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On Insurance for Long-term Care in France

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Introduction

The ageing of populations in most industrialised countries is accompanied by an increase in the need for long-term care (LTC). LTC is a mix of social and health care provided on a daily basis, formally or informally, at home or in institutions, to people suffering from a loss of mobility and autonomy in their daily living activities. Although loss of autonomy may occur at any age, its frequency rises with age. In 2011, the first baby-boom generation will turn 65, and it is forecasted that on average the size of the old-age population dependent on assistance will double in the next 50 years in OECD countries (OECD 2005). At the same time, the number of informal caregivers is decreasing. This trend is attributed to the decomposition of the family unit, the distancing of children from their parents and the increase in women's employment rates. Furthermore, low rates of public long-term care coverage suggest that the financial consequences of dependency could be catastrophic, even resulting in ruin, for a number of elderly people and their families (Assous and Mahieu 2002).

A solution to this lack of public coverage is to develop the insurance market for long-term care. That is why, for some decades now, insurance companies have been offering contracts to cover the financial consequences of dependency and the use of long-term care. Market evolution strongly depends on institutional settings, and the United States and France are currently the most developed markets. Yet, the demand for this kind of insurance would seem relatively small in comparison to the importance of the risk of dependency and the aversion of individuals to such a risk. Several theoretical and empirical arguments have been proposed to explain the decisions made when considering the purchase of long-term care insurance. Among the common arguments quoted, insurance demand for LTC is thought to be influenced by information asymmetry phenomena, intergenerational factors, bias in risk perception, the role of the state as insurer of last resort, the family structure, access to informal care and the amount of the inheritance.

The aim of this text is to provide an overview of recent empirical work (Courbage and Roudaut 2008) studying the determinants of the demand for insurance covering LTC on the French market using cross-sectional data from the newly developed SHARE (Survey of Health, Ageing, and Retirement in Europe) database.

Based on a two-stage model of the likelihood of receiving informal care, we estimate the probability of individuals taking out insurance covering LTC. We examine whether this probability is significantly influenced by income, education, the probability of leaving a bequest, family structure, experience of dependency, risk behaviours, level of informal care and health status.

Let us first start by presenting the arguments that explain the decision to purchase insurance for LTC and introducing the way LTC is financed in France.

The decision to purchase LTC insurance

Several theoretical arguments have been put forward to explain the decision to purchase LTC insurance or not.

A common explanation for the unwillingness to purchase LTC insurance is that individuals are inadequately informed about the products available and that they ignore low-frequency high-severity events that have not occurred recently (Kunreuther 1978). Another explanation for the limited development of LTC insurance markets includes the phenomena of

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moral hazard (over-consumption of care encouraged by insurance) and of adverse selection (over-representation of bad risks in the insured population), and the fact that the interaction of public insurance programmes arguably crowds out private insurance.

Since LTC is largely provided informally, mainly through family members, intergenerational factors have also been put forward to explain the rationale for taking out LTC insurance (Pauly 1990). The desire to leave a bequest seems to be a major motive for LTC insurance. However, elderly individuals with children may decide to forego the purchase of LTC insurance due to intrafamily moral hazard. Indeed, parents who prefer to receive care from their children may decline the offer to purchase insurance, as this may create a disincentive for children to provide care. Intra-family moral hazard differs from classic moral hazard in the sense that it is not the policyholder behaviour that is modified by the presence of insurance, but the caregiver's behaviour. Nevertheless, it happens that bequests can be structured so as to provide an incentive for children to care for their elderly parents. If long-term care insurance were purchased, parents could increase the sensitivity of the bequest to caregiving in order to elicit attention from children (Zweifel and Strüwe 1996).

While theoretical literature on the subject is rather abundant, relatively little empirical research has been done on the factors affecting the decision to purchase coverage, and it relates almost exclusively to the situation in the United States. Sloan and Norton (1997) examine the relationship existing between the demand for LTC insurance and, respectively, the bequest motive and expectations of future nursing home use. Although they find phenomena of adverse selection, the bequest motive does not seem to influence the demand for LTC insurance. Mellor (2001) shows that education, income and wealth positively impact LTC insurance, whilst availability of informal care has no statistical significant effect on LTC insurance. Doerpinghaus and Gustavson (2002) show that nursing home expenditure levels, the relative size of the elderly population and the nursing home population are significant explanatory factors of LTC insurance purchase in some states of the United States. The intuition is that these variables raise awareness among the elderly about cost and quality issues in LTC, which should reinforce the utility of LTC insurance for such individuals. Recently, Brown and Finkelstein (2007) have presented evidence of supply-side market failures in the United States LTC insurance market, such failures being explained by the characteristics and pricing of the products on offer. Finally, using French data, Courbage and Roudaut (2008) have shown that insurance for formal long-term care is purchased to preserve bequests and to protect families in the event of disability. Risk behaviour, as well as experience of disability, also plays a significant role in explaining the demand for insurance covering LTC in France. This last work will be the main topic of the text below.

Financing long-term care in France

LTC financing varies from one country to the other, and the organisation of LTC coverage is in general a function of the health systems already in place. LTC is often provided by both health and social services, which are not necessarily disconnected. It may be difficult to differentiate the health insurance system from other systems specific to LTC risk. In the face of LTC expenditure that represents an increasing share in health budgets, several countries have decided to consider the risk of dependency as a new risk and to separate it from the health risk. These countries have established LTC insurance as a new branch of their social insurance system (e.g., Austria, Germany, Luxemburg, Japan). According to a recent report by the European Commission (2008), most European countries recognise the importance of finding an appropriate balance between public and private sources of funding. The logic of mixed funding based on public-private partnership in the coverage of LTC risk seems to be the way chosen by the largest number of countries.

In France, the public coverage of LTC is derived not only from a long tradition of intervention concerning social assistance, but also from the great diversity of actors and sources of financing. At the national level, the sickness insurance scheme deals with expenses concerning health care. In addition, the retirement insurance scheme allows the financing of a significant part of living expenses through means of domestic assistance. At the regional level, general councils manage the Personalised Allowance of Autonomy (APA). The APA is paid to people aged 60 or more who are no longer autonomous, regardless of their financial situation and geographical location. However, only those with a low income are exempted from the co-payment, which can represent up to 80 percent of the total cost. This allowance is jointly funded by both central and regional governments. APA can be seen as

a the first step towards recognition of dependency as a new risk in life, yet public coverage remains low in comparison to the financial expenses incurred by the occurrence of dependency.[1] In view of the complexity of LTC financing, the French government intends to create a fifth branch of the social security dedicated to the risk of LTC. It is expected that this legal project will be discussed in parliament during the second half of 2010.

Also, in addition to public coverage, private insurance has developed in France. LTC insurance contracts are individual or collective and guarantee the payment of a fixed allowance, in the form of monthly cash benefit, possibly proportional to the degree of dependency. The French market, with an annual growth close to 15 percent (Kessler 2008), is one of the most dynamic amongst the industrialised markets. Contrary to the United States, public authorities do not use tax incentives to encourage the development of private LTC insurance. In France, it seems that national debates associated with the search for new solutions to cover the risk of LTC, widely covered in the press, have increased the general public's awareness of the existence of this risk. This has supported the development of the private insurance (Durand and Taleyson 2003). It also seems that the success of the French market is explained by the choice of the products offered. Whereas US insurers have launched products with service benefits (payment proportional to LTC expenditure), French insurers have turned to cash benefit products. Policy-holders would appear to prefer the freedom of cash disability benefits, even if that implies the need to organise the care themselves, to the simplicity of the service benefit (Durand and Taleyson 2003).

The data and variables

The Survey on Health, Ageing and Retirement in Europe (SHARE) is a multidisciplinary and cross-national micro-database containing information on approximately 22,000 Europeans over the age of 50 and their spouses. A description of methodological issues can be found in Börsch-Supan and Jürges (2005). We use the first wave of SHARE developed in 2004, and updated in 2007. The sample for France contains 3,193 individuals. Missing values for some variables and a restriction to individuals aged 50 and over have left us with 2,530 observations.

SHARE asks various questions on the terms of health insurance and, in particular, on insurance covering LTC. The question of special interest to us is: "Do you have any supplementary or private health insurance for one of the following types of care?" A list of different types of care is then proposed. The answers corresponding to insurance covering long-term care in a nursing home, nursing care at home in case of chronic disease or disability, and home help for assistance with daily activities are chosen to define LTC insurance. As these forms of care correspond to the common definition of LTC, we considered that an individual has insurance for LTC if he has subscribed to at least one of these three types of care. This is the case for 52.7 percent of individuals in the sample. Note that these three forms of coverage do not necessarily correspond to what is usually labelled LTC insurance but could also be provided through supplementary health insurance. The issue of relevance is that there is insurance coverage for these types of LTC.

Table 1

SHARE sample variable means and definitions (*n* = 2530)

Variable	Definition	
LTCI	=1 if respondent reports having private long-term care insurance (covering LTC in nursing home, nursing care at home, home help)	52.7%
Informal care	=1 if the household has received help from a descendant (children. step children. grand children. nephew)[a]	9.8%
Female	=1 if respondent is female	54.8%
Age	Age at interview	64.48
Children	Number of children	2.29
One daughter	=1 if respondent has at least one daughter	68.4%
Married	=1 if respondent is married	66.0%
Single	=1 if respondent is single	6.7%
Divorced	=1 if respondent is divorced	10.9%
Widow	=1 if respondent is widowed	16.4%
Low inheritance	=1 if the household expects not to leave an inheritance to his descendants	15.8%
Medium inheritance	=1 if the household expects to leave an inheritance of less than 150 000€ to his descendants	46.8%
High inheritance	=1 if the household expects to leave an inheritance of at least of 150 000 € to his descendants	37.5%
Hospital	=1if respondent has been hospitalised recently	14.5%
LTI	=1 if respondent suffers from chronic or long-term conditions	50.7%

[a] During the last 12 months.

Source: Compilation by the authors.

[1] Public coverage represents only 30 percent of the average cost of LTC (Ennuyer 2006).

Table 1 summarises the main variables used in our analysis. We consider family structure, income, bequest, risk perception, informal care, age and health level as the main explanatory variables.

Indeed, married persons may feel the need to protect their partner from the financial burden of impoverishment due to long-term care expenses and could then demand more insurance. The role of children is more complex, as explained previously, because they are subject to intra-family moral hazard. Risk perception or awareness is represented through two types of variables: providing or having provided informal care to a family member, and having personally experienced hospitalisation or serious illness in the past. So as to test for the influence of intra-family moral hazard, we need to know how the presence of informal care influences the demand for LTC insurance. Informal care occurs when the household receives help for personal care, domestic and administrative help from a descendant. Since we do not have any indication of the level of insurance premiums, age could be regarded as a proxy for the price of insurance. One might expect that age is negatively correlated with the probability of purchasing insurance since insurance premiums found on the market usually increase importantly with age. We also control for the level of education of individuals as well as their health status (chronic diseases, level of activities, symptoms).

Table 2

Probit models

	(1)	(2)
Dependent variable	Informal care	Having long-term care insurance (LTCI)
Informal care *(predicted)*		0.171***
Female	0.687***	0.039
Age		0.032***
Age (square)		–0.000***
Children	0.011***	0.050***
One daughter	0.577***	
Single		–0.125***
Divorced		–0.095***
Widow		0.085
Ref = Married		
Low inheritance	0.199**	–0.369***
Average inheritance	0.276**	-0.230***
Ref = High inheritance		
Hospital		0.155
LTI		0.109***
Constant	–2.559***	–1.128***
Observations	541	1,989

Robust standard errors using White correction. Adjusted for clustering at the household level
* significant at 10%; ** significant at 5%; *** significant at 1%
Variables sex, income, education, health conditions, risky behaviour are included but not reported, for the sake of simplicity.

Source: Estimation by the authors.

The model

As pointed out earlier, children are the main providers of informal care and their behaviour can be influenced by the level of insurance. As underlined by Mellor (2001), there might be a phenomenon of endogeneity of informal care in the sense that the supply of informal care might depend on LTC insurance coverage. Indeed, people receiving informal care from a child can be precisely those who lack insurance coverage. Moreover, in the presence of intra-family moral hazard, having LTC insurance would encourage children to reduce or substitute their help, current or future, by formal care covered by insurance. To address these concerns, we compute predictions of informal care reception from the estimation of a probability model of receiving informal care from descendants to dependent people. Hence, a probit model is estimated on the sub-sample of dependant people with only time-invariant variables in order to provide time- independent predictions. These variables are gender, level of education, characteristics of the children, income and amount of expected inheritance. (Table 2, column 1).

In a second step, the estimated probability of receiving informal care is introduced into the equation of the demand for insurance (Table 2, column 2). This equation is estimated on the sub-sample of those who are not in a position to need help today.

Results

The results show that income has a non-linear, bell-shape effect on the insurance demand for LTC. Very low-income people take out little insurance coverage, which might be explained by the existence of higher public coverage for the lowest incomes. It is mostly middle-income people who take out insurance for LTC. Then, from a certain level of income, the demand for insurance decreases.

The demand for insurance covering LTC is also strongly related to the amount of the bequest. Indeed, an individual who with a high inheritance to leave to his children is more likely to purchase insur-

ance for LTC. This suggests that insurance is purchased in order to preserve the inheritance, thus demonstrating some form of altruistic behaviour.

Such altruistic behaviour seems to be confirmed by the fact that the probability of having insurance for LTC is higher for married individuals and those with children. Insurance is thus not purchased to protect oneself from the financial consequences of dependency, but rather to protect family and relatives against the financial risks of becoming dependent in the future.

Moreover, we find that the probability of purchasing insurance for LTC increases for those who have a higher probability of receiving informal care should the need arise in the future. An explanation is that insurance for LTC is purchased to reduce the burden on potential informal caregivers. Indeed, several studies suggest that providing informal care may have a negative effect on the informal caregiver's health (e.g., Schulz and Beach 1999). Formal care covered by insurance would replace informal care and would avoid strain on the informal caregiver's health.

Having been recently hospitalised or having suffered a serious illness also seems to positively influence the probability of purchasing LTC insurance. These findings conform with the results of work carried out on the role of information and on the perception of risks in decision-making processes. Indeed, shocks affecting health or experience of serious illnesses is often recognised as a source of information that can lead people to modify their behaviour and their economic decisions (Sloan, Smith and Taylor 2003).

Conclusion

While many theoretical arguments have been proposed to explain the decision to purchase long-term care insurance, little work has been done to study these phenomena empirically and it almost exclusively relates to the United States. This article provides an overview of recent work (Courbage and Roudaut 2008) using cross-sectional data from the newly developed SHARE database to estimate the determinants of the probability of purchasing insurance covering long-term care in France.

The main results are consistent with the view that providing public coverage for low-income individuals crowds out private insurance. Furthermore, it seems that the demand for insurance covering LTC is driven, above all, by altruistic behaviour. It is not necessarily sought out to protect oneself from the financial consequences of the risk of dependency, but rather to protect one's family against the risk of becoming dependent in the future. Insurance is perceived as a way to reduce the burden on potential informal caregivers. Such results lead us to think that the French insurance market for LTC is not limited by potential phenomena of intra-family moral hazard, which could be another explanation for its dynamism.

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