



OBSERVATOIRE DE L'ÉPARGNE EUROPÉENNE

Research project on
Stockholding in Europe

Survey Design and Estimation of
Portfolio Models

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Why survey data?

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- Allow to identify stockholders and relate demand for stock to age, wealth, health, occupation and education of individual
- Decision to participate in stock market may be different from decision on how much to invest

Why survey data?

2

Recent studies on U.S. and European surveys show (controlling for wealth, income, household composition):

- Participation decision strongly age-dependent
- Risky asset portfolio share decision less affected by age

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Why survey data?

3

Aggregate data:

- Fail to distinguish the two decisions
- Cover the whole of the market

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What survey data?

- Financial intermediaries customers data
 - Lots of high quality data but choice-based sample: hard to draw inference on whole population. Also: little information on customer characteristics
- Random sample of resident population
 - Ideal if good response rate and/or over-sampling of the wealthiest households (wealth distribution is highly skewed)

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Our survey data

	D	F	I	NL	UK
Run by	Stat. Bundesamt	INSEE	Bank of Italy	VSB- CentER	CSO
Response rate	N.A.	70	43	18	66
Data collection	PAPI	PAPI	CAPI	CAPAR	CAPI
Sample size	50000	10200	7100	2800	22900
Respondent	Head	Head	Head	Head + Individ.s	Head + Individ.
Over-sampling	NO	YES	NO	YES	NO

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Methods to elicit information on stocks and other financial assets

	D	F	I	NL	UK
Participation	Yes	Yes	Yes	Yes	Yes
Exact amount	Yes	Yes	Yes	Yes	Sub-sample
Self reported range	Yes	Yes	No	No	No
Pre-assigned brackets	Yes	Yes	Yes	Yes	Yes
Investment Income	Yes	Yes	Imputed	No	Yes

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Other Wealth Information

	D	F	I	NL	UK
Number of financial assets	6	27	17	44	19
Home	value	value	value	value	value
Own business	value	value	value	value	none
Other real wealth	value	value	value	value	none
Pension wealth	none	none	repl. rate	none direct	some
Mortgage	value	value	value	value	value
Other debt	value	value	value	value	none

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Further issues

- Order of questions (exact amount first - brackets if don't know or refuse: F, NL, D; reverse: I, UK)
- Imputation method if amount not known
- Type of financial intermediary (bank, finance house, insurance company)
- Distinction between direct and indirect holdings of stocks

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Data quality

	D	F	I	NL	UK
Income (H)	Excellent	Good	Good	Good	Excellent
Consumption	Good	None	Fair	Poor	None
Financial Wealth	Fair	Good	Good	Good	Fair
Education	Good	Good	Good	Good	Good
Occupation	Good	Good	Good	Good	Fair
Subj. Expectations	None	Good	Good	Good	None
Health	None	None	Poor	Good	None

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Estimation problems

Two separate equations:

- Participation decisions (whether household holds any stocks, directly or indirectly)
- Amount (or portfolio share) equation (how much wealth does each household hold in stocks, given participation)

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Estimation issues

- Participation equation
 - Knowledge of the assets involved (information)
 - Access to the market (fixed costs)
 - Excess return, risk aversion, wealth, health, age and other economic variables
- Amount (or wealth share) equation
 - Excess return, risk aversion, wealth, health, age and other economic variables