The concentration of personal wealth in Italy
1995-2013

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How financial systems work: evidence from financial accounts
Bank of Italy
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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

Death of a person
R.I.P.

Filing the inheritance tax form

Tax Revenue Agency computes tax due on inherited shares:
Flat rates depending on the degree of kinship.

Inheritance to Spouse, parents, and children: 4% paid on taxable inherited value above 1 Million €

Inheritance to siblings: 6% paid on taxable inherited value above 100 Thousand €

Inheritance to other relatives or other people, 6% or 8% with no exemption threshold

Inheritance to a person with disability: 1.5 Million € exemption threshold applies.

Inheritance to the State; political parties; religious entities; charities, foundations, and NGOs working on education, scientific research, social assistance etc.: NO Tax applied.

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

1995-1999
- Tax applied on the total estate value & on the inherited shares
- Tax rates from 3 to 33%
- Global exemption: €125,000 (raised to €175,000 in 1999)
- Share exemption: full for spouses, parents, and children; €50,000 for siblings; €5,000 for others.

2000 reform
- From Estate to Inheritance Duty: Tax only on inherited share
- Flat rates only above €175,000 of inheritance received (4%, 6%, or 8%)

2001-2006
- Inheritance and gift tax abolished
- Tax return filing still compulsory in most cases

Since Oct 2006
- Inheritance and gift tax reintroduced
- Same flat tax rates & exemption thresholds substantially increased for direct ascendants and descendents.

Note: Rules also apply to donations and inter-vivos gifts
Inheritance tax data: decedents population coverage

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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.

*Age distribution of decedent wealth holders*

*Age distribution of the living wealth holders*

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.

**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.
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

Albareto 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.

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Aggregate net personal wealth: comparison with SHIW

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

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Aggregate wealth across macro areas

(d) North

(e) Center

(f) South

Albareto et al. (2008) up to 2005; Bank of Italy Regional Economies, Annual reports 2016 thereafter.
NET PERSONAL WEALTH CONCENTRATION
Concentration of net personal wealth from tax records

Top1% and Bottom 90% in Italy: 1995-2013

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Top1% from tax records and household survey

Wealth Concentration - Top1% in Italy: 1995-2013

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

Top1% in Italy and Macro areas: 1995-2013

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

![Wealth portfolio chart](chart.png)

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Average unconditional wealth over the life-cycle

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

![Graph showing average unconditional wealth over the life-cycle with age groups under 20, 20-40, 40-50, 50-60, 60-70, 70-80, and above 80 for the years 1995, 2007, and 2013.]
Wealth for each age group identified from tax form

... But net wealth is unequally distributed within all 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

Wealth and Income Concentration - Top1% in Italy

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

![Graph showing tax burden for different wealth groups and tax regimes from 1995-1999, 2000, and 2007-2013.](image)

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

Note: heterogeneity across years, original disaggregated wealth ranges, macro areas, gender, and age groups
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.
Relative Age distribution 2012: Full population vs. identified wealth holders

Source: ISTAT, population by age groups.
Distribution of business, shares, and bonds across wealth classes

![Graph showing distribution of business, shares, and bonds across wealth classes.](image)

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Distribution of liabilities across wealth classes

The graph shows the distribution of liabilities across different wealth classes in Italy for the years 1995 and 2013. The x-axis represents the net estate range, while the y-axis represents the share of the total liabilities in percent.

The legend indicates that the dark line represents the year 1995, and the gray line represents the year 2013. The data points for each net estate range show the percentage of liabilities for that range in 1995 and 2013.

The graph highlights the concentration of personal wealth in Italy across various wealth classes for the specified years.
Imputation of missing wealth and liabilities

![Graph showing the imputation of missing wealth and liabilities over the years from 1996 to 2014.](image)

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

Wealth Threshold - Top1% in Italy : 1995 -2013

Top 1%

Top 0.1%
Top0.1% share from adjusted tax records

Wealth Concentration - Top0.1% in Italy: 1995-2013

% of National Personal Wealth

year


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

Wealth Concentration in Italy: 1995 - 2013

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Top1% : internal vs. external wealth totals

Wealth Concentration - Top1% in Italy : 1995 - 2013

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

Wealth Concentration - Top1% in Italy: 1995-2013

% of National Personal Wealth

Source: data from Blanchet (2016)
Aggregate wealth other than real estate across macro areas

(i) North

(j) Center

(k) South

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