

Working Paper 176/18

INFORMATION AND PERCEPTIONS ON PENSIONS. THE CASE OF THE 2011 ITALIAN REFORM

Elsa Fornero Mariacristina Rossi Cesira Urzí Brancati

January 2018

Information and perceptions on pensions.

The case of the 2011 Italian reform

Authors: Elsa Fornero¹, Mariacristina Rossi¹, Cesira Urzí Brancati²

Abstract

This article summarises some results from an ad hoc survey investigating the awareness and understanding of the 2011 Pension reform in Italy among would be retirees aged 55 and over. Despite being so close to retirement age, a third of the respondents did not think their income in retirement would be enough to meet consumption needs. Pension information was deemed as sufficient and easy to find only by one in five respondents. Even though nearly all respondents were interested in receiving generic pension information, only a tiny proportion was eager to seek professional advice to assess how balanced their portfolio were.

Traditionally, Italian households have shown little interest in their pension wealth, mainly because of the weak or absent correlation between contributions paid and annuity received in a Defined Benefit (DB) pension system. However, following the reform and the subsequent shift to a fully funded, Notional Defined Contribution (NDC) system, households will to face important decisions regarding their retirement. This decision is of paramount importance as it will have a one-to-one impact on their annuity for the whole retirement life. Discontinuous careers, for example, will affect the future pension benefit and this is more likely to happen to women, as they often present career interruptions due to maternity leaves. Individuals are thus more and more vulnerable to the consequences of every choice and shocks happened during their working life.

In this much more volatile and risky environment, pension annuity is no more certain in its amount, as it is related not only to the working career length, but also to the performance of

 ¹ University of Turin and CeRP – Collegio Carlo Alberto.
 ² CeRP – Collegio Carlo Alberto.

the whole economy. Pension wealth accrual rate, in the Italian NDC System, is based on the GDP performance over the working years, a variable obviously unknown to workers *ex-ante*.

Indeed, the shift from a DB to a Defined Contribution (DC) system has made retirement choices increasingly complex. The conception (and management) of DB and DC schemes are different. Even though they both serve the ultimate goal of providing financial security in retirement, DB schemes are conceived and managed to provide an income, and, if one asks a DB member what their pension is worth, they will likely reply with an income figure. The annual contribution is calculated on the basis of the pension income that the consumer will earn as a proportion of his or her final salary. Conversely, DC schemes are conceived and managed as assets, so the focus is on asset growth rather than on potential income they can deliver in retirement. In other words, people contribute a percentage of their current salary without necessarily having in mind a target pension income, and often failing to account for variations in longevity and interest rates. As a result, they may find out that they haven't accumulated enough when they are about to retire, which is clearly too late (Merton, 2007 and 2012).

In view of these risks, the European Commission also called for "safer, more transparent pensions with better awareness and information".

In order to investigate how the quality of information about future pensions claims and the degree of individual financial literacy affect retirement and saving behaviour, CeRP Collegio Carlo Alberto commissioned a survey on would-be retirees. The survey aimed to ascertain the level of knowledge among would-be retirees (aged 55 and over and not yet in retirement) and the possible reactions to a foreseeable decline in pension income. In particular, the survey tried to detect whether respondents took any actions on savings and wealth accumulation decisions following the 2011 pension reform. The survey further investigated whether would-be retirees perceive the need of more specific knowledge on their income in retirement, and the additional need of being more responsible and active in shaping the financial life in retirement.

1. Thematic Overview of the Literature

1.1. Financial education and retirement savings

Many authors highlight the link between financial knowledge and financial decision-making. For instance, Chan and Stevens (2008) claim that workers evaluate different financial factors

³ Green Paper on adequate, sustainable and safe European pension systems.

affecting their retirement decisions differently according to their knowledge of such factors, and this largely explains heterogeneity in retirement savings; similarly, Lusardi and Mitchell have shown that many of the shortfalls in retirement decision-making are related to a lack of understanding of basic financial concepts, like the difference between simple and compound interest, or risk diversification.

The past few years have seen the development of rigorous systematic reviews aimed at gathering and assessing results from different studies on the impact of financial education programmes, including the provision of pension information.

Fernandez, Lynch and Netemeyer (2014) conducted a meta-analysis to extract and compare findings from 188 studies that had engaged 585,168 participants. The researchers drew data from published results and solicited additional information from study authors as needed. The study found substantial heterogeneity in effect sizes, and claimed that such diversity could be explained by the length and intensity of the intervention (generally a financial education course), as well as by the time delay between the intervention and the measurement of financial behaviour. In other words, courses that last only a few hours are not effective, and education that closely precedes a financial decision has more impact. Furthermore, the returns to financial education appear to be diminishing over time. The authors also found that workplace interventions or career counselling were be substantially more effective.

A more recent meta-analysis conducted by researchers at the World Bank (Miller et al, 2015) concluded that financial education can affect some financial behaviours, including savings and record keeping.

1.2. Pension information and retirement behaviour

Several studies have assessed the impact of providing pension information on subsequent retirement planning behaviour. According to the OECD definition, "Pension information is timely data on the effect of a course of events or action/inaction by an insured person on the expected size of the pension benefit and the contribution. [...] Further, pension information should include information on the expected variation – a confidence interval – around the expected value that is associated with a particular course of event or action/inaction." (Larsson et al., 2008). Since the late '90s or early 2000s, most OECD countries have started

providing information on pensions, while financial education has become a priority of the European Commission since 2007⁴ and part of its agenda since 2008^{5,6}.

However, whether providing information is actually conducive to adequate savings is debatable. For instance, Gustman et al. (2010) suggest that the strong empirical relationship between pension wealth and pension knowledge may be due to reverse causality, in that people who invest in pension funds progressively learn about them.

An experimental study conducted by Goda, Manchester and Sojourner found positive impact of receiving customised pension information on the probability to increase retirement savings (Goda, Manchester and Sojourner, 2012). The authors conducted a large-scale field experiment using administrative data to measure the effect on participation and the level of contributions in retirement saving accounts of a relatively low-cost, direct-mail intervention designed to inform subjects about this relationship affects their saving behaviour. The treatment contained a customised projection (based on the employee's current age) of the additional account balance and retirement income that would result from additional hypothetical contribution amounts. Results show that members of the treatment group were more likely than the control group to boost their pension contributions and contribution rates; among those who made a change in contribution, the annual increase was approximately \$1,150. The authors also found that individuals who reported a tendency to procrastinate were significantly less likely to respond to the intervention, therefore informational campaigns may not be as effective if they do not address the behavioural forces that may undermine their success. For this reason, they concluded that informational campaigns may not be effective unless they addressed the behavioural forces, such as the tendency to procrastinate, that may undermine their success.

Two studies, one semi-experimental conducted using US data (Mastrobuoni, 2011) and the other, a survey experiment conducted on Norwegian data (Finseraas and Jakobsson, 2013) conclude that providing information on pensions raises knowledge (thus improving financial literacy), but has no effect on subsequent retirement planning behaviour.

Mastrobuoni's work is semi experimental, in that he uses HRS data, but takes advantage of a stepwise introduction of the Social security statement (SSS) by the Social Security Administration (SSA). More specifically, since the Statement had been sent out in phases,

⁴ http://ec.europa.eu/internal_market/finservices-retail/docs/capability/evaluation_financial_education_en.pdf

http://ec.europa.eu/internal market/finservices-retail/capability/

⁶ http://ec.europa.eu/internal market/finservices-retail/docs/capability/egfe 1report en.pdf.

depending on the age, the fiscal year, and the date of birth of workers, workers born in the same year might have started receiving a Statement in different years. Mastrobuoni finds that after receiving the Statement, workers were more likely to be able to provide a benefit estimate and their benefit estimate tended to be more precise; however, the additional information did not have significant effects on retirement behaviour.

The study conducted by Finseraas and Jakobsson (2013) is instead experimental. They run a Survey Experiment in Norway, following the 2011 pension reform, and studied whether exposure to the information brochure improved knowledge about the reform and the pension system, and whether it affected retirement plans. The experiment was conducted on a large sample, roughly 3000 individuals ages 40 and over. The treatment group was emailed a brochure (standard information brochure from the Norwegian Labour and Welfare Service) six days before receiving the questionnaire; the control group only received the questionnaire. What the authors found is that the treatment had a large positive effect on knowledge, but no effect on retirement plans.

Conversely, Liebman and Luttmer (2011) and Allen et al. (2013) found significant positive effects of pension information on labour supply. Liebman and Luttmer conducted a field experiment on a sample of roughly 2,500 working individuals randomly assigned to a treatment group, which received a brochure and was invited to a web tutorial on social security, and a control group which did not receive any material. They measured the impact of the information provided by administering a follow up survey one year later. They found that the treatment raised the fraction of the sample remaining in the labour force by 4 percentage points. More interestingly, the authors reveal that the impact is driven by female sample members. The finding is particularly important not just because women have, in general, shorter work histories, but also because they are often less financially knowledgeable, therefore understanding the returns to working additional years has a much stronger impact.

The study carried out by Allen et al. (2013) examines the participants in 85 seminars conducted by five companies in 2008 and 2009 to determine whether the seminars improve knowledge of retirement benefits and whether employees adjust their retirement plans. Using surveys conducted before and after the seminars, the authors find a significant improvement in knowledge after the seminar. They also find that employees with the largest increases in knowledge were most likely to change their planned retirement age and planned age of

claiming Social Security benefits, and conclude that employer provided financial education programs can benefit both the worker and the firm.

1.3. Pension information vs. default options

Thaler and Sunstein (2010) have emphasized the role of "choice architects", who have the responsibility for organizing the context in which people make decisions, by taking into account insights from behavioural science.

In the context of employer-provided pensions, changing the default from "opt in" to "automatic enrolment / opt out" can dramatically increase pension participation (from under 40 percent to close to 90 percent (Madrian and Shea 2001). Fatas, Lacomba and Lagos (2007) suggest exploiting behavioural biases, namely the preference for lump sums, to increase retirement age.

Indeed, informational campaigns are likely to be more expensive and relatively less effective than default options, at least in the short term. For example, Duflo and Saez (2003) find a positive effect of the "Benefits fair" on TDA enrolment, however, they also admit that the effect is tiny compared to interventions that change the default rules for TDA enrolment, or that offer individuals the option to allocate automatically future pay rises to TDA contributions (Thaler and Bernatzi (2001)).

However, choice architecture is no panacea.

First: even Thaler, Sunstein, and Balz (2010: np) admit that 'choice architects do not always have the best interests of the people they are influencing in mind.'

Second: default options cannot take into account heterogeneity in workers' needs, and many individuals, often the least financially literate, tend to stick to the wrong default (Lusardi, 2013).

Third: not all individuals (countries) respond to default options in the same way. For instance, when in 2007 Italy introduced the automatic transfer (with the opt-out option) of the private sector workers' TFR (a sort of mandatory severance pay) in private pension funds, the increase in participation rates was well below expectations, and substantially higher for the financially literate (Fornero and Monticone, 2011; Ceccarelli and Rinaldi, 2011).

2. The 2011 Pension reform in Italy

Since 1992, Italy has been through a series of reforms aimed at restoring its intergenerational equity and financial sustainability. Such reforms have used a combination of tools, e.g. an increase in contributions, the reduction in the amounts of pensions compared to wages (replacement rate), and an increase in retirement age.

The 2011 pension reform in Italy had three main goals: guarantee the short and medium term sustainability of the pension system; restore intergenerational equity by improving prospects for the young; and promote adequacy of pensions.

In order to achieve this, a series of specific measures were introduced: First and foremost, minimum retirement age and seniority requirements have been raised so as to reflect the overall increase of life expectancy and the generally improved health conditions. Excluding disability pensions, the system now offers three different routes to retirement, according to different age/contribution requisites to which different pension amounts correspond:

- 'Early Retirement' that requires a seniority of 41 years and 1 month for women, 42 years and 1 month for men;
- 'Old-age Pension' that requires an age of 66⁷ and a seniority of 20 years;
- 'Old-age allowance' not an insurance, but welfare/redistribution. It is a flat pension, independent of contribution paid that can be accrued at the age of 66 if an individual is poor and not entitled to any other pension benefit;

To ensure a link between increases in life expectancy and the pension system, the reform introduced an indexation of the minimum retirement age and of the seniority requirements every two years. Financial sustainability has been pursued by gradually introducing NDC pro-rata from 2012, according to which lifetime contributions must actuarially cover pensions for every worker; and by increasing payroll tax rates for the self-employed.

3. Data and descriptive statistics

The Eurisko survey is representative of the Italian population aged 55 and over and not yet retired, and collects information on socio demographics, social security, perceptions and expectations on the social security system, the 2011 Pension reform, household consumption and savings, and household health status. Our study is the first to test the effects of such

⁷ The actual age requirement for women private employees is lower but will reach the level of the men from 2018 on.

policy, and our findings can be used to understand what is more effective as well as more efficient from a budget point of view.

The sample contains 808 observations for 808 individuals. Men are slightly over-represented, since they account for 59.4 per cent of the sample, vs. 39.6 per cent of women. The questionnaire comprises the following six sections: 1. Socio-demographics; 2. Social Security Type; 3. Perceptions and Expectations on the Security System; 4. The 2011 Reform – knowledge and perceptions; 5. Savings; 6. Health and household care burden. This article only describes the first five sections of the survey, since they are the most relevant for the purposes of this study.

3.1. Summary statistics

The average age is 58.4 for men and 58.2 for women; nearly a quarter of the respondents have a degree of higher and nearly 40 per cent live in small municipalities – fewer than 30,000 inhabitants.

A higher proportion of men are part of a couple (90 per cent vs. 75 per cent) while a higher proportion of women are separated / divorced or widows, which seems to suggest that men are more likely to remarry than women. More men than women reside in the south or Italy – 40 v. 29 per cent (see table 1).

Table 1: Summary statistics of Eurisko sample - Demographics Only

	Males (#478)		Females (#327)
	Mean	SD	Mean	SD
Age	58.40	3.38	58.25	3.79
Occupation (d)				
Director/upper and lower management	0.20	0.40	0.12	0.33
Employee	0.44	0.50	0.43	0.50
Teacher	0.06	0.24	0.23	0.42
Factory worker/shop assistant	0.30	0.46	0.22	0.42
Marital Status(d)				
Couple	0.90	0.30	0.75	0.43
Single	0.05	0.21	0.08	0.28
Separated / Divorced	0.04	0.21	0.13	0.34
Widow(er)	0.01	0.11	0.04	0.19
Education (d)				
Degree or higher	0.23	0.42	0.25	0.44
Upper Secondary	0.52	0.50	0.57	0.50
Lower secondary/primary	0.25	0.43	0.18	0.38
Geographical area (d)				
North West	0.27	0.45	0.37	0.48
North East	0.13	0.34	0.16	0.37
Centre	0.19	0.39	0.17	0.38
South	0.40	0.49	0.29	0.45

Municipality size (d)					
<30,000 inhabitants	0.46	0.50	0.39	0.49	
Between 30,000 and 100,000	0.23	0.42	0.24	0.42	
Between 100,000 and 500,000	0.14	0.35	0.18	0.39	
> 500,000	0.17	0.37	0.19	0.39	

⁽d) stands for dichotomous variable; No missing values.

As per the social security type, more than two thirds of men are part of a fund for private employees (INPS) vs. one third of men who contribute in funds for public employees (INPDAP), while women are more evenly distributed between the two types – 45 vs 48 per cent.

The number of years of contribution (seniority) is slightly higher for men -33.4 vs. 31.0, who also wish to stay in work for longer, with an average desired retirement age of 62.65 vs. 61.67 for women. Over three quarters of the workers will be entitled to an old age pension (which now requires that requires an age of 66^8 and a seniority of 20 years), 15 per cent to a work pension or "early retirement" (independent of age and now requiring a seniority of 41 years and 1 month for women, 42 years and 1 month for men) and 12 per cent to a social pension (i.e. a flat pension, independent of contributions that can be accrued at the age of 66 if the individual is poor and not entitled to any other pension benefit) See table 2.

Table 2: Summary statistics of Eurisko sample - Social Security

	Males (#478)		Females (#327)
	Mean	SD	Mean	SD
Types of social security fund (%)				
Funds for private employees (INPS)	0.61	0.49	0.45	0.50
Funds for public employees (INPDAP)	0.32	0.47	0.48	0.50
Separate fund for Self-employed/non				
professional workers	0.04	0.20	0.05	0.22
Other	0.05	0.22	0.05	0.21
Seniority (years of contribution) (a)	33.38	7.08	31.09	9.00
Desired retirement age ^(b)	62.65	3.61	61.67	3.90
Legal retirement age ^(c)	64.59	3.40	64.49	2.80
Type of Pension (d)				
Old age pension	0.76	0.43	0.77	0.42
Work pension	0.15	0.36	0.15	0.36
Social pension	0.12	0.33	0.12	0.32
% income to retire 1 earlier	6.06	13.76	5.61	13.69

(d) stands for dichotomous variable; (a) 118 missing; (b) 36 missing; (c) 201 missing.

⁸ The actual age requirement for women private employees is lower but will reach the level of the men from 2018 on.

9

A more detailed description is provided in figure 1 and figure 2, where we show years of contribution, desired/legal retirement age and the gap between them by gender and social security type.

As we can see, the greatest difference in seniority occurs between men and women contributing to a separate fund for self-employed (non professional), while the years of contribution for male and female public employees are very close.

33.3
29.7
32.7
32.6

Funds for private employees (INPS)
Funds for public employees
(INPDAP)

Men

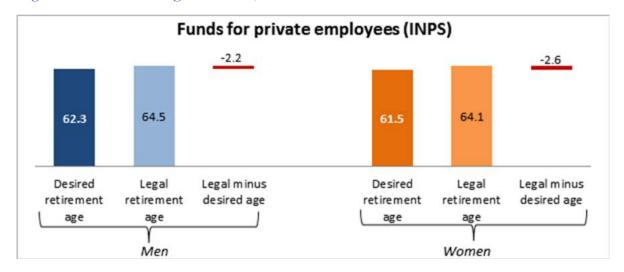
Women

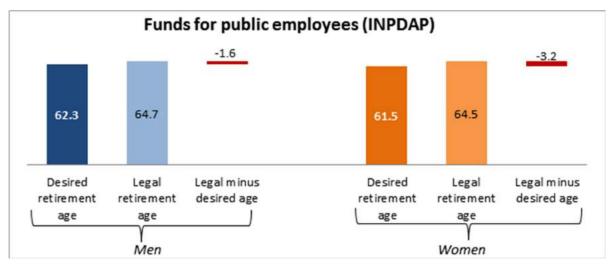
Figure 1: Years of contribution by gender and Social Security Fund

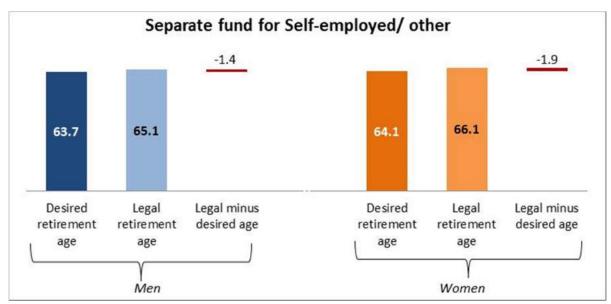
Source: own elaborations from Eurisko data.

Both men and women wish to work fewer years than what the law requires, but the difference between desired and legal retirement age is larger for women. Women working in the public sector show the largest gap between desired and mandatory retirement age (3.2 years), while both men and women contributing to a separate fund for the self-employed show the smallest gap (1.4 and 1.9 years respectively), even though they will have to retire later than everybody else. This could be due to a number of reasons. In principle, it may be that men and women working in the public sector have already secured a good enough pension income and therefore do not wish to work till age 64.5, even though they may be forced to. Alternatively, it may be that they had already set their expectations regarding retirement age and find it hard to adjust to the new requirements. As per the self-employed men and women contributing to separate funds, it is likely that they have contributed less and are aware that they will have to work for longer if they wish to attain a decent income in retirement.

Figure 2: Retirement age – desired, actual and difference between them







Source: own elaborations from Eurisko data

With the fourth section we ascertained respondents' perceptions and expectations on the social security system. 30 per cent of men and 34 per cent of women state that pensions should be calculated on the basis of contributions only: 28/26 per cent opt for a combination of contributions and age, while the last third prefers a calculation method based on the last pay. However, when asked whether they favoured defined contribution of defined benefits, over 50 per cent of respondents chose the latter system (see Table 3).

Since one of the issues often arising in the public debate concerns the fairness of potential early retirement for people who started working really young or had wearisome jobs, a specific question was put forward to investigate respondents' attitudes in this domain. As Table 3 shows, while 28 per cent of men and 25 per cent of women believe that to lower contribution should always correspond later retirement, over 40 per cent of men and women believe that this needn't be the case for people who started working very young or worked in wearisome jobs.

Table 3: Summary statistics of Eurisko sample - Perceptions and Expectations on Social Security System

	Males (#4	78)	Females (#327)
	Mean	SD	Mean	SD
How should pensions be calculated (d)				
Contribution only	0.30	0.46	0.34	0.47
Contribution and age	0.28	0.45	0.26	0.44
Based on last pay	0.34	0.48	0.35	0.48
Other	0.02	0.13	0.01	0.11
DK	0.06	0.23	0.04	0.20
Preference for pension system (d)				
Prefer DC	0.32	0.47	0.36	0.48
Prefer DB	0.56	0.50	0.51	0.50
Can't tell the difference	0.02	0.14	0.06	0.23
DK	0.11	0.31	0.08	0.27
Lower contribution later retirement?				
(d)				
Yes, always	0.28	0.45	0.25	0.43
Yes, unless early starter or wearisome				
job	0.41	0.49	0.43	0.50
No	0.21	0.41	0.26	0.44
DK	0.10	0.30	0.07	0.26

⁽d) stands for dichotomous variable.

Section 4 of the survey focuses on the 2011 pension reform. Questions summarised in table 5 ascertained respondents' awareness and understanding of the reform, both in terms of its aims, and in terms of extra burden it would place onto the individual.

The first question simply asked respondents if they were aware of the 2011 reform of the labour market. The findings show that only a small proportion of Italian men (8 per cent) and women (6 per cent) have never heard of the reform, with over 40 per cent claiming to be aware of it and understanding its implications. Proportions among men and women look very similar.

The following question aims to verify whether respondents who claimed to understand the purpose of the reform, actually did so. More specifically, it summarised three possible aims of the reform (Contrast effects of population ageing; Improve long term balance of social security system; and Convince financial markets) and asked respondents how much they agreed with the statements on a scale from 1 to 5. We found that over two in three Italian men and women agreed with the statements that the reform aimed to contrast the effect of population ageing or that it aimed to improve the long term balance of the social security system or that the reform was aimed at convincing financial markets (see Table 4).

The two final question reported in table 4 ascertain whether people know how many more years they are required to work following the reform. Worryingly, 46 per cent of men and 52 per cent of women could not tell how many more years of work the reform prescribed for them.

Table 4: Summary statistics of Eurisko sample - 2011 Reform

	Males (#4	78)	Females (#327)
	Mean	SD	Mean	SD
Are you aware of the 2011 reform? (d)				
Yes, and I know what it implies	0.40	0.49	0.40	0.49
I have heard of it, but I know little	0.52	0.50	0.54	0.50
Never heard of it	0.08	0.26	0.06	0.24
The 2011 reforms is aimed at				
Contrast effects of population ageing				
I very much agree	0.10	0.30	0.14	0.35
I quite agree	0.26	0.44	0.22	0.41
I somewhat agree	0.27	0.44	0.26	0.44
I don't really agree	0.16	0.37	0.13	0.34
I don't agree at all	0.17	0.38	0.22	0.41
DK	0.04	0.21	0.03	0.18
Improve long term balance of social				
security system				

	Males (#478)		Females (#327)
	Mean	SD	Mean	SD
I very much agree	0.12	0.32	0.14	0.35
I quite agree	0.25	0.43	0.23	0.42
I somewhat agree	0.26	0.44	0.22	0.41
I don't really agree	0.13	0.34	0.12	0.32
I don't agree at all	0.21	0.41	0.27	0.44
DK	0.03	0.16	0.03	0.16
Convince financial markets				
I very much agree	0.14	0.35	0.14	0.35
I quite agree	0.25	0.44	0.23	0.42
I somewhat agree	0.27	0.45	0.28	0.45
I don't really agree	0.14	0.35	0.11	0.31
I don't agree at all	0.14	0.35	0.20	0.40
DK	0.05	0.21	0.04	0.19
Can you tell how many more years of				
work the reform entails for you?				
Yes	0.54	0.50	0.48	0.50
No	0.46	0.50	0.52	0.50
If YES, how many years? (only #414)				
1 year	0.03	0.17	0.02	0.14
2 years	0.05	0.22	0.04	0.21
3 years	0.19	0.39	0.15	0.36
4 years	0.23	0.42	0.13	0.34
5 years	0.12	0.33	0.13	0.34
> 5 years	0.03	0.17	0.22	0.42

(d) stands for dichotomous variable

When asked what percentage of their income they would be willing to give up in order to retire a year earlier, 39.5 per cent of men and 46.8 per cent of women replied "nothing", roughly 35 per cent of men and 28 per cent of women answered between 1 and 5 per cent, and only a quarter of men and women answered 6 per cent or more (see Figure 3).

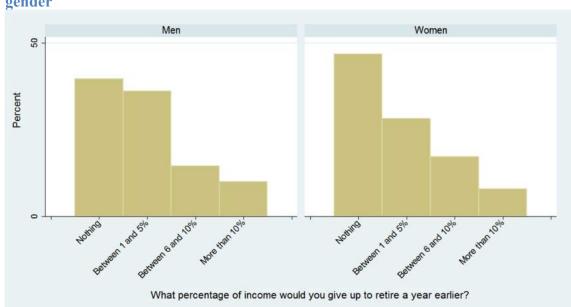


Figure 3: Percentage of income respondent would give up to retire a year earlier, by gender

Source: Our elaborations using Eurisko data

The fifth section of the survey analyses savings behaviour. In

Table 5 we report some of the most relevant questions. More specifically, the survey asked whether respondents changed their saving behaviours in the aftermath of the reform and we found that roughly a fifth (22 per cent of men and 23 per cent of women) increased savings, while more than a half (52 per cent of men and 54 per cent of women) decreased savings. Because the reform took place in the midst of the financial crisis, we do not believe that the change in saving behaviour is motivated by it, but rather by external circumstances. The survey also asked respondents if they thought their income in retirement would be enough to meet their consumption needs and we found that nearly a half (47 per cent of men and 49 per cent of women) responded either "no" or "do not know".

Table 5: Summary statistics of Eurisko sample: Household Savings

	Males (#4	78)	Females (#327)
	Mean	SD	Mean	SD
During the past two years, have y	/ou			
changed your saving behaviour				
Yes, increased savings	0.22	0.42	0.23	0.43
Yes, decreased savings	0.52	0.50	0.54	0.50
No	0.21	0.41	0.20	0.40
No answer	0.05	0.22	0.03	0.18
Do you think that after retiremen	nt your			
income will be enough to meet yo	ur			
consumption needs?				
Yes	0.05	0.23	0.05	0.20
Probably	0.48	0.50	0.46	0.50
Surely not	0.33	0.47	0.36	0.48
DK	0.14	0.35	0.13	0.34

(d) stands for dichotomous variable

In Figure 4 we report the distribution of savings for men and women separately. Both men and women are most frequently found in the first saving bracket –up to 5,000 euros of total savings, however the proportion of women with little savings is higher than the proportion of men (19.3 percent vs. 15.5 per cent). Note that over a third (35.3 per cent) of respondents either claimed not to know how much savings they had or refused to give an answer.

Figure 4: Saving categories by gender (excluding missing values)



Source: Our elaborations using Eurisko data.

In terms of asset ownership, Figure 5 shows how the vast majority of men and women (approximately 90 per cent) own at least a current account, roughly a third contributes to a complementary pension fund and nearly 4 out of 5 own their home. Quite interestingly, a third of respondents, both men and women, also own a second home.

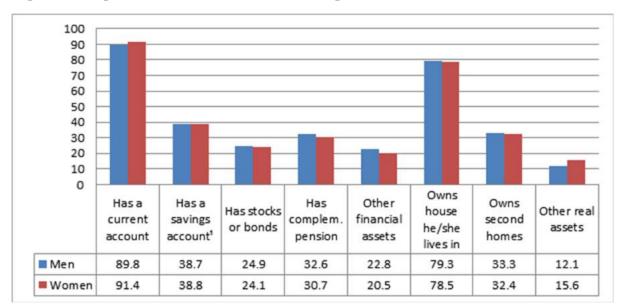


Figure 5: Proportion of men and women owning real / financial assets

Source: Our elaborations using Eurisko data

3.2. Adequacy of Pension Information

One of the questions we asked was aimed at understanding whether the information provided by the each worker's social security fund (INPS, INPDAP and separate fund) was deemed as sufficient by our sample respondents. The results are quite disheartening, since the largest proportion of men and women found the information insufficient, with women usually giving more often a negative answer. As Figure 6 shows, more than half women (52.6 per cent) and nearly half the men (48.9 per cent) found the information received by their fund "insufficient"; roughly a third finds it "sufficient, but hard to find", and only one in five men and 16 per cent of women finds it "sufficient and easy to find".

¹ Savings accounts include postal accounts and other interest bearing current accounts.

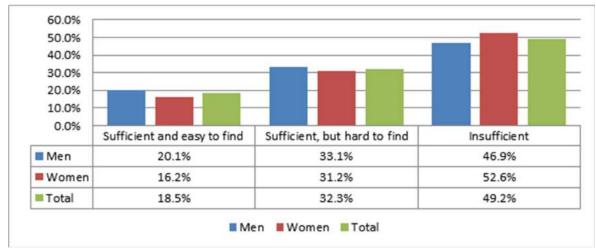


Figure 6: How pension information is perceived by men and women

Source: Our elaborations using Eurisko data

Unsurprisingly, when asked whether or not they would have liked to receive more information on pension contribution 88.5 per cent answered "Yes, very much" or "Yes, quite enough", and the favourite means of communication for over 40 per cent of the sample was an email (as opposed to a letter or a specific section on website).

Understanding information as complex as the one related to pensions may be harder for the least educated; for such group, pension information may seem insufficient or hard to find because of a lack of necessary skills to deal with it.

To investigate this possibility we start by showing the perception of pension information for men and women at different educational levels.

By disaggregating our sample into three educational levels, we find that the effect of education is not the same for men and women. More specifically, men who have a degree claim less frequently than the average that the Pension information provided by INPS is "sufficient and easy to find" (15.3 per cent vs. 20.1 per cent) and more frequently that it is "insufficient" (53.2 per cent vs. 46.9 per cent); conversely, more educated women are more often finding the information provided by INPS "sufficient and easy to find" compared with the average (21.7 per cent vs. 16.2 per cent) and less often insufficient.

Table 6: Perception of pension information, by gender and educational level

	Sufficient and easy to find		Sufficient to find	it, but hard	Insufficient		
	Men	Women	Men	Women	Men	Women	
Degree	15.3%	21.7%	31.5%	34.9%	53.2%	43.4%	
Upper/secondary Education	23.8%	15.6%	31.9%	30.1%	44.4%	54.3%	
Lower/Primary Education	16.8%	10.3%	37.0%	29.3%	46.2%	60.3%	
Total	20.1%	16.2%	33.1%	31.2%	46.9%	52.6%	

Source: Our elaborations using Eurisko data

Another possible source of individual differences is given by the social security type in which people contribute, since, arguably, different funds may provide information of different quality.

Again, we see an opposite attitude by gender, with men participating in private funds more often finding the information provided "sufficient and easy to find" and women belonging to the same fund finding it more often "insufficient".

The proportion of women contributing to separate funds and finding the information sufficient is higher compared to the other funds, however we should bear in mind that the number of observations for people belonging to such fund is pretty small.

Table 7: Perception of pension information, by gender and educational level

	Sufficient and easy to find		Sufficien to find	t, but hard	Insufficient	
	Men	Women	Men	Women	Men	Women
Funds for private employees (INPS)	22.3%	13.6%	32.9%	27.1%	44.9%	59.3%
Funds for public employees (INPDAP)	18.5%	17.2%	33.8%	33.8%	47.7%	49.0%
Separate fund for Self- employed/non professionals	11.4%	23.3%	31.8%	36.7%	56.8%	40.0%
Total	20.1%	16.2%	33.1%	31.2%	46.9%	52.6%

Source: Our elaborations using Eurisko data

4. Retirement Planning and Asset Accumulation (or decumulation): The Role of Professional Advice

The availability of reliable and trusted professional advisers could help future pensioners manage their portfolios better and help them understand whether they have made inefficient choices.

The next two questions focus specifically on retirement counselling and are mean to unearth the potential interest among the would be retirees.

- 1. Before entering retirement, I would like to receive professional assistance in assessing how balanced my portfolio is (to avoid too much real estate with respect to financial instruments, or vice versa)
 - 1) I would appreciate it a lot; 2) I would appreciate it enough; 3) I might appreciate it; 4) I'd appreciate it just a little; 5) I would not appreciate it; 6. I do not know.
- 2. For those who answer 1-4: Who should provide this type of advice? (Bank; insurance; independent financial adviser; independent real estate adviser; public adviser (such as Poste Italiane); a public/private mix adviser.

Despite their lack of financial literacy (Fornero and Monticone, 2011) - or perhaps, because of it - Italians don't seem too keen on receiving this type of help. As Table 8 shows, roughly one in five men and one in four women would appreciate receiving an assessment on how balanced their portfolio is "A lot" or "Enough", with nearly 10 per cent simply answering "Do not know".

Table 8: Interest in receiving professional advice before retirement, by gender

	Men	Women	Total	
Appreciate it a lot	3.8%	5.2%	4.3%	
Appreciate it enough	17.8%	19.9%	18.6%	
Might appreciate it	29.7%	26.9%	28.6%	
Appreciate it a little	20.3%	18.0%	19.4%	
Not appreciate it	20.1%	19.6%	19.9%	
DK	8.4%	10.4%	9.2%	
Obs	478	327	805	

Source: Our elaborations using Eurisko data

By breaking down the level of interest in professional advice according to people's educational attainment, we see that the effect of education appears to be different for men and women. While more educated men (with a degree claiming to be "very interested" or "quite interested" more frequently than the average male population (9.0 per cent of the graduates vs. of 2.8 per cent of men with secondary education and 0.8 per cent of men with primary education), for women the relationship is more uneven (4.8 per cent of female graduates, vs. 6.5 per cent of women with secondary education, and 1.7 per cent of low educated women).

As pure speculation, we might be tempted to think that this is the case because male graduates are more likely to have degrees in subjects that require high numeracy (like engineering or science), while graduate women, especially if they are aged 50 and over and live in Italy, are more likely to have studied humanistic subjects, and therefore do not necessarily understand the importance of retirement advice.

Table 9: Interest in receiving professional advice before retirement, by gender and educational level

	Degree				Lower/Primary Education		All	
	Men	Women	Men	Women	Men	Women	Men	Women
Very interested	9.0%	4.8%	2.8%	6.5%	0.8%	1.7%	3.8%	5.2%
Quite interested	24.3%	30.1%	16.9%	15.1%	13.5%	20.7%	17.8%	19.9%
Somewhat interested	27.0%	24.1%	31.1%	25.3%	29.4%	36.2%	29.7%	26.9%
A little interested	12.6%	20.5%	23.8%	18.8%	20.2%	12.1%	20.3%	18.0%
Not interested	23.4%	14.5%	19.0%	23.1%	19.3%	15.5%	20.1%	19.6%
DK	3.6%	6.0%	6.5%	11.3%	16.8%	13.8%	16.8%	10.4%

Source: Our elaborations using Eurisko data

Respondents who would appreciate having their portfolio assessed at least a little (645 individuals) were then asked who would be the most trusted source of advice. Banks were considered the best source of information more often than the other potential advisers, with approximately one in three men and women answering "yes" to question "should your bank provide this help?".

The second favourite source of help, is a public/private combination, with 15.7% of the people answering "yes". The bottom scorers are independent real estate advisers, with only 3.9 per cent of respondents wanting their help. The answers reported in Table 10 suggest that Real estate agents or Insurance brokers are perceived as less trustworthy than banks, which is an interesting finding. What is also surprising, given the general mistrust in Banks after the

great recession, is that people still prefer their bank to a public institution as a source of financial counselling.

Table 10: Favourite source of financial advice

	Men		Women		All	
	Yes	No	Yes	No	Yes	No
Bank	29.1%	70.9%	32.3%	67.7%	30.4%	69.6%
Insurance	7.9%	92.2%	7.2%	92.8%	7.6%	92.4%
Independent financial adviser	11.3%	88.7%	10.7%	89.4%	11.0%	89.0%
Independent Real Estate adviser	3.4%	96.6%	4.6%	95.4%	3.9%	96.1%
Public adviser	14.4%	85.6%	19.4%	80.6%	16.4%	83.6%
Public/private mix	14.9%	85.1%	16.7%	83.3%	15.7%	84.3%
Obs	382		263		645	

Source: Our elaborations using Eurisko data

5. Discussion

This short study provided some preliminary evidence on how Italian households reacted to the 2011 Pension reform. The Eurisko survey shows that a significant proportion of Italian men and women are sceptical about the reform, in that a higher proportion of them believes that it was undertaken to please the markets, rather than to mitigate the effects of population ageing and improve the long term balance of the social security system.

The survey reveals that both men and women wish to retire earlier than the law prescribes, but the difference between desired and legal retirement age is larger for women; furthermore, women contributing to a fund for private employees show the smallest gap, even though they will be allowed to retire later than all the other groups, which suggests some kind of understanding of the need to work more to attain higher retirement income.

Even though on average people wish to retire earlier than what is legally required, more than 50 per cent of the sample would not be willing to give up any proportion of their income to work one year less.

Only a small proportion of respondents – less than one in five – believed that information on pensions provided to each worker by their social security funds (INPS, INPDAP and separate fund) was sufficient and easy to find. Given the scarcity of pension information, it was not surprising to find that only half of the respondents knew whether their income after retirement would be enough to meet their consumption needs.

Even though nearly all respondents were interested in receiving generic pension information, only a tiny proportion was eager to take professional financial advice specific to their asset allocation. This suggests that Italian households still do not appreciate the importance of decumulating the wealth optimally.

In line with what highlighted by Merton (2012), we conclude that pension information should help investors understand why they are saving, and what the chances are that their retirement goals will be achieved given their current behaviour, so that they can change their choices to improve those chances. Rather than lengthy, theoretical education courses, or static letters, retirement income simulators and similar online tools may prove to be the best and cheapest options to guide optimal retirement savings behaviour.

References

Allen, S. G., Clark, R.L., Maki, J., Sandler Morrill, M. (2013). Golden Years or Financial Fears? Decision Making After Retirement Seminars, *NBER Working Papers 19231*, National Bureau of Economic Research, Inc.

Ceccarelli, S., Rinaldi, A. (2011). Does Literacy Really Foster Pension Fund Participation? Some Evidence from a Survey of Italian Employees, MIMEO

Chan, S., Huff Stevens, A. (2008) What You Don't Know Can't Help You: Pension Knowledge and Retirement Decision-Making. *The Review of Economics and Statistics* 90(2):253 {266.

Duflo, E. Saez, E. (2003). The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment, *The Quarterly Journal of Economics*, 118 (3): 815-842.

Finseraas, H., Jakobsson, N. (2013). Does Information about the Pension System Affect Knowledge and Retirement Plans? Evidence from a Survey Experiment, *Journal of Pension Economics and Finance*, pp. 1-22

Fatas, E., Lacomba, J. A., Lagos, f. (2007). An Experimental Test on Retirement Decisions, *Economic Inquiry*, 45: 602–614

Fornero, E., Monticone, C. (2011). Financial literacy and pension plan participation in Italy, *Journal of Pension Economics and Finance*, Cambridge University Press, vol. 10(04), pages 547-564, October.

Goda, S. G., Manchester, C., Sojourner, A. (2012). What Will my Account Really be Worth? An Experiment on Exponential Growth Bias and Retirement Saving. *RAND Working Paper WR-873*.

Gustman, Alan, Thomas Steinmeier, and Nahid Tabatabai. (2010). Financial Knowledge and Financial Literacy at the Household Level, *NBER Working Paper 16500*

Fernandes D, Lynch Jr JG, Netemeyer RG (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60:1861-1883

Hung, A.A. and J.K. Yoong, 2010, "Asking for Help: Survey and Experimental Evidence on Financial Advice and Behavior Change," *RAND Center for Labor and Population Working Paper*

Larsson, L., Sundén, A., Settergren, O. (2008). Pension Information: The Annual Statement at a Glance, *OECD Journal: General Papers*, OECD Publishing, vol. 2008(3), pages 131-171.

Liebman, J.B., Luttmer, E.,F. (2011). Would People Behave Differently If They Better Understood Social Security? Evidence From a Field Experiment, *NBER Working Papers 17287*, National Bureau of Economic Research, Inc.

Lusardi, A., Mitchell, O. (2006). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education, *Michigan Retirement Research Center*

Lusardi, A., Mitchell, O. (2007). Baby Boomer retirement security: The roles of planning, financial literacy, and housing wealth, *Journal of Monetary Economics*, Elsevier, vol. 54(1), pages 205-224, January.

Lusardi, A. Mitchell, O. (2013). The Economic Importance of Financial Literacy Theory and Evidence, *Netspar discussion papers*, DP 04/2013-009

Madrian, B., Shea, D. (2001). The Power of Suggestion: Inertia in 401(k) Participation and Saving Behavior, *Quarterly Journal of Economics* 116 (4): 1149-1187.

Mastrobuoni, G. (2011). The role of information for retirement behavior: Evidence based on the stepwise introduction of the Social Security Statement. *Journal of Public Economics*, 95(7-8):913-925.

Merton, R. (2007). The Future of Retirement Planning, in The Future of Life-Cycle Saving & Investing eds. Z. bodie. D. McLeavey and L.B. Siegel, Research Foundation of the CFA Institute,

Merton, R. (2012). Observations on Financial Education and Consumer Financial Protection" in Life-Cycle Investing: Financial Education and Consumer Protection, eds. Z. Bodie, L. B. Siegel, and L. Stanton, Research Foundation of the CFA Institute, Vol. 2012, No. 3.

OECD Pensions Outlook, 2016

Thaler, Richard H., and Cass R. Sunstein. (2010). Nudge: Improving Decisions about Health, Wealth, and Happiness. *New Haven: Yale University Press*.

Willis, L. (2008). Against Financial Literacy Education. *Iowa Law Review*, Vol. 94, 2008