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32 Long-term care insurance across Europe

► Overall, relatively few 50+ Europeans hold private long-term care insurance (LTCI) policies
► There are large country-specific variations in LTCI coverage rates that are mainly related to differences in the institutional design of long-term care provision
► Education, income, widowhood, good subjective health status, and chronic conditions are positively related with the demand for LTCI policies

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32.1 Demand and supply for long-term care insurance in Europe

Population aging is one of the main challenges for most Western countries. The number of older individuals will increase substantially and some of the extra years of life might be spent with some level of dependency requiring care. However, it is unclear if the need for long-term care will necessarily increase to the same extent as the number of older citizens, because compression of morbidity (if any) may play a mitigating role. At the same time, changes in the family structures – with more childless households or more mobile children – will require the enhanced provision of formalised care arrangements. An important question in many countries is how to adapt the provision of long-term care (LTC) to the changing needs of their aging populations. In this context, long-term care insurance (LTCI) plays a fundamental role. In contrast to acute care needs, LTC needs can require years of medical, social and financial requirements. Despite this looming financial risk in old-age, it is known that purchase rates of private LTCI policies are low (Brown & Finkelstein 2009). This could be due to a lack of demand (e.g. because of a preference for informal care by daughters, as stressed in chapter 33 in this volume) or due to a lack of supply (e.g. because insurance companies are concerned about adverse selection or even aggregate longevity risks).

In order to derive strategies for mitigating financial problems in the provision of LTC, a comprehensive study of the dispersion and utilisation of LTCI is a necessary first step. The goal of this chapter is to give empirical insights into the structure of long-term care insurance coverage across Europe using SHARE. In particular, we examine the cross-country variation in LTCI coverage using the newly introduced question HC 116 (*Do you have any of the following private or public long-term care insurances?*). Our main focus lies on the demand for private

supplementary LTCI, particularly in those countries where non-negligible fractions of households hold such policies.

We find large country-specific variations in LTCI coverage rates. This is in accordance with the differing institutional LTC arrangements in Europe which create different incentive structures for the demand for private insurance. In France and Israel, there exist quite developed markets for such insurance policies, whereas in the other European countries under scrutiny, only a small share of people are privately insured against the risks of needing long-term care. We find that income and education are important determinants of the probability of holding a private LTCI policy. Moreover, being widowed is positively related to having an insurance policy. The effect of health is ambivalent: while reporting excellent or very good subjective health is positively correlated to being insured, suffering from a chronic condition is also positively associated with LTCI ownership. We also analyse whether the low holding of LTCI policies in some countries is due to supply-side constraints or to differences in socio-demographics. We conduct a policy thought experiment and decompose differences in market shares between countries into supply side factors, i.e. institutional constraints, and different socio-demographic characteristics which are related to demand. The main result of this exercise is that most of the differences in observed market shares would vanish if the supply structure was similar.

32.2 Long-term care insurance: theoretical and empirical economic research

LTC may be defined as care for people who need support in activities of daily living over a longer time span. Persons receiving LTC have lost their autonomy in conducting activities like moving around the house, personal hygiene or dressing. Help is then provided by family members, friends or (semi-)skilled caregivers and nurses (Colombo et al. 2011). The demand for and provision of LTC as well as its financing systems show great diversity across Europe. For example, according to recent OECD data the share of LTC recipients (defined as individuals receiving LTC by paid providers, including non-professionals receiving cash payments under a social programme) varies notably across the countries surveyed in SHARE. In the Netherlands, Israel and Switzerland around 20 per cent of the population aged 65 and older receive LTC according to this definition in 2011. The shares for the Czech Republic, Denmark, France, Germany, Luxembourg and Sweden lie between twelve per cent and 17 per cent. In Spain, Slovenia, Estonia and Italy less than ten per cent of the older population receive this kind of care. With the exception of Slo-

venia, where institutionalised care outnumbers home care, in all other countries more than half of the care recipients are cared for at home in 2011 (OECD 2013). Further country-specific arrangements of LTC systems may relate to the source of funding (by taxes or insurance contributions), entitlement to LTC benefits (universal or means-tested) or level of public LTC coverage (single systems or multiple benefits/services/programmes) (Kraus et al. 2010, Colombo et al. 2011).

Figure 32.1 shows public LTC expenditures as a share of GDP for the countries which are analysed in this article. Care-related public spending varies to a great extent between countries. While in Sweden and the Netherlands between 3.5 and four per cent of GDP is spent on public LTC provision, expenditure in the Czech Republic and Israel is less than 0.5 per cent. Hence incentive structures to buy additional private long-term care insurance may vary as well.
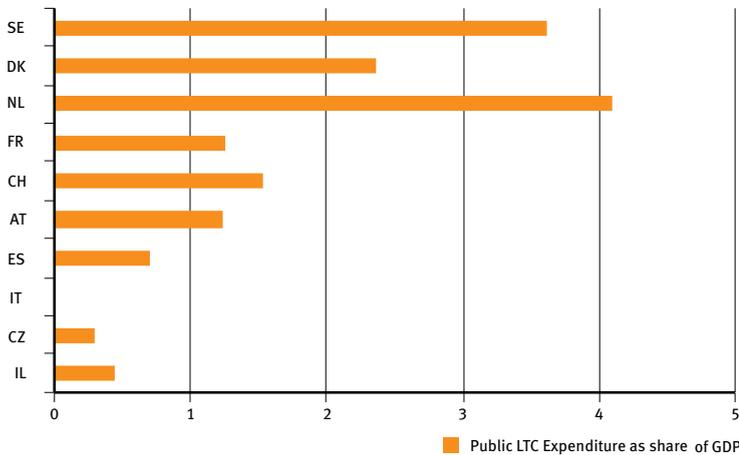

Figure 32.1: Share of public expenditure on LTC as a percentage of GDP, 2012 (2010 for Israel)
Notes: No data available for Italy
Source: OECD Health Data, data extracted on 11 Nov 2014 13:08 UTC (GMT) from OECD.Stat

The role of private LTCI is especially interesting in the context of potential future financing challenges of LTC. The merit of private care insurance is ambivalent – on the one hand it will provide an important supplement to public expenditure and ease the potential pressure on government budgets, on the other hand, private financing of care might be difficult and thus, a less efficient way to ensure universal and sufficient coverage in the population, for example due to selection problems (Colombo et al. 2011).

Alternative explanations for the low demand for additional LTCI purchase in countries where a market for such policies exists are discussed in the litera-

ture. Frequently listed explanations are asymmetric information in the insurance market (like adverse selection and moral hazard), the complexity of insurance contracts, uncertainty about the future costs of LTC and reforms of LTC institutions, individuals' myopia in assessing the financial risk for LTC, competing financial priorities, as well as the availability of potential substitutes for care provision (like public coverage, family or friends) (Pestieau & Ponthière 2010, Colombo et al. 2011). Not many empirical studies that examine the determinants of buying LTCI policies exist for European countries.

32.3 Data and descriptive results

The 5th wave of SHARE introduced a new question on long-term care insurance as part of the Health Care Module. The question was not asked in Germany and in some other countries where no market for private long-term care insurance exists (i.e. Belgium, Estonia and Slovenia). We exclude data from Luxembourg – even though the question was asked, because post-validation revealed that no private LTCI products are available. Thus we are able to discuss and compare data for the following ten countries: Austria, the Czech Republic, Denmark, France, Israel, Italy, the Netherlands, Spain, Sweden and Switzerland. The generic question on long-term care insurance in SHARE Wave 5 is "*Do you have any of the following public or private long-term care insurances?*" In case the question is unclear, the interviewer is instructed to add the following text: "*Long-term care insurance helps covering the cost of long-term care. It generally covers home care, assisted living, adult day-care, respite care, hospice care, and stays in nursing homes or residential care facilities. Some of the long-term care services might be covered by your health insurance*". Respondents then can report one or more of the following answer categories: '*Public', 'Private mandatory', 'Private voluntary/supplementary', 'None'.* Due to the country-specific care arrangements and their different levels of public and private coverage, the given categories slightly vary between country questionnaires. In Austria, France, Israel and Switzerland there is no option to report being covered by public LTCI. The Danish and Swedish surveys do not distinguish between private mandatory and private voluntary LTCI but only offer the category 'private' insurance. In Austria and Switzerland the question concentrates solely on holding a private LTCI policy. Respondents were asked if they own any private care insurance and could opt 'yes' or 'no'. Moreover, in the Swedish version of the questionnaire the translation of the question does not perfectly cover the subject-matter of interest. Swedish respondents were asked if they have a public or a private 'hälsovårdsförsäkring' – which is mostly equivalent to 'health care insurance'. The option to choose having no LTCI was not available in Sweden.

Before we report the respondents' coverage with private voluntary LTCI policies we would like to take a quick look at the fraction of missing answers. The share of persons refusing to give an answer or answering 'I do not know' varies across countries. We find low rates of these missing values in Austria, Denmark, France, Italy and Spain (less than 1 %). Refusals and 'Don't know' answers are slightly more common in the Czech Republic and Sweden (1.13 % and 2.27 %). The share of missing values is highest in Israel, the Netherlands and Switzerland (between 5.98 % and 6.73 %). We treat few (N=15) implausible cases where respondents stated simultaneously to have and not to have LTC insurance also as missing.

With the exceptions of Austria, Sweden and Switzerland, where respondents cannot choose to answer having no LTCI coverage at all (i.e. neither public nor private), in the remaining countries respondents mostly report to hold no such insurance. In France and Italy more than 80 per cent state that they do not have any insurance, in Denmark and Spain we find shares exceeding 70 per cent. More than half of the respondents in the Czech Republic claim to have no LTCI policy. Shares are lower in Israel and the Netherlands, with approximately 25 per cent.

In the following we take a closer look at the cross-country variation of the coverage with private supplementary LTCI policies. To give a descriptive overview regarding our main focus, Figure 32.2 shows the weighted percentage share of respondents who state holding a private voluntary LTCI policy. As hypothesised, we observe a very diverse distribution across countries depending on the institutional context. In Israel we find the highest coverage rate with over 32 per cent of the surveyed persons stating to own a private supplementary LTCI policy. The second greatest share is found in Switzerland with 19.37 per cent of the respondents owning such insurance policies. France, the Netherlands and Sweden yield results of 14.67 per cent (NL), 13.95 per cent (SE) and 13.41 per cent (F), respectively. The remaining countries show population shares of well below ten per cent claiming to have signed a LTCI contract. In the Southern European countries the shares are 4.94 per cent for Spain and 2.63 per cent for Italy. The lowest coverage rates are found in the Czech Republic (2.28 %), Denmark (1.83 %) and Austria (1.45 %).

Before analysing potential determinants for holding a private care insurance policy, a major concern of our article is to compare the self-reported coverage shares we find in SHARE data with the most recent information on the development of the long-term care insurance markets in the respective countries. Bearing in mind the country-specific European institutional care arrangements with highly different financing sources, organisational depths, eligibility criteria and levels of development, some of the descriptive statistics we stated above might demand more detailed exploration. Due to a relatively small market penetration
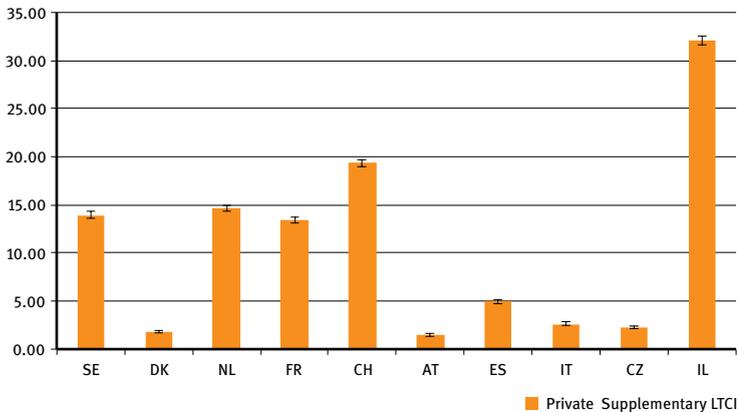
Figure 32.2: Private supplementary LTCI, share of valid answers in per cent with standard deviations
Notes: Overall N=41,899. Observations in the individual countries: SE – 4,358; DK – 4,029; NL – 3,813; FR – 4,282; CH – 2,745; AT – 4,153; ES – 6,264; IT – 4,588; CZ – 5,427; IL – 2,240
Source: SHARE Wave 5 release 0 using calibrated individual weights, authors' own calculations

in most European countries, aggregate information on the number of private LTCI holders is still scarce. Nevertheless, it is possible to make some comparisons between the reported shares of LTCI in SHARE and existing figures or general statements on the development of those markets. We are providing an overview of this exercise in Table 32.1. In this table, we report the available information on the depth of private LTCI markets from official reports and the corresponding sources and year of the report. We identify six countries in which the most recent market information available seems to correspond to the LTCI coverage reported in SHARE: Austria, Denmark, the Czech Republic, Italy, France and Israel. Official figures on LTCI holders are documented best for countries with developed markets for this kind of insurance (i.e. Israel and France). In those countries we also find relatively high shares of private insurance holders among the SHARE respondents. On the other hand, the low fraction of LTCI holders reported in SHARE for Austria, Denmark, the Czech Republic, and Italy coincides with the information that in those countries markets are still very thin. In the remaining countries, private LTCI coverage seems to be reported too frequently by SHARE respondents compared to the available information on the development of the respective insurance markets. These countries are Spain, the Netherlands and Switzerland.

Finally, we consider the survey results for Sweden as an 'intermediate' case in the scope of our validation process. 13.95 per cent of SHARE respondents report private LTCI ownership, which seems fairly high in a country where the

state provides a comprehensive public solution for care needs (Fukushima et al. 2010, Karlsson et al. 2010). However, as mentioned earlier, in the Swedish version of the questionnaire, the translation of the relevant question does not perfectly match the subject-matter of interest. Swedish respondents were asked if they have a private 'hälsovårdsförsäkring' – which is mostly equivalent to 'health care insurance'. Compared to recent official figures of private health care insurance coverage, answering behaviour in SHARE seems to be reliable (Svensk Försäkring 2014) but does not exactly correspond to our research question.

Table 32.1: Compilation of market statistics on LTCI

Country	Information on LTCI markets	Year	Source
AT	LTCI: 60,000 insured persons	2010	Kern & Lammer (2011)
	Market for private LTCI has expanded recently - with eleven insurance companies offering a stand-alone LTC policy in 2012 compared to six providers in 2007	2012	Liepold & Hager (2012)
DK	Private Health Insurance: 1.094277 insured persons of which are 10.6 % personally signed schemes and of those are 80.1 % care insurances	2010	Danish Insurance Association (n.d.)
FR	LTCI: 5.5 million insured persons	2012	AXA (2012)
ES	LTCI: 17,500 insured persons	2010	SCOR Global Life (2012)
IL	"A high market penetration with over 4 million insured" (appr. 54 %)	2012	SCOR Global Life (2012: 39)
IT	No official data on private expenditure, including out-of-pocket expenditure for LTC or insurance are available	2010	Tediosi & Gabriele (2010)
NL	"No substantial demand for private LTC insurance"	2013/ 2014	Van den Berg (2013/2014: slide no. 9)
SE	Private health care insurance: ~ 573,000 insured persons	2013	Svensk Försäkring (2014)
CH	"Private LTC insurance is not a success in Switzerland"	2012	SCOR Global Life (2012: 31)
CZ	No information on LTCI, and only very limited role of private health insurance in general (0.1 % of the population covered by private insurance)	2011	Roubal & Šídlo (2014)

32.4 The demand for private long-term care insurance

32.4.1 Empirical strategy and measures

In the following section we aim to identify socio-economic and health characteristics which are related to the possession of a private supplementary long-term care insurance policy. The main sample of analysis is based on data from Austria, the Czech Republic, Denmark, France, Israel and Italy. Additionally, we supplement SHARE Wave 5 data with variables from previous waves which did not change between survey years (e.g. gender, education). We estimate a probit regression model for which we define the following variables.

Dependent Variable: A dummy variable indicates if a respondent owns a private supplementary/voluntary LTCI policy.

Independent Variables: We include information on socio-economic characteristics such as age (divided into four age groups: "*under 55*", "*55 to 64*", "*65 to 74*" and "*75 or older*"), gender, current employment status *("retired", "working", "not working"* – where "working" contains employed or self-employed persons and "not working" covers unemployed, permanently sick or disabled people, homemakers or others*),* education (based on the ISCED-1997 scale with categories *"no/primary education", "secondary education"* and *"tertiary education"*) and weighted household income, which is defined as the combined monthly net income of all household members of the year before (i.e. 2012). We adjust the local currencies by applying purchasing power adjusted price indices provided by Eurostat and in a second step we construct the equivalence scale income by dividing the overall household income by the square root of the number of household members. In addition, our model contains variables reflecting the family background which might influence a person's decision to purchase an insurance policy. These include current marital status *("married", "single", "divorced", "widowed")*, the number of household members as well as the information whether the respondent has children (as dummy variable *"yes/no")*. Moreover, we analyse the influence of a person's health situation on the decision to hold a LTCI policy. We use the self-rated health status *("excellent/very good", "good", "fair", "poor")* and – as a more objective health measure – an indicator if the respondent is suffering from any chronic conditions (dummy variable if the respondent reports any chronic or long-term health problem, illness or disability including mental health problems). Additionally, we use a binary variable indicating if the respondent received home care (e.g. any professional or paid services due to a physical, mental, emotional or memory problem in their own home) or nursing

home care (been temporary or permanently in a nursing home/residential care facility overnight) within the last twelve months. Finally, we include a dummy variable for each country to control for unobserved heterogeneity caused by potential country-specific effects. In Table 32.2, we report summary statistics for the explanatory variables of the regression model.

Table 32.2: Summary statistics for the estimation sample

Variable	Mean in % (SD)	N
Male (Ref.=female)	43.29	25,574
Age group		25,484
<55	12.50	
55–64	34.23	
65–74	31.37	
75+	21.90	
Education ISCED-1997		25,040
No/primary education	22.72	
Secondary education	54.83	
Tertiary education	22.44	
Health self-rated		25,488
Excellent/very good	28.61	
Good	34.76	
Fair	25.54	
Poor	11.10	
Health chronic illness (=yes)	48.04	25,487
Care received last year (=yes)	10.24	25,377
No. of household members	2.15 (0.99)	25,561
Marital status		25,187
Married	69.77	
Single	5.50	
Divorced	9.46	
Widowed	15.27	
Employment status		25,204
Retired	60.09	
Working	26.53	
Not working	13.38	
Household income (log)	7.28 (1.21)	20,824
Child (=yes)	91.62	25,466

Notes: Sample: DK, FR, AT, IT, CZ, IL
Source: SHARE Wave 1 release 2.6.0, Wave 2 release 2.6.0, Wave 4 release 1.1.1, Wave 5 release 0

32.4.2 Results

Results from the probit regression are shown in Table 32.3. We report the average marginal effects of the dependent variables on the probability to possess a private LTCI policy in Austria, the Czech Republic, Denmark, France, Israel and Italy. Overall, we do not find significant differences in the probability to own a private LTCI policy between men and women. However, we estimate a slightly higher probability of LTCI ownership among the 55 to 64-year old compared to respondents aged 55 and younger. There is no significant effect for those older than 65. Education has a positive effect on the likelihood to have a supplementary insurance. This could be due to an increased awareness of the need to insure the additional risks privately. We do not find significant differences in the likelihood to own private LTCI policies between married, single and divorced respondents. However, widowed individuals are substantially more likely to be privately insured. This could be related to the fact that widows and widowers do not have a partner anymore that could provide informal care. Thus, there is an increased need for formal care that can be (partially) financed by a private insurance. At the same time, widowed respondents might have cared for the deceased partner and thus have an increased awareness that care might be needed at some point in their life. We do not find an effect of whether the respondent has any children on the purchase of private LTCI. Moreover, compared to retired individuals, those in the category 'not employed' have a lower likelihood to own a private insurance. Since this category is comprised of so many different subgroups, the effect is hard to interpret. Self-rated health shows an interesting and at first glance counterintuitive effect: those rating their health as 'excellent' or 'very good' are much more likely to buy private insurance compared to those in worse health conditions. Several mechanisms are possible to explain this relation: on one side, unhealthy individuals might abstain from demanding LTCI policies because they might assume that their premiums will be very high due to their bad health condition. On the other side, the effect could be related to risk preferences which on the one hand determine health status and on the other hand might drive the purchasing of private insurance ("advantageous selection"). Interestingly, for chronic conditions we find the reverse effect: conditional on subjective health those suffering from chronic health problems are slightly more likely to be privately insured which could be an indication for adverse selection based on health. The fact if someone received care in the past twelve months seems to be unrelated to coverage with a private LTCI policy. Income has a significantly positive effect on buying an insurance contract. The number of household members is negatively related to holding a private LTCI policy which could be an indication of a substitution effect: if more household members are present who could potentially provide informal care the need for private insurance is lower.

Table 32.3: Probit regression on owning a private LTCI policy

Variables	Marginal effects	Standard error
Male (Ref.=female)	−0.0017	(0.0033)
Age group (Ref.= <55)		
55–64	0.0107**	(0.0054)
65–74	0.0090	(0.0067)
75+	−0.0072	(0.0070)
Education ISCED-1997 (Ref.=no/primary education)		
Secondary Education	0.0056	(0.0040)
Tertiary Education	0.0101**	(0.0049)
Marital status (Ref.=married)		
Single	−0.0034	(0.0073)
Divorced	−0.0031	(0.0054)
Widowed	0.0185***	(0.0058)
Children (Ref.=no child)	−0.0091	(0.0069)
Employment status (Ref.=retired)		
Working	0.0055	(0.0052)
Not working	−0.0238***	(0.0045)
Health self-rated (Ref.= excellent/very good)		
Good	−0.0133***	(0.0045)
Fair	−0.0197***	(0.0052)
Poor	−0.0295***	(0.0063)
Health: chronic illness (Ref.= no illness)	0.0063*	(0.0037)
Care received (Ref.=not received)	0.0031	(0.0059)
Household income (log)	0.0046***	(0.0011)
No. of household members	−0.0036*	(0.0020)
N	**20,130**	
Pseudo-R2	**0.22**	

Significance: *** = 1%; ** = 5%; * = 10%
Notes: Controlled for country fixed-effects
Source: SHARE Wave 1 release 2.6.0, Wave 2 release 2.6.0, Wave 4 release 1.1.1, Wave 5 release 0

32.5 A policy (thought) experiment

In this section we investigate whether the low holding of LTCI policies in some countries is driven by institutional supply-side constraints or by different demand structures based on observable characteristics. As already indicated in the data section above, the LTCI institutions differ substantially between countries. While quite well developed markets exist in France and Israel, market development is rather limited in Austria, Denmark, the Czech Republic and Italy. More specifically, in Israel three types of private LTCI are offered: 1) Commercial individual LTCI, 2) Commercial collective LTCI, 3) Collective LTCI through health plans. 60 per cent of the population (including children) have a private LTCI policy either indirectly through their health plan or directly from a commercial insurance company. Most insurance holders (88 %) have collective insurance (provided by their health plan). In France, private LTCI fills a gap in care provision as the public system covers only parts of the costs incurred by the receiver. More than 20 insurance companies offer around 40 different policies. Around 5.5 million individuals are covered by a policy (approximately 10 % market penetration). Compared to Israel and France the supply of LTCI policies is not well developed in Austria, Denmark, Italy and the Czech Republic and few insurance policies are offered (references are given in Table 32.1).

The question we would like to answer in this section is the following: what would the LTCI coverage be if households in Austria (or Denmark, Italy and the Czech Republic) faced the same market conditions as households in France or Israel? For this purpose we estimate the demand equation as in the previous section only for Israel and France and use those parameter estimates to predict demand in Austria, Denmark, the Czech Republic and Italy. We then take France (resp. Israel) as the reference country and predict the probability of holding a LTCI policy for Austria (and Denmark, Italy and the Czech Republic) with the parameter estimates of France (resp. Israel). We can decompose the difference of the market shares, for example, between France and Austria into two parts: the first component is the difference between the market share in France and the predicted market share in Austria (using the parameter estimates of France). The second component is the predicted market penetration of Austria minus the observed market share in Austria. If s_i denotes the market penetration in country I the decomposition can be stated as:

$$S_{France} - S_{Austria} = \left(S_{France} - S^{predicted}_{Austria}\right) + \left(S^{predicted}_{Austria} - S_{Austria}\right)$$

The first term can be interpreted as the difference in market penetration due to a different composition of the population (based on observable characteristics), the second term is the difference in market shares due to differences in market conditions (i.e. supply side and institutional factors). In order for this decomposition to be valid, we have to assume that individuals from different countries but with identical characteristics have the same demand (preferences) for LTCI policies. Therefore difference in demand between identical individuals in different countries can be – in our interpretation – solely attributed to differences in supply conditions. This assumption usually underlies such kind of policy experiments.

In Table 32.4, the results of the decomposition are displayed. The second column contains the difference between the reference country and the country of interest. Column three and four show the result of the decomposition. The results indicate that the differences due to different distributions of socio-economic variables are negligible, i.e. most of the effects in column two are quite small (exceptions are the differences between Israel and Austria and Israel and Denmark). This means that differences in the observable characteristics do not explain the differences in market shares between these country pairs. Interestingly, the difference in the market shares can largely be explained by "structural" differences between the countries. Comparing the results from column two and four shows that the difference in market shares observed between France and Israel on the one hand and the four other countries on the other hand would almost completely disappear if the institutional contexts converged. In other words: Denmark, Italy, the Czech Republic and Austria might have much higher utilisation of private LTCI if the supply conditions as in France or Israel existed there.

Table 32.4: Results of the policy experiment

Ref - i	$S_{Ref} - S_i$	$S_{Ref} - S^{predicted}_i$	$S^{predicted}_i - S_i$
F - DK	0.1118	−0.0174	0.1292
F - AT	0.1146	−0.0272	0.1418
F - IT	0.1023	−0.0185	0.1208
F - CZ	0.1141	−0.0174	0.1438
IL - AT	0.2875	−0.0789	0.3664
IL - IT	0.2752	0.0448	0.2304
IL - DK	0.2847	−0.1043	0.389
IL - CZ	0.287	0.0156	0.2714

Notes: Decomposition of the differences in market shares; Reference countries: France and Israel
Source: SHARE Wave 1 release 2.6.0, Wave 2 release 2.6.0, Wave 4 release 1.1.1, Wave 5 release 0

32.6 The importance of market conditions

In this paper, we analysed the coverage with private supplementary long-term care insurance among the older population in ten European countries. We find a large dispersion of coverage rates among those countries. While purchasing rates of private LTCI policies are high in France and Israel, where markets for those types of insurances are well developed, coverage rates are much lower among other countries. This is mostly due to the fact that the institutional frameworks for the provision of long-term care are diverse. Some states provide extensive public coverage, like, e.g. Sweden and Denmark, which makes the purchase of private insurance less necessary. On the other hand, Southern and Eastern European countries also show low shares of LTCI holders among the older population even though less formal care is provided by the state there. Here formal care is very often substituted by informal family care.

Looking into the determinants of LTCI purchase, we find that coverage increases with education and income. Widowed individuals are more likely to own LTCI and the number of household members decreases LTCI purchase. With respect to subjective and objective health we find contrasting results. While individuals in excellent and very good subjective health are more likely to own LTCI, those with a chronic condition are likewise more likely to own an insurance policy. Overall, the patterns of LTCI holdings seem plausible and reveal a diverse but consistent pattern. In a small policy experiment we decompose the differences in market shares between relatively well developed markets (France and Israel) and less developed markets (Austria, Denmark, the Czech Republic and Italy) into two components: one explained by differences in observable characteristics and the other related to differences in market conditions. Interestingly, this exercise reveals that differences in observables are not the answer to explain the differences in LTCI coverage rates. The market shares in Austria, Denmark, the Czech Republic and Italy would almost completely converge to coverage rates in France and Israel if the same market conditions prevailed.

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