

## 2 Household consumption and the crisis

- 
- ▶ We analyse the living standards of older Europeans throughout the crisis
  - ▶ We use the share of income spent on food at home and failure to eat out as indicators
  - ▶ Standards of living are lower in Southern and Eastern Europe
  - ▶ People with low education, low income, poor health and females were affected by the crisis most
- 

### 2.1 Food consumption as an indicator of standard of living

In this chapter we exploit the longitudinal dimension of the Survey of Health, Ageing and Retirement in Europe (SHARE) to compare household consumption behaviour before and after the financial crisis. The global economic downturn has affected the material well-being of European households, albeit in different ways depending on their age, country of residence, labour market attachment and access to welfare state and social networks support.

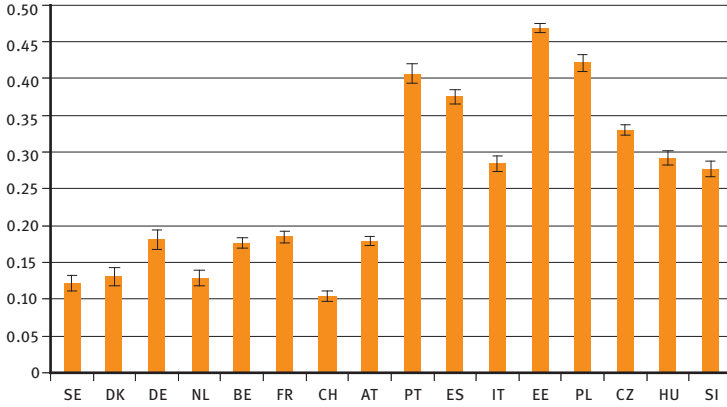
In SHARE we do not observe total household expenditure (like in many other surveys, see Browning et al. 2003), but have food consumption recall data, divided into three groups: food consumed at home, food consumed outside the home and home produced food. The sum of food consumed at home and the market value of home produced food we call “food in” – the ratio of food in to total household income is the food share. As long as food in is a necessity, the food share declines as a function of available resources, and its level can be used to assess the standard of living of households at a point in time. Its changes over time could in principle be used to detect the perceived importance of the recession, but measurement error in either numerator or denominator makes individual changes hard to explain. Food consumed outside the home (or “food out”) is instead typically considered a luxury. Given that for large fraction of individuals it is reported to be zero in a typical month, an interesting research question we address is how this fraction has varied for different individuals over time.

## 2.2 A snap-shot of food consumption during the crisis

We first look at Wave 4 data to analyse how the countries that have recently joined the SHARE project (Hungary, Slovenia, Portugal and Estonia) compare to the others, and to assess in which countries living standards of the 50+ appear particularly low, as a result of their history or of the current financial crisis.

In Figure 2.1 we show how the median food share (defined as the ratio of the sum of food consumed at home and own-consumption of home-produced food to household disposable income) varies across countries that were involved in Wave 4. There is a striking similarity in the median food shares in Eastern and Southern European countries. In fact, median food shares are between ten and 20 per cent in Northern and Central European countries (including Switzerland and Austria), between 20 and 30 per cent in Italy, Hungary and Slovenia, and exceed 30 per cent in Spain, Poland, Portugal and Estonia. Broadly speaking, we can say that food consumption by households in Southern and Eastern European countries is consistent with a lower standard of living compared to the remaining countries. To what extent this is due to long term differences in living standards or instead to the differential impact of the great recession is an issue that deserves careful investigation (see Brugiavini & Weber 2012, for an analysis along these lines).

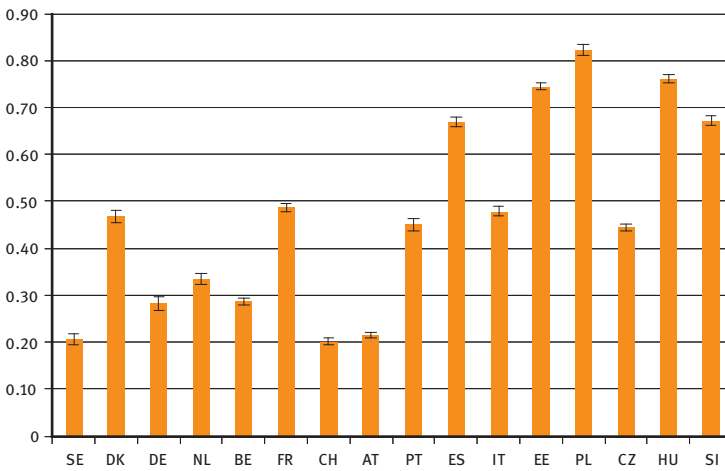
In Figure 2.2 we show the proportion of households who report never to eat out in a normal month by country in Wave 4. Eating out is of course partly a matter of taste, partly a matter of relative prices but in all countries it is a luxury good compared to eating at home. Other things being equal, we expect households with lower standard of living to eat out less often than households with no financial problems. Again, there is a striking similarity in the proportions of households who never eat out in Eastern and Southern European countries (but also in Denmark and France). Figure 2.2 shows that the countries where the proportion of households who report never to eat out is highest are Spain, which was particularly hit by the financial crisis, Poland and the new SHARE countries Hungary, Slovenia and Estonia.



**Figure 2.1:** Median share of food in out of total household income by country

Notes: Wave 4 households (n=40,239)

Source: SHARE Wave 4 release 1



**Figure 2.2:** Proportion of households who report never to eat out by country

Notes: Wave 4 households (n=40,239)

Source: SHARE Wave 4 release 1

## 2.3 How has eating out been affected by the crisis?

To study the impact of the global economic downturn on the 50+ in Europe, we now turn to the longitudinal sample and focus only on those households who were interviewed in both second and fourth waves. In this way, we can look at which groups of the population were most affected by the crisis for the ten countries that took part in both waves.

Given the difficulties in analysing individual food share equations, we focus on the second consumption measure described above. We study the probability of not eating out in Wave 4, separately for the sample of households who did and did not eat out in Wave 2. Parameter estimates are reported in Table 2.1 – column (1) refers to the sample of households who reported eating out in a normal month in Wave 2 (7,112 observations in all) – column (2) refers to the sample of households who instead reported not to eat out in Wave 2 (5,595 observations).

We estimate two probit models controlling for:

- age, gender, education, household size, employment status, per-capita income and health in Wave 2
- changes in household size, employment status, income and health between Wave 2 and Wave 4
- country dummies.

Looking at the sample of households who used to eat out in Wave 2 (“Wave 2 Eaters”), we see that households whose respondent is female are more likely not to eat out in Wave 4. Older and less educated households are also more likely not to eat out, and so are households who were in poor health in Wave 2. The employed and those with higher per-capita income in Wave 2 are more likely to eat out, confirming that not eating out is a good proxy for a low living standard. Household size has a marginally significant negative coefficient: the more household members there were in Wave 2, the higher the probability of eating out in Wave 4, for a given per-capita income. Changes in household size between waves have no effect on the probability, possibly because of limited variability, while a change in health is highly significant (its deterioration increases the probability of not eating out; its improvement is associated to an almost identical increase in the probability of eating out). For those who retired between waves there is a marked increase in the probability of never eating out in Wave 4, in line with the findings of the retirement consumption puzzle literature (see Attanasio & Weber 2010, for an appraisal). Finally, real income increases between waves strongly decrease the probability of non-eating out in Wave 4.

In the last part of the table, we report country dummies coefficients. Country fixed effects capture differences in eating out that are not explained by the model.

**Table 2.1:** Probability of not eating out

	(1)	(2)
<b>Variables</b>	<b>Wave 2 Eaters</b>	<b>Wave 2 Non-eaters</b>
Female	0.034*** (0.010)	0.042*** (0.014)
<i>Variables in Wave 2</i>		
Age	0.005*** (0.001)	0.005*** (0.001)
Low education	0.084*** (0.014)	0.047** (0.020)
Medium education	0.032** (0.013)	0.001 (0.021)
Log(income per capita)	-0.054*** (0.007)	-0.057*** (0.009)
Employed	-0.070*** (0.015)	-0.100*** (0.026)
Log(household size)	-0.024* (0.014)	-0.108*** (0.017)
Bad health	0.082*** (0.015)	0.057** (0.023)
<i>Changes between Wave 2 and Wave 4</i>		
Increase in income	-0.064*** (0.011)	-0.047*** (0.014)
Increase in household size	0.031 (0.025)	0.010 (0.026)
Decrease in household size	-0.001 (0.015)	0.028 (0.018)
Health improvement	-0.057*** (0.015)	-0.092*** (0.026)
Health deterioration	0.049** (0.020)	0.016 (0.027)
Newly retired	0.078*** (0.021)	0.045 (0.028)
<i>Country effects</i>		
Sweden	-0.033 (0.022)	-0.175*** (0.045)
Denmark	0.209*** (0.031)	0.168*** (0.025)
The Netherlands	0.038 (0.025)	0.043 (0.034)
Belgium	-0.003 (0.021)	-0.018 (0.038)
France	0.129*** (0.027)	0.123*** (0.027)

Variables	(1)	(2)
	Wave 2 Eaters	Wave 2 Non-eaters
Switzerland	0.041 (0.027)	-0.084* (0.051)
Austria	-0.047* (0.026)	-0.198*** (0.052)
Spain	0.285*** (0.040)	0.139*** (0.027)
Italy	0.090*** (0.029)	0.116*** (0.028)
Czech Republic	0.132*** (0.032)	-0.031 (0.036)
Poland	0.418*** (0.047)	0.241*** (0.021)
Observations	7,112	5,595

Significance: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: Probability of not eating out in Wave 4 for households who reported to eat out in Wave 2 (column 1) and not to eat out in Wave 2 (column 2). Probit model, marginal effects at the mean of the variables. Standard errors in parentheses.

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

The omitted category here is Germany. Compared to similar German households, Polish and Spanish households are much more likely not to eat out. Less strong, but still significant, positive effects are associated to France, Italy and the Czech Republic. These effects are fully consistent with the patterns displayed in Figure 2.2 – and this confirms that much of the cross-sectional variability across countries relates to factors that do not vary over time.

Column (2) estimates show that the determinants of the probability of not eating out are overall similar for those who did not eat out in Wave 2. The effects of education and health in Wave 2 are less strong, the effects of income, employment and household size stronger. Changes in observables between waves are less important: there is no effect of retirement (those who did not eat out as workers, keep not eating out when they retire) and a smaller (but quite significant) effect of income. Health deterioration is insignificant, but a health improvement has a stronger, negative impact. Positive coefficients on country dummies are overall less large, while negative coefficients (Sweden and Austria) become larger in absolute terms.

## 2.4 Consumption behaviour and the crisis

As various chapters in this book reveal, the financial crisis has had different effects on European households, depending on their labour market attachment, their access to welfare state provisions, social support networks and private economic resources (savings). Even among the retirees, the crisis has probably been more acutely felt by those whose children or grandchildren have lost their job or have suffered substantial earnings cuts.

Our analysis of household food consumption of the European 50+ has highlighted some interesting patterns that shed light on the differential impact of the crisis on this segment of the European population.

First of all, we have seen using Wave 4 data that the share of food at home to income is much lower in Northern and Central European countries compared to Southern and Eastern European countries. Thus Estonian and Polish households devote as large a fraction of their resources (40 %) to eating at home as Spaniards and Portuguese. To a large extent this similarity carries through when we consider another indicator of limited access to economic resources: the proportion of households who report not to eat out in a normal month. For instance, more than 70 per cent of Poles, Hungarians and Estonians fail to eat out – a similarly large proportion is found in Spain, a country hard hit by the crisis.

Our analysis of individual changes in eating out has shown the importance of factors like education, gender and poor health. It has also highlighted the key role played by economic factors, most notably income and the employment status of respondents. An income decrease, for instance, is associated to a strong increase in the probability of not eating out for all; retirement instead has a strong, positive effect, but only for those households who used to eat out while still employed.

## References

- Attanasio, Orazio, Weber, Guglielmo (2010): “Consumption and saving: models of intertemporal allocation and their implications for public policy”. In: *Journal of Economic Literature* 48, p. 693–751.
- Browning, Martin, Crossley, Thomas, Weber, Guglielmo (2003): “Asking consumption questions in general purpose surveys”. In: *Economic Journal* 113, p. F540–F567.
- Brugiavini, Agar, Weber, Guglielmo (2012): “Longer-term consequences of the great recession on income distribution”. Fondazione Rodolfo De Benedetti working paper.

