EXPECTED BEQUESTS AND CURRENT WEALTH IN SHARE, ELSA AND HRS

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Age profile of wealth

- Important for both theoretical and economic policy reasons
- Life-cycle theory: people save when young and dissave when old →

  Wealth decreases in old age
  Bequests are purely accidental
- Empirically not always observed, i.e. consumption falls in old age and bequests occur even in very old age

Problems with detecting wealth age profile in cross-sections

- Cohort effects
  - Higher life-time income of younger cohorts
  - Effect of institutions different across cohorts (e.g. pension system more generous to older cohorts)
- Time effects
  - Availability of new credit instruments
  - Business cycles

Possible way out

- Expected bequests (Hurd and Smith 2002)
- Provide a final stock of wealth
- Difference between current wealth and expected bequests gives the expected asset decumulation of the household

SHARE

- Conducted in 2004 in 11 European countries
- 19,000 households and 32,000 individuals

SHARE, ELSA and HRS

- SHARE was modelled after the HRS (US) and ELSA (UK)
- We can use common sets of questions
- We use ELSA and HRS from 2002

SHARE Questions on Bequests

- Probability of you or your partner leaving an inheritance more than 50,000 euro
- If positive probability, same question is asked for an inheritance of more than 150,000 euro
- If zero probability, same question is asked for an inheritance of more than zero
- Different thresholds in HRS (lower: 10,000 and 100,000 Dollars) and ELSA (higher: 50,000 and 150,000 Pounds)

Couples

- Must take into account both partners when answering
- Who leaves the bequest
  - Choose the one with the highest expected lifetime
- Timing of the bequest
  - At expected death time

How do people answer?

Table A - Distribution of Replies

Case	Frequency	Percentage
P(B>1st thr)=1 & 0<P(B>2nd thr)<1	5,683	9.3
P(B>1st thr)=1 & P(B>2nd thr)=0	4,317	7.1
0<P(B>1st thr)<1 & P(B>2nd thr)=0	9,144	15.0
0<P(B>1st thr)<1 & 0<P(B>2nd thr)<1	**8,678**	**14.3**
P(B>2nd thr)=1	12,227	20.1
P(1st thr<B<2nd thr)=0 & 0<P(B>2nd thr)<1	4,669	7.7
P(B>1st thr)=0 & 0<P(B>0)<1	6,787	11.2
P(B>1st thr)=0 & P(B>0)=1	2,687	4.4
P(B=0)=1	6,634	10.9
Total	60,826	100

Notes:

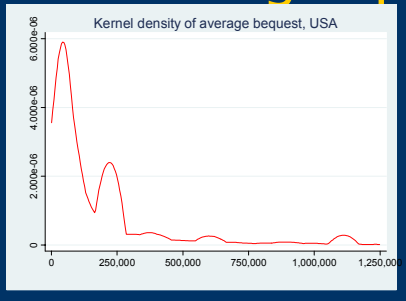
P(B>1st thr): probability of leaving a bequest above the first threshold value

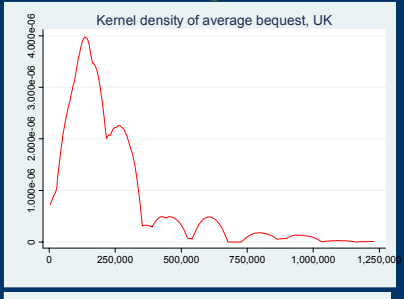
P(B>2nd thr): probability of leaving a bequest above the second threshold value

P(B>0): probability of leaving a positive bequest

All SHARE countries, UK and USA. Individual respondents.

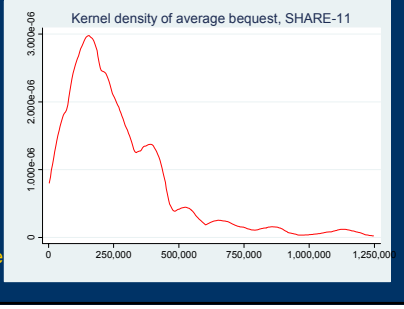
Plotting expected bequests





Assume ihs of bequests are normally distributed

Evaluate mean and sd for observations with two non-unit, non-zero probabilities =>



Econometric Model

Desired bequests y: semi-latent

Assume $\phi(y)=x\beta+e$ with $e\sim N(0,s)$

where $\phi(y) = \ln(y + (y^2 +1)^{.5})$ is the ihs transformation

Expected bequest=0 when desired bequest<0

Econometric Model (cont.)

- We only know the probabilities of each interval
- Assume interval probability $E(p|X)=G(X\beta)$
- If interval is between a_1 and a_2 we can use

  $G(X\beta)=F[(a_2-X\beta)/s]-F[(a_1-X\beta)/s]$
- Pseudo log-likelihood is:

$$\ln L_i(\beta)=\sum_{j=1}^{3}[p(j,i)\ln G_j(X_i\beta)+(1-p(j,i))\ln(1-G_j(X_i\beta))]$$

Quasi ML

- We use quasi-ML:
  - requires only that the conditional expectation is correctly specified as: $E(p|X)=G(X\beta)$
  - no assumptions about the remaining features of the likelihood
- Valid for linear-exponential family of distributions (Gourieroux et al, 1984)

Regression Results

- Number of children and grandchildren: negative or non significant
- Education: typically not significant
- Food consumption: occasionally significant (4^{th} quartile has positive effect)
- Net financial assets: 4^{th} quartile significant in most countries, except Southern European and Switzerland

Regression Results

- Real assets quartiles and home-ownership dummy: extremely significant
- Bad health: negative, but insignificant
- Cognition (10 word recall): often significant
- Bequest received (expectation): very significant (Cox and Stark (2005))
- Typically not significant: employment, social interactions

Bequest and Real Wealth Ratios, 50th and 75th percentiles

	Bequest Ratio					Real Wealth Ratio
	50-54	55-59	60-66	67-73	74-80	Total Sample
U.S.A.	0.248	0.289	0.233	0.233	0.274	0.600
	0.423	0.533	0.411	0.396	0.473	0.883
Sweden	0.285	0.286	0.327	0.407	0.539	0.704
	0.528	0.488	***0.517***	***0.590***	***0.812***	0.883
Germany	0.266	0.260	0.290	0.409	0.468	0.533
	0.584	0.470	***0.595***	***0.742***	***0.998***	0.936

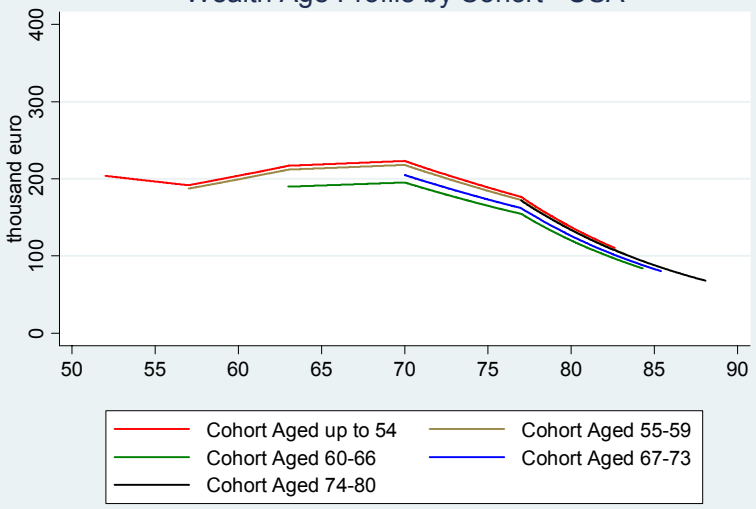
Bequest and Real Wealth Ratios, 50th and 75th percentiles

	Bequest Ratio					Real Wealth Ratio
	50-54	55-59	60-66	67-73	74-80	Total Sample
France	0.198	0.209	0.199	0.263	0.285	0.911
	0.390	0.355	0.425	***0.502***	***0.624***	0.984
Italy	0.255	0.263	0.355	0.496	0.485	0.966
	0.533	0.410	***0.594***	***0.789***	***0.909***	1.000
UK	0.424	0.437	0.488	0.565	0.639	0.837
	0.544	***0.564***	***0.627***	***0.752***	***0.863***	0.949

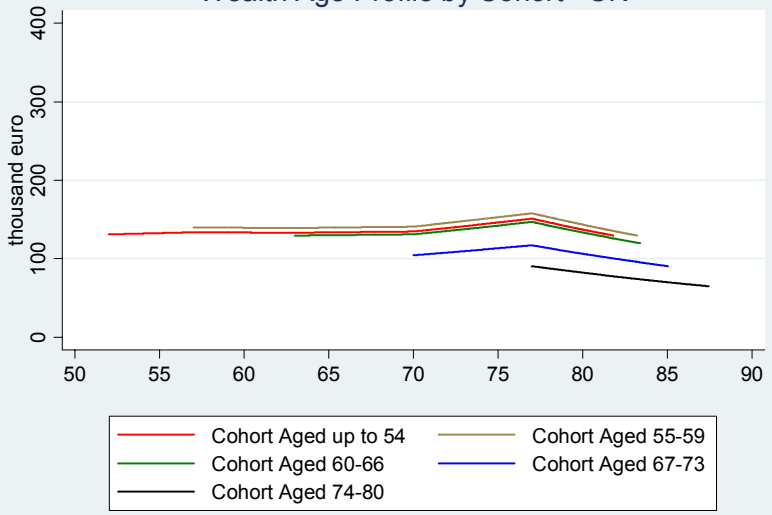
Deducing the age profile of wealth from the cross-section

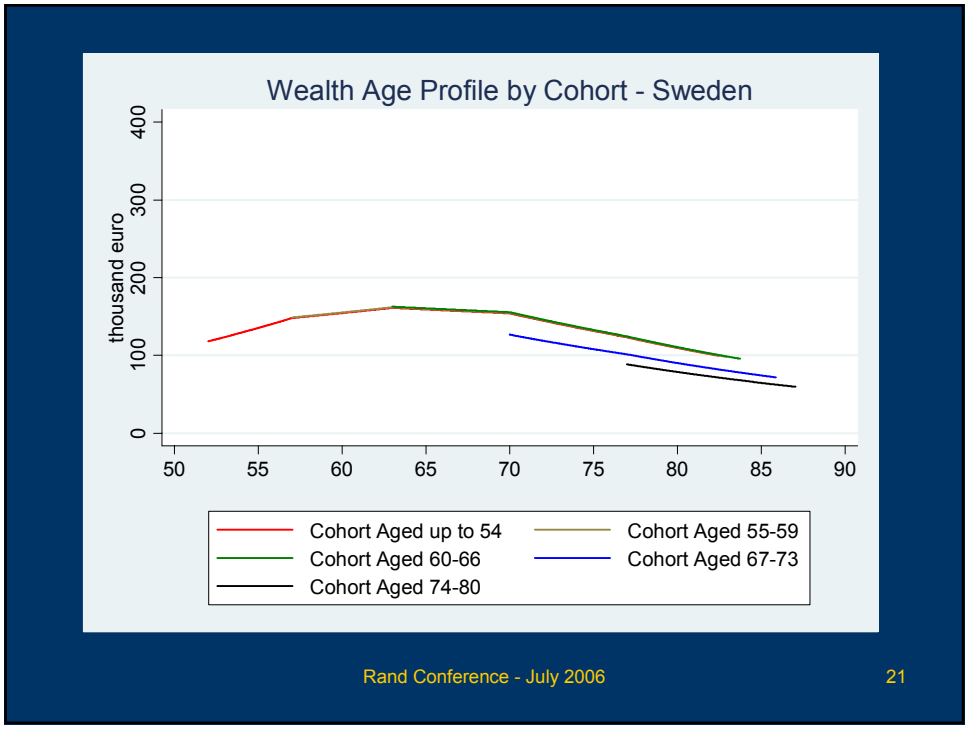
- Wealth profiles are affected by differential mortality, productivity and by institutional effects
- But one can get an estimate of the age profile by assuming:
- the saving rate is not influenced by cohort effects, only age effects
- current age groups (i.e. cohorts) will have a saving rate in the future equal to the current saving rate of the older age groups (cohorts)

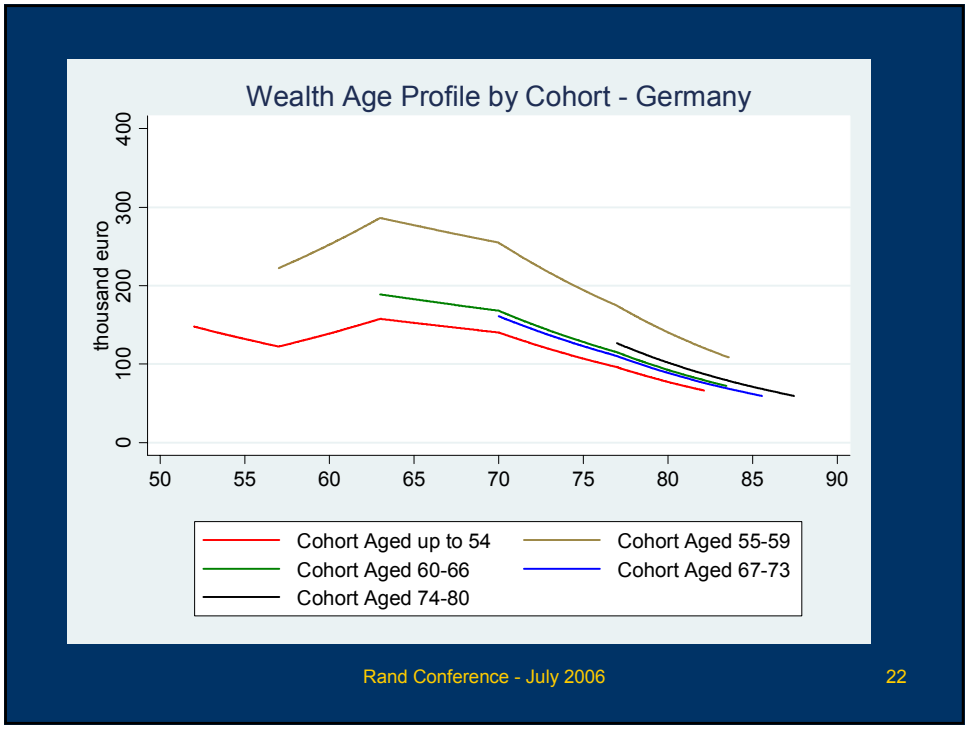
Wealth Age Profile by Cohort - USA



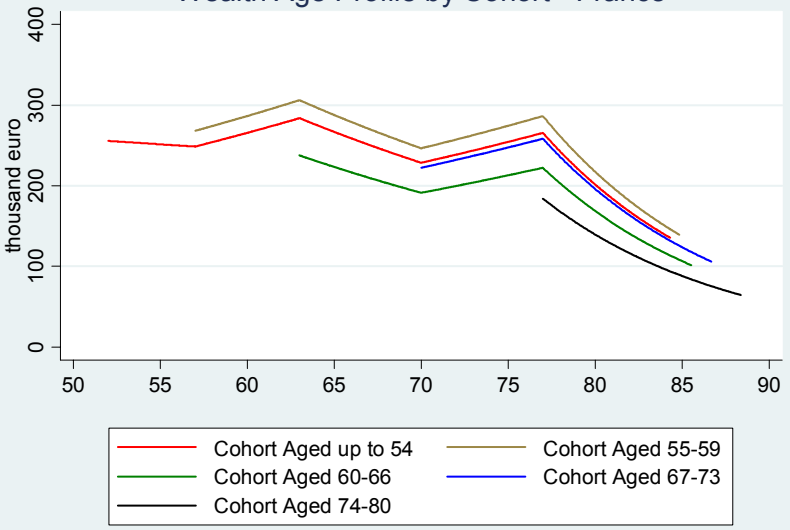
Wealth Age Profile by Cohort - UK



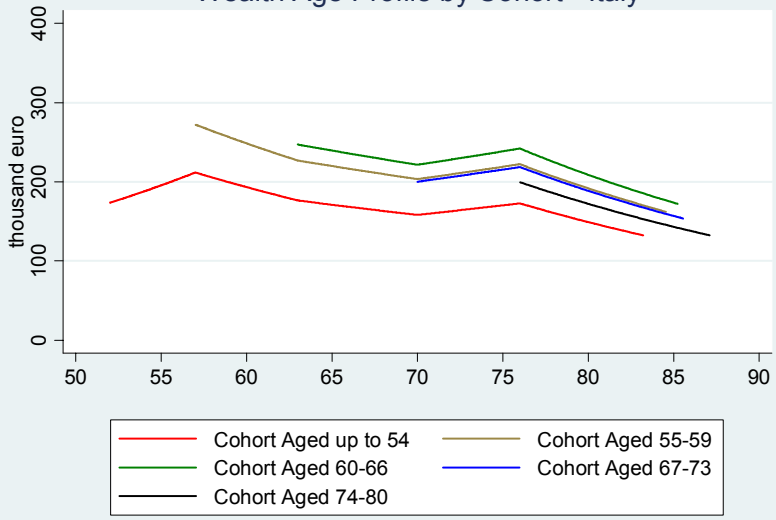

Wealth Age Profile by Cohort - Sweden
thousand euro
0
100
200
300
400
50
55
60
65
70
75
80
85
90
Cohort Aged up to 54
Cohort Aged 55-59
Cohort Aged 60-66
Cohort Aged 67-73
Cohort Aged 74-80


Wealth Age Profile by Cohort - Germany
thousand euro
0
100
200
300
400
50
55
60
65
70
75
80
85
90
Cohort Aged up to 54
Cohort Aged 55-59
Cohort Aged 60-66
Cohort Aged 67-73
Cohort Aged 74-80

Wealth Age Profile by Cohort - France



Wealth Age Profile by Cohort - Italy



Reasons for differences in decumulation of assets

- Share of financial assets. Real assets can't be easily liquidated, reverse mortgages are very rare
- Adequacy of welfare and health system
- Inheritance taxes and laws

Financial Transfers

- 3 questions for transfers given (last year)
- 3 questions for transfers received (last year)
- Questions on who gave/from whom they were received
- Questions on the motives for the transfer

Financial Transfers Given and Received

- They represent in/outflows of wealth and thus affect decumulation
- If transfers given higher than received then total dissaving is higher than implied by expenditure

Prevalence of Financial Transfers

	Fin. Transfers Given	Fin. Transfers Received	Gives and Receives Transfers	Median Amount Given
Sweden	37.9	6.3	3.7	1,197
Denmark	31.5	9.2	4.7	1,689
Germany	40.1	7.5	5.0	1,434
Netherlands	26.8	5.3	2.7	2,033
Belgium	27.9	2.9	1.2	2,181
France	26.2	3.8	1.9	2,352
Switzerland	36.1	11.5	6.2	2,328
Austria	35.4	9.2	6.5	1,720
Italy	28.3	6.9	3.1	1,325
Spain	14.7	6.4	1.7	1,678
Greece	39.7	11.6	4.2	2,447

Conclusions

- Real wealth plays a major role in determining expected bequests.
- Financial wealth plays a role only for the rich (highest quartile) – and no role in Southern European countries
- The probability of receiving bequests plays an important role in predicting the value of expected bequests.

Conclusions

- Expected bequests are higher in Europe than in the US for people past retirement age
- In all countries most households plan to consume a non-negligible fraction of their wealth. However, past age 60, a fourth of European respondents expect to bequeath more than half to nearly all of their wealth.
- In many countries a sizeable minority of households make or receive gifts