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Saving for old age: Longevity annuity buying intention of Italian young adults

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ABSTRACT

The aim of this study was to investigate the longevity annuity buying intention on the part of Italian young adults aged 25–35 by adopting the Theory of Reasoned Action. Using a structural equation modeling approach based on the method of Partial Least Squares, a confirmatory test of the model construct validity was performed, including behavioral beliefs and normative beliefs. The results obtained from 7480 Italian young adults revealed that the theory of reasoned action had predictive power for the intention of buying longevity annuities. The cause–effect relationship of behavioral and normative beliefs was confirmed. Intention to purchase a longevity annuity was determined to be affected by both attitude toward buying and the subjective norm with a greater influence of social pressure over attitude. Finally, results showed that intention to buy longevity annuity policies was significantly moderated by three background factors, namely, gender, annual household income, and educational attainment. Research, policy, and managerial implications of the findings are discussed and suggestions for further research provided.

1. Introduction

In Italy, as in many other European countries, pensions and pension policies are high-priority issues on national agendas, representing one of the highest items of public expenditure (Feldstein and Siebert, 2002). Pensions are a subject of great interest also because they concern all citizens of a country. Both "active" citizens, i.e., the major financers of a national welfare system who will be assigned a pension in the future, and "inactive" citizens, i.e., today's pensioners and youth who are still waiting to enter or have only recently entered the labor force, will hopefully benefit from a pension in a more distant future (Botta, 2012).

Since the early 1990s, Italy has undergone radical changes in the regulations of the public pension system aimed at mending its main drawbacks and improving sustainability in the long run. The reforms were intended to recover the national economy through a significant reduction of benefits by increasing, particularly for younger people, individual responsibility for the accumulation of retirement wealth (Franco, 2002).

Two major changes have been introduced by these reforms (Fornero and Monticone, 2011), primarily, the replacement of a defined benefit by a defined contribution method. According to the first type of plan, pension benefits are predetermined and based on a formula involving salary history and length of employment. Until the reforms, in Italy, the average pension provided by the public welfare system to citizens accounted for approximately 80% of the salary earned in their late working life (Rodà, 2006). The defined contribution method, instead, fixes benefits based on "actuarial equivalence", namely to the (capitalized worth of) payroll taxes that people contribute throughout their entire working lives and to workers' retirement age. This practice results, on average, in a much lower and more uncertain replacement rate (the ratio of a person's first pension to his or her last wage) compared to former and actual benefits in payment, which are quantified based on late-career remunerations. As a consequence of the application of these new rules, official estimates (Ministero dell'economia e delle finanze, 2007) forecast that between 2011 and 2050, the ratio between the average pension and the average salary in Italy will shrink by 30%. At the

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same time, the average replacement rate will decrease from 70 to 50%.

The second great change concerns pension funds. The decreasing availability of public financial resources allocated to retirees has cleared the path for private social security plans. These plans have acquired paramount importance in restoring a satisfactory level of future pension benefits that have a major impact on the well-being of the elderly (Bender, 2012). In Italy, joining a privately owned pension plan is performed on a voluntary basis and encouraged by the government through tax incentives (Guazzarotti and Tommasino, 2008).

In line with what is happening all over the world, despite established public measures to encourage Italian citizens to invest in privately managed pension plans, participation rates at the country level are still disappointing. Regarding Italian workers, *Associazione Nazionale fra le Imprese Assicuratrici* (National Association of Insurance Companies, ANIA, 2012) data show that in 2011, only 24% participated in a private pension plan. The participation of young employees aged 25–34 was even lower, with only 16.9% of them having invested in an integrative pension plan.

According to Brown and Warshawsky (2001), the extent to which individuals insure themselves against outliving their savings (the so-called "longevity risk") in defined contribution systems is significant for several reasons. Firstly, increasing average longevity in all developed countries raises the issue of guaranteeing sufficient resources throughout people's advanced life. Indeed, it has been ascertained that the adequacy of later life income directly influences elderly poverty rates. Second, if people fail to provide adequate resources to ensure themselves a comfortable retirement, social support systems will be burdened by increasing financial pressure due to the greater reliance that the elderly will exert both on public and private assistance structures. Lastly, the way people decide to insure themselves against longevity risk today can have a significant impact on the amount of intergenerational transfers within a given economy, affecting the wealth distribution of future generations.

Understanding the factors influencing the intention to enroll in a private pension plan through the purchase of a longevity annuity on the part of young people – greatly affected by the recent pension system reforms – could therefore constitute an important element in providing recommendations to the policy maker and private companies to favor the adoption of wide-spread virtuous behaviors among citizenships.

Accordingly, this study analyzes the factors influencing the intention to purchase longevity annuities on the part of Italian young adults aged 25–35 using the framework of the Theory of Reasoned Action (TRA). First, it provides a test of the TRA as applied to the understanding of the longevity annuity purchasing intention on the part of Italian young adults. Second, a confirmatory test of the construct validity of the theoretical model using a PLS-Path Modeling (PLS–PM) approach (Wold, 1982, 1985; Lohmöller, 1989), including behavioral beliefs and normative beliefs of the theory, is performed. Third, the Ajzen and Fishbein's (1972) standpoint concerning the independence of the attitudinal and normative factors is tested, verifying whether the constructs of subjective norm and attitude are correlated. Finally, the moderating effect of four individual characteristics, namely gender, income, education, and place of residence, on behavioral intention to purchase longevity annuities is tested. Given that the value of attitudinal and normative factors, as well as their role in predicting behavioral intention, are said to vary from individual to individual depending on multiple social, cultural, and personal traits (Xu et al., 2004), the influence on longevity annuity purchasing intention of gender, income, and education, as well as place of residence, appear to be relevant aspects to investigate.

The paper is organized as follows: First, a literature review of the main contributions of a financial type concerning annuity purchasing behavior is provided. Second, a brief review of the framework of the TRA is presented. Moreover, the conceptual model is described, research hypotheses are formulated, and the research design used to empirically test the hypotheses is outlined. Subsequently, the results of the study are described. Finally, research, policy, and managerial implications are discussed, and limitations of the study, as well as suggestions for further research, are provided.

2. Annuity purchasing behavior

Until a few years ago, annuity research focused almost exclusively on immediate annuities (Hu and Scott, 2007). These are contracts that are acquired with a single lump-sum disbursement and, in exchange, provide a certain income whose payments start straightaway after the initial premium. Such contracts are particularly suitable for pre-retirees or retirees who have almost/already ended their working life, in need of financing their current consumption, and who are conscious they might face the risk of outliving their savings in the future. This situation explains why a greater part of the literature investigates annuity purchasing behavior of the elderly. In recent years, however, the insurance industry has been launching innovative products on the market, one of which is the so-called "longevity annuity" (also labeled "delayed payout annuity"), a contract purchased today that defers payments until some future point in time (e.g., when the buyer reaches a certain age). In the specific case of the longevity annuity examined in this research, the contract also provides a designated beneficiary with a lump-sum payment in the case of premature death of the annuitant. In this way, in addition to ensuring an income throughout the policyholder's advanced life, this annuity product represents a suitable way to leave a financial legacy to close relatives or to whomever is elected as a beneficiary by the subscriber.

Longevity annuities are especially suitable for younger generations, who being more heavily affected by recent pension system reforms, will face a higher risk that their savings will not be adequate to ensure themselves a comfortable retirement.

The traditional finance paradigm explains peoples' financial decisions based on the assumption that they are well-informed economic agents who behave rationally with the aim of maximizing their self-interest (Statman, 1999). Accordingly, it is presumed that people can understand and evaluate information regarding available options, correctly assess and weigh these choices, and then make an advised decision based on pondering the alternatives (Mitchell and Utkus, 2003). Within this paradigm, the life-cycle model of saving theorizes that people are rational planners of their consumption and saving requirements, considering also the interests of their successors (Modigliani and Brumberg, 1954). Some researchers have noted that saving generally increases with age (Furnham, 1985; Katona, 1975; Mirer, 1979) and income (Yuh and Hanna, 2010) and is positively related to education level (Avery and Kennickell, 1991; Solmon, 1975) and overall wealth (Hefferan, 1982).

According to this approach, it is ascertained that annuitization enables rational consumers to remove or at least reduce their individual longevity risk (Yaari, 1965). Rational choice theory predicts that people should annuitize a considerable portion of their wealth (Modigliani, 1986). Hence, one would expect the annuity market to be sizeable (e.g., Benartzi, Previtero, and Thaler, 2011) (analogously to that of any substitute financial or insurance product able to reduce people's longevity risk) and growing along with the widespread development of defined contribution systems (e.g.,