios differ in interest rate and replacement rate and in the specific design of the payout options. We find that while a constant payout pattern is most popular, there is also substantial interest in the alternative options, with both the high/low and the lump sum options being chosen in almost 30% of the choice scenarios. A majority of the respondents adjust their advice to the circumstances of the choice, and switch their preferred option at least once. Our regression results indicate that interest in a lump sum is higher when a higher percentage can be taken out as lump sum and lower when interest rates or replacement rates are higher. Interest in a high/low annuity-based profile is higher when the high annuity is valid for a shorter period. We furthermore find that choosing the constant annuity is negatively correlated with income, willingness to take risks and financial literacy, but we find little evidence for differences in preferences by gender, age, or type of household. Finally, we propose to investigate how pension participants can be informed better and more actively about their payout options.

Samenvatting

In dit paper onderzoeken we de interesse in drie momenteel beschikbare of aankondigde uitkeringspatronen bij pensionering in Nederland. Het gaat hierbij om een constante uitkering, een hoog/laag uitkeringsprofiel en een gedeeltelijke lumpsum bij pensionering in combinatie met een lagere constante uitkering. We maken gebruik van een vignetonderzoek, waarbij we deelnemers vroegen om een met hen vergelijkbaar huishouden te adviseren over hun pensioenuitkeringspatroon, onder verschillende scenario's. De scenario's verschilden wat betreft de rente en de vervangingsratio van het pensioen en wat betreft de precieze vormgeving van de pensioenuitkeringspatronen. Een constante pensioenuitkering bleek het meest populair, maar er is ook substantiële belangstelling voor de twee andere opties. Het hoog/laag uitkeringsprofiel en de lumpsum optie werden elk in bijna 30% van de scenario's gekozen. De meerderheid paste het advies aan naar aanleiding van de wisselende keuzescenario's en veranderde tenminste eenmaal van voorkeursoptie. Onze regressieresultaten laten zien dat de interesse in een lumpsum hoger is wanneer een hoger percentage van het pensioenvermogen als lumpsum kan worden opgenomen en lager wanneer de rente of de vervangingsratio van het pensioen hoger is. De belangstelling voor een hoog/laag uitkeringsprofiel is hoger wanneer de hoge uitkering korter duurt. Verder vinden we dat de keuze voor een constante pensioenuitkering negatief gecorreleerd is met inkomen, de bereidheid om risico's te nemen en de financiële geletterdheid, maar we vonden weinig bewijs voor verschillen in voorkeuren naar geslacht, leeftijd of huishoudsamenstelling. Tot slot stellen wij voor te onderzoeken hoe pensioendeelnemers beter en actiever geïnformeerd kunnen worden over hun uitkeringsopties.

1 Introduction

In the debate about a new pension system in the Netherlands, much attention has been given to the options for increasing the freedom of choice, both in the accrual phase and the benefit phase. In the benefit phase the default payout pattern is a lifelong flat-rate monthly annuity, but retirees can also opt for a high/low annuity-based profile. A new legislative proposal adds the extra option of taking out up to 10% of accrued retirement benefits as a partial lump sum at the retirement date. To what extent do these different pension payout options appeal to retirees, and what choice-related aspects influence that appeal?

Increased freedom of choice has advantages as well as disadvantages. Van Ewijk et al. (2017) describe how more freedom of choice can lead to substantial welfare gains, but that it also entails a risk of substantial welfare losses, due to the bounded rationality of pension participants. They discuss several motives for choosing a high/low payout or a lump sum, with some of the motives being more rational (and welfare-enhancing) than others. They point out that the option to take out a relatively substantial lump sum, of as much as 50%, could result in substantial welfare losses. This potential negative welfare effect is, however, of less concern, since the current legislative proposal stipulates that Dutch pensioners will only be allowed to take out a lump sum of up to 10% of their pension wealth.¹ Van Bilsen et al. (2020) investigate the freedom of choice within the Dutch pension system and find that the impact of choosing a high/low annuity-based profile or taking out a lump sum of up to 10% is relatively limited. However, the option of taking out pension assets for early retirement long before the statutory retirement age can severely limit one's retirement income. They suggest to introduce conditional freedom of choice, such that individuals are free to use their pension assets as they like, as long as certain conditions are met and remain met.

Several previous studies looked at the relationship between expected expenditure and pension payout preferences. Bonekamp and Van Soest (2019) conducted a vignette analysis where respondents were asked to advise a certain consumption pattern after retirement. They also looked at scenarios where the retirees have a non-constant retirement income, comparable with a high/low annuity-based profile. In those scenarios, respondents advised a higher consumption pattern during the first period with the higher pension annuity. Van der Crujssen and Jonker (2019) provide a detailed insight into the expected retirement expenditures of still working respondents, and whether these expectations drive their retirement income preferences. They also relate individuals' trust in pension funds to the preferences for different pension profiles. They find that while

¹<https://www.internetconsultatie.nl/wetbedragineens>

the majority of individuals prefer the default flat-rate annuity, there remains a substantial share of individuals who are interested in other pension patterns, often related to expected expenditure patterns. They also find that those who do not trust their pension fund are more likely to prefer a lump sum.

The mandatory full annuitization of second pillar pension assets in the Netherlands is an exception compared to other countries. Lever et al. (2018) show that especially in the Anglo-Saxon countries a lump sum pension payout is much more common, in particular when a person's pension assets are limited. In fact, there is a large body of literature that discusses the annuity puzzle. Annuity demand tends to be lower than can be expected based on rational optimization models. Brown et al. (2021) discuss this annuity puzzle and show evidence of behavioral mechanisms that may affect the annuitization decisions. They find that increasing the complexity of the annuity choice reduces the respondent's ability to value the annuity, measured by the difference between the sell and buy values that respondents assign to the annuity.

The way in which the choice options are presented can influence the choice of payout scheme as well. Bockweg et al. (2018) used a survey-based experiment among participants of a large Dutch pension fund to study the impact of framing on the annuitization decision. Respondents were asked to make a hypothetical choice on the fraction of pension assets that are paid out as a partial lump sum (0, 5, 10, 15 or 20%), while the question emphasized either the gain or loss, or the investment or consumption aspects of the choice. The study finds strong and highly significant framing effects and indications that the institutional environment matters for explaining puzzles in annuity demand. Heterogeneity among participants, for example with respect to risk aversion, time preference, and trust in the pension fund, also plays an important role in annuity demand.

In this study we focus on the current and the announced pension payout patterns in the Netherlands.² We examine to what extent the currently available payout options – a constant or a high/low annuity-based profile – appeal to people and how this compares to the appeal of the announced option of a partial lump sum. We also measure the impact of several aspects of the choice options, such as the relative prices depending on the relevant interest rate and the percentage of the available pension capital that can be (re)distributed over time. Finally, we study which demographic and personal characteristics are correlated with the pension payout preferences.

The remainder of this paper is organized as follows. Section 2 presents a short overview

²We only focus on the payout phase, where the accrued pension assets are reflected by the replacement rate. The build-up phase falls outside of the scope. For our study it does not matter whether the pension entitlements have been accrued via a defined benefits or a defined contributions scheme.

of the Dutch pension system. Section 3 introduces the data and the hypothetical choice experiment. In Section 4 we first show the aggregated choices that respondents make. We then analyze the causal effects of the randomized design and economic background variables, and how the choices correlate with individual characteristics, such as demographics and economic preferences and attitudes. Finally, in Section 5 we discuss the implications of our findings.

2 Dutch pension system

The Dutch pension system consists of three pillars. The first pillar is a pay-as-you-go state allowance that proportionally depends on the years a person lived or worked in the Netherlands in the 50 years before his or her statutory retirement age. The allowance is linked to the minimum wage and adjusted for inflation twice a year. A full allowance amounts to 70% of the minimum wage for singles. In the case of couples, each partner receives 50% of the minimum wage for singles. There is no flexibility in the timing of the benefit phase; the first pillar allowance starts at the statutory retirement age.

The second pillar is capital-based and employment-related and only concerns the portion of income that exceeds the social minimum; this is due to the fact that the first pillar already covers that first part of a person's income. Depending on the specific retirement scheme, the employer and/or the employee pay a monthly pension premium, primarily into a defined benefit (DB) scheme, although defined contribution (DC) schemes are becoming more common. A typical DB scheme currently aims at a gross replacement rate of 75% of the average wage over one's career, although low interest rates have put pension goals under increasing pressure. In fact, most current DB pensions can now be designated as 'conditional defined benefit'. Pension funds aim to index the nominal entitlements to inflation; however, this is not a hard promise as it is conditional on the financial position of the fund. In extreme circumstances pension benefits may even be cut in nominal terms. Participants bear the risks of the collective scheme. Since the financial crisis in 2008, most pensions have been not at all or only partially indexed or have even been cut.

While the second pillar pension premiums are tax-exempted, the received benefits are subjected to income tax at payout.³ The second pillar pension wealth is currently fully annuitized at retirement.⁴ Depending on the specific scheme, the participant can opt for early or late retirement within a certain bandwidth, with an actuarially fair impact on the resulting annuity. There is no general obligation in the Netherlands to participate in a second pillar pension. However, many employers and sectors have binding agreements to participate in a second pillar pension fund. This means that most employees (about 90%) and some specific groups of self-employed professionals (e.g. physicians, painters or plasterers) are de facto obliged to participate in the second pillar pension scheme of their company, sector or profession.

³Income taxes are lower after the statutory retirement age, since a specific premium that partly finances the first pillar pensions is only levied on the working age population.

⁴The option of taking out a partial lump sum of up to 10% of the pension savings has been publicly announced but is currently not yet available.

The third pillar is also capital-based and income-related. It basically offers all workers who do not make full use of the second pillar the opportunity to voluntarily accrue tax facilitated pension rights. The third pillar is relatively small in the Netherlands. The shares of the respective pillars in total yearly pension payouts amount to roughly 50, 45, and 5 percent (Molenaar-Cox and Woestenburg, 2018).

3 Data

To learn more about the interest in different pension payout schemes, we conducted a survey experiment involving six hypothetical retirement choice scenarios. We focus on the most immediately affected age groups, by making use of a subset of the respondents of the Dutch LISS panel (Longitudinal Internet studies for the Social Sciences)⁵ that are around retirement age. Our survey was conducted in December 2019, targeting LISS respondents between the age of 55 and 75. Out of the 1,250 invited individuals, 1,064 completed the questionnaire, leading to a response rate of 85%.

3.1 Pension payout schemes

The core of our survey consisted of eliciting the participants preference for a specific pension payout scheme, and how this preference depends on the design of the different schemes, as well as on other characteristics of the choice environment, such as the interest rate or the replacement rate. The three pension payout profiles that we consider are as follows.

Flat-rate annuity (constant)

The flat-rate annuity, i.e. nominally constant monthly payments throughout retirement, constitutes the general default at the time of the survey. Retirees receive a fixed monthly pension payout. While most pension contracts have the ambition to provide yearly indexation against inflation, the bulk of pension funds have not been able to do so since the financial crisis. A constant nominal payment would thus imply a slowly but steadily diminishing real payment. Depending on the replacement rate, the monthly net pension payment equals the pre-retirement monthly net wage or a percentage thereof (e.g. 60% or 80%).

High/low annuity-based payments (high/low)

In the high/low profile, retirees start with a period of high monthly pension payouts, followed by a period of lower payouts. This option was also available at the time of the survey, but it needs to be specifically requested and is less frequently used than the constant payout profile. The maximal difference between the high and the low payment is regulated by law. The low payment (pre-tax) has to amount to at least 75% of the high

⁵The LISS panel consists of 5,000 representative households with approximately 7,500 individual respondents. Each respondent fills out a paid questionnaire once per month. These questionnaires consist of topic-specific and LISS-core questions. More information about the LISS panel can be found at www.lissdata.nl.

payment (pre-tax). For our research we chose the largest possible difference in gross payment. This will, however, generally result in a smaller gap in net payments.

Partial lump sum, followed by a lower annuity (lump sum)

In the lump sum profile, retirees receive a share of their pension savings (e.g. 5% or 10% of their total savings) as a one-time payment at the start of their retirement. Thereafter, they receive a constant monthly payment, based on their remaining pension savings. This pension payout option was not yet available to retirees at the time of the survey, but its introduction to the pension system has been publicly announced. Respondents who are not retired yet will potentially have this option available when they reach the retirement age.⁶ As with the high/low scheme, tax law regulates the maximum size of the lump sum, to ensure that the fiscally subsidized pension savings are primarily used for a lifetime annuity. Current law stipulates that no more than 10% of the total pension wealth can be extracted as a lump sum payment at the start of retirement and that this lump sum cannot be combined with a high/low profile.

3.2 Survey experiment design

To elicit the pension payout preferences, we use a vignette study, in line with de Boer et al. (2019). The respondents are asked to give advice on the choice between the three payout options to a person who has the same characteristics as they have.⁷ It is specifically mentioned that the advisee has the same pre-pension income, as well as the same family status as the respondent. We use the respondents' own income category to provide them with an estimated monthly pension income in euros per pension plan. The high/low and the lump sum options are calibrated such that they are actuarially equivalent to the constant payout.⁸ All options are based on the retirement age of 67, which is also explicit in the survey question.⁹

The respondents are asked to give advice in six different scenarios, which differ in terms of the specifics of the plans as well as the financial environment. In each of the scenarios, the same parameters apply for all three options (i.e. we provide all three options

⁶The Dutch parliament is currently debating the law to make the lump sum option feasible. The introduction of the lump sum option is currently scheduled for 2023.

⁷The screenshots in the appendix, section A.1, display the precise instructions the respondents received.

⁸While the constant payout is determined by the replacement rate, for the high/low and the lump sum a few additional assumptions are necessary to provide actuarial fair alternatives. We base the calculations on the assumptions of an average life expectancy after retirement of 20 years, and the tax rates and brackets that apply in 2019, the year of the survey.

⁹See Van Soest and Vonkova (2014) for a similar experiment that investigates flexibility as to the retirement age.

under the assumption of, for example, low interest rate and a 100% replacement rate). For each choice the respondents receive information on the monthly payouts, the size of the lump sum payout, and the duration of the high and low periods in the high/low scheme. The different assumptions regarding the economic environment are implicit and only reflected in the realization of the net monthly payout values; in other words, the interest rate is not explicitly mentioned, but it affects the payouts amounts in the high/low and lump sum profiles. We present respondents with nominal amounts, without discussing inflation and the possibility of indexation so as not to complicate matters further.¹⁰

For each of these six choices we randomize the following four variables for the calculation of the expected values, as follows.

Net replacement rate

The net replacement rate that is used to calculate the future pension payout in the second pillar can take a value of either 60%, 80% or 100%.¹¹ This choice parameter is shown implicitly, by its effect on the payout sums. Respondents are not explicitly informed about the replacement rate that is used for a specific scenario. The replacement rate affects all three options in a similar way in determining the actual amount of the pension rights. The predicted effect of a change in the replacement rate is therefore ambiguous.

A high replacement rate could increase interest in the lump sum, given that the remaining annuity would be high enough to maintain the current standard of living. Conversely, a low replacement rate might induce choosing for the lump sum or the high/low payment scheme in order to at least maintain the current standard of living during the initial years of retirement, at the cost of an even lower annuity for the remaining retirement years.

¹⁰Few respondents currently expect substantial indexation on their future pension, see Table A.1 in the Appendix.

¹¹Given that the first pillar pension fully replaces one's income up to the social minimum, the average replacement rate over the total income for the lowest income category in our study will be approximately 80%, 90% or 100%. For higher income levels, the relative weight of the first pillar pension will be lower, and the overall replacement rates will be closer to 60%, 80% or 100%. An overall net replacement rate of 60% is close to the OECD average for average earners with a full career (OECD, 2019). An overall net replacement rate of 80% corresponds to the respective level that the OECD reports for the Netherlands. A 100% net replacement rate represents a state of the world where retirement does not change a worker's financial situation.

Interest rate

To calculate the high/low and lump sum payouts such that they are actuarially equivalent to the constant option, we need to make assumptions on the interest rate. We randomly assign an interest rate of 2% or 6%. Again, this choice is implicit and not obvious to the respondent. A higher interest rate makes early payout of pension savings more costly relative to the unaffected constant rate. The two possible rates do not correspond to current interest rates, which are much lower. However, the difference between the high and low interest rate allows us to investigate the impact of an increase in interest rate.

Because the interest rate is not communicated to the respondents, they cannot take into account the possible higher yields to alternative investments in the high interest scenarios. Thus, in our setting a high interest rate makes earlier payout of the pension savings strictly less attractive. This effect should be even more pronounced in the lump sum, where the surplus payout takes place immediately upon retirement.

Duration of the high versus low payout period in the high/low scheme

We randomize between two designs of the high/low scheme, which differ in the duration of the high and the low payment period, respectively. The *short* option foresees a period of 5 years of higher payments, followed by lower payments thereafter. The *long* option consists of a 10-year period of high payments, with lower payments thereafter. To calculate the low and high options we assume a life expectancy of 20 years after retirement.¹² In both specifications we maximize the difference between the high and the low payment, within the legally allowed range. While both the high and the low payment amounts are slightly higher in the *short* option, also the difference between the high and the low payment is mostly larger in this option.

Size of the one-time lump sum in the partial lump sum scheme

The partial lump sum scheme offers the payout of a fraction of the total pension savings at the start of retirement. We vary the size of this fraction, assigning it to be either 5% or 10% of the total pension savings. The subsequent monthly payments are adjusted, such that the accumulated gross pension rights are equal to the constant option. We account for the higher marginal taxes that apply to the lump sum.¹³ Both the lump sum and the

¹²It can happen that a part of the high payment falls into a higher tax bracket. Where this occurs, the reported monetary values take the higher taxes into account.

¹³We assume the tax rates that apply to retirees, even though the lump sum may factually fall into the last year of active labor market participation. The timing and rate of taxation is a complex problem for the announced lump sum payout option in the Dutch pension system, and the reason why the introduction is

monthly payment that are presented in the survey are net values. While the larger lump sum is on average more costly due to higher tax rates in the first period and lost interest on savings, it can also lead to lower tax rates in later periods, and in specific cases the lower annuities can make retirees eligible for subsidies that they would not be entitled to on their regular flat-rate annuity. In addition, it allows for a higher degree of flexibility. If a retiree wishes to use the partial lump sum payout for a large expenditure at the start of retirement (e.g. to pay down a mortgage or to buy a caravan), the option to take out a larger share might be preferable despite the higher costs.

Each participant sees 6 of the 24 possible scenarios. The order in which the pension schemes (constant, high/low, or lump sum) are shown in each scenario differs across but not within individuals. This means that the decision screens that an individual sees across the six rounds only differ in terms of the monetary values and the specifics of the lump sum and high/low plan. The random variation in the order of the specific options across individuals, however, allows us to control that the order in which the options are presented in the survey does not influence the respondents, for example by suggesting that the first option on the left is the reference pension scheme.

In addition to choosing one payout plan, the respondents must rate each of the shown scenarios. They have to assign a grade to each of the payout schemes, based on their own preferences, from 1 (“not interesting at all”) to 10 (“ideal”). In only 6% of all choices, the scheme that is chosen does not correspond to the option that receives the highest rating from the respondent.

3.3 Control variables

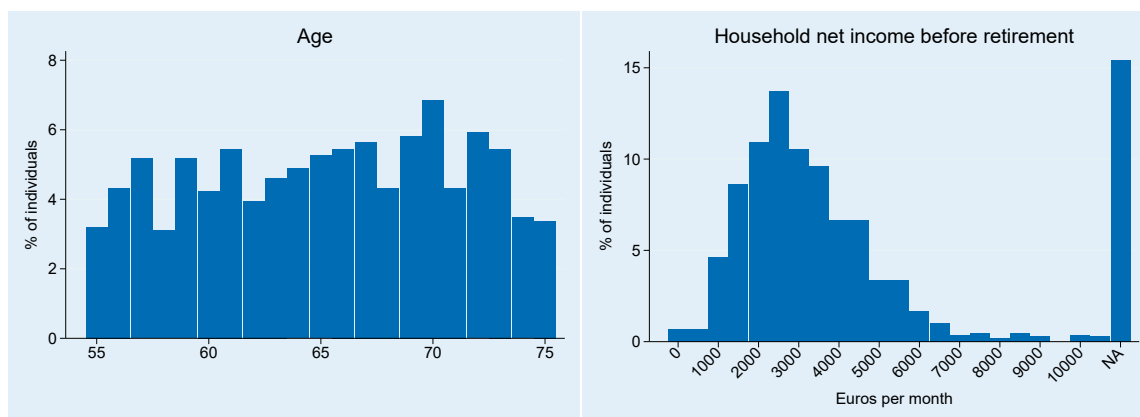
Demographics and financial situation

Demographic variables, such as age and gender are retrieved from the LISS core study. The left panel of Figure 1 shows the age distribution of the respondents to our survey. The sample is balanced with respect to gender, with 50.5% female and 49.5% male respondents.

The pension choice survey elicited additional information on the respondents’ financial situation and health, their attitude towards and knowledge of the pension system, and their economic preferences, such as risk attitudes and discount rates. Table A.1 in the appendix provides detailed descriptive information for the sample.

delayed from 2022 to 2023.

Figure 1: Age and income distribution of respondents



The right panel of Figure 1 shows the distribution of net household income before retirement. Individuals between 55 and 66 years of age were asked to report their current monthly net household income (consisting of labor and wealth income as well as subsidies), while individuals above retirement age were asked to report the income they received just before reaching retirement age. Of the respondents, 15% do not disclose their household income. The median net household income lies between 2,500 and 3,000 euros per month among the respondents who do report their income.¹⁴

70% of the respondents live with a partner, and 73% own their house. The respondents also have a significant private savings: 67% of the individuals have several months income or more worth of private savings, and at least 83% have pension savings in one or several pension funds. Figure A.1 in the appendix shows what funds the respondents have their pension savings in.

Economic preferences and attitudes

When asked about their trust in the Dutch pension system, approximately one fourth of the respondents answered that they had little or no trust in the system, while about one fifth indicated that they trusted it much or very much. The majority of individuals report

¹⁴The incomes were reported in 500-euro income brackets. For the vignettes we used these reported incomes (the respective middle of the reported income bracket) as the 100% net replacement rate income after retirement. For those with a reported income below a certain threshold, we used the minimum income needed for accumulating second pillar pension income (on top of the basic public pension level). This way, there was some pension income that could be redistributed during retirement. Specifically, individuals in single households who report a pre-retirement income below 1,500 euros are placed in the 1,500-2,000 euros income group, and individuals in couples households with a household income below 2,000 euros are placed in the 2,000-2,500 euros income group. For those who did not report their income, we used the median income for the vignettes; this amounts to 2,500-3,000 euros for individuals in single households and 4,000-4,500 euros for individuals who live with a partner.

having “some” trust in the Dutch pension system. Individuals who are already retired trust the pension system more than those who are not yet retired. The level of trust is very low among individuals who do not have a pension fund; half of this group has little or no trust in the system.

We measured the risk attitude of respondents by asking them to rate their willingness to take risks – in general and in the financial domain – on a scale from 0 to 10. The distribution of risk preference is comparable to earlier findings for this age group (Dohmen et al., 2005). To understand whether preferences depend on the knowledge that individuals have about the options and the financial system in general we included questions on financial literacy¹⁵ and two direct questions on their familiarity with the concept of a high/low and a lump sum pension payment scheme. Finally, we also measured if individuals are likely to act on information about financial products by inquiring about recent changes in electricity, healthcare insurance and telecom providers. We summarize these questions into one proxy variable for their willingness to take action (and thus to deviate from a status quo). Figure A.2 in the appendix provides an overview of the distribution of answers for the economic preference and attitude variables.

¹⁵We use the three standard questions (see e.g. Alessie et al., 2011), augmented with an advanced financial literacy question on the relation between interest rates and bonds (see Van Rooij et al., 2012).

4 Results

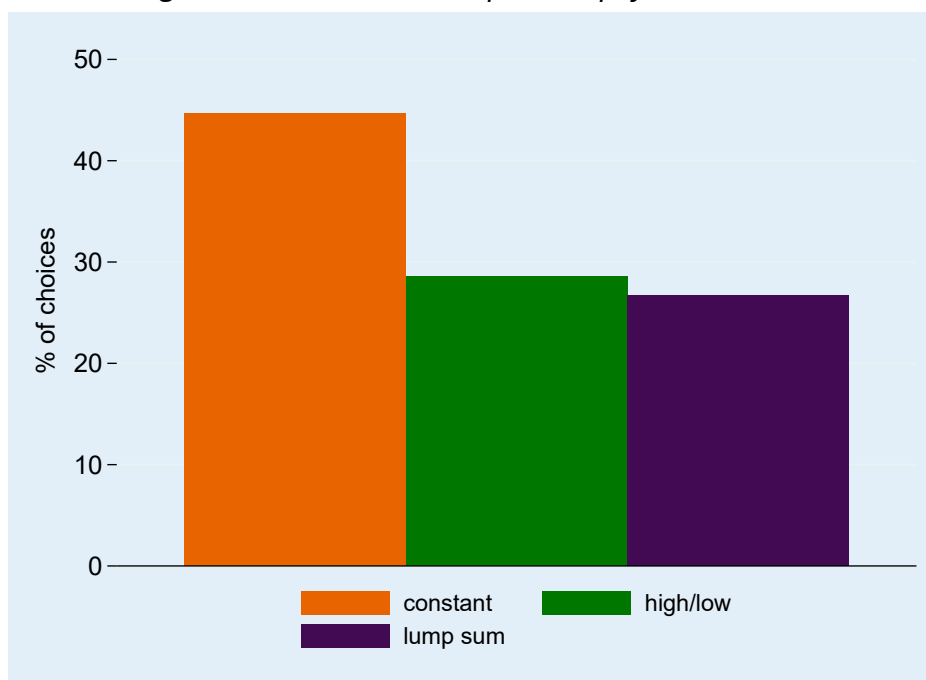
We first provide an overview of how popular the respective pension schemes are, and of how the advice given relates to actual choices that the individuals have already made or plan to make for themselves. In a second step we provide causal evidence on how the financial environment and specifics of the pension payout plans impact the respondents' preferences. Finally, we provide descriptive evidence on how the respondents' choices relate to their personal characteristics, their demographic and socio-economic background, and their economic preferences and financial literacy.

4.1 Interest in the pension payout schemes

The constant pension payout plan is the most popular scheme. If we aggregate all vignette choices across scenarios and individuals, we see that the constant payout is chosen in 45% of all cases, while the high/low and the lump sum schemes are chosen in 29% and 27% of all cases, respectively. Figure 2 illustrates this distribution of the 6,384 choices that are made in the vignettes. The distribution of choices between the three options not only reflects to different preferences between respondents, but also a significant variance of choice within individuals, dependent on the specific scenario. Only 36% of all respondents make the same choice across all six scenarios. 43% of the respondents switched between two schemes in their choices, while 20% of the individuals chose each scheme at least once.¹⁶ This suggests that a significant share of individuals adjust their pension choice to the specifics and circumstances that exist at the time of their retirement, rather than having a fixed preference that is constant across all circumstances. This is supported by the answers to the question on their personal pension choice, where a large fraction of the respondents remains undecided.

Individuals who are already retired were asked whether they chose the high/low option, and whether they would have chosen the lump sum option if it had been available at the time of their retirement. Respondents who had not yet reached the retirement age were asked if it is likely that they will choose the high/low option, or the lump sum option respectively. Figure A.3 in the appendix provides the distribution of the answers to the expected choices (high/low and lump sum for not yet retired respondents), realized choice (high/low for retired respondents), or the hypothetical choice (lump sum for retired respondents). In a follow-up question we asked respondents who were interested in the high/low or lump sum options to indicate which motives they would have or had for choosing the respective option. Table A.2 in the appendix displays the answers to this

¹⁶Figure A.4 in the appendix displays the shares of respondents in more detail, by scheme or combination of schemes.

Figure 2: *Preferences over pension payout schemes*

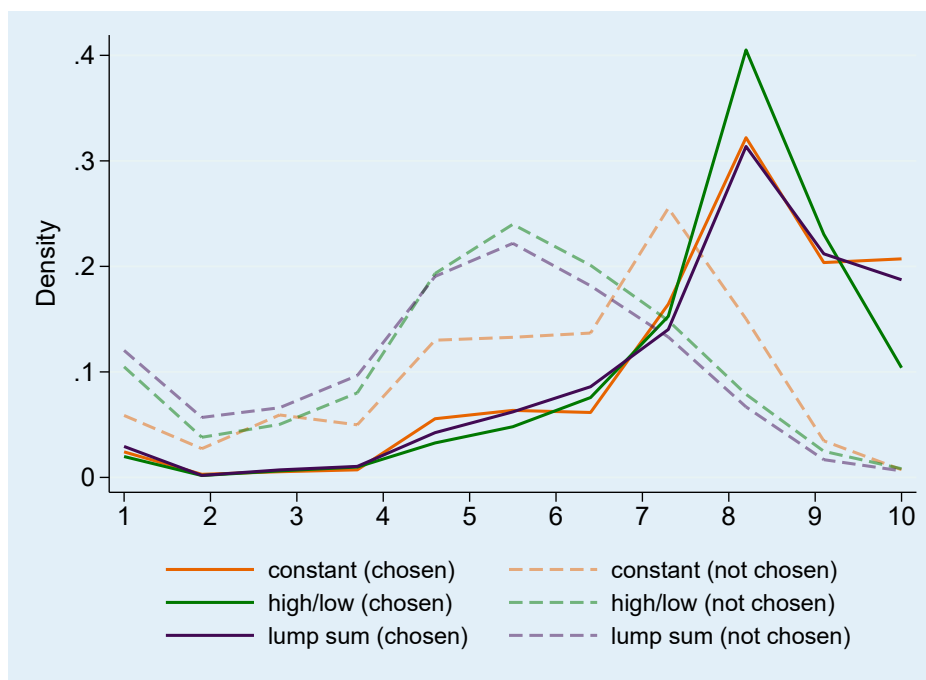
Aggregated results of all choices across the six vignette scenarios.

question by option and retirement status. Respondents were allowed to choose multiple options. An important motive for choosing the lump sum or high/low option is the wish to have more precautionary savings, due to uncertainty about the pension system or future healthcare costs. Other relevant motives are paying off loans (such as a mortgage loan) or the wish to travel. Van der Crujisen and Jonker, 2019 discuss motives for the choice of pension payout plans in more detail.

When asked whether they find it important that an option for a high/low scheme exists, 45% of all respondents agree. Similarly, 44% find it important that retirees can choose to receive part of their pension savings as a lump sum at the start of their retirement.

Figure 3 illustrates the distribution of the ratings that respondents give to each realization of the pension payout schemes. Each respondent rates every scheme six times, in light of the specific circumstances of the respective vignette scenario. Respondents rate the two schemes that they do not choose on average more than two points lower: the average rating for the chosen scheme is 7.8, while the average over the two options that are not chosen is significantly lower, with 5.2. The rating of the chosen option does not depend on which scheme is chosen. However, this does not hold for the options that are not chosen. Among the options that are not chosen, the constant pension payout plan receives a higher rating than the other two schemes, with an average of 5.9 for the

Figure 3: Rating of all options (chosen and not chosen)



Respondents rate each option on the scale of 1 “not interesting at all” to 10 “ideal”.

constant payout compared to 5.2 for the high/low option and even 4.8 for the lump sum scheme.

4.2 Exogenous determinants

In this section we investigate how external factors influence the hypothetical choices that individuals make. As described in the data section, we randomly vary the choice environments in six vignettes that the respondents receive. We vary the replacement rate and the interest rate, as well as the specifics of the high/low option and the lump sum option. For each of the three pension payout options we calculate the probability that it is chosen, using a linear random effects probability model.¹⁷ Next to the randomized variables we also include an indicator that tracks the number of the scenario, from 1 to 6. This allows us to capture learning effects. Additionally, we control for the order in which a respondent sees the options (e.g. lump sum, constant, high/low).¹⁸

¹⁷Estimating a random effects probit model instead of a linear probability model yields very similar marginal effects.

¹⁸We add a binary variable for each of the six possible combinations of options. There is no indication that there are significant and systematic differences due to the order or options. However, the “constant–lump sum–high/low” arrangement relates to a significantly lower probability of choosing the constant option.

Table 1 shows the regression results for each of the three possible pension payout scheme options.

Net replacement rate

The base category for the net replacement rate in this analysis is 60%. The constant pension payout scheme becomes more popular the higher the replacement rate is, with a 7 percentage points higher probability of being chosen if the replacement rate is 100%. Inversely, the interest in the lump sum scheme is higher at the 60% replacement rate and drops with higher values of the replacement rate, with a 5 percentage points decrease at an 80% replacement rate and 8 percentage points lower probability of being chosen at a 100% replacement rate. The interest in the high/low scheme is less affected, with a small increase in interest at the 80% replacement rate and no effect for the 100% replacement rate.

Interest rate

An increase in the interest rate of 4 percentage points, from 2% to 6%, increases the probability of choosing a constant pension payout scheme by about 6 percentage points, and reduces the probability of choosing a scheme with an initial lump sum payment by the same amount. The interest in the high/low pension payout scheme, on the other hand, does not appear to be affected by the interest rate. The shift towards a constant pension payout in a high interest rate scenario is expected, as described above. In the scenario with a high interest rate an early payout of the pension savings (i.e. the withdrawal of a lump sum payment) is more costly than in an environment with low interest rates. Hence, the current real world situation with zero or negative interest rates might make the lump sum scheme more interesting to pension fund participants.

Duration high/low

Half of the vignettes displayed scenarios in which the high/low scheme was designed as a *short* period of high pension payments (5 years) and lower pension payments in the years that follow. The other half of the vignettes showed scenarios with a *long* high/low scheme, i.e. 10 years of high pension payments and lower pension payments thereafter.¹⁹ The values of both high and low differ on average more strongly from the constant option for the *short* high/low design than for the *long* high/low design, where the

¹⁹The payout options are actuarially equivalent under the assumption of an average remaining life expectancy of 20 years after retirement.

Table 1: *Impact of environment and design of options*

VARIABLES	(1) p(constant)	(2) p(high/low)	(3) p(lump sum)
Net replacement rate			
medium (80%)	0.026** (0.011)	0.026** (0.011)	-0.052*** (0.011)
high (100%)	0.072*** (0.013)	0.006 (0.012)	-0.080*** (0.012)
Interest rate			
high (6%)	0.057*** (0.009)	0.002 (0.009)	-0.059*** (0.010)
Duration of high period			
long (10 years)	0.021** (0.009)	-0.023** (0.009)	0.003 (0.008)
Size of lump sum			
large (10%)	-0.026*** (0.009)	-0.047*** (0.010)	0.071*** (0.010)
Scenario number	-0.008*** (0.003)	-0.007*** (0.003)	0.016*** (0.003)
Constant	0.435*** (0.030)	0.324*** (0.027)	0.241*** (0.025)
Observations	6,384	6,384	6,384
Number of individuals	1,064	1,064	1,064

Note: Linear probability random effects estimates for the probability of choosing a specific pension payout scheme over the other two options. The base group for replacement rate is 60%, for interest rate it is low (2%), for duration of high in high/low the base group is short (5 years), and for the size of the lump sum it is small (5%). We additionally control for the order in which the individual sees the options. Standard errors are in parentheses, clustered at household level, significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

payout difference between high/low and constant can be as small as 20 euros, depending on the other choice parameters and the respondent's income group. Accordingly, the results indeed show that, as the high/low option approaches the constant option, the interest therein decreases by the same amount as the interest in the constant option grows. The probability that respondents choose the lump sum option is not impacted by the change in duration of the high/low scheme from *short* to *long*.

Size lump sum

A higher percentage of the total pension savings that can be paid out as a one-time payment at the start of retirement – with the consequence of lower constant payments during retirement – makes the lump sum option more popular. The lump sum pension scheme with a 10% one-time payout at the beginning has a 7 percentage points higher probability of being chosen than when the initial payout is only 5% of the total accrued pension wealth. This indicates that a small initial payment, which makes the lump sum scheme more similar to the constant payout scheme, is less interesting. However, we cannot extrapolate from this finding that initial payouts that are even larger than 10% would be preferred. Further research is needed to be able to say more about when the interest in a lump sum is at its maximum and about the optimal ratio between the initial payout and the remaining regular monthly payouts. The increased interest in the 'higher' lump sum scheme is balanced by a shift away from both the constant and the high/low scheme, although with a reduction of about 5 percentage points in the probability of being chosen, the decrease in interest is stronger for the high/low option than for the constant option (with a decrease of 3 percentage points).

Scenario number

We also observe a learning effect in our vignette study. The lump sum payout scheme is not yet available in the Dutch pension system, and the familiarity with this system is consequently also lower.²⁰ However, we see that the more decisions a respondent makes, the more likely the respondent is to go for the lump sum option. At the same time, the two better known options become less likely to be chosen with every new decision that is made.

²⁰Only 25% of the respondents answer that they are aware of the lump sum option that was announced by the government, while 49% of the respondents are familiar with the high/low option.

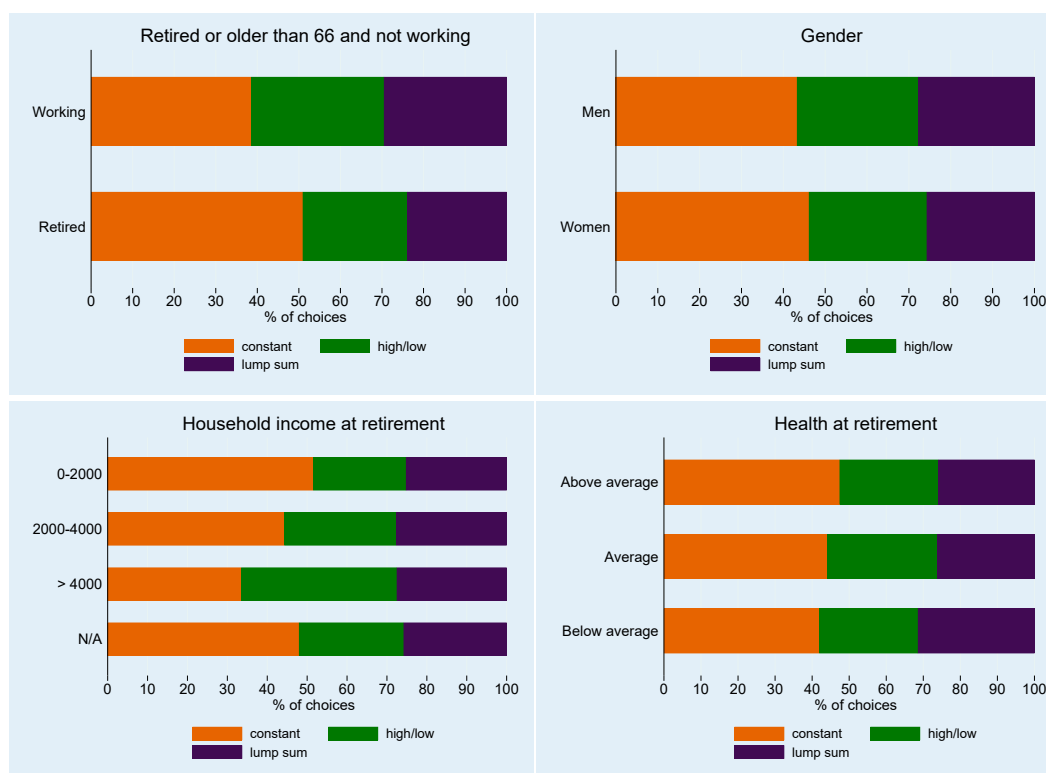
4.3 Personal characteristics

How does the interest in a specific pension payout scheme relate to the personal characteristics of individuals? In this section we provide correlational evidence for the link between specific choices and the demographic characteristics of individuals, their environment, their knowledge about the pension system, and their economic preferences.

Figure 4 provides a first descriptive overview of the relationship between key demographic, financial, and health characteristics and the stated preferences on pension payout systems. In these graphs we pool all answers over all choices and respondents. We find that individuals who are already retired choose to advise the constant payout option in more than half of all cases, while the group of not yet retired respondents only chooses the constant option in 39% of the choice situations. There seems to be only a very marginal gender difference in pension payout preferences in our sample. Women are slightly more likely to choose a constant pension payout, with a statistically significant 3 percentage points difference. However, they do not differ significantly from men in opting for any of the other choices.

Household income (for retirees the last pre-retirement income) seems to be an important predictor of the option chosen. The higher the pre-retirement income, the more likely the respondent is to choose the high/low construction. This comes largely at the cost of the constant pension payout scheme, while the differences in interest in the lump sum option are not statistically significant between the various income groups. Finally we see a slight shift away from the constant option and towards the lump sum for individuals who had, or expect to have, lower than average health at the time of entering retirement. This is in line with what we would expect if individuals with poorer health hold private information on shorter life expectancy, and prefer to shift the consumption of their pension savings to an earlier date.

In a next step, we regress individual characteristics on the probability of choosing each of the three options, using a random effects linear probability model. For each option we provide two sets of estimates: firstly, we regress demographic characteristics, as well as the financial environment and health at retirement, on the probability of choosing the respective option. Secondly, we also add controls for economic preferences, financial literacy, and trust in the pension system. While we include the most important individual characteristics we cannot entirely exclude the possibility that unobserved characteristics are biasing our results. We can therefore not interpret the ensuing results causally. They do, however, provide an important insight into differences between relevant groups of individuals.

Figure 4: *Descriptives – preferences by personal characteristics*

Aggregated results of all choices within a demographic group across the six vignette scenarios.

The regression results in Table 2 confirm the most notable patterns from the bivariate findings above. While controlling for other individual characteristics, we still find that retired respondents are more likely to choose the constant pension payout option. This relation does not seem to be driven by differences in risk preferences or trust in the pension system, as the coefficients for the retirement variable remain stable when including the second group of control variables. The age coefficient is not significant for any of the choices or specifications, which indicates that there seem to be no differences in choices that depend on age once retirement is controlled for. The small gender differences that can be found in the raw data disappear when other individual characteristics are taken into account. Also, household composition does not seem to make a difference in the preference patterns.

The positive relation between income²¹ and the preference for the high/low scheme

²¹This is based on the same income variable that is used for the calculation of the pension payout options in the vignettes. It captures 22 net monthly household income groups in steps of 500 euros, with the last group being open-ended at "more than 10,000". If a value is missing we allocate the median income. Low incomes are grouped in one category up to a minimal income, for which there is sufficient choice in the pension payout schemes. The income variable reflects the income based on which the hypothetical pension

Table 2: *Pension payout preferences by personal characteristics*

VARIABLES	p(constant)		p(high/low)		p(lump sum)	
retired	0.102**	0.104**	-0.043	-0.045	-0.059*	-0.059*
	(0.041)	(0.041)	(0.036)	(0.036)	(0.033)	(0.033)
age	0.003	0.000	-0.003	-0.002	0.000	0.002
	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)
female	0.012	-0.025	0.003	0.028	-0.015	-0.002
	(0.024)	(0.024)	(0.020)	(0.020)	(0.019)	(0.020)
couple	-0.001	-0.016	-0.033	-0.020	0.033	0.036
	(0.029)	(0.029)	(0.024)	(0.024)	(0.024)	(0.024)
income group	-0.018***	-0.013***	0.014***	0.011**	0.004	0.003
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)
home ownership	0.019	0.031	0.038	0.023	-0.058**	-0.054**
	(0.032)	(0.032)	(0.025)	(0.024)	(0.027)	(0.027)
savings	-0.011	0.004	0.026	0.008	-0.015	-0.012
	(0.035)	(0.035)	(0.030)	(0.030)	(0.030)	(0.031)
health	0.032	0.042**	-0.017	-0.025	-0.015	-0.017
	(0.020)	(0.020)	(0.017)	(0.017)	(0.017)	(0.017)
risk		-0.026***		0.012***		0.014***
		(0.005)		(0.004)		(0.004)
discount rate		-0.027		0.003		0.024
		(0.025)		(0.021)		(0.021)
financial literacy		-0.043***		0.029***		0.014
		(0.013)		(0.010)		(0.010)
trust in pension system		0.013		0.018		-0.031**
		(0.015)		(0.013)		(0.013)
Constant	0.268	0.549**	0.417**	0.241	0.315*	0.210
	(0.229)	(0.229)	(0.198)	(0.202)	(0.180)	(0.190)
Observations	6,384	6,384	6,384	6,384	6,384	6,384
Individuals	1,064	1,064	1,064	1,064	1,064	1,064

Note: Linear probability random effects estimates for the probability of choosing a specific pension payout scheme over the other two options. We additionally include in all specifications binary control variables for missing income information, low income, missing information on savings, and in the extended specifications a control for negative discount rates. Standard errors are in parentheses, clustered at household level, significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

that is apparent in the raw data also holds in the regression results, when controlling for personal characteristics and preferences. Individuals who own their house are less likely to choose a lump sum payout scheme. We know from Lever et al. (2018) that paying off a mortgage loan (fully or partly) is a popular use a lump sum, but this suggests that it is not an important driver for taking out a lump sum. This could partially be explained by the fact that retired homeowners on average have relatively low (remaining) mortgages, see Table A.1 in the Appendix. This also means that the average homeowner has a lower need for the precautionary savings that a lump sum could provide, due to the fallback option that home ownership offers them in an emergency situation. However, we find no significant link between having private savings and the payout choice when we control for income, home ownership and other individual characteristics.

The different choices based on health that we see in the raw data partially disappear once we control for other personal characteristics. We no longer find a significant relation between poor health and the probability of choosing a lump sum scheme. However, when additionally controlling for preferences and attitudes, we do find that healthier individuals are more likely to choose the constant payout scheme.

We find that individuals who are more willing to take risks favor either the high/low or the lump sum payout scheme more and are less likely to choose the constant payment. We furthermore see that individuals who have a higher degree of financial literacy are more likely to deviate from the simple reference choice of a constant payment and instead to choose the high/low option. Alessie et al. (2011) show that individuals with a higher financial literacy are better prepared for retirement. Having thought through their options more carefully, they might be less likely to revert to a reference point. Finally, low or no trust in the pension system goes along with an increased interest in the lump sum. By taking out a lump sum, individuals are able to move a part of their pension assets away from a system that they do not trust and manage it themselves. This finding is supported by earlier results by Van der Crujisen and Jonker (2019).

choice is made. This departs from the actual income for low incomes or for missing information on income. However, we do control separately for these two cases.

5 Discussion and conclusion

More flexibility in the pension system can increase the welfare of retirees, assuming the right circumstances (Van Ewijk et al., 2017). The Dutch pension system allows increasing flexibility for retirees to choose how their pension savings are paid out, but it puts constraints on those options, such that retirees have to take out a significant part of their savings in the form of annuities. In this study we investigate whether the flexibility that is provided is of interest to individuals, in particular to those who have to make pension choices in the near future or who have done so recently.

Our results show that each of the pay-out options receives significant interest, with the default option of a flat-rate annuity remaining the most popular scheme. Almost half of the respondents also indicate that they find it important that each of the various payout options exists. Importantly, our study shows that the individuals are sensitive in their choices to the economic environment and the specific design of the payout options. The advice given in the vignette scenarios varies significantly within individuals, with 64% of all respondents giving a different advice at least once. This sensitivity is slightly higher among respondents who are not yet retired. We also observed a learning effect with respect to the lump sum option, in the sense that respondents were more likely to choose the lump sum pension scheme with every new scenario that they assessed. Table 3 summarizes the effects of the significant explanatory variables on the probability of an advice for each of the payout options. It shows that a more generous pension system with a higher replacement rate increases the interest in a flat-rate annuity, while a lower replacement rate makes an earlier payout of the relatively small pension savings amount more attractive. In this case, a higher early payout allows for a smoother transition into retirement as it prevents a sudden drop in income at the start of retirement. Higher interest rates lead to a lower probability of choosing options that foster an early consumption of pension assets. In the real world, we currently see a decrease in real replacement rates due to little to no indexation, and we experience a period of low interest rates. This indicates that we might expect a growing interest in the lump sum option, and to a lesser degree also in the high/low option. The planned introduction of the lump sum option in 2023 could therefore see a fair amount of uptake.

Payout options that deviate stronger from the default²², i.e. a shorter duration of the high/low option and a larger initial lump sum, generate greater interest. It seems reasonable therefore to offer solutions which make use of the full range of flexibility that is allowed within the fiscal framework. The extent to which participants would be interested in flexibility beyond the current fiscal framework – and the associated social costs

²²We only consider options that are compliant with the Dutch fiscal framework.

Table 3: *Summary of significant explanatory variables*

	probability to advise		
	constant	high/low	lump sum
Randomized variables			
Replacement rate 20% ↑	+	+	–
Replacement rate 40% ↑	+	.	–
Interest rate ↑	+	.	–
Duration of high period ↑	+	–	.
Size of lump sum ↑	–	–	+
Familiarity with options ↑ (Learning effect)	–	–	+
Personal characteristics			
Retired	+	.	(–)
Income ↑	–	+	.
Health ↑	+	.	.
Home ownership	.	.	–
Willingness to take risk ↑	–	+	+
Financial literacy ↑	–	+	.
Trust in pension system ↓	.	.	+

Note: This table summarizes the direction of the effects and correlations for all variables from Tables 1 and 2. We only display relations that are statistically significant on at least the 5% level (or at the 10% in brackets).

and benefits – could be a topic for further research. The fact that changes in the parameters of, for example, the high/low-option do impact the interest in this option, but not in the lump sum, shows that the two options are not perfect substitutes and that each has added value compared to the other.

We find that only half of the respondents – even of those who are already retired – are familiar with the current high/low option, and only a quarter with the anticipated option of a lump sum payout scheme. At the same time, we find a positive learning effect for the lump sum in our vignette study: with each additional vignette scenario respondents become more likely to choose this option. This finding mirrors the results of Brown et al. (2021), who find that financial transactions that are less known and understood are also less popular. In their setting with lump sums as default, this leads to both a lower buying price and a higher selling price for annuities. This suggests that when the default is full annuitization, there can be some hesitance as to the high/low profile or the partial lump sum. This might be called a ‘de-annuitization puzzle’.

The interest in a lump sum is fairly constant over subgroups. We find a positive relation between retirement status and the probability of advising the constant option; this could reflect a positive personal experience, or just a rationalization of previously made choices. Furthermore, we find a strong and stable positive correlation with income for the preference for a high/low income profile during retirement. Van Ewijk et al. (2017) point out that this could indicate a lack of selection effects on life expectancy. People with higher incomes tend on average to have a higher life expectancy, but they nonetheless opt more often for partly de-annuitizing their pension assets. However, we do find some indications that people with a better self-assessed health status opt more often for a constant annuity. Homeowners less often advise taking out a lump sum. We also find strong correlations between the choices of individuals and their risk attitudes, financial literacy, and trust in the pension system.

The potential interest that we find in the high/low option is substantially higher than its current take-up.²³ The low familiarity with current and anticipated payout options and the learning effect we find for the lump sum option both point to the value of additional information for pension participants, to enable them to make a more reasoned choice among the available payout options.²⁴ It might be helpful to present personalized information with sample calculations about the amounts that people could expect under

²³Currently, the high/low option is mainly used by individuals who retire early, to smooth income before and after the statutory retirement age. The choice for a high/low payout profile after retirement is relatively rare (Lever et al., 2018).

²⁴Beshears et al. (2008) identify five factors that increase the likelihood of discrepancies between a person’s actions and actual interests. Most of these are particularly relevant in the pension domain, such as passive choice (i.e. the default-effect), inter-temporal choice and complexity.

the different payout options at retirement, similar to the way we have presented our vignettes. This could be done several times in the years before retirement, to familiarize participants with their choice options. Further research might inform pension providers about the best ways and moments to communicate with their participants about these topics.

References

- Alessie, R., Van Rooij, M., and Lusardi, A. (2011). Financial literacy and retirement preparation in the Netherlands. *Journal of Pension Economics & Finance*, 10(4):527.
- Beshears, J., Choi, J. J., Laibson, D., and Madrian, B. C. (2008). How are preferences revealed? *Journal of Public Economics*, 92(8-9):1787–1794.
- Bockweg, C., Ponds, E., Steenbeek, O., and Vonken, J. (2018). Framing and the annuitization decision—experimental evidence from a Dutch pension fund. *Journal of Pension Economics & Finance*, 17(3):385–417.
- Bonekamp, J. and Van Soest, A. (2019). Spaarmotieven en consumptiegedrag. Netspar Design Paper 130, Netspar.
- Brown, J. R., Kapteyn, A., Luttmmer, E. F., Mitchell, O. S., and Samek, A. (2021). Behavioral impediments to valuing annuities: complexity and choice bracketing. *Review of Economics and Statistics*, 103(3):1–14.
- de Boer, H.-W., Kantarcı, T., Van Vuuren, D., and Westerhout, E. (2019). Deeltijdpensioen geen wondermiddel voor langer doorwerken. Netspar Design Paper 129, Netspar.
- Dohmen, T., Falk, A., Huffman, D. B., Sunde, U., Schupp, J., and Wagner, G. G. (2005). Individual Risk Attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey. IZA Discussion Papers 1730, Institute of Labor Economics (IZA).
- Lever, M., Ponds, E., Dillingh, R., and Stevens, R. (2018). Keuzevrijheid in de uitkeringsfase: internationale ervaringen. Netspar Design Paper 104, Netspar.
- Molenaar-Cox, P. and Woestenburg, D. (2018). Pensioenaansprakenstatistiek 2015. Notitie, Statistics Netherlands.
- OECD (2019). *Pensions at a Glance 2019: OECD and G20 Indicators*. OECD Publishing, Paris.
- Van Bilsen, S., Bonekamp, J., and Ponds, E. (2020). Keuzes rondom pensioen. Netspar Design Paper 158, Netspar.
- Van der Crujisen, C. and Jonker, N. (2019). Pension profile preferences: the influence of trust and expected expenses. *Applied Economics*, 51(12):1212–1231.
- Van Ewijk, C., Mehlkopf, R., Van den Bleeken, S., and Hoet, C. (2017). Welke keuzemogelijkheden zijn wenselijk vanuit het perspectief van de deelnemer. Netspar Design Paper 71, Netspar.

Van Rooij, M. C., Lusardi, A., and Alessie, R. J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560):449–478.

Van Soest, A. and Vonkova, H. (2014). How sensitive are retirement decisions to financial incentives? A stated preference analysis. *Journal of Applied Econometrics*, 29(2):246–264.

A Appendix

Figure A.1: Pension funds of respondents

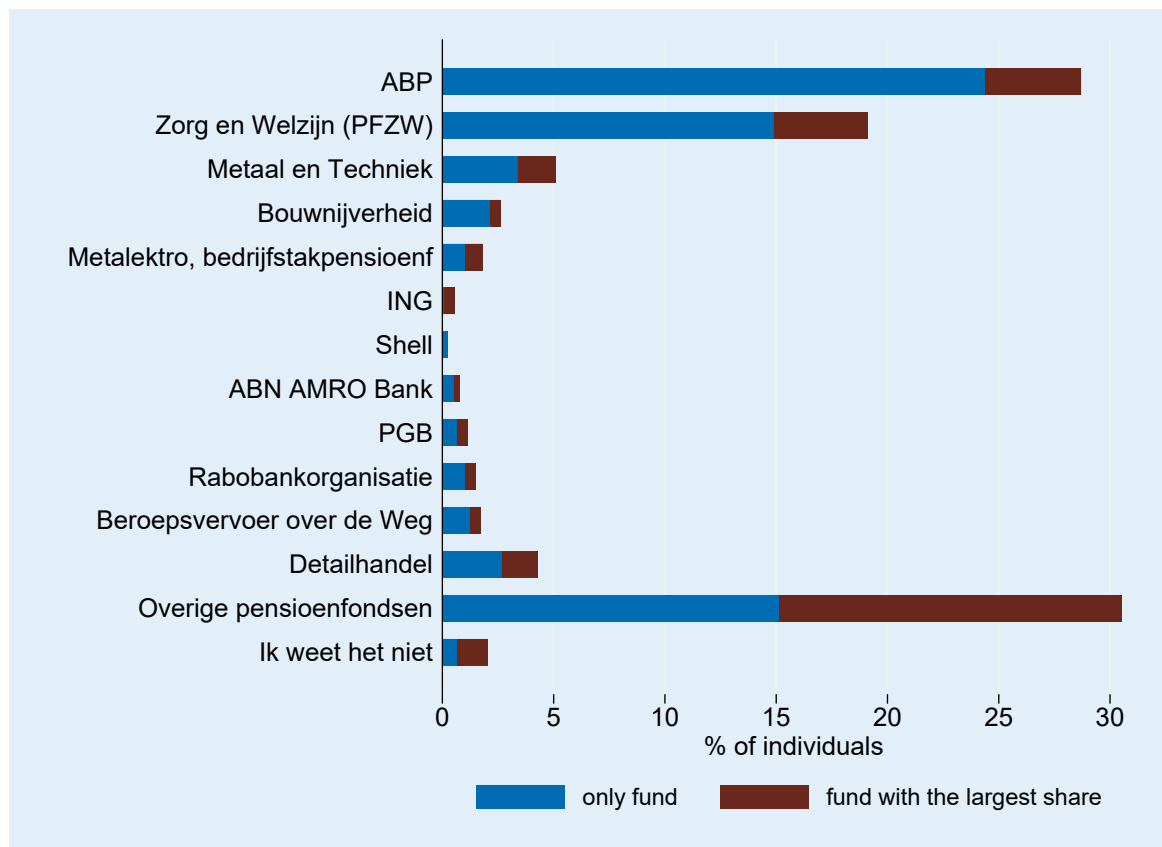


Figure A.2: *Descriptives – economic preferences and attitudes*

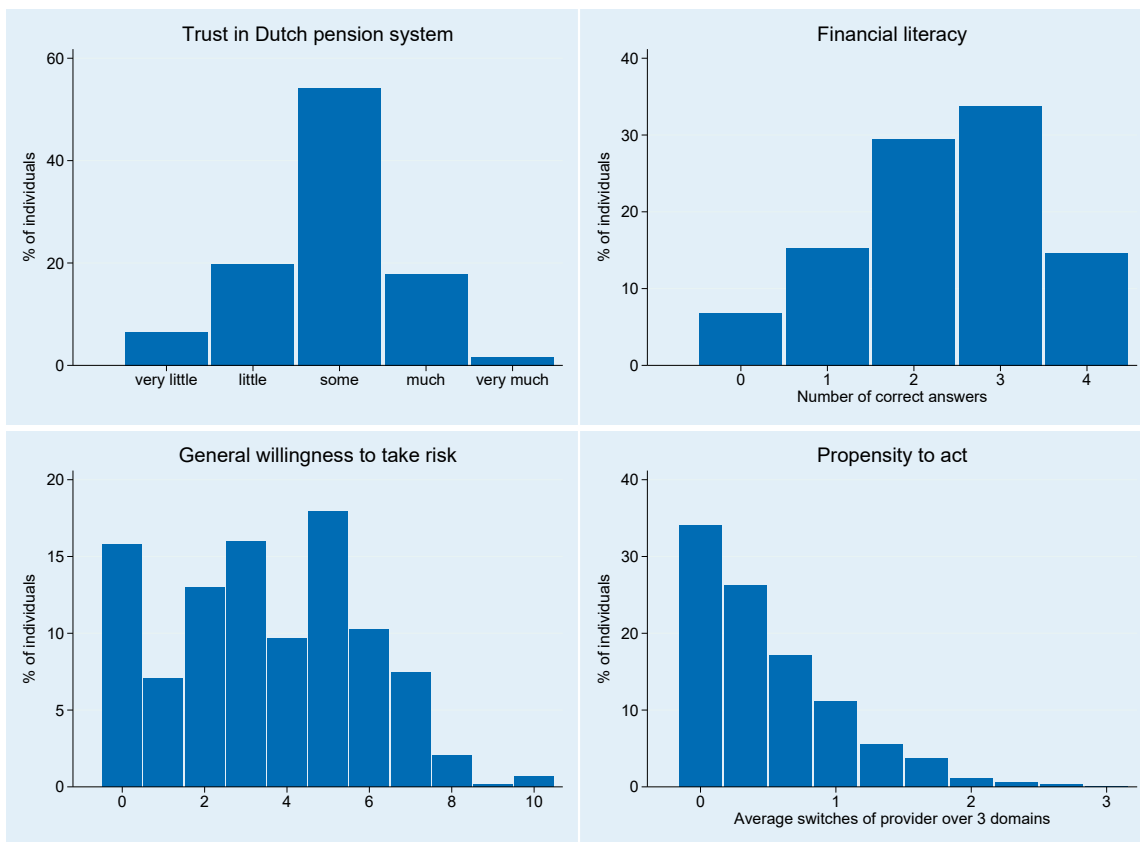
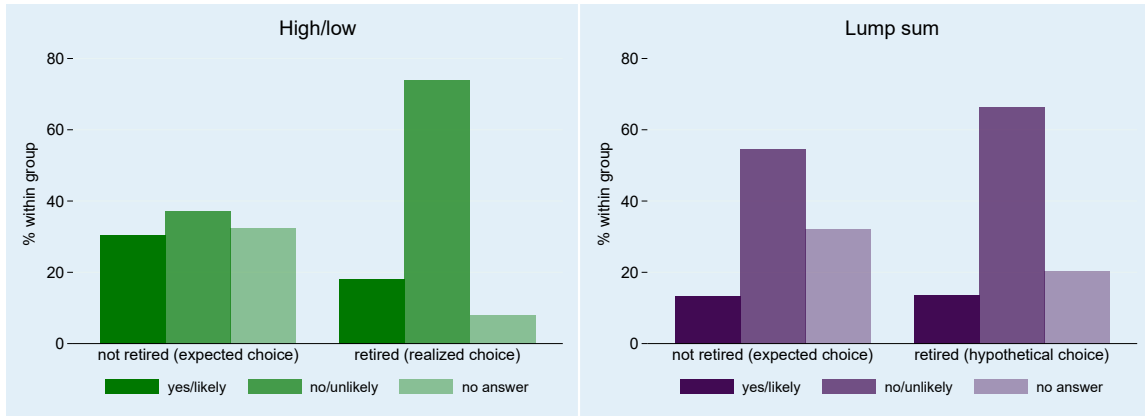


Figure A.3: *Expected, realized, and hypothetical choices about own pension payouts*



This figure displays the answers to four questions on the respondents' own pension plans. Retired respondents were first asked whether they had chosen the high/low construction for their own pension payout, and then whether they would have chosen the lump sum option if it had been available at the time of their retirement. Respondents who are not yet retired were asked in two separate questions whether they considered choosing the high/low option, and whether they considered choosing the lump sum option. The category "no answer" contains both the answer "I don't know" and "I don't want to answer"; the latter constitutes less than 1% of all answers.

Figure A.4: *Type of advice given by individuals across all six scenarios*

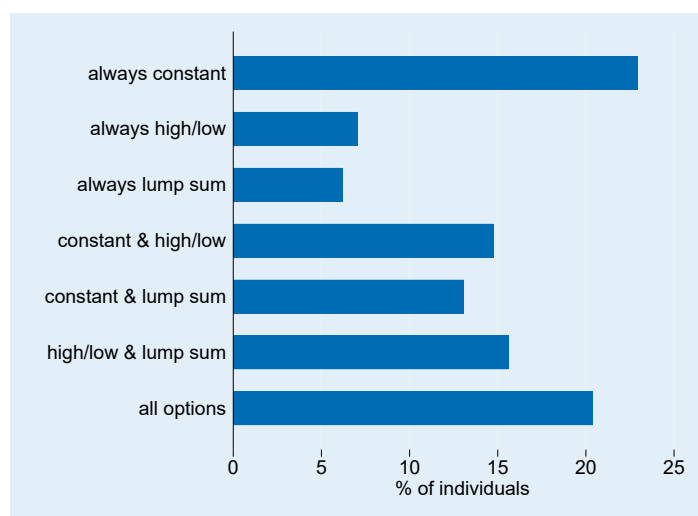


Table A.1: *Descriptive statistics*

Variable	Category	
Gender	Male	50%
	Female	51%
Household composition	Single	30%
	Couple	70%
Has pension fund	Yes, one	57%
	Yes, several	26%
	No	13%
	Does not know	4%
Expected health at retirement	Above average	25%
	Average	64%
	Below average	11%
Current health	Good	72%
	Average	23%
	Bad	5%
Savings	Little to nothing	17%
	Several months net hh income	22%
	Over 6 months net hh income	45%
	Does not know	6%
	Chooses not to answer	9%
Home owner	Yes	74%
	No	26%
Mortgage at start of retirement	No	49%
	Yes, max. 5 years	4%
	Yes, max. 10 years	6%
	Yes, (partially) interest only	36%
	Does not know	4%
	Chooses not to answer	2%
Knowledge of high/low option	Yes	49%
	No	51%
Knowledge of lump sum option	Yes	25%
	No	75%
Is there need for high/low option	Yes	45%
	No	55%

Is there need for lump sum option	Yes	44%
	No	56%
Trust in pension system	Very much	2%
	Much	18%
	Some	54%
	Little	20%
	Very little	7%
Expected indexation future pension	Not at all	31%
	Partially	16%
	Completely	5%
	Does not know	48%
	Chooses not to answer	1%
Observations		1064

Table A.2: Descriptives: motives to choose high/low or lump sum

	high/low		lump sum	
	not retired expected choice	retired realized choice	not retired expected choice	retired hypothetical choice
Financial planning				
to pay off a loan	7%	1%	6%	11%
to pay the outstanding mortgage	20%	13%	21%	23%
Consumption				
to take a long and expensive journey	29%	19%	24%	16%
Support of children				
to buy a house	10%	4%	14%	11%
Uncertainty about				
the future of the pension system	30%	23%	37%	25%
possible future healthcare costs	16%	12%	25%	14%
Other	27%	49%	27%	25%
I don't know	5%	4%	5%	4%
Number of individuals	143	75	63	56

Note: Motives to choose the high/low or lump sum option by respondents who said that they chose or would likely choose that option. Respondents can select more than one motive.

A.1 Screenshots hypothetical choice experiment

Instructie

Algemene beschrijving:

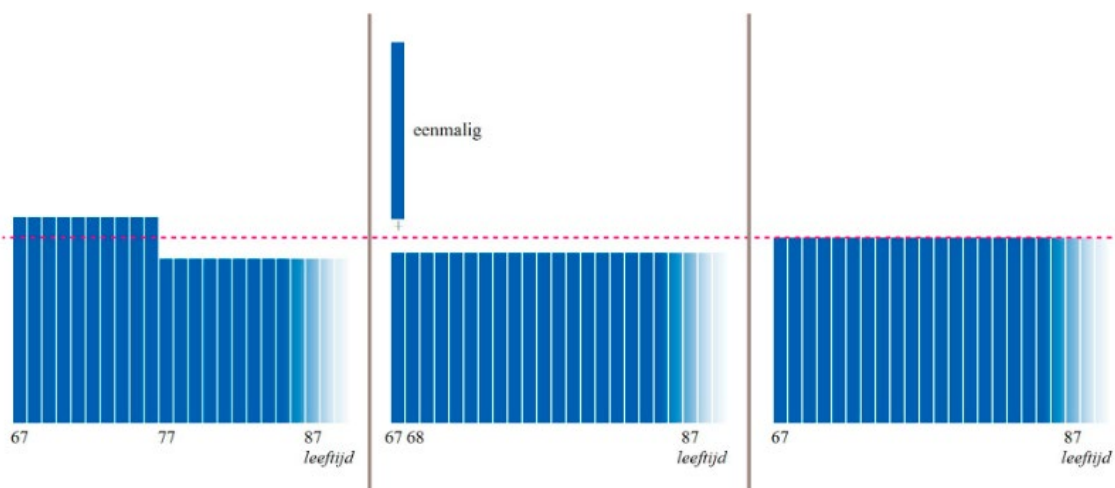
Als u deelneemt aan een pensioenfonds, dan hebt u een bepaald geldbedrag aan pensioenrechten opgebouwd wanneer u met pensioen gaat. Pensioenfondsen bieden op dat moment verschillende keuzes voor de uitkering van deze pensioenrechten. U kunt kiezen voor een pensioenuitkering die niet verandert (Constante pensioenuitkering). Maar u kunt ook kiezen voor eerst een hogere en daarna een lagere pensioenuitkering (Hoog-laag constructie). De bedoeling is dat u vanaf 2021 ook kunt kiezen om meteen als u met pensioen gaat een geldbedrag te krijgen en dan voor de rest van uw leven een wat lagere pensioenuitkering (Eenmalige uitkering).

De drie keuzemogelijkheden zijn dan, kort samengevat:

Hoog-laag constructie. Hierbij krijgt u de eerste jaren van het pensioen een maandelijkse pensioenuitkering die hoger is dan bij een constante uitkering. Dit kan bijvoorbeeld 5 of 10 jaar duren. Daarna krijgt u een lagere pensioenuitkering voor de rest van uw leven.

Eenmalige uitkering bij de start van het pensioen. Hierbij krijgt u op het moment van pensioneren direct een eenmalig bedrag uitgekeerd vanuit de pensioenrechten. Dit is bijvoorbeeld 5 of 10 procent van het totale opgebouwde pensioen. Daarnaast ontvangt u een wat lagere maandelijkse pensioenuitkering voor de rest uw leven.

Constante pensioenuitkering. Hierbij krijgt u een maandelijkse pensioenuitkering die niet verandert voor de rest van uw leven.



Vorige

Verder

Vervolg instructie

Op de volgende schermen vragen wij u zes keer een huishouden te adviseren. Dit huishouden moet steeds kiezen tussen de drie verschillende vormen voor de uitkering van hun pensioen. De drie keuzes zijn steeds andere verdelingen over de jaren van eenzelfde hoeveelheid pensioenrechten en zijn dus naar verwachting precies evenveel waard. De vraag is welke verdeling over de tijd u het huishouden adviseert, terwijl u rekening houdt met uw eigen voorkeuren.

Voor dit huishouden geldt dat beide partners 67 jaar zijn. Hun AOW-gerechtigde leeftijd is ook 67 jaar en ze besluiten beiden op deze leeftijd met pensioen te gaan.

Het huishouden had voor pensionering een netto huishoudinkomen van € 2250 per maand. Tijdens pensioen wordt een netto AOW ter grootte van € 1275 per maand ontvangen. De hoogte van hun aanvullende pensioen hangt af van de keuze die het huishouden maakt en kan daarnaast verschillen tussen de afzonderlijke vragen.

Neemt u bij uw keuze aan dat dit huishouden een vergelijkbaar sociaal leven en gezinssituatie heeft als u op de leeftijd van 67 jaar verwacht te hebben. Neemt u daarnaast aan dat dit huishouden dezelfde (verwachte) gezondheid en financiële situatie heeft als u op die leeftijd.

Vorige Verder




Advies 1 van de 6

Welke keuze zou u het huishouden adviseren, op basis van uw voorkeuren?

Optie A: een hoog-laag-constructie met 10 jaar een hogere uitkering.

Het *netto pensioeninkomen* (inclusief AOW) is per maand:

Vanaf 67 tot 77 jaar: € 2292

Vanaf 77 jaar: € 2156

Optie B: een eenmalige netto uitkering bij pensioneren van € 5596

Het *netto pensioeninkomen* (inclusief AOW) is per maand:

Vanaf 67 jaar: € 2200

Optie C: constant pensioeninkomen (annuïteit).

Het *netto pensioeninkomen* (inclusief AOW) is per maand:



Vanaf 67 jaar: € 2250

Optie A
Optie B
Optie C

Geef nu voor het huishouden elke optie een cijfer, op basis van uw eigen voorkeuren.

	Helemaal niet interessant									Ideaal
	1	2	3	4	5	6	7	8	9	10
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Optie C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

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