The concentration of personal wealth in Italy
1995-2013

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First WID.world conference
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December 15, 2017
Italian wealth topography: The (high) mountains of wealth and the (shallow) sea of debt

Net personal wealth (per-adult). 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

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

-acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy – – Slide 6/52
NET PERSONAL WEALTH CONCENTRATION
Concentration of net personal wealth from tax records

The Graduate Center logotype reflects the urban character of the City University of New York and its location at the intersection of Fifth Avenue and 34th Street. The vertical treatment and use of the name gives the logo a unique and distinct appearance. The word "Graduate" being the tallest "building" in the center speaks to the Graduate Center's unique role as the doctoral dispensing arm, rising from the base of the "City University of New York".

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

The concentration of personal wealth in Italy – Acciari, Alvaredo, & Morelli
Top1% 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.
COMPARING RESULTS TO OTHER COUNTRIES

-Acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy – – Slide 10/ 52
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.
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!
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.
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.

Age distribution of decedent wealth holders
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.

- Acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy – Slide 17/52
**Full adult population vs. identified wealth holders**

Source: ISTAT, total population.

Estimating wealth of the missing population (approx 200-300 bln Euros in 2013): Average wealth and liabilities of heads and spouses in renter households also imputed to adults that are neither heads of household or spouses/partners.
ADJUSTMENTS TO WEALTH
Imputing missing wealth & liabilities

Sources: 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 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.
TOWARDS DINA FOR ITALY
DINA for personal net wealth in Italy

DINA adjustments: unaccounted liabilities, financial, real, and other missing assets imputed to the population. Allowance for the wealth of the missing population is also taken into account.
Comparison with the UK, France, and the US using DINA estimates

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.
Summary of the main (preliminary) results

- The group of the richest half million individuals (1%) in Italy controls between a fifth and a forth of total personal wealth. Wealth concentration has moderately increased since mid 1990s.
- Concentration is substantially higher than what found using the household survey.
- Personal net wealth is much more concentrated than gross income.
- Similar results in other European countries.
- The concentration of personal net wealth is similar across all age groups suggesting that inheritance may play a strong role.

Other results not shown

- Macro-regional wealth concentration series suggest heterogeneity of levels and trends.
- Inclusion of undeclared off-shore wealth
Conclusions

▶ The novel investigation of inheritance tax data provides fruitful complementary information to official household survey data to shed light on the concentration of personal wealth in Italy. (Important as every source is open to challenge and a multi-sources approach is essential)

▶ PRELIMINARY ESTIMATES

Future steps (in progress)

▶ The Italian inheritance tax data in conjunction with regional NA and FA, allow the application of DINA method at the regional and macro regional level.

▶ Growth Incidence Curves across the distribution.

▶ The application of 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

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- Acciari, Alvaredo, & Morelli
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

![Graph showing tax-paying estates across wealth groups for different tax regimes from 1995-1999, 2000, and 2007-2013.](image)
The average tax incidence across wealth groups and tax regimes

![Graph showing tax burden across different wealth groups and tax incidence further variability.](image-url)
The heterogeneity of tax incidence across wealth classes: a detailed look

(a) 1995-1999

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

(b) 2007-2013

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. The x-axis represents net estate range with categories such as <0, 1k-10k, 2k-100k, etc., and the y-axis shows the share of total in percent. The graph compares data from 1995 and 2013.](slide42.png)
Distribution of liabilities across wealth classes

The concentration of personal wealth in Italy
Imputation of missing wealth and liabilities

The Graduate Center logotype reflects the urban character of the City University of New York and its location at the intersection of Fifth Avenue and 34th Street. The vertical treatment and use of the name gives the logo a unique and distinct appearance. The word "Graduate" being the tallest "building" in the center speaks to the Graduate Center's unique role as the doctoral dispensing arm, rising from the base of the "City University of New York".

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*minimal size

The Wordmark

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Imputation of missing wealth and liabilities

Missing imputed wealth

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-Bacci, Alvaredo, & Morelli The concentration of personal wealth in Italy – – Slide 44/52
Entry net wealth for top 1% and top 0.1% groups

Wealth Threshold - Top1% in Italy : 1995 - 2013

-Acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy – – Slide 45/ 52
Top 1%, Bottom 90%, and next 9% shares from adjusted tax records

Wealth Concentration in Italy: 1995 - 2013

- Acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy -- Slide 46/52
The Graduate Center logotype reflects the urban character of the City University of New York and its location at the intersection of Fifth Avenue and 34th Street. The vertical treatment and use of the name gives the logo a unique and distinct appearance. The word "Graduate" being the tallest "building" in the center speaks to the Graduate Center’s unique role as the doctoral dispensing arm, rising from the base of the "City University of New York".

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

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.

Including wealth in off-shore accounts

% of Total Personal Wealth

Year

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

Wealth Concentration - Top1% in Italy: 1995-2013

Source: data from Blanchet (2016)
Aggregate real estate wealth: comparison with SHIW

![Graph showing aggregate real estate wealth comparison with SHIW]
Aggregate real estate wealth across macro areas

(c) North

(d) Center

(e) South

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

-Acciari, Alvaredo, & Morelli The concentration of personal wealth in Italy – – Slide 52/52
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