

HOW DO EUROPEAN CITIZENS COPE WITH ECONOMIC SHOCKS?

LIVING WITH LESS...


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- ▶ Quantitative part of a larger project funded by the European Commission & combining a qualitative study among unemployed people in seven EU countries (led by Serge Paugam) and a quantitative study based on EU-SILC data for the whole EU.
- ▶ See DG employment, social affairs and inclusion, 2014, "Facing the crisis – The coping strategies of Europe's unemployed".
<http://ec.europa.eu/social/BlobServlet?docId=13089&langId=en>

BROAD RESEARCH QUESTION

Is unemployment in a period of crisis at the origin of a process of impoverishment and spiralling breaks in social bonds or can it also be at origin of a process of coping, based on forms of compensation, through strengthening other types of social bonds than the employment bond?

Coping strategy:

- Living with less (this ppt)
 - Protect parent-child bond
 - Rely on family solidarity (depends on the country)
 - Withdrawal back to the domestic sphere, shrinking network of friends
 - Informal economy & undeclared (precarious) work
 - Loss of confidence in institutions
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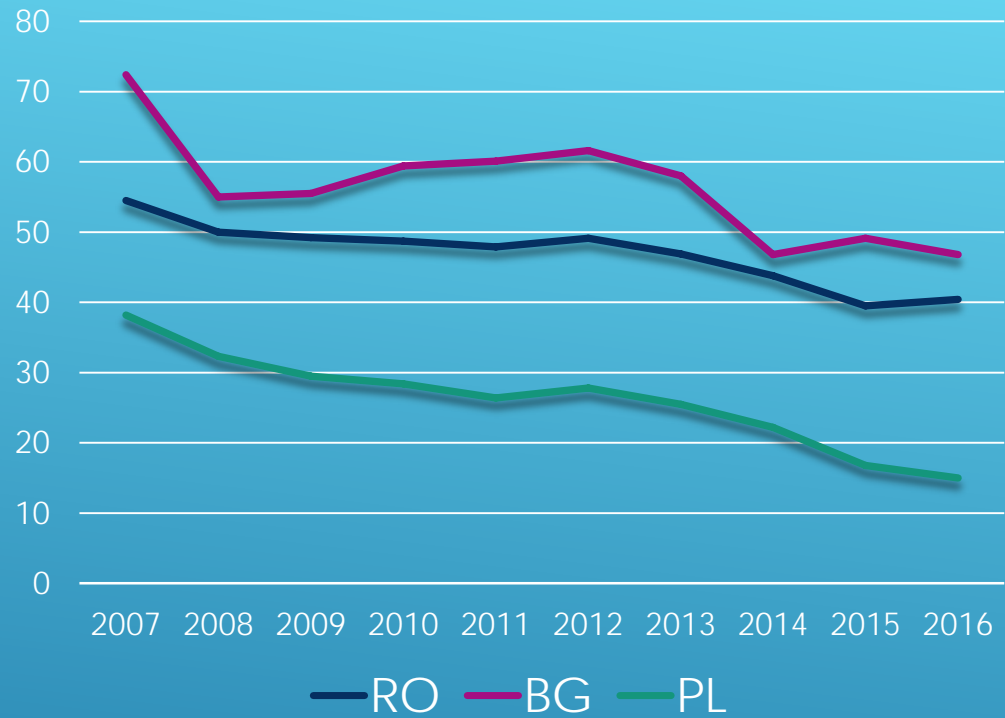
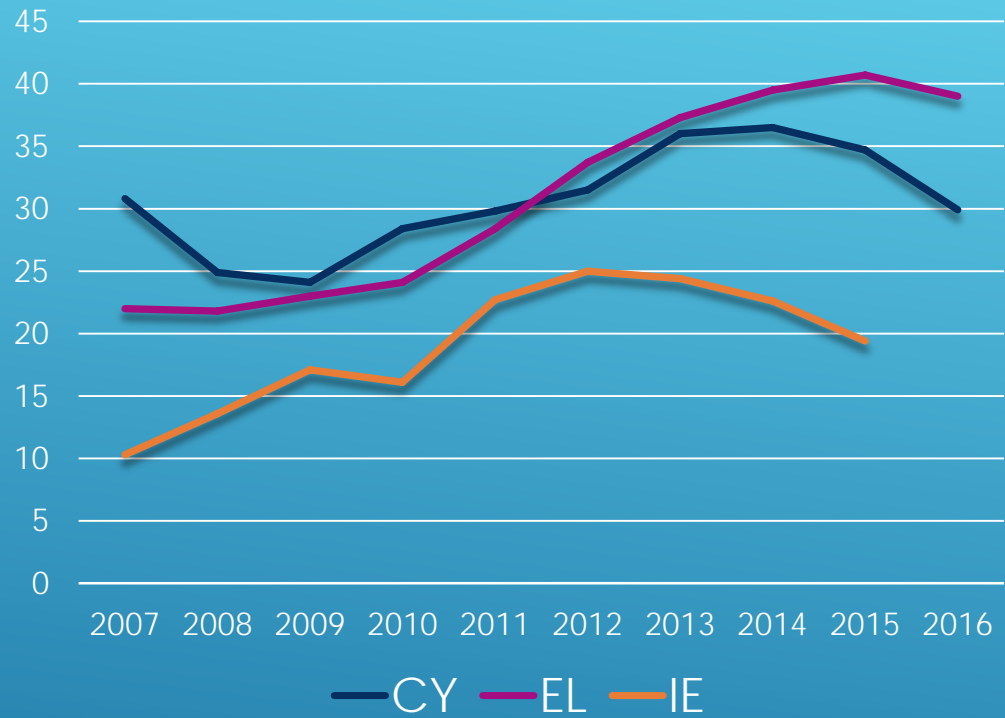
LIVING WITH LESS

Interviews showed that being unemployed goes hand-in-hand with deprivation and consumption restriction, including self-deprivation strategy to protect children.

We focus on this aspect & explore which items people have to go without as their resources decrease/deprivation increases.

My wife and myself mightn't eat for a day or two just to make sure that kids had food. We've had no holidays in 4/5 years. We don't put lights on until necessary and the same with heating. But we are all healthy and together, so it isn't too bad, you know.
(Man, Ireland, 47 year old)

Anything that isn't essential on a day-to-day basis I've taken out
(Man, France, 37 year old)



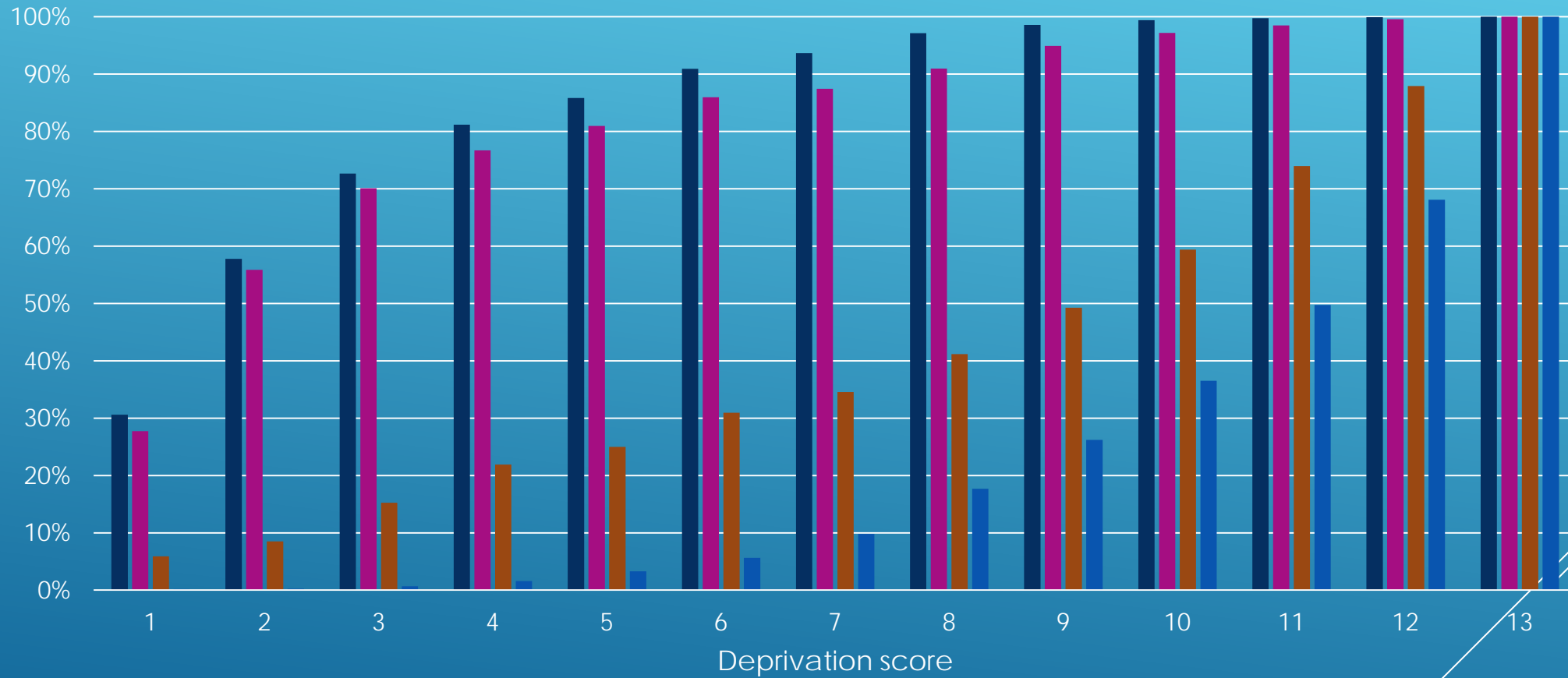
EVOLUTION OF MD RATE (2007-2016)

New MD items

- ▶ 1) coping with unexpected expenses;
- ▶ 2) one week's annual holiday away from home;
- ▶ 3) avoiding arrears (in mortgage or rent, utility bills or hire purchase instalments);
- ▶ 4) a meal with meat, chicken, fish or vegetarian equivalent every second day;
- ▶ 5) keeping the home adequately warm;
- ▶ ~~6) a washing machine;~~
- ▶ ~~7) a colour TV;~~
- ▶ ~~8) a telephone;~~
- ▶ 9) a personal car.

1. to replace worn-out clothes by some new ones;
 2. to afford two pairs of properly fitting shoes;
 3. to have some pocket money;
 4. to get a drink/meal at least monthly;
 5. to have regular leisure activities;
 6. to replace worn-out furniture;
 7. to afford a computer and an internet connection.
- ▶ (Guio, Gordon, Marlier, 2012, 2017)

PERCENTAGE OF PEOPLE WHO CAN'T AFFORD EACH ITEM, BY LEVEL OF MD, EU



■ Holidays ■ Unexpected expenses ■ Arrears ■ Shoes

METHOD:

- ▶ The method compares the deprivation order of each case in a dataset to all the possible orders.
- ▶ If two items (enforced lack of holidays and shoes), there are 2 possible orders of curtailment (holidays first then shoes, or shoes first then holidays). If the order is (Holidays, Shoes), then → 3 possible patterns in data consistent with this order:

| Holidays | Shoes |
|----------|-------|
| 0 | 0 |
| 1 | 0 |
| 1 | 1 |

- ▶ We compare each case in our dataset to this pattern, and allocate errors to each case. We would then aggregate the total amount of error for each possible order and choose the order with the lower error.

CROSS SECTIONAL ORDER – 13 ITEMS

→ MORE Items available but Deprivation order obtained by comparing deprivation pattern of people with different MD level at one point in time (EU-SILC 2014)

1. Unexpected expenses
 2. Holidays
 3. Furniture
 4. Leisure
 5. Pocket Money
 6. Drink/meal out with friends
 7. Clothes
 8. Arrears
 9. Meat/chicken/fish
 10. Home warm
 11. Shoes
 12. Internet
 13. Car
- 

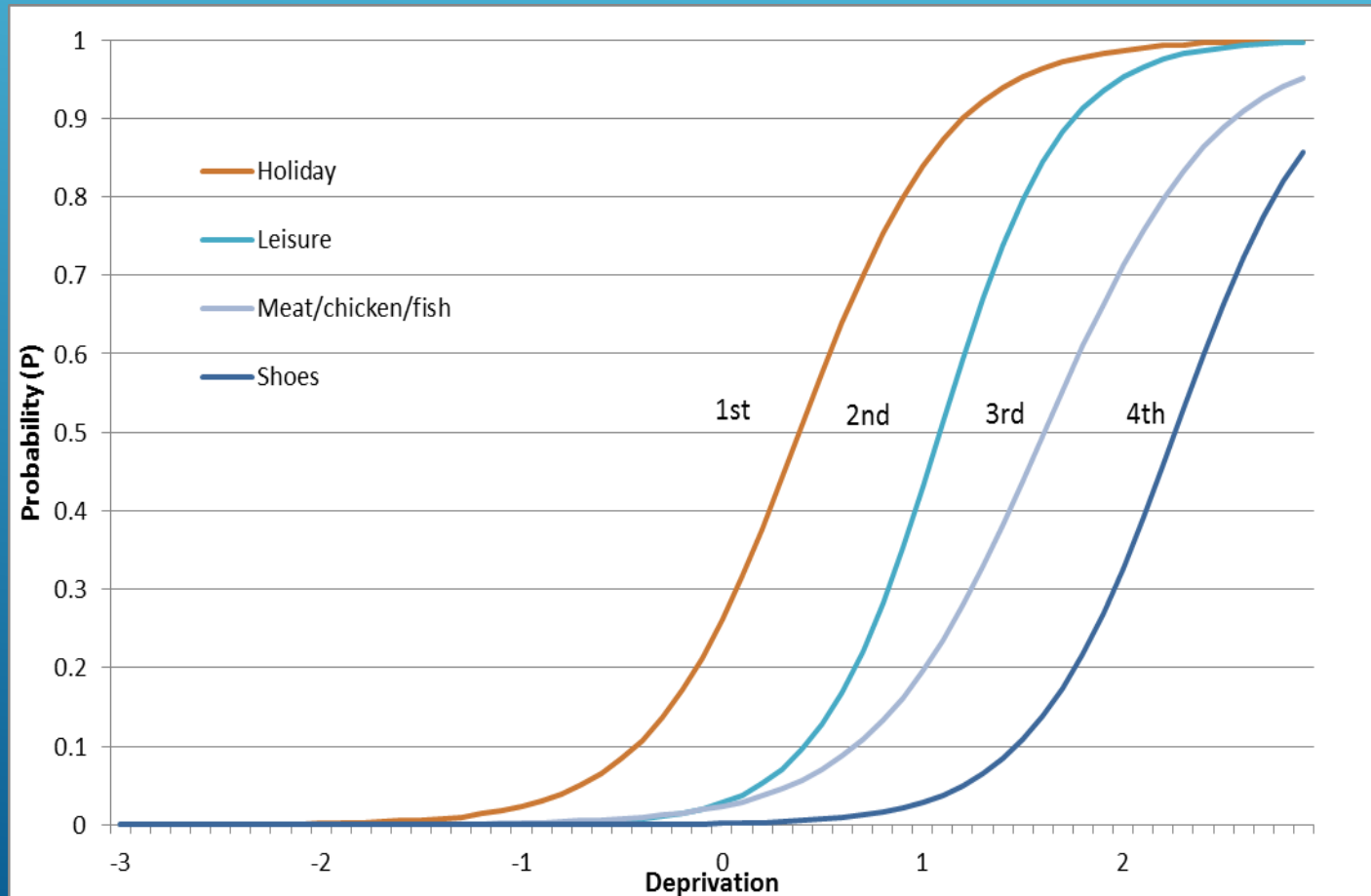
CROSS-SECTIONAL MD ORDER EU COUNTRIES

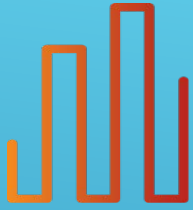
| 2014 | EU-28 | BE | AT | LU | SI | IT | LT | DE | BG | PL | IE | ES | EL | HU | FR | SE | HR | DK | PT | SK | LV | FI | EE | RO | NL | CY | CZ | MT | |
|--------------|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Unexp exp | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 1 | 1 | 1 | 4 | 2 | 1 | 2 | 5 | |
| Holidays | 2 | 1 | 2 | 3 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 1 | 3 | 1 | 3 | 1 | |
| Furniture | 3 | 4 | 4 | 2 | 3 | 3 | 1 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 2 | 4 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 5 | |
| Leisure | 4 | 3 | 3 | 6 | 3 | 4 | 4 | 5 | 7 | 4 | 7 | 4 | 7 | 5 | 4 | 4 | 9 | 5 | 4 | 6 | 5 | 6 | 9 | 3 | 4 | 5 | 6 | 3 | |
| Pocket money | 5 | 5 | 4 | 4 | 7 | 5 | 6 | 5 | 6 | 5 | 5 | 4 | 4 | 7 | 4 | 3 | 4 | 4 | 7 | 5 | 9 | 6 | 5 | 4 | 5 | 8 | 4 | 2 | |
| Friends | 6 | 5 | 6 | 5 | 7 | 6 | 7 | 3 | 9 | 5 | 4 | 6 | 8 | 4 | 7 | 8 | 7 | 8 | 8 | 8 | 9 | 10 | 4 | 6 | 9 | 9 | 9 | 4 | |
| Clothes | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 7 | 5 | 7 | 8 | 7 | 10 | 6 | 6 | 7 | 5 | 6 | 4 | 7 | 4 | 5 | 5 | 7 | 6 | 7 | 7 | 8 | |
| Arrears | 8 | 9 | 10 | 8 | 5 | 9 | 12 | 12 | 10 | 9 | 5 | 9 | 5 | 9 | 9 | 6 | 5 | 7 | 11 | 11 | 12 | 4 | 11 | 12 | 7 | 4 | 12 | 11 | |
| Proteins | 9 | 9 | 8 | 8 | 9 | 10 | 8 | 7 | 7 | 8 | 11 | 12 | 9 | 8 | 9 | 11 | 7 | 12 | 12 | 4 | 8 | 8 | 8 | 11 | 11 | 11 | 4 | 10 | |
| Home warm | 9 | 9 | 11 | 13 | 10 | 8 | 11 | 9 | 7 | 10 | 9 | 9 | 6 | 12 | 11 | 12 | 10 | 9 | 4 | 13 | 9 | 13 | 13 | 13 | 12 | 5 | 10 | 8 | |
| Shoes | 11 | 13 | 12 | 11 | 12 | 12 | 13 | 13 | 11 | 13 | 10 | 11 | 12 | 13 | 7 | 9 | 11 | 10 | 12 | 11 | 6 | 10 | 10 | 7 | 10 | 12 | 13 | 7 | |
| Internet | 11 | 12 | 12 | 12 | 11 | 10 | 10 | 11 | 12 | 12 | 12 | 8 | 10 | 11 | 12 | 13 | 13 | 13 | 13 | 9 | 10 | 13 | 12 | 11 | 9 | 13 | 10 | 11 | 12 |
| Car | 11 | 8 | 9 | 10 | 12 | 13 | 9 | 9 | 13 | 11 | 12 | 13 | 13 | 10 | 12 | 10 | 11 | 11 | 9 | 9 | 7 | 9 | 5 | 10 | 8 | 13 | 8 | 13 | |

Item response theory (IRT) is a set of statistical models that describes the relationship between item responses and an unobserved latent trait, such as material deprivation.

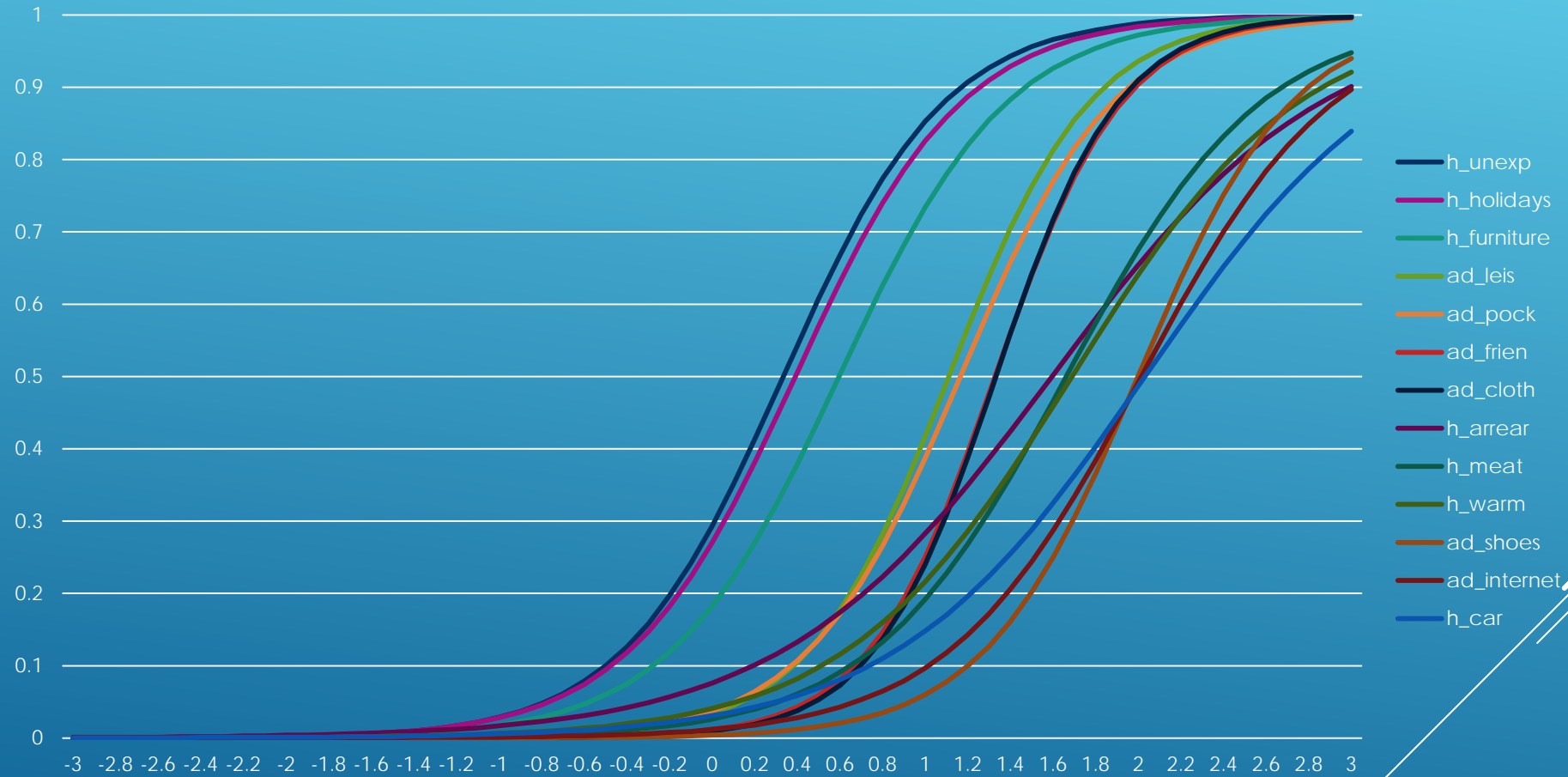
$$P(X_{ij} = 1 | \theta_i, \beta_j, \alpha_j) = \frac{\exp(\alpha_j(\theta_i - \beta_j))}{1 + \exp(\alpha_j(\theta_i - \beta_j))}$$

θ =Deprivation
 α =Discrimination
 β =Severity





DEPRIVATION SEVERITY ASSOCIATED WITH EACH ITEM (ITEM RESPONSE CURVES)



LONGITUDINAL EXTENSION

Important to extent the methodology to be used on panel data, because curtailment is by definition a temporal process which, ideally, to be fully understood necessitates panel data.

| WAVE 1 | | WAVE 2 | |
|----------|-------|----------|-------|
| Holidays | Shoes | Holidays | Shoes |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 |
| 1 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 |
| 1 | 1 | 1 | 0 |
| 1 | 1 | 1 | 1 |

LONGITUDINAL MD ORDER – 6 items

Cost of longitudinal extension: only six items available in longitudinal EU-SILC and method even more complex.

Results at EU level:

1. Unexpected expenses
 2. Holidays
 3. Arrears
 4. Meat/chicken/fish
 5. Home warm
 6. Car
- 
- A decorative graphic consisting of several parallel white lines of varying lengths and orientations, located in the bottom right corner of the slide.

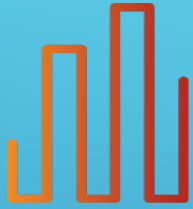
NATIONAL LONGITUDINAL MD ORDER

- Homogeneity across EU Member States
- Longitudinal order very close to cross-sectional order

| | | EU-27 | AT | BE | BG | CY | CZ | DK | EE | ES | FI | HU | IT | LT | LU | LV | MT | NL | PL | PT | RO | UK |
|---------------------------|-------|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Holidays | CS | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 |
| | LONGI | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 |
| Unexp. expenses | CS | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 1 |
| | LONGI | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 1 |
| Meat/ chicken/ fish | CS | 3 | 3 | 5 | 4 | 5 | 3 | 4 | 4 | 6 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 6 | 3 | 5 | 4 | 4 |
| | LONGI | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 3 | 5 | 4 | 4 | 3 | 3 | 5 | 3 | 6 | 6 | 5 |
| Home warm | CS | 4 | 6 | 4 | 1 | 3 | 5 | 6 | 6 | 4 | 6 | 6 | 3 | 4 | 5 | 6 | 4 | 5 | 4 | 2 | 5 | 3 |
| | LONGI | 4 | 6 | 4 | 1 | 3 | 5 | 5 | 6 | 4 | 6 | 6 | 4 | 3 | 5 | 6 | 6 | 4 | 4 | 2 | 5 | 4 |
| Arrears | CS | 5 | 4 | 3 | 5 | 4 | 6 | 3 | 5 | 3 | 3 | 4 | 5 | 6 | 3 | 5 | 5 | 3 | 5 | 6 | 6 | 5 |
| | LONGI | 5 | 4 | 3 | 5 | 4 | 6 | 3 | 3 | 3 | 3 | 4 | 3 | 6 | 3 | 5 | 4 | 3 | 5 | 5 | 4 | 3 |
| Car | CS | 6 | 5 | 6 | 6 | 6 | 4 | 5 | 3 | 5 | 5 | 5 | 6 | 5 | 6 | 4 | 6 | 4 | 6 | 4 | 2 | 6 |
| | LONGI | 6 | 5 | 6 | 6 | 6 | 3 | 6 | 5 | 6 | 4 | 5 | 6 | 5 | 6 | 4 | 5 | 6 | 6 | 4 | 3 | 6 |

AND THE CHILDREN ITEMS ?

| | EU-28 | CY | BE | SI | AT | HR | IT | DK | MT | ES | PT | PL | LT | EL | LV | NL | SE | FR | HU | RO | DE | IE | CZ | LU | SK | BG | FI | EE | |
|--------------------|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Furniture | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | |
| Holidays | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 4 | 2 |
| Leisure | 3 | 3 | 3 | 4 | 5 | 2 | 3 | 4 | 12 | 7 | 4 | 5 | 5 | 4 | 8 | 8 | 4 | 3 | 5 | 6 | 4 | 3 | 3 | 4 | 2 | 3 | 3 | 10 | |
| Arrear | 4 | 7 | 8 | 12 | 3 | 15 | 14 | 3 | 15 | 2 | 6 | 2 | 4 | 3 | 4 | 3 | 4 | 15 | 5 | 9 | 5 | 4 | 6 | 10 | 10 | 3 | 2 | 16 | |
| Friends | 5 | 5 | 5 | 9 | 7 | 13 | 6 | 7 | 6 | 6 | 4 | 15 | 8 | 5 | 3 | 10 | 6 | 6 | 8 | 7 | 7 | 9 | 5 | 5 | 7 | 5 | 6 | 3 | |
| Outdoor equipment | 6 | 6 | 8 | 3 | 8 | 5 | 10 | 4 | 7 | 8 | 10 | 9 | 13 | 6 | 10 | 14 | 11 | 8 | 3 | 5 | 7 | 10 | 8 | 12 | 4 | 10 | 7 | 4 | |
| Home warm | 6 | 8 | 8 | 4 | 4 | 10 | 7 | 10 | 17 | 4 | 8 | 17 | 8 | 6 | 15 | 4 | 3 | 6 | 16 | 7 | 3 | 7 | 7 | 3 | 17 | 15 | 8 | 16 | |
| Celebration | 6 | 8 | 5 | 14 | 6 | 10 | 9 | 7 | 8 | 5 | 3 | 11 | 5 | 6 | 13 | 10 | 7 | 8 | 8 | 9 | 5 | 10 | 4 | 7 | 9 | 7 | 8 | 4 | |
| Clothes | 6 | 13 | 4 | 12 | 9 | 6 | 10 | 7 | 10 | 16 | 8 | 4 | 3 | 15 | 6 | 4 | 7 | 4 | 5 | 3 | 7 | 12 | 15 | 5 | 10 | 5 | 5 | 4 | |
| Car | 10 | 4 | 7 | 15 | 17 | 2 | 4 | 13 | 4 | 14 | 13 | 6 | 15 | 12 | 4 | 10 | 17 | 4 | 13 | 4 | 16 | 5 | 9 | 7 | 5 | 7 | 14 | 4 | |
| Indoor games | 11 | 10 | 14 | 9 | 11 | 9 | 14 | 10 | 10 | 13 | 12 | 11 | 14 | 10 | 13 | 14 | 11 | 13 | 3 | 15 | 12 | 14 | 11 | 11 | 5 | 12 | 8 | 12 | |
| Books | 11 | 10 | 8 | 7 | 9 | 15 | 10 | 6 | 8 | 10 | 15 | 6 | 11 | 6 | 11 | 16 | 7 | 14 | 13 | 13 | 13 | 13 | 9 | 12 | 10 | 12 | 16 | 8 | |
| Proteins | 11 | 13 | 12 | 7 | 12 | 7 | 4 | 14 | 4 | 8 | 15 | 11 | 11 | 10 | 8 | 6 | 13 | 12 | 8 | 13 | 7 | 5 | 11 | 17 | 14 | 14 | 11 | 8 | |
| Internet | 11 | 12 | 14 | 16 | 12 | 7 | 10 | 17 | 12 | 14 | 6 | 14 | 17 | 14 | 11 | 10 | 7 | 8 | 16 | 16 | 16 | 16 | 16 | 7 | 7 | 16 | 14 | 13 | |
| Fruit & vegetables | 15 | 17 | 14 | 9 | 14 | 10 | 7 | 15 | 3 | 12 | 15 | 9 | 10 | 13 | 6 | 9 | 15 | 11 | 8 | 9 | 13 | 14 | 11 | 14 | 16 | 17 | 11 | 10 | |
| Shoes | 16 | 16 | 12 | 6 | 16 | 13 | 14 | 10 | 12 | 17 | 13 | 6 | 5 | 16 | 17 | 6 | 15 | 16 | 15 | 9 | 11 | 7 | 16 | 14 | 10 | 7 | 13 | 13 | |
| School trips | 17 | 15 | 14 | 16 | 15 | 17 | 17 | 15 | 16 | 10 | 11 | 15 | 15 | 16 | 16 | 17 | 14 | 16 | 8 | 17 | 13 | 17 | 11 | 14 | 15 | 10 | 17 | 15 | |



OVERLAP BETWEEN HOUSEHOLD AND CHILDREN MD

Children living in household lacking the item

Children not lacking:

Holidays: 35%

Meal with proteins: 59%

Leisure: 61%

Friends: 66%

Shoes: 56%

Clothes: 63%

Children living in household not lacking the item

Children lacking:

Holidays: 2%

Meal with proteins: 1%

Leisure: 3%

Friends: 2%

Shoes: 1%

Clothes: 2%

Children are, to a certain extent, protected from the household/adult deprivation...

CONCLUSIONS

- ▶ As their resources decrease, households first cut back on their annual holidays, their saving to face unexpected expenses, new furniture, leisure and social activities and as their resources decrease even further they are unable to afford meals with proteins, a warm house, paying the bills, an internet connection and eventually even two pairs of all-weather shoes.
- ▶ Despite the large diversity in deprivation levels within the EU, there is a large degree of overlap between the deprivation orders of different countries across the EU, which is a remarkable result. The same is true for different household types within each country.
- ▶ The longitudinal analysis confirms that this pattern is also found when following the same people across time. CS order can be used as a proxy for longitudinal order.
- ▶ Our analysis also shows that questions on extreme deprivations such as two pairs of shoes are however needed in the longitudinal element of the EU-SILC to further corroborate the cross-sectional results and give a richer overview of the severity of deprivation.
- ▶ Results provide evidence against claims that poverty is the result of erratic spending or inefficient household budgeting: the vast majority of people shares a common deprivation trajectory.