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Financial literacy and retirement planning in the Netherlands

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ABSTRACT

The complexity of financial decisions that households now face has increased to unprecedented levels. At the same time, households seem to lack the financial knowledge to cope with these decisions, including how to save and invest adequately for retirement. In this paper, we examine the relationship between financial knowledge and retirement planning in the Netherlands. For this purpose, we have designed a module on financial literacy and planning for the De Nederlandsche Bank (DNB) Household Survey. We find a strong and positive relationship between financial knowledge and retirement planning; those who are more financially knowledgeable are more likely to plan for retirement. Using information on economics education acquired in school, we show that the nexus of causality goes from financial literacy to planning rather than the other way around.

1. Introduction

Large household surveys on financial capability and money management in, for example, the United Kingdom, New Zealand, Ireland, the United States, and the Netherlands highlight significant heterogeneity in financial behavior and show that the typical household does not manage household finances well (Atkinson, McKay, Kempson, & Collard, 2006; OECD, 2005; Van Raaij, Antonides, & de Groot, 2008). One particular shortcoming is that households tend to be short-sighted when making financial decisions and may be ill-prepared for retirement. This is a matter of concern for policymakers as, over the past two decades, individuals and households have been increasingly expected to take responsibility for their own retirement security. In fact, many US employees have very little savings on the verge of retirement (Lusardi, 2003, 2004; Lusardi & Mitchell, 2007a). In the Netherlands as well, it has become clear that many employees hold overly optimistic expectations

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about the level of their pension benefits, a finding that has induced an intensive debate on policy measures needed to close this expectations gap (AFM, 2009).

At the same time, researchers have started to examine financial literacy and the implications of a lack of basic skills and economic knowledge for household financial decisions. For example, Lusardi and Mitchell (2006) designed three questions for the US Health and Retirement Survey (HRS) to measure numeracy as well as the understanding of basic economic concepts such as inflation and risk diversification. They find not only that many individuals lack basic financial knowledge but also evidence of a relationship between financial knowledge and retirement planning. This is an important finding as planning is a strong predictor for wealth: planners are much more likely to accumulate wealth than non-planners (Ameriks, Caplin, & Leahy, 2003; Lusardi & Mitchell, 2007a; Van Rooij, Lusardi, & Alessie, 2008).

We have designed a special module for the De Nederlandsche Bank (DNB) Household Survey that makes it possible to examine a larger set of measures of financial literacy than was feasible with earlier surveys. We gathered information on respondents' level of financial knowledge, self-reported knowledge, and financial education in school (Van Rooij, Lusardi, & Alessie, in press). In addition, we gathered information on retirement planning. The survey was answered by respondents for whom an extensive set of background information was already available, including data on economic and psychological characteristics.

Our main findings are as follows: Most households lack knowledge of fundamental financial concepts. Moreover, there exist vast differences in knowledge among respondents; women and those with low educational attainment display the lowest levels of financial knowledge. Most importantly, more financially knowledgeable households are more likely to plan for retirement, even after controlling for a large set of socioeconomic characteristics, including education and income. The positive relationship between financial literacy and retirement planning is an important observation in itself, but, in our work, we also attempt to assess the direction of causality. Using information on economics education in school, we show that it is financial literacy that affects retirement planning and not the other way around. These findings have important policy implications. For example, they show that the design of financial education programs and the implementation of measures aimed at improving financial literacy go hand in hand with a higher propensity to plan for retirement. Moreover, financial education programs as well as initiatives to increase financial knowledge should be targeted to those groups that are most lacking in knowledge.

The outline of the paper is as follows. In Section 2 we briefly review literature on the relationship between financial literacy, retirement planning and wealth accumulation and discuss its findings. In Section 3 we explain the Dutch pension system and provide information on savings in retirement plans to facilitate the interpretation of the empirical results. In Section 4 we discuss the survey data. In Section 5 we discuss levels of financial knowledge in the Netherlands and the methodology used to measure financial literary. In Section 6 we introduce our retirement planning measure, discuss its relevance and present descriptive evidence on its relationship to saving behavior. In Section 7 we report the outcome of a multivariate regression analysis to explain variations in retirement planning. We focus on the role of financial literacy herein, using information on economics education when young to overcome potential endogeneity problems in the empirical analysis. In Section 8 we perform a sensitivity analysis to investigate the robustness of our results. In Section 9 we put the results into perspective and conclude with policy implications.

2. Background

Differences in the propensity to plan are found to contribute greatly to differences in household wealth holdings (Ameriks et al., 2003; Lusardi, 1999, 2002, 2003; Lusardi & Beeler, 2007; Lusardi & Mitchell, 2007a, 2007b). Lusardi (1999) was the first to document a strong correlation between thinking about retirement and wealth holdings for individuals on the verge of retirement: respondents who have thought a little, some, or a lot about retirement have double the amount of wealth compared to those who have given hardly any thought to retirement (Lusardi, 1999, 2003). Lusardi and Beeler (2007) compare data on retirement planning and wealth in both the 1992 and 2004 HRS waves and conclude that wealth differences between planners and non-planners appear robust over time. Lusardi and Mitchell (2007a) confirm that thinking about retirement leads to greater wealth accumulation, even after controlling for a wide set of socio-economic characteristics, including income and education. In principle, the relationship could work in the other direction, i.e., wealthy households could have more reason to think about their retirement and what to do with their money at retirement. However, Lusardi and Mitchell (2007a), by using exogenous variation in wealth, such as boom and bust in home prices, show that the nexus of causality goes from retirement to wealth and not the other way around.

In this study, we ask respondents *how much they have thought about retirement* to measure their propensity to plan for retirement. We have chosen this approach because the studies discussed above have shown it is a strong predictor for wealth accumulation and we aim to assess that relationship in the Netherlands as well. Moreover, it enables us to compare the findings in the Netherlands with the findings in other countries.

Bernheim (1995, 1998) was among the first to indicate the importance of financial knowledge in household decision-making. Since then, financial literacy has been shown to be related to several types of behavior. For example, higher levels of financial sophistication are associated with more efficient money management (Hilgert, Hogarth, & Beverly, 2003). Less knowledgeable home owners tend to take out mortgage loans with unfavorable terms (Gerardi, Goette, & Meier, 2010; Miles, 2004; Moore, 2003) and to forego refinancing mortgage contract conditions when interest rates decline (Campbell, 2006).