Labour Economics 34 (2015) 100–117

Contents lists available at ScienceDirect

Labour Economics

journal homepage: www.elsevier.com/locate/labeco

Can the Dutch meet their own retirement expenditure goals?☆

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HIGHLIGHTS

- We evaluate retirement readiness of a representative sample from the Dutch population.
- We match self-reported expenditure goals with administrative assets records.
- The median difference between pension annuities and minimal expenditures is 25%.
- Even if all wealth is annuitized, 20% would fall short of their minimal expenditures.
- Divorced and self-employed are pension-poor; highly educated are rich yet ambitious.

ARTICLE INFO

Article history:
Received 24 October 2014
Received in revised form 16 March 2015
Accepted 24 March 2015
Available online 1 April 2015

JEL classification:
D14
D31
H55
J14

Keywords:
Retirement
Pensions
Savings
Aging

ABSTRACT

Population aging and the poor performance of financial markets during recent years put the sustainability of pension arrangements in many Western countries under pressure. In order to investigate whether the Dutch will be able to cope with possible cutbacks in the generosity of pensions, we analyze their preparedness for retirement in 2008, at the eve of the prolonged slump. In contrast to previous efforts to measure preparedness for retirement, we disentangle the roles of variation in needs and accumulated resources by comparing annuitized wealth from administrative data with self-reports of minimal and preferred expenditures during retirement. In order to draw conclusions that are representative for the Dutch population we estimate a multivariate sample selection model and simulate pension annuities and consumption needs. The model takes into account that some people thought more about retirement than others and that some people found it more difficult than others to answer questions about retirement needs. We find that in the aggregate the Dutch can expect to retire quite comfortably, exceeding their expenditure floors and affording their preferred level of spending. However, both needs and resources vary widely across the sample and about a fifth cannot afford their minimal expenditures even if they would draw down housing wealth.

1. Introduction

The question whether people save enough for retirement is not a new one. Most research on retirement preparedness has focused on the US, because the US pension system places responsibility for securing an income after retirement with the individual. In the absence of generous, universal public pensions, one naturally worries about saving decisions and their implications for eventual retirement income. Pensions in the Netherlands, on the other hand, cover almost the entire population and have traditionally succeeded to ensure an adequate income during retirement. As for most Western countries, however, Dutch pensions are not immune to the combined forces of population aging and weak financial market performance. Maintaining sustainability of the system will necessitate a combination of raising the pension eligibility age[2] and cuts in pension payments. Against that backdrop, we investigate the retirement readiness of the Dutch in January 2008, at the eve of the downturn in the financial markets. Our aim is to describe whether the Dutch

☆ The authors thank Marcel Das, Edwin de Vet, Arjen Hussem, Bettina Lamla, Annette Scherpenzeel, Arjan Soede, Maarten van Rooij, Arthur van Soest, Rob Alessie, Frederic Vermeulen, Pierre-Carl Michaud, Mathijn Wilkens, two anonymous referees and participants of the MESS conference 2012, the PHF-SAVE conference 2013 on ‘Household Finances, Saving and Inequality: An International Perspective’, the CPB Research Seminar 2013 at the Netherlands Bureau for Economic Policy Analysis, the ESPE 2014 conference, the EEA 2014 conference and the EALE 2014 conference for their help and useful comments. We thank Netspar for their financial contribution to this project.

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[2] Until 2013 the statutory retirement age in the Netherlands was 65. As of January 2013 the statutory retirement age has increased by one month, and it will gradually increase to 66 in 2019 and 67 in 2023.

http://dx.doi.org/10.1016/j.labeco.2015.03.014
0927-5371/

were sufficiently prepared according to their own standards, to identify vulnerable groups, and to examine the consequences of disappointing pensions and decreasing house prices.

As in many European countries, the Dutch pension system consists of four pillars, all of which will be taken into account in this paper. The first pillar is a flat-rate public pension for all residents, financed by a pay-as-you-go scheme. This public pension aims to provide retirees with a subsistence income during retirement. Its level is set in relation to the minimum wage.[3] The second pillar is that of occupational pensions that cover 90 percent of Dutch workers (Bovenberg and Meijdam, 2001). Though occupational pensions are mostly defined benefit, the possibilities of non-indexation and pension cuts introduce uncertainty in payments. Together the first two pillars of the pension system aim to replace 70 percent of the final or average wage. The third pillar offers saving vehicles such as life annuities. In contrast to the first two pillars, third pillar pensions are voluntary and usually of the defined contribution type. The fourth pillar contains all other assets that individuals may decumulate to generate income during retirement, such as savings accounts and housing wealth. We investigate retirement savings adequacy with a fixed retirement age of 65.[4] Human capital (sometimes called the fifth pillar) is not taken into account.

Our approach differs from previous efforts in that we adopt as our yardstick for savings sufficiency self-reported measures of the minimal and preferred level of expenditures during retirement. The rationale for this approach is that preferences and constraints are likely to vary across individuals and households. Measuring readiness against a single universal threshold fails to capture relevant differences in coping strategies. Lifecycle models are able to take into account differences between households, but may have difficulties to accurately reflect heterogeneous preferences. This makes an alternative and complementary analysis useful.

Simultaneously analyzing both aims and means also yields new policy implications. On the one hand there are groups that have a modest expected retirement income but also low perceived needs. These people will not change their saving behavior when confronted with a realistic assessment of their financial position. On the other hand, financial information can motivate changes in saving behavior of groups with high expected retirement incomes who also have high perceived needs.

Another distinguishing feature of this paper is our combined use of survey and administrative data. For the subjective assessments of minimal and preferred expenditure levels during retirement, we draw unique survey data from a representative sample of the Dutch population.We match those surveys with tax records and data from pension funds, which allow us to construct a complete and precise measure of the resources available to households.

To deal with selection issues, we estimate a multivariate generalization to the classical univariate sample selection model (Heckman, 1979). We model assets and self-reported retirement goals simultaneously and allow for correlation between the underlying unobserved heterogeneity. To assess whether the Dutch can meet their retirement expenditure goals we simulate pension annuities and consumption needs. Our method hinges on the degree to which people can predict their expenditure needs during retirement. We find that people provide reasonable answers compared to their current income level and that young people and retirees provide similar answers. Furthermore, our model controls for the fact that some individuals have thought about retirement more than others, and that some people found it more difficult than others to answer questions about consumption needs during retirement. Our focus on attaining consumption goals after retirement means that we do not take into account other reasons to save, such as precautionary or bequest motives. If such additional rationales exist, our analysis should be interpreted as an upper bound on preparedness.

We find that in the aggregate the Dutch were well prepared for retirement. The median difference between the after-tax annuity that can be obtained at age 65 and the individual-specific level of minimal expenditures is 25% if we consider public and occupational pensions. For preferred expenditures this difference is 5%. Still, there is a sizable minority of close to 20 percent of the sample for whom the annuity falls short of minimum expenditures even if we include private savings and housing wealth. The size of those deficits is large enough to be problematic, with a median shortfall of around 30%. A multivariate analysis reveals that variation in needs interacts with accumulated resources to produce interesting patterns. For instance, we find that individuals with high incomes accumulate more wealth, but are even more demanding in terms of their minimal retirement income. As a result they are less likely to reach their goals. The self-employed and the divorced stand out as vulnerable groups with relatively modest pension entitlements.

The remainder of the paper is organized as follows. Section 2 presents a literature review on retirement readiness. Section 3 describes the data, after which Section 4 explains our methodological approach. Section 5 shows the estimation results and analyzes who can and cannot look forward to comfortable retirement. The final section concludes.

2. Literature

This paper compares available resources with self-reported minimal and preferred retirement expenditures to assess whether the Dutch are ready to meet their expenditure goals after retirement. It fits in with the large literature on retirement savings adequacy, which has focused on the US. Previous papers mostly compare retirement savings with one of the following yardsticks: pre-retirement consumption (or a fraction thereof); an official poverty line; or the wealth holdings predicted by a lifecycle model. The literature shows that the choice of benchmark is not without consequences. For the US, about a third of the retiring households may not be able to consume as much during retirement as they did while still working (Mitchell and Moore, 1998; Haveman et al., 2007; Skinner, 2007). However, that need not be problematic, since consumption needs are likely to decline when individuals retire. Indeed, a much smaller fraction will drop below the poverty line (Haveman et al., 2007), but income at the poverty threshold will not be satisfactory for individuals used to high consumption levels. If optimal savings are derived from lifecycle models, the picture changes to one in which US households are saving adequately (Engen et al., 1999; Scholz et al., 2006). However, lifecycle models may not always accurately reflect the decision process and heterogeneous preferences of real households. Our approach to retirement readiness compares annuitized wealth with minimal and preferred expenditures reported by survey respondents. One important advantage of this method is that it allows consumption needs to differ at the level of the individual household, depending on preferences and constraints that are likely to be household-specific.

3. Data

As explained in the introduction, we combine survey data on minimal and preferred expenditures during retirement with tax data on assets to investigate whether the Dutch are sufficiently prepared to meet their own goals. This section describes the survey data (3.1), the administrative data (3.2) and selection issues (3.3).

3.1. Survey data

Survey data are taken from the LISS panel (Longitudinal Internet Study in the Social Sciences), gathered by CentERdata.[5] This panel is recruited through address-based sampling (no self-selection), and

[3] Single pensioners who have lived in the Netherlands between the ages of 15 and 65 receive 70% of the minimum wage. Couples receive 100% of the minimum wage.

[4] Of course it is also possible to make the retirement age cohort-specific in the calculations.

[5] For more information, see http://www.lissdata.nl/lissdata/.