

# Saving and portfolio behavior after retirement

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# Motivation

- ▶ Public expenditures on pensions and long term care will increase progressively because of population aging.
- ▶ Reductions in pension benefits and long-term care coverage are announced.
- ▶ Are the elderly able to support themselves through their private savings?
- ▶ Important to understand saving behavior after retirement.
  - ▶ Is there evidence of a bequest motive?
  - ▶ Are people uncertain about the timing of death or medical expenditures?
  - ▶ Do households plan to downsize their housing wealth?
- ▶ Present descriptive evidence about saving behavior after retirement.

# Data

- ▶ Detailed administrative data on wealth holdings: Dutch income panel (IPO) 2005-2010.
  - ▶ Households age 60 and older where both the partner and the spouse are retired.
  - ▶ Sample includes 13,500 individuals in 2005.
- ▶ Hospital discharge register 1995-2010 (LMR) to measure health status.
  - ▶ Health index based on mortality hazard (by type of disease).
  - ▶ Evolving index: Number of periods with a specific diagnosis.
  - ▶ Predict health status for each year.

# What resources do individuals have available in retirement?

Table : Household wealth, 2005-2010, Balanced panel

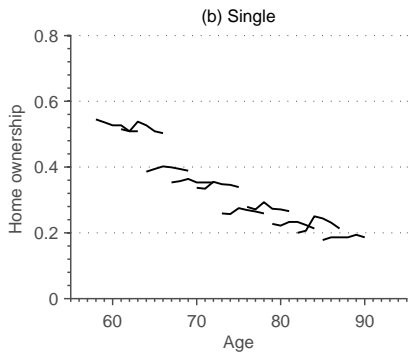
	2005	2006	2007	2008	2009	2010	% Change 2007 - 2010
<i>Net worth</i>							
Mean	246.3	256.8	272.7	249.8	243.0	235.3	-13.7
Median	113.1	118.4	135.9	124.9	114.7	107.1	-21.2
Percent negative or zero	4.4	4.7	3.9	4.0	3.3	3.3	
<i>Net financial assets</i>							
Mean	116.4	120.5	123.7	108.9	113.6	116.7	-5.7
Median	28.4	28.4	29.6	28.4	29.0	29.0	-1.9
Percent negative or zero	5.4	5.9	5.1	5.2	4.3	4.1	
<i>Primary residence</i>							
Mean (conditional)	274.2	289.4	305.4	293.6	273.7	254.8	-16.6
Median (conditional)	239.4	251.9	261.7	254.2	230.7	221.9	-15.2
Ownership	47.4	47.1	48.8	48.0	47.3	46.6	
<i>Stocks and mutual funds</i>							
Mean (conditional)	99.8	114.6	114.2	81.7	93.5	95.5	-16.3
Mean (unconditional)	37.1	40.3	40.9	26.5	30.4	32.5	-20.6
Ownership	27.0	25.0	23.4	21.6	21.4	20.0	

All amounts are expressed in 2010 prices using the CPI deflator

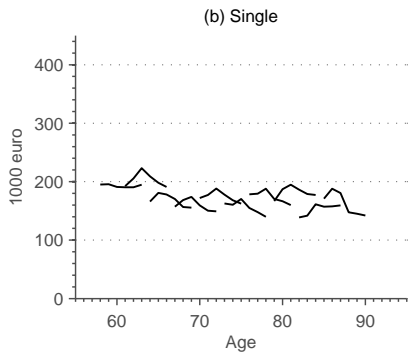
**Table :** Composition of household portfolios in 2005 (% of total assets), Balanced panel

	Total	Q1	Q2	Q3	Q4	Top 5%
Checking and saving accounts	55.1	97.2	84.4	20.8	18.0	17.1
Stocks and mutual funds	5.1	1.3	5.2	4.4	9.8	20.5
Bonds	0.9	0.0	0.6	0.8	2.4	4.9
Primary residence (gross value)	35.6	1.3	8.4	71.1	61.6	41.0
Other real estate (gross value)	2.1	0.1	0.7	1.7	5.8	12.1
Business equity	0.2	0.1	0.1	0.2	0.6	1.2
Other assets	0.9	0.0	0.5	1.1	1.9	3.2
<i>Total assets</i>	100.0	100.0	100.0	100.0	100.0	100.0
Mortgage debt	6.5	2.7	5.1	12.7	5.5	3.0
Other debt	1.0	1.0	0.6	0.7	1.5	2.7
Negative business equity	1.5	5.8	0.0	0.0	0.0	0.0
<i>Total debt (% of total assets)</i>	8.9	9.5	5.7	13.5	7.0	5.7

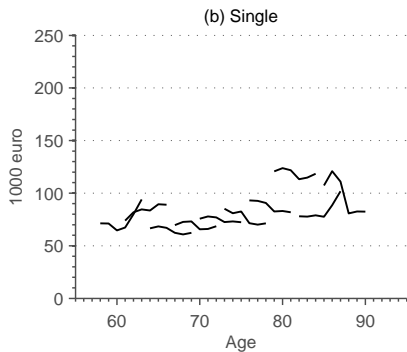
**Figure :** Home Ownership Profile by Cohort and Age of the Keyperson of Household, Balanced Panel



**Figure :** Net Worth Profile (mean) by Cohort and Age of the Keyperson of Household, Balanced Panel



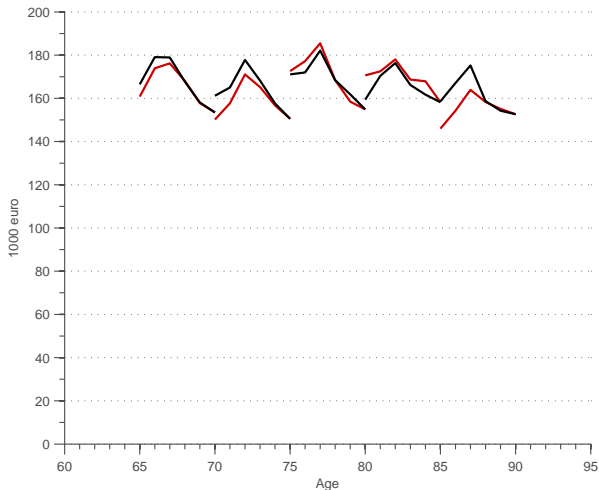
**Figure :** Net Financial Wealth Profile (mean) by Cohort and Age of the Keyperson of Household, Balanced Panel



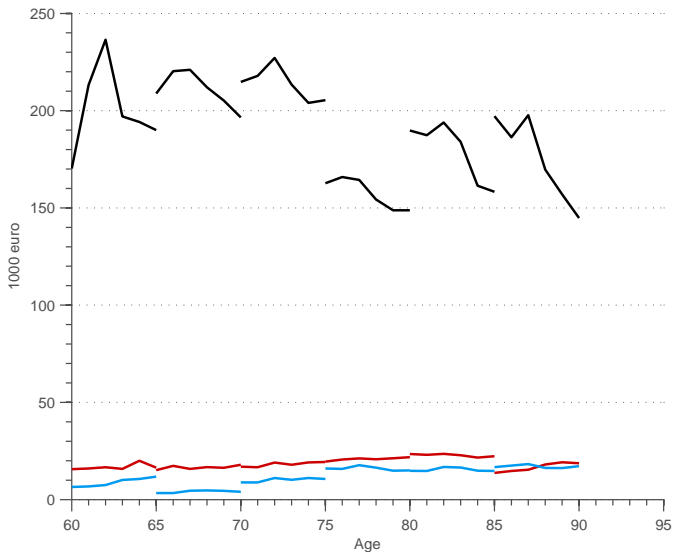


# Differential mortality is significant at advanced ages

**Figure :** Net Worth Profile (mean) by Cohort, Balanced Panel (black line) versus Unbalanced Panel (red line)



**Figure :** Net Worth Profile (median) by Cohort and Permanent Income Tertile for Singles, Balanced Panel



# To what extent are the financial resources affected by the decease of a spouse?

Figure : Total Net Worth (mean) by Family Status

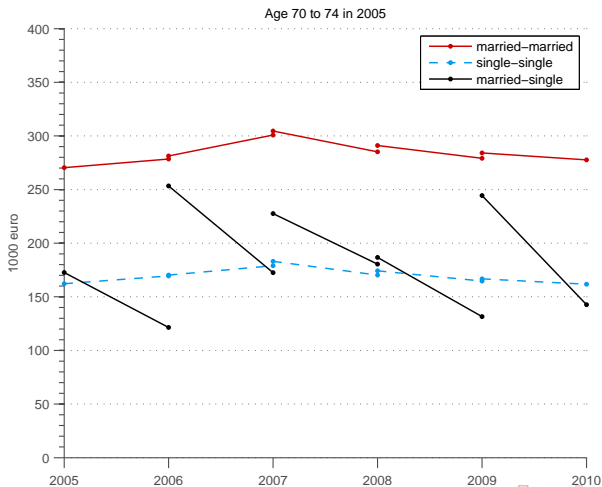
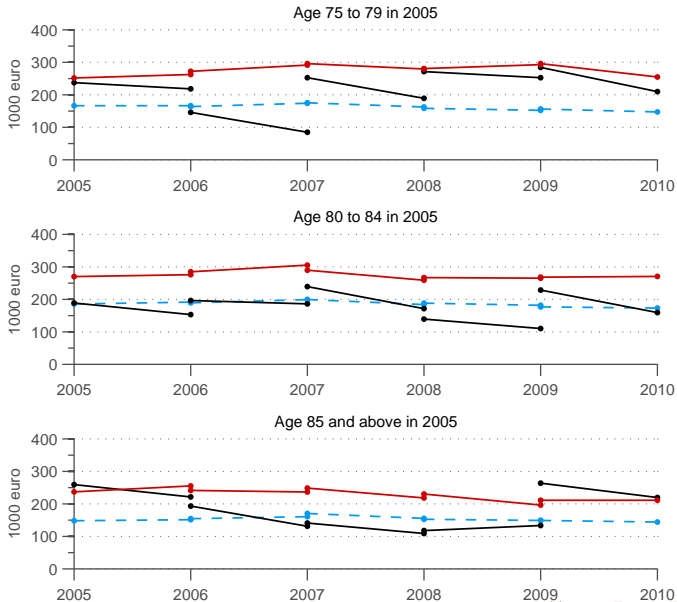


Figure : Total Net Worth (mean) by Family Status



# Are the elderly dissaving during the last years of their lives?

**Table :** Net Worth before death (1000 euro), Single households, Age 70 and older in 2005

	Survives			Dies		
	2005	$\Delta$ annual	$\Delta$ final year	2005	$\Delta$ annual	$\Delta$ final year
<b>No health problems</b>						
Mean	187.5	-2.85	-6.1	185.5	-1.62	-5.89
Median	24.85	-0.02	-0.2	24.85	0.02	-0.08
Obs	997			437		
<b>Minor health problems</b>						
Mean	158.3	-2.13	-3.17	140.9	1.3	-5.08
Median	24.85	-0.02	-0.2	22.7	0	0
Obs	587			364		
<b>Major health problems</b>						
Mean	159.7	-4.27	-4.68	149.1	-3.58	-4.7
Median	24.85	0	-0.2	20.9	0.04	0.01
Obs	526			415		

# Conclusions

- ▶ Elderly on average keep large amounts of assets even at very old age.
- ▶ No clear evidence of decumulation of wealth after retirement for singles.
- ▶ Some suggestive evidence of dissaving for couples at advanced ages.
- ▶ Significant reduction in wealth holdings after the decease of a spouse.
- ▶ No evidence of dissaving in the years before death for single households.
- ▶ No major differences in the decumulation pattern for different health groups.
- ▶ Life expectancy seems relevant.

# Work in progress

- ▶ Structural model of retirement saving behavior for the Netherlands
- ▶ Does the marginal utility of consumption varies with health status?
- ▶ Do households actually plan to downsize their housing wealth in case of a health shock? Do large adjustment costs constrain the evolution of retirement wealth?
- ▶ Is there evidence of a bequest motive?