

Appendix for online publication only

Appendix A. Definition of variables

Table A1 . Explanatory variables in the stock-sampling duration model

Categories	Definition
Socio-demographic variables	<ul style="list-style-type: none"> ○ Age and age squared. ○ Gender ○ Level of education. Education is categorized in four levels using the 1997 International Standard Classification of Education (ISCED): primary, lower secondary, upper secondary, post-secondary non tertiary and tertiary education. ○ Living alone ○ Living in a rural area
Economic-related variables	<ul style="list-style-type: none"> ○ Household income refers to annual income (in euros) net of taxes collected by all household members. Income was adjusted for the purchasing power of different currencies using the PPP exchange rate of the year in which the “Main Questionnaire” was performed. Income was divided by the square root of the number of household members to adjust for household size. ○ Household net worth is defined as the value of total assets (the total amount of financial assets plus the total amount of non-financial assets; note that this indicator only takes into account the value of dwellings from non-financial assets) minus the total value of outstanding liabilities as is expressed in the same terms as household income ○ Being employed at the time of the survey.
Health status	<ul style="list-style-type: none"> ○ Self-reported health status¹. We define five binary variables corresponding to the following categories: excellent, very good, good, fair and poor. ○ Chronic conditions. We define seven binary variables corresponding to the following pathologies: Alzheimer, diabetes, cancer, high blood pressure, lung disease, stroke and heart attack. ○ Number of days stayed at hospital during last year for surgery or medical tests. ○ Number of days stayed at hospital during last year due to mental health problems. ○ Number of days stayed in other institutions other than a hospital or a nursing home during last year (i.e., institutions for rehabilitation, convalescence) ○ Number of visits to general practitioner during last year.
Smoking	<p>[SHARE questions]: Have you ever smoked cigarettes, cigars or a pipe daily for a period of at least one year? and Do you smoke at the present time?</p> <p>We define two binary variables:</p> <ul style="list-style-type: none"> ○ Current smoker: takes the value 1 if the respondent is smoking at the time of the survey, 0 otherwise. ○ Past smoker: takes the value 1 if the respondent has smoked at least one year, but is not currently smoking, 0 otherwise.
Drinking alcohol	<p>[SHARE questions]: I am now going to ask you a few questions about what you drink. During the last 3 months, how often have you drunk any alcoholic beverages, like beer, cider, wine, spirits or cocktails?</p> <p>We define two binary variables corresponding to the following categories</p> <ul style="list-style-type: none"> ○ Not having drunk during the last 3 months or less than one per month (teetotal) ○ Drinking every day or 5-6 times per week
Sedentary lifestyle	<p>[SHARE questions]: We would like to know about the type and amount of physical activity you do in your daily life. How often do you engage in vigorous physical activity (such as sports, heavy housework, or a job that involves physical labour) or in activities that require a moderate level of energy (such as gardening, cleaning the car, or doing a walk)?</p> <p>We define a binary variable “sedentary lifestyle” that takes the value 1 if the respondent is engaged in a vigorous or moderate activity “one or three times a month” or “hardly ever, or never” .</p>
Weight	<p>Using body mass index (BMI) provided by SHARE we define the following categories and include the variable “normal weight” in the regression.</p> <ul style="list-style-type: none"> ○ Underweight: if BMI is lower than 20. ○ Normal weight: if BMI lies between 20 and 24.9 ○ Overweight: if BMI lies between 25 and 29.9 ○ Obese: if BMI is greater than 30.
Memory test	<p>Memory was tested using a standard version of two word-list learning tests (Brandt, 1991) with immediate and delayed recall.</p> <p>The interviewer read a list of 10 words. In the immediate recall, participants are asked to recall as many words as possible in one minute, immediately after hearing them. In the delayed recall, participants are asked to recall as many words as possible in one minute, after several other interview questions. Each word correctly recalled scores 1 point.</p> <p>Finally, the episodic memory score is calculated by adding up the number of target words recalled immediately, and the number of target words recalled after the delay. Thus, the score ranges between 0 and 20 with a high score indicating good cognitive function.</p>

¹ Self-reported health is a good indicator of morbidity and a powerful predictor of future health and mortality (Burström and Fredlund, 2001; Van Doorslaer and Gerdtham (2003)).

Table A2. Explanatory variables in the first-stage regression for biased survival expectations

Categories	Definition
Socio-demographic variables	<ul style="list-style-type: none"> ○ Age and age squared. ○ Gender ○ Level of education. Education is categorized in four levels using the 1997 International Standard Classification of Education (ISCED): primary, lower secondary, upper secondary, post-secondary non tertiary and tertiary education. ○ Marital status (married/cohabiting, single, separated/divorced, widow) ○ Living alone ○ Living in a rural area
Economic-related variables	<ul style="list-style-type: none"> ○ Household income refers to annual income (in euros) net of taxes collected by all household members. Income was adjusted for the purchasing power of different currencies using the PPP exchange rate of the year in which the “Main Questionnaire” was performed. Income was divided by the square root of the number of household members to adjust for household size. ○ Household net worth is defined as the value of total assets (the total amount of financial assets plus the total amount of non-financial assets; note that this indicator only takes into account the value of dwellings from non-financial assets) minus the total value of outstanding liabilities as is expressed in the same terms as household income ○ Relation with economic activity at the time of the survey (employed, unemployed, retired, houseworking).
Health status	<ul style="list-style-type: none"> ○ Number of days stayed at hospital during last year for surgery or medical tests. ○ Number of days stayed at hospital during last year due to mental health problems. ○ Number of days stayed in other institutions other than a hospital or a nursing home during last year (i.e., institutions for rehabilitation, convalescence) ○ Number of visits to general practitioner during last year.

Table A3. Dependent variables in the biased survival models

Categories	Definition
Smoking	As defined in Table A1
Drinking alcohol	As defined in Table A1
Sedentary lifestyle	As defined in Table A1
Social contacts	<p>[SHARE question] Which of the activities listed on this card - if any - have you done in the last twelve months?</p> <p>We define a binary variable “social contacts” that takes the value 1 if the respondent has participated in the last month in voluntary or charity work, gone to sport club or social club, taken part in political/community/religious organization or attended to educational or training courses, 0 otherwise.</p>
Locus of control	<p>[SHARE question] How often do you feel that what happens to you is out of your control?</p> <ul style="list-style-type: none"> ○ Often ○ Sometimes ○ Rarely ○ Never
Financial assets	<p>[SHARE question]: The next questions ask about a number of different kinds of savings or investments that you may have.</p> <p>We define five binary variables corresponding to the following assets:</p> <ul style="list-style-type: none"> ○ Bank accounts ○ Government or corporate bonds ○ Stocks or shares listed or unlisted in the stock market ○ Funds or managed investment accounts: mostly in stocks, half in bonds and half in stocks, mostly in bonds. ○ Retirement accounts ○ Life insurance policies <p>[SHARE question] Do you have mortgages or loans on this property?</p> <p>We define a binary variable “mortgage” that takes the value 1 if the respondent answers in the affirmative to previous question, 0 otherwise.</p> <p>[SHARE question] The next question refers to money that you may owe, excluding mortgages or money owed on land, property or firms (if any). Looking at card 36, which of these types of debts do you currently have, if any?</p> <p>We define the binary variable “Other debts (excluding mortgage)” if the respondent reports having any debt on cars and other vehicles (vans/motorcycles/boats, etc.), debt on credit cards / store cards, loans (from bank, building society or other financial institution), debts to relatives or friends, student loans or overdue bills (phone, electricity, heating, rent).</p>
Risk taking attitude	<p>[SHARE question]: When people invest their savings they can choose between assets that give low return with little risk to lose money, for instance a bank account or a safe bond, or assets with a high return but also a higher risk of losing, for instance stocks and shares. Which of the statements on the card comes closest to the amount of financial risk that you are willing to take when you save or make investments?</p> <p>We define four binary variables corresponding to each answer:</p> <ul style="list-style-type: none"> ○ Take substantial financial risks expecting to earn substantial returns ○ Take above average financial risks expecting to earn above average returns ○ Take average financial risks expecting to earn average returns ○ Not willing to take any financial risks.

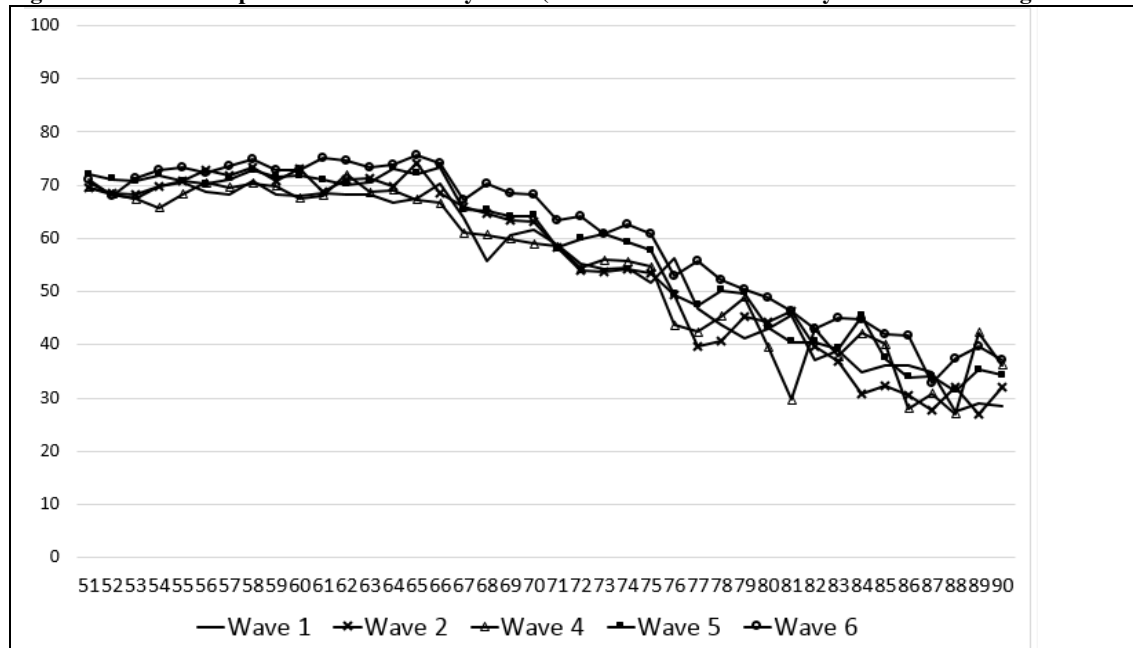
Table A4. Classification of countries

Countries have been group according to cultural similarities defined by the Lewis model (1996).

Group	Countries	Categorization
Group 1	Italy Spain	Multi-active countries: warm, emotional, loquacious and impulsive
Group 2	Belgium France	A bit further from multi-active countries
Group 3	Austria Denmark	Share characteristics from multi-active countries and linear-active countries
Group 4	Germany Sweden Switzerland	Linear-active countries, who are identified as factual, cool and decisive planners

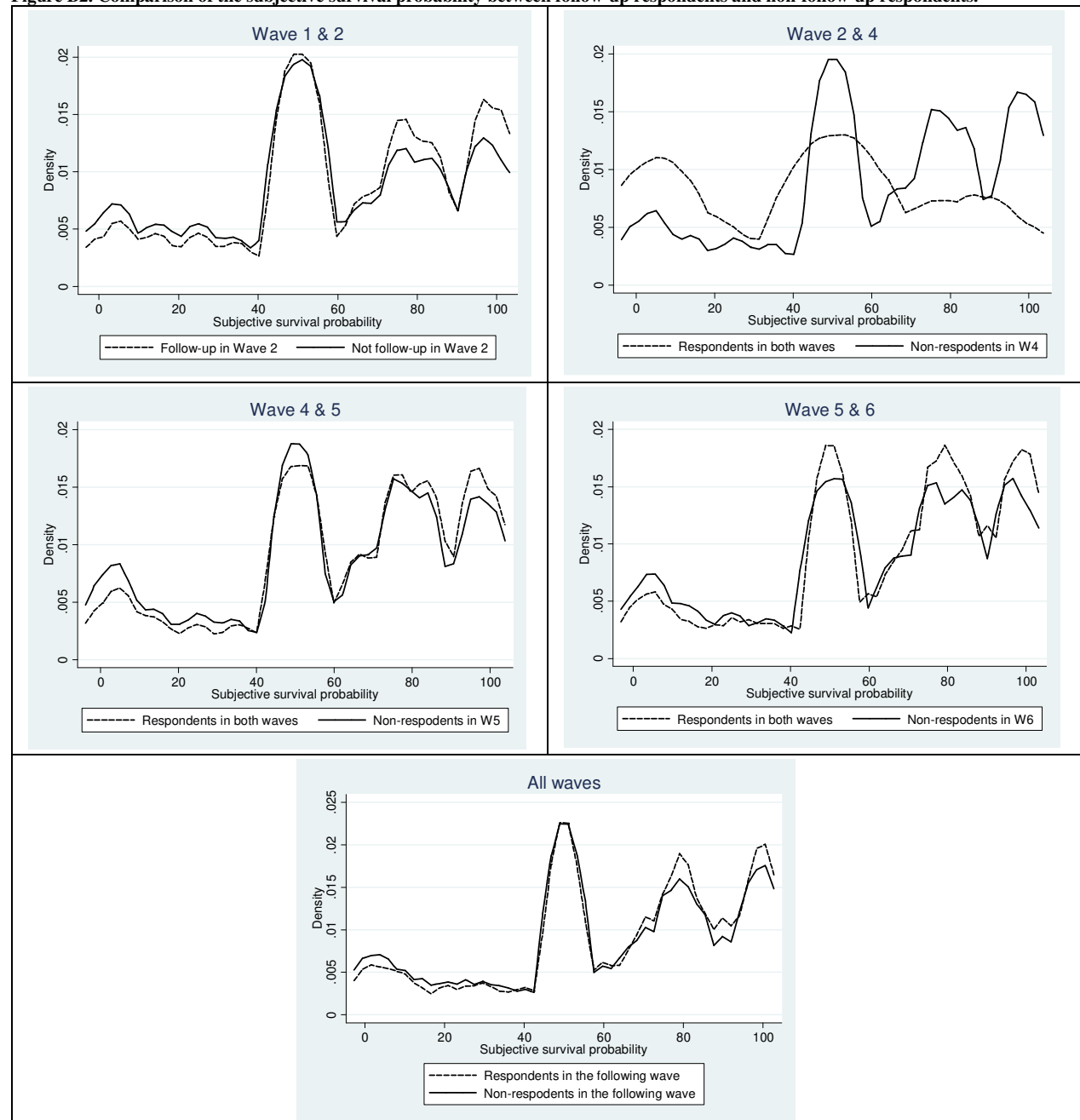
Appendix B. Descriptive statistics

Figure B1. Survival expectations over time by wave (What are the chances that you will live to be age T or more?)



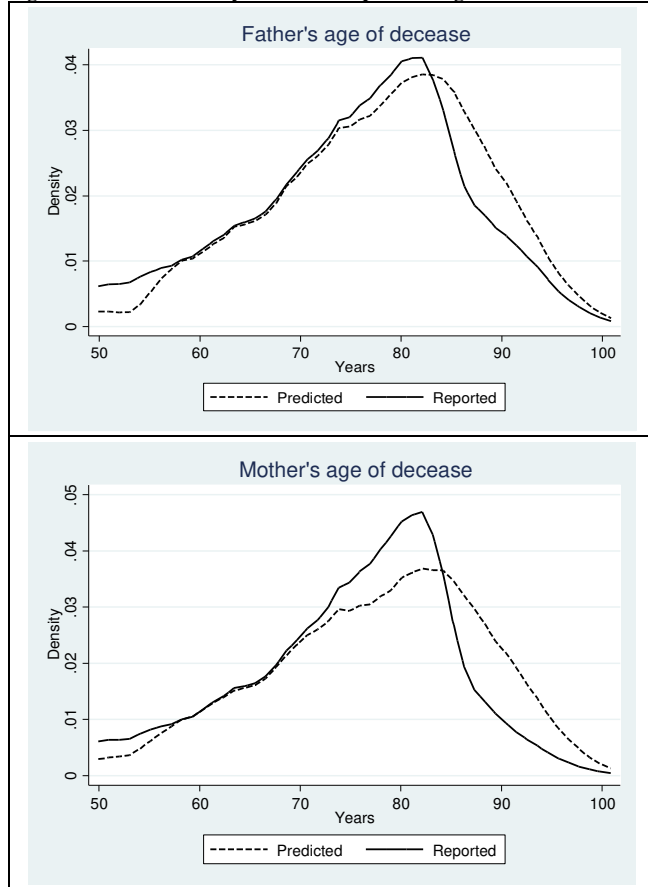
Note: This figure reports the probability of an individual subjective longevity attaining a target age. Using calibrated sampling weights. Target: T= 75 years if Age <65; T= 80 years if $65 \leq \text{Age} < 70$; T= 85 years if $70 \leq \text{Age} < 75$; T= 90 years if $75 \leq \text{Age} < 80$; Individuals aged 80 or older have been collapsed at age 90. In this case, we summarize the expectations of living to age 95 or older. Sample size: 21,384 for Wave 1; 21,741 for Wave 2; 32,405 for Wave 4; 42,495 for Wave 5; 38,295 for Wave 6.

Figure B2. Comparison of the subjective survival probability between follow-up respondents and non-follow-up respondents.



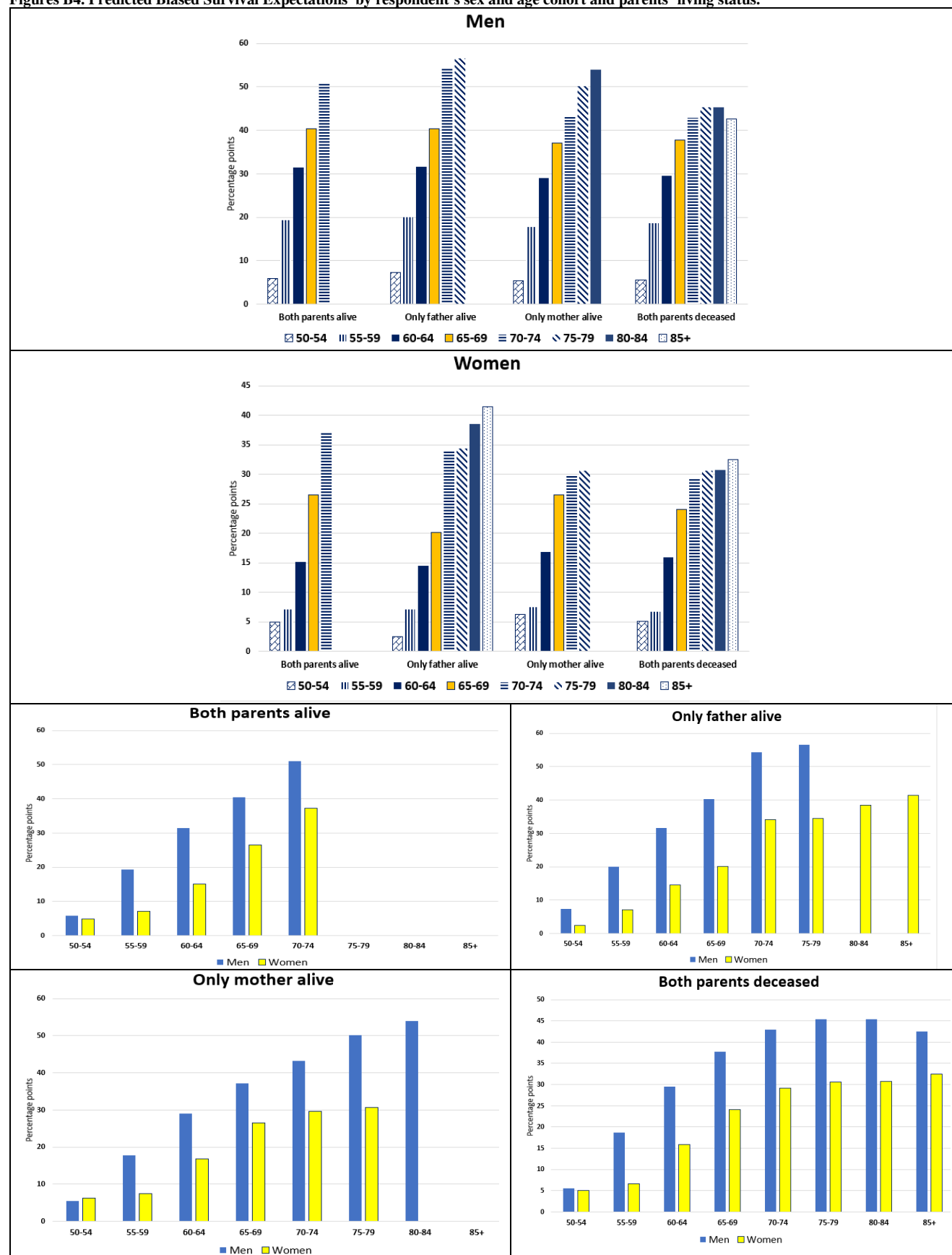
Each graph shows the kernel density function for the subjective survival probability reported by SHARE. Dashed line corresponds to the sample respondents who participate in two consecutive waves. Straight lines corresponds to the sample of respondents in one wave who disappear in the next one.

Figure B3. Kernel density function for parent's age of decease.



Note: Dashed line is used to represent the kernel density function of father's (mother's) age of decease for those fathers (mothers) who have died at the time of the survey. Straight line is used to represent the kernel density function of father's (mother's) age of decease for those fathers (mothers) who are still alive at time of the survey, and for whom age of decease has been predicted using multiple imputation. This technique allows predicting what age at decease for living parents would have been using information from the "Main Questionnaire". It requires two main assumptions: (i) the data must be missing at random, which is clearly the case because age at decease is missing for all living parents, and (ii) the reasons for the missing data must be captured by other variables that do not have missing values. As the age of decease is a continuous variable, and OLS imputation method has been chosen. We have used the deceased subsample and selected those variables for which parent's characteristics are also available. These variables are: (i) gender, (ii) age of the father/mother and age at the last survey for the deceased sample, (iii) number of children of the father/mother and number of children of the deceased, (iv) frequency of contact between respondent and father/mother and frequency of contact between the deceased and his/her children, (v) distance between father's/mother's household and respondent's household and distance between the deceased's household and his/her children, (vi) country and year fixed effects. To test the sensitivity of our results, we have selected five different random seed values, and added five different imputations to our main dataset. The results in these alternative cases were very similar to the original estimations.

Figures B4. Predicted Biased Survival Expectations by respondent's sex and age cohort and parents' living status.



Note : Predicted BSE are obtained from equation (3). The first two figures compare BSE according to respondent's age cohort and parents' living status. The other four figures compare LO by gender for the same age cohort and parent's living status.

Table B1. Design of the samples.

	Wave 1	Wave 2	Wave 4	Wave 5	Wave 6	Total
Initial sample	30,434	37,174	58,184	66,221	68,231	260,244
Select countries interviewed in all waves ^a	22,119	22,381	33,418	43,491	38,979	160,388
Select observations with not missing calibrated sampling weights ^b	21,384	21,741	32,405	42,495	38,295	156,320

^a Croatia not included in wave 1, 2, 4 and 5; Czech Republic not included in wave 1; Estonia not included in wave 1, 2 and 5; Greece not included in wave 4 and 5; Ireland not included in wave 1, 4, 5 and 6; Israel not included in wave 4; Hungary not included in wave 1, 2, 5 and 6; Luxembourg not included in wave 1, 2 and 4; Netherlands not included in wave 6; Poland not included in wave 1 and 5; Portugal not included in wave 1, 2 and 5; Slovenia not included in wave 1 and 2.

^b Calibrated sampling weights are missing for respondents younger than 50 years (i.e., age-ineligible partners of an age eligible respondent) and those with missing information on the set of calibration variables (i.e., age, gender and NUTS1 code).

	Wave 1 & Wave 2	Wave 2 & Wave 3-4	Wave 4 & Wave 5	Wave 5 & Wave 6	Total
Merging consecutive waves of SHARE (obtained from last row of previous table) ^c					
Survivors sample	14,493	13,933	24,515	32,559	85,500
Deceased sample	463	644	862	1,180	3,149
Not follow-up respondents	6,428	7,164	7,028	8,756	29,376
Total	21,384	21,741	32,405	42,495	118,025
Report subjective survival probability					
Survivors sample	13,427	12,842	11,364	30,227	67,860
Deceased sample	372	524	284	860	2,040
Not follow-up respondents	5,733	6,346	3,738	7,877	23,694
Total	19,532	19,712	15,386	38,964	93,594
Do not report subjective survival probability ^d					
Survivors sample	1,066	1,091	13,151	2,332	17,640
Deceased sample	91	120	578	320	1,109
Not follow-up respondents	695	818	3,290	879	5,682
Total	1,852	2,029	17,019	3,531	24,431
For the robustness checks					
Excluding erroneous responses to probabilistic question					
Survivors sample	2,847	2,478	2,187	21,494	29,006
Deceased sample	169	178	106	724	1,177
Total	3,016	2,656	2,293	22,218	30,183
Excluding focal responses for survival expectations' question: 0, 50 or 100					
Survivors sample	7,268	7,208	6,670	18,581	39,727
Deceased sample	198	253	163	552	1,166
Total	7,466	7,461	6,833	19,133	40,893

^c Resulting from merging two consecutive final sample datasets obtained in the previous table.

^d Missing, do not know, refusal.

Survivors sample: alive in the second wave; Deceased sample: died between both waves; Not follow-up respondents: only appear in one wave.

Table B2. Wave to wave retention rates of all wave 1 samples (%)

	Wave 1&2	Wave 2&3	Wave 3&4	Wave 4&5	Wave 5&6
Austria	74.4	71.3	74.3	78.3	81.4
Belgium	76.3	83.9	80.6	84.4	85.7
Denmark	77.0	80.2	85.2	89.6	88.3
France	67.0	76.2	82.4	72.5	71.1
Germany	55.1	73.6	77.6	68.3	89.5
Italy	71.4	87.1	84.8	88.0	89.3
Spain	68.6	83.3	80.1	89.2	88.2
Sweden	70.6	70.6	73.4	79.4	85.2
Switzerland	74.6	85.3	87.0	86.3	89.8
All countries	70.6	79.1	80.6	81.8	85.4

Source: Own work and Bergman et al. (2017)

Table B3. Test of equality of distributions. Comparison of the sample of follow-up respondents in two consecutive waves and the sample of non-follow-up respondents (participate in one wave, but disappear in the next one)

		Respondents in both waves	Non-respondents in the following wave	Test of equality of distributions ^a
Waves 1 &2	Mean.	62.44	57.89	1.257
	Std.Dev.	(29.20)	(30.35)	0.2086
	N	12,890	6,642	
Waves 2 &4	Mean.	46.02	62.79	-12.475
	Std.Dev.	(32.58)	(29.68)	-12.475
	N	993	19,109	
Waves 4 &5	Mean.	64.72	60.61	1.486
	Std.Dev.	(28.97)	(30.40)	0.1374
	N	10,961	4,421	
Waves 5 &6	Mean.	(65.79)	62.32	0.063
	Std.Dev.	28.59	(30.29)	0.9500
	N	(29,298)	9,666	
All waves	Mean.	64.54	61.61	1.212
	Std.Dev.	(28.96)	(30.07)	0.2255
	N	53,242	35,838	

^a Wilcoxon Rank sum test. Null hypothesis: both samples are from are from populations with the same distribution.

Table B4. Survival expectations over time by wave (What are the chances that you will live to be age T or more?). By countries and groups of countries

	Target	T= 75	T= 80	T= 85	T= 90	T= +90
Austria	Mean	73.94	65.67	58.28	46.99	36.18
	Std.Dev	(24.97)	(26.44)	(29.58)	(29.92)	(30.60)
	N	6,387	762	467	210	77
Belgium	Mean	67.50	62.68	55.63	44.70	33.86
	Std.Dev	(23.43)	(25.05)	(27.26)	(29.29)	(29.58)
	N	5,335	528	341	166	67
Denmark	Mean	78.86	74.27	66.85	53.87	37.82
	Std.Dev	(22.96)	(25.28)	(28.52)	(31.51)	(32.78)
	N	8,637	1,041	695	313	105
France	Mean	69.17	62.74	56.85	47.61	35.80
	Std.Dev	(25.53)	(27.25)	(27.32)	(29.52)	(29.76)
	N	6,635	833	566	284	112
Germany	Mean	69.54	60.83	54.32	41.47	30.93
	Std.Dev	(25.47)	(26.84)	(28.47)	(29.84)	(29.27)
	N	6,004	654	331	138	35
Italy	Mean	71.86	65.94	60.96	54.30	46.41
	Std.Dev	(26.64)	(27.83)	(29.88)	(31.82)	(32.97)
	N	6,274	826	443	156	54
Spain	Mean	72.75	65.19	59.57	48.97	38.45
	Std.Dev	(24.88)	(28.08)	(28.44)	(30.99)	(31.09)
	N	5,880	1,036	711	406	132
Sweden	Mean	74.91	67.50	57.85	44.05	28.20
	Std.Dev	(23.65)	(26.53)	(29.22)	(31.22)	(30.31)
	N	5,574	765	464	259	70
Switzerland	Mean	75.12	69.53	62.10	53.57	42.04
	Std.Dev	(22.25)	(24.26)	(26.25)	(29.22)	(30.98)
	N	4,883	620	386	178	60
Group I	Mean	71.81	64.87	61.21	51.33	42.71
	Std.Dev	(26.03)	(28.41)	(29.24)	(31.82)	(32.30)
	N	8,085	2,184	2,169	1,783	1,697
Group II	Mean	67.57	61.68	55.62	46.26	33.97
	Std.Dev	(24.51)	(26.31)	(27.01)	(29.56)	(29.47)
	N	11,195	2,262	2,156	1,775	1,833
Group III	Mean	76.94	69.44	62.10	50.90	38.12
	Std.Dev	(23.71)	(25.85)	(29.10)	(30.07)	(30.86)
	N	8,106	1,860	1,941	1,207	1,226
Group IV	Mean	72.99	66.46	58.23	47.11	34.85
	Std.Dev	(24.15)	(25.90)	(28.33)	(30.89)	(31.14)
	N	11,165	2,965	2,651	1,943	1,697
All sample	Mean	70.95	63.92	57.70	47.49	37.11
	Std.Dev	(25.47)	(27.27)	(28.69)	(30.81)	(31.22)
	N	55,609	7,065	4,404	2,110	712
Test by country						
Highest SSP	Country	Denmark	Denmark	Denmark	Italy	Italy
Test difference of means ^a	F-test	F _{1,68538} =530.98	F _{1,17158} =175.80	F _{1,16780} =105.35	F _{1,12851} =68.87	F _{1,13323} = 101.86
	p-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Lowest SSP	Country	Belgium	Germany	Germany	Germany	Sweden
Test difference of means ^b	F-test	F _{1,68538} =124.53	F _{1,17158} =30.61	F _{1,16780} =35.94	F _{1,12851} =73.36	F _{1,13323} = 91.54
	p-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Test by group of countries						
Highest SSP	Group	Group III	Group III	Group III	Group I	Group I
Test difference of means ^c	F-test	F _{1,38550} =116.89	F _{1,9270} =21.29	F _{1,8916} =6.37	F _{1,6707} =24.16	F _{1,6452} =48.89
	p-value	(0.0000)	(0.0000)	(0.0116)	(0.0000)	(0.0000)
Lowest SSP	Group	Group II	Group II	Group II	Group II	Group II
Test difference of means ^d	F-test	F _{1,38550} =39.66	F _{1,9270} =8.72	F _{1,8916} =3.03	F _{1,6707} =0.01	F _{1,6452} =10.64
	p-value	(0.0000)	(0.0039)	(0.0820)	(0.8044)	(0.0011)

^a Ho: mean(other countries)-mean(country with highest expectancy)=0

Ha: mean(other countries) < mean(country with highest expectancy)

^b Ho: mean(other countries)-mean(country with lowest expectancy)=0

Ha: mean(other countries) > mean(country with lowest expectancy)

^c Ho: mean(other groups)-mean(group with the lowest expectancy)=0

Ha: mean(other groups) < mean(group with lowest expectancy)

^d Ho: mean(other groups)-mean(group with the lowest expectancy)=0

Ha: mean(other groups) > mean(group with lowest expectancy)

Note: Using calibrated sampling weights. Target: T= 75 years if Age < 65; T= 80 years if 65 ≤ Age < 70; T= 85 years if 70 ≤ Age < 75; T= 90 years if 75 ≤ Age < 80; Individuals aged 80 or older have been collapsed at age 90. In this case, we summarize the expectations of living to age 95 or older.

Group I: Italy and Spain. Group II: Belgium and France. Group III: Austria and Denmark. Group IV: Germany, Sweden and Switzerland.

Table B5. Survival expectations by survival status and gender

	Target	T= 75	T= 80	T= 85	T= 90	T= +90
Survivors						
Total	Mean	70.79	64.07	58.40	48.56	38.47
	Std.Dev	(25.77)	(27.25)	(28.65)	(31.17)	(31.46)
	N	54,786	6,719	4,046	1,798	511
Men	Mean	70.58	64.32	58.79	50.01	40.79
	Std.Dev	(26.11)	(27.49)	(28.67)	(31.55)	(32.03)
	N	25,093	3,088	1,741	719	188
Women	Mean	70.98	63.84	58.07	47.52	37.13
	Std.Dev	(25.44)	(27.03)	(28.64)	(30.85)	(31.06)
	N	29,693	3,631	2,305	1,079	323
Test equality of means men-women	F-test	F _{1,29547} =0.65	F _{1,6940} =0.24	F _{1,6567} =0.45	F _{1,4678} =3.11	F _{1,3979} = 5.29
	p-value	(0.4192)	(0.6276)	(0.5034)	(0.0779)	(0.0215)
Deceased						
Total	Mean	57.23	47.09	44.01	44.11	29.80
	Std.Dev	(32.88)	(30.59)	(30.65)	(33.20)	(30.01)
	N	823	346	358	312	201
Men	Mean	56.06	46.53	47.49	47.34	28.69
	Std.Dev	(33.94)	(29.94)	(30.95)	(34.76)	(30.19)
	N	512	201	190	159	80
Women	Mean	59.90	47.95	39.39	40.23	30.60
	Std.Dev	(30.27)	(31.77)	(29.76)	(30.89)	(29.87)
	N	311	145	168	153	121
Test equality of means men-women	F-test	F _{1,372} =0.54	F _{1,194} =0.05	F _{1,291} =2.50	F _{1,360} =1.45	F _{1,118} = 0.36
	p-value	(0.4622)	(0.8272)	(0.1148)	(0.2296)	(0.5484)
Test equality of means survivors-deceased	F-test	F _{1,29920} =27.34	F _{1,7135} =28.39	F _{1,6859} =30.34	F _{1,5039} =1.92	F _{1,4798} = 22.84
	p-value	(0.0000)	(0.0000)	(0.0000)	(0.1664)	(0.0000)

Note: means and test of means have been computed using calibrated sampling weights.

Target: T= 75 years if Age <65; T= 80 years if 65 ≤ Age < 70; T= 85 years if 70 ≤ Age < 75; T= 90 years if 75 ≤ Age < 80; Individuals aged 80 or older have been collapsed at age 90. In this case, we summarize the expectations of living to age 95 or older.

Table B6. Descriptive statistics

	Do not report subjective survival probabilities	Report subjective survival probabilities			
		Not follow-up respondents	Final sample: Follow-up respondents		
			Total	Deceased sample	Survivor sample
N (all sample)	24,431	23,694	69,900	2,040	67,860
N (for the probability of sunny day)	-	-	69,315	1,956	67,359
N (respondents who participated in SHARELIFE)	-	-	33,269	708	32,561
Subjective survival probability (SSP)	-	61.05	62.06	40.63	63.21
	-	(30.55)	(29.07)	(32.87)	(29.48)
Objective survival probability (OSP)	-	-	44.07	17.18	47.99
	-	-	(28.97)	(24.54)	(29.35)
Biased survival expectations (SSP-OSP)	-	-	19.99	23.44	15.21
	-	-	36.00	40.43	35.86
Biased survival expectations >0 (SSP- OSP >0)	-	-	(24.26)	(27.44)	(24.15)
	-	-	-20.42	-12.02	-20.66
Biased survival expectations <0 (SSP- OSP <0)	-	-	(17.91)	(17.09)	(17.87)
	-	-	(34.04)	(34.82)	(34.96)
Subjective probability of sunny day			61.54	58.50	61.63
			(29.82)	(30.40)	(29.80)
Predicted meteorological probability of sunny day			40.72	42.65	40.67
			(9.78)	(10.79)	(9.74)
Biased meteorological expectations			20.82	15.85	20.96
			(29.78)	(30.67)	(29.74)
Biased meteorological expectations > 0			33.80	31.57	33.86
			(18.90)	(18.30)	(18.91)
Biased meteorological expectations < 0			-22.51	-23.93	-22.46
			(14.70)	(16.29)	(14.63)
Man	43.36	46.48	46.22	52.91	45.99
Woman	56.64	53.52	53.78	47.09	54.01
Age	69.21	65.75	65.47	76.68	65.09
	(10.84)	(11.06)	(10.36)	(10.65)	(10.13)
Marital status					
Single	7.30	8.29	7.27	8.23	7.23
Widow	20.99	17.93	16.83	37.01	16.15
Separated/divorced	8.06	10.05	9.20	5.49	9.32
Married/cohabiting	63.65	63.73	66.70	49.27	67.30
Education (ISCED 1997 levels)					
None	8.83	5.80	6.34	12.71	6.13
Primary education	24.88	20.78	24.52	40.30	23.99
Lower secondary	15.36	17.75	15.92	13.68	16.00
Upper secondary	31.21	35.57	31.51	22.70	31.80
Post-secondary non tertiary	2.06	2.06	2.40	1.51	2.43
Tertiary education	17.66	18.04	19.31	9.10	19.65
Lives alone	27.99	27.18	24.25	38.35	23.78
Rural area, village, small town	56.77	54.62	59.94	57.31	60.02
Relation with economic activity					
Employed	20.86	29.88	28.59	4.72	29.39
Unemployed	2.68	3.41	4.05	1.40	4.14
Retired	54.12	49.20	50.34	70.40	49.66
Disabled	3.58	2.99	2.70	4.53	2.64
Houseworking	13.61	12.74	12.67	13.87	12.63
Other	5.15	1.78	1.65	5.08	1.54
Adjusted wealth (1,000 PPP) ^a	160.15	158.19	167.31	127.85	168.63
	(254.10)	(336.06)	(286.63)	(191.16)	(289.19)
Adjusted income (1,000 PPP) ^a	18.00	22.62	19.99	15.43	20.15
	(21.25)	(74.04)	(25.60)	(21.45)	(25.72)
Body mass index					
Underweight	1.67	1.43	1.27	4.74	1.15
Normal	34.46	39.23	37.06	36.04	37.09
Obese	17.16	16.09	18.77	17.37	18.82
Overweight	39.04	40.81	40.60	35.74	40.77
Missing	7.67	2.44	2.30	6.11	2.17
Sedentary (never moderate or vigorous physical activity)	16.96	13.79	11.58	40.33	10.61
Smoking					
No, never	37.79	51.20	48.82	46.62	48.89
Not now	48.56	25.50	24.17	22.79	27.14
Yes	13.65	23.30	27.01	30.59	23.97
Drinking					
Everyday or 5/6 times per week	23.18	124.69	27.96	27.16	27.98
Not drunk during last 3 months or less than once per month	27.15	28.65	30.42	47.30	29.86
Chronic illness					
High blood pressure	39.16	33.26	36.06	42.94	35.83
Cancer	5.35	5.47	5.11	14.14	4.81
Stroke	4.40	3.50	3.18	9.62	2.96
Diabetes	14.15	11.68	11.48	22.09	11.13
Heart attack	12.56	11.27	11.33	24.18	10.90
Lung disease	7.39	5.74	6.17	13.35	5.93
Alzheimer	3.43	1.06	0.68	4.19	0.56
Days in hospital last year (surgery/medical tests)	2.37	2.07	1.66	5.67	1.53
	(10.63)	(9.79)	(7.32)	(14.55)	(6.91)
Days in hospital last year (mental health)	5.39	2.81	3.75	2.62	3.81
	(25.83)	(14.84)	(14.02)	(7.57)	(14.28)
Days in other institutions (last year)	26.10	46.33	27.44	54.16	25.42
	(28.60)	(81.87)	(31.63)	(67.43)	(26.06)

Visits to medical practitioner last year	4.85 (6.89)	4.04 (6.98)	3.26 (6.17)	5.02 (8.74)	3.20 (6.06)
Blood test last year (participated in SHARELIFE)	.	.	68.65	75.14	68.51
Blood pressure checked last year (participated in SHARELIFE)	.	.	69.12	74.15	69.01
Depressed (last month)	41.64	39.58	42.22	51.09	41.92
Self-reported health status					
Excellent	4.51	6.96	7.53	2.37	7.70
Very good	12.10	16.12	16.52	5.88	16.88
Good	35.98	38.23	39.76	23.84	40.29
Fair	32.52	27.54	26.82	37.54	26.46
Poor	14.89	11.15	9.37	30.37	8.67
Social contacts ^b	13.18	14.31	15.72	9.91	15.90
Locus of control: Feels things are out of control					
Often	9.90	7.54	7.37	18.49	7.00
Sometimes	21.44	17.70	19.34	18.51	19.37
Rarely	22.22	19.05	21.44	16.96	21.60
Never	28.09	22.79	25.37	16.76	25.66
Cognitive skills					
Ten word listing (first recall)	4.69 (1.96)	4.91 (1.95)	4.99 (1.84)	3.59 (2.00)	5.04 (1.81)
Ten word listing (second recall)	3.36 (2.16)	3.45 (2.10)	3.57 (2.08)	2.11 (1.92)	3.62 (2.07)
Maximum grip strength	32.34 (12.16)	34.34 (12.72)	34.01 (12.31)	27.67 (11.85)	34.19 (12.27)
Financial assets					
Bank accounts	94.70	94.89	93.45	89.46	93.58
Government or corporate bonds	4.54	3.64	4.51	6.24	4.32
Stocks or shares listed or unlisted in the stockmarket	6.73	4.66	6.07	3.04	6.17
Mutual funds or managed investment accounts	6.84	4.37	7.56	2.98	6.36
Mostly in stocks	31.85	30.25	34.10	30.09	34.17
Half in stocks and half in bonds	41.87	40.09	44.92	39.82	45.01
Mostly in bonds	17.83	16.34	20.98	30.09	20.83
Individual retirement accounts	5.17	6.24	7.29	1.69	7.48
Life insurance	10.97	9.99	12.07	5.58	12.28
Debts					
Mortgage	7.54	8.86	10.81	3.31	11.06
Other debts	8.11	10.15	11.40	6.10	11.58
Attitudes towards financial risk					
Substantial risk expecting to earn substantial returns	13.49	12.95	8.62	24.3	0.42
Average fin. risk expecting to earn above average returns	27.88	28.95	31.12	27.37	1.14
Average financial risk expecting to earn average returns	23.85	23.97	24.94	23.43	10.16
Not willing to take any financial return	34.78	34.13	35.32	24.90	35.33
Countries					
Austria	0.96	3.16	3.37	3.17	3.38
Germany	34.56	34.81	25.21	21.29	25.34
Sweden	3.84	2.78	3.06	3.35	3.05
Spain	15.62	11.01	14.99	23.01	14.72
Italy	19.32	20.98	22.42	25.23	22.33
France	19.96	20.80	21.37	16.40	21.54
Denmark	1.96	1.25	2.00	2.17	1.99
Switzerland	1.27	2.00	3.34	2.18	3.37
Belgium	2.51	3.21	4.24	3.20	4.28

^a Income and wealth are expressed in 1,000 units of Purchase Power of Parity and adjusted by household sized (dividing wealth and income by the square root of the number of household members)

^b Respondent has participated in the last month in voluntary or charity work, gone to sport club or social club, taken part in political/community/religious organization or attended to educational or training courses.

Biased survival expectations: 50,058 observations for positive bias and 19,842 observations for negative bias

Biased meteorological expectations: 53,336 observations for positive bias and 15,979 observations for negative bias

Table B7. Descriptive statistics for reported and predicted parents' age of decease

	Father's age of decease			Mother's age of decease		
	Total	Men	Women	Total	Men	Women
Reported in SHARE						
Mean	78.58	78.73	78.46	81.97	81.93	82.01
Std.dev	(8.78)	(8.77)	(8.78)	(8.65)	(8.58)	(8.71)
N	49,423	22,801	26,622	42,823	19,768	23,055
Predicted using multiple imputation						
Mean	82.74	82.79	82.69	84.59	84.74	84.47
Std.dev	(5.19)	(4.98)	(5.36)	(6.21)	(6.19)	(6.23)
N	20,477	9,170	11,307	27,077	12,203	14,874

Multiple imputation has been used to predict father's or mother's age of decease for those fathers or mother who were still alive at the time of the survey.

Table B8. Weibull estimations for the discrete-time hazard model

	Total sample		Excluding focal points		Excluding erroneous responses to probabilistic question		Including only individuals who have answered SHARELIFE	
	Coef.	Hazard ratio	Coef.	Hazard ratio	Coef.	Hazard ratio	Coef.	Hazard ratio
Man	0.633*** (0.083)	1.884***	0.589*** (0.133)	1.802***	0.606*** (0.090)	1.833***	0.642*** (0.090)	1.895***
Age	-0.049 (0.045)	0.952	-0.012 (0.075)	0.988	-0.045 (0.051)	0.956	-0.057 (0.050)	0.956
Age^2	0.001*** (0.000)	1.001***	0.001 (0.001)	1.001	0.001** (0.000)	1.001**	0.003*** (0.001)	1.002***
Employed	-0.653*** (0.183)	0.520***	-0.449* (0.238)	0.638*	-0.578*** (0.189)	0.561***	-0.687*** (0.191)	0.529***
Lives alone	0.192** (0.087)	1.211**	0.134 (0.149)	1.143	0.234** (0.098)	1.263**	0.202** (0.094)	1.217**
Rural area, village, small town	-0.028 (0.071)	0.972	-0.175 (0.116)	0.840	-0.046 (0.078)	0.955	-0.034 (0.076)	0.979
Normal weight	-0.246*** (0.082)	0.782***	-0.262** (0.32)	0.712**	-0.219** (0.090)	0.804**	-0.295*** (0.085)	0.801***
High blood pressure	-0.087** (0.036)	0.916**	-0.225** (0.107)	0.799**	-0.109** (0.043)	0.896**	-0.091** (0.037)	0.918**
Heart attack	0.253* (0.127)	1.287*	0.250* (0.128)	1.284*	0.241* (0.119)	1.265*	0.260* (0.129)	1.291*
Cancer	0.943*** (0.102)	2.566***	1.017*** (0.158)	2.765***	0.910*** (0.118)	2.484***	0.948*** (0.108)	2.568***
Stroke	0.434*** (0.122)	1.543***	0.300** (0.123)	1.350**	0.575*** (0.143)	1.777***	0.440*** (0.126)	1.546***
Diabetes	0.346*** (0.089)	1.413***	0.533*** (0.156)	1.703***	0.375*** (0.101)	1.454***	0.340*** (0.088)	1.411***
Lung disease	0.248** (0.109)	1.281**	0.364* (0.193)	1.440*	0.284** (0.121)	1.329**	0.240** (0.101)	1.278**
Alzheimer	0.461*** (0.157)	1.585***	0.210*** (0.051)	1.234***	0.411* (0.216)	1.508*	0.478*** (0.159)	1.592***
Days at hospital (last year)	0.012*** (0.001)	1.012***	0.015*** (0.002)	1.015***	0.014*** (0.002)	1.014***	0.014*** (0.001)	1.013***
Days in hospital last year (mental health)	0.0075*** (0.0015)	1.276***	0.0077*** (0.0016)	1.280***	0.0074*** (0.0014)	1.274***	0.0079*** (0.0016)	1.278***
Days in other institutions (last year)	0.0113*** (0.0021)	1.011***	0.0110*** (0.0019)	1.014***	0.0115*** (0.0020)	1.017***	0.0121*** (0.0023)	1.019***
Visits to general practitioner (last year)	-0.002 (0.006)	0.998	-0.002 (0.007)	0.998	0.002 (0.006)	1.002	-0.003 (0.005)	0.999
Sedentary lifestyle	0.858*** (0.080)	2.357***	0.841*** (0.145)	2.318***	0.787*** (0.089)	2.196***	0.865*** (0.083)	2.360***
Smokes now	0.422*** (0.109)	1.524***	0.407*** (0.170)	1.487***	0.360*** (0.114)	1.434***	0.431*** (0.111)	1.527***
Smoked before, not now	0.313*** (0.108)	1.366***	0.327** (0.145)	1.387**	0.225* (0.120)	1.253*	0.315*** (0.111)	1.367***
Drinks alcohol daily, 5-6 times/week	0.215** (0.082)	1.234**	0.227 (0.090)	1.246**	0.240 (0.095)	1.267**	0.217** (0.084)	1.235**
No education	0.426*** (0.159)	1.531***	0.536*** (0.183)	1.710***	0.398** (0.168)	1.489**	0.430*** (0.161)	1.533***
Primary education	0.454*** (0.132)	1.575***	0.390** (0.175)	1.477**	0.427*** (0.135)	1.533***	0.459*** (0.134)	1.577***
Lower secondary education	0.187 (0.147)	1.205	0.256 (0.200)	1.292	0.182 (0.149)	1.199	0.195 (0.150)	1.208
Upper secondary education	0.300** (0.129)	1.349**	0.214** (0.114)	1.239**	0.335*** (0.127)	1.398***	0.308** (0.133)	1.351**
Post-secondary non tertiary	0.387 (0.259)	1.472	0.401 (0.541)	1.579	0.302 (0.409)	1.381	0.393 (0.262)	1.476
Adjusted wealth (1,000 PPP)	-0.411** (0.189)	0.663**	-0.561* (0.227)	0.571**	-0.494** (0.213)	0.610**	-0.416** (0.193)	0.664**
Adjusted income (1,000 PPP)	-0.118 (1.346)	1.889	-0.182 (1.152)	2.152	0.203 (1.331)	1.895	-0.121 (1.352)	1.890
Feeling depressed (last month)	0.167** (0.072)	1.181**	0.160** (0.078)	1.175**	0.147** (0.050)	1.091**	0.170** (0.071)	1.184**
Constant	-6.738*** (1.678)	0.001***	-8.799*** (2.725)	0.000***	-6.912*** (1.883)	0.001***	-6.777*** (1.685)	0.002***
N	69,900		40,893		30,183		33,269	
Hazard rate	1.429 (0.057)		1.615 (0.073)		1.461 (0.065)		1.477 (0.060)	
Wald chi2(38)	2385.24		1876.38		972.68		1792.35	
p-value	(0.0000)		(0.0000)		(0.0000)		(0.0000)	

Standard errors between parenthesis. All regressions include time fixed effects and country fixed effects and are weighted using calibrated sampling weights.

Table B9. Average daylight minutes per day ($DMD_{m,r}$)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Austria	510	605	700	796	893	957	956	888	791	687	628	569
Belgium	488	593	698	803	910	982	980	904	797	683	618	553
Denmark	436	563	690	818	949	1,040	1,038	942	812	675	595	515
France	504	602	700	798	897	963	961	891	792	686	625	564
Germany	471	583	695	808	923	1,000	998	916	802	681	611	541
Italy	555	630	706	782	858	908	907	854	777	694	647	601
Spain	564	635	706	778	851	898	897	847	775	696	652	608
Sweden	382	532	682	833	986	1,101	1,098	978	825	668	572	477
Switzerland	520	611	702	793	885	946	944	880	787	688	632	576

Source: Gaisma

Table B10. Average sunlight minutes per day ($SMD_{m,y,r}$)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Austria	142	197	268	322	385	405	442	412	347	280	161	127
Belgium	94	155	206	295	367	371	360	352	288	221	129	85
Denmark	73	133	215	350	463	453	443	412	284	183	112	66
France	172	219	309	384	437	503	551	492	406	294	203	165
Germany	100	156	229	319	403	419	423	402	313	225	121	90
Italy	221	248	310	374	452	516	584	535	432	336	243	204
Spain	269	296	363	407	493	560	618	571	453	366	293	252
Sweden	62	139	252	362	487	554	496	404	276	170	90	49
Switzerland	157	205	272	309	330	377	429	393	354	271	180	154

Source: World Meteorological Organization

Table B11. Average meteorological probability of sunny day ($MetSD_{m,y,r}$)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Austria	0.28	32.63	38.35	40.45	43.16	42.27	46.28	46.39	43.81	40.77	25.61	22.40
Belgium	19.28	26.14	29.48	36.69	40.30	37.76	36.70	38.99	36.14	32.42	20.91	15.43
Denmark	16.75	23.66	31.23	42.75	48.80	43.54	42.72	43.76	34.98	27.07	18.78	12.75
France	34.13	36.40	44.10	48.10	48.77	52.27	57.32	55.17	51.26	42.90	32.46	29.21
Germany	21.29	26.83	33.00	39.45	43.61	41.94	42.42	43.84	39.05	33.00	19.74	16.62
Italy	39.81	39.29	43.87	47.84	52.69	56.83	64.34	62.59	55.55	48.36	37.56	33.91
Spain	47.78	46.60	51.43	52.26	57.95	62.41	68.87	67.40	58.43	52.60	44.99	41.50
Sweden	16.10	26.19	36.99	43.46	49.36	50.30	45.17	41.30	33.40	25.47	15.73	10.28
Switzerland	30.26	33.51	38.72	38.98	37.28	39.83	45.40	44.71	45.01	39.36	28.54	26.71

Source: own estimations using Tables B7 and B8.

Table B12. Comparison of biased expectation indicators

• **By country**

	Biased survival expectations OSP-SSP		Meteorological expectations		Comparison between indicators of expectations %			
	Mean	Std.Dev.	Mean	Std.Dev.	LO > 0 & ME > 0	LO > 0 & ME < 0	LO < 0 & ME > 0	LO < 0 & ME < 0
Total	19.99	34.04	20.82	29.78	56.75	14.87	20.37	7.98
Men	27.62	33.93	21.18	29.76	61.74	16.37	15.46	6.37
Women	13.56	32.80	20.51	29.80	52.54	13.60	24.50	9.34
Survivors	19.81	34.03	20.96	29.74	56.84	14.75	20.42	7.98
Deceased	26.02	34.15	15.85	30.67	53.53	18.77	18.73	8.04
Austria	26.13	32.04	24.65	29.77	65.73	13.15	16.60	4.50
Belgium	10.96	32.43	22.91	28.66	49.03	12.87	27.57	10.52
Denmark	25.73	31.97	26.31	29.57	65.79	13.67	16.36	4.13
France	12.31	33.59	16.01	30.44	50.32	13.42	25.52	10.75
Germany	12.53	33.43	19.24	29.50	48.17	16.66	24.06	11.10
Italy	21.60	36.39	17.01	28.62	56.75	15.62	18.28	9.31
Spain	30.83	34.04	11.87	29.01	58.05	22.17	12.36	7.27
Sweden	23.63	33.13	26.38	29.94	61.55	13.57	18.28	6.52
Switzerland	20.55	32.69	24.91	29.09	60.76	12.58	21.09	5.53

Biased survival expectations: difference between objective survival probability and subjective survival probability

Biased meteorological expectations: difference between reported probability of sunny day and meteorological predicted probability of sunny day.

• **By age cohort**

Age at baseline	N	LO>0 & ME>00		LO>0 & ME<0		LO<0 & ME>0		LO<0 & ME<0	
		Mean LO	Mean ME	Mean LO	Mean ME	Mean LO	Mean ME	Mean LO	Mean ME
50-64	55,609	36,88 (0,008)	20,25 (0,006)	33,70 (0,009)	-22,78 (0,008)	-21,01 (0,013)	19,73 (0,013)	-21,00 (0,012)	-27,24 (0,016)
65-69	7,065	34,68 (0,006)	40,14 (0,007)	31,14 (0,013)	-19,53 (0,011)	-20,77 (0,010)	36,50 (0,015)	-22,25 (0,016)	-21,86 (0,018)
70-74	4,404	34,41 (0,007)	44,77 (0,009)	31,07 (0,016)	-20,23 (0,014)	-20,95 (0,011)	40,43 (0,017)	-22,59 (0,020)	-21,65 (0,023)
75-79	2,110	32,55 (0,008)	47,04 (0,011)	31,97 (0,018)	-15,48 (0,014)	-21,34 (0,013)	41,15 (0,021)	-24,40 (0,021)	-16,35 (0,021)
80-84	617	31,55 (0,010)	45,46 (0,015)	31,59 (0,021)	-10,45 (0,015)	-22,44 (0,015)	39,15 (0,028)	-23,06 (0,027)	-10,49 (0,025)
85-94	83	29,74 (0,015)	42,81 (0,023)	30,74 (0,031)	-3,55 (0,011)	-21,85 (0,024)	38,26 (0,044)	-24,96 (0,353)	-5,47 (0,077)
95-100	12	30,75 (0,025)	45,86 (0,037)	30,13 (0,079)	-0,42 (0,005)	-24,37 (0,045)	36,65 (0,066)	-19,22 (0,272)	-2,08 (0,029)
All	69,900	30,13 (0,008)	34,52 (0,011)	28,56 (0,016)	-13,32 (0,011)	-19,59 (0,013)	30,89 (0,021)	-19,94 (0,059)	-15,29 (0,027)

Table B13. Effect of biased survival expectations (LO) and biased meteorological expectation (ME) over lifestyle variables

	Using biased survival expectations (IV- First-stage Table D.1)			Using meteorological expectations (OLS)		
	M1	M2	M3	M1	M2	M3
Smokes now						
Biased expectations indicator > 0	-0.6288*** (0.2291)	-0.6186*** (0.1981)	-0.5390*** (0.1924)	-0.0117** (0.0046)	-0.0111** (0.0046)	-0.0102** (0.0046)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.4556	0.4565	0.4568	0.1546	0.1600	0.1634
F	994.820	987.895	990.151	1,338.748	972.895	901.434
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	42.65 (0.0000)	41.38 (0.0000)	49.68 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.69	25.88	26.02			
Sargan test chi2	2.56	2.12	1.96			
Smokes now						
Biased expectations indicator < 0	0.8364*** (0.2080)	0.8245*** (0.2007)	0.8180*** (0.2004)	0.0145*** (0.0048)	0.0141** (0.0048)	0.0135** (0.0048)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2331	0.2337	0.2349	0.1801	0.1846	0.1854
F	353.321	329.516	328.189	5,090.501	3,446.851	3,032.646
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	41.90 (0.0000)	42.05 (0.0000)	42.12 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.13	25.41	25.67			
Sargan test chi2	2.77	2.87	2.80			
Has never smoked						
Biased expectations indicator > 0	1.0967*** (0.4531)	1.0443** (0.4532)	1.0282** (0.4415)	0.0068** (0.0027)	0.0063** (0.0027)	0.0062** (0.0027)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2961	0.2968	0.2972	0.1003	0.1040	0.1061
F	250.651	273.376	246.077	2,583.187	1,767.512	1,581.170
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Durbin test chi2(1) /p-value	16.42 (0.0000)	17.50 (0.0000)	17.87 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.56	25.22	5.98			
Sargan test chi2	2.75	2.48	2.40			
Has never smoked						
Biased expectations indicator < 0	-1.8102*** (0.4609)	-1.5526*** (0.4682)	-1.4846*** (0.4661)	-0.0232** (0.0091)	-0.0224** (0.0090)	-0.0222** (0.0097)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1931	0.1937	0.1952	0.1650	0.1842	0.2061
F	310.832	377.704	377.398	4,581.661	3,439.539	1,581.170
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	15.14 (0.0000)	14.67 (0.0000)	16.01 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.26	25.18	26.48			
Sargan test chi2	2.32	2.27	2.16			
Drinks everyday or 5/6 times per week						
Biased expectations indicator > 0	-0.9172*** (0.2281)	-0.8690*** (0.2104)	-0.8205*** (0.2076)	-0.0353*** (0.0065)	-0.0344*** (0.0062)	-0.0343*** (0.0062)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2461	0.2470	0.2580	0.0980	0.1769	0.1790
F	380.129	476.718	477.715	384.154	701.655	690.038
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	22.63 (0.0000)	19.87 (0.0000)	20.08 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	28.49	28.12	30.05			
Sargan test chi2	1.65	1.51	1.33			
Drinks everyday or 5/6 times per week						
Biased expectations indicator < 0	1.0217*** (0.3048)	0.9397*** (0.3012)	0.9042*** (0.3093)	0.0292** (0.0104)	0.0272** (0.0104)	0.0267** (0.0104)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4412	0.4424	0.4437	0.1705	0.1788	0.1814
F	438.442	442.966	443.865	526.345	389.475	353.242
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	23.41 (0.0000)	22.87 (0.0000)	22.65 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.61	24.89	25.91			
Sargan test chi2	1.71	1.68	1.67			
Has not drunk during last 3 months or less than once per month						
Biased expectations indicator > 0	1.2542** (0.5594)	1.2264** (0.5553)	1.1891** (0.5558)	0.0554** (0.0222)	0.0545** (0.0222)	0.0542** (0.0222)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.4981	0.5009	0.5129	0.2011	0.2064	0.2077
F	166.635	173.916	171.262	1,746.392	1,184.407	1,044.660
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	17.91 (0.0000)	15.43 (0.0000)	13.92 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.45	28.50	30.10			
Sargan test chi2	1.14	1.05	0.98			
Has not drunk during last 3 months or less than once per month						
Biased expectations indicator < 0	-0.6053*** (0.1945)	-0.4803** (0.1822)	-0.4761** (0.1435)	-0.0173** (0.0087)	-0.0172** (0.0076)	-0.0167** (0.0076)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4740	0.4953	0.4979	0.1995	0.1043	0.1071
F	106.225	102.295	100.993	766.692	530.640	477.959
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	21.19 (0.0000)	22.23 (0.0000)	23.76 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	31.12	30.03	29.78			
Sargan test chi2	2.11	2.21	2.32			
Sedentary lifestyle						
Biased expectations indicator > 0	-1.0182** (0.4146)	-1.0135** (0.4155)	-1.0098** (0.4062)	-0.0495** (0.0222)	-0.0411* (0.0219)	-0.0381* (0.0218)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2985	0.3001	0.3015	0.1997	0.2198	0.2258
F	118.610	148.655	148.567	1,730.474	1,283.449	1,162.097
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	13.26 (0.0000)	13.95 (0.0000)	17.57 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.58	25.87	27.49			
Sargan test chi2	1.06	0.87	0.75			
Sedentary lifestyle						
Biased expectations indicator < 0	0.9650** (0.3490)	0.8442** (0.3345)	0.8421** (0.3015)	0.0837*** (0.0175)	0.0751*** (0.0166)	0.0744*** (0.0165)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1410	0.1435	0.1463	0.1666	0.2596	0.2632
F	87.083	195.183	191.445	211.356	341.849	337.413
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	17.79 (0.0000)	17.23 (0.0000)	17.48 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.67	26.89	27.05			
Sargan test chi2	1.26	1.12	1.19			
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes

Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year, number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP). Bootstrap with 1,000 replications Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%.

Table B14. Effect of biased survival expectations (LO) and biased meteorological expectation (ME) over health-related variables

	Using biased survival expectations (IV- First-stage Table D.1)			Using meteorological expectations (OLS)		
	M1	M2	M3	M1	M2	M3
Normal weight						
Biased expectations indicator > 0	0.9028*** (0.2279)	0.7616*** (0.2537)	0.7374*** (0.2315)	0.0046*** (0.0011)	0.0033*** (0.0009)	0.0021** (0.0007)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2860	0.2864	0.2878	0.1416	0.1831	0.1837
F	205.480	229.937	218.262	1,006.442	1,380.582	1,217.093
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	22.65 (0.0000)	19.88 (0.0000)	21.43 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	35.69	35.89	37.04			
Sargan test chi2	1.19	1.08	1.01			
Normal weight						
Biased expectations indicator < 0	-1.0093*** (0.2987)	-0.7323** (0.2736)	-0.6583** (0.2633)	-0.0057** (0.0019)	-0.0040** (0.0017)	-0.0033** (0.0017)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2411	0.2416	0.2441	0.1218	0.1773	0.1778
F	152.947	218.386	207.788	516.924	1,275.193	1,124.469
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	27.86 (0.0000)	26.81 (0.0000)	26.50 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	33.51	32.90	32.12			
Sargan test chi2	1.32	1.28	1.11			
Obese or overweight						
Biased expectations indicator > 0	-1.2110** (0.396)	-1.1909** (0.358)	-1.1445** (0.357)	-0.0691** (0.0251)	-0.0604** (0.0248)	-0.0592** (0.0247)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.3527	0.4086	0.4286	0.2877	0.3022	0.3039
F	796.522	948.510	934.043	9,361.692	6,594.199	5,816.475
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	24.80 (0.0000)	25.88 (0.0000)	24.33 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	31.58	35.56	38.98			
Sargan test chi2	1.28	1.12	1.00			
Obese or overweight						
Biased expectations indicator < 0	1.7996*** (0.554)	1.5021*** (0.559)	1.2238** (0.555)	0.0636** (0.0223)	0.0590** (0.0220)	0.0582** (0.0247)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.3205	0.3221	0.3291	0.2685	0.2811	0.3039
F	595.790	694.857	688.146	8,506.316	5,955.134	5,816.475
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	29.56 (0.0000)	28.75 (0.0000)	28.21 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	30.41	28.61	28.19			
Sargan test chi2	1.42	1.37	1.31			
Ten word listing (first recall)						
Biased expectations indicator > 0	3.3305*** (0.711)	2.8702*** (0.703)	2.1547*** (0.686)	0.7293*** (0.1136)	0.4736*** (0.1102)	0.4465*** (0.1098)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.6790	0.7183	0.7502	0.6596	0.6738	0.6754
F	2,583.271	3,144.535	3,236.081	6,518.774	6,417.712	6,267.699
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	40.87 (0.0000)	47.56 (0.0000)	45.31 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.14	25.68	27.48			
Sargan test chi2	1.43	1.26	1.17			
Ten word listing (first recall)						
Biased expectations indicator < 0	-0.6965*** (0.1586)	-0.6801*** (0.1949)	-0.6611*** (0.1853)	-0.0156** (0.0042)	-0.0139*** (0.0042)	-0.0137*** (0.0042)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4407	0.4558	0.4667	0.3424	0.3453	0.3455
F	966.729	966.972	899.419	1,840.370	1,721.758	1,670.683
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	43.31 (0.0000)	41.12 (0.0000)	40.98 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.89	26.89	26.40			
Sargan test chi2	1.89	1.88	1.80			
Ten word listing (second recall)						
Biased expectations indicator > 0	2.7465*** (0.7131)	2.2495*** (0.7081)	2.2579*** (0.7064)	0.0046*** (0.0006)	0.0038*** (0.0005)	0.0035*** (0.0005)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.4214	0.4503	0.4871	0.3404	0.3878	0.3885
F	32.152	54.933	53.322	292.132	438.188	387.022
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	55.21 (0.0000)	53.24 (0.0000)	57.88 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.89	25.67	27.89			
Sargan test chi2	1.62	1.53	1.35			
Ten Word listing (second recall)						
Biased expectations indicator < 0	-2.4732*** (0.7882)	-1.8469** (0.7348)	-1.8767** (0.6536)	-0.0034** (0.0012)	-0.0027** (0.0010)	-0.0021** (0.0009)

N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4811	0.4821	0.4832	0.3203	0.3822	0.3834
F	17.590	46.451	44.790	143.582	407.714	362.376
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	57.27 (0.0000)	56.34 (0.0000)	56.15 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.90	25.91	26.39			
Sargan test chi2	1.89	1.84	1.75			
Maximum grip strength measure						
Biased expectations indicator > 0	7.0176*** (2.093)	6.0616** (2.647)	6.0572** (2.168)	0.1120*** (0.0352)	0.0828** (0.0339)	0.0778** (0.0338)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.5446	0.5446	0.5456	0.3205	0.3427	0.3446
F	226.097	243.278	236.869	3,272.160	2,375.145	2,095.338
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	47.12 (0.0000)	46.49 (0.0000)	45.43 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.04	2890	30.27			
Sargan test chi2	1.07	0.98	0.81			
Maximum grip strength measure						
Biased expectations indicator < 0	-7.8529** (2.626)	-7.250** (2.535)	-6.1280** (2.214)	-0.0643*** (0.0189)	-0.0551** (0.0179)	-0.0411** (0.0178)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4549	0.5121	0.5171	0.2947	0.3110	0.3135
F	261.062	266.289	260.737	2,899.058	2,056.523	1,819.981
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	43.14 (0.0000)	42.25 (0.0000)	41.36 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.56	26.57	26.13			
Sargan test chi2	1.15	1.09	1.03			
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year, number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP).

Table B15. Effect of biased survival expectations (LO) and biased meteorological expectation (ME) over investment behaviour

	Using biased survival expectations (IV- First-stage Table D.1)			Using meteorological expectations (OLS)		
	M1	M2	M3	M1	M2	M3
Bank accounts						
Biased expectations indicator > 0	-0.7648*** (0.1925)	-0.7531*** (0.2208)	-0.7188*** (0.2139)	-0.0101*** (0.0034)	-0.0078** (0.0034)	-0.0080** (0.0033)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1415	0.1463	0.1555	0.0933	0.0960	0.1000
F	472.601	458.540	439.838	2,385.473	1,617.503	1,481.197
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	20.87 (0.0000)	20.78 (0.0000)	20.93 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.05	24.93	25.56			
Sargan test chi2	1.98	1.90	2.01			
Bank accounts						
Biased expectations indicator < 0	0.9519*** (0.1790)	0.9277*** (0.2059)	0.9175*** (0.2001)	0.0079*** (0.0021)	0.0058** (0.0021)	0.0059** (0.0021)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1526	0.1544	0.1605	0.0421	0.0439	0.0443
F	106.557	108.158	100.499	1,017.662	698.768	618.141
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	39.90 (0.0000)	39.13 (0.0000)	40.15 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	31.57	33.41	34.07			
Sargan test chi2	1.38	1.26	1.11			
Government or corporate bonds						
Biased expectations indicator > 0	0.0950** (0.0378)	0.0942** (0.0392)	0.0845** (0.0325)	0.0363*** (0.0066)	0.0355*** (0.0066)	0.0352*** (0.0066)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1890	0.2089	0.2080	0.1012	0.1043	0.1046
F	308.975	306.252	289.932	2,608.859	1,772.503	1,557.134
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	19.68 (0.0000)	21.15 (0.0000)	22.43 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.48	28.49	29.59			
Sargan test chi2	1.85	1.74	1.63			
Government or corporate bonds						
Biased expectations indicator < 0	-0.1690** (0.0833)	-0.1538** (0.0776)	-0.1506** (0.0773)	-0.0443*** (0.0107)	-0.0401*** (0.0107)	-0.0322*** (0.0066)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1844	0.1890	0.1904	0.0774	0.0807	0.1046
F	198.929	192.150	185.140	1,944.628	1,337.700	1,557.134
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	41.06 (0.0000)	41.12 (0.0000)	41.55 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	30.75	33.07	30.96			
Sargan test chi2	1.42	1.46	1.53			
Stocks or shares (listed or unlisted in stockmarket)						
Biased expectations indicator > 0	-0.0987** (0.0041)	-0.0951** (0.0037)	-0.0930** (0.0034)	-0.0021** (0.0007)	-0.0018** (0.0008)	0.0017** (0.0008)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2451	0.2472	0.2497	0.1721	0.1737	0.1747
F	52.101	44.870	44.399	79.600	73.689	71.668
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	14.89 (0.0000)	16.56 (0.0000)	17.25 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.89	28.12	30.15			
Sargan test chi2	1.33	1.21	1.17			
Stocks or shares (listed or unlisted in stockmarket)						
Biased expectations indicator < 0	0.1620*** (0.0527)	0.1584*** (0.0510)	0.1550*** (0.0492)	0.0178*** (0.0050)	0.0121** (0.0051)	0.0116** (0.00351)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2003	0.2033	0.2075	0.0941	0.0978	0.0989
F	127.306	124.511	125.508	39.764	38.007	37.154
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	15.78 (0.0000)	17.42 (0.0000)	18.16 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	34.13	35.63	35.99			
Sargan test chi2	0.71	0.68	0.57			
Mutual funds or managed investment accounts						
Biased expectations indicator > 0	0.1746*** (0.0504)	0.1675*** (0.0490)	0.1562*** (0.0487)	0.0086*** (0.0021)	0.0072*** (0.0022)	0.0067*** (0.0022)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1835	0.1905	0.1990	0.1518	0.1566	0.1583
F	129.095	128.607	128.803	126.050	90.690	81.767
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	17.56 (0.0000)	19.85 (0.0000)	17.02 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	26.87	27.12	27.89			
Sargan test chi2	1.25	1.16	1.08			
Mutual funds or managed investment accounts						

Biased expectations indicator < 0	-0.2877**** (0.0884)	-0.2812*** (0.0862)	-0.2620*** (0.0830)	-0.0029*** (0.0009)	-0.0028*** (0.0009)	-0.0022** (0.0009)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2187	0.2261	0.2280	0.1292	0.1318	0.1439
F	268.113	261.238	283.621	3,439.609	2,312.261	2,240.060
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	19.12 (0.0000)	21.10 (0.0000)	23.95 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	35.52	36.41	37.14			
Sargan test chi2	0.93	0.95	1.07			
Mutual funds: mostly in stocks						
Biased expectations indicator > 0	-0.2659** (0.1266)	-0.2438** (0.1081)	-0.2280** (0.1007)	0.0077** (0.0028)	0.0060** (0.0028)	0.0056* (0.0028)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2145	0.2054	0.2015	0.1099	0.1106	0.1142
F	321.422	316.970	290.943	2,862.599	1,894.342	1,717.918
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	23.05 (0.0000)	23.12 (0.0000)	23.23 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	20.45	21.07	20.88			
Sargan test chi2	0.89	0.83	0.85			
Mutual funds: mostly in stocks						
Biased expectations indicator < 0	0.2115*** (0.0574)	0.1898*** (0.0583)	0.1222** (0.0581)	0.0110** (0.0039)	0.0086** (0.0039)	0.0086** (0.0038)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2587	0.2632	0.12730	0.1587	0.1600	0.1142
F	499.326	492.068	466.396	4,372.017	2,901.209	1,717.918
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	29.88 (0.0000)	32.14 (0.0000)	32.45 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	27.15	27.78	28.99			
Sargan test chi2	0.76	0.62	0.53			
Mutual funds: half in stocks, half in bonds						
Biased expectations indicator > 0	-0.3843*** (0.0992)	-0.3430*** (0.0953)	-0.3667*** (0.0886)	-0.0192*** (0.0075)	-0.0173** (0.0075)	-0.0176** (0.0075)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2233	0.2422	0.2350	0.0915	0.0940	0.0952
F	243.503	245.547	231.024	355.720	338.892	332.992
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	18.45 (0.0000)	18.70 (0.0000)	18.23 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	26.58	26.90	26.05			
Sargan test chi2	1.22	1.18	1.27			
Mutual funds: half in stocks, half in bonds						
Biased expectations indicator < 0	1.2878*** (0.3270)	1.2716*** (0.3706)	1.1901** (0.3493)	0.0190*** (0.0064)	0.0149** (0.0064)	0.0147** (0.0064)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2487	0.2501	0.2516	0.1207	0.1254	0.1275
F	152.517	170.215	159.798	484.941	468.263	462.255
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	47.34 (0.0000)	44.06 (0.0000)	42.39 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	30.12	29.51	30.62			
Sargan test chi2	1.90	1.82	1.93			
Mutual funds: mostly in bonds						
Biased expectations indicator > 0	0.5507** (0.2064)	0.4990** (0.2185)	0.4524** (0.1908)	0.0908*** (0.0137)	0.0889*** (0.0137)	0.0890** (0.0136)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1843	0.2053	0.2244	0.1193	0.1220	0.1295
F	161.446	153.819	156.363	939.418	633.141	592.782
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	29.25 (0.0000)	29.32 (0.0000)	28.41 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.25	22.72	23.75			
Sargan test chi2	1.87	1.80	1.90			
Mutual funds: mostly in bonds						
Biased expectations indicator < 0	-0.5231** (0.2320)	-0.5166** (0.2246)	-0.5154** (0.2109)	-0.0059** (0.0014)	-0.0039** (0.0014)	-0.0046** (0.0014)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1723	0.1789	0.1801	0.0458	0.0491	0.0507
F	143.468	141.115	140.335	333.169	235.376	212.725
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	32.27 (0.0000)	28.86 (0.0000)	29.84 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	32.62	33.20	32.09			
Sargan test chi2	1.23	1.19	1.28			
Individual retirement accounts						
Biased expectations indicator > 0	0.2314*** (0.0422)	0.2219*** (0.0475)	0.2080*** (0.0481)	0.0106** (0.0046)	0.0107** (0.0046)	0.0104** (0.0046)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2541	0.2574	0.2614	0.1067	0.1097	0.1106
F	177.505	175.603	172.946	828.622	561.533	495.501
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	24.67 (0.0000)	22.05 (0.0000)	22.97 (0.0000)			

Stock & Yogo's test (critical value at 5%: 19.93)	21.58	22.18	22.94			
Sargan test chi2	0.74	0.61	0.52			
Individual retirement accounts						
Biased expectations indicator < 0	-0.3414*** (0.0989)	-0.371*** (0.0950)	-0.3253*** (0.0917)	-0.0034** (0.0015)	-0.0033** (0.0015)	-0.0029** (0.0014)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1745	0.1781	0.1856	0.0946	0.0987	0.0995
F	144.797	146.473	144.632	724.619	498.811	440.278
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	36.35	36.46	35.36			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	26.56	27.42	27.35			
Sargan test chi2	0.90	0.84	0.86			
Life insurance						
Biased expectations indicator > 0	-0.2772*** (0.0726)	-0.2369** (0.0711)	-0.2170*** (0.0647)	-0.1599*** (0.0321)	-0.1481*** (0.0330)	-0.1440*** (0.0329)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.3414	0.4183	0.4537	0.2046	0.2100	0.2152
F	39.322	37.313	37.724	31.454	29.283	28.989
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	37.58	35.76	34.14			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	28.65	29.21	29.60			
Sargan test chi2	0.73	0.85	0.97			
Life insurance						
Biased expectations indicator < 0	0.3679** (0.1265)	0.3570** (0.1210)	0.3420** (0.1217)	0.1214** (0.0396)	0.1176** (0.0305)	0.1190** (0.0305)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2561	0.2502	0.2531	0.1401	0.1472	0.1527
F	92.556	95.944	98.928	19.925	19.019	19.056
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	27.31	27.95	27.39			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	35.20	35.59	37.23			
Sargan test chi2	1.27	1.18	1.09			
Mortgage						
Biased expectations indicator > 0	0.1637*** (0.0463)	0.1614*** (0.0458)	0.1572*** (0.0453)	0.2039** (0.0835)	0.2104** (0.0842)	0.2113** (0.0843)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2012	0.2078	0.2112	0.1580	0.1637	0.1660
F	116.258	114.058	112.582	42.050	30.301	27.479
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	21.41	23.35	23.87			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.89	26.90	27.08			
Sargan test chi2	0.71	0.68	0.57			
Mortgage						
Biased expectations indicator < 0	-0.1504** (0.0629)	-0.1444*** (0.0599)	-0.1305* (0.0567)	-0.0201*** (0.0056)	-0.0208*** (0.0056)	-0.0198*** (0.0055)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2341	0.2374	0.2463	0.1250	0.1291	0.1401
F	103.852	102.026	106.996	991.108	675.336	649.295
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	20.31	23.31	20.11			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	36.41	37.02	40.06			
Sargan test chi2	1.36	1.23	1.19			
Other debts (excluding mortgage)						
Biased expectations indicator > 0	0.1598** (0.0584)	0.1563** (0.0520)	0.1436** (0.0527)	0.0313*** (0.0081)	0.0290*** (0.0081)	0.0280*** (0.0081)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2150	0.2192	0.2280	0.1145	0.1162	0.1193
F	131.755	123.257	123.566	896.992	598.711	539.706
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	32.56	31.41	32.09			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.52	25.72	26.19			
Sargan test chi2	1.37	1.25	1.10			
Other debts (excluding mortgage)						
Biased expectations indicator < 0	-0.1640** (0.0769)	-0.1623** (0.0712)	-0.1593** (0.0725)	-0.0209** (0.0076)	-0.0198** (0.0076)	-0.0215** (0.0076)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2298	0.2510	0.2827	0.1547	0.1572	0.1611
F	129.386	123.872	129.875	1,269.505	849.454	765.046
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	18.16	20.18	21.05			
Durbin test chi2(1) /p-value	(0.0000)	(0.0000)	(0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	35.13	36.38	37.99			
Sargan test chi2	1.89	1.78	1.67			
Total wealth amount (1,000PPP)(*)						
Biased expectations indicator > 0	0.2386*** (0.0938)	0.2235** (0.0948)	0.2145** (0.0942)	0.0135** (0.0053)	0.0128** (0.0052)	0.0128* (0.0052)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2813	0.3033	0.3057	0.1041	0.1086	0.1098
F	90.151	90.373	89.569	122.836	118.830	116.445

p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	30.58 (0.0000)	30.90 (0.0000)	31.06 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.17	25.72	23.98			
Sargan test chi2	1.40	1.44	1.51			
Total wealth amount (1,000PPP)(*)						
Biased expectations indicator < 0	-0.7998*** (0.2261)	-0.6911*** (0.2145)	-0.6455** (0.2106)	-0.0017*** (0.0003)	-0.0016*** (0.003)	-0.0015*** (0.003)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2714	0.2789	0.3091	0.1396	0.1447	0.1485
F	99.040	99.842	100.873	171.540	164.994	164.732
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	25.89 (0.0000)	25.76 (0.0000)	25.98 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	32.02	31.84	32.82			
Sargan test chi2	2.02	1.94	2.05			
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year and number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP). Bootstrap with 1,000 replications Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%. (*) Wealth is not included as explanatory variable in this regression.

Table B16. Effect of biased survival expectations (LO) and biased meteorological expectation (ME) over the amount of financial risk that the respondent is willing to take when making investments

	Using biased survival expectations (IV- First-stage Table D.1)			Using meteorological expectations (OLS)		
	M1	M2	M3	M1	M2	M3
Take substantial risk expecting to earn substantial returns						
Biased expectations indicator > 0	0.0277*** (0.0035)	0.0251*** (0.0044)	0.0248*** (0.0022)	0.0060*** (0.0019)	0.0059*** (0.0019)	0.0059*** (0.0019)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2127	0.2153	0.2146	0.0782	0.0788	0.0791
F	40.102	40.371	38.379	191.685	134.615	121.816
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	30.75 (0.0000)	32.44 (0.0000)	33.70 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.14	25.70	24.18			
Sargan test chi2	1.16	1.09	0.91			
Take substantial risk expecting to earn substantial returns						
Biased expectations indicator < 0	-0.0387*** (0.0021)	-0.0302*** (0.0020)	-0.0282*** (0.0079)	-0.0161*** (0.0034)	-0.0155*** (0.0034)	-0.0153*** (0.0034)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2486	0.2477	0.2487	0.1410	0.1415	0.1424
F	126.595	122.422	116.730	991.257	659.660	590.479
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	28.76 (0.0000)	29.98 (0.0000)	30.16 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	33.78	34.89	34.09			
Sargan test chi2	1.45	1.51	1.34			
Take above average financial risks expecting to earn above average returns						
Biased expectations indicator > 0	1.1210*** (0.3544)	1.1031*** (0.4031)	1.0661*** (0.3880)	0.0319*** (0.0077)	0.0285*** (0.0077)	0.0277*** (0.0076)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1619	0.1870	0.1844	0.1619	0.1650	0.1659
F	328.700	331.612	315.922	4,477.045	3,009.245	2,650.989
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	27.50 (0.0000)	26.43 (0.0000)	27.12 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	21.85	22.64	23.67			
Sargan test chi2	2.31	2.28	2.11			
Take above average financial risks expecting to earn above average returns						
Biased expectations indicator < 0	-1.0475*** (0.3583)	-0.9896** (0.4037)	-0.9596** (0.3897)	-0.0579*** (0.0080)	-0.0540*** (0.0080)	-0.0530*** (0.0080)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2888	0.3176	0.3294	0.5174	0.5190	0.5198

F	1,680.102	1,722.838	1,606.077	24,852.998	16,429.099	14,421.279
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	26.78	28.14	25.33			
Stock & Yogo's test (critical value at 5%: 19.93)	(0.0000)	(0.0000)	(0.0000)			
Sargan test chi2	22.08	23.35	26.87			
	2.67	2.80	2.78			
Take average financial risks expecting to earn average returns						
Biased expectations indicator > 0	-0.0771*** (0.0211)	-0.0685*** (0.0208)	-0.0673*** (0.0205)	-0.0043** (0.0021)	-0.0042* (0.0021)	-0.0040* (0.0021)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.3052	0.3054	0.3066	0.02170	0.2182	0.2183
F	15.947	16.112	15.938	48.553	37.571	33.295
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	29.14	28.47	27.03			
Stock & Yogo's test (critical value at 5%: 19.93)	(0.0000)	(0.0000)	(0.0000)			
Sargan test chi2	23.58	21.41	22.90			
	1.75	1.57	1.41			
Take average financial risks expecting to earn average returns						
Biased expectations indicator < 0	0.1080*** (0.0065)	0.1060*** (0.0083)	0.1015*** (0.0017)	0.0130** (0.0060)	0.0129** (0.0050)	0.0125** (0.0050)
N	19,842	19,842	19,842	15,979	15,979	15,979
F	0.3271	0.3274	0.3258	0.2305	0.2320	0.2327
p	36.641	35.324	34.572	217.999	150.787	134.715
R ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	32.14	33.79	35.51			
Stock & Yogo's test (critical value at 5%: 19.93)	(0.0000)	(0.0000)	(0.0000)			
Sargan test chi2	23.78	22.02	21.98			
	1.80	1.62	1.48			
Not willing to take any financial risks						
Biased expectations indicator > 0	-0.6822*** (0.1410)	-0.5752*** (0.1648)	-0.5598*** (0.1724)	-0.0116** (0.0048)	-0.0114** (0.0047)	-0.0107** (0.0047)
N	50,058	50,058	50,058	53,336	53,336	53,336
F	0.1724	0.2097	0.2147	0.1608	0.1654	0.1676
p	158.385	155.737	152.498	1.329.275	902.858	802.377
R ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	43.78	42.53	45.87			
Stock & Yogo's test (critical value at 5%: 19.93)	(0.0000)	(0.0000)	(0.0000)			
Sargan test chi2	28.02	26.43	25.51			
	0.64	0.58	0.53			
Not willing to take any financial risks						
Biased expectations indicator < 0	0.4028*** (0.0492)	0.3802*** (0.0783)	0.3507*** (0.0861)	0.0176** (0.0079)	0.0172** (0.0078)	0.0166** (0.0078)
N	19,842	19,842	19,842	15,979	15,979	15,979
F	0.6005	0.6085	0.6109	0.5709	0.5735	0.5747
p	1,255.924	1,184.734	1,155.490	9,229.947	6,126.153	5,384.768
R ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	41.36	41.79	43.80			
Stock & Yogo's test (critical value at 5%: 19.93)	(0.0000)	(0.0000)	(0.0000)			
Sargan test chi2	24.75	25.78	24.89			
	0.60	0.55	0.31			
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year and number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP). Bootstrap with 1,000 replications Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%.

Table B17. Effect of biased survival expectations (LO) and biased meteorological expectation (ME) over social contacts

	Using biased survival expectations (IV- First-stage Table D.1)			Using meteorological expectations (OLS)		
	M1	M2	M3	M1	M2	M3
Social contacts						
Biased expectations indicator > 0	0.2814*** (0.0788)	0.2790*** (0.0699)	0.2509*** (0.0613)	0.4052** (0.1506)	0.3136** (0.1395)	0.3085** (0.1388)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.6525	0.6681	0.6662	0.6491	0.6669	0.6681
F	1,457.312	1,436.108	1,387.521	1,831.377	1,828.466	1,780.234
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	27.05 (0.0000)	28.67 (0.0000)	25.13 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.56	24.25	24.60			
Sargan test chi2	1.17	1.10	0.98			
Social contacts						
Biased expectations indicator < 0	-0.0579*** (0.0166)	-0.0565*** (0.0121)	-0.0562*** (0.0125)	-0.0136** (0.0042)	-0.0122*** (0.0042)	-0.0117*** (0.0041)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.4986	0.4043	0.4039	0.3178	0.3214	0.3224
F	348.214	328.724	318.509	492.488	461.813	449.429
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	44.24 (0.0000)	43.25 (0.0000)	43.19 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	29.80	29.17	29.04			
Sargan test chi2	1.67	1.54	1.49			
Feels things are out of control: often						
Biased expectations indicator > 0	-0.4981** (0.2086)	-0.4892** (0.1933)	-0.4635** (0.2090)	-0.0195*** (0.0055)	-0.0187*** (0.0055)	-0.0101* (0.0053)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1012	0.1078	0.1122	0.0361	0.0381	0.0897
F	125.170	131.952	265.282	1,329.886	918.184	1,500.742
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	22.15 (0.0000)	21.41 (0.0000)	24.01 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.50	25.01	26.48			
Sargan test chi2	1.48	1.37	1.22			
Feels things are out of control: often						
Biased expectations indicator < 0	0.9489** (0.3339)	-0.8213** (0.3195)	0.7994** (0.2984)	0.0278*** (0.0051)	0.0275*** (0.0051)	0.0245*** (0.0045)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1217	0.1228	0.1362	0.0461	0.0504	0.1237
F	55.947	59.448	128.050	513.889	368.423	642.820
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	20.18 (0.0000)	21.05 (0.0000)	23.15 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.44	23.78	24.10			
Sargan test chi2	1.59	1.45	1.36			
Feels things are out of control: sometimes						
Biased expectations indicator > 0	-0.5256*** (0.1129)	-0.2848** (0.1074)	-0.2255** (0.1075)	-0.0777*** (0.0089)	-0.0763*** (0.0089)	-0.0633*** (0.0088)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1544	0.1578	0.1610	0.0767	0.0778	0.0972
F	266.697	253.100	312.104	2,951.259	1,954.878	1,640.135
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	23.58 (0.0000)	23.47 (0.0000)	23.60 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	22.71	22.18	23.05			
Sargan test chi2	1.59	1.44	1.29			
Feels things are out of control: sometimes						
Biased expectations indicator < 0	0.5291*** (0.1695)	0.4425** (0.1653)	0.4328** (0.1522)	0.0503** (0.0217)	0.0498** (0.0217)	0.0481** (0.0215)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.1605	0.1641	0.1718	0.0784	0.0791	0.0943
F	120.351	116.192	117.113	905.714	595.760	474.465
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	19.73 (0.0000)	19.81 (0.0000)	20.03 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	25.30	25.65	27.02			
Sargan test chi2	1.45	1.23	1.17			
Feels things are out of control: rarely						
Biased expectations indicator > 0	-0.2902*** (0.0442)	-0.2788*** (0.0349)	-0.1894*** (0.0831)	0.0012 (0.0097)	-0.0013 (0.0097)	-0.0038 (0.0097)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.1923	0.1975	0.1984	0.1086	0.1102	0.1150
F	388.476	369.710	372.668	4,329.949	2,870.911	1,978.499
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	19.12 (0.0000)	19.65 (0.0000)	19.71 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	35.11	35.17	36.23			
Sargan test chi2	1.31	1.23	1.11			
Feels things are out of control: rarely						
Biased expectations indicator < 0	1.1085*** (0.3191)	0.9103** (0.3018)	0.6532** (0.3274)	0.0367 (0.0225)	0.0352 (0.0225)	0.0317 (0.0224)
N	19,842	19,842	19,842	15,979	15,979	15,979

R ²	0.2016	0.2057	0.2091	0.0950	0.0966	0.1064
F	128.663	130.370	135.482	1,117.617	741.814	542.637
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	23.41 (0.0000)	23.50 (0.0000)	24.65 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	34.34	34.19	34.76			
Sargan test chi2	1.17	1.24	1.21			
Feels things are out of control: never						
Biased expectations indicator > 0	0.6580*** (0.1656)	0.4500** (0.1487)	0.4430** (0.1405)	0.0946*** (0.0098)	0.0948*** (0.0098)	0.0755*** (0.0096)
N	50,058	50,058	50,058	53,336	53,336	53,336
R ²	0.2105	0.2133	0.2178	0.1322	0.1335	0.1650
F	565.285	546.860	629.164	5,414.361	3,572.653	3,009.816
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	33.57 (0.0000)	33.80 (0.0000)	34.81 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	23.61	23.90	23.98			
Sargan test chi2	1.45	1.67	1.89			
Feels things are out of control: never						
Biased expectations indicator < 0	-0.3644*** (0.0510)	-0.3335*** (0.0493)	-0.2608*** (0.0480)	-0.0586** (0.0230)	-0.0570** (0.0229)	-0.0551** (0.0225)
N	19,842	19,842	19,842	15,979	15,979	15,979
R ²	0.2256	0.2279	0.2380	0.1073	0.1095	0.1457
F	119.510	114.634	131.859	1,279.643	852.819	777.083
P	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Durbin test chi2(1) /p-value	31.11 (0.0000)	31.15 (0.0000)	31.43 (0.0000)			
Stock & Yogo's test (critical value at 5%: 19.93)	24.78	24.87	24.50			
Sargan test chi2	1.89	1.69	1.82			
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year and number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP).

Table B18. Effect of one standard deviation increase (or decrease) of biased survival expectations (LO) and biased meteorological expectation (ME) over social contacts

	One standard deviation increase of LO>0	One standard deviation increase of LO<0	One standard deviation increase of ME>0	One standard deviation increase of ME<0
Social contacts				
Effect in percentual points	6.0873 pp	-1.0060 pp	5.8276 pp	-0.1719 pp
With respect to the mean probability	38.7234 %	-6.3994 %	37.0710 %	-1.0933 %
Feels things are out of control: often				
Effect in percentual points	-11.2445 pp	14.3093 pp	-0.1908 pp	0.3599 pp
With respect to the mean probability	-152.5714 %	194.1555 %	-2.5887 %	4.8834 %
Feels things are out of control: sometimes				
Effect in percentual points	-5.4706 pp	7.7471 pp	-1.1957 pp	0.7066 pp
With respect to the mean probability	-28.2866 %	40.0575 %	-6.1827 %	3.6535 %
Feels things are out of control: rarely				
Effect in percentual points	-4.5948 pp	11.6923 pp	No signif	No signif
With respect to the mean probability	-21.4312 %	54.5349 %	-	-
Feels things are out of control: never				
Effect in percentual points	10.7472 pp	-4.6683 pp	1.4262 pp	-0.8094 pp
With respect to the mean probability	42.3618 %	-18.4009 %	5.6216 %	-3.1905 %

The effects for LO are obtained after estimating equation (4) with the explanatory variables included in specification M3. Estimated coefficients are reported on Table B17 (and on Table D.1 for first-stage regression). The effects for ME are obtained after estimating equation (8) with the explanatory variables included in specification M3. Estimated coefficients are reported on Table B17. Mean values for the dependent variables are reported on Table B6.

Appendix C. Discrete time-hazard model

Estimating biased survival expectations. The departure point of our analysis is the duration model of Jenkins (1995). He estimated a discrete-time hazard model to explain the effect of different covariates over the transition to retirement. The key point of his model is to use as unit of analysis the time of risk of an event, so that time periods prior to selection into the sample can be ignored. In this way, the estimation of the discrete-time hazard model is simplified to the estimation of a binary outcome (retired vs. not retired in the case of Jenkins (1995), or live vs. died, in our case). We create our sample of interest selecting alive individuals at each wave of SHARE following them through the next waves, until they are observed to decease or they are censored. Transition to death is estimated using a discrete-time hazard model which allows us to analyze the impact of socioeconomic characteristic and health indicators over the probability of not surviving.

To understand how the stock-sampling works, consider first individuals who are alive at wave 1. In the following waves, they may be still alive or have died. Using Jenkins' (1995) notation $t = \tau$ is the first observation of the stock sample, that is, the first period at which the individual is at risk of decease. By the time of the second interview (for the subsample of follow-up respondents), each individual may be still living (censored duration data $\delta_i = 0$) or have died (complete duration data $\delta_i = 1$). $t = \tau + s_i$ is the year of the decease if $\delta_i = 0$, and is the final year of our observation period if $\delta_i = 1$. Therefore, each respondent i contributes to s_i of life spell data. Given that the probability of dying at each time period t provides information on the duration distribution, the discrete-time hazard (h_{it}) is defined as:

$$h_{it} = P[T_i = t | T_i \geq t, \Omega_{it}] \quad (C.1)$$

where Ω_{it} is a vector of explanatory variables² that varies with time and T_i is a random variable representing the time at which the decease is observed. Then, upon the restriction of being alive at the beginning of the spell, the conditional probability of observing an uncompleted spell (i.e., being alive at the next interview) is the following:

$$Pr[T_i > t | T_i > \tau - 1] = \prod_{t=\tau}^{\tau+s_i} (1 - h_{it}) \quad (C.2)$$

The probability of dying between the initial observation (τ) and next interview is:

² Age, gender, level of education, body mass index, chronic illness, smoking and drinking habits, feeling depressed, days stayed at hospital during last year for surgery or medical tests, days stayed at hospital during last year due to mental health problems, number of days stayed in other institutions other than a hospital or a nursing home during last year (i.e., institutions for rehabilitation, convalescence), visits to general practitioner during last year, sedentary lifestyle, living alone, living in a rural area, being employed, adjusted income and wealth, country and time fixed effects. The definition of each one is shown on Table A1.

$$Pr[T_i > t | T_i = \tau - 1] = h_{i\tau+s_i} \prod_{t=\tau}^{\tau+s_i-1} (1 - h_{it}) = \frac{h_{i\tau+s_i}}{1 - h_{i\tau+s_i}} \prod_{t=\tau}^{\tau+s_i} (1 - h_{it}) \quad (C.3)$$

And the log-likelihood function for the complete sample is:

$$\log L = \sum_{i=1}^N \delta_i \log \left(\frac{h_{i\tau+s_i}}{1 - h_{i\tau+s_i}} \right) + \sum_{i=1}^N \sum_{t=\tau}^{\tau+s_i} \log (1 - h_{it}) \quad (C.4)$$

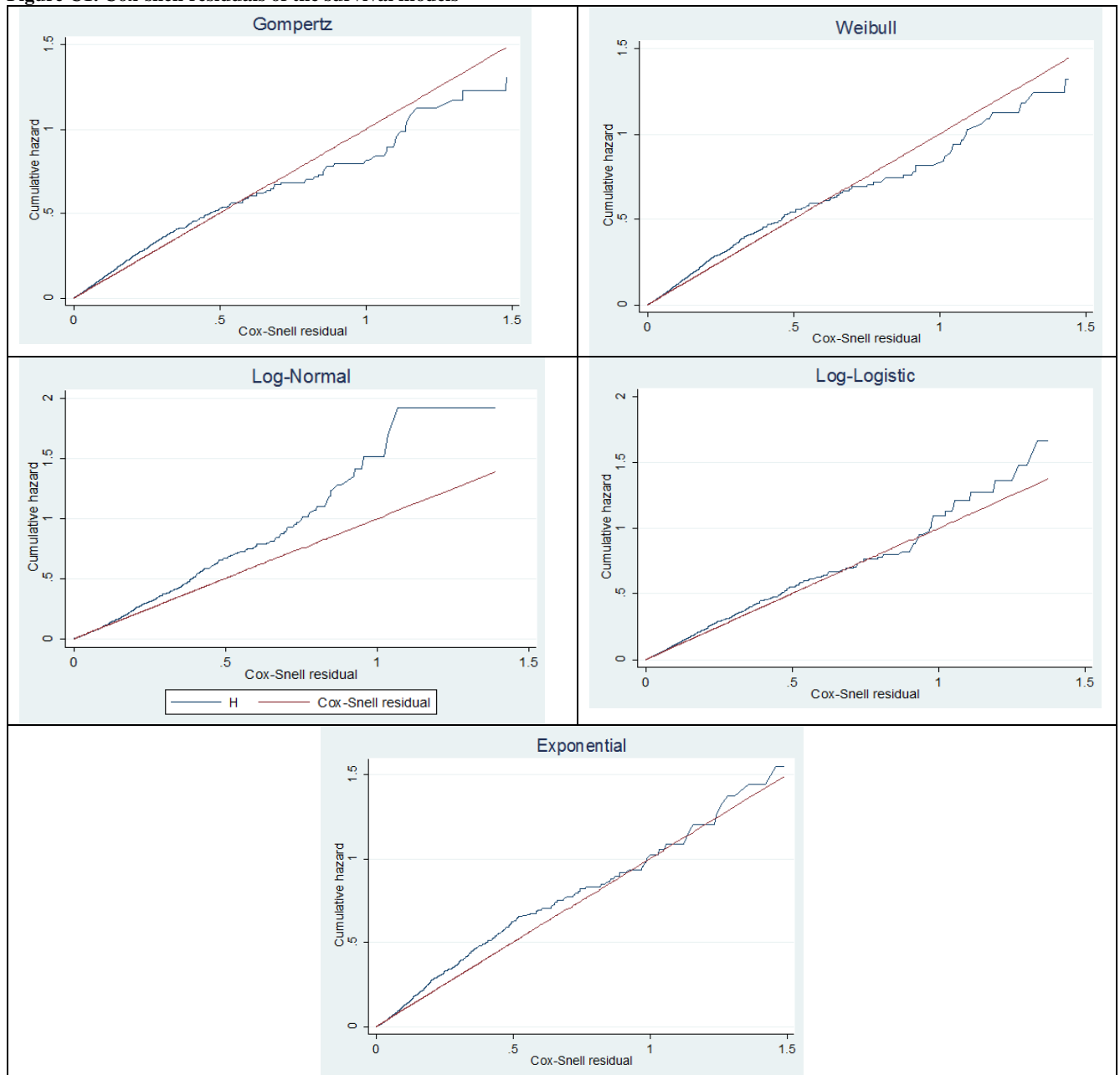
As we only observe individuals who are alive by the time of the first interview, we can simplify the log-likelihood by defining a binary indicator. For those who are alive at the end of the observation period: $y_{it} = 0$, for all periods. For those who die: $y_{it} = 0$ for all periods, except the last one in which case $y_{it} = 1$. It can also be expressed as: $y_{it} = 1$ if $t = \tau + s_i$ and $\delta_i = 1$ (for decease-observation) and $y_{it} = 0$ otherwise (for alive-observation). After introducing this binary indicator in the log-likelihood function we get:

$$\log L = \sum_{i=1}^N \sum_{t=\tau}^{\tau+s_i} y_{it} \log \left(\frac{h_{i\tau+s_i}}{1 - h_{i\tau+s_i}} \right) + \sum_{i=1}^N \sum_{t=\tau}^{\tau+s_i} \log (1 - h_{it}) \quad (C.5)$$

Consequently, (C.5) seems like the log-likelihood function of a binary variable, where the unit of analysis is the spell period.

In the estimation of the discrete time hazard model, we have adjusted five different functional forms: exponential, Gompertz, Weibull, log-normal and log-logistic. To determine which one fits better to the data we have obtained the cox-snell residuals and two information criteria (AIC y BIC). Figure C1 shows the cox-snell residuals for all the functional forms. As the model fits better to the data, the cox-snell residuals seem like an exponential distribution with scale parameter equal to 1. For this purpose, we have estimated the Kaplan-Meier cumulative hazard function using the cox-snell residuals as the time variable and plotted them against the cox-snell residuals. We observe that the cox-snell residuals are nearer to the bisector of the first quadrant for the Weibull function. Additionally, the AIC and BIC attain the lowest values for the Weibull model (Table C1).

Figure C1. Cox-snell residuals of the survival models



All models include the same explanatory variables: age age-squared, gender, level of education, obese, overweight, chronic illness (high blood pressure, cancer, stroke, diabetes, heart attack, lung disease, Alzheimer), number of days stayed at hospital during last year (not due to mental health problems), number of days stayed in hospital due to mental health problems, number of days stayed in other institutions during last year, number of visits to general practitioner during last year, feeling depressed, drinking alcohol every day or 5-6 days per week, sedentary lifestyle, smokes now, has smoked before (not now), being employed, living alone, living in rural area/village/small town, adjusted income, adjusted wealth, country fixed effects, time fixed effects..

Table C1. Comparison of AIC and BIC statistics

	Gompertz	Weibull	Log-normal	Log-logistic	Exponential
Baseline model (N=69,900)					
AIC	64,248.669	61,098.945	65,622.216	65,032.539	61,974.631
BIC	64,249.044	61,099.320	65,622.591	65,032.915	61,974.997
Excluding focal responses					
AIC	67,462.102	64,154.892	68,904.327	68,285.166	65,074.363
BIC	67,462.496	64,155.286	68,904.721	68,285.561	65,074.747
Excluding respondents with erroneous responses to probabilistic question					
AIC	72,185.450	68,646.735	73,728.630	73,066.128	69,630.568
BIC	72,185.871	68,647.156	73,729.051	73,066.550	69,630.979
Including parental characteristics as explanatory variables in the baseline model					
AIC	60,120.778	57,365.864	61,315.941	60,803.308	58,133.776
BIC	60,121.104	57,366.193	61,316.267	60,803.635	58,134.097

All models include the same explanatory variables: age age-squared, gender, level of education, obese, overweight, chronic illness (high blood pressure, cancer, stroke, diabetes, heart attack, lung disease, Alzheimer), number of days stayed at hospital during last year (not due to mental health problems), number of days stayed in hospital due to mental health problems, number of days stayed in other institutions during last year, number of visits to general practitioner during last year, feeling depressed, drinking alcohol every day or 5-6 days per week, sedentary lifestyle, smokes now, has smoked before (not now), being employed, living alone, living in rural area/village/small town, adjusted income, adjusted wealth, country fixed effects, time fixed effects..

Table C2. Comparison of subjective survival probability and objective survival probability gender

	N	SSP (%)	OSP (%)	LO Difference SSP-OSP	Optimistic SSP>OSP (%)	Pesimistic SSP<OSP (%)
Deceased						
Men	1,142	43.01 (33.75)	16.17 (23.10)	26.84 (34.42)	74.33	25.67
Women	898	37.96 (31.65)	18.33 (26.03)	19.63 (34.89)	65.24	34.76
All	2,040	40.63 (32.87)	17.18 (24.54)	23.44 (34.82)	70.04	29.96
Survivor						
Men	30,829	64.51 (28.97)	42.51 (28.15)	22.00 (35.03)	72.89	27.11
Women	37,031	62.10 (29.87)	52.67 (29.55)	9.43 (33.85)	60.90	39.10
All	67,860	63.21 (29.48)	47.99 (29.35)	15.21 (34.96)	63.41	36.59

SSP: subjective survival probability. OSP: objective survival probability
Standard errors between parenthesis. Using calibrated sampling weights

Table C3. Comparison of subjective survival probability and objective survival probability by country

Deceased subsample (by country)

	N	SSP (%)	OSP (%)	LO Difference SSP-OSP	Optimistic SSP>OSP (%)	Pesimistic SSP<OSP (%)
Austria	223	43.71 (31.11)	19.28 (25.07)	24.43 (34.34)	73.30	26.70
Belgium	260	38.54 (31.64)	18.29 (25.13)	20.26 (33.74)	66.85	33.15
Denmark	210	43.97 (33.96)	16.91 (23.49)	27.06 (33.54)	71.80	28.20
France	199	42.45 (33.71)	22.84 (27.81)	19.61 (36.31)	64.93	35.07
Germany	165	36.63 (32.88)	21.95 (28.21)	14.68 (31.43)	63.55	36.45
Italy	237	45.38 (32.06)	13.64 (19.93)	31.74 (34.62)	78.27	21.73
Spain	414	38.53 (32.73)	12.67 (21.59)	25.86 (35.42)	72.08	27.92
Sweden	211	31.64 (34.34)	12.62 (21.10)	19.02 (31.74)	60.45	39.55
Switzerland	121	42.20 (30.98)	19.46 (26.29)	22.74 (36.25)	68.30	31.70
Group I	651	42.11 (32.53)	13.18 (20.72)	28.94 (35.10)	75.32	24.68
Group II	459	41.82 (33.37)	22.10 (27.41)	19.72 (35.86)	65.24	34.76
Group III	433	43.82 (32.27)	18.31 (24.44)	25.50 (34.01)	72.69	27.31
Group IV	497	36.46 (32.94)	20.58 (27.39)	15.88 (31.92)	63.55	36.45
All countries	2,040	40.63 (32.87)	17.18 (24.54)	23.44 (34.82)	70.04	29.96

SSP: subjective survival probability. OSP: objective survival probability

Standard errors between parenthesis. Using calibrated sampling weights

Group I: Italy and Spain. Group II: Belgium and France. Group III: Austria and Denmark. Group IV: Germany, Sweden and Switzerland.

Survivors subsample (by country)

	N	SSP (%)	OSP (%)	LO Difference SSP-OSP	Optimistic SSP>OSP (%)	Pesimistic SSP<OSP (%)
Austria	7,680	64.48 (29.36)	45.24 (28.32)	19.24 (33.13)	71.23	28.77
Belgium	10,531	59.76 (27.42)	50.81 (29.27)	8.96 (32.67)	59.18	40.82
Denmark	6,227	71.26 (27.89)	46.98 (28.45)	24.28 (32.19)	77.92	22.08
France	8,231	61.48 (28.99)	51.94 (29.28)	9.53 (33.64)	60.38	39.62
Germany	6,997	60.91 (29.80)	51.71 (28.94)	9.20 (34.04)	60.85	39.15
Italy	7,516	65.56 (30.13)	46.29 (29.38)	19.27 (36.40)	70.29	29.71
Spain	7,751	64.57 (29.19)	38.39 (28.26)	26.19 (34.42)	76.82	23.18
Sweden	6,921	63.62 (30.48)	43.92 (29.13)	19.71 (33.26)	71.25	28.74
Switzerland	6,006	68.05 (26.66)	51.68 (27.89)	16.37 (32.65)	68.84	31.16
Group I	15,267	65.17 (29.76)	43.15 (29.20)	22.02 (35.79)	72.88	27.12
Group II	18,762	61.19 (28.74)	51.75 (29.28)	9.44 (33.48)	60.18	39.82
Group III	13,907	67.00 (29.01)	45.88 (28.38)	21.11 (32.87)	73.71	26.29
Group IV	19,924	61.93 (29.64)	50.96 (28.94)	10.97 (34.01)	62.70	37.30
All countries	67,860	63.21 (29.48)	47.99 (29.35)	15.21 (34.96)	63.41	36.59

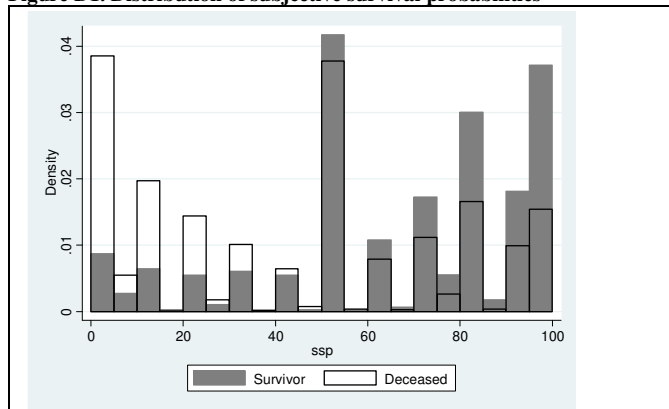
SSP: subjective survival probability. OSP: objective survival probability

Standard errors between parenthesis. Using calibrated sampling weights

Group I: Italy and Spain. Group II: Belgium and France. Group III: Austria and Denmark. Group IV: Germany, Sweden and Switzerland.

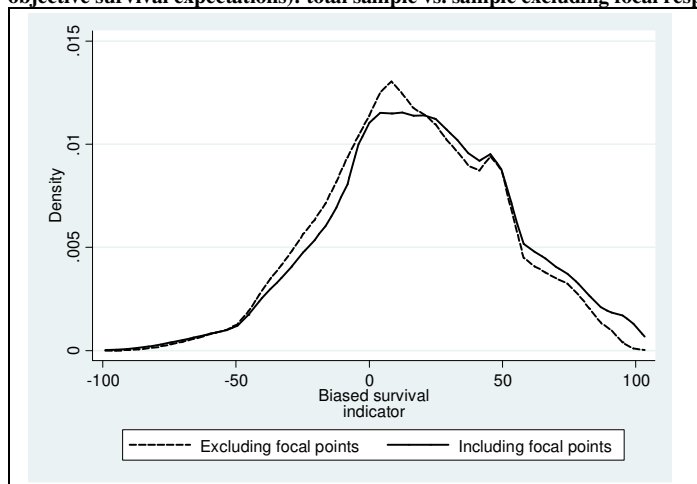
Appendix D. First-stage regressions and robustness checks

Figure D1. Distribution of subjective survival probabilities



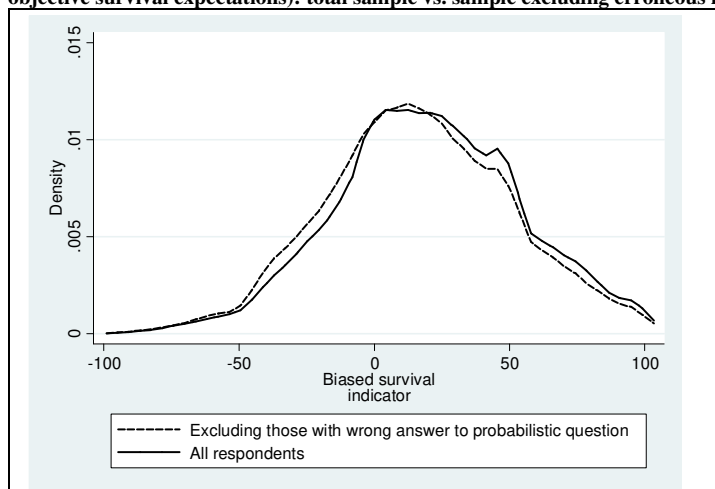
Note: 2,040 observations for the deceased subsample; 67,860 observations for the survivors subsample.

Figure D2. Kernel density function for the “biased survival indicator” (difference between subjective survival expectations and objective survival expectations): total sample vs. sample excluding focal responses



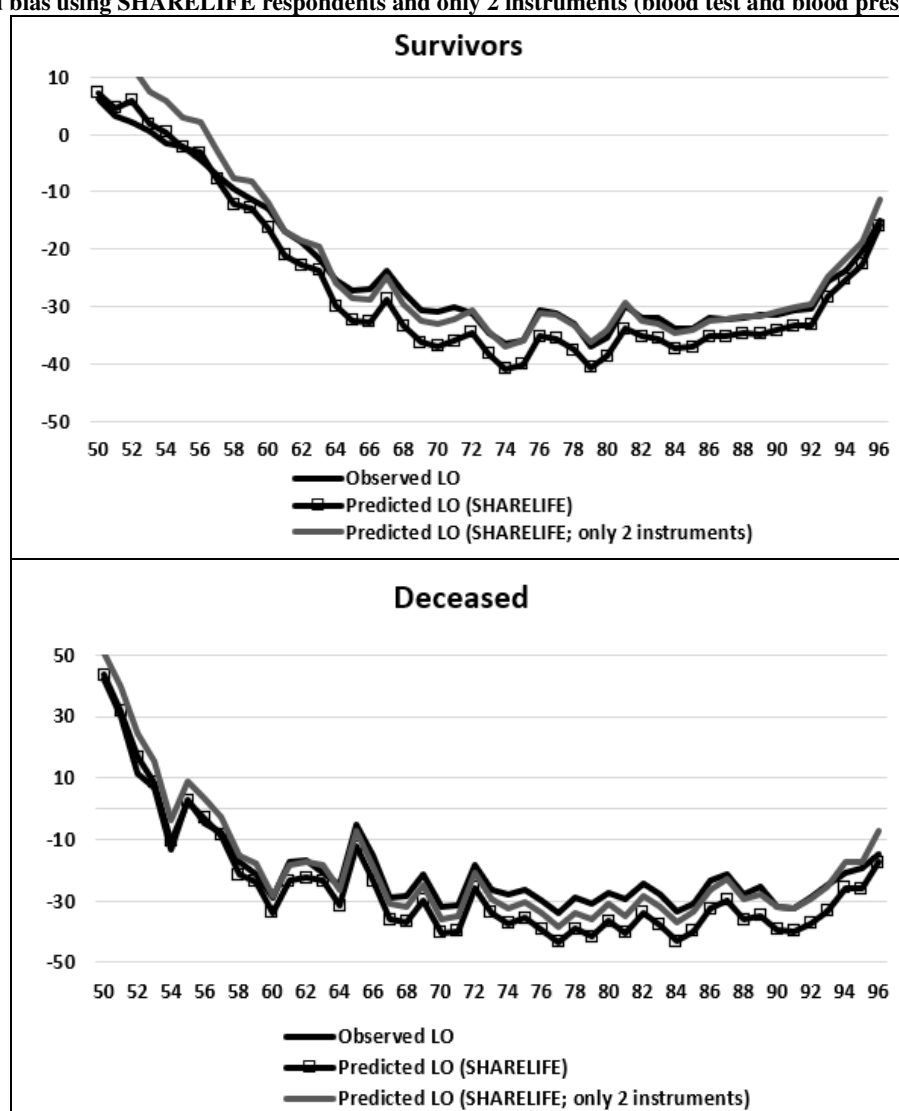
Including focal responses: N=69,900. Excluding focal responses (0, 50, 100): N=40,893.

Figure D3. Kernel density function for the “biased survival indicator” (difference between subjective survival expectations and objective survival expectations): total sample vs. sample excluding erroneous responses to probabilistic question.



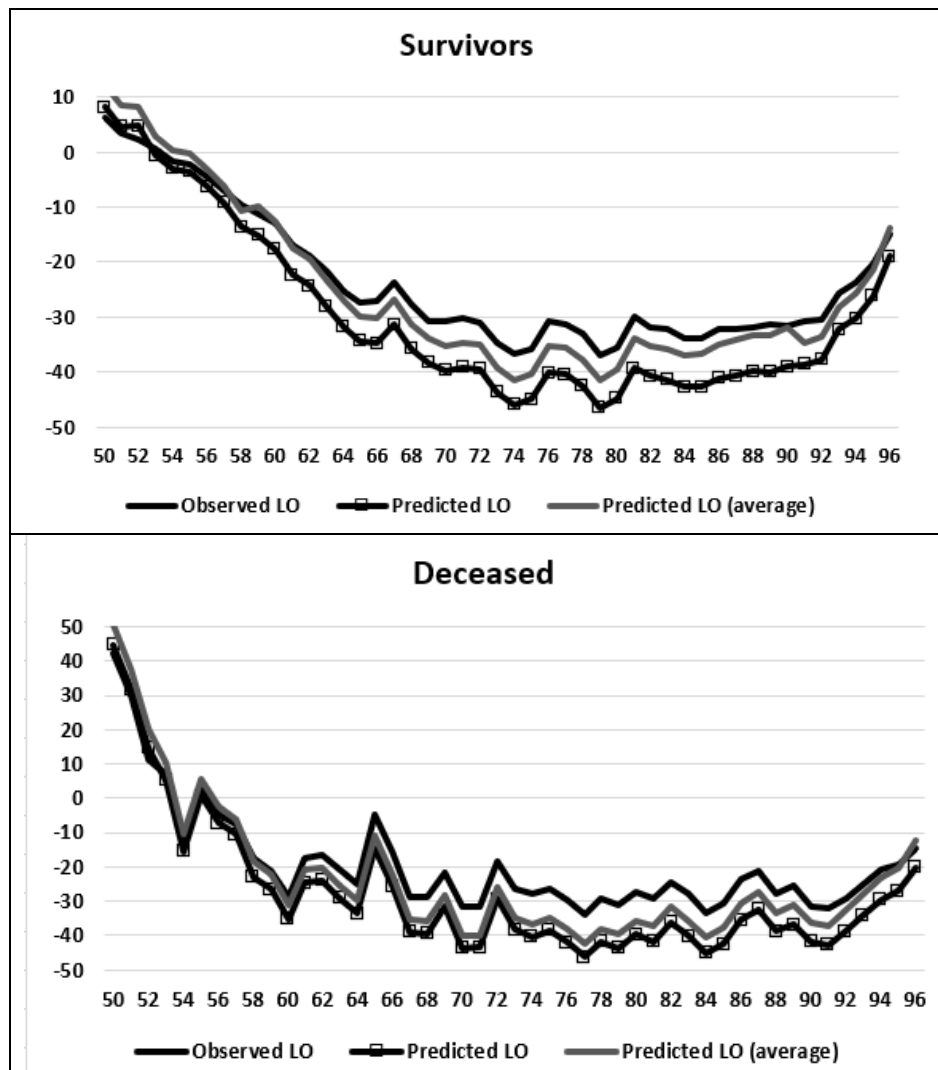
Probabilistic question: “If the chance of getting a disease is 10 per cent, how many people out of 1000 (one thousand) would be expected to get the disease?”
Total sample: N=69,900. Excluding erroneous responses to probabilistic question: N=30,183.

Figure D4. Comparison between observed bias, predicted bias using SHARELIFE respondents and all instruments and predicted bias using SHARELIFE respondents and only 2 instruments (blood test and blood pressure).



Note: Black straight line corresponds to observed LO (difference between objective and subjective survival expectations represented on Figure 1). Black line with squares corresponds to predicted LO using only SHARELIFE respondents and all instruments (parent's age of deceased, blood test and blood pressure) (4th column of Table D1). Parent's age of decease has been imputed for those fathers/mothers alive at the time of the survey. Grey straight line corresponds to predicted LO using only SHARELIFE respondents, but using only two instruments (blood test and blood pressure) (5th column of Table D1).

Figure D5. Comparison between observed bias, predicted bias and predicted bias taking the average for each respondent.



Note: Black straight line corresponds to observed LO (difference between objective and subjective survival expectations represented on Figure 1). Black line with squares corresponds to predicted LO using the whole sample of respondents (Table D1). Grey straight line corresponds to predicted LO using the whole sample of respondents (Table D1) and taking the mean for each individual.

Table D1. First stage regressions for the “biased survival” indicator (difference between SSP and OSP)

	Using the whole sample of respondents			Sample of respondents who have answered SHARELIFE	
	M1	M2	M3	M4	M5
Mother's age at decease ^a	0.0011*** (0.0001)	0.0012*** (0.0001)	0.0012*** (0.0001)	0.0010*** (0.0001)	-
Father's age at decease ^b	0.0015*** (0.0001)	0.0017*** (0.0001)	0.0017*** (0.0001)	0.0014*** (0.0001)	-
Mother alive	0.0111** (0.0051)	0.0114** (0.0050)	0.0114** (0.0050)	0.0107** (0.0048)	-
Father alive	0.0242*** (0.0047)	0.0248*** (0.0046)	0.0248*** (0.0046)	0.0235*** (0.0043)	-
Blood pressure checked last year	-	-	-	-11.6010*** (0.0034)	-11.6511*** (0.0031)
Blood test last year	-	-	-	-8.09870** (0.0030)	-8.09865** (0.0030)
Man	13.3946*** (0.2152)	12.6625*** (0.2139)	12.4184*** (0.2215)	13.4264*** (0.2325)	13.1261*** (0.2322)
Age	7.8840*** (0.1381)	7.7335*** (0.1354)	7.6209*** (0.1505)	8.5209*** (0.1775)	8.2209*** (0.1662)
Age^2	-0.0495*** (0.0010)	-0.0480*** (0.0010)	-0.0473*** (0.0011)	-0.0494*** (0.0022)	-0.0491*** (0.0022)
Austria	8.2871*** (0.4195)	8.3152*** (0.4093)	8.3762*** (0.4138)	7.4952*** (0.4246)	7.1922*** (0.1216)
Germany	0.9488** (0.4315)	2.0698*** (0.4223)	2.1708*** (0.4249)	2.2906*** (0.4139)	2.2906*** (0.1139)
Sweden	10.0911*** (0.4284)	8.1773*** (0.4218)	8.3323*** (0.4486)	7.4424*** (0.4765)	7.1121*** (0.1662)
Spain	14.2872*** (0.4305)	15.2159*** (0.4203)	15.0797*** (0.4282)	16.0999*** (0.4162)	16.0999*** (0.1162)
Italy	8.2729*** (0.4241)	9.3606*** (0.4138)	9.3638*** (0.4176)	9.4546*** (0.4095)	9.1216*** (0.1092)
France	-1.0237** (0.4081)	-0.3794 (0.3981)	-0.4362 (0.4006)	-0.4570 (0.4126)	-0.4265 (0.1126)
Denmark	18.1013*** (0.4402)	16.1364*** (0.4333)	16.4724*** (0.4563)	15.4967*** (0.4580)	14.1966*** (0.1280)
Switzerland	4.8486*** (0.4574)	3.7264*** (0.4472)	3.7549*** (0.4498)	4.0549*** (0.4599)	4.0219*** (0.1299)
Wave 1-2	-1.9374*** (0.2873)	-1.9344*** (0.2995)	-2.0010*** (0.3004)	-2.3420*** (0.3713)	-2.3120*** (0.3613)
Wave 2-4	-30.9290*** (0.2878)	-30.2121*** (0.2979)	-30.2523*** (0.2982)	-32.6520*** (0.3089)	-31.6120*** (0.3089)
Wave 4-5	3.1023*** (0.3235)	3.0839*** (0.3301)	3.0392*** (0.3303)	3.1402*** (0.4204)	3.1102*** (0.1201)
No education	6.3875*** (0.5754)	9.5475*** (0.5662)	10.0616*** (0.5731)	11.1721*** (0.6042)	11.1621*** (0.6512)
Primary education	8.3876*** (0.3472)	10.9498*** (0.3432)	11.4072*** (0.3523)	12.5561*** (0.3624)	12.2261*** (0.3621)
Lower secondary education	3.3884*** (0.3547)	4.9869*** (0.3475)	5.3111*** (0.3527)	5.4222*** (0.4020)	5.1272*** (0.1020)
Upper secondary education	7.4730*** (0.2889)	8.6269*** (0.2827)	8.8285*** (0.2856)	7.6266*** (0.2970)	6.6266*** (0.2965)
Post-secondary non-tertiary	10.9202*** (0.6141)	11.3085*** (0.5975)	11.4665*** (0.5977)	12.4666*** (0.6045)	12.1666*** (0.6512)
Married/cohabiting	1.2261*** (0.3484)	0.6770** (0.3400)	-1.0799** (0.4435)	-1.2003** (0.5046)	-1.2003** (0.2016)
Single	-0.2741 (0.5362)	-0.4163 (0.5221)	-0.7104 (0.5236)	-0.7704 (0.5246)	-0.7651 (0.2216)
Separated/Divorced	2.2170*** (0.4726)	2.0405*** (0.4601)	1.7195*** (0.4628)	2.0206*** (0.456)	2.0211*** (0.126)
Days in hospital (surgery/medical tests)		-0.1780*** (0.0138)	-0.2107*** (0.0138)	-0.2107*** (0.0146)	-0.2106*** (0.0116)
Days in hospital (mental health)		-0.1118*** (0.0546)	-0.1120*** (0.0541)	-0.1220*** (0.0142)	-0.1320*** (0.0112)
Days in other institutions		0.0645*** (0.0215)	0.0642*** (0.0209)	0.0682*** (0.0222)	0.0690*** (0.0222)
Vistis to GP		-0.0903*** (0.0223)	-0.0864*** (0.0223)	-0.0891*** (0.0244)	-0.0875*** (0.0211)
Employed			0.7910** (0.3805)	0.8020** (0.4006)	0.8033** (0.1006)
Unemployed			1.1400* (0.6498)	1.2400* (0.6506)	1.2100* (0.6206)
Retired			1.3713*** (0.3353)	1.4024*** (0.3464)	1.1221*** (0.3161)
Lives alone			-2.4425*** (0.3972)	-2.4711*** (0.4002)	-2.4611*** (0.1002)
Adjusted income (1,000 PPP)			66.417** (30.565)	66.420** (32.666)	66.390** (32.676)
Adjusted wealth (1,000 PPP)			1.1664*** (0.3838)	1.2651*** (0.3646)	1.2621*** (0.3716)
Rural área, small village			-0.8729*** (0.2135)	-0.9020*** (0.2246)	-0.9110*** (0.116)
Constant	-29.6850*** (4.006)	-29.8698*** (4.172)	-29.6701*** (5.532)	-12.6002*** (5.781)	-12.65102*** (5.681)
N	69,990	69,990	69,990	33,269	33,269
R ²	0.3466	0.3818	0.3825	0.3712	0.3612

F	1,441.622	1,354.597	916.898	854.023	821.671
p	0.0000	0.0000	0.0000	0.0000	0.0000

Omitted variables: women, tertiary education, widow, relation with economic activity: houseworking and other situations, Belgium, waves 5-6. Bootstrap with 1,000 replications. Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%. Income and wealth are expressed in 1,000 units of Purchase Power of Parity and adjusted by household sized (dividing wealth and income by the square root of the number of household members).

^a Recorded father's age at decease if father has died at the time of the survey. Predicted father's age at decease if father is alive at the time of the survey.

^a Recorded mother's age at decease if mother has died at the time of the survey. Predicted mother's age at decease if mother is alive at the time of the survey.

Table D2. Effect of the instruments over the dependent variables. Reduced form equations.

	Smokes now	Has never smoked	Drinks every day or 5/6 times per week	Has not drunk during last 3 months or less than once per month
Father's age at decease	-0.0006 (0.0006)	0.0039 (0.0027)	0.0005 (0.0007)	-0.0006 (0.0007)
Mother's age at decease	0.0003 (0.0006)	-0.0040 (0.0037)	-0.0000 (0.0007)	-0.0002 (0.0007)
Father alive	-0.0230** (0.0105)	-0.0105 (0.0121)	-0.0167 (0.0122)	-0.0023 (0.0116)
Mother alive	-0.0229 (0.0182)	0.1216 (0.0741)	0.0261* (0.0141)	-0.0087 (0.0134)
N	69,990	69,990	69,990	69,990
r2	0.0754	0.2568	0.1241	0.2198
F	215.858	914.221	374.888	745.457
p	0.0000	0.0000	0.0000	0.0000
	Sedentary lifestyle	Normal weight	Obese or overweight	Ten-word listing (first recall)
Father's age at decease	0.0007 (0.0005)	-0.0008 (0.0008)	0.0010 (0.0006)	-0.0007 (0.0026)
Mother's age at decease	-0.0011** (0.0005)	0.0008 (0.0008)	-0.0009 (0.0006)	0.0038 (0.0026)
Father alive	-0.0079 (0.0082)	0.0026 (0.0138)	-0.0051 (0.0110)	0.0503 (0.0443)
Mother alive	0.0034 (0.0095)	0.0095 (0.0161)	-0.0166 (0.0128)	-0.0561 (0.0515)
N	69,990	69,990	69,990	69,990
r2	0.2198	0.0839	0.0838	0.3328
F	745.374	242.317	242.057	1.319.381
p	0.0000	0.0000	0.0000	0.0000
	Ten word listing (second recall)	Maximum grip strength measure		
Father's age at decease	-0.0059* (0.0031)	0.0053 (0.0120)		
Mother's age at decease	0.0086 (0.0061)	0.0030 (0.0120)		
Father alive	0.1507 (0.0927)	0.2193 (0.2076)		
Mother alive	-0.1097* (0.0613)	-0.0897 (0.2414)		
N	69,990	69,990		
r2	0.3030	0.6691		
F	1,150.028	5,027.791		
p	0.0000	0.0000		
	Bank accounts	Stocks or shares (listed or unlisted in stockmarket)	Government or corporate bonds	Mutual funds
Father's age at decease	-0.0003 (0.0004)	-0.0009** (0.0005)	-0.0002 (0.0003)	-0.0004 (0.0005)
Mother's age at decease	0.0006 (0.0004)	0.0001 (0.0005)	0.0004 (0.0003)	0.0007 (0.0005)
Father alive	-0.0056 (0.0068)	0.0023 (0.0077)	0.0032 (0.0057)	0.0120 (0.0085)
Mother alive	0.0100 (0.0079)	-0.0112 (0.0090)	-0.0087 (0.0067)	-0.0149 (0.0099)
N	69,990	69,990	69,990	69,990
r2	0.1812	0.1150	0.0541	0.1008
F	585.315	343.805	151.300	296.596
p	0.0000	0.0000	0.0000	0.0000
	Mutual funds: mostly in stocks	Mutual funds: half in stocks, half in bonds	Mutual funds: mostly in bonds	Individual retirement accounts
Father's age at decease	-0.0013 (0.0026)	-0.0038 (0.0028)	0.0025 (0.0033)	0.0005 (0.0005)
Mother's age at decease	0.0004 (0.0026)	0.0038 (0.0028)	-0.0034 (0.0022)	-0.0002 (0.0005)
Father alive	0.0186 (0.0388)	-0.0027 (0.0421)	-0.0160 (0.0345)	0.0011 (0.0080)
Mother alive	0.0334 (0.0448)	0.0258 (0.0487)	-0.0591 (0.0399)	-0.0159* (0.0094)
N	69,990	69,990	69,990	69,990
r2	0.1698	0.1026	0.0954	0.1379
F	58.897	32.929	30.375	423.097
p	0.0000	0.0000	0.0000	0.0000
	Life insurance	Mortgage	Other debts	Total wealth
Father's age at decease	-0.0002	0.0003	0.0011	0.0004

Mother's age at decease	(0.0005) 0.0004 (0.0005)	(0.0005) -0.0001 (0.0005)	(0.0007) -0.0012 (0.0008)	(0.0004) 0.0000 (0.0004)
Father alive	-0.0009 (0.0091)	0.0153 (0.0094)	-0.0143* (0.0086)	-0.0052 (0.0075)
Mother alive	-0.0082 (0.0106)	-0.0161 (0.0109)	0.0136 (0.0100)	-0.0199 (0.0108)
N	69,990	69,990	69,990	69,990
r2	0.1182	0.1711	0.0970	0.1306
F	354.477	546.123	284.024	397.560
p	0.0000	0.0000	0.0000	0.0000
	Take substantial risk expecting to earn substantial returns	Take above average financial risks expecting to earn above average returns	Take average financial risks expecting to earn average returns	Not willing to take any financial risks
Father's age at decease	0.0000 (0.0001)	-0.0003 (0.0002)	0.0004 (0.0006)	0.0000 (0.0001)
Mother's age at decease	-0.0001 (0.0001)	0.0003 (0.0002)	-0.0002 (0.0006)	-0.0001 (0.0001)
Father alive	-0.0017 (0.0024)	0.0047 (0.0042)	0.0091 (0.0096)	-0.0017 (0.0024)
Mother alive	0.0019 (0.0028)	-0.0007 (0.0049)	-0.0175 (0.0111)	0.0019 (0.0028)
N	69,990	69,990	69,990	69,990
r2	0.0126	0.0449	0.1680	0.0126
F	33.628	124.255	534.321	33.628
p	0.0000	0.0000	0.0000	0.0000

All regressions include gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year, number of visits to general practitioner during last year, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP), country fixed effects and wave fixed effects.

Table D3. Comparison of cognitive and economic related variables between focal respondents and non-focal respondents

	Focal response =0	Focal response =50	Focal response =100	No focal response
Deceased subsample				
Cognitive skills				
Ten word listing (first recall)	2.87 (2.01)	3.56 (2.04)	3.70 (2.08)	3.81 (1.91)
Ten word listing (second recall)	1.60 (1.77)	2.00 (1.89)	1.98 (1.91)	2.33 (1.94)
Education (ISCED 1997 levels)				
None	15.18	14.59	12.79	11.24
Primary education	40.44	42.60	35.89	40.01
Lower secondary	14.69	12.43	6.44	14.77
Upper secondary	19.52	19.84	30.38	23.71
Post-secondary non tertiary	1.94	1.00	3.22	1.34
Tertiary education	8.22	9.54	11.28	8.94
Adjusted income (1,000 PPP) ^a	14.03 (15.93)	15.73 (19.51)	20.40 (26.24)	15.09 (22.81)
Adjusted wealth (1,000 PPP) ^a	112.87 (161.91)	138.14 (172.22)	128.63 (183.44)	128.72 (206.44)
N	350	385	139	1,166
Survivors subsample				
Cognitive skills				
Ten word listing (first recall)	4.01 (1.88)	4.99 (1.80)	5.30 (1.73)	5.05 (1.81)
Ten word listing (second recall)	2.53 (1.92)	3.54 (2.05)	3.91 (2.05)	3.64 (2.06)
Education (ISCED 1997 levels)				
None	10.09	6.30	4.35	6.30
Primary education	32.28	24.27	21.68	23.96
Lower secondary	16.43	15.34	16.34	16.11
Upper secondary	28.16	32.69	34.76	30.86
Post-secondary non tertiary	1.32	2.40	3.10	2.33
Tertiary education	11.72	19.00	19.78	20.44
Adjusted income (1,000 PPP) ^a	15.73 (16.68)	20.54 (26.91)	20.43 (22.32)	20.24 (26.72)
Adjusted wealth (1,000 PPP) ^a	126.49 (224.37)	163.95 (246.44)	178.94 (309.62)	170.41 (301.22)
N	2,420	14,152	11,561	39,727

^a Income and wealth are expressed in 1,000 units of Purchase Power of Parity and adjusted by household sized (dividing wealth and income by the square root of the number of household members). Standard deviation between parenthesis.

For the deceased subsample and compared to non-focal respondents we show that: (i) focal respondents at zero attain lower scores for both ten-word listing recalls, have a higher percentage without primary education and lower wealth, (ii) focal respondents at 100 attain a lower score for the second ten-word listing recall, have a higher percentage with post-secondary education, higher income and higher wealth. For the survivors' subsample, and compared to non-focal respondents: (i) focal respondents at 100 achieve higher scores for both ten-word listing recalls and show similar levels of income and wealth; (ii) the opposite is true for focal respondents at 0. For both subsamples, ten-word listing scores, income and wealth of focal-respondents at 50 resemble to those of non-focal respondents. However, the distribution of educational levels is more akin to that of focal respondents at 0 for the deceased subsample and more similar to that of non-focal respondents for the survivors' subsample.

Table D4. Subsample of respondents who have answered SHARELIFE. Replication of regressions shown on Tables B.13 to B.17.

Regressions after instrumenting the “biased survival” indicator” (difference between subjective survival probability and objective survival probability) introducing as instruments blood pressure checked last year and blood test done last year.

Reported coefficients correspond to the variable “Biased survival expectations” after IV regression.

Dependent variable	LO > 0			LO < 0		
	M1	M2	M3	M1	M2	M3
Smokes now	-0.6090** (0.2317)	-0.5995** (0.2001)	-0.5245** (0.1943)	0.8714*** (0.2102)	0.8585*** (0.2027)	0.8515*** (0.2024)
Has never smoked	1.1568** (0.4634)	1.0988** (0.4635)	1.0811** (0.4512)	-1.6464*** (0.4715)	-1.4321*** (0.4792)	-1.3744*** (0.4770)
Drinks every day or 5/6 times per week	-0.8751*** (0.2307)	-0.8312*** (0.2126)	-0.7868*** (0.2098)	1.0739*** (0.3094)	0.9839*** (0.3057)	0.9451*** (0.3141)
Has not drunk during last 3 months or less than once per month	1.3329** (0.5750)	1.3016** (0.5707)	1.2598** (0.5712)	-0.5870** (0.1964)	-0.4688** (0.1839)	-0.4648** (0.1445)
Sedentary lifestyle	-0.9664** (0.4232)	-0.9621** (0.4241)	-0.9588** (0.4144)	1.0116** (0.3551)	0.8798** (0.3401)	0.8776** (0.3060)
Normal weight	0.9436*** (0.2305)	0.7906*** (0.2569)	0.7646*** (0.2342)	-0.9584** (0.3032)	-0.7055** (0.2773)	-0.6366** (0.2668)
Obese	-1.1377** (0.4038)	-1.1200** (0.3644)	-1.0790** (0.3634)	1.9615*** (0.5693)	1.6149** (0.5746)	1.2987** (0.5704)
Ten word listing first recall	3.8851*** (0.7363)	3.2821*** (0.7277)	2.3868*** (0.7095)	-0.6722*** (0.1599)	-0.6570*** (0.1968)	-0.6392*** (0.1870)
Ten word listing second recall	3.1237*** (0.7385)	2.5025*** (0.7332)	2.5128*** (0.7314)	-2.1674** (0.8193)	-1.6763** (0.7618)	-1.7006** (0.6750)
Maximum grip strength measure	7.4799*** (2.3120)	5.8987** (2.9973)	5.8917** (2.4030)	-6.7695** (2.9708)	-6.6219** (2.8563)	-6.2504** (2.4591)
Social contacts	0.2854*** (0.0791)	0.2829*** (0.0701)	0.2540*** (0.0615)	0.0581** (0.0166)	-0.0563*** (0.0121)	-0.0560*** (0.0125)
Bank accounts	-0.7356*** (0.1944)	-0.7247*** (0.2232)	-0.6930*** (0.2162)	0.9972*** (0.1806)	0.9707*** (0.2080)	0.9596*** (0.2021)
Government or corporate bonds	0.0955** (0.0379)	0.0946** (0.0393)	0.0849** (0.0326)	-0.1676** (0.0836)	-0.1526** (0.0779)	-0.1495** (0.0776)
Stocks or shares listed or unlisted in stockmarket	-0.0982** (0.0041)	-0.0946** (0.0037)	-0.0926** (0.0034)	0.1633*** (0.0528)	0.1597*** (0.0511)	0.1562*** (0.0493)
Mutual funds or managed investment accounts	0.1761*** (0.0505)	0.1689*** (0.0491)	0.1574*** (0.0488)	-0.2836*** (0.0888)	-0.2772*** (0.0866)	-0.2586*** (0.0833)
Mutual funds: mostly in stocks	-0.2624** (0.1274)	-0.2408** (0.1087)	-0.2254** (0.1012)	0.2137*** (0.0576)	0.1916*** (0.0585)	0.1229*** (0.0583)
Mutual funds: half in stocks, half in bonds	-0.3769*** (0.0997)	-0.3371*** (0.0958)	-0.3600*** (0.0890)	1.3707*** (0.3323)	1.3524*** (0.3775)	1.2609*** (0.3554)
Mutual funds: mostly in bonds	0.5659** (0.2085)	0.5115** (0.2209)	0.4626** (0.1926)	-0.5094** (0.2347)	-0.5033** (0.2271)	-0.5021** (0.2131)
Individual retirement accounts	0.2341*** (0.0423)	0.2244*** (0.0476)	0.2102*** (0.0482)	-0.3356*** (0.0994)	-0.3641*** (0.0955)	-0.3200*** (0.0921)
Life insurance	-0.2734*** (0.0729)	-0.2341*** (0.0714)	-0.2146*** (0.0649)	0.3747** (0.1273)	0.3634** (0.1217)	0.3478** (0.1224)
Mortgage	0.1650*** (0.0464)	0.1627*** (0.0459)	0.1584*** (0.0454)	-0.1493*** (0.0632)	-0.1434** (0.0629)	-0.1296** (0.0570)
Other debts	0.1611** (0.0586)	0.1575** (0.0521)	0.1446** (0.0528)	-0.1627** (0.0772)	-0.1610** (0.0715)	-0.1580** (0.0728)
Total wealth amount 1.000PPP	0.2362*** (0.0942)	0.2158** (0.0952)	0.2168*** (0.0946)	-0.7678** (0.2287)	-0.6672** (0.2168)	-0.6247** (0.2128)
Take substantial risk expecting to earn substantial returns	0.0277*** (0.0035)	0.0251*** (0.0044)	0.0248*** (0.0022)	-0.0386*** (0.0021)	-0.0302*** (0.0020)	-0.0282*** (0.0079)
Take above average financial risks expecting to earn above average returns	1.1838*** (0.3607)	1.1639*** (0.4112)	1.1229*** (0.3955)	-0.9926** (0.3647)	-0.9406** (0.4118)	-0.9136** (0.3973)
Take average financial risks expecting to earn average returns	-0.0768*** (0.0211)	-0.0683*** (0.0208)	-0.0671*** (0.0205)	0.1086*** (0.0065)	0.1066*** (0.0083)	0.1020*** (0.0017)
Not willing to take any financial risks	-0.6589*** (0.1420)	-0.5587*** (0.1662)	-0.5441*** (0.1739)	0.4109*** (0.0493)	0.3874*** (0.0786)	0.3568*** (0.0865)
Education, marital status	Yes	Yes	Yes	Yes	Yes	Yes
Days at hospital for surgery/tests, due to mental problems, days at other institutions, visits to GP	No	Yes	Yes	No	Yes	Yes
Relation with economic activity, lives alone, lives in rural area, income and wealth	No	No	Yes	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

M1 includes optimistic indicator (after first-stage regression), gender, age, age squared, level of education (no education, primary education, lower secondary education, higher secondary education, post-secondary non-tertiary education and tertiary education (omitted)), marital status (married/cohabiting, separated/divorced, single and widow (omitted)), country fixed effects and wave fixed effects. M2 includes the same explanatory variables than M1, and additionally, number of days stayed at hospital during last year (surgery or medical tests), number of days stayed at hospital during last year (mental health), number of days stayed at other institutions during last year and number of visits to general practitioner during last year. M3 includes the same explanatory variables than M2, an additionally, relation with economic activity (employed, unemployed, retired, houseworking and other situations (omitted)), living in a rural area/village/small town, living alone, wealth and income (adjusted by household size and in 1,000 PPP). Bootstrap with 1,000 replications Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%.

Results of the Durbin test, Stock and Yogo test and Sargan test are not shown due to space constraints but are available upon request. Results indicate that OLS estimations are not consistent and confirm the validity of the instruments used.

N=33,269; 21,313 for the sample with LO>0 and 11,956 for the sample with LO <0.

Table D5. Comparison between current and lagged instruments in first-stage regression for “biased survival”

	Using the whole sample of respondents	Sample of respondents who have a lagged observations	
		With current instruments	With lagged instruments
Mother's age at decease ^a	0.0012*** (0.0001)	0.0013*** (0.0001)	
Father's age at decease ^b	0.0017*** (0.0001)	0.0019*** (0.0001)	
Mother alive	0.0114** (0.0050)	0.0127** (0.0056)	
Father alive	0.0248*** (0.0046)	0.0275*** (0.0051)	
Mother's age at decease (lagged) ^a			0.0017*** (0.0001)
Father's age at decease (lagged) ^b			0.0024*** (0.0001)
Mother alive (lagged)			0.0118** (0.0052)
Father alive (lagged)			0.0256*** (0.0047)
Man	12.4184*** (0.2215)	13.7844*** (0.2459)	12.8195*** (0.2287)
Age	7.6209*** (0.1505)	8.4592*** (0.1671)	7.8671*** (0.1554)
Age^2	-0.0473*** (0.0011)	-0.0525*** (0.0012)	-0.0488*** (0.0011)
Austria	8.3762*** (0.4138)	9.2976*** (0.4593)	8.6468*** (0.4272)
Germany	2.1708*** (0.4249)	2.4096*** (0.4716)	2.2409*** (0.4386)
Sweden	8.3323*** (0.4486)	9.2489*** (0.4979)	8.6014*** (0.4631)
Spain	15.0797*** (0.4282)	16.7385*** (0.4753)	15.5668*** (0.4420)
Italy	9.3638*** (0.4176)	10.3938*** (0.4635)	9.6663*** (0.4311)
France	-0.4362 (0.4006)	-0.4842 (0.4447)	-0.4503 (0.4135)
Denmark	16.4724*** (0.4563)	18.2844*** (0.5065)	17.0045*** (0.4710)
Switzerland	3.7549*** (0.4498)	4.1679*** (0.4993)	3.8762*** (0.4643)
Wave 1-2	-2.0010*** (0.3004)	-2.2211*** (0.3334)	-2.0656*** (0.3101)
Wave 2-4	-30.2523*** (0.2982)	-33.5801*** (0.3310)	-31.2294*** (0.3078)
Wave 4-5	3.0392*** (0.3303)	3.3735*** (0.3666)	3.1374*** (0.3410)
No education	10.0616*** (0.5731)	11.1684*** (0.6361)	10.3866*** (0.5916)
Primary education	11.4072*** (0.3523)	12.6620*** (0.3911)	11.7757*** (0.3637)
Lower secondary education	5.3111*** (0.3527)	5.8953*** (0.3915)	5.4826*** (0.3641)
Upper secondary education	8.8285*** (0.2856)	9.7996*** (0.3170)	9.1137*** (0.2948)
Post-secondary non-tertiary	11.4665*** (0.5977)	12.7278*** (0.6634)	11.8369*** (0.6170)
Married/cohabiting	-1.0799** (0.4435)	-1.1987*** (0.4923)	-1.1148*** (0.4578)
Single	-0.7104 (0.5236)	-0.7885 (0.5812)	-0.7333 (0.5405)
Separated/Divorced	1.7195*** (0.4628)	1.9086*** (0.5137)	1.7750*** (0.4777)
Days in hospital (surgery/medical tests)	-0.1797*** (0.0138)	-0.1995*** (0.0153)	-0.1855*** (0.0142)
Days in hospital (mental health)	-0.1120*** (0.0541)	-0.1243*** (0.0601)	-0.1156*** (0.0558)
Days in other institutions	0.0642*** (0.0209)	0.0713*** (0.0232)	0.0663*** (0.0216)
Vistis to GP	-0.0864*** (0.0223)	-0.0959*** (0.0248)	-0.0892*** (0.0230)
Employed	0.7910** (0.3805)	0.8780** (0.4224)	0.8165** (0.3928)
Unemployed	1.1400* (0.6498)	1.2654* (0.7213)	1.1768* (0.6708)
Retired	1.3713*** (0.3353)	1.5221*** (0.3722)	1.4156*** (0.3461)
Lives alone	-2.4425*** (0.3972)	-2.7112*** (0.4409)	-2.5214*** (0.4100)
Adjusted income (1,000 PPP)	66.417** (30.565)	73.7229** (33.9272)	68.5623** (31.5522)
Adjusted wealth (1,000 PPP)	1.1664*** (0.3838)	1.2947*** (0.4260)	1.2041*** (0.3962)

Rural área, small village	-0.8729*** (0.2135)	-0.9689*** (0.2370)	-0.9011*** (0.2204)
Constant	-29.6701*** (5.532)	-32.9338*** (6.1405)	-30.6284*** (5.7107)
N	69,990	17,223	17,223
R ²	0.3825	0.175	0.176
F	916.898	129.828	130.924
p	0.0000	0.000	0.000

Omitted variables: women, tertiary education, widow, relation with economic activity: houseworking and other situations, Belgium, waves 5-6. Bootstrap with 1,000 replications. Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%. Income and wealth are expressed in 1,000 units of Purchase Power of Parity and adjusted by household sized (dividing wealth and income by the square root of the number of household members).

^a Recorded father's age at decease if father has died at the time of the survey. Predicted father's age at decease if father is alive at the time of the survey.

^a Recorded mother's age at decease if mother has died at the time of the survey. Predicted mother's age at decease if mother is alive at the time of the survey.

Appendix E

Plausible exogeneity of the instruments:

The departure point is equation (2) in which we explicitly distinguish between the potential endogenous variable (BSE_{ict}) and the other explanatory variables:

$$IND_{ict} = \alpha_0 + \alpha_1 BSE_{ict} + \alpha_2 X_{ict} + T_t + C_c + \epsilon_{ict} \quad (C.1)$$

The first method is the γ -Local-to-Zero (LTZ) approximation bounds method, which introduces some bias term (or exogeneity error) in the approximate distribution of $\widehat{\alpha}_1$. In other words, it relaxes the exclusion restriction requirement by allowing for uncertainty in the priors about γ . According to Conley et al., (2012) this method provides robustness with respect to 2SLS approach under the assumption that the priors are correct.

$$\begin{aligned} \widehat{\alpha}_1 &\sim N(\lambda, \Sigma_{2SLS}) + \Pi\gamma \\ \gamma &\sim Y \end{aligned} \quad (C.2)$$

$$\Pi = (X'Z(Z'Z)^{-1}Z'X)^{-1}X'Z$$

where Y is the distribution of γ , Σ_{2SLS} is the variance-covariance matrix for the estimation 2SLS and Z is the vector of instrumental variables. The distribution of the exogeneity error ($\Pi\gamma$) depends on the sample moments of the matrix Π , which shows a negative relationship between the strength of the instrumental variable and the exogeneity error, and the distribution Y . This exogeneity error is an indicator of the deviations of $\widehat{\alpha}_1$ from the asymptotic standard distribution of the 2SLS estimator due to non-fulfilment of the exclusion restriction assumption.

It is assumed that γ follows a normal distribution with mean μ_γ and variance-covariance matrix Ω_γ . Then, the asymptotic distribution $\widehat{\alpha}_1$ of can be expressed as:

$$\widehat{\alpha}_1 \sim N(\lambda + \Pi\mu_\gamma, \Sigma_{2SLS} + \Pi\Omega_\gamma\Pi') \quad (C.3)$$

Following Conley et al. (2012), we implement the simples form of priors for γ , that is, $\gamma \sim N(0, \delta^2)$ and computed the 95% confidence intervals for α_1 for different values of δ . Under the assumption that priors are correct, this approach provides valid inference and robustness with respect to normal 2SLS approach.

The second method is the Union Confidence Interval (UCI), which allows us to analyse the robustness of the estimations in case of a direct relationship between the instrumental variables (for notation simplicity, parent's age of decease and parent's living status have been collapsed in the variable, $PAD\&LS_{it}$) and the outcome variables. Following Conley et al. (2012) equation (C.1) can be modified as follows:

$$\begin{aligned} IND_{ict} &= \alpha_0 + \alpha_1 BSE_{ict} + \alpha_2 X_{ict} + \alpha_3 PAD\&LS_{ict} + T_t + C_c + \epsilon_{ict} \\ BSE_{ict} &= \beta_0 + \alpha_3 PAD\&LS_{ict} + \beta_5 X_{ict} + T_t + C_c + \epsilon_{ict} \end{aligned} \quad (C.4)$$

In a normal 2SLS estimation the term ($\alpha_3 PAD_{ict}$) would not be present in equation (C.4). If the strict exogeneity assumption is satisfied, parents' age of decease does not have any effect over outcome variables and thus $\alpha_3 = 0$. The innovation proposed by Conley et a. (2012) consist in relaxing the strict exogeneity assumption ($\alpha_3 \neq 0$) and checking its significance in the outcome equation. Then, allowing for non-zero γ , equation (C.4) can be expressed as (C.5)

$$IND_{ict} - \alpha_3 PAD\&LS_{ict} = \alpha_0 + \alpha_1 BSE_{ict} + \alpha_2 X_{ict} + T_t + C_c + \epsilon_{ict} \quad (C.5)$$

Considering that the outcome variable is now ($IND_{ict} - \alpha_3 PAD\&LS_{ict}$), then α_1 can be consistently estimated using PAD as an instrument for BSE . Under the UCI approach, α_1 is estimated given any α_3 belonging to the specific support interval for α_3 : $\alpha_3 \in [-\delta, +\delta]$. Conley et al. (2012) notes that given that γ belongs to that interval, the union will contain the true parameter value for α_1 at least 95% of the time (if using a 95% confidence interval).

Figure E1. Local-to-Zero approximation and Union of Confidence Intervals. Test for instrument validity for the instrument “father’s age of decease”.³

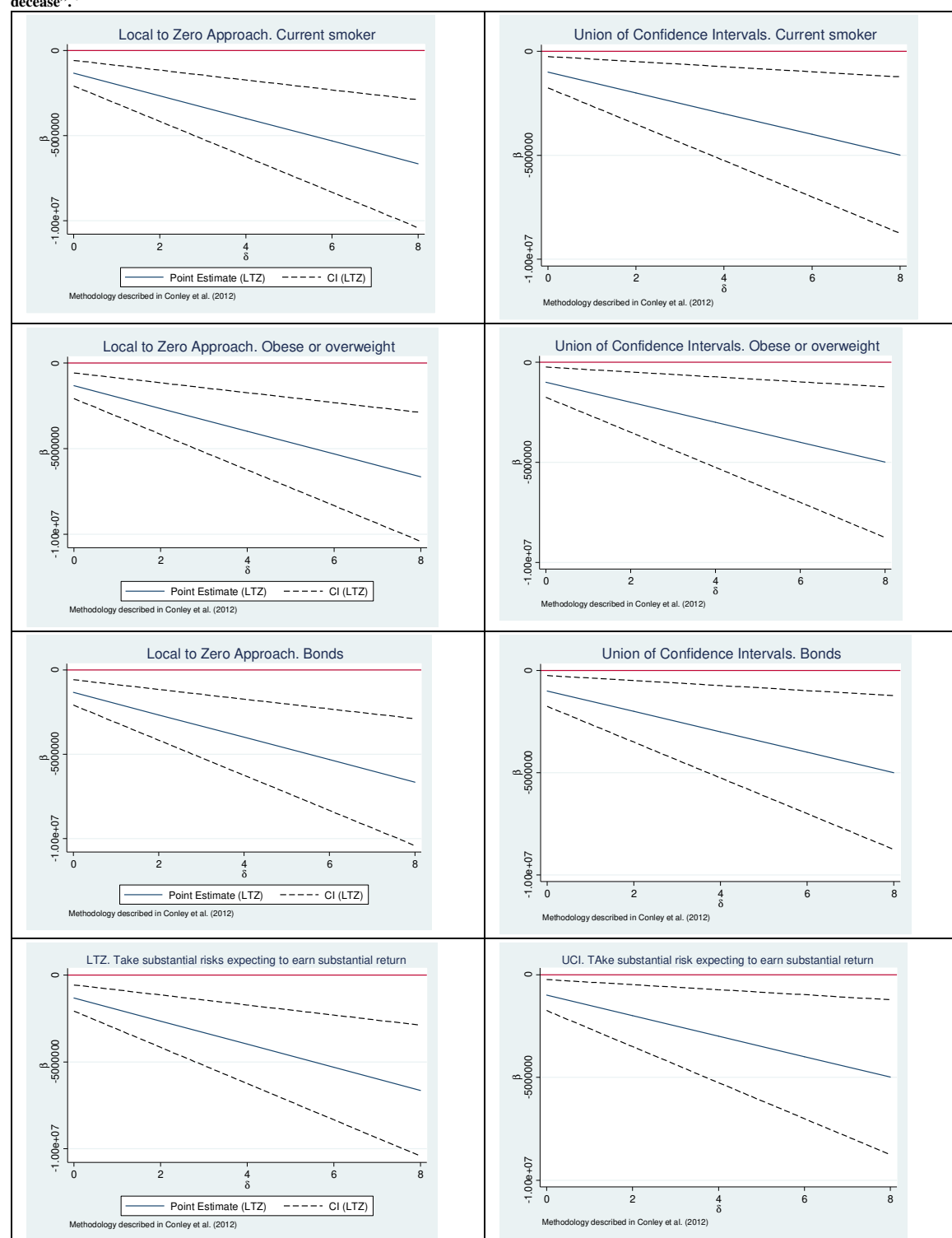


Table E1. Effect of lagged BSE and of the death of a brother, sister or child between the current wave and the previous one

	M1	M2	M3	M4	M5	M6	M7	M8
BSE (lagged)	0.3048***	0.2962***	0.2719***	0.2714***	0.2714***	0.2714***	0.2713***	0.2714***

³ These figures have been obtained using the command *plausexog* proposed by Clarke (2014) for STATA.

Brother dies between waves	(0.0073)	(0.0073)	(0.0072)	(0.0072)	(0.0072)	(0.0072)	(0.0072)	(0.0072)
					-0.2758 (0.6714)			0.0055 (0.6947)
Sister dies between waves						-0.1086* (0.0615)		-0.0842 (0.0666)
Child dies between waves							0.3828 (1.555)	0.4084 (1.556)
Man	8.4185*** (0.4157)	8.7439*** (0.4266)	8.1307*** (0.4273)	7.8798*** (0.4429)	7.8813*** (0.4429)	7.8722*** (0.4429)	7.8773*** (0.4429)	7.8695*** (0.4430)
Age	2.3918*** (0.3104)	2.3516*** (0.3106)	2.4590*** (0.3070)	2.1123*** (0.3472)	2.1132*** (0.3472)	2.1090*** (0.3472)	2.1145*** (0.3473)	2.1114*** (0.3473)
Age^2	-0.0136*** (0.0022)	-0.0135*** (0.0022)	-0.0138*** (0.0022)	-0.0116*** (0.0024)	-0.0116*** (0.0024)	-0.0115*** (0.0024)	-0.0116*** (0.0024)	-0.0115*** (0.0024)
Austria	6.1510*** (0.9568)	5.4431*** (0.9603)	5.6171*** (0.9441)	5.4256*** (0.9459)	5.4319*** (0.9461)	5.4321*** (0.9459)	5.4187*** (0.9462)	5.4247*** (0.9463)
Germany	0.2639 (0.7875)	0.5996 (0.7993)	1.4964* (0.7898)	1.4155* (0.7928)	1.4199* (0.7929)	1.4396* (0.7929)	1.4133* (0.7928)	1.4373* (0.7930)
Sweden	5.9098*** (0.7524)	5.5205*** (0.7578)	4.3033*** (0.7504)	4.0283*** (0.7695)	4.0290*** (0.7696)	4.0295*** (0.7695)	4.0212*** (0.7698)	4.0220*** (0.7698)
Spain	9.9827*** (0.8187)	8.5335*** (0.8651)	9.7920*** (0.8539)	9.6527*** (0.8643)	9.6686*** (0.8652)	9.7147*** (0.8651)	9.6555*** (0.8644)	9.7177*** (0.8657)
Italy	8.4141*** (0.7087)	6.5027*** (0.7320)	7.9287*** (0.7253)	7.7671*** (0.7268)	7.7712*** (0.7269)	7.7835*** (0.7268)	7.7722*** (0.7269)	7.7889*** (0.7270)
France	1.2744* (0.7710)	0.8496 (0.7810)	11.326 (0.7687)	0.8813 (0.7739)	0.8820 (0.7739)	0.8932 (0.7739)	0.8798 (0.7739)	0.8917 (0.7739)
Denmark	11.2501*** (0.7640)	11.5870*** (0.7703)	10.4852*** (0.7658)	10.3882*** (0.7707)	10.3900*** (0.7707)	10.4066*** (0.7707)	10.3844*** (0.7708)	10.4026*** (0.7708)
Switzerland	5.0121*** (0.8835)	3.8189*** (0.9137)	2.8765*** (0.9016)	3.0333*** (0.9088)	3.0397*** (0.9089)	3.0357*** (0.9087)	3.0309*** (0.9088)	3.0331*** (0.9089)
Wave 2-4	-42.2337*** (0.4844)	-42.3502*** (0.4848)	-41.4680*** (0.4782)	-41.5568*** (0.4794)	-41.5692*** (0.4803)	-41.5806*** (0.4796)	-41.5539*** (0.4794)	-41.5773*** (0.4804)
Wave 4-5	-0.9282 (33.982)	-0.4881 (33.825)	-0.7728 (33.224)	-0.5758 (33.254)	-0.5134 (33.290)	-0.3422 (33.283)	-0.6065 (33.266)	-0.3751 (33.316)
No education		4.1719*** (1.913)	6.6472*** (1.834)	6.9881*** (1.920)	7.0027*** (1.926)	7.0241*** (1.921)	6.9881*** (1.920)	7.0241*** (1.926)
Primary education		7.6616*** (0.6513)	9.4152*** (0.6514)	9.6512*** (0.6610)	9.6626*** (0.6616)	9.6973*** (0.6615)	9.6509*** (0.6610)	9.6969*** (0.6619)
Lower secondary education		2.6195*** (0.6775)	3.6567*** (0.6701)	3.7777*** (0.6747)	3.7816*** (0.6748)	3.7905*** (0.6747)	3.7764*** (0.6747)	3.7891*** (0.6748)
Upper secondary education		5.2170*** (0.5697)	6.2601*** (0.5638)	6.3199*** (0.5661)	6.3218*** (0.5662)	6.3302*** (0.5661)	6.3202*** (0.5661)	6.3305*** (0.5662)
Post-secondary non-tertiary		7.1224*** (1.176)	7.3119*** (1.964)	7.4809*** (1.971)	7.4795*** (1.971)	7.4893*** (1.970)	7.4763*** (1.972)	7.4845*** (1.972)
Married/cohabiting		0.3161 (0.6284)	-0.0428 (0.6194)	-1.5270* (0.8232)	-1.5268* (0.8232)	-1.5156* (0.8232)	-1.5197* (0.8235)	-1.5078* (0.8235)
Single		0.5703 (10.376)	0.4080 (10.205)	0.1976 (10.222)	0.2069 (10.225)	0.2223 (10.223)	0.2101 (10.228)	0.2355 (10.231)
Separated/Divorced		0.9825 (0.9035)	0.8896 (0.8879)	0.6562 (0.8908)	0.6582 (0.8909)	0.6682 (0.8908)	0.6592 (0.8909)	0.6713 (0.8909)
Depressed			-1.8669*** (0.4308)	-1.8393*** (0.4310)	-1.8384*** (0.4310)	-1.8281*** (0.4310)	-1.8444*** (0.4313)	-1.8334*** (0.4313)
Self-reported health: excellent			13.6700*** (1.726)	13.5664*** (1.771)	13.5670*** (1.771)	13.5518*** (1.771)	13.5679*** (1.772)	13.5533*** (1.772)
Self-reported health: very good			9.8517*** (0.9481)	9.7131*** (0.9521)	9.7122*** (0.9522)	9.6850*** (0.9522)	9.7178*** (0.9523)	9.6899*** (0.9524)
Self-reported health: good			6.4866*** (0.8493)	6.3695*** (0.8524)	6.3686*** (0.8524)	6.3553*** (0.8524)	6.3740*** (0.8525)	6.3600*** (0.8525)
Self-reported health: fair			3.1174*** (0.8369)	3.0339*** (0.8379)	3.0343*** (0.8379)	3.0203*** (0.8379)	3.0381*** (0.8380)	3.0247*** (0.8380)
Hypertension			-3.2354*** (0.4243)	-3.2456*** (0.4241)	-3.2460*** (0.4241)	-3.2568*** (0.4242)	-3.2441*** (0.4242)	-3.2553*** (0.4242)
Cancer			15.7267*** (1.575)	15.6632*** (1.572)	15.6615*** (1.573)	15.6336*** (1.573)	15.6688*** (1.574)	15.6394*** (1.575)
Stroke			7.3373*** (1.756)	7.3578*** (1.755)	7.3594*** (1.755)	7.3499*** (1.754)	7.3634*** (1.756)	7.3558*** (1.756)
Diabetes			6.2485*** (0.6390)	6.2237*** (0.6389)	6.2264*** (0.6390)	6.2188*** (0.6389)	6.2181*** (0.6391)	6.2128*** (0.6392)
Heart attack			-1.7856*** (0.6515)	-1.8176*** (0.6513)	-1.8155*** (0.6514)	-1.8086*** (0.6513)	-1.8175*** (0.6514)	-1.8085*** (0.6514)
Lung disease			3.9353*** (0.8428)	3.9327*** (0.8425)	3.9377*** (0.8427)	3.9428*** (0.8425)	3.9310*** (0.8426)	3.9410*** (0.8427)
Alzheimer			31.840 (21.000)	29.371 (21.008)	29.475 (21.010)	29.806 (21.009)	29.369 (21.009)	29.804 (21.011)
Employed			0.1741 (0.7814)	0.1724 (0.7814)	0.1687 (0.7815)	0.1687 (0.7814)	0.1706 (0.7815)	0.1650 (0.7815)
Unemployed			-0.5352 (1.5448**)	-0.5327 (1.5473**)	-0.5327 (1.5473**)	-0.5288 (1.5352**)	-0.5360 (1.5459**)	-0.5298 (1.5363**)
Retired			-14.468 (0.6274)	-14.469 (0.6275)	-14.469 (0.6275)	-14.468 (0.6274)	-14.469 (0.6275)	-14.469 (0.6275)
Lives alone			-2.0935*** (0.7622)	-2.0951*** (0.7623)	-2.0951*** (0.7623)	-2.0902*** (0.7622)	-2.0887*** (0.7624)	-2.0851*** (0.7624)
Rural área, small village			-0.8875** (0.4149)	-0.8865** (0.4150)	-0.8865** (0.4150)	-0.8815** (0.4149)	-0.8869** (0.4150)	-0.8808** (0.4150)
Constant	-76.6230*** (10.130)	-78.0149*** (10.910)	-91.1640*** (10.990)	-76.6743*** (12.464)	-76.7010*** (12.468)	-76.6039*** (12.458)	-76.7646*** (12.492)	-76.6994*** (12.492)
N	69,990	69,990	69,990	69,990	69,990	69,990	69,990	69,990

R ²	0.4519	0.4575	0.4773	0.4779	0.4779	0.4780	0.4779	0.4780
F	979.283	492.569	545.935	971.620	872.181	873.400	872.164	688.585
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Omitted variables: women, tertiary education, widow, relation with economic activity: houseworking and other situations, Belgium, waves 5-6. Bootstrap with 1,000 replications. Robust standard errors between parenthesis. * statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%. All regressions include income and wealth are expressed in 1,000 units of Purchase Power of Parity and adjusted by household sized (dividing wealth and income by the square root of the number of household members).

Table E2. Weibull estimations for the discrete-time hazard model including parental characteristics as explanatory variables

	Total sample		Excluding focal points		Excluding erroneous responses to probabilistic question		Including only individuals who have answered SHARELIFE	
	Coef.	Hazard ratio	Coef.	Hazard ratio	Coef.	Hazard ratio	Coef.	Hazard ratio
Father alive	-0.359 (0.331)	0.693	-0.357 (0.319)	0.688	-0.356 (0.308)	0.683	-0.355 (0.297)	0.679
Mother alive	0.020 (0.194)	1.009	0.020 (0.190)	0.999	0.020 (0.186)	0.989	0.019 (0.182)	0.979
Father's age at decease	-0.060** (0.027)	0.970**	-0.060** (0.028)	0.972**	-0.061** (0.028)	0.970**	-0.061** (0.0281)	0.973**
Mother's age at decease	-0.037** (0.017)	0.990**	-0.036** (0.017)	0.991**	-0.036** (0.017)	0.992**	-0.037** (0.017)	0.992**
Man	0.629*** (0.082)	1.849***	0.586*** (0.131)	1.770***	0.602*** (0.089)	1.799***	0.638*** (0.089)	1.859***
Age	-0.049 (0.045)	0.943	-0.012 (0.074)	0.978	-0.045 (0.051)	0.947	-0.057 (0.050)	0.947
Age^2	0.001*** (0.000)	0.991***	0.001 (0.001)	0.991	0.001** (0.000)	0.991**	0.003*** (0.001)	0.992***
Employed	-0.649*** (0.179)	0.517***	-0.447* (0.232)	0.634*	-0.575*** (0.185)	0.558***	-0.682*** (0.187)	0.526***
Lives alone	0.192** (0.086)	1.19**	0.134 (0.147)	1.130	0.233** (0.097)	1.247**	0.202** (0.093)	1.202**
Rural area, village, small town	-0.028 (0.070)	0.963	-0.175 (0.115)	0.833	-0.046 (0.077)	0.946	-0.034 (0.075)	0.969
Normal weight	-0.245*** (0.081)	0.776***	-0.261** (0.309)	0.707**	-0.219** (0.089)	0.798**	-0.294*** (0.084)	0.795***
High blood pressure	-0.087** (0.036)	0.908**	-0.224** (0.106)	0.793**	-0.109** (0.043)	0.888**	-0.091** (0.037)	0.910**
Heart attack	0.252* (0.125)	1.270	0.249* (0.126)	1.268	0.240* (0.117)	1.249*	0.259* (0.127)	1.274*
Cancer	0.934*** (0.101)	2.500***	1.007*** (0.155)	2.689***	0.902*** (0.116)	2.422***	0.939*** (0.107)	2.502***
Stroke	0.432*** (0.120)	1.519***	0.299** (0.121)	1.332**	0.572*** (0.141)	1.745***	0.438*** (0.124)	1.522***
Diabetes	0.345*** (0.088)	1.393***	0.530*** (0.153)	1.674***	0.374*** (0.100)	1.433***	0.339*** (0.087)	1.391***
Lung disease	0.247** (0.108)	1.265**	0.363* (0.189)	1.419*	0.283** (0.119)	1.311**	0.239** (0.100)	1.262**
Alzheimer	0.459*** (0.154)	1.560***	0.210*** (0.051)	1.219***	0.409* (0.211)	1.485*	0.476*** (0.156)	1.567***
Days at hospital (last year)	0.012*** (0.001)	1.002***	0.015*** (0.002)	1.005***	0.014*** (0.002)	1.004***	0.014*** (0.001)	1.003***
Days in hospital last year (mental health)	0.007*** (0.001)	1.260***	0.008*** (0.002)	1.264***	0.007*** (0.001)	1.258***	0.008*** (0.002)	1.262***
Days in other institutions (last year)	0.011*** (0.002)	1.001***	0.011*** (0.002)	1.004***	0.011*** (0.002)	1.007***	0.012*** (0.002)	1.009***
Visits to general practitioner (last year)	-0.002 (0.006)	0.988	-0.002 (0.007)	0.988	0.002 (0.006)	0.992	-0.003 (0.005)	0.989
Sedentary lifestyle	0.851*** (0.079)	2.301***	0.834*** (0.143)	2.264***	0.781*** (0.088)	2.148***	0.858*** (0.082)	2.304***
Smokes now	0.420*** (0.108)	1.501***	0.405*** (0.167)	1.465***	0.359*** (0.113)	1.413***	0.429*** (0.110)	1.504***
Smoked before, not now	0.312*** (0.107)	1.347***	0.326** (0.143)	1.368**	0.224* (0.118)	1.237*	0.314*** (0.110)	1.348***
Drinks alcohol daily, 5-6 times/week	0.215** (0.081)	1.219**	0.226 (0.089)	1.230	0.239** (0.094)	1.251**	0.217** (0.083)	1.220**
No education	0.424*** (0.156)	1.508***	0.533*** (0.179)	1.681***	0.396** (0.165)	1.467**	0.428*** (0.158)	1.509***
Primary education	0.452*** (0.130)	1.550***	0.388** (0.172)	1.455**	0.425*** (0.133)	1.509***	0.457*** (0.132)	1.552***
Lower secondary education	0.187 (0.145)	1.190	0.255 (0.196)	1.275	0.182 (0.147)	1.185	0.195 (0.148)	1.193
Upper secondary education	0.299** (0.127)	1.331**	0.214** (0.113)	1.224**	0.334*** (0.125)	1.378***	0.307** (0.131)	1.333**

Post-secondary non tertiary	0.386 (0.252)	1.450	0.399 (0.508)	1.554	0.301 (0.390)	1.362	0.391 (0.254)	1.454
Adjusted wealth (1,000 PPP)	-0.409** (0.185)	0.659***	-0.558* (0.221)	0.568*	-0.492** (0.208)	0.606**	-0.414** (0.189)	0.660**
Adjusted income (1,000 PPP)	-0.118 (1.145)	1.853	-0.182 (1.005)	2.106	0.203 (1.134)	1.859	-0.121 (1.149)	1.854
Feeling depressed (last month)	0.167** (0.071)	1.167**	0.160** (0.077)	1.161**	0.147** (0.050)	1.079**	0.170** (0.070)	1.170**
Constant	-6.284*** (1.365)	0.001***	-8.025*** (1.900)	0.000***	-6.434*** (1.489)	0.001***	-6.318*** (1.370)	0.002***
N	69,900		40,893		30,183		33,269	
Hazard rate	1.202 (0.057)		1.325 (0.072)		1.224 (0.065)		1.235 (0.060)	
Wald chi2(42)	2,322.025		1,837.260		962.168		1,756.655	
p-value	0.000		0.000		0.000		0.000	

Standard errors between parenthesis. All regressions include time fixed effects and country fixed effects and are weighted using calibrated sampling weights.