

The concentration of personal wealth in Italy

1995-2013

Paolo Acciari (MEF, Italy)

Facundo Alvaredo (PSE & Conicet)

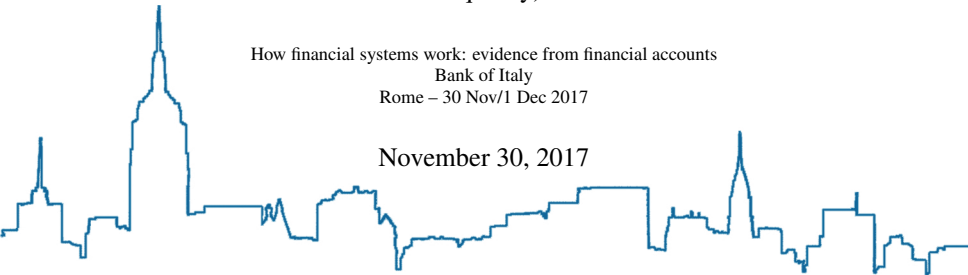
Salvatore Morelli (GC-CUNY & Stone Center on Socio-Economic
Inequality)

How financial systems work: evidence from financial accounts

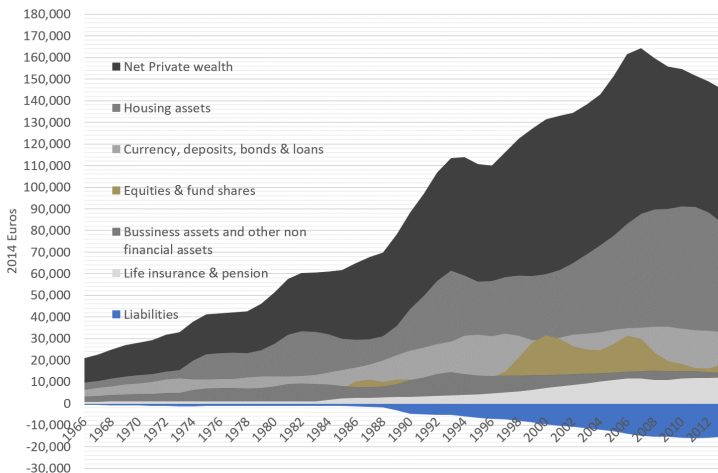
Bank of Italy

Rome - 30 Nov/1 Dec 2017

November 30, 2017



Italian wealth topography: The (high) mountains of wealth and the (shallow) sea of debt



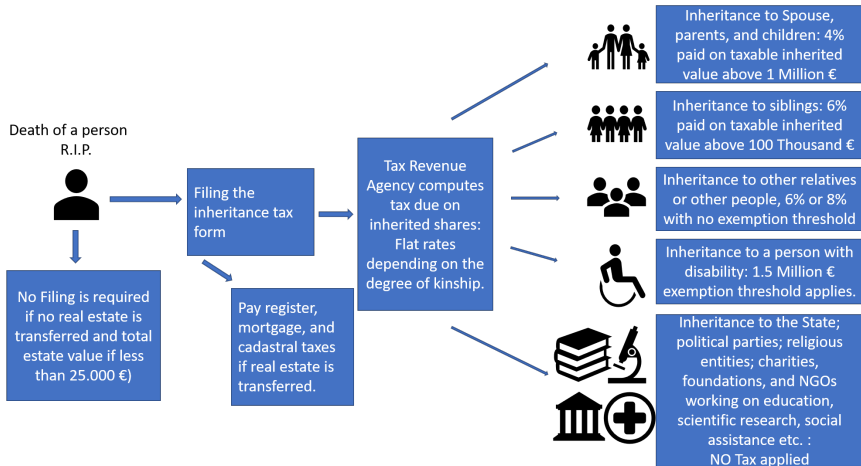
Source: Elaborations on data from Bank of Italy, ISTAT, and WID.world

Objective: Estimating the concentration of personal wealth and its evolution since mid-1990s

- ▶ We use confidential inheritance tax register data and the “mortality multiplier” method to study the concentration of current marketable wealth (sum of financial & real assets net of liabilities): only source of information alternative to the Bank of Italy household survey on income and wealth (e.g. no tax on wealth and no full taxation of capital income at the individual level).
- ▶ Household surveys are typically less suited to study the high-end wealth groups due to under-sampling of wealthy households and to differential under-reporting and non-response rates. (Vermeulen 2015)
- ▶ First systematic empirical application to the Italian data (see also Gabbuti 2017 for application to historical aggregate data 1890-1914)
- ▶ **Caveat:** Results are still preliminary (especially for 2001-2006 period) and may be subject to revisions.

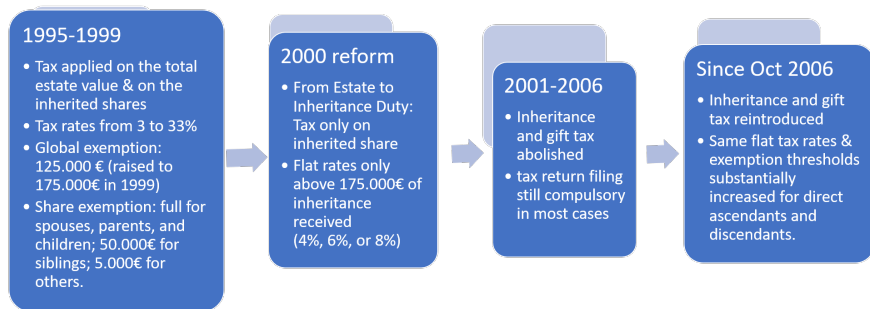
INHERITANCE TAX ADMINISTRATION

Current inheritance (and gifts) tax legislation



Note: in 2014 the no-filing threshold was raised to 100 thousand Euros.

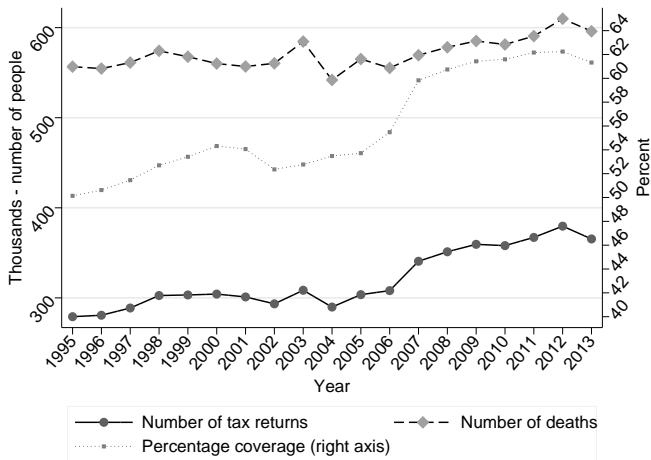
From Estate duty to Inheritance tax: changes to tax law 1995-2013



Note: Rules also apply to donations and inter-vivos gifts

► Inheritance tax revenue

Inheritance tax data: decedents population coverage



THE ESTATE MULTIPLIER METHOD

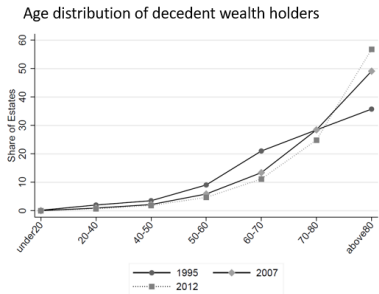
The application of the Estate multiplier method

From the decedent wealth holders to the living wealth holders. Challenge: death does not "sample" individuals randomly.



The application of the Estate multiplier method

From the decedent wealth holders to the living wealth holders. Challenge: death does not "sample" individuals randomly. Solution: mortality multipliers.



Mortality multipliers

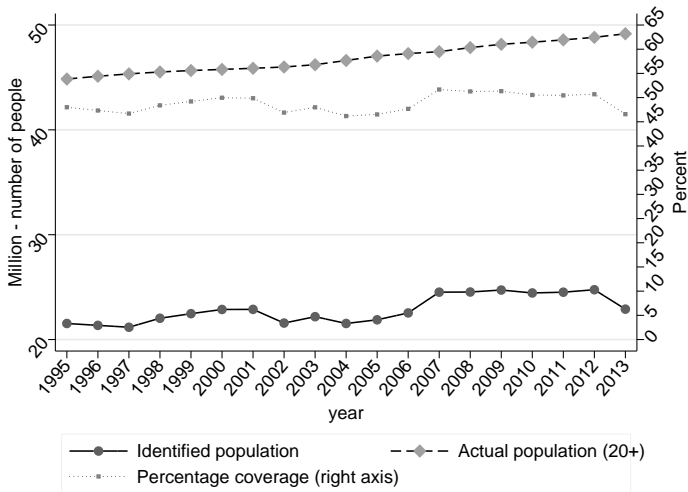


▶ Adult population coverage

▶ Population coverage by Age groups

▶ Relative age distribution: full vs. identified population

Full adult population vs. identified wealth holders



Source: ISTAT, total population.

ADJUSTMENTS TO WEALTH

Imputing missing wealth & liabilities

Source: Financial Accounts (Bank of Italy)

Missing Wealth: approx 900 bln Euros in 2013

- ▶ 100% of Pension funds, life insurances and TFR
- ▶ 90% of cash and coins (100% in 2001-2006)
- ▶ 50% of Government bonds -not taxed, but have to be reported-(100% in 2001-2006)

Imputed to the population using the inheritance tax returns distribution of business, stocks, and bonds. ▶ Distribution of business/financial assets

Missing Debt: approx. 300 bln Euros in 2013

- ▶ Difference between mortgages and insurance technical reserves liabilities and the total identified liabilities.

Imputed to the population according to the distribution of liabilities observed in the inheritance records. ▶ Distribution of liabilities

▶ Imputed wealth and liabilities

Adjusting real estate cadastral value

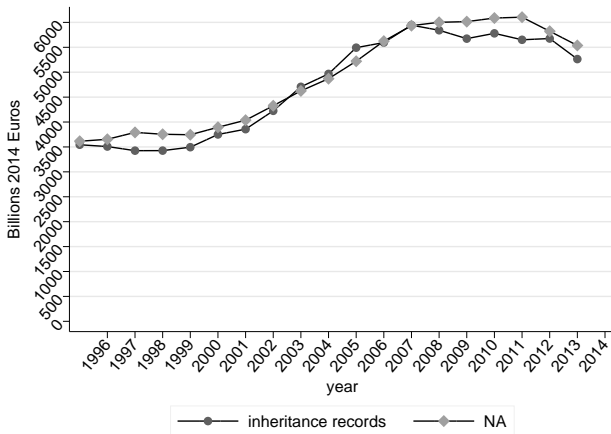
Cadastral rents/values are lying well below market values, so a correction has been introduced

- ▶ For years 2009-2013 we used the ratio between market values of property held by physical persons recorded by the Revenue Agency/Nomisma in the “Osservatorio del Mercato Immobiliare” and the corresponding cadastral values, in years 2009-2013. (source: “Gli immobili in Italia”)
- ▶ For years 1995 to 2008 we recovered the “market values/cadastral values” ratio using BIS direct estimates of nominal growth rate of house prices and the yearly variation of average cadastral values (between 2007 and 2013, the longest time series available for cadastral values).
- ▶ We have also taken into account the legislative changes that have affected the cadastral rent multiplier (to obtain the cadastral value)

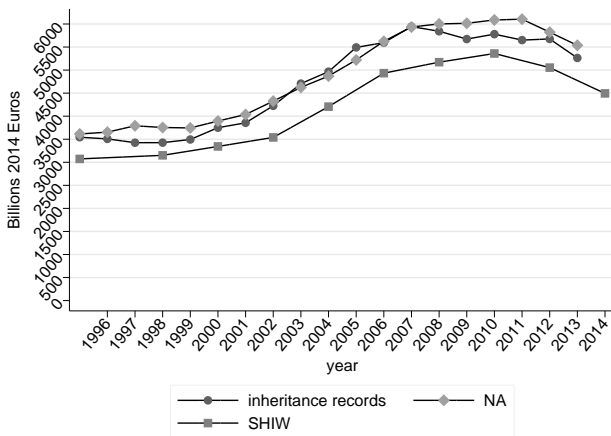
Caveat: aggregate correction factor across cadastral category and geographical location

A VIEW ON AGGREGATE WEALTH FROM TAX RECORDS

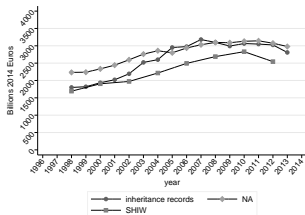
Aggregate real estate wealth (land + housing)



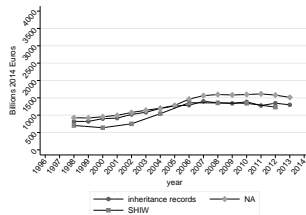
Aggregate real estate wealth : comparison with SHIW



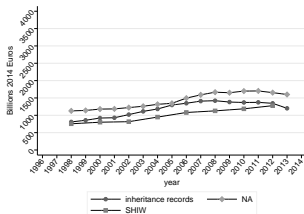
Aggregate real estate wealth across macro areas



(a) North



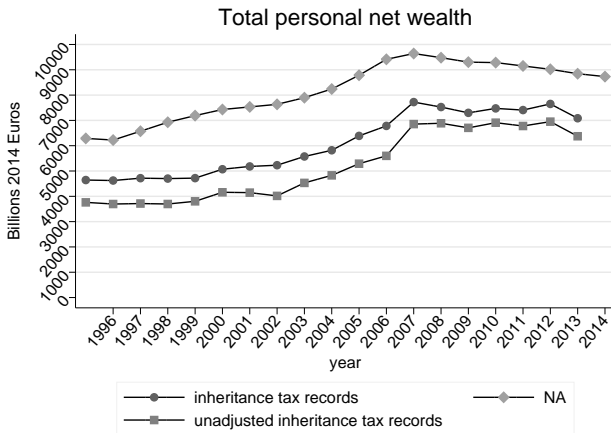
(b) Center



(c) South

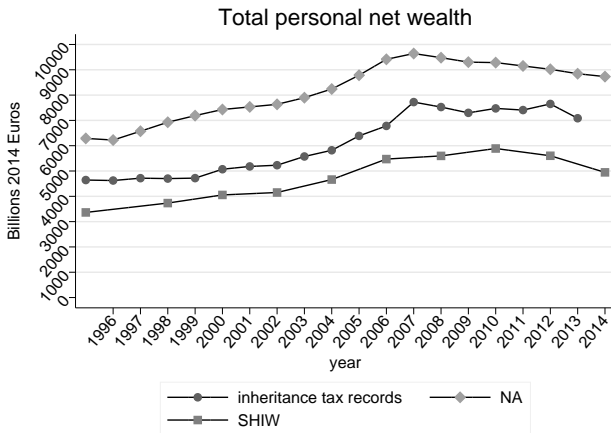
Albaretto et al. (2008) up to 2005; Bank of Italy Regional Economies, Annual reports 2016 thereafter.

Aggregate net personal wealth



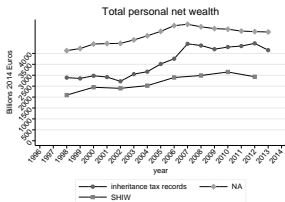
Adjustments: Partial unaccounted liabilities and financial wealth imputed to the population.
 Allowance for the wealth of the missing population is also taken into account.

Aggregate net personal wealth: comparison with SHIW

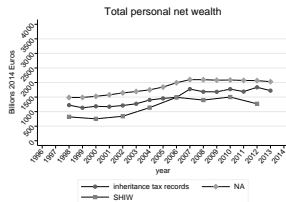


Adjustments: Partial unaccounted liabilities and financial wealth imputed to the population.
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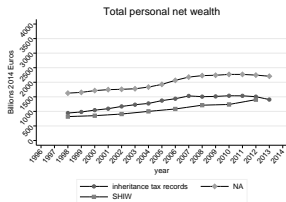
Aggregate wealth across macro areas



(d) North



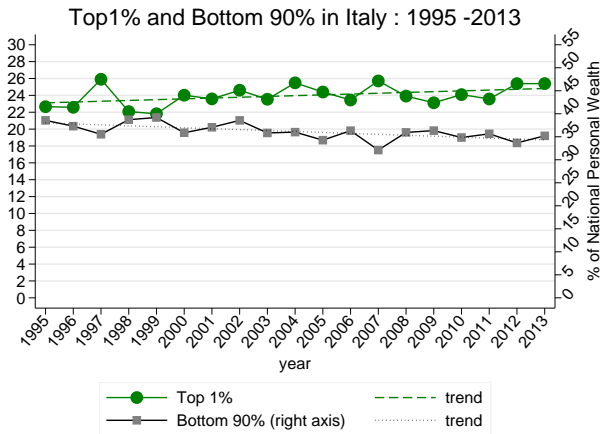
(e) Center



(f) South

NET PERSONAL WEALTH CONCENTRATION

Concentration of net personal wealth from tax records



▶ comparison with Top 1% gross income

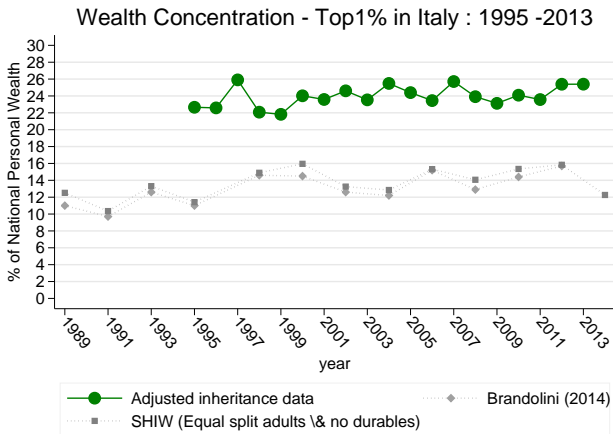
▶ Wealth threshold - P99 and P99.9

▶ Top 0.1% series

▶ Full

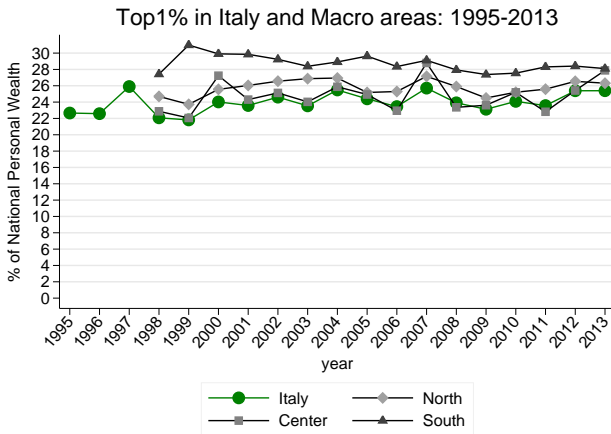
▶ External Wealth Total - NA

Top 1% from tax records and household survey



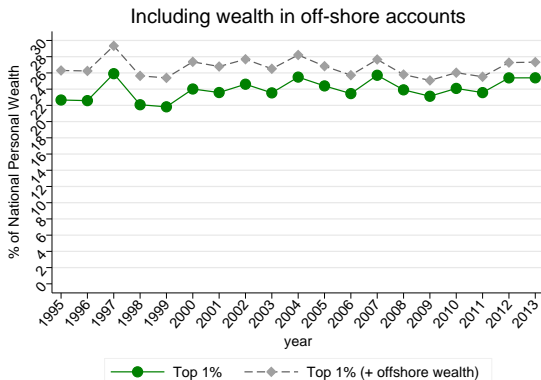
Source: Brandolini (2014) from household survey (SHIW): net equivalent wealth. Note: External totals refer to the total personal wealth from the NA and the total adult population (20+) from ISTAT.

Top1% across macro-areas



Sources: wealth totals reconstructed from Albareto et al. (2008) up to 2005; then linked to Bank of Italy Regional Economies, Annual reports 2016 thereafter.

Robustness: Taking into account undeclared off-shore wealth



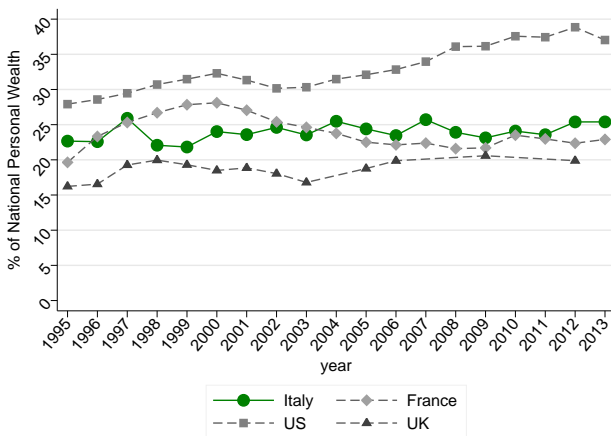
Total off-shore wealth = 2% of personal net wealth in 2007 (allocated within the top 1% group)

Source: Data on off-shore wealth based on Alstadsæter, Johannesen, and Zucman (2017).

Evolution since 1995 assumed in line with changes in overall European off-shore wealth.

COMPARING RESULTS TO OTHER COUNTRIES

Comparison with the UK, France, and the US



Sources: WID.world - Alvaredo, Atkinson, and Morelli (2016) for the UK; Saez and Zucman (2016) for the US; Garbinti, Goupille-Lepret, and Piketty (2016) for France.

Conclusions

- ▶ The novel investigation of inheritance tax data provides fruitful complementary information to official household survey data. (Important as every source is open to challenge and a multi-sources approach is essential)
- ▶ Personal Wealth is heavily concentrated in Italy. The group of 1% richest individuals (approx. half million individuals) controls more a quarter of total personal wealth. Wealth concentration has moderately increased since mid 1990s.
- ▶ Similar results in other European countries.
- ▶ Macro-regional wealth concentration series were estimated suggesting heterogeneity of levels and trends.
- ▶ PRELIMINARY ESTIMATES

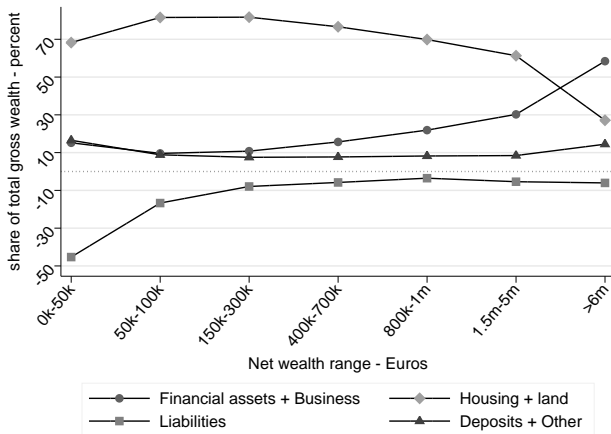
Future steps (*in progress*)

- ▶ Towards a DINA approach: full imputation of the missing wealth (and debt).
- ▶ Failure to appropriately account for mortality heterogeneity across wealth class may result in biased estimates of wealth aggregates and their distribution. We will be using new mortality coefficients based on education level (ISTAT)
- ▶ Elaboration of the additional available evidence on wealthy individuals through the Forbes Rich list.
- ▶ More evidence is needed on the relevance of inter-vivos gifts and inheritance for the accumulation of great fortunes

APPENDIX

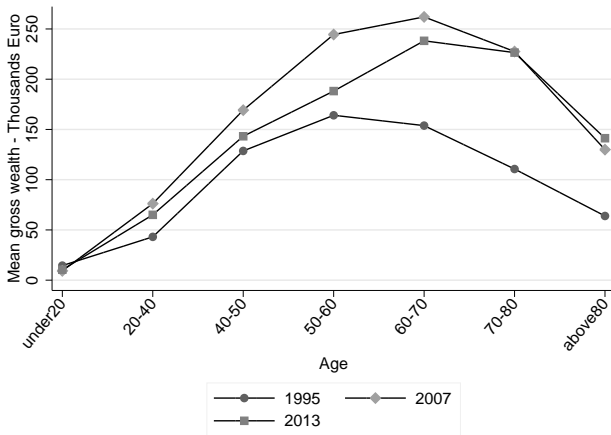
PORTFOLIO and LIFE-CYCLE

Wealth portfolio across wealth distribution: 2012



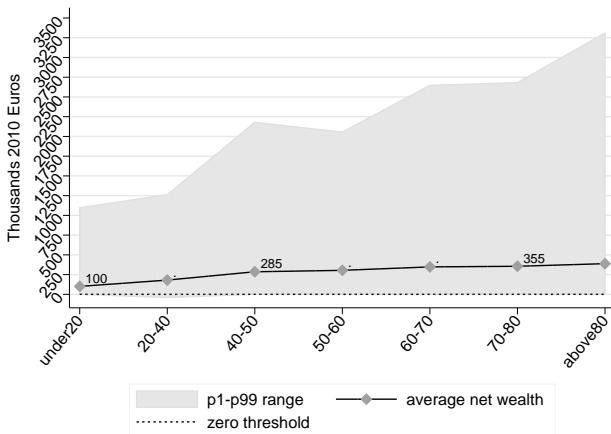
Average unconditional wealth over the life-cycle

Wealth inequality or wealth accumulation over the life-cycle? Substantial heterogeneity of mean wealth across age groups...



Wealth for each age group identified from tax form

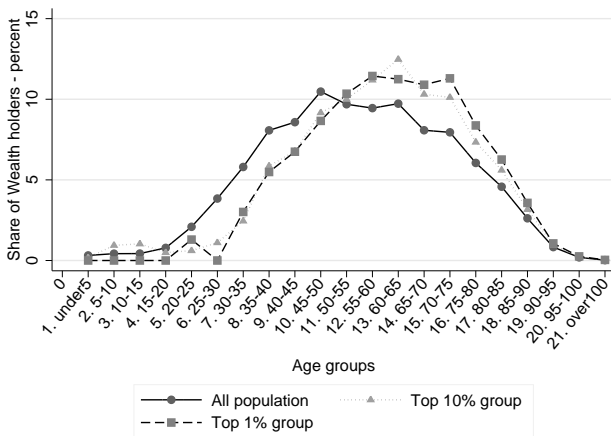
... But net wealth is unequally distributed within all age groups!



► Upper Lorenz curves by age groups

Explaining the age distribution of large wealth holders: the role of gifts and inheritance

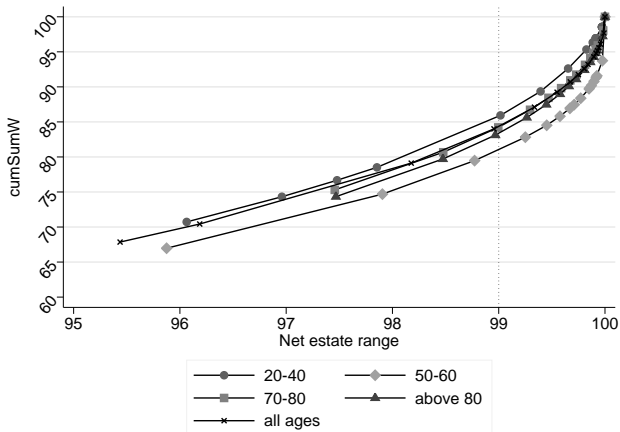
...and very wealthy individuals are not overwhelmingly ‘old’. Bequests and inter-vivos gifts can explain very wealthy children.



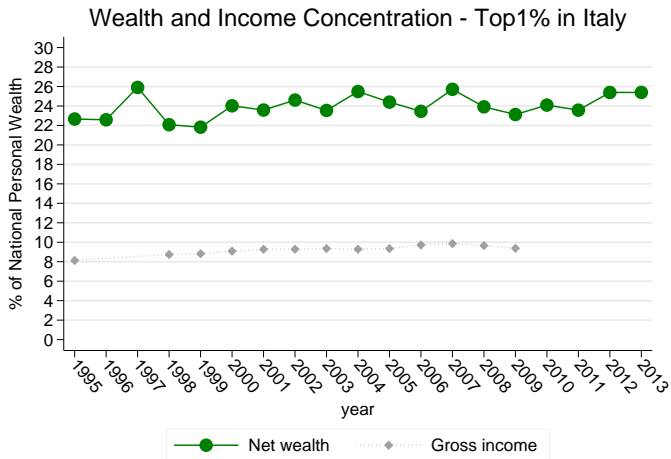
Upper Lorenz curves for different age groups: 2012

Wealth is unequally distributed in all age groups to a very similar degree.

Wealth concentration cannot be explained purely by life-cycle accumulation.

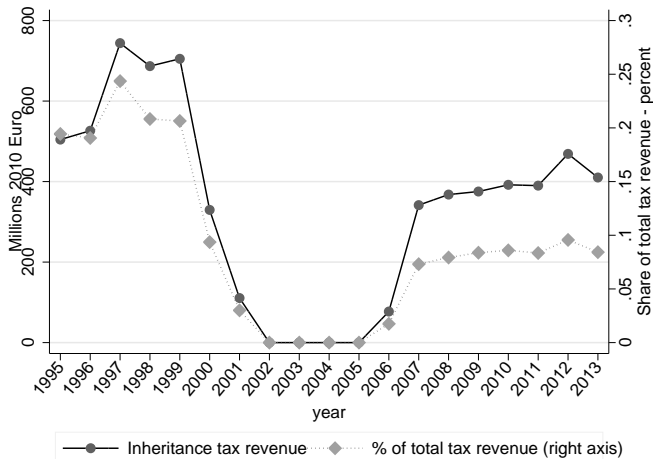


Top 1%: net wealth vs. gross income



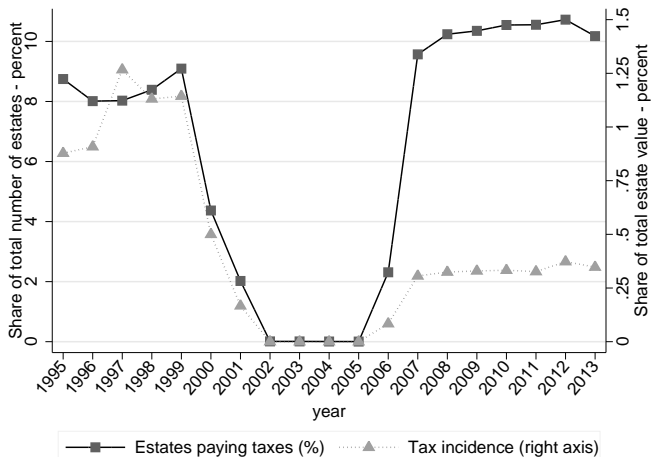
Source: Top income share from Alvaredo & Pisano (2010)

The evolution of the inheritance tax revenue: 1995-2013

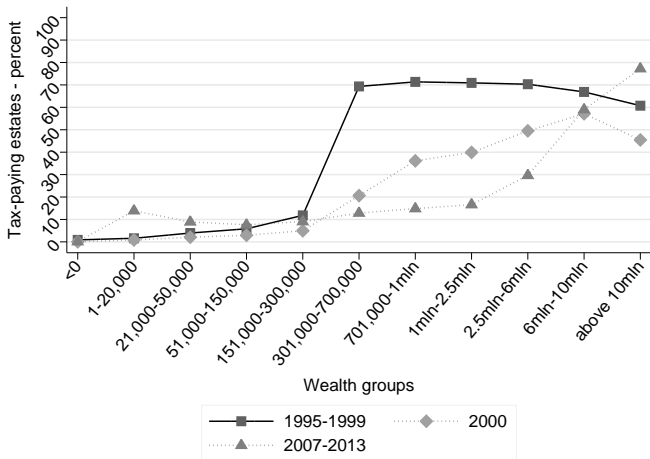


Note: Total tax revenue derived from the EU-Commission publication "Taxation trends".

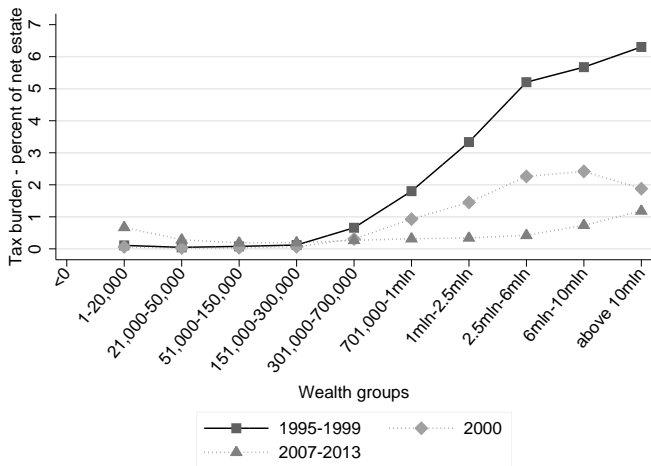
The evolution of the inheritance tax incidence and coverage: 1995-2013



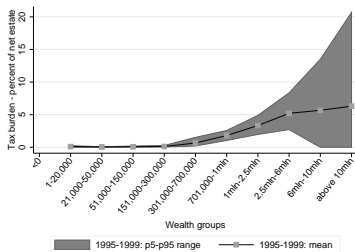
The average tax coverage across wealth groups and tax regimes



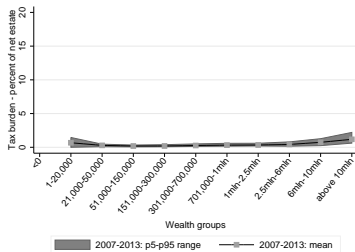
The average tax incidence across wealth groups and tax regimes



The heterogeneity of tax incidence across wealth classes: a detailed look



(g) 1995-1999

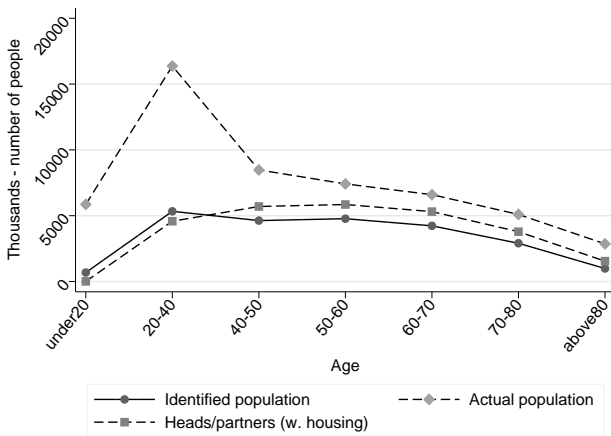


(h) 2007-2013

Note: heterogeneity across years, original disaggregated wealth ranges, macro areas, gender, and age groups

◀ go back

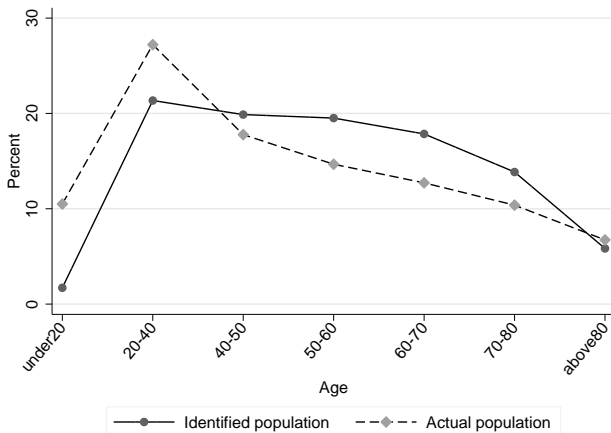
Full population coverage: by age groups



Source: ISTAT, population by age groups. Bank of Italy Survey of Household Income and Wealth, population of adult heads and partners living in households owning a property by age groups.

[← go back](#)

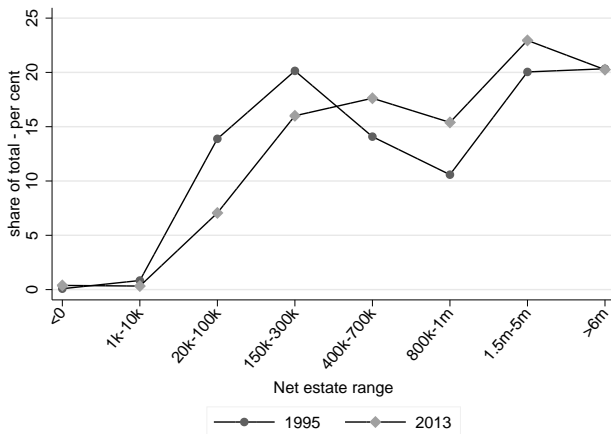
Relative Age distribution 2012: Full population vs. identified wealth holders



Source: ISTAT, population by age groups.

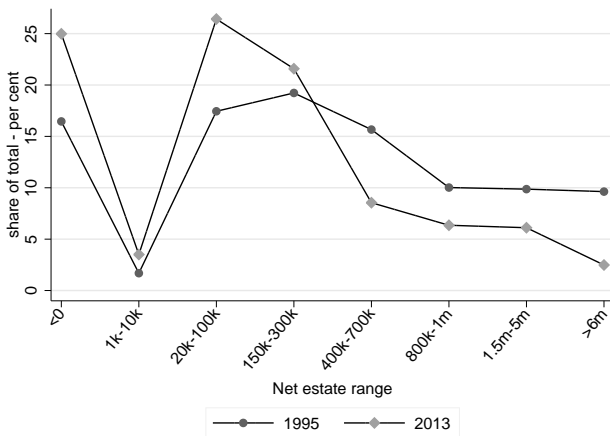
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Distribution of business, shares, and bonds across wealth classes



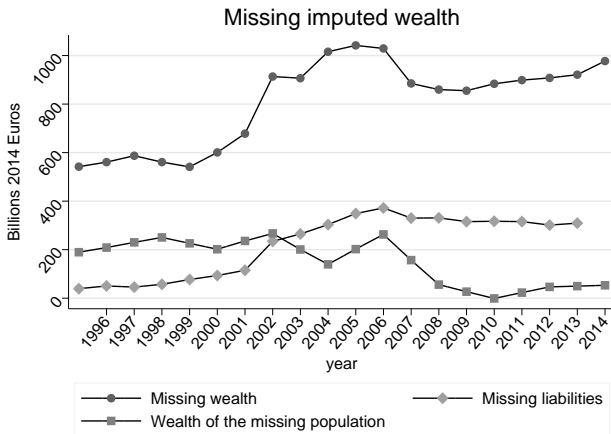
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Distribution of liabilities across wealth classes



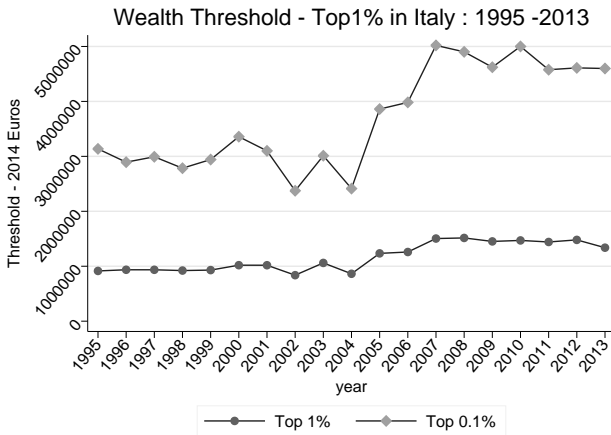
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Imputation of missing wealth and liabilities



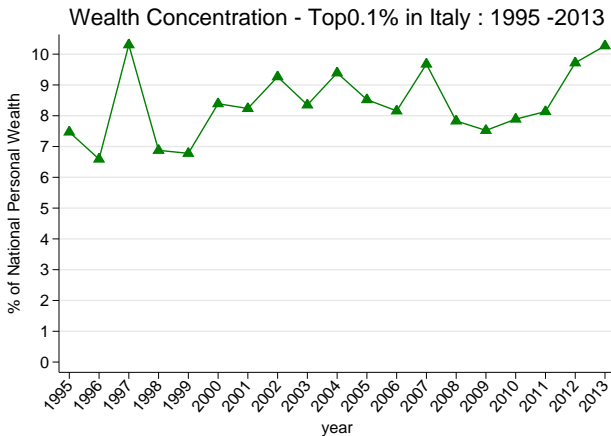
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Entry net wealth for top 1% and top 0.1% groups

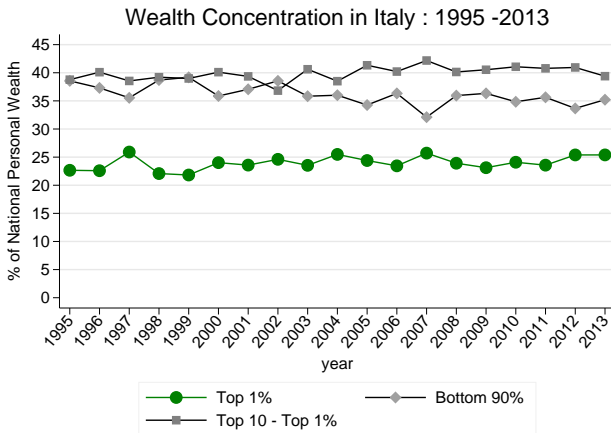


◀ go back

Top0.1% share from adjusted tax records

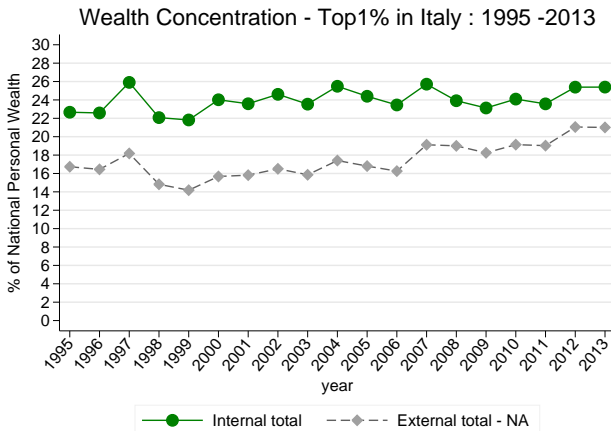
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Top 1%, Bottom 90%, and next 9% shares from adjusted tax records



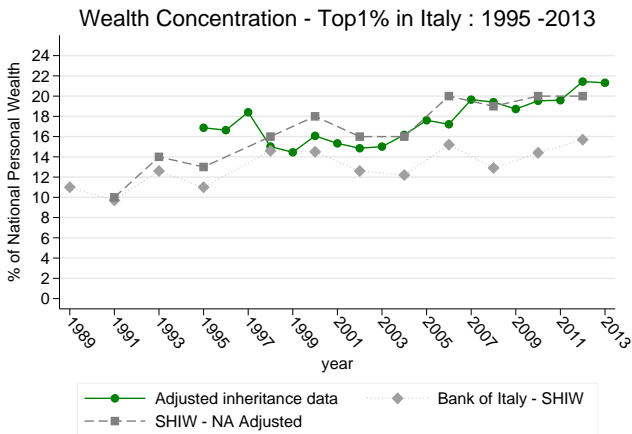
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Top1% : internal vs. external wealth totals



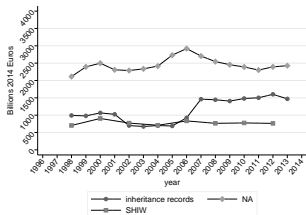
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Adjusting SHIW data for wealth gap w.r.t. NA

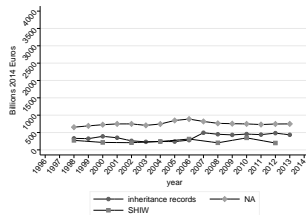


Source: data from Blanchet(2016) [◀ go back](#)

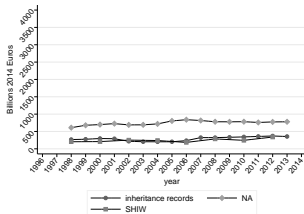
Aggregate wealth other than real estate across macro areas



(i) North



(j) Center



(k) South