

Is Information Overrated?

Evidence from the Pension Domain

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1. Introduction and Motivation

Population ageing affects pension income: more risk, more uncertainty, less generosity

- 1 Dutch pension system gradually moved from a DB-type to collective DC \Rightarrow risk increasingly shifted from employers towards employees
 - some pension funds have had to cut down on indexation
 - have announced nominal cuts on pension income and claims as of 2013
- 2 Mandatory arrangements have become less generous
 - retirement income no longer depending on end-wage, but on career average
 - from 2015, the “partner allowance” (the supplement on the first layer pension for residents aged 65 and older with a partner below age 65) will be abolished
- 3 February 2012: decision to gradually increase of the eligibility age for the 1st layer pension and the retirement age, from the current 65 to 67.
 - the increase will start in 2013 and end in 2023
 - after 2023 the RA will be linked to general life expectancy

1. Introduction and Motivation

How to make sure that employees will adapt to the new situation?

- 1 Financial literacy in NL is low ... (Van Rooij *et al.*, 2007)
- 2 ... and has not increased between 2005 and 2010 (Alessie *et al.*, 2011)
- 3 Employees' expectations about the level of their pension income are high compared to what retirement plans may realistically provide (Alessie *et al.*, 2011; AFM, 2010)
 - AFM (2010): 59% of Dutch consumers expect to get a pension of 70% or more of their gross end wage
- 4 In the US, where employees have no mandatory system, retirement savings fall short of the level necessary to maintain the standard of living
 - Munnell *et al.* (2007): even before the financial crisis, 43% of households fell at least 10% short of reaching target replacement rates;
 - Skinner (2007): even after correcting for the substitution of household production for income, a fall in living standard is likely for a large group;
 - Hurd and Rohwedder (2011): at least one out of three households is inadequately prepared for retirement

1. Introduction and Motivation

Recent post-crisis initiatives by the government and the pension industry in NL:

- 1 in 2008: Ministry of Finance initiated platform **Wijzer in geldzaken** (The Money Wise Platform) on financial education
- 2 since 2008: mandatory **Uniform Pension Overview** which is to be sent once a year to plan participants
- 3 in 2011: the **Pension Register** was launched - Employees can get access to information about their various second pillar pension rights accrued with different employers and funds through a website (www.mijnpensioenoverzicht.nl). In the future, the Pension Register will also include third pillar savings.
- 4 February 2012: "**money window**", a physical place where people can go to get information and advice about their Uniform Pension Overview and other personal finance questions

1. Introduction and Motivation

Policy response worldwide: make people aware of their pension risks

- 1 Communication
- 2 Information
- 3 Financial education
- 4 Transparency

Implicit assumption: people who are well informed will make choices that are in line with their own preferences

However, the assumption that information will lead to action is challenged by behavioral evidence

1. This paper

- Object and methodology
 - Focus on the effect of pension information on (planned) pension action
 - Hypothetical survey questions in the CentERpanel
- Main findings
 - Only a minority of employees would change its behavior in response of an announced pension benefit cut
 - Information by itself does not do much when it comes to saving for retirement or, in general, to intertemporal choice with immediate gratification
- Relevance and policy implications
 - If policymakers, supervisors and the pension industry have the ambition to influence pension savings behavior, they are unlikely to reach this goal by a policy relying only on information, awareness, communication and transparency
 - Help from suggestions for behaviorally inspired strategies that may effectively help people make sensible pension choices

Outline

- 1 Introduction and motivation
- 2 Occupational pensions in NL
- 3 Data
- 4 Empirical results
- 5 Discussion of results
- 6 Concluding remarks

2. Pension system in NL

- 1 PAYG old age state pension
 - unrelated to labour history and to other income sources
 - depends on having lived in the Netherlands and on household composition
 - 40% of the gross incomes of over-65 hhs (CBS, 2012)
- 2 Mandatory (between employer and employees) occupational career-average pension
 - accrued pension rights are in many cases indexed to negotiated wage increases (without backloading accruals for career steps)
 - pension benefits are often indexed to consumer price inflation
 - full indexation of pension claims to cost-of-living increases is not guaranteed, and even nominal “guarantees” are conditional on the coverage ratio of the pension fund meeting the prudential supervisor’s minimum requirement
 - 35% of the gross incomes of over-65 hhs (CBS, 2012)
- 3 individual retirement savings schemes held on a purely voluntary basis

2. Occupational pensions in NL

The financial crisis revealed what pension experts had been warning against for many years

- unsustainability of the *status quo* due to population aging and the rise in life expectancy combined with adverse asset market performance and/or a low interest rates

June 2011: employer and employee organizations have come up with a proposal for a change in the system which would

- 1 increase the retirement age
- 2 have pension contributions fixed, hence pension rights explicitly linked to the coverage ratio
- 3 pension funds will be free to choose the riskiness of their portfolio and do not need - as is the case today- to cut on indexation as soon as the coverage ratio falls below 130%

2. Occupational pensions in NL

The financial crisis seems not to change the support for the current mandatory system

- In 2003: 77% of Dutch population was in favor of the system of compulsory retirement saving; 12% was against the mandatory saving scheme, and the remainder was indifferent or did not know (Van Rooij, Kool and Prast, 2007)
- By the end of 2010: 72% was in favor; 11% against the current system with mandatory saving (DNB, 2011)

2. The data - CentERpanel and DHS

- Annual panel of about 2,000 households representative of Dutch-speaking population
- Run by CentERdata at Tilburg University
- Questionnaires are asked via the internet, although internet is not a requisite for participation
- Rich information about demographics, income and wealth, health, assets and liabilities, psychological concepts

For this paper data were collected in Summer 2011

3. The data - CentERpanel and DHS

Retirees

- Say your pension income would be 25 percent lower than you have today. You go back in time to a day long before retirement. Would you adjust your life (style) of those days, in order to have a higher pension income today?
 - **If YES - What?**
 - Retire later
 - Work more hours
 - Saving more
 - Repay my mortgage quicker
 - **If NO - Why not?**
 - Settle for less
 - I needed money in the past
 - Was not interested in pension
 - Other reasons
 - **If DK - Why not?**
 - Was not interested in pension
 - DK the consequences
 - Did not know what I could do
 - Other reasons

3. The data - CentERpanel and DHS

Employees and others belonging to the workforce:

- Would you change your lifestyle if you were informed that your future real pension was going to be 25% lower than you expected thus far?
 - **If YES - What?**
 - Retire later
 - Work more hours
 - Repay my mortgage quicker
 - Other reasons
 - **If NO - Why not?**
 - Settle for less
 - Not interested in pension now
 - Can not adjust anything
 - Other reasons
 - **If WISE BUT NO - Why not?**
 - Do not know what I can do
 - Can not adjust anything
 - Not interested in pension now
 - Postpone to later
 - **If DK - Why not?**
 - Not interested in pension now
 - DK the consequences
 - Do not know what I can do
 - Other reasons

4. Empirical results

Table 2: Attitude towards pension benefit cuts - unretired respondents

	Frequency	Percent	Cumulative
Yes	235	21.27	21.27
No	313	28.33	49.59
Wise to do, but not	371	33.57	83.17
Don't know	186	16.83	100
TOTAL	1,105	100	

4. Empirical results

*Table 2: Attitude towards pension benefit cuts - unretired respondents
If YES: What would you do? (Multiple answers)*

	Frequency	Percent	Cumulative
Retire later	93	39.57	
Work more hours	36	15.32	
Saving more	169	71.91	
Repay my mortgage quicker	40	17.02	
Other reasons	19	8.08	
TOTAL	235		

4. Empirical results

Table 2: Attitude towards pension benefit cuts - unretired respondents
If NO: Why not? (Main reason)

	Frequency	Percent	Cumulative
Settle for less	88	28.12	28.12
Not interested in pension now	67	21.41	49.52
Do not want to adjust current life(style)	46	14.70	64.22
Can not adjust anything	63	20.13	84.35
Other reasons	49	15.65	100
TOTAL	313	100	

4. Empirical results

*Table 2: Attitude towards pension benefit cuts - unretired respondents
If WISE BUT DO NOT DO: Why not? (Main reason)*

	Frequency	Percent	Cumulative
Do not know what I can do	34	9.16	9.16
Can not adjust anything	92	24.80	33.96
Not inter. in pension now	82	22.10	56.06
Postpone to later	118	31.81	87.87
Other reasons	45	12.13	100
TOTAL	371	100	

4. Empirical results

Table 3: Attitude towards pension benefit cuts - retired respondents

	Frequency	Percent	Cumulative
Yes	235	49.16	49.16
No	152	31.80	80.96
Don't know	91	19.04	100
TOTAL	478	100	

4. Empirical results

*Table 3: Attitude towards pension benefit cuts - retired respondents
If YES: What would you have done? (Multiple answers)*

	Frequency	Percent	Cumulative
Retired later	117	49.79	
Worked more hours	31	13.19	
Saved more	155	65.96	
Repaid my mortgage quicker	42	17.87	
Other reasons	5	2.13	
TOTAL	235		

4. Empirical results

*Table 3: Attitude towards pension benefit cuts - retired respondents
If NO: Why not? (Main reason)*

	Frequency	Percent	Cumulative
Settled for less	75	49.34	49.34
I needed money in the past	44	28.95	78.29
Was not interested in pension	22	14.47	93.42
Other reasons	11	7.23	100
TOTAL	152	100	

4. Empirical results

Table 3: Attitude towards pension benefit cuts - retired respondents
If DO NOT KNOW: Why not? (Main reason)

	Frequency	Percent	Cumulative
Was not interested in pension	14	15.38	15.38
Did not know consequences	37	40.66	56.04
Did not know what I could do	17	18.68	74.73
Other reasons	23	25.27	100
TOTAL	91	100	

Table 4: Willingness (not) to change life style - unretired respondents (probit estimates)

Variable	(I) Coefficient [Marg.eff.]	(II) Coefficient [Marg.eff.]	(III) Coefficient [Marg.eff.]	(IV) Coefficient [Marg.eff.]	(V) Coefficient [Marg.eff.]
Female	-0.006 [-0.002]	-0.217 [-0.080]	-0.103 [-0.034]		
Age	0.107 *** [0.040]	0.126 *** [0.047]	0.249 ** [0.083]	0.025 * [0.008]	0.023 [0.007]
Age squared	-0.001 *** [-0.001]	-0.001 *** [-0.001]	-0.002 ** [-0.001]		
Household size	0.008 [0.003]	-0.106 [-0.039]	-0.324 *** [-0.108]	-0.308 ** [-0.103]	-0.327 ** [-0.106]
Having a partner	0.279 ** [0.107]	-0.458 [-0.151]			
HH gross income (in logs)	-0.057 [-0.021]	-0.152 [-0.056]	-0.964 *** [-0.321]	-1.133 *** [-0.378]	-1.000 ** [-0.326]
Spouse works		0.216 [0.080]	0.337 [0.114]	0.548 * [0.188]	0.372 [0.124]
Pr(working at 65)			0.007 * [0.002]	0.010 ** [0.003]	0.009 * [0.003]
Expected ret. age			-0.047 [-0.015]	-0.048 [-0.016]	-0.033 [-0.010]
Expected repl. rate				0.012 * [0.004]	0.017 ** [0.005]
Interest towards pensions				-0.339 * [-0.113]	-0.292 * [-0.095]
Financial literacy					0.285 * [0.096]
Constant	-1.744 **	-2.224	6.436	11.833	9.714
Log-likelihood	-675.788	-207.801	-85.149	-59.794	-53.733
Pseudo R ²	0.075	0.054	0.132	0.149	0.151
N.Obs.	1,057	344	161	114	104

Table 5: Willingness to change life style - retired respondents (probit estimates)

Variable	(I)	(II)	(III)
	Coefficient [Marg.eff.]	Coefficient [Marg.eff.]	Coefficient [Marg.eff.]
Female	-0.004 [-0.002]	-0.043 [-0.017]	-0.453 ** [-0.178]
Age	-0.032 * [-0.012]	-0.039 [-0.015]	
Low education	-0.272 [-0.106]	0.028 [0.011]	-0.441 * [-0.174]
Mid education	-0.688 ** [-0.248]	-0.711 ** [-0.260]	-0.533 ** [-0.208]
HH gross income (in logs)	-0.451 [-0.176]	-0.278 [-0.109]	
Spouse retired	-0.024 [-0.009]	0.104 [0.041]	
Age at retirement		0.002 [0.001]	-0.005 [-0.002]
Constant	6.057 **	4.819	0.734
Log-likelihood	-101.673	-72.651	-113.984
Pseudo R ²	0.046	0.056	0.048
N.Obs.	156	112	173
The dependent variable is the probability for a retired individual to be willing to change lifestyle for (I) and (II); it is the probability to work longer for (III)			

Table 6: Reasons not to change lifestyle - unretired respondents (probit estimates)

Variable	(I)	(II)	(III)	(IV)
	Coefficient [Marg.eff.]	Coefficient [Marg.eff.]	Coefficient [Marg.eff.]	Coefficient [Marg.eff.]
Female	0.112 [0.015]	0.163 [0.050]	-0.448 ** [-0.105]	-0.175 [-0.060]
Age	0.016 * [0.002]	0.015 * [0.004]	-0.025 *** [-0.008]	-0.013 * [-0.004]
Low education	0.198 [0.030]	-0.359 [-0.101]	0.796 ** [0.243]	-0.172 [-0.057]
Mid education	0.412 * [0.064]	-0.308 [-0.091]	0.297 [0.082]	-0.234 [-0.079]
Having a partner	0.622 ** [0.071]	0.368 [0.106]	-0.588 ** [-0.193]	-0.346 [-0.124]
HH gross income (in logs)	-0.261 [-0.037]	-0.620 *** [-0.191]	0.482 ** [0.118]	0.415 ** [0.143]
Financial assets (in ,000 euro)		-0.003 * [-0.001]		
Net wealth (in ,000 euro)			-0.001 * [-0.000]	
Impatience 1				-0.516 ** [-0.159]
Impatience 2				-0.353 * [-0.118]
Constant	-0.792	3.617	-3.058	-2.600
Log-likelihood	-100.774	-140.318	-119.697	-157.573
Pseudo R ²	0.064	0.071	0.110	0.069
N.Obs.	357	262	262	273
The dependent variable is the probability for a working individual of reporting a certain reason that it would be wise to change lifestyle but probably would not (I): Do not know what to do; (II): Cannot adjust anything; (III): Not interest in pension now; (IV): Postpone to later				

5. Discussion of results

- 1 Only minority of the workforce (20%), when informed about a considerable drop in their expected pension income, will take some action
- 2 The majority of the workforce (60%) would not intend to act upon this information.
 - worrying finding as far as the effect of information on action is concerned

5. Discussion of results

- 1 Only a small minority indicates that insufficient knowledge is the main reason why they would not take action
- 2 Many people believe that they should save more in case of a projected drop in pensions, but are aware of their tendency to **procrastinate**, of their **aversion to think about retirement**, and **feel unable to make the decisions that are in line with their own long term goals**
 - in line with previous research into the poor effect of information when it comes to retirement planning
 - the message to policy makers, supervisors and the pension industry is clear: if the current policies based on information have the purpose of behavior change, and not merely of "disclaiming", they are very likely to be ineffective
 - information is a necessary but not a sufficient condition to change individual behaviour (in line with Rinaldi and Giacomel, 2008)

5. Discussion of results

- 1 Major differences between retirees and workforce in their attitude to behaviour change
- 2 Current retirees would, going back in time, be more willing to change behaviour after information about a sharp pension drop
- 3 Current retirees would be more inclined to retire at a higher age than people that are still working
 - suggests that being retired does provide less utility than expected by those that are still working
 - retirement provides less social contacts and less cognitive stimulus (Rohwedder and Willis, 2010; Mazzonna and Peracchi, 2012)
 - actively ageing helps staying longer alert
 - this finding is relevant for the policy debate on the increase of the retirement age in the Netherland

5. Discussion of results

- 1 Low income individuals (precisely those who need a higher replacement ratio) are less inclined to take action after being informed about a higher risk and lower level of future pensions.
 - this is a result that should worry policy makers who feel responsible for helping people make appropriate financial decisions
 - Over-saving issue à la Kotlikoff and Burns (2008)?
 - policy implication if people cannot, in fact, afford to save more?
 - hardly any benefit from communication, information and transparency: The only effect would then be that they are made aware that they should prepare for postponing their retirement date → enforced retirement should be abolished, so that employees have the right to work longer
 - inducing these groups to save more for retirement through default choices would be suboptimal → a case can be made in favor of mandatory active choice instead of information/defaults

6. Concluding remarks

- Policies based on information, communication, and transparency, with the official aim of reducing the gap in order to help people prepare adequately for retirement, have not been as successful as expected
- Information is a necessary condition but not a sufficient condition
- Help from suggestions for behaviorally inspired strategies that may effectively help people make sensible pension choices (Bodie and Prast, 2011)

6. Concluding remarks

Policy instruments that can help employees save adequately for retirement without eliminating freedom of choice:

- default options
- mandated choice
 - effective in the domain of organ donation
 - recently, the UK government has introduced it as part of the procedure of applying for a driver license
- commitment mechanisms - making additional savings the path of least resistance
- salient "information"
 - to make people aware of the importance of saving for their old age
 - Hershfield *et al.* (2011) report that after having been confronted in a "mirror" with a picture of themselves at the age of 70 are prepared to save significantly more for retirement. This finding may be used e.g. in personalized pension information channels, like the UPO (picture on the envelope) or pension register