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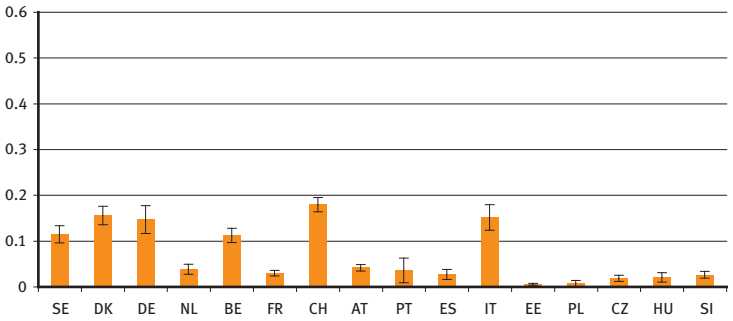
5 Financial market participation and the crisis

- We analyse financial market participation of older Europeans throughout the crisis
- Risky assets are much more commonly held in Northern and Central European countries
- We then study what factors drive the decision to liquidate assets during the crisis
- We find that a decline in income is the most important explanatory factor

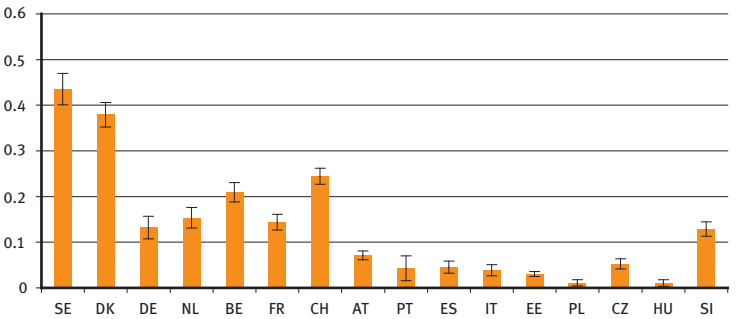
5.1 Financial market participation in Europe

In this chapter we investigate financial market participation of the 50+ in Europe and the role played by the recent financial crisis. Understanding the determinants of financial market behaviour of older individuals is crucial for the theme of active ageing. Indeed, a limited use of financial markets is often associated with financial hardship late in life (see Angelini et al. 2009). Therefore, the improvement of the financial awareness and sophistication of older people may increase their well-being through an increased ability to manage their savings and plan for their future.

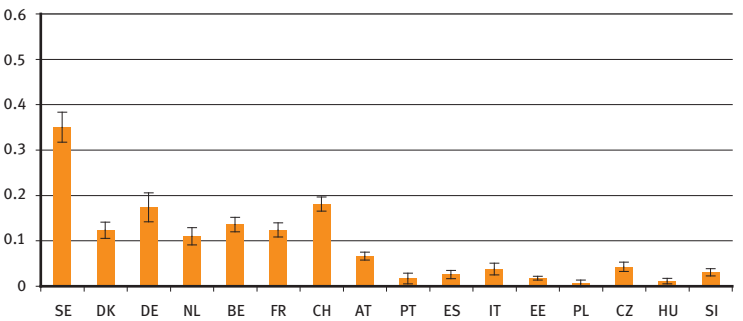
Figure 5.1 shows the proportion of households who own bonds, stocks, mutual funds and life insurance policies in each country using data from the fourth wave of the Survey of Health, Ageing and Retirement in Europe (SHARE). Households own stocks and mutual funds much more frequently in Sweden, Denmark, Belgium and Switzerland, where financial markets and institutions are more developed. In Austria, the Southern countries (Italy, Spain and Portugal) and Eastern Europe (Czech Republic, Estonia and Hungary) financial market participation is less widespread, while in Slovenia direct stock ownership is over ten per cent. For relatively safe assets, such as bonds, we observe a similar pattern, with the exception of Italy where the proportion of households who own bonds is among the highest in Europe. Life insurance policies are held by more than 16 per cent of households in all countries but Italy, Spain and Estonia.



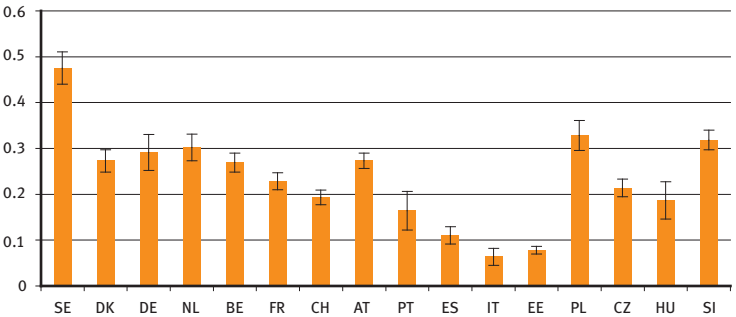
(a) Bonds (n= 38,605)



(b) Stocks (n= 38,623)



(c) Mutual funds (n= 38,588)



(d) Life insurance policies (n= 38,888)

Figure 5.1: Financial market participation in Europe (Wave 4), weighted figures
Source: SHARE Wave 4 release 1

5.2 Ownership of financial assets across waves

To study the impact of the global economic crisis, we now turn to the longitudinal sample and focus only on those households who were interviewed both in the second and in the fourth wave of the survey. Figure 5.2 shows how direct stock-ownership has changed across waves. For each country we consider four groups of households: those who hold stocks in both waves (in-in), those who exit the stock market during the financial crisis (in-out), those who enter (out-in) and those who stay out (out-out).

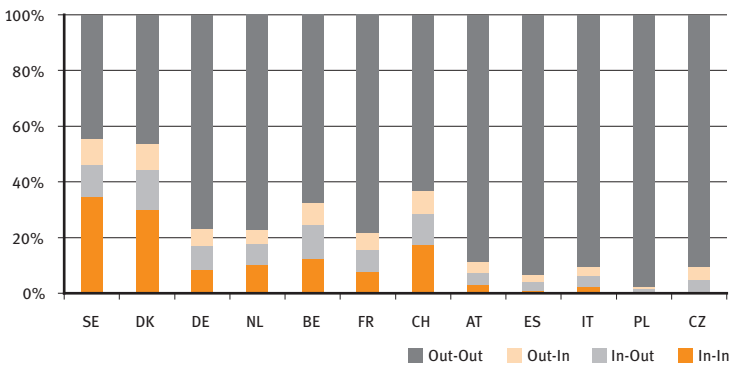
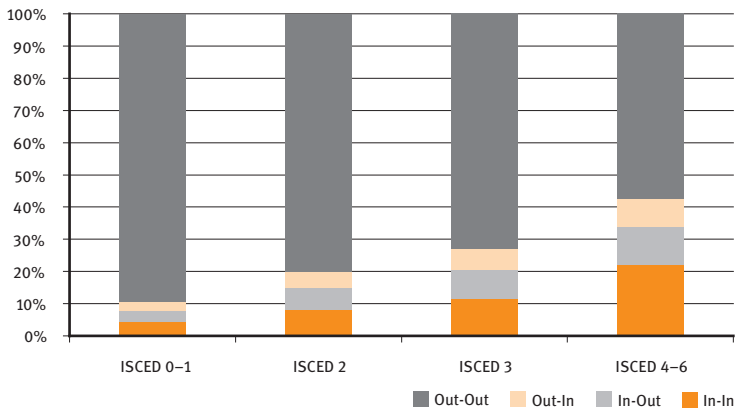
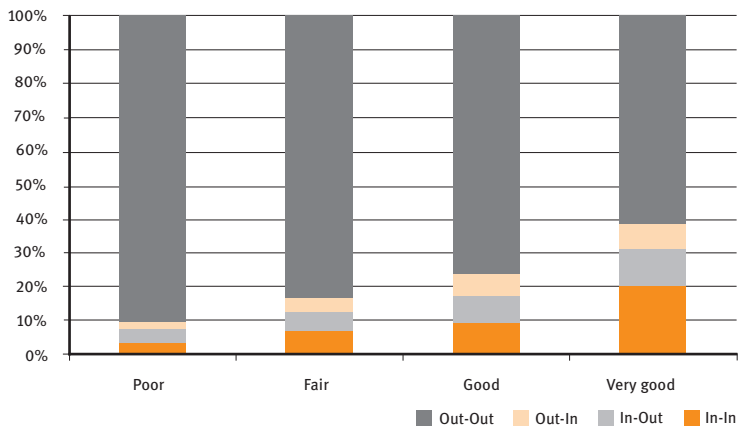


Figure 5.2: Direct stock ownership transitions between Wave 2 and Wave 4 by country
Notes: 12,684 observations
Source: SHARE Wave 2 release 2.5.0, Wave 4 release 1

Figure 5.2 shows a substantial number of transitions, both in and out of the stock market (see Christelis et al. 2008 for similar figures for the first two waves of the survey). In all countries but the Czech Republic, the households who exit the stock market are more than those who enter in it: although changes in participation are not very large, it is interesting to note that stock holding has substantially declined also in countries with well-developed financial markets, such as Denmark and Switzerland.



(a) By education (n= 12,269)



(b) By health status (n= 12,311)

Figure 5.3: Direct stock ownership transitions between Wave 2 and Wave 4 by education and health status
Source: SHARE Wave 2 release 2.5.0, Wave 4 release 1

A similar pattern can be observed if we focus on mutual funds and life insurance policies, while the data show a clear increase in the number of households holding bonds in Austria and Italy. In these countries there seems to be a shift in household portfolio composition from risky to safe assets in response to the financial crisis. In our analysis we did not look at the change in ownership of individual retirement accounts (IRAs). Differently from the other assets considered, IRAs typically allow early withdrawal only in very special cases (e. g. permanent disability, high education costs, etc.) and subject to fees. Therefore, IRAs cannot be considered as a 'liquid' asset.

Figure 5.3 shows that there are large differences in financial behaviour not only across countries but also across groups of the population.

Higher education and better health conditions are associated with higher participation in the stock market. Changes in participation between the second and fourth wave are small, but both the probability to remain in the stock market and that of entering in it are higher for highly educated and healthier households, even during the financial crisis. The same is true for households where the financial respondent has higher cognitive abilities and comes from a family with good cultural background, as measured by the number of books in the house at the age of ten.

5.3 What are the individual determinants of changes in financial behaviour during the crisis?

From the analysis in the previous sections, it is clear that the financial crisis did not affect all individuals in our sample equally. From a policy perspective, it is crucially important to understand which groups of the population were most affected by the recent economic downturn.

In what follows, we focus on households who owned a certain type of asset in Wave 2 and we study the individual determinants of changes in financial behaviour during the crisis period. In particular, we estimate a linear probability model where the outcome variable is the decision of leaving the financial market between Wave 2 and Wave 4, separately for each type of asset. In our regressions we control for the characteristics of the household head as measured in the 2006/7 wave:

- demographic characteristics (gender, age, marital status, household size)
- socio-economic status (education, employment, income and wealth)
- health and cognitive abilities (self-reported good health, numeracy, fluency and recall – see Christelis et al. 2010)
- country fixed effects.

In addition, we control for the changes in the individual time-varying characteristics between 2006/7 and 2011: whether cognitive abilities and health have improved or deteriorated, whether household size has increased or decreased, whether there has been a decline in income and whether the household head has retired.

Table 5.1 presents the estimation results. The most interesting finding is that exiting the financial market is more likely for households who experience a decrease in income during the crisis period. In general, for households who own bonds, mutual funds and stocks, having low income and wealth before the crisis are also important risk factors. On the contrary, the economic conditions in 2006/7 do not seem to play a role in the probability of selling life insurance policies, which is highest for people aged between 61 and 65, out of the labour market, in good health, with low cognitive abilities and without a university degree. Males are less likely to liquidate their stock and mutual fund position, while we do not observe gender differences in the financial behaviour related to the other assets.

It is interesting to note that a decline in numeracy is associated with a higher probability of selling one's mutual funds and life insurance policies.

Table 5.1: Estimation results for the probability of leaving the financial market between Wave 2 and Wave 4 by type of asset

Variables	Bonds	Stocks	Mutual funds	Life insurances
Demographics				
Male	−0.027	−0.070***	−0.045*	−0.011
	(0.030)	(0.022)	(0.026)	(0.019)
Age 50–55	0.082	−0.038	−0.022	−0.124***
	(0.061)	(0.043)	(0.053)	(0.039)
Age 56–60	0.089*	−0.057	−0.060	−0.071*
	(0.052)	(0.037)	(0.044)	(0.037)
Age 61–65	0.086**	−0.026	−0.044	0.082**
	(0.044)	(0.033)	(0.040)	(0.035)
Age 66–70	0.062	−0.043	0.028	0.021
	(0.043)	(0.033)	(0.039)	(0.040)
Low education	0.039	0.040	0.034	0.016
	(0.039)	(0.028)	(0.032)	(0.024)
Medium education	0.058*	0.052**	−0.015	0.044**
	(0.034)	(0.024)	(0.029)	(0.022)
Wave 2 characteristics				
Numeracy	−0.017	−0.027**	0.004	−0.012
	(0.016)	(0.012)	(0.014)	(0.010)
Fluency	−0.003	−0.002	−0.002	−0.004***
	(0.002)	(0.002)	(0.002)	(0.002)

Recall	–0.005	–0.008	–0.011	–0.006
	(0.009)	(0.007)	(0.008)	(0.006)
Employed	–0.001	0.015	0.027	–0.084***
	(0.049)	(0.033)	(0.042)	(0.027)
Good health	–0.027	–0.023	–0.073*	0.063**
	(0.043)	(0.033)	(0.038)	(0.026)
Single	–0.046	–0.034	–0.116***	0.023
	(0.043)	(0.032)	(0.036)	(0.026)
Household size	0.005	–0.010	–0.014	–0.008
	(0.022)	(0.018)	(0.021)	(0.011)
Income	–0.056**	–0.037**	–0.082***	–0.013
	(0.024)	(0.017)	(0.021)	(0.010)
Wealth	–0.010	–0.014***	–0.007	0.001
	(0.007)	(0.004)	(0.004)	(0.002)
Changes from Wave 2 to Wave 4				
Increase in numeracy	–0.055	–0.108	–0.015	0.090
	(0.213)	(0.139)	(0.171)	(0.093)
Decrease in numeracy	0.015	0.021	0.480***	0.229**
	(0.146)	(0.184)	(0.054)	(0.110)
Increase in fluency	–0.000	0.007	–0.005	0.013
	(0.055)	(0.038)	(0.046)	(0.034)
Decrease in fluency	0.036	0.038	0.014	0.056*
	(0.053)	(0.038)	(0.045)	(0.034)
Increase in recall	–0.018	–0.022	–0.038	–0.018
	(0.039)	(0.027)	(0.032)	(0.023)
Decrease in recall	–0.017	–0.013	0.002	0.020
	(0.040)	(0.028)	(0.033)	(0.025)
Health improvement	–0.007	–0.021	0.043	0.056
	(0.060)	(0.047)	(0.051)	(0.035)
Health deterioration	0.081*	–0.009	0.038	–0.012
	(0.046)	(0.032)	(0.039)	(0.028)
Increase in household size	0.059	–0.013	0.055	0.034
	(0.075)	(0.059)	(0.067)	(0.040)
Decrease in household size	0.024	0.045	0.032	0.030
	(0.040)	(0.032)	(0.037)	(0.024)
Decrease in income	0.066**	0.062***	0.056**	0.037**
	(0.030)	(0.022)	(0.026)	(0.019)
Newly retired	–0.039	–0.045	–0.043	0.080***
	(0.053)	(0.034)	(0.043)	(0.028)
Observations	1,279	2,294	1,764	3,110
R-squared	0.073	0.112	0.072	0.090

Significance: ***=1%; **=5%; * = 10%.

Notes: Robust standard error in parenthesis. The outcome variable is the probability of leaving the financial market between Wave 2 and Wave 4. The regressions also control for country dummies (not reported). Germany, age group 71+ and high education dummy are used as baseline.

Source: SHARE Wave 2 release 2.5.0, Wave 4 release 1

5.4 Financial behaviour in times of crisis

In this chapter we have analysed the financial behaviour of the 50+ in Europe, focusing on holdings of stocks, bonds, mutual funds and life insurance policies.

The data show large cross-country variation in financial market participation, which is highest in Northern countries and lowest in Southern and Eastern Europe. When we focus on the longitudinal dimension to study the effects of the financial crisis, we find that especially households who have experienced a decline in income have liquidated their holdings of all assets under consideration.

The use of financial wealth to cope with negative shocks suggests that households rely more on self-insurance (i. e. their savings) rather than or on top of other forms of insurance, such as the ones provided by the state or the family.

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