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An Empirical Study of Dutch Pension Participants

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An Empirical Study of Dutch Pension Participants

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Abstract:

Trust in pension institutions is pivotal in making pension decisions, like saving or enrolling in pension programs. But which traits of pension institutions matter in making or breaking trust in providers like pension funds, banks or insurance companies? This paper presents an empirical analysis of the underlying forces of trust in private pension providers in the Netherlands. Based on a large-scale survey among pension participants, we show that the perceived integrity, competence, stability, and benevolence of pension providers matter in assessing the trustworthiness of pension providers. Pension funds are more trusted than banks or insurance companies, a difference that is primarily related to weights attached to perceived levels of integrity and stability. Second, higher educated participants have a significantly higher propensity to trust pension providers than lower educated. Third, transparency as perceived by participants plays virtually no role in establishing trust.

Introduction

The pension systems in Europe are in a state of flux (OECD, 2013). The financial sustainability of pension arrangements has been a structural worry for governments for years as a consequence of population ageing. The financial crisis has put even more pressure on governments and private pension providers to address the fallibilities of funded pension schemes (Casey, 2012). Pension entitlements and promises were tacitly perceived as certain but the crisis revealed the inherent uncertainty in financial contracts. The trust that workers and pensioners have put in pension providers was being put to the test. In that respect the definition of trust by Gärling, Kirchler, Lewis, and Van Raaij (2009) succinctly captures the essence of the function of trust, namely “the experience of certainty where no real certainty can exist.” The need for trust remains as high as ever as pension reforms increasingly shift risks to individuals (Quinn and Cahill, 2016) and therefore they have a greater stake in being concerned about how pension providers handle their money. Handling risk requires for most people professional expertise offered by financial institutions. However, the reputation of these institutions has been seriously damaged by imprudent and sometimes fraudulent actions over the years. During and after the credit crunch of 2008 financial institutions have been trying to restore the trust level they enjoyed well before the onset of bank runs and financial scandals. Expertise, integrity and benevolence have been seriously questioned in public debates, especially of banks (Jansen, Mosch, and van der Crujisen, 2015; van der Crujisen, de Haan, and Jansen, 2016).

Understanding trust in pension providers and related institutions is of utmost importance. Not only because such research offers a reality check for pension professionals how they are perceived, but more importantly it may explain why people are hesitant to put their life savings in the hands of private-sector professionals, why they do not seek financial advice, or why they have not saved enough to meet their needs or expectations (Taylor-Gooby, 2005; Vickerstaff, Macvarish, Taylor-Gooby, Loretto, and Harrison, 2012; Henkens et al., 2017). The central research question in this paper therefore concerns the very basic question: what makes and what breaks the trust that pension participants have in pension providers?

Although pension insiders discuss and underscore the importance of trust in pension institutions (Besley and Prat, 2005; Hyde, Dixon, and Drover, 2007; Schanz, 2009) the concept of trust and its underlying dimensions are rarely measured and examined empirically

in the academic literature. Trust is generally seen as the essential ingredient in making societies work and there is ample macroeconomic evidence of the importance of generalized trust for economic growth and well-being (Berggren and Jordahl, 2006; Beugelsdijk, De Groot, and Van Schaik, 2004; Zak and Knack, 2001). At the micro level the importance of trust and its underlying forces are far more difficult to establish. As Vickerstaff et al. (2012) make abundantly clear in their review of the literature on trust in pensions there is “a surprising lack of literature on how individuals differentiate between different pension products and their providers.” (p.30). Practitioners resort to making claims about controlling trust based on rules-of-thumb. For instance, trust activities are often translated in being transparent as a company and communicating in an open and clear manner about the provided services. However, some state that transparency is overrated (Pirson and Malhotra, 2008; Prast, Teppa, and Smits, 2012) or qualify this statement by saying that transparency matters only when basic trust conditions are met (Gärling et al., 2009). An open question is, of course, whether this is really so in the case of pension providers. The organizational trust literature offers some clues as to what may affect trust. For instance, Mayer, Davis, and Schoorman (1995) make the claim that trust in organizations comes from fundamental character traits which the members of an organization possess, like ability, benevolence and integrity. In a review of trust in financial institutions in the wake of a crisis Gärling et al. (2009) extend this claim by including factors such as transparency, value congruence and reputation of organizations. In their view basic trust markers, such as ability, integrity and benevolence, are so-called ‘dissatisfiers’: not satisfying these criteria makes it hard for organizations to be perceived as credible and trustworthy. Markers such as the level of transparency or reputation of an organization are at best traits that help to differentiate or position the organization in the market for pensions. But more importantly, these markers are not going to generate trustworthiness and compensate a decline in the basic trust markers of an organization. Although these claims seem plausible, they have not been put to the test for the case of financial institutions in the trust literature. In designing social policies it is important to know which drivers are key and which markers are of minor importance. For instance, one can design huge advertising campaigns or protocols on how to communicate but when perceived integrity and competence are the root causes of distrust, money is ill spent.

This paper makes three contributions. First, we extend the body of trust research in financial institutions by offering insight into the level of trust in a number of pension providers in the Netherlands, specifically pension funds, banks and insurance companies.

These are the pension institutions, which are relevant for understanding the second and third pillar of the pension system. Second, we examine the impact of the different drivers of trust as mentioned in the organizational trust literature. And third, we show that there is a hierarchy in trust drivers as suggested by Gärling et al. (2009).

The pension context is that of the Netherlands, a country which has received praise for its pension system (Ambachtsheer, 2011), but which is also experiencing difficulties in adjusting to structural changes in demography and the labour market. To understand the basics of pension provision in the Netherlands we will first give some background information on the Dutch system. Second, we will offer a brief overview of how to operationalize trust based on the literature on trust in organizations. Third, we will present our method and data on how we measured trust and the underlying drivers and subsequently present the results of our statistical analysis. Finally, we will conclude with a summary and discussion of the findings.

A bird's eye view of the Dutch pension system

In order to understand the issue of trust in the Dutch context it is necessary to understand the governance in pension plans and the key players that figure in the provision of pensions. In the Netherlands most employees save and accumulate pension rights within a three pillar system: (1) a basic public pension plan (the so-called 'AOW'); (2) a mandatory supplementary pension plan; and (3) individual voluntary pension savings.

First pillar

The first pillar offers every citizen of the Netherlands an equivalent benefit upon retirement. As of January 2016, a gross benefit of 1,138 euros per month is received by single individuals, and 784 euros is received by each member of a couple. The public pension is financed on a pay-as-you-go manner. Part of the income tax is earmarked (17.9% of the first 30.000 euro on income) to generate the public pension income. In 2014 these public pension premiums covered 69% of the public pension outlay. This deficit is funded by the government from general fiscal means. Each resident accumulates for each year of residency (starting 50 years before the public pension age) in the Netherlands 1/50 pension rights. As mentioned above pension premiums are levied over income earned and the government is responsible for making sure that contributions and benefits are managed prudently and the day-to-day

management of this process is delegated to the Social Insurance Bank. With respect to benefits, the main decision is whether or not to index pensions for (wage) inflation. The credibility of public pensions therefore rests mainly with the (federal) government which makes the key decisions. The most recent reform undertaken by the government concerns raising the retirement age in steps from 65 (starting in the year 2012) to 67 years in 2021 and from 2022 onward, the retirement age is automatically linked by the average life expectancy (at age 65). Based on population forecasts this implies that by the year 2060 the public pension retirement age would be 71.5 years.

Second pillar

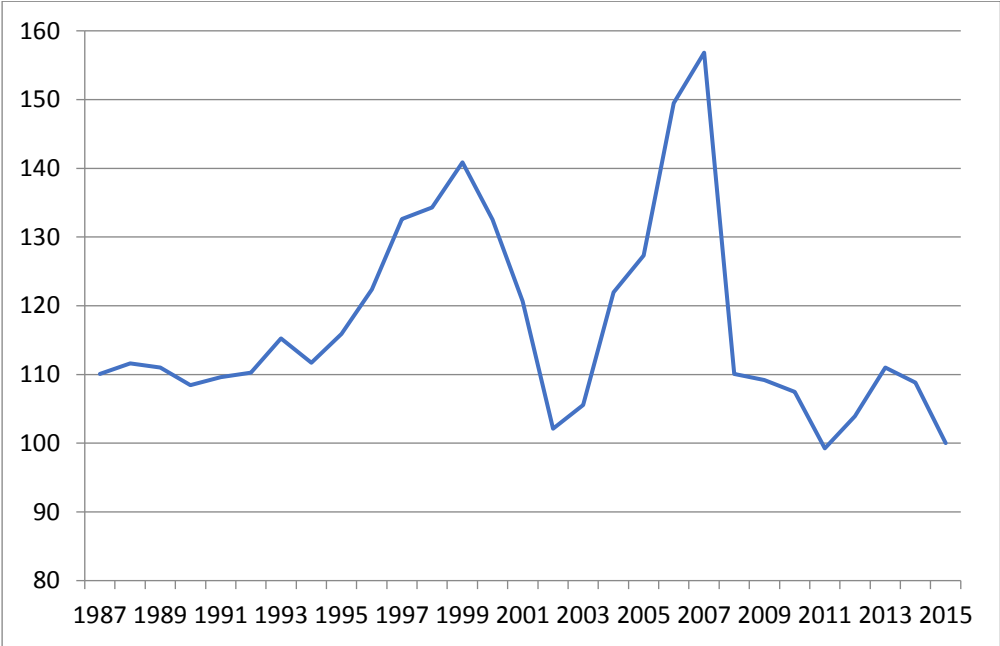
The most complex pillar with respect to finance and governance is the second pillar, which constitutes of occupational pension plans (see Chen and Beetsma (2015)). These plans are agreed upon at a collective level between the so-called social partners: the employers or their representative organization and the trade unions, which represent the employees. Employees accrue pension rights which offer a supplementary income on top of the public pension. However, employees face some restrictions in accumulating those rights. Whenever their employer offers a supplementary pension program participation in that particular pension provider is mandatory.

Although most Dutch employees accumulate their pension rights with pension funds, a small and increasing number of employees are covered by insurance companies. Pension funds are non-profit organizations, where key policy decisions are made by the so-called social partners: the employer(s) or their representatives and trade unions which represent the employees. Employees and pensioners of a pension fund can also be represented in the participants' council, which gives solicited and unsolicited advice to the board of directors. However, in actual practice most funds (in 2014: 85%) have outsourced their administration and/or asset management to for-profit pension organizations.

In the Netherlands approximately half of the pension premium is paid by the employer and the other half by the employee. By and large most Dutch employees have a defined benefit (DB) pension plan. In the past, these benefits were promised in terms of certain percentage (usually 70-75%) of an employee's final pay based on 40 years of contribution. Over time, this ambition has been toned down to guaranteeing the benefit to a percentage of the average pay over the employee's career. And during the last ten years, pension funds have come to realize that the promises they have made in the past were untenable. The increase in

life expectancy, the various crises on the stock market and since the Great Recession the historically low interest rates have made it difficult to match assets with future liabilities. Although most occupational pensions are characterized as DB plans, they can better be characterized as collectively defined contribution (CDC) plans as most pension contracts provide nominal guarantees, but the degree to which they are indexed depends on the funding ratio, the ratio of the pension fund's assets over its liabilities. Liabilities are computed by discounting the future cash flows associated with the current stock of accumulated pension rights against a risk-free market interest rate. This discount rate used to be 4% but as of 2012 the government has changed this rate to a market interest rate in order to free the system from arbitrary rates which did not reflect conditions on the capital market. The development over time of the funding ratio of Dutch pension funds is presented in Figure 1. This clearly shows the effects of a number of crises on the sustainability of pension funds.

Figure 1: Average funding ratio of pension funds, The Netherlands 1987-2015



Source: [CBS, Statline](#), Note: a score of a 100 means that the pension assets exactly meet the pension liabilities.

The 21st century has been a volatile period for pension funds which is a result of both the credit crisis and the subsequent crash on the stock market (see also Casey (2012)) as well as the fall of interest rates to historically low levels. To interpret this figure one should know that

a funding ratio of 100 percent implies that pension funds have no resources to index the pension rights of participants for inflation. And to guarantee the promise of a pension which adjusts the value to the level of purchasing power, pension funds should have a funding ratio of 145 (Van Ewijk and Teulings, 2011).

Third pillar

Finally, there is a third pillar in which individuals can privately accumulate pension savings in case they find their pension inadequate. Voluntary pension savings are mainly effectuated through banks and insurance companies. This pillar is expected to become more important for a number of reasons. First, the government is pulling back as a (fiscal) sponsor for the second pillar arrangements. It restricts the coverage of gross incomes up to 100,000 euros (per annum) and political parties are hinting at lowering this income level to 70,000 euros or even lower. If employees want to maintain their expected benefit replacement rate, they have to save privately. Second, the number of self-employed individuals (without personnel) has grown significantly over the past 10 years in the Netherlands and for this type of workers there are in general no collective pension arrangements. However, many self-employed do not make pension arrangements because the pension premium – in the absence of the employer as sponsor – is twice as high as that of an employee. Third, the labour market has become more flexible and this is expected to increase even more. This aspect makes that certain funding practices that were well attuned to a labour market with low labour mobility and life-long contracts are perceived as perverse solidarity. In particular, the rule of pension funds to levy a contribution rate that is the same for all participants regardless of age, gender or income (uniform premium), as well as a uniform accrual rate of pension rights is seen as a form of perverse solidarity.

Regulation

The government has a dual role as regulator and as legislator. The task of regulating the pension sector has been delegated to two institutions: the Dutch central bank (De Nederlandsche Bank, DNB) and the Financial Markets Authority (AFM). The first institution regulates and monitors the pension funds as stipulated in the Pension Act and the life insurance companies as stipulated in the Financial Regulation Law. Financial prudence and stability are key aspects on judging the performance of pension providers and in impact the DNB is the most influential as it can force pension funds to change their policy if it is not acting prudently. The AFM monitors the pension sector on actual behavior of pension

providers, in particular whether participants receive correct information and whether providers act in the interest of consumers.

Trust in pension providers

The examination of trust in pension providers relies on a diverse body of literature on trust in organizations and institutions (Mayer et al., 1995; Vickerstaff et al., 2012), which draws on insights of disciplines like economics, marketing, sociology, psychology, management and political science. The core of the matter in measuring and explaining trust revolves around the assumption that trust is both a trait of the trustee – perceived trustworthiness - as well as the person who has to trust others – the propensity to trust (cf. Mayer et al. (1995)). The perceived trustworthiness is shown to consist of a multitude of characteristics, although in most studies the elements of ability, benevolence and integrity are central to understanding trust (Mayer et al., 1995; Pirson and Malhotra, 2008; Vickerstaff et al., 2012). However, it is believed that financial institutions merit a more special focus, perhaps because money – more than other services or commodities - is deep down a matter of trust. In a review on the underlying determinants of trust in financial institutions Gärling et al. (2009) arrive at a number of drivers that relate to the general literature on organizational trust but which also includes other factors. We have used or made these drivers more specific to measure the drivers of trust in pension institutions. This amounts to the following set of trust drivers:

- *Stability*: stability is a trait that is pivotal in the financial economist's eye as pension finance revolves around managing assets and liabilities and the reputation as a pension provider depends crucially on delivering what was initially promised. Pension contracts in the Netherlands are by and large defined benefit contracts. Hence being perceived as a stable provider might be seen as a reflection of the ability of a pension provider. Stability or predictability is expected to be intimately related to trust, although the two should not be seen as equivalent concepts. One can act in a predictable and stable manner, but if these actions are detrimental to the interests of the participants one is not likely to be trusted. Hence, stability should be complemented by other drivers, as listed below.
- *Competence* is the perceived ability of pension providers, or more specific the group of skills, competencies, and characteristics that enable a pension provider to offer a satisfactory level of services within the domain of pensions. This could be the

knowledge of the financial products and the ability to spread risks and hence to attain a smooth level of pension premiums and benefits.

- *Integrity* is described in more general terms by Mayer et al. (1995) who define integrity as “the trustor’s perception that the trustee adheres to a set of principles that the trustor finds acceptable.” In applying the element of integrity to the financial sector, Gärling et al. (2009) describe it as “honesty and carefulness in procedures and treating all customers in the same way”.
- *Benevolence* is the extent to which a trustee is believed to want to do good to the trustor, or who puts the interest of the trustor at least on an equal footing with their own interest. It is an element which is very much stressed by Shiller (2013) who claims that only business which serve their customers well will stay in business. It may involve giving advice and communicating from the client’s perspective and genuinely taking their interests at heart and not solely taking the perspective of the pension provider.
- *Transparency* is defined in this paper as the quality by which a trustee reports to and communicates with the trustor. Transparency in general has more dimensions as it is said to cover both openness and the use of understandable information. It can also be seen as an indicator of integrity and benevolence. Being open and clear about what is going on inside an organization is a signal that an organization has nothing to hide. And offering complete and clear information about liabilities, procedures and inherent risks tied to products may be seen as a sign of benevolence as such actions show that organizations take the customer seriously.
- *Social responsibility*: this trait could signify to stakeholders the level to which an organization is concerned with its own core competencies and priorities and therefore focuses on its own interest and stakeholders (Friedman, 1970) or whether it also takes a broader social concern into account in making decisions. By assessing this element in conjunction with the other markers, one might be able to uncover signs of value congruence (cf. how Gärling et al. (2009) use social responsibility as such) when organizations are perceived to take the perspective of society and not merely its own interests into account.

In examining trust in pension providers we arrive at the following hypothesis:

Trustworthiness hypothesis: Trust in pension providers (pension funds, banks and insurance companies) is positively associated with indicators of their perceived competence, stability, benevolence, integrity, transparency and social responsibility.

It is a straightforward hypothesis that can be put to the test. However, there is a second hypothesis which relates to the relative importance of the various factors. Gärling et al. (2009) claim that the first four trust drivers – stability, integrity, competence and benevolence – are key to financial institutions. They are called ‘dissatisfiers’ (following the terminology of Herzberg, Mausner, and Snyderman (1959)). Often mentioned trust drivers like transparency or social responsibility can only be of value to a financial institution when the first four drivers are assessed in a positive manner. They are what Gärling et al. (2009) call ‘satisfiers’. By examining this sub-hypothesis one essentially focuses on the importance of size effects of the separate drivers of trust.

Hierarchy-in-trust hypothesis: The perceived competence, stability, benevolence and integrity of pension providers are far more important than the perceived transparency and social responsibility of pension providers in generating trust.

In testing our hypotheses, we will use a set of social demographic characteristics as control variables, to account for the fact that people differ in their propensity to trust pension providers.

Methods and data

Sampling and Participants

In June 2014 a survey was carried out among pension participants in the Netherlands, ($N = 2,103$, response rate 69%). For our purposes we focused solely on people who had accumulated pension rights at a pension fund ($N = 1,735$). The survey was conducted by the CentERdata, a survey institute of Tilburg University that maintains a large panel of households in the Netherlands (for details, see <http://www.centerdata.nl/en/>). The panel is representative of the Dutch population with respect to sex, age, education, and regional variation. Members of the panel are all interviewed through an Internet connection. Participants who do not have Internet access are provided with a facility by CentERdata, allowing them to access the Internet through their televisions. Households that do not have a television set are given one by CentERdata to facilitate the data collection process. As such, there is no selectivity with regard to whether people have access to Internet or not. In general,

people participate for about four years on the panel, during which time they are interviewed regularly on a variety of different topics. When a respondent leaves the panel, a new respondent is selected on the basis of matched socio-demographic characteristics, so that representativeness of the sample will be maintained.

Variables

As dependent variable we measured respondents' perceived trust in three types of pension providers: pension funds, banks and insurance companies. We asked the following question "To what extent do you trust [pension funds/banks/insurance companies] in guaranteeing a comfortable pension?"; answer categories are (1) no trust; (2) little trust; (3) neutral; (4) some trust; (5) a lot of trust. Hence we ask respondents to express their trust in pension providers in general and not their own pension fund or their own insurance company.

As explanatory variables the following set of variables is used:

- Drivers of *trustworthiness*. We asked respondents the following question: "How would you characterize [pension funds/banks/insurance companies] in terms of the following elements?" Six elements of trustworthiness of pension providers were assessed by participants: (1) stability; (2) integrity; (3) competence; (4) benevolence; (5) transparency; and (6) social responsibility. For each of the trust drivers the respondents were asked to assess the three pension providers on a five-point scale. For instance, for the dimension stability they could assess a pension provider as unstable (-2, -1), neutral (0), or stable (+1, +2); the values -1 and +1 are interpreted as moderate values of specific elements of trust. For each of these trust markers we created four dummy variables. For example for the case of stability the dummy variables included "unstable", "moderately unstable", "moderately stable, and "stable". The category neutral served as a reference category. *Control variables*. To control for the characteristics of the trustor who makes the judgement of trustworthiness we use three variables: (1) age (in years); (2) education (three levels: low, middle and high); (3) gender.

Table 1 presents the descriptive statistics for the entire sample used in this study. The average pension participants is 52 years old, there are slightly more men than women in the sample and the percentage of higher educated is higher than the national average, which stands to

reason, as we only focus on pension participants, i.e. people who accumulate pension rights in the second pillar.

Table 1: Descriptive statistics

Organization level variables	Pension funds		Banks		Insurance companies	
	Means	St. dev.	Means	St. dev.	Means	St. dev.
Trust*	3.35	1.06	2.91 ^a	1.00	2.79 ^{a,b}	1.00
<i>Trust markers</i> *						
Stability	0.09	1.00	-0.08 ^a	0.97	0.05 ^b	0.90
Integrity	0.24	0.94	-0.36 ^a	0.95	-0.34 ^a	0.91
Competence	0.35	0.92	0.30	0.90	0.31	0.86
Benevolence	-0.05	1.07	-0.93 ^a	1.01	-0.83 ^{a,b}	1.00
Transparency	-0.02	1.02	-0.37 ^a	0.92	-0.43 ^{a,b}	0.90
Social responsibility	0.10	0.97	-0.48 ^a	0.95	-0.43 ^a	0.87
Individual level variables						
Age categories (years)	52.47	15.87	52.47	15.87	52.47	15.87
Gender (male = 0)	0.45	0.50	0.45	0.50	0.45	0.50
Education (3 cat.)	2.25	0.80	2.25	0.80	2.25	0.80

N = 1735.

* Note: In the table significant differences ($p < 0.05$) between the means of the trust variables and trust markers are denoted by (a) where the pension funds are used as benchmark and (b) with differences between banks and insurance companies. The trust variable is a 5-point variable 1-5. The evaluation of trust markers is based on a five-point scale -2, -2, 0, +1, +2.

The assessed level of trust are of a qualitative or ordinal nature and to analyse the trust assessments of respondents properly we use ordered logit analysis.

Explaining trust in pension providers

In the Netherlands trust in pension institutions has shown to be characterized by a marked swing in ups and downs, but also by a consistency in evaluation across the various providers. Over the years we have tracked the development of trust of various pension providers and Table 2 shows the development over time of the most prominent institutions between 2004 and 2014.

Table 2: Trust in pension institutions, 2004-2014 (percentage of the general population who (very much) trust specific institutions)

	2004	2006	2009	2011	2014
Pension funds	53	64	44	42	48
Banks	32*	37*	25	34	30
Insurance companies	32*	37*	18	20	25
Government	37	42	45	41	41

* In 2004 and 2006 the trust question was posed for jointly for banks and insurance companies as a lot of large corporations at that time were conglomerates offering both insurance and banking services. After the crisis some organizations unraveled and to reflect this trend a separate trust question was posed for both banks and insurance companies.

Source data: NIDI (2004-2014)

To offer a benchmark in the comparison of institutions we also include the government as the provider of public pensions. Government is moderately trusted and there was only one period in which the government was seen as the most trusted institution and that was in the midst of the credit crisis, when virtually all Dutch banks had to be supported by government guarantees and some were even nationalized (like the bank ABN AMRO) as they were seen as a risk to the (Dutch) financial system. However, the most notable observation of Table 2 is that for each and every year banks and insurance companies are seen as far less trustworthy compared to pension funds.

To get a deeper understanding of why pension funds differ markedly from banks or insurance companies we have asked pension participants to characterize the various pension providers relevant in the second pillar of the pension system along the six dimensions as suggested by Gärling et al. (2009). The result of this characterization can be found in Table 3. Although the providers share some similarities in the eyes of participants, one can see the pension funds as a whole are evaluated markedly different from banks and insurance companies. In particular with respect to traits such as integrity and benevolence pension funds are clearly seen as institutions which are more honest and more engaged to put the customer's position first than banks or insurance companies. For example, only a small minority of respondents view pension funds as dishonest (4.3%) or moderately dishonest (14.3%). The corresponding percentages for banks (12.3% and 31.2%) and insurance companies (10.3% and 32.0%) are far more negative. Some differences can also be traced in terms of transparency and social responsibility, with pension funds being more transparent and acting

more socially responsible than banks and insurance companies. With respect to stability the three institutions do not differ much: for each institution the participants are more or less divided about how stable these institutions are. The same can be said of the assessed competence of the three pension providers. This observation suggests that competence and stability are both elements that approximate the ability of these institutions.

Table 3: Trust in financial intermediaries in pensions by pension participants

Characteristics		Evaluation					
Stability	Unstable	Moderate	Neutral	Moderate	Stable	Total	
Pension funds	6.2	21.8	35.7	30.1	6.3	100.0	
Banks	7.8	25.8	35.9	27.9	2.5	100.0	
Insurance	4.6	21.4	41.1	29.0	3.2	100.0	
Integrity	Dishonest	Moderate	Neutral	Moderate	Honest		
Pension funds	4.3	14.3	42.0	31.6	7.8	100.0	
Banks	12.3	31.2	38.4	16.3	1.7	100.0	
Insurance	10.3	32.0	40.9	15.2	1.6	100.0	
Competency	Incompetent	Moderate	Neutral	Moderate	Competent		
Pension funds	3.1	13.0	38.5	36.5	8.9	100.0	
Banks	3.9	11.7	41.4	36.3	6.8	100.0	
Insurance	3.2	10.6	44.7	35.5	6.1	100.0	
Benevolence	Focused on organization's interest	Moderate	Neutral	Moderate	Focused on customer's interest		
Pension funds	10.4	21.4	37.4	24.1	6.7	100.0	
Banks	34.3	36.2	19.2	8.8	1.5	100.0	
Insurance	28.3	38.6	22.0	9.6	1.5	100.0	
Transparency	Unclear communication	Moderate	Neutral	Moderate	Clear communication		
Pension funds	8.6	21.6	38.8	25.3	5.8	100.0	
Banks	11.4	32.4	39.7	14.9	1.6	100.0	
Insurance	12.1	34.2	39.9	12.4	1.4	100.0	
Social responsibility	Not socially responsible	Moderate	Neutral	Moderate	Socially responsible		
Pension funds	6.0	16.0	45.4	27.4	5.2	100.0	
Banks	16.1	31.1	38.4	13.3	1.2	100.0	
Insurance	13.0	30.4	44.6	11.0	1.0	100.0	

N = 1735

In order to examine the determinants of trust, we formulated two hypotheses. The trustworthiness hypothesis assumes that all six traits of organizations are - at some level - positively associated with trust in pension providers. The hierarchy of trust hypothesis predicts that the dissatisfiers, like stability, integrity, competence and benevolence, are far

more important than the satisfiers, like transparency and social responsibility. The results of the ordered logit analyses to test these hypotheses are presented in Table 4.

Table 4: Ordered logit analysis of trust in pension institutions by pension participants

<i>Characteristics institutions:</i>	Trust of pension participants in:					
	Pension funds		Banks		Insurance companies	
	Coëf.	t-value	Coëf.	t-value	Coëf.	t-value
Stability (neutral = 0)						
Unstable	-1.98**	6.64	-1.00**	3.82	-0.65*	2.11
Moderately unstable	-0.89**	6.02	-0.34*	2.49	-0.19	1.36
Moderately stable	0.65**	4.39	0.72**	5.30	0.72**	5.48
Stable	1.16**	3.96	1.41**	3.44	0.35	1.02
Integrity (neutral = 0)						
Dishonest	-1.59**	4.24	-1.46**	6.07	-1.78**	6.99
Moderately dishonest	-0.81**	4.55	-0.76**	5.45	-0.93	6.86
Moderately honest	0.50**	3.34	0.71**	4.25	0.73	4.33
Honest	1.43**	4.86	0.82	1.56	2.14**	3.80
Competence (neutral = 0)						
Incompetent	-0.89*	2.13	-0.30	0.93	-0.54	1.51
Moderately incompetent	0.03	0.19	-0.14	0.82	0.04	0.21
Moderately competent	0.68**	5.02	0.27*	2.25	0.24*	1.94
Competent	1.36**	5.32	0.55*	2.27	0.14	0.54
Benevolence (neutral = 0)						
Interest organization first	-0.63*	2.53	-0.58**	3.17	-0.94**	4.98
Moderately organ. first	-0.18	1.23	-0.06	0.43	-0.45**	3.18
Moderately cust. first	0.25‡	1.72	-0.37‡	1.76	-0.28	1.43
Interest customer first	0.63*	2.15	0.40	0.83	-0.45	0.94
Transparency (neutral = 0)						
Unclear communication	0.20	0.86	-0.20	0.91	-0.35	1.55
Moderately unclear	-0.01	0.04	-0.08	0.65	0.07	0.55
Moderately clear	0.26‡	1.75	0.28	1.61	0.08	0.45
Clear communication	-0.17	0.58	0.58	1.12	-0.06	0.10
Social responsibility (neutral=0)						
Not socially responsible	-0.23	0.77	-0.54*	2.73	-0.51*	2.31
Moderately not responsible	-0.28	1.65	0.19	1.42	-0.06	0.46
Moderately responsible	0.20	1.35	0.35	1.89	0.58**	3.01
Socially responsible	0.63‡	1.85	1.28‡	2.04	0.89	1.40
<i>Control variables:</i>						
Education (low = 0)						
Middle	0.26‡	1.88	0.34**	2.55	0.32*	2.37
High	0.59**	4.62	0.52**	4.22	0.21‡	1.71
Gender (male = 0)	-0.22*	2.19	-0.07	0.71	-0.04	0.37
Age (in years)	0.03**	8.10	0.00	0.49	-0.01‡	1.82
Controlled for randomization questions ^a		√		√		√
Pseudo R ²		0.29		0.21		0.19
N =		1735		1735		1733

‡ < 0.1 * p < 0.05; ** p < 0.01.

(a) To come to independent assessment of the pension providers, we randomized the order in which one of the three providers appeared to respondents. In the statistical analysis we controlled for this as the order of one of these providers might affect the outcome of the assessments.

The overall outcome of this test is that we find strong support for our first hypothesis – the trustworthiness hypothesis. Most of the traits of organizations are - at some level – positively associated with drivers of trust in pension providers.¹ In particular, stability, integrity, competence, benevolence and social responsibility proved to be a statistically significant predictor of trust. The notable exception is the level of transparency – the level of communication of organizations – is not significantly (at $p < 0.05$) associated with trust in the three organizations.

The first column of Table 4 presents the analysis of trust in pension funds and these results show all drivers are of some influence, although clearly stability and integrity are dominating factors, whereas the influence of transparency and social responsibility is weak. With respect to the dominating factors for pension funds one should note that trust is especially vulnerable to perceptions of integrity and stability. The coefficient for being unstable in the case of pension funds is a factor 1.7 larger than the coefficient for being stable and this asymmetry suggests that participants ‘punish’ pension funds more heavily for perceived instability, whereas for the other drivers one can detect more symmetrical effects.

The control variables - education, gender and age – are statistically significant in the case of pension funds. The higher educated are more trusting towards pensions funds, and the same applies to male participants. It is well known within the literature on generalized trust that the educational level or intelligence is positively associated with trust (Carl and Billari, 2014, Glaeser, Laibson, Scheinkman, Soutter, 2000). This finding may be a reflection of the complexity of the pension industry, which is perhaps easier for higher educated and more financially literate to grasp than for the lower educated (Lusardi and Mitchell, 2014).

The fact that age plays a significant role in trusting pension funds may perhaps be a reflection of the status quo: by and large, pension funds have been the default intermediary to arrange a supplementary pension and up and till the credit crisis pension funds had been highly trusted institutions that could always make good on their promises. And finally, it could also be a reflection of the fact that the older participants are relatively better off in terms of their pension package and rights compared to younger generations, who face an uncertain future.

¹ We have checked for possible multicollinearity in the explanatory factors by carrying out variance inflation factors (vif) and for all trust markers the vifs were 2 or lower, which is well below the limiting benchmark values often used in statistics (O’Brien, 2007), suggesting that multicollinearity is not a problem in carrying out the ordered logit analysis.

The second and third columns show the results for trust in banks, respectively insurance companies. The weights attached to stability, integrity and competence are very much alike for these two providers. It is however, noteworthy to see that the both institutions are evaluated equally negative in terms of benevolence, the insurance companies are ‘punished’ for this assessment in terms of trust, whereas banks are not. The fact that this asymmetry is clearly visible for the case of insurance companies when one focuses on benevolence is also telling and understandable. Insurance companies and banks have a history in the Netherlands of miss-selling insurance products starting in 1990s (van Dijk, Bijlsma, and Pomp, 2008) and resolving this scandal is still going on today.² The different weights may also be the result of the fact that participants can leave a bank when they are dissatisfied about their services, but the relationship with insurance companies (and this applies also to pension funds) refer generally to contracts which cover a lifetime. Putting the interests of customers first is in that case pivotal to trusting such providers. Perhaps that also explains why social responsibility is more important in the case of insurance companies than in the case of banks. It suggests that value congruence is a factor that could be decisive factor for insurance companies in establishing trust with pension consumers. A final remark with respect to the propensity to trust in the case of banks and insurance companies. Age and gender do not play a role of significance. However, just like the case of pension funds, the educational level of trustors matters and this is a robust finding across all pension providers: the higher educated are far more trusting of these institutions than the lower educated.

The size and significance of the various factors in Table 4 suggest that stability and integrity are the most important factors in the establishment of trust and thereby provide support for the hierarchy-in-trust hypothesis. To illustrate the relevant hypotheses of drivers for the various pension providers we carried out a simulation analysis (see Table 5) based on the ordered logit estimates of Table 4.

Column 1 of this table offers the sample means as a benchmark. The real test of the hierarchy-in-trust hypothesis is to see whether trust can be substantially improved by factors like transparency or social responsibility (‘satisfiers’) when the key drivers or trust – stability, integrity, competence and benevolence (‘dissatisfiers’) – are assessed very negatively.

² A similar conclusion about banks can be found in Jansen et al. (2014). Although they do not speak of fairness or honesty the high remuneration packages in the banking sector are seen as a very negative element by consumers.

Table 5: Simulated trust levels for a number of scenarios with respect to trust markers^a

Trust levels in:	Sample means (1)	Dissatisfiers = very negative, satisfiers = neutral (2)	Dissatisfiers = very negative, satisfiers = very positive (3)
<i>Pension funds</i>			
No trust	0.04	0.57	0.46
Little trust	0.21	0.40	0.49
Neutral	0.24	0.03	0.04
Some trust	0.38	0.00	0.01
A lot of trust	0.13	0.00	0.00
<i>Banks</i>			
No trust	0.07	0.33	0.07
Little trust	0.30	0.56	0.49
Neutral	0.33	0.09	0.35
Some trust	0.26	0.02	0.09
A lot of trust	0.04	0.00	0.00
<i>Insurance companies</i>			
No trust	0.08	0.47	0.28
Little trust	0.34	0.48	0.60
Neutral	0.33	0.05	0.10
Some trust	0.22	0.01	0.02
A lot of trust	0.03	0.00	0.00

(a) Dissatisfiers = stability, integrity, competence, benevolence; Satisfiers = transparency, social responsibility.

Column 2 shows what happens when the key drivers are very negative and the satisfiers are neutral. One can see for all pension providers that distrust is the distinguishing outcome of such a constellation. And this column should be compared to column 3 which shows the movement from a neutral position to a very positive assessment of the satisfiers. For instance, the group of pension participants that perceive the core values of a pension fund – stability, integrity, competence and benevolence – very negatively and who are neutral with respect to the satisfiers (transparency and social responsibility) has little (40 percent) to no trust (57 percent). When we assume that their view become very positive with respect to the satisfiers, the overall stance of this group is still very distrustful: 49 percent has little trust and 46 percent has no trust. The effect of these movements in trust drivers does not lead to a fundamental change in trust – most participants remain distrustful – , which can be seen as further support for our hierarchical trust hypothesis : there exists a hierarchy in trust drivers. Trying to repair a bad reputation by solely claiming excellence in transparency or by being

socially responsible is not going to generate trust at a very deep level. People only become slightly less distrustful.

Conclusions and discussion

The idea that trust is pivotal to the wealth of nations, organizations and individuals is slowly but gradually gaining recognition. Without trust transactions break down or can only be facilitated at very high transaction costs (Williamson, 1993). The incompleteness of contractual arrangements is a facet of everyday life, but it is especially prevalent in the domain of pensions where governments and financial intermediaries provide contracts which rely on financial obligations which covers a large part of the life course of individuals. Such obligations are bound to be imprecise as numerous risks (inflation, longevity, bankruptcy, interest rates, etc.) can become real and distinct. Trust is therefore crucial for the functioning of pension systems or more broadly the financial industry (Van Raaij, 2016). Trust is a complex phenomenon and this complexity is also reflected in the diverse theoretical and empirical approaches in capturing the “elusive notion of trust” (Gambetta, 1988). To unravel this elusive notion we have made the effort to focus on the drivers of trust that are often ascribed to financial intermediaries (Gärbling et al., 2009). This paper has three findings to offer that are of interest to both academics and practitioners.

First, we show by means of a survey among pension participants in the Netherlands that underlying core traits of pension institutions, such as ability, integrity, benevolence, competence, matter.

Second, within the set of drivers of trust stability and integrity are the most important indicators, followed by the benevolence, competence and social responsibility of pension providers. Transparency is often stressed by corporate executives in building trust as being of significant importance, but in our estimations it is of little or no importance.

A third finding, is that trust is not solely a reflection of the pension provider – the trustee - but also of the person who gives trust – the trustor. A robust finding across all pension providers is that higher educated are far more trusting of these institutions than the lower educated. And in the case of pension funds, it appears that the older participants are significantly more trusting than younger age groups. Whether this is a trait tied to generations or age groups cannot be discerned based on a cross-sectional survey.

Limitations

In this paper we restricted our attention to six drivers - of which some of these drivers deserve a more in-depth treatment as there may be more dimensions than meets the eye. For instance, transparency is often translated into the quality of communication of an organization, but the value of being open and frank about one's policies may also be a sign of integrity.

A second limitation is that the survey has a cross-sectional setup which limits our focus to understand how trust differs *between* persons. A natural and more interesting extension of this research would be to focus on the differences *within* persons or how trust develops within a person. As Vickerstaff et al. (2012) also notice in their review of the literature it is important to see how trust is gained, sustained or lost. This makes a longitudinal setup necessary.

A third limitation is that we have not developed variables that might approximate the propensity to trust. People with different experiences, cultural backgrounds, education, or personality types will vary in their propensity to trust or their general willingness to trust others. The same may be applicable to the issue of pension finance. To trust an organization to handle your affairs depends on your experience, your acknowledgement that others might know better and, for instance, whether you have some anxiety in disclosing information to others (Van Dalen, Henkens and Hershey, 2017). In theory the propensity to trust is how one in general trusts other people or organizations (Mayer et al., 1995). However, such a measure is bound to be correlated with the specific trust in pension providers and for the purpose of this paper we have handled it by controlling for a variety of factors which might indirectly capture these influences.

Discussion

The key findings offer food for thought, in particular for financial organizations as the credit crunch and the ensuing crisis have been detrimental to their trustworthiness. The problems and dilemmas are not specific to the Dutch pension system and can be encountered in many countries. Most organizations immediately respond to declines in trust by claiming that they should be more transparent and consultants are apt to cater to those needs. Listen to what, e.g., CEO Nilsson of a UK pension consultancy firm has to say:

“The UK pensions market has suffered from high costs, lack of alignment of interests, and poor performance for many years, which has led to a lack of trust in the industry. The key issue here is

the lack of transparency when it comes to charges. Many savers do not realize the true costs of their pensions as the charges are hidden or presented in such a way as to suggest they are not as harmful, while in reality they continue to eat into savings of millions of those saving for retirement.” ([stated on 18 July, 2012](#))

The quote does not serve to downplay the importance of transparency – which is a real issue - but it demonstrates how professionals inside the pension industry make tacit claims about drivers of trust and their assumed importance. As Pirson and Malhotra (2008) have argued transparency is an overrated element in building trust and other elements of trust should be at the center of attention. Furthermore, Kirby (2012) makes a point that is of some importance in an age in which risks and decisions are shifted towards individuals: “The real problem might be that, as time goes on, consumers are increasingly being placed in situations where they are forced to trust—and they resent that.” When this is the case, integrity of an organization may very well be of far greater importance to clients than an organization that is completely transparent in reporting its business model and the underlying costs or charges. Most consumers may simply be not interested in reading this information as that they are either unable to comprehend the wealth of information or because they rather focus and spend their time on more pressing problems (Mullainathan and Shafir, 2013). This paper is one of the first to suggest that in the greater scheme of establishing trust (perceived) integrity and stability are key traits on which pension participants base their trust.³ However, one should also be aware that part of the trust or distrust people have in pension providers is hard wired and connected to their propensity to trust. In other words, organizations which try to become trustworthy by investing in aspects of integrity or stability will only partially reap the benefits of this strategy as increasing trustworthiness depends also on the trustors – their clientele - and not entirely on the trustee.

³ There are some similar approaches in financial services marketing, like the Financial Trust Index run by the Nottingham University Business School (see, e.g., (Ennew and Sekhon, 2007)), although they do not, as proposed by Gärling et al. (2009), include stability as a trust driver and they are also not focused on pension finance.

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