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Elisa Luciano
Mariacristina Rossi

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Evidence from Italian households *

by

Elisa Luciano** Mariacristina Rossi**

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ABSTRACT

This paper studies the demand for life insurance of Italian households, as resulting from the SHIW 2012, and envisages policy moves able to increase it. We consider both participation and invested amounts. Our results point at a role of financial inclusion as pivotal in shaping life insurance demand. We proxy financial market inclusion with stock and home ownership; we then explore its link with financial literacy, using parental managerial skills as an instrument. Our results stress the importance of financial inclusion as the main driver of insurance demand.

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** University of Turin, Collegio Carlo Alberto and Netspar Contacts: elisa.luciano@unito.it; mariacristina.rossi@unito.it, School of Economics and Management, Corso Unione Sovietica 218 bis, Turin, Italy.

1. Introduction

Among all forms of savings, life insurance has a distinctive feature: it permits to distinguish long-term savings from straightforward bequest intentions. So-called pure life insurance, be it in the form of an annuity, or in the form of a lump-sum amount, which can be withdrawn at will by the insured, represents a form of long-term savings. Term insurance, which pays upon death of the insured, instead, isolates a component of savings which clearly goes only to heirs. Insurance then provides a unique possibility to explore at the same time annuitization and lump-sum savings for the old age, and to keep them separated from pure bequest. Despite this possibility, little attention has been paid to the empirical study of the demand for insurance. This comes to our surprise, even more because the demand for insurance has been steadily increasing, in Europe as well as in the rest of the world, over the last decade, with a slowdown during the Great Recession.

In order to study the demand for life insurance, Italy stands out as a good candidate, since, together with Germany, the UK and France, it accounts for 70% of the overall premiums in Europe. It is also a paramount example of the important role of insurance among other forms of savings: the expected payments from insurance companies to households, i.e. the mathematical reserves, amount to 11.7% of the Italian households' total wealth (see Ania 2014). As a comparison, bonds represents 16%, shares 23% and mutual funds 8% of it. In terms of flows instead of stock, "traditional life insurance", i.e. contracts which do have little financial component, amount to 79% of the total premiums in 2012, while contracts which are de facto financial, including unit and index linked, are 21%.

This is why we study the determinants of insurance demand using Italian data. Specifically, we use the Survey on Household Income and Wealth (SHIW) data, as collected by the Bank of Italy in 2012. The survey allows us to investigate traditional drivers of demand, such as income, wealth, geographical and demographic variables, as well as newer ones, such as financial market inclusion. We proxy the latter with stock and housing market participation, since both represent pure proximity to financial

market, but also hint at the quest for diversification benefits. In a second stage we recognize the potential endogeneity of financial market participation and try to understand whether it is justified by financial literacy. To this end, we use parental capabilities, as measured by the father's managerial skills, as an instrument.

An important feature of our analysis is the distinction between genders. Women, at least in Italy, participate very little to the labour market with only one woman out of two working, and would therefore need more voluntary annuitization. This can be achieved through life insurance. For the homemakers, it may happen that their work in the household is not implicitly monetized when taking financial decisions at the household level. This means that their human capital is not fully appreciated, and therefore their demand for term insurance is lower than would be fair, or lower than the one of the working member of the couple, all others equal. Last, women are expected to be more distant than men from financial markets and matters, and less financially knowledgeable. This generates an expectation on our part of a lower demand for life insurance, both life and term, on the part of women.

To anticipate on our results, we show that the demand for insurance - both participation and invested amount, given participation - is correlated with the explanatory variables already pointed out in the literature, such as disposable income, education, the number of very young dependents and the fact of being self-employed. Geographical variables play a role too. As concerns the new variables, i.e. financial-market inclusion, our results point at a noticeable impact of stock market participation on the demand for life insurance. We take this result as a strong evidence suggesting financial inclusion is the channel enhancing the demand for insurance products too. In order to purge this result of potential endogeneity problem, we use a measure of financial literacy as an alternative measure of financial inclusion. Results point again at an important role of financial knowledge in support of financial inclusion. All others equal, women participate less to the insurance market and, conditional on participation, pay smaller premiums. So, there seems to be a gender effect beyond the smaller financial literacy of women.

We conclude that, all others equal, effective ways in which financial intermediaries or policy makers can increase further insurance demand is by increasing the awareness of financial planning through financial literacy or financial market inclusion. We show that both moves are more effective than decreasing taxes, which is equivalent to increasing net income.

The outline of the paper is the following. Section 2 provides the conceptual background and reviews the existing literature on insurance demand. Section 3 presents the data and the related descriptive statistics. Section 4 is devoted to our empirical analysis on participation. We present the estimation strategy, followed by the estimation results. Section 5 investigates the determinants of premiums, by looking at the determinants of premiums paid by household. Section 6 uses the predictions on which investors are more likely to buy specific types of insurance to draw policy implications and conclusions.

2. Conceptual Background

Life insurance can be very effective in planning efficiently saving patterns. It embeds two types of products: i) pure life insurance, which guarantees a lump sum (pure endowment) or an annuity upon survival of the subscriber and ii) term insurance, which guarantees to beneficiaries a payment if death occurs to the subscriber. So, while the first type represents pure savings, the second reveals the intention to bequeath. Pure life insurance in turn is often of the "whole life" type: it consists of an accumulation plan which pays a lump sum (or annuity) if the subscriber is alive, whenever he decides to stop the contract, and pays a lump sum to the heirs (whose amount is precisely known in advance) in case of subscriber's death.

So, life insurance contracts, including pure and term, respond efficiently to long-term savings needs of a family, irrespective of the different states of the world (dead or alive subscriber). Because it is an efficient instrument to generate wealth in both states of the world, an appropriate mix of life insurance (pure and term) exposes households

members to little welfare variability. The life component of life insurance contracts, if converted into annuities, protects people from the risk of longevity, which could come hand in hand with a lack of resources, particularly when old age occurs and households are more vulnerable to shocks. Even apart from whole life contracts, if bequest intentions are present, death assurance is an optimal tool to neutralize the risk of post-mortem wealth mis-allocation. If a specific target to bequeath is decided, the most efficient way to realise it is by subscribing a death insurance.

The basic theoretical conceptualization of the demand for pure life insurance, in the form of annuities, is Yaari's model (1965). The optimal solution for the household is to subscribe to an annuity, so as to neutralize the risk of running out of wealth before death. All others equal, an annuity dominates the other investment solutions, as it incorporates the probability of survival. Hence, everyone should annuitize all wealth. This sis in contrast with empirical evidence and generates the so-called annuity puzzle. However, the prediction of Yaari is evidently not tenable if people have intention to bequeath or in the presence of other insurance contracts. Indeed, Yaari's model has been extended by Lewis (1989) to incorporate preferences of dependents and more recently by Davidoff, Brown and Diamond (2005) including bequest motives and health insurance (unfairly priced). In the latter paper, the quest for annuities remains high, even in the presence of alternatives. Inkmann et al. (2010) further extend the demand for insurance theoretical model, to include annuities, term insurance, bonds as well as stocks choices. They show that, once the demand for insurance has been embedded into an enlarged portfolio selection model, and once this model has been calibrated to real data from the UK elderly households (ELSA), the annuity puzzle almost disappears. Another important reason for observing low demand for voluntary annuitization could be the presence of compulsory annuitization, through state social security and private DB plans. The tapering effect of compulsory annuitization on insurance demand has been analyzed by Bernheim (1991), Brown et al. (2001) and Dushi and Webb (2004).

Even if the last models dilute the importance of annuities and the optimal amount of annuities should not be such that all wealth is annuitized, still some part of it should be

transformed into annuities. According to most of the theoretical models listed so far, in a pool of investors, we should observe quite an important percentage of annuitants or pure-life-insurance owners and, on top of them, individuals with death assurance. The total number of insured individuals, considering pure life and death contracts, should be high, even in countries where annuitization is compulsory for the working population, if, as it happens in Italy, the number of non-working citizens is high. In spite of this, apart from the cases analyzed in Inkmann (2011), the general conclusion is that too little demand for life insurance, particularly annuities (Brown 2008) and term insurance, is actually observed. [1]

In this paper we investigate first whether the traditional drivers of insurance demand work on the Italian data. The main determinants of life insurance have been traditionally detected in: household income, tax treatment, education, life expectancy, young dependents' ratio, risk aversion, financial vulnerability, age and bequest intention.

A wide strand of literature has indeed focused on the importance of income to purchase life insurance (Lewis 1989). Beck and Webb (2003) find the same evidence for 60 countries, both developing and developed ones. Li et al (2007) find a strong effect of income on the demand for insurance for OECD countries. Their findings highlight that a 1% increase in aggregate income is associated with an increase of about 0.6 percent in life insurance sales. The results are in line with the literature (i.e. Lewis, 1989, Outreville 1996 and Beck and Webb 2003, among others). Overall, there is consensus that income is significant in shaping insurance demand.

Tax treatment, and specifically the heterogeneity of the tax treatment of insurance contract, is, under some circumstances, relevant in shaping demand. For instance, the fact that in several countries the premiums are either tax deductible or tax-exempt should spur the demand with respect to other forms of savings with comparable return.

[1] A simple reason for that may be that insurance products are overpriced. This argument does not apply as soon as risk aversion heterogeneity between insurance sellers and buyers is high enough to make the cum-loading reservation price of the former lower than that of the latter. This paper does not dig into overpricing of insurance products. It assumes that competition among insurance sellers is high enough to make premiums lower than the average buyer's reservation price.

This is not the case of Italy, though, as already demonstrated in Jappelli and Pistaferri (2002). Further amendments to the Italian tax code, which rendered the tax advantage of insurance smaller than at the time Jappelli and Pistaferri conducted their study, have reduced the bias in favour of insurance even more[2]. For this reason, in this paper we do not take into consideration any specific tax code provision, and content ourselves with using net income, instead of gross income, as an explanatory variable.

In addition to GDP, Sen (2008) used financial debt, savings per capita, dependency ratio, adult literacy, life expectancy and crude death rate, among others, to explain the demand for insurance for selected Asian countries and India. Using micro data, the author finds a positive relationship not only between the demand for insurance and GDP, but also with savings and financial development. Also adult literacy rate, as well as life expectancy and dependency ratio, turn out to be significant. Conversely, at the macro level, neither education nor life expectancy and young dependency ratio matter for the insurance demand (see Beck and Webb, 2003).

The sign of the impact on insurance demand of higher life expectancy, when it is significant, is in principle ambiguous. Longer life expectancies should lead, on one hand, to lower mortality coverage costs and lower perceived need for mortality coverage. On the other hand, they should lead to higher savings channeled through life insurance products and annuities. Previous papers on life expectancy and insurance demand (Brown and Kim 1993, Outreville 1996) find that the empirical evidence points to a positive correlation between life expectancy and insurance penetration.

In a recent survey, Outreville (2014) focuses on risk aversion and general education stressing that the two variables can be strongly correlated. More risk-averse individuals are likely to choose lower educational level and thus lower insurance demand.

Bernheim et al (2003) do not find evidence that financial vulnerability to a shock matters, even controlling for family composition and shocks, as well as the tax system.

2 The tax reduction could exceed 1291 euro in year 2010 and is halved (to €530) in 2014.

Lin and Grace (2006) extend the analysis of financial vulnerability by controlling for age. At any level of financial vulnerability, the older the household the lower the demand for life insurance.

The bequest motive explains the demand for term insurance, as recalled above. However, the strength of bequest has been at the center of debate. Hurd (1987) finds that bequest intention is not strong for the US, while Bernheim (1991) and more recently Kopczuk and Lupton (2007) and De Nardi (2004) challenge this view.

Much to our surprise, the growing literature on financial literacy has not focused on the demand for life insurance. Financial literacy provides the ability to manage wealth and help avoiding the mis-management of resources, particularly at old age (Lusardi and Mitchell 2007 and 2011 and Brown 2008). It has been used to show that financially illiterate households do suffer in terms of portfolio performance and wealth accumulation (Jappelli and Padula, 2013; Van Rooij et al. 2011), irrespective of whether they ask for professional financial advice or whether they discuss investment choices with friends and relatives. Financial illiteracy leads to underperformance mainly because of lower participation to the stock market and under diversification. However, on a more detail level, Guiso and Viviano, in a recent paper (2013) highlight that even highly literate household tend to choose the dominated alternative in the market, suggesting that literacy may be a poor edge against financial mistakes. highly financially literate individuals. A priori, the effect of illiteracy on insurance could be stronger, since insurance contracts may have both a financial component (the presence of a minimum guaranteed return, of a guaranteed capital) and a longevity/survivorship one, since their payoff is linked to the event of death or survival of the subscriber.

3. Data

The data source we use for our empirical analysis is the Survey of Household Income and Wealth (SHIW) which is conducted every two years by the Bank of Italy. The SHIW dataset includes several information pieces about Italian households, including

household composition and characteristics, income and employment variables, wealth and its components. To our purpose, we make use also of information on the type of insurance held and the amount of premium paid. Households own either life contract, or term insurance, from which we isolate, for reasons to be explained below, "Traditional Life and term insurance", made by the policies with an annual premium smaller than euro 1500. Life and term insurance instead comprehend all levels of premiums.

The sample used in the most recent surveys comprises about 8,000 households (24,000 individuals), distributed over about 300 Italian municipalities. In order to carry out our analysis, we select a sample consisting of individuals aged between 24 and 65 that are either a household head or the head's spouse, where the head is self-stated. We exclude other relatives and children living in the household so as to focus on the couple (or single) decisions. Our final sample consists of 6,973 individual-observations. The respondent is defined as the person who takes financial decisions in the family.

Before looking at the SHIW data, let us summarize some features of insurance demand as resulting from the national statistics (Ania, 2014). At the national level, insurance contracts cover around 10% individuals heading a household. 21% of the premiums they paid (in 2012) are devoted to contracts with an high financial content, including unit and index-linked The remaining 79%, has a simpler financial component and is likely to have periodic premiums.

Looking now at the SHIW statistics, Table 1 presents the percentage of household heads owning an insurance product depending on their own or the whole household socio-demographic characteristics.

Given the importance of financial literacy, we give as first evidence of the percentage of insurance holding (either life or term insurance) split by whether respondents were able to answer correctly to SHIW questions which measure financial literacy. These questions assess the respondent's knowledge of the concepts of variable versus fixed interest-rate mortgage, inflation rate and portfolio risk and diversification.

The first snapshot indicates that insurance coverage doubles for more financial knowledgeable household, suggesting that, at least at first sight, financial literacy is a driving factor of insurance demand.

Figure 1

	Financial literacy (highest scores)		Total (%)
Sex	**No**	**Yes**	
Male	10.7	17.6	13.5
Female	5.4	9.2	7
Total	8	13	10

Note: We measure financial literacy at highest level if all three answers were correct.

4. Empirical Analysis of Participation

4.1 Estimation strategy

Our dependent variable to detect whether the individual is covered by insurance is constructed in three different ways. We first construct an overall participation indicator as a dichotomous variable that takes value one if the respondent has at least a life or a term insurance product. We then use a dummy to capture life insurance. The dummy takes value one if respondents own a life insurance product, irrespective of a term insurance product. Symmetrically, we construct a dummy equal to one if respondents own a term insurance policy. Last, we turn to a dummy variable capturing whether respondents own a so-called "Traditional Life and/orTerm Insurance". Indeed, as recalled above, in the national statistics, contracts with the highest financial content, have very often a single premium. The "Traditional" contracts, with a simpler financial component are more likely to have periodic premiums. For the SHIW sample, we reconstruct a percentage of premiums similar to the national one (21 and 79% respectively) by isolating the policies with a premium smaller than euro 1500, which we therefore call "Traditional" policies .

For each type of dependent variable, we first estimate the probability of owning

insurance with a probit model, as follows:

$$\Pr(Y_i = 1 \mid Z_i) = \Phi(\beta_0 + \beta_1 Z_i) \qquad (1)$$

where Y is the dummy variable on insurance, Z_i is a vector of individual, economic and socio-demographic characteristics described below, Φ represents the standard normal cumulative distribution function, β_0 and β_1 are a scalar and a vector.

In order to dig into deeper detail into the differences between death and life insurance, taking into account the potentially strong correlation among the two types of insurance, we next estimate the two insurance type subscription using a bivariate probit model. This allows us to jointly estimate the two outcomes without assuming absence of correlation. Indeed, it is likely that individuals who demand more insurance own more than one type of protection. We use the same vector of explanatory variables as for the probit.

The definition of the non self-evident explanatory variables Z_i is as follows.

- "Log hh income" is the logarithm of the household net, or disposable, income, per capita.
- "individual income/family income" is the ratio of individual income over the total income of the household, which provides a measure of how important the contribution of the individual is to the total disposable resources of the family.
- "income/wealth" is the ratio of income over net wealth, and it acccounts for the wealth effect.
- The "degree" variable is a dummy that takes the value 1 if the respondent has at least a bachelor degree, zero otherwise.

- The variable "risk averse" is also a dummy variable that takes the value 1 if the respondent has given the lowest degree of appeal to risky portfolio[3]:

- We also construct a "couple" variable that takes value 1 if the respondent is engaged with someone, zero otherwise.

- The variable "beq(uest)" is a dummy variable that takes value 1 if the respondent gives one of the following answers as reasons for saving: education/economic support to children and grandchildren; legacy to children and grandchildren; owning a house and having children (still alive) who do not reside with the respondent at year end, 2012.

- We construct a set of dummies variables such as female, stocks and homeownership that take the value 1 if the respondent is respectively a woman, s/he has stocks in her/his portfolio and has a property house, zero otherwise

- The variables "age" and "age2", which means "age squared" are both included to capture the effect of aging in the life insurance demand. We expect participation to be positively correlated with age and negatively correlated with its square, so as to get a demand curve concave in age.

- We also include geographical dummies for "north" and "center", south and the islands being the baseline, because in Italy there are a lot of cultural differences among North, Centre and South, on top of income and job market status.

- At the same time we embed dummies for the size of the city of residence: small city (0-20.000 inhabitants, the baseline), medium city (20.000-40.000 inhabitants)

3 The question RISKFIN used is the following: "In managing your financial investments, would you say you have a preference for investments that offer": a very high returns, but with a high risk of losing part of the capital; a good return, but also a fair degree of invested capital a fair return, with a good degree of protection for the invested capital- low returns, with no risk of losing the invested capital

large city (40.000-500.000 inhabitants) and mega city (more than 500.000 inhabitants). We use small cities as the baseline.

- In order to control for the number of components and their different role in the family we include a set of a variables counting the household members within a certain age range. We count the number of components under 15 years, between 15 and 25, between 25 and 55, and above 55. The distinction reflects the possible levels of dependency of the households members. Children under 15 are at most students of junior high school or compulsory secondary high school, dependents between 15 and 25 are either unoccupied, workers, students of a secondary, non compulsory school or College students.

- To capture the job effect we include 3 dummies: "employee", "self-employed" and "not-employed" (the baseline). Not employed in the SHIW classification includes retirees and persons with transitory jobs as well as inactive people.
- The last but not least is the financial literacy dummy variable. This variable counts the number of correct answers that the respondent gives to the three questions concerning financial literacy. These three questions are in the 2010 SHIW dataset and we can use the historical answer as a benchmark for our 2012 analysis without losing powerfulness of the model, since financial literacy of adults is not so likely to change in two years.
- In order to take into consideration potential endogeneity of financial literacy, although one year lagged, we instrument the financial literacy score using as an instrument a dummy variable taking the value of one if the respondent's father or mother had high managerial job at the age of the respondent. [4] The rational of the instrument relies on the fact that having a parent with higher education or managerial job increases the likelihood of having a higher cognitive ability and financial knowledge (see Calcagno and Urzì, 2014)

[4] The main respondent is asked "what was the occupation of your mother and father at your age?". We consider managers, freelancers and entrepreneurs as managerial occupations so as to build up the instrument.

4.2 Estimation results

We start our analysis by looking at the probability of owning an insurance product, be it a pure life insurance or a term insurance (Table 2). We then split our dependent variable according to the type of insurance owned (Tables 3). [5]

In Tables 2 and 3 we explore four different specifications of the regression. From specification 2 onwards we include some measure of financial market inclusion. In specification 2 this is proxied by home-ownership and stock ownership, while specifications 3 and 4 include also the measure of financial literacy. Specification 4 controls for the endogeneity of financial literacy by instrumenting it. The reported coefficients in the probit tables represent the marginal effects, evaluated at the sample median values of the continuous explanatory variable.

As predicted by most of the theoretical literature and confirmed in previous empirical literature, (log) income has always a positive effect on the demand for life insurance.[6] The coefficient indicates that doubling log income would increase the chance of buying insurance by between 1 and 2%. This points to the nature of life insurance as a form of savings, and comes as no surprise. Another variable which is always significant, when financial literacy is not included, even though its marginal effect is not very high, is the ratio of the respondent's income over the total income of the family. Faced with concentration of income on one individual, households rationally react by buying more insurance, so as to protect their permanent income. Here, where we consider all forms of insurance together, whether one is the main income recipient or not matters, but does not spur demand in a quantitatively important way, as the low marginal effect says. It will be interesting below to see whether this happens through term insurance (as one would expect) or pure life.

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[5] We also run separate regression on "Traditional life and term insurance," as defined above, results do not change.

6We include it in the regressions in log form, since we expect the relationship to be exponential, i.e. linear in log.. An exception occurs when financial literacy is included and the instrumental variable is not.

The ratio of income over wealth is significant in most cases and has, as expected, a negative coefficient: the higher is the flow (income) with respect to the stock (cumulated savings), the less households perceive the need for insurance. Equivalently, a richer household invests more, for any given level of income. A standard wealth effect is at play. This points to the nature of insurance as a form of savings, and is more than expected. It also suggests that looking at the income variable only can be very misleading, as wealth is playing an important role too. Income and wealth, as we know, do not always go hand in hand.

In the specifications with financial literacy, the demand for insurance is increasing in age and decreasing in its square. This signals that, in the range included in the sample, between 24 and 65, demand is increasing at relatively young ages, and decreasing later, with a peak at age 43. It is consistent with the traditional life-cycle behavior of savings. As for income, this is a consequence of the savings nature of insurance, be it in the form of pure endowment, annuity or term insurance. However, the concave behavior, which we label "age effect", totally disappears in the richest specification, when financial literacy is included, suggesting that, when financial market participation is allowed to play its full role, it absorbs the effect of age, which doesn't have an additional impact other than determining financial literacy knowledge. A caveat is in order, though: the age of the insured is observed at the time of the interview, and is just greater or equal – not necessarily equal -- to the age at which the contract was purchased.

The composition of households illustrates that the age of dependents influences the demand for insurance. Having children under the age of 25 does not affect significantly the demand for insurance. Conversely, family members older than 25 reduce the interest in insurance demand, in all specifications with financial literacy. Here a mechanism of the "family network" type could be at work: respondents demand less insurance when there are people above 25 in the household, because the latter, either with their income or cumulated wealth, are likely to offer support in case of need. The presence of a spouse does not affect the final decision of buying an insurance, suggesting that the decision is done at individual level rather than at family level.

Labour market status does not affect insurance demand if you compare employees to "not employed". This is not much of a surprise, because the second category in the SHIW data includes pensioners as well as people with transitory jobs and inactive, i.e. is a residual category. It does affect significantly the insurance demand when we compare self-employed and "not employed". Self-employment is a strong and powerful explanatory variable, positively affecting insurance demand. However, when financial inclusion is inserted among regressors, the explanatory power of being self-employed vanishes, suggesting that financial inclusion, rather than the occupational status, is the actual driver.

Holding higher education (a university degree or above) is not significant, suggesting that education level is not necessarily a good proxy for insurance participation.

Risk aversion – which in the SHIW dataset is measured by the risk attitude of the financial decision maker in the household rather than at an individual level – has sometimes a positive, sometimes a negative effect on the demand for insurance, but is never significant. The change in sign is not surprising because, in principle, more risk averse individuals are as likely to demand more insurance than to demand less of it. Neither this swing of sign surprises us, nor the fact that overall the coefficients are not significant. Indeed, we know that self-assessed risk aversion, as in the SHIW dataset, is not very reliable. However, more risk averse individuals are also more likely to diversify better their portfolio and consequently, if they already have insurance policies with a high financial component, to go for stocks or real estate. This is why we turn to detect whether inclusion does explain participation into the life insurance market. Being life insurance products distant from those who could benefit most (such as women who are far from the work market and likely to be exposed to the zero annuity risk) we want to check whether financial inclusion is actually the real actor in shaping life insurance demand. Our reasoning is that people who are less distant to the financial market could simply exhibit a more differentiated portfolio. We measure proximity by stock market participation or financial literacy. It is a fact that people who are financially literate do participate more to the stock market, hence, showing a better balanced portfolio (van

Rooi et al. 2011). Is this the case, also, of life insurance market participation? Our regressions show that holding stocks and being financially literate is significant. We have also included in our specifications home-ownership, even though, being widespread across all types of households, it seems to be a milder variable proxying financial inclusion. Our regressions, indeed show that home ownership is significant only when financial literacy is not included Overall, the impact of inclusion is positive. More insurance goes together with more stocks and real estate in the household portfolio, i.e. higher diversification, and higher financial literacy. We believe this is the most important message of our paper. When households participate to the financial markets, they do it extensively. The result holds when financial literacy is instrumented, suggesting that even when the endogeneity of the financial literacy is purged from the innate financial predisposition[7].

Continuing on the description of the explanatory power of different regressors, let us comment on the geographical variables. As a general rule, and as already stated by Millo and Carmeci (2011), the macro areas do not impact in a significant way the insurance demand. It is interesting to notice that the sign of living in the North and Center is positive and then becomes negative when instrumented, albeit not significant. This could be attributed to the influence that living in the North can have on financial literacy, household living in the North being more likely to be financially literate (as the first stage of the instrumental variable regression highlights). Once this effect is purged form the main regression, the sign of the macro variable is reversed.

What matters, instead, is the magnitude of a city, if this goes beyond a medium city. The bigger the city, the lower the demand for insurance. This effect could capture the higher price level in large cities and thus be a signal of vulnerability of households.

The intention to bequeath does not have a significant impact on insurance demand, unless we include financial literacy. We are, however, aware that this may just depend on

[7] Having an educated parent, or a parent with managerial skills, strongly and positively affects the financial literacy of the respondent, as a result form the first stage regression (available upon request).

the fact that here all forms of insurance are examined, and demand for life insurance in the large and bequest do not necessarily share the same driving factors. Also, as already pointed in the literature (Hurd 1987), the intention to bequeath is not necessarily captured by the self-declared intention.

Turning last on gender, we find that, in all specifications, demand for insurance is significantly lower for women. The gender of respondents does not loose explanatory power in regressions (2) to (4), when we introduce financial market proximity, through stocks and real estate, and financial literacy. Even if we control for the fact that women are further than men from financial matters, gender seems to add explanatory power.

We now turn to the single insurance policy, whether respondent has a life insurance and a term insurance. Results are in Table 3.

Income is still a significant and positive determinant of the demand for both life and term insurance, in all specifications. The same still happens for the ratio of individual income to the total income of the family. The ratio of income over wealth has still a negative and most of the times significant effect. As expected, the reaction to income and wealth is the same for life and term contracts: in particular, both types of insurance are subject to a wealth effect.

The concave behavior of insurance demand with respect to age in the simplest specifications is confirmed for term insurance, while it is weaker (in the sense that in most cases it loses explanatory power) in life contracts. The fact that death is relevant in determining the concave behavior is not much of a surprise, since term insurance contracts are much more popular among relatively young individuals, for whom they seem to be cheaper. The regression says that this effect exists but is weak[8].

Holding higher education is still not . The age mix of the household is quite telling. The number of dependents below 15 is hardly a significant driver of term insurance, while it is never significant in explaining the demand for life insurance. When it enters, it is

8 For a given loading, term assurance for young insured just "seem" to be cheaper, because the death probability is lower.

obviously positive, since protection for very young dependent is searched for, through insurance. For life insurance, the presence of family members between 15 and 25, as well as the presence of members between 25 and 55 and older for both types of insurance, is significant and its coefficient is negative. This confirms that, when the presence of household members within a specific age range has an impact, this takes the form of "family network". The presence of a spouse has no significance .

Job market participation has the same effect on life and term insurance: in both cases being employee does not increase the demand of insurance, in comparison with the benchmark case, while being self-employed does, at least when we do not include financial literacy.

Self-declared risk aversion is never significant, and this happens for life as well as death insurance. Having stocks is significant for both life and death, having a house is significant (in the simplest specifications) for death contracts, never for life contracts. This confirms that self-declared risk aversion does not reflect the true attitude towards risk of individuals. Indeed, when factors other than the simple self-declaration account for it, risk aversion is important, at least for term insurance. In our setting, stock and real estate market participation reflect risk aversion and testify seek for diversification benefits.

As concerns financial literacy, it is highly significant in both life and term insurance, when the instrumental variable is not added, and it remains such, in case of term insurance, even when the instrument is added.

As for the macro areas do not impact in a significant way the insurance demand, with the exception for the life insurance and only for the poorer specification.

The magnitude of a city instead is important in both Tables, especially for term insurance. Living in a mega-city is significant and brings a negative coefficient for both life and death, living in a large city and, in some specifications, even in a medium city is significant. Since the bigger the city, the lower the demand for insurance, the magnitude of the residence city may include a "cost of living" effect.

Quite obviously, the dummy for the intention to bequeath has no impact on life insurance demand What is most surprising is that it has no significant impact on term insurance demand, unless financial literacy is included. In this last case, the coefficient is puzzling. This confirms that, as it happens for risk aversion and as other researchers already noticed, the intention to bequeath may not be captured by self declarations about it.

The taming effect of being a woman is significant in all specifications for term and life insurance. Women are less likely to insure. At least for term insurance, a possible explanation of this evidence is that women do not monetize their importance for the well being and the regular course of the household life and do not perceive their death as a risk to protect against as important as the loss of their spouse. Note that here we do not distinguish between households in which a man has the highest income from households in which the highest income comes from a woman. We do that because in both cases there would be a non-monetized amount of services, mainly care and housekeeping, which are non-monetized and not captured in the survey, and are very often provided by women. The survey says that, being the welfare of the household due to man or women, both in monetized and monetized terms, female individuals, all others equal, do not seem to perceive their death as worth insuring as men. The same effect shows up for life insurance: women are asking for less insurance than men, in the life form, i.e. in terms of annuitized or non-annuitized savings

All in all, turning the main variable of interest, which is inclusion in the financial market, the same conclusions for insurance policy, irrespective on which form, still hold with respect to stock holdings, which stays one of the pivotal variables explaining participation to the life insurance market, both pure life and term. When stock holding is dropped and proxied by a more exogenous variable, such as financial literacy (one year lagged), again results hold for both types. Only when financial literacy is instrumented,

the same financial market inclusion loses predictive power for pure life insurance, while it keeps it for term insurance[9].

5. Empirical analysis: premiums

This Section studies the correlation of premiums paid with the explanatory variables introduced above. Instead of focusing simply on participation, we look at the amount of income or wealth devoted to insurance protection. The dependent variable Y is now the premium paid either in pure life or term insurance and regressor used are the same as in Z vector, as in equation (1). We decide to use Tobit model to allow for the zero values of Y for those who do not have any insurance contract. Before doing that, we exclude from the sample those premiums that were paid as lump sum (one observation). We use the three richest specifications above (with stock holdings, lagged and instrumented financial literacy).

5.1 Estimation results

We present the results of our estimates on the premiums in Table 4, where we used the same structure as the one used for Probit analysis. The first three columns refer to life, the last three to term insurance. In all cases the regression specifications chosen are those of Tables 2-3.

For both life and term insurance, income - measured both by logy and by the individual contribution to family income - has a positive and significant effect. Income over wealth, is never significant. Please notice that also the level of significance of the ratio of the household head to total income is smaller for life than for death insurance: the perceived risk of losing the main source of income is more likely to lead to higher investments in

[9] As another robustness check we also run the same analysis on participation to the life insurance market for contracts below €1500 per year, so as to exclude investment type insurance contracts. The results hold on financial inclusion as the main determinant of insurance participation. Results available upon request

term than in life insurance, as expected, since term insurance contains a direct bequest component.

There is almost no evidence that age determines the amount of premiums, while it was a significant explanatory variable for participation. If the explanatory power of age almost disappears, concavity in age, which was proper of participation, disappears completely.

The age mix of the dependents affects the level of premiums as intuition and the family-network phenomenon explained above would suggest. The number of children under 15 is significant only for life, when financial literacy is not instrumented, those between 15 and 25 as well as those between 25 and 55 is significant, while it is not significant the number of household members above 55. So, the family network plays a role, not only as far as participation is concerned, but also for the asset or income share spent in insurance. Family members between 15 and 55 decrease the amount spent in insurance.

With the usual exceptions of the instrumented case for death, being employee affects positively the amount spent in insurance premiums, both life and term

Holding higher education is never significant in our specifications, suggesting that, specific targeted knowledge on financial topics, rather than a general one increases the sensitivity to insurance demand.

As for participation, risk aversion is not significant in explaining the amount spent, whether this is for life or term insurance. Again, we would impute this to the fact that risk-aversion is self-assessed, since, as we see next, other indicators of risk aversion in the survey do appear significant. As it happened for participation, variables that do explain the amount of premiums are indeed stock ownership. This confirms the role of financial market inclusion, and understanding of risky market values and payoffs, in explaining the amount of hedging through insurance. People who are included in the financial market and likely to be more literate participate more and spend more than their peers, all others equal. Or, risk aversion is better proxied by observed diversification through the stock than by self-declarations. With the exception of the instrumented case, also financial literacy is significant.

Macro geographical area are again non significant, while living in a large city and, above all, in a mega city turns out to decrease the amount of premiums spent in life insurance. Since the coefficient of the magnitude of the city enters with a negative coefficient, we still interpret this as a cost of living effect.

Bequest intention is not significant, even in explaining premiums spent on term insurance: what is probably at work is again a mismatch between the self-declared intention and the real attitude of the investor.

Death premiums are negatively affected by being a woman, while life premiums are affected only when financial literacy is instrumented. For term insurance, this confirms the scarce importance given to death of the female spouse, either because it does not contribute to the household income, or because her role is not monetized. It may signal that women undervalue the opportunity cost associated to their role in the household.

6. Policy implications and conclusions

In order to design policy intervention, we therefore imagine shocks to financial market participation, in the form of owning stocks, income, education, and the last two together, and measure their marginal effect on insurance market participation.

Our policy implications and conclusions are based on the following Table. Column (1) presents the predicted probabilities of having life or term insurance (in the first and second part of the Table respectively), as resulting from specification (3) above, which includes (non-instrumented) financial literacy. The remaining columns present the same probabilities, as obtained by simulating five different policy scenarios: column (2) increases stock market participation by making the whole sample hold a stock, column (3) increases household income by 10%, in the spirit of simulating a tax deduction, column (4) simulates the effect of receiving a degree education for those who own a secondary school diploma only, column (5) combines the last two policies and, finally, column (6) increases financial literacy by assuming that each respondent provides one more correct answer

Table 6

Pr(L=1)	BaseLine	With stock	Income +10%	Additional Education	Income +10% and additional education	One more correct answer in Financial Literacy
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.05	0.09	0.06	0.05	0.05	0.06
Male	0.08	0.13	0.09	0.09	0.09	0.10
Total	0.06	0.11	0.07	0.07	0.07	0.08
Pr(D=1)	BaseLine	With stock	Income +10%	**Additional Education**	Income +10% and **additional education**	**One more correct answer in Financial Literacy**
Female	0.05	0.10	0.06	0.06	0.06	0.07
Male	0.11	0.19	0.13	0.13	0.13	0.15
Total	0.06	0.14	0.09	0.09	0.09	0.11

Note: Simulations are based on the coefficients illustrated in the second and third specification illustrated in Table 3

The general result one can draw from the last Table is that the effect is always greater on men than women, while it is not always greater for life (or death) contracts. Among the policies explored above, increasing financial inclusion, which in this case can be done either by making everybody a participant to the stock market, or in a wider sense, as increasing financial literacy, is more effective than a direct manoeuvre on the educational level or an increase in disposable income. This holds even if, given our hypotheses, the latter is a major increase in education or a major tax deduction. All in all, the gist of the policy exercise emphasizes the huge potential of financial inclusion, which stands as the main actor shaping the demand for insurance. Fostering education in a targeted way, by improving financial education, would work at best as a device to foster insurance participation and, as a spillover effect, would reduce the vulnerability of those people who are at risk of under annuitisation or of running out of wealth in the old age. This holds in particular for women, who, as shown above, demand less insurance than men

and are out of the labour market in 50% of the cases. They would benefit most of a broader financial inclusion.

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Table 1. Descriptive Statistics

Variables	Mean	S.D
female	.5615396	.4962347
Individual income over family income	15498.41	14882.54
Age	46.89551	8.259171
Age^2	2.267393	.7464795
Degree	.1454705	.3526004
North	.4110932	.4920681
Centre	.2007903	.4006208
Risk averse	.5960779	.4907181
Couple	.8748719	.3308883
Under 15	.6860822	.9071056
15-25	.5158788	.7419087
25-55	1.675252	.7261413
Over 55	.4451924	.7408423
Employee	.5504171	.497488
Self employed	.1295185	.3357975
Income ratio	127.9496	1326.094
Medium city	.1883507	.3910205
Large city	.4835358	.4997654
Mega city	.0837114	.2769748
Bequest intention	.5641739	.4959009
Home ownership	.6859359	.464176
Stockholding	.0828431	.2756788
Financial Literacy	2.089216	.9412147
Father with Managerial job	0.0314239	0.1744672

Notes: Observations: 6,833. Financial literacy variable refers to respondents in 2010 wave, which are also present in 2012. The number of observations is lower (4,080)

Table 2. Having an insurance policy (either life or death).

	(1)	(2)	(3)	(4)
female	-0.00905***	-0.00995***	-0.0148***	-0.0338**
	(7.16e-05)	(6.46e-05)	(0.000977)	(0.0107)
Log hh income	0.0160***	0.0139***	0.0208***	-0.000362
	(3.86e-10)	(1.05e-06)	(0.000107)	(0.991)
Individual income/family income	4.32e-07***	4.33e-07***	8.34e-07***	1.54e-06**
	(2.09e-07)	(1.92e-06)	(3.10e-06)	(0.0311)
Age	0.00376**	0.00364*	0.00840**	0.0107
	(0.0366)	(0.0625)	(0.0497)	(0.422)
Age2	-0.0391*	-0.0383*	-0.0860*	-0.112
	(0.0553)	(0.0846)	(0.0706)	(0.433)
Degree	0.00284	0.00296	0.00506	0.0120
	(0.347)	(0.369)	(0.411)	(0.497)
North	0.00126	0.000532	-0.000359	-0.0332
	(0.660)	(0.866)	(0.952)	(0.137)
Centre	0.00486	0.00445	0.00709	-0.0553
	(0.155)	(0.229)	(0.310)	(0.138)
Risk averse	-0.00162	0.000305	-0.00434	0.00311
	(0.489)	(0.906)	(0.362)	(0.839)
Couple	0.00103	0.000941	0.00806	0.0117
	(0.790)	(0.824)	(0.293)	(0.614)
Under 15	0.00165	0.00164	0.00463	0.0121
	(0.269)	(0.315)	(0.155)	(0.199)
15-25	-0.00245	-0.00250	-0.00441	0.00307
	(0.166)	(0.198)	(0.225)	(0.810)
25-55	-0.00794***	-0.00799***	-0.0160***	-0.0251
	(0.00181)	(0.00427)	(0.00205)	(0.140)
Over 55	-0.0103***	-0.0107***	-0.0178***	-0.0245
	(0.000850)	(0.00137)	(0.00939)	(0.252)
Employee	0.000680	0.00193	-0.00406	-0.0107
	(0.826)	(0.570)	(0.518)	(0.521)
Self-employed	0.0147***	0.0188***	0.0135	0.0111
	(0.00176)	(0.000348)	(0.116)	(0.653)
Income/Wealth	-0.000212**	-0.000214**	-0.000335*	-0.000710
	(0.0283)	(0.0404)	(0.0824)	(0.102)
Medium city	-0.00435	-0.00480	-0.0109*	0.0102
	(0.160)	(0.158)	(0.0695)	(0.724)
Large city	-0.00757***	-0.00809***	-0.0163***	-0.00569
	(0.00638)	(0.00770)	(0.00327)	(0.816)
Mega city	-0.0140***	-0.0152***	-0.0242***	-0.0836***
	(9.39e-05)	(0.000129)	(0.000505)	(0.000692)
Bequest	0.000564	0.000135	-0.00130	-0.0338*
	(0.817)	(0.960)	(0.793)	(0.0790)
Homeownership		0.00509*	0.00109	-0.0156
		(0.0978)	(0.853)	(0.424)
Stock holding		0.0251***		
		(3.83e-06)		
Financial literacy			0.00850***	0.256**
			(0.00263)	(0.0178)
Observations	6,833	6,833	6,833	4,080

Notes: Marginal effects; p-value in parentheses. (d) for discrete change of dummy variable from 0 to 1 * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.Standard Errors are clustered at family level

Table 3. Pure Life and Term Contracts.

Life Insurance	(1)	(2)	(3)	(4)
female	-0.00343**	-0.00359**	-0.00661*	-0.0241*
	(0.0373)	(0.0389)	(0.0558)	(0.0604)
Log hh income	0.0116***	0.0104***	0.0160***	0.0380
	(5.00e-10)	(3.59e-07)	(0.000162)	(0.249)
Individual income/family income	1.43e-07**	1.33e-07**	2.52e-07*	7.68e-07
	(0.0155)	(0.0287)	(0.0741)	(0.160)
Age	0.00221*	0.00212	0.00581	0.0171
	(0.0951)	(0.129)	(0.106)	(0.242)
Age2	-0.0225	-0.0218	-0.0582	-0.172
	(0.132)	(0.167)	(0.138)	(0.270)
Degree	-0.000285	-0.000412	0.00301	0.0107
	(0.892)	(0.853)	(0.526)	(0.529)
North	-0.00354*	-0.00417*	-0.00547	-0.0277
	(0.0857)	(0.0568)	(0.235)	(0.266)
Centre	-0.000195	-0.000611	-0.00176	-0.0292
	(0.934)	(0.804)	(0.730)	(0.507)
Risk averse	-0.00102	-2.07e-05	-0.00263	-0.00441
	(0.557)	(0.991)	(0.486)	(0.768)
Couple	-0.00101	-0.00118	0.00374	0.0105
	(0.734)	(0.710)	(0.543)	(0.624)
Under 15	0.000214	0.000100	-0.000243	0.000242
	(0.850)	(0.933)	(0.929)	(0.928)
15-25	-0.00289**	-0.00295**	-0.00618**	-0.0164
	(0.0321)	(0.0391)	(0.0376)	(0.254)
25-55	-0.00490***	-0.00486**	-0.0114***	-0.0353**
	(0.00758)	(0.0125)	(0.00365)	(0.0364)
Over 55	-0.00668***	-0.00676***	-0.0135**	-0.0406*
	(0.00245)	(0.00342)	(0.0108)	(0.0675)
Employee	0.00102	0.00174	0.00123	0.00340
	(0.655)	(0.469)	(0.804)	(0.838)
Self-employed	0.00948***	0.0117***	0.0140*	0.0385
	(0.00726)	(0.00211)	(0.0534)	(0.213)
Income/Wealth	-0.000138**	-0.000139**	-0.000232	-0.000781
	(0.0312)	(0.0418)	(0.122)	(0.135)
Medium city	-0.00254	-0.00274	-0.00734	-0.0142
	(0.273)	(0.264)	(0.131)	(0.611)
Large city	-0.00390*	-0.00407*	-0.00816*	-0.0164
	(0.0614)	(0.0648)	(0.0627)	(0.461)
Mega city	-0.00850***	-0.00883***	-0.0165***	-0.0666**
	(0.00204)	(0.00291)	(0.00332)	(0.0174)
Bequest	0.00117	0.000970	0.00413	0.00367
	(0.517)	(0.614)	(0.285)	(0.868)
Homeownership		0.00276	0.000978	-0.00280
		(0.214)	(0.830)	(0.890)
Stock holding		0.0123***		
		(0.00131)		
Financial literacy			0.00529**	0.102
			(0.0204)	(0.505)

Table 3 (cont) Term Insurance	(1)	(2)	(3)	(4)
female	-0.0105***	-0.0116***	-0.0169***	-0.0424***
	(8.31e-07)	(7.69e-07)	(2.37e-05)	(0.00142)
Log hh income	0.0141***	0.0122***	0.0166***	-0.00330
	(1.84e-09)	(3.31e-06)	(0.000401)	(0.914)
Individual income/family income	3.37e-07***	3.36e-07***	6.10e-07***	1.21e-06**
	(3.16e-06)	(2.60e-05)	(2.92e-05)	(0.0365)
Age	0.00319*	0.00308*	0.00672*	0.00887
	(0.0531)	(0.0874)	(0.0725)	(0.481)
Age2	-0.0330*	-0.0322	-0.0670	-0.0897
	(0.0787)	(0.116)	(0.109)	(0.511)
Degree	0.00317	0.00342	0.00620	0.0154
	(0.254)	(0.262)	(0.260)	(0.369)
North	0.000767	0.000171	-0.000882	-0.0327
	(0.768)	(0.952)	(0.865)	(0.137)
Centre	0.00293	0.00254	0.00381	-0.0562
	(0.333)	(0.440)	(0.525)	(0.128)
Risk averse	-0.00168	-4.95e-05	-0.00424	0.00185
	(0.429)	(0.983)	(0.312)	(0.902)
Couple	0.00152	0.00153	0.00503	0.00614
	(0.662)	(0.691)	(0.462)	(0.782)
Under 15	0.00218*	0.00227	0.00614**	0.0167*
	(0.0973)	(0.116)	(0.0238)	(0.0556)
15-25	-0.00126	-0.00120	-0.00236	0.00635
	(0.426)	(0.489)	(0.450)	(0.593)
25-55	-0.00839***	-0.00860***	-0.0140***	-0.0246
	(0.000587)	(0.00138)	(0.00338)	(0.134)
Over 55	-0.0104***	-0.0110***	-0.0159**	-0.0247
	(0.000483)	(0.000743)	(0.0110)	(0.229)
Employee	0.000604	0.00171	-0.00282	-0.00857
	(0.833)	(0.586)	(0.616)	(0.598)
Self-employed	0.0126***	0.0163***	0.0126	0.0123
	(0.00323)	(0.000715)	(0.103)	(0.607)
Income/Wealth	-0.000185**	-0.000186**	-0.000292*	-0.000685*
	(0.0273)	(0.0407)	(0.0792)	(0.0943)
Medium city	-0.00502*	-0.00561*	-0.0113**	0.00373
	(0.0650)	(0.0617)	(0.0246)	(0.895)
Large city	-0.00718***	-0.00774***	-0.0170***	-0.0122
	(0.00417)	(0.00506)	(0.000451)	(0.602)
Mega city	-0.0121***	-0.0131***	-0.0199***	-0.0767***
	(0.000228)	(0.000346)	(0.00105)	(0.00220)
Bequest	0.000316	-0.000114	-0.00160	-0.0336*
	(0.887)	(0.963)	(0.714)	(0.0800)
Homeownership		0.00507*	0.00219	-0.0118
		(0.0657)	(0.662)	(0.533)
Stock holding		0.0219***		
		(8.64e-06)		
Financial literacy			0.00784***	0.245**
			(0.00141)	(0.0288)

Table 4. Tobit Models

	Life (1)	Life (2)	Life (3)	Death (4)	Death (5)	Death (6)
female	-420.5	-417.7	-401.5*	-925.5***	-922.9***	-816.2***
	(0.106)	(0.111)	(0.0940)	(0.000108)	(0.000131)	(7.87e-05)
Log hh income	1,636***	1,692***	1,105*	1,254***	1,332***	364.2
	(0.00108)	(0.00236)	(0.0974)	(0.000890)	(0.00184)	(0.473)
Individual income/family income	0.0181**	0.0249**	0.0177*	0.0201***	0.0259***	0.0155**
	(0.0385)	(0.0132)	(0.0708)	(0.00705)	(0.00278)	(0.0278)
Income/wealth	344.9	351.0	352.0	314.6	332.6	165.0
	(0.155)	(0.156)	(0.199)	(0.113)	(0.105)	(0.432)
Age	-3,503	-3,611	-3,426	-3,195	-3,417	-1,531
	(0.195)	(0.189)	(0.244)	(0.148)	(0.133)	(0.505)
age2	233.4	268.0	266.8	593.7*	627.9*	402.8
	(0.520)	(0.470)	(0.435)	(0.0691)	(0.0614)	(0.184)
Degree	-848.2*	-748.1	-462.0	-188.4	-81.66	-481.8
	(0.0818)	(0.105)	(0.391)	(0.538)	(0.778)	(0.256)
North	-411.9	-357.5	-358.8	-122.5	-66.43	-1,005
	(0.347)	(0.401)	(0.733)	(0.706)	(0.833)	(0.199)
centre	94.36	-49.41	21.80	140.6	-6.261	138.6
	(0.743)	(0.866)	(0.941)	(0.521)	(0.977)	(0.587)
Risk averse	-13.47	106.0	342.9	254.6	343.2	172.7
	(0.978)	(0.834)	(0.480)	(0.533)	(0.413)	(0.670)
Couple	-38.94	-6.373	21.25	178.0	193.2	318.2**
	(0.840)	(0.974)	(0.907)	(0.176)	(0.143)	(0.0373)
Under 15	-488.6*	-482.9*	-388.9	-185.8	-177.6	16.72
	(0.0881)	(0.0982)	(0.153)	(0.322)	(0.350)	(0.936)
15-25	-791.2**	-794.6**	-879.7***	-816.5**	-839.3**	-596.2**
	(0.0288)	(0.0314)	(0.00892)	(0.0121)	(0.0121)	(0.0391)
25-55	-1,081**	-1,080**	-947.3**	-1,056**	-1,066**	-597.2*
	(0.0221)	(0.0267)	(0.0219)	(0.0124)	(0.0139)	(0.0762)
Over 55	424.2	288.6	246.3	362.8	256.9	32.51
	(0.283)	(0.450)	(0.488)	(0.256)	(0.406)	(0.912)
Employee	1,721**	1,534**	951.9**	1,529**	1,378**	524.1
	(0.0198)	(0.0280)	(0.0448)	(0.0128)	(0.0177)	(0.183)
Self employed	-22.53*	-21.89*	-17.35	-18.40*	-18.19*	-14.73*
	(0.0606)	(0.0641)	(0.119)	(0.0577)	(0.0579)	(0.0951)
Medcity	-512.2	-429.5	-526.6	-661.5**	-605.4*	-229.5
	(0.224)	(0.303)	(0.402)	(0.0478)	(0.0668)	(0.630)
Largecity	-625.2*	-554.7	-610.4	-613.9**	-570.4**	-435.3
	(0.0781)	(0.114)	(0.229)	(0.0256)	(0.0367)	(0.277)
Megacity	-1,894**	-1,834**	-1,734**	-1,721**	-1,657**	-1,753***
	(0.0260)	(0.0317)	(0.0169)	(0.0133)	(0.0171)	(0.00440)
Beq	-24.84	26.38	196.3	-117.7	-60.65	-460.2
	(0.934)	(0.929)	(0.662)	(0.620)	(0.793)	(0.200)
Homeown	355.8	405.8	-48.79	425.6	452.9	-197.1
	(0.322)	(0.264)	(0.902)	(0.136)	(0.116)	(0.540)
Stock holding	1,513**			1,438**		
	(0.0346)			(0.0145)		
Financial Literacy		264.6**	546.7		182.0**	3,209
		(0.0168)	(0.857)		(0.0278)	(0.152)

Notes:See Table Above. We also exclude one observation, with respect to the probit estimation, for which the premium paid is higher than 20,000€ to drop the lump-sum premium policy