

NBER WORKING PAPER SERIES

WEALTH TRANSFERS AND NET WEALTH AT DEATH:  
EVIDENCE FROM THE ITALIAN INHERITANCE TAX RECORDS 1995–2016

Paolo Acciari  
Salvatore Morelli

Working Paper 27899  
<http://www.nber.org/papers/w27899>

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge, MA 02138  
October 2020, Revised March 2021

We are grateful to the Department of Finance of the Italian Ministry of Economy and Finance for providing technical support and access to the data. The views expressed in the paper are the authors' responsibility only. We thank Facundo Alvaredo, Twisha Asher, Giovanni D'Alessio, Janet Gornick, and Arthur Kennickell for very helpful comments and discussions. We also thank Margaret R. Jones and Carolyn Fisher for very helpful comments to the structure of this paper and other participants of the CRIW-NBER conference on "Measuring and Understanding the Distribution and Intra/Inter-Generational Mobility of Income and Wealth," DC March 5–6, 2020. SM acknowledges support from the Stone Center on Socio-Economic Inequality at the Graduate Center CUNY. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

At least one co-author has disclosed additional relationships of potential relevance for this research. Further information is available online at <http://www.nber.org/papers/w27899.ack>

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2020 by Paolo Acciari and Salvatore Morelli. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Wealth Transfers and Net Wealth at Death: Evidence from the Italian Inheritance Tax Records  
1995–2016

Paolo Acciari and Salvatore Morelli  
NBER Working Paper No. 27899  
October 2020, Revised March 2021  
JEL No. D3,H2,N3

**ABSTRACT**

In this paper we describe a novel source of data on the full record of inheritance tax files in Italy, covering up to 63% of total deceased. The work documents a substantial rise in the total value of inheritance and gifts as a share of national income, from 8.4% in 1995 to 15.1% in 2016. Consistent with the increasing role of total personal net wealth in the economy, the weight of inheritance and gifts in Italy appears relatively high by international standards. Over the same period, total wealth left at death has also become increasingly concentrated. The estates valued at least one million Euro were worth 18.7% of total estate in the mid 1990s and 24.8% in 2016. This paper also documents that revenues collected from the inheritance tax underwent a large decline from 0.14% to 0.06% of total tax revenue between 1995 and 2016. Data also allow a disaggregated analysis by demographic and geographic characteristics.

Paolo Acciari  
Italian Ministry of Economy and Finance  
Via XX Settembre 97  
Rome 00187  
Italy  
paolo.acciari@mef.gov.it

Salvatore Morelli  
Via Ostiense, 163  
Dipartimento di Giurisprudenza  
365 5th Avenue  
New York, NY 10016  
Rome, Lazi 00154  
Italy  
salvatore.morelli@uniroma3.it

# Introduction

Wealth transfers, including bequests, inheritances, and gifts between living persons (i.e. inter vivos gifts), are crucial economic resources for households and their accumulation of wealth. In rich countries, their scale relative to the total national income has increased substantially over recent decades. The ground-breaking work by Piketty (2011) documents the evolution of annual wealth transfers as a share of total national income in France since 1820, showing that their estimated share has increased threefold since 1950, from a level of 5%, to 15% in 2010. Atkinson (2013), Atkinson (2018), and Alvaredo et al. (2017) estimate corresponding series indicating a similar trend towards an increasing relative weight of inheritances and gifts in other economies, such as the UK, Germany, Sweden, and the U.S.

In Italy, the stock net wealth owned by households is equivalent to six years of national income and almost eight years of household disposable income as of 2016. This makes Italy one of the countries with the highest wealth-to-income ratio in the world.<sup>1</sup> Very little attention has been devoted to understanding whether this rise in the wealth-income ratio led to an increase in bequests and transfer from one generation to the next. Several questions remain unanswered. What is the empirical importance of inheritance and inter vivos gifts in Italy? More broadly, how are inheritances distributed among the population? In a context of an increasing aggregate personal wealth as a share of national income (Piketty and Zucman, 2014, 2015), it is crucial to assess the nature of intra- and inter-generational wealth transfers, their distribution across demographic groups as well as across income and wealth ranks, and their effects on wealth inequality and mobility. Similarly, it is important to understand how existing institutions and tax policies may affect the pattern and evolution of wealth transfers over time and across countries.

We make use of a newly assembled micro-data set from the inheritance tax records which provides a direct measure of the flows of bequests (e.g., wealth-holding of decedents), and has not been systematically exploited so far. The dataset assembles the inheritance tax forms filed with the Italian Revenue Agency on behalf of decedents from 1995 to 2016. The Italian inheritance tax data also have a very good coverage of the upper end brackets, despite the claims of avoidance and evasion that are typical of tax systems. This is the result of the combination of the very high home-ownership rate, with a key administrative feature of the tax, which is connected to the upkeep of the real estate cadastral register: all inheritances involving the transfer of real estate property are obliged to file a return, even when no tax is due. As a consequence, the coverage rate is high by international standards, as it remains above 50% of decedents throughout the period and reaches a peak of 63% in 2014.

This source of data is typically used to derive direct measures of wealth concentration through the application of the mortality multiplier method (see Atkinson and Harrison, 1978, Lampman, 1962). Analysis of the distribution of estates at death has received very little attention in economic literature. However, this source of data provides direct, relevant information about the aggregate magnitude as well as the concentration of bequests (and, indirectly, inheritance) and can be the object of independent scrutiny (Alvaredo et al., 2018).

This work makes a series of contributions. First, we derive a new series of total annual

---

<sup>1</sup>See wid.world.

inheritance flow of all assets (tangible and financial assets, net of financial liabilities) transmitted at death or through inter vivos gifts from 1995 to 2016. We find that the share of annual wealth transfers in household disposable income almost doubled during the past 20 years, from approximately 9.6% in 1995 to 18.5% in 2016. Meanwhile, wealth accumulated via savings dropped from 16% of annual disposable income in 1995 to 3.2% in 2016. This is an important indication that, other things being equal, ‘self-made’ wealth (i.e., savings) has been declining as compared to inherited wealth. Second, we provide a detailed account of estate, inheritance, and gift taxation in the country, which underwent substantial changes throughout the period of analysis. We also document the decline in tax revenues arising from wealth transfers, which is partially due to a fall in the number of wealthy estates that are subject to taxation. Third, we provide a detailed analysis and description of wealth left at death across demographic and geographic dimensions. Similarly, we describe the importance of looking within wealthy groups to uncover heterogeneity in the estate composition: for example, financial assets become the most important holdings at the very top. Finally, the evidence also suggests that bequests are becoming more concentrated. Reported estates of at least €1 million were worth almost 15% of total net estate value (including an estimated of total estates unreported to the tax authorities), and this share increased to 25% by 2016. Estates left at death by the richest 0.01% of decedents (individuals with a declared total estate greater than €17 million) as a share of total estates, was approximately 1% at the end of the 1990s. By 2016, the top 0.01% estate share almost tripled to approximately 3%. The increase in the estate concentration is less pronounced if we take the mid-1990s as a reference. A growing concentration of estates left at death may also imply a growing concentration of inheritance over time.

The work is organized as follows. We begin the paper with a description of total net wealth of the household sector in Italy, followed by a detailed account of its wealth transfer taxation. In the third section we describe the main features of the inheritance data. New measures of the relative share of total inheritance and gifts, as share of national income and household disposable income, are derived in section four. In the fourth section we provide detailed analysis of bequeathed wealth in Italy across demographic and geographic dimensions as well as a details estate portfolios across the distribution of estates. In the fifth section, we document the concentration of estates at the top of the distribution and its evolution over time. Our last section concludes.

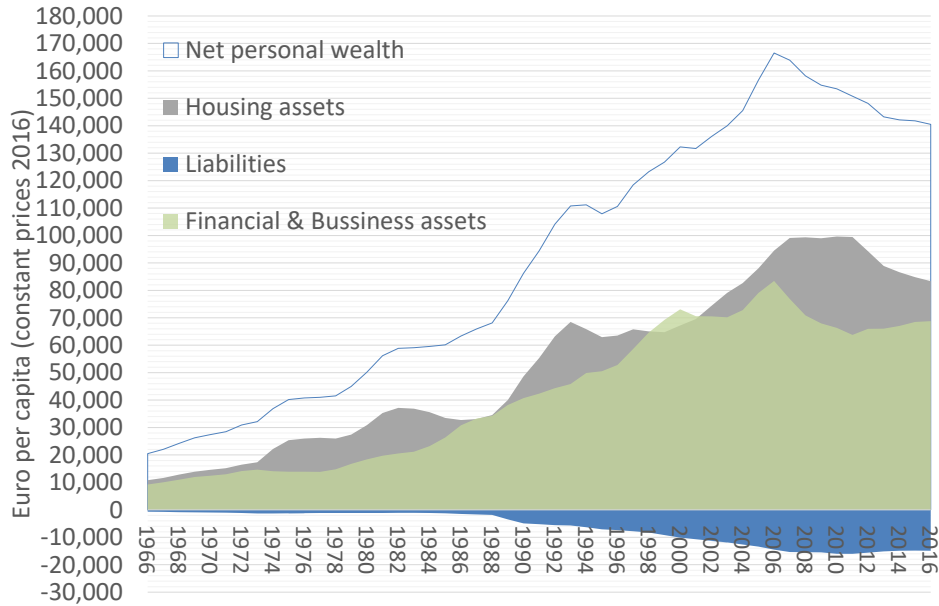
## 1 The growing relevance of personal wealth in Italy

According to the national balance sheets, Italian households are, on average, among the wealthiest and least indebted amongst all rich economies. In 1966, the average net wealth per capita, taken as the sum of all financial and real assets minus all liabilities, was €21,000 (2016 prices), and experienced an eightfold increase to €167,000 at the end of 2006, just before the onset of the great financial crisis. Since then, as shown in Figure 2, personal net wealth per capita has dropped to €141,000 in 2016. Italy and Spain were the only advanced economies to experience a sharp decline (16% for Italy) in per-capita net wealth.

The concept of personal net wealth refers to the current value of all assets, tangible and intangible, that are under the control of the household sector, provide economic benefits to the holders, and over which property rights can be exercised. The assets may be financial, such as

current or savings accounts, stocks, bonds and insurance reserves, or real assets, such as land, houses, and unincorporated self-employment businesses. This is the definition of personal net wealth that is used in the national balance sheet according to the System of National Accounts (SNA 2008) and the European System of Accounts (ESA 2010).<sup>2</sup> This definition is grounded in conventional economic theory, in which wealth represents reserve of value that can be exchanged for present and future consumption.

Figure 1: The growing relevance of personal wealth



Source: Estimates assembled in Acciari et al. (2020) building from data series published by World Inequality Database for the pre-1995 period, and ISTAT, and Bank of Italy for the post-1995 period. Data refer to the household sector only, excluding the non-profit sector serving households

A substantial fraction of personal wealth is composed of housing and land assets, the shares of which increased from 51% to 54% over the 50 years from 1966 to 2016. The weight of direct holding of equities, investment funds, and indirect holding of financial securities via life insurance and private pension funds increased from 11% to 24% over the same period. Saving and current accounts, currency, and bonds decreased from 30% to 19%, as did business assets and other non-financial assets, from 3% to 1.5%. Italian personal debt amounts to approximately €15,000 per capita in recent years, one of the lowest levels currently recorded among rich

<sup>2</sup>The assets recorded in the balance sheets are economic assets, which are defined as “a store of value representing the benefits accruing to the economic owner by holding or using the entity over a period of time. It is a means of carrying forward value from one accounting period to another” (ESA 2010, p.170).

countries.

Italy is also one of the countries with the highest incidence of aggregate private wealth as a share of national income. Since 2005, more than six years of national income and nearly eight years of households gross disposable income would be required to accumulate the net worth of the household sectors, as compared to two years worth of income around 1970. The ratio of private wealth (household sector plus nonprofit institutions serving households) and national income is close to 6 in some rich countries like France, Japan, and the UK, or nearer to 5 and 4 as is the case of the U.S. and Germany.<sup>3</sup>

## 2 The inheritance and gift tax in Italy

The tax (*Imposta sulle successioni e le donazioni*) is applied to all worldwide taxable assets, net of liabilities and deductible expenses, inherited from a deceased person residing in Italy. Strictly speaking, the tax system is an inheritance tax (on the amount received by each heir), and not an estate tax (on the amount of total wealth left at death) such as the transfer taxes currently levied in the U.S. and the UK today.<sup>4</sup>

Different rates apply depending on the degree of kinship. For spouses and direct descendants or ascendants the rate is 4% above any inheritance share with a net value of €1 million or higher.<sup>5</sup> For siblings, the rate is 6% above €100,000. For relatives within the fourth degree, immediate relatives by marriage and extended it is 6% on all bequests with no exemption threshold; a rate of 8% applies to all other parties with no exemption threshold. The same rates and structure apply to inter vivos gifts.<sup>6</sup> Until 2016 the exemption threshold was reduced by an amount equal to the capitalized lifetime donations received by each heir from the same deceased. This provision (called *coacervo*) limited the scope for avoidance of the tax by means of gifts by partially integrating the taxation of gifts and inheritance.<sup>7</sup>

The administration of the tax is linked to the upkeep of the real estate cadastral register, as other taxes are due on transactions of real estate rights (e.g., registration duty as well as mortgage and cadastral taxes).

---

<sup>3</sup>The comparison with other countries is done using the private sector and not the personal sector of the national account (households only), as it not always possible to disentangle the household sector and the nonprofit institutions serving households.

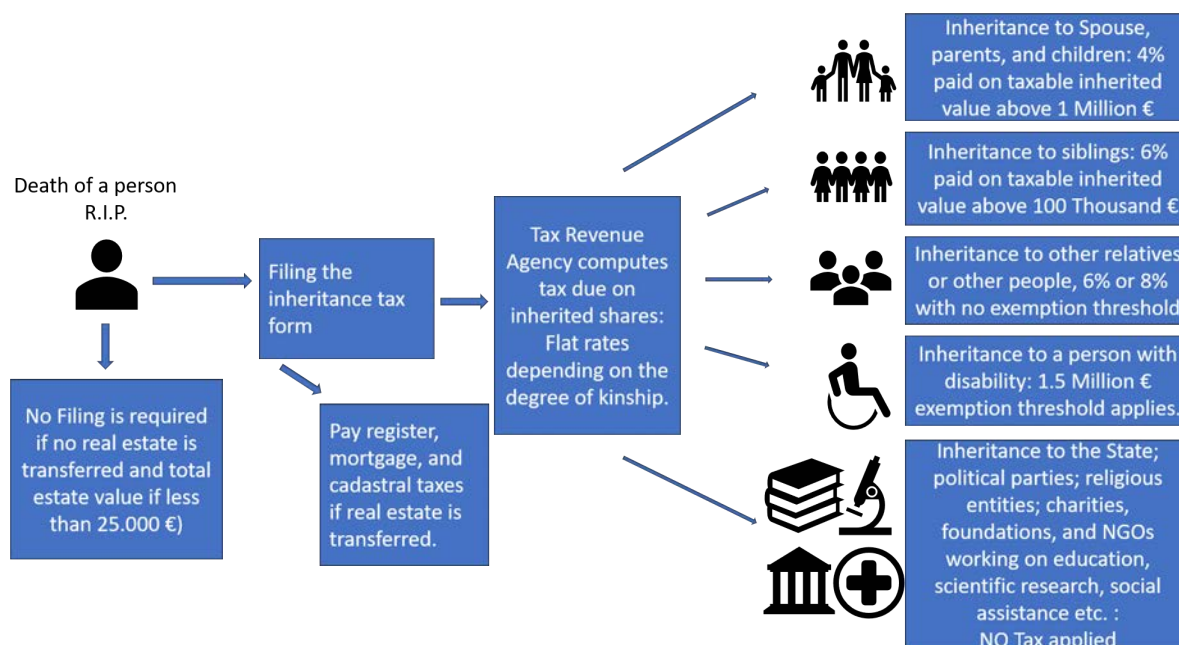
<sup>4</sup>The inheritance tax is calculated only on the net value of assets located in Italy in the event a person is not deemed to be domiciled in Italy for fiscal reasons.

<sup>5</sup>In the presence of a disabled heir the tax exempt threshold is €1.5 million.

<sup>6</sup>As mentioned in the work by Jappelli et al. (2014), which also provides a useful description of wealth transfer taxation in Italy, one exception applies for the years 2000 and 2001 when gift flat tax rates were 1 percentage point lower than the inheritance tax rates.

<sup>7</sup>It is not yet clear if this provision is still in force, as the supreme court (*Cassazione*) in the period 2016–2019 issued non-unanimous judgments on the topic. A system purely based on lifetime capital receipts, irrespective of the identity of the donor, would be more effective in reducing tax avoidance. Indeed, currently a single heir can receive different inheritances and still pay zero taxes as long as each inherited share is below the tax exemption threshold. It is also important to note that in case the *coacervo* is definitively abandoned by the jurisprudence, tax avoidance schemes of inheritance tax through *inter vivos* gift would be substantially easier.

Figure 2: Current structure of inheritance tax in Italy



**Tax-exempt assets.** A variety of exemptions permit the reduction of the effective tax bill beyond the statutory description. The tax-exempt status implies, in many cases, that such holdings are not reported in the tax returns.

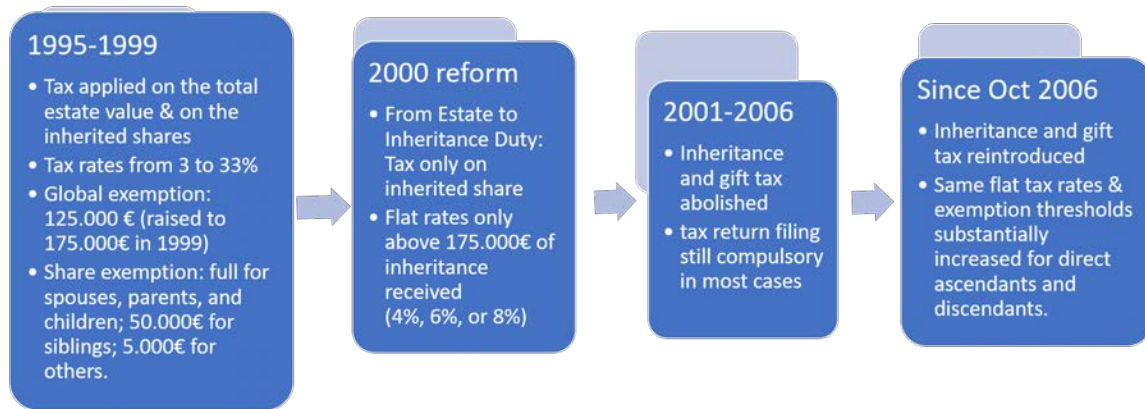
Full exemption is granted to private pension and life insurance funds, postal saving bonds (i.e., *Buoni Fruttiferi Postali*), and a number of national and extra-national government securities.<sup>8</sup> Albeit exempted, the reporting of government bonds is often advised by tax accountants and frequently occurs in cases where securities are bundled with other assets within investment funds (e.g. banks and other financial intermediaries are required to provide detailed description of investment funds and accounts following death of a legal owner). Such investment bundles can be fully reported on the inheritance tax form, and the tax authority would then compute the relevant tax deductions. Exempted assets also includes cars and vehicles in the national vehicle registry, credits towards the state, properties listed as cultural and historical heritage, and all family businesses and control shares of companies that are transferred to direct descendants or to spouse.<sup>9</sup>

**Changes in the taxation structure.** The period under investigation coincided with substantial changes in the tax code. Three major reforms were enacted in 2000, 2001, and 2006.

<sup>8</sup>There are now 134 countries whose tax authorities have “adequate” exchange of information with Italy. As a result these countries are included in the so-called “white list,” which is necessary to get access to more favourable tax treatment.

<sup>9</sup>The tax exemption status is valid under the condition that the business is run and the control share is maintained for at least 5 years following the wealth transfer. Nonetheless, the value of business assets has to be reported in the inheritance tax returns. The remaining exempted assets are generally not reported on tax records. Inherited or donated assets of any kind may be fully exempted if the recipient belongs to one of these categories: religious entities, NGOs, political parties, state, regional or local authorities, or research institutions.

Figure 3: The evolution wealth transfers taxation in Italy: 1995-2016



Before 2000, the tax was a mix of a progressive estate tax (levied on the total estate left at death) with marginal rates ranging from 3% to 27%, and an inheritance tax (levied on the share received by the heir or beneficiary) with a further graduation in marginal rates of up to 33%. The latter applied only to recipients other than the spouse and direct relatives. In 2000, the tax was transformed into a pure inheritance tax without the estate tax component. The exemption threshold was unique before 2000 and increased from €125 thousand from 1995 to 1999, to €175 thousand in 2000. As explained in the previous section, the new tax had differential proportional tax rates and exemption thresholds for spouses, direct descendants, ascendants, and beneficiaries with certain disabilities. Such structure has continued to-date, although the exemption thresholds have been much more generous since 2006 (e.g., €1 million for spouses and offspring).

The inheritance and gift taxes were abolished in 2001 but reintroduced in 2006. Despite six years repeal, inheritance tax form filing remained compulsory for estates including housing or land wealth. In this period, therefore, the declared information about housing and land assets remain reliable, whereas little information is provided about other wealth holdings.

#### ***The inheritance tax revenue and its coverage.***

The tax revenue collected from estate and inheritance taxes experienced a threefold decrease from approximately 0.15% of total fiscal revenue in 1995 to 0.05% in 2016. This happened as a result of changes in the tax structure. The total revenue generated from the inheritance tax to individuals who died in 1998 was €100 million. The estate tax revenue was five times as big, €500 million in the same year (see 6(c) 6(b) and Table 7). In 2016, there was no estate tax revenue but the inheritance tax brought in approximately €400 million. The official figure of the Ministry of Economy and Finance for the inheritance tax revenue is €558 million for 2016 but is measured at the year of account and not at year of death.<sup>10</sup> An additional €183

<sup>10</sup>Although an official measure of the tax gap does not exist for the inheritance tax, the tax authority, Agenzia delle Entrate, runs audit programs. The results of this activity should be visible from the field “Ruoli”

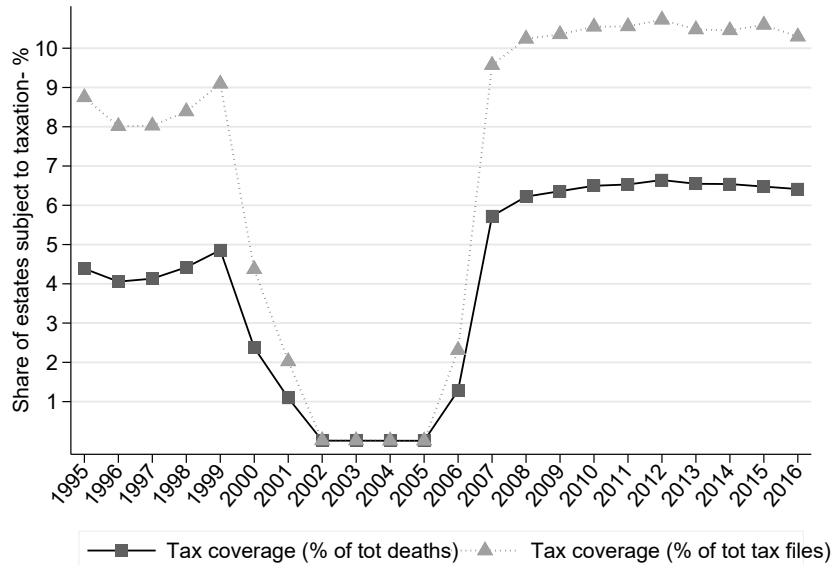


million came from the taxes levied on *inter vivos* gifts.

Only a small fraction of estates are subject to estate or inheritance tax. In the mid-1990s, between 8% and 9% of recorded estates were taxed, and the average amount paid was approximately €20–25 thousand. By 2016, the share of estates subject to inheritance taxation rose slightly to just above 10%, whereas the average tax paid per estate was more than halved, to approximately €10 thousand (cfr. Tables 6 and 7).

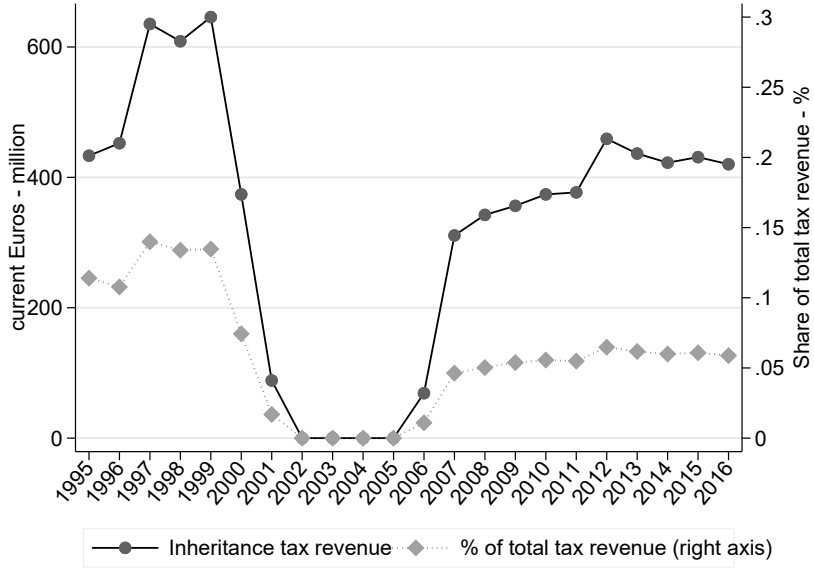
It may seem counterintuitive that under the current tax regime, the share of estates subject to taxation increased despite a substantial increase in the tax exemption threshold, especially for transfers of wealth to spouses and children. However, many smaller estates are now subject to taxation due to the fact that minimum-value exemptions were eliminated for wealth transfers occurring beyond the fourth degree of kinship. Even small inheritances are, therefore, subject to taxation if received from donors outside the direct family sphere.

Figure 4: The share of total estates subject to taxation

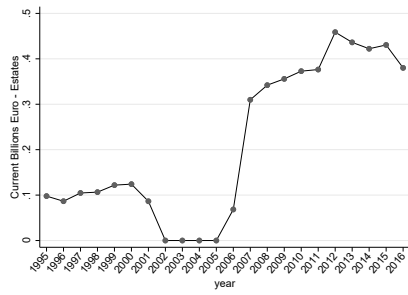


within the publication “Rendiconto dello Stato” In the 2015 volume, available on the website of the Ragioneria Generale dello Stato (<http://www.rgs.mef.gov.it>). At pages 303/142 and 303/144 one can observe that the ordinary amount of inheritance tax receipt is around 640 million, whereas the extraordinary receipts through “ruoli” amounts to 9 million (cash value). The share total value of “ruoli” receipts and ordinary receipts is approximately 1.4%. This is slightly higher than a similar ratio for personal income tax—the so called “IRPEF” (1.6 billion divided by 182 billion = 0.8%—see pages 303/1 and 303/8).

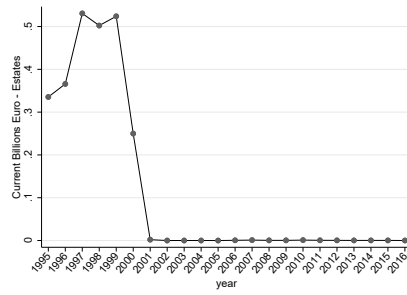
Figure 5: Inheritance tax revenue: 1995–2016



(a) Inheritance tax revenue (million Euro and % total revenue)



(b) Revenue from inheritance tax only



(c) Revenue from the estate tax only

### 3 The inheritance tax data

Data used in this paper come from inheritance tax returns, referred to as “successions,” opened between 1995 and 2016 (evaluated at year of death).<sup>11</sup>

The analysis of net estates, namely total net wealth and possessions left at death, is of intrinsic interest to economists as it relates to the amount of wealth that is transferred, via inheritance, from deceased individuals to designated heirs. Our data refer to the total net wealth of deceased individuals represented in the tax records, independent of how the assets are subsequently distributed.

Net wealth is determined by adding all reported financial and real assets and subtracting

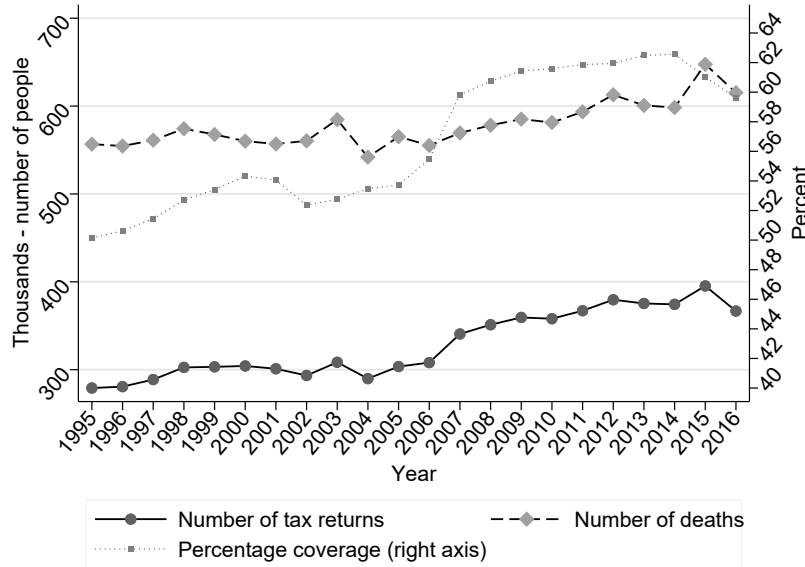
<sup>11</sup>The paper tax form digitized by the Ministry of Economy and Finance to collect the data used in this paper is the so-called “Modello 4.”

all liabilities. We also add the market value of assets sold within six months of the deaths reported between 1990 and 2000; this is typically negligible and does not affect the results. Individuals are then ranked from the smallest to the largest value of their net estate. The micro-data are then transformed into detailed tabular form by the statistical office of the Ministry of Economics and Finance and shared with us. The main tabulations have 34 net wealth ranges, from negative values to the highest range worth €20 million or more. The demographic information is provided by seven age groups (i.e., under 20, 20 to 40, 40 to 50, 50 to 60, 60 to 70, 70 to 80, and over 80), three gender groups (i.e., males, females, and gender not stated), and three Italian macro areas (i.e., south and islands, north, and center).

### 3.1 Main advantages of the data

The inheritance data at hand cover more than 50% of decedents for every year under investigation, even when the inheritance tax was abolished between 2001 and 2006. This is the direct result of high home-ownership rates in the country combined with the administrative features of the Italian inheritance tax, linked to the upkeep of the real estate cadastral register as well as the administration of taxes on land and housing transactions. The coverage rate reached 63% in 2014, the highest on record, and 62% in 2016. The coverage rate dropped to 61% in 2015, due to an unexpectedly high mortality rate in that year.<sup>12</sup>

Figure 6: The coverage of decedents people using inheritance tax records



The tax return is filed by the estate executor (one of the heir, or a legal representative) within twelve months of death and is then submitted to the office of the revenue agency (*Agen-*

<sup>12</sup>Total deaths in 2015 amounted to 648,000, approximately 40,000 greater than the average deaths in 2012, 2013, 2014, and 2016. The relative decline of the coverage rate after 2014 may also be due to a change in legislation (passed at the end of 2014) which increased the non-filing threshold from 50,000 Italian Lira (i.e., €25,823) to €100,000 (the threshold defining the net value above which the filing is required for those estates without any real estate properties or rights).

*zia delle Entrate*) in the province where the deceased had residence.<sup>13</sup> A dedicated official at the local branch of the tax authority processes the returns in order to assess the tax liability. At the same time, legal proof of ownership and third-party assessments of asset valuation are often required, enhancing the accuracy of the information and reducing the scope for tax evasion. For instance, banks and financial institutions need to certify the balances of any checking, savings, or investment accounts; the cadastral office certifies the cadastral value of buildings, land or dwellings; a certified copy of the most recent balance sheets needs to be attached to prove the book value of any company; and the official certification of ownership of quoted stocks should be provided. Similarly, all the expenses and liabilities that are deducted need to be appropriately documented.

### 3.2 Main disadvantages of the data

The use of tax data, however, does come with substantial costs. First, the valuation of real estate has to be corrected to bring cadastral values reported for taxation purposes in line with market prices. Second, not all assets are taxable, and their reporting may not be mandatory.<sup>14</sup> Third, not every death is represented in the tax records and allowance should be made for the wealth of the unidentified population in the tax data. Moreover, only real properties were reported between 2001 and 2006, when the inheritance and gifts taxes were abolished. Fourth, underreporting may be pervasive due to tax avoidance and evasion, or, more simply, due to lack of incentives to fully disclose assets and possessions on inheritance tax records (e.g., completing in detail the complex tax form on the nature and composition of the estate might be regarded as an unnecessary burden when the resulting inheritance shares are below the taxable threshold).

***The valuation of real estate.*** The value of land, buildings, and dwellings is reported at cadastral values for tax purposes; this nominal value generally underestimates market prices.<sup>15</sup> In order to overcome this problem, we have applied, with the support of the statistical office of the Ministry of Economy and Finance, a proportional adjustment to bring the cadastral values in line with market values. As we detail in the Appendix A, the yearly adjustment factor is defined as the ratio of (average) market price to cadastral valuation at the national level.

***The wealth of “non-filers.”*** Inheritance tax returns are only mandatory if the rights of any real estate are transferred at death, or if the net value of the estate of the deceased is above €25,822.<sup>16</sup> Hence, only a fraction of total deaths are observed in the tax records: in 2013,

---

<sup>13</sup>The time limit was set to 6 months up to 2003. The last data update in this paper was obtained in May 2020. A set of 2,600 tax returns presented in 2018 with the new electronic form, but related to deaths that occurred in 2016, were included in the data. In principle there could be later submission/revision of very few tax returns even 10 or 20 years after death as more precise information about the estate come to notice, but these amendments are not taken into account in the statistics. Every year-specific database becomes consolidated for our purposes if two years have passed since the year of death.

<sup>14</sup>In a few cases the tax administration suggests reporting the assets (e.g., government bonds) despite their total tax-exemption status. Moreover, the values of family business assets need to be reported even if they are exempted.

<sup>15</sup>This is particularly the case with older buildings whose values have typically not been updated for many decades. The likely sell-up value is reported only for those buildings under construction or for those for which no cadastral rent has been attributed yet.

<sup>16</sup>The threshold was expressed in 50 thousand Italian Lira, converted into Euros using the official conversion

365,000 estates out of 600,000 deaths. Although incomplete, such a coverage rate, more than 60%, is high compared to data from other rich countries: in the UK, the coverage rate is just below 50%, whereas in the U.S. it is lower than 1%.

Our data are representative of living adults with estates values and arrangements that warrant the attention of the tax authority in the event of their death, approximately 60% of decedents in our case. Although this does not generally affect the top of the distribution, the need to estimate the amount of wealth held by non-filers or the so-called “missing population” is necessary to assess the full cross-sectional distribution of estates for the entire decedent population every year.

***Inter vivos gifts.*** Tax planning may be used to reduce the tax liability at death if assets are donated in life. According to official data from the Ministry of Economy and Finance, the value of total annual reported gifts increased from €10 billion in 2007 to €24 billion in 2016 (see column B1 in Table 8).

To tackle aggressive avoidance of taxes via careful estate planning, the tax schedule on inter vivos gifts is fully unified with the estate and inheritance taxation. In other words, gifts are subject to the same exemption thresholds and marginal tax rates. Moreover, donations and gifts received in life from the same donor are fully integrated with the value received at death. In fact, tax forms also report the value of all *inter vivos* gifts done at any time before death by the deceased capitalized to the date of death.<sup>17</sup> Also, keeping track of donations and transfers of assets during life is necessary to compute the ‘reserved’ share of total estate (e.g. share of total estates that must be allocated to heirs according to legal provisions) guaranteed by the Italian civil law to spouses or to civil partners (only since 2016), direct descendants, and ascendants of the deceased, depending on circumstances.<sup>18</sup>

As reported in Table 7, the total amount of lifetime donations reported in the tax records more than tripled from €260 million in 1995 to €990 million in 2016. However, the share of total estates reporting lifetime donations dropped from 3.2% in 1995 to 2.2% in 2016 (cfr. Table 6).

***Trusts.*** Trusts are by definition not taxable under the inheritance tax, as the property of the settled assets is transferred from the settlors to the trustees. Very little is known about the amount of wealth held in trusts in Italy. To have a better understanding of the phenomenon, we have consulted the universe of income tax files in 2012 and have capitalized the reported capital income from trusts (*Redditi da capitale imputati ai trusts*) using similar rates as in

---

rate of 1,936.27 Lira for €1. The filing exemption threshold was then increased to €100 thousand at the end of 2014. It is too early to assess how this change will affect the nature of inheritance tax statistics in the future.

<sup>17</sup>The self-reported gifts and donations done in life concur to erode the inheritance tax-exempted thresholds if the heir belongs to the degree of kin for which an exemption threshold is contemplated by the tax legislation.

<sup>18</sup>The reserved share (so-called “quota legittima”) of a single child is a half, whereas in the case of multiple children, the children are entitled to two thirds of the total estate in equal shares. If there is a spouse and one child, the reserved portion is two thirds split equally between the spouse and the child. If there is a spouse and more than one child, the spouse has one quarter and the children one half. If there are only ascendants, the reserved portion is one third. In case there are only ascendants and a spouse, the reserved portion of the spouse is half of the estate and that of the ascendants is a quarter. Finally, the spouse always reserves the right to inhabit the family home, even if not owned fully or partially, and the right to use the furniture in it.

Kopczuk and Saez (2004) for the U.S. and in Alvaredo et al. (2018) for the UK, getting an estimate of total wealth held in trusts of €200–300 million.<sup>19</sup> This estimate is rather small in magnitude, suggesting that the use of trusts in Italy may indeed be not as widespread as in the U.S. or the UK.<sup>20</sup>

**Liabilities.** The concept of net worth used in this paper subtracts all liabilities from real and financial assets. However, it is expected that very high tax exempt thresholds, as for the current inheritance tax in Italy, reduces the incentive of detailed reporting of liabilities for most (non-taxable) estates. A further limitation of tax records is linked to the fact that liabilities can be reported with deductible expenses. The expenses include the costs of funeral or medical treatment, paid by the heirs during the last six months of the deceased person’s life. Although the amount of these expenses may be negligible (e.g., only a small fixed amount of funeral costs can be deducted for tax reasons but no specific threshold is specified for health related costs), it is not possible to appropriately add deductible expenses back to the value of the individual estate.

## 4 The growing relevance of inheritance and gifts

The total annual flow of bequests declared on tax records increased from €38.2 billion in 1995 to €112.26 billion in 2016 at current prices, ranging from 4.6% to 8.1% of total national income (see column A1 in Table 8 and Table 9). This measure provides information about the transfer, made at death, of tangible and intangible wealth and possessions, such as real estate, financial securities and cash.

Wealth transfers from one generation to the next or, more simply, from one person to another, can also be made inter vivos, via gifts and donations. Gift tax data list the total gift value recorded every year. In 2016, total gifts amounted to €24.15 billion (see column B1 in Table 8). This total does not fully represent the total value of gifts at market prices, as donated real properties are reported at the cadastral value. Even without adjustments to transform cadastral valuations into market prices, the estate figures would increase by 21%. This adjustment is substantially higher than the 10% proportional adjustment to estate data series applied in the UK after the year 1979 in Atkinson (2013, 2018). This is consistent with the fact that existing provisions and reporting requirements about gift taxes results in Italian data on gifts being more complete than other countries, for instance, in the UK, where only gifts within seven years from death are reported and taxed. Making an allowance for the market prices of transferred rights on real properties would increase total estate value by 36%. Total adjusted estates and gifts were worth €153.63 billion in 2016 (see column D1 in Table 8).<sup>21</sup>

---

<sup>19</sup>The rate of return used in the capitalization exercise is 5.6%.

<sup>20</sup>It is, nonetheless, possible that such estimate is likely to be substantially underestimated due to the fact that several sources of capital income are not directly observed on income tax records in Italy, as they are taxed at the source.

<sup>21</sup>The derivation of market prices of the amount donated and declared on gift tax forms is obtained by multiplying the value of donated real properties as declared on the tax records at cadastral values by the proportional adjustment factor as described in 2. Data on reported gifts and their composition are taken from an official Ministry of Economics and Finance publication, namely the “Analisi statistiche - Atti del registro,”

However, in order to derive a more complete measure of the annual total gross flows of wealth transfers, at death and inter vivos, further allowances are needed for the wealth of the missing population (i.e., “the non-filers”) as well as for the missing wealth due to unreported exempted assets or due to underreporting of assets linked to mis-valuation of assets, tax avoidance, and tax evasion.

A related paper by Acciari et al. (2020) made use of the so-called estate multiplier method, on the same set of estate data described here, to estimate the total wealth and its distribution among the living population, estimated applying the estate multiplier method on the inheritance tax record (e.g. the population of decedents is treated as a sample of the living, selected with probability equal to the mortality rate by age, gender, and location groups). The total identified wealth from the tax records using the estate multiplier method is compared to the total in the official balance sheet in the National Accounts (NA). Here we use this relative discrepancy between the two series and assume it applies also between the observed total estate from the tax records and the “true” unobserved total estate we need to estimate. The same is done to the observed series of inter vivos gifts.

The distribution of wealth of the decedents, provided by the inheritance tax data described above, is conceptually different from that of the wealth of the living. Yet, the use of estate data has a very long tradition in economics and statistics for the derivation of wealth of the living population, through a re-weighting process of the decedent population. This happens insofar as we consider death as a way to “sample” the living population. The nature of the sample is clearly non-random (e.g., older people and men have, all else being equal, a higher mortality rate than younger people and women, respectively) so that detailed mortality rates are required to re-weight the decedent population.

The work by Acciari et al. (2020) used detailed mortality tables, published by the Italian Statistical Institute (ISTAT), available for each age, gender, and geographical location. Given the large share of decedents covered every year (over 60%), the re-weighting of inheritance records allows the estate mortality method to account for a substantial share of the living adult population and personal net worth. The population identified from the tax records accounts for more than 50% of the adult population throughout the period, whereas the identified wealth accounts for a minimum of 59% to a maximum of 86% of total personal wealth in the NA (cfr. column H in Table 8). The coverage rate increases from a minimum of 64% to a maximum of 94% of total personal wealth if we remove tax exempt assets from the NA total (cfr. column G in Table 8). Multiplying the values of estates and gifts reported on the tax records by the inverse of the coverage rate of total wealth, we obtain a more complete measure of total estate at death. This rough adjustment indirectly accounts for different types of underreporting and missing wealth in the inheritance and gift tax data, including the estate value of non-filers. The corrected gross flows of inheritance and gifts increased from 8.5% of national income in 1995 to 15% in 2016 (see Table 9).<sup>22</sup> One could also use a different denom-

---

focusing on the lines related to “Atti traslativi a titolo gratuito.” The statistics are downloaded directly from the MEF website at [finanze.gov.it/finanze3/registro](http://finanze.gov.it/finanze3/registro).

<sup>22</sup>This approach differs from the approach used in the literature and described in work by Piketty (2011). Here, one could derive an alternative compelling measure of total inheritance (not gifts) from National Accounts data without using the fiscal data. This measure can be compared to the direct estimate through the fiscal

inator, moving from national income (equal to the gross domestic product excluding capital depreciation and including net foreign factor income) to household disposable income (national income minus taxes plus cash transfers), or even to total net wealth of households. As disposable household income accounts for between 81% and 86% of national income, the relative increase of inheritance and gifts since the mid-1990s, using household disposable income as denominator, appears to be even more pronounced, going from 9.7% to 18.5%. The increase of total inheritance and gifts as a share of total personal net wealth was less pronounced but still salient, increasing from 1.7% to 2.4% from 1995 to 2016 (see Table 9). A similar increasing trend in the total flows of annual inheritance has been estimated in the work of Luigi and Giovanni (2018) simulating inheritance receipts by applying mortality tables to the reported wealth in the Survey of Income and Wealth. The total value of inheritance flows as a share of total net worth increased from 0.99% in 1995 to 1.52% in 2016.

Household disposable income (HDI) can be used here to directly compare the inheritance to income ratio to relevant macroeconomic statistics that use HDI as denominator. For instance, the share of inheritance in 2016 is almost six times higher than the share of household disposable income that is accumulated through savings. According to OECD data, the household saving rate in Italy was the highest among OECD countries in 1995, around 16%, and it dropped to 3.2% in 2016 (see Figure 8).

The relative weight of Italian inheritance and gift flows is slightly higher than other countries for which similar estimates are available. The last direct estimate from tax records by Piketty (2011) that is available in 2006 amounts to 11% (Appendix Table B1), whereas in Italy it is 11.8%. In the UK, for the same year, the share of total transfers in total income appears lower at 8.2% (Table 2 in Atkinson, 2013). The relative high weight of inheritance in countries like Italy was predicted by Piketty (2011), who wrote that “[i]n countries with low economic growth and projected negative population growth, such as Spain, Italy, or Germany, inheritance is bound to matter a lot during the twenty-first century. Aggregate inheritance flows will probably reach higher levels than in France” (p. 1077).

Although the rise of the aggregate size of inheritances and gifts does not necessarily have automatic direct consequences for the distribution of wealth or income, economists and social scientists care about the role of earned versus inherited wealth. The main reason lies in the fact that a growing role of inheritance in the economy has direct consequences on the extent of intergenerational wealth mobility. Consistent with our findings, works based on the analysis of the Italian Survey on Household Income and Wealth found that the levels of education, income, and wealth of parents are good predictors of education, income, and wealth levels of children. (Bloise, 2018, Cannari and D’Alessio, 2018). In other words, intergenerational mobility in Italy appears to be relatively low by international standards. Recent research emphasizes the powerful role of parents’ wealth in shaping their offspring’s standard of living. Boserup et al. (2016), using Danish administrative data, found an almost linear relationship between parents’ and children’s wealth rankings. Killewald et al. (2017) summarized the

---

data to obtain an indication about tax evasion, avoidance, and missing wealth that cannot be accounted for in the tax data. One would simply need to apply the following equation:  $B_t/Y_t = \mu_t m_t W_t/Y_t$ , where  $B_t$  is the annual inheritance flow,  $Y_t$  is the national income,  $W_t$  is the aggregate private wealth,  $m_t$  is the annual mortality rate = (total number of decedents)/(total living population), and  $\mu_t$  is the ratio between average wealth of the deceased and average wealth of the living.



existing empirical literature, in the U.S., on the extent to which parental wealth improves a range of outcomes among their children, including educational and cognitive achievement, employment outcomes, and transitions to homeownership.

Figure 7: The growing relevance of inheritance and gifts

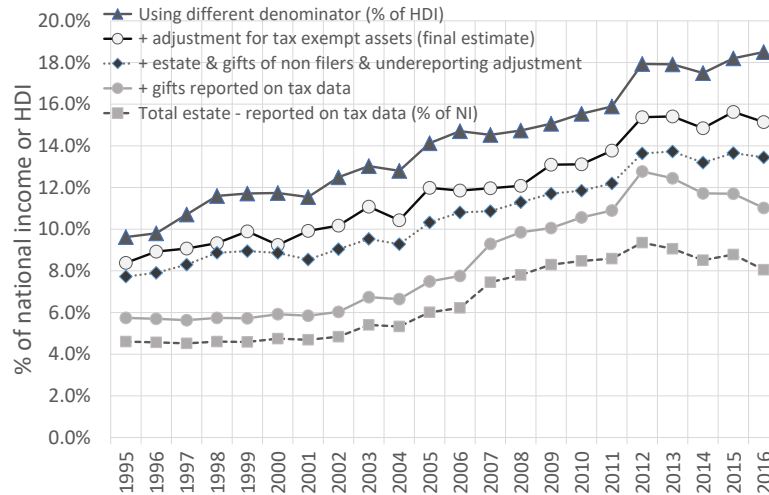
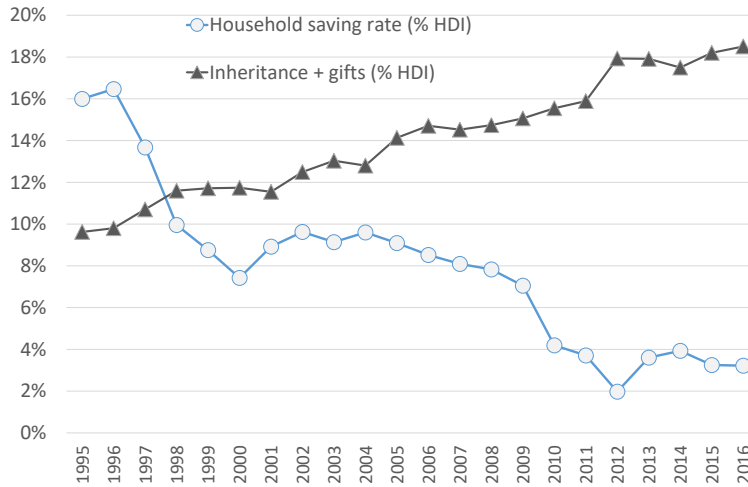


Figure 8: Inheritance vs saving rates (% of household disposable income -HDI)



Notes: Household saving rates obtained from OECD (2020)

#### 4.1 Wealth left at death: a detailed description

The demographic composition of reported estates changed substantially throughout the period under analysis. In 1995, 30% of declared estates belonged to individuals who died aged 80 or older; the number grew to 60% in more recent years. In 1995, only 6% of total reported estates belonged to individuals aged 50 or under, and this figure dropped to 2% in 2016. The gender composition of estates was more unbalanced in the mid-1990s when 60% of total reported estates belonged to men. For 2016, this relative share is approximately 52% (see Table 4). Yet men are not overrepresented in all age groups. Reported estates belonged to men in 45% of cases for the group of 80 years old and above, whereas the share increases to 60–70% for other age groups (see Figure 11(a)). The composition of reported estates also differ by geographical location. The “north” of the country represents throughout approximately 50% of total reported estates, with a slight increase starting in 2007. The relative share of the “center” and the “south” (including the islands), remained roughly constant at around 20% and 30% of total estates, respectively (see Figure 11(b)).

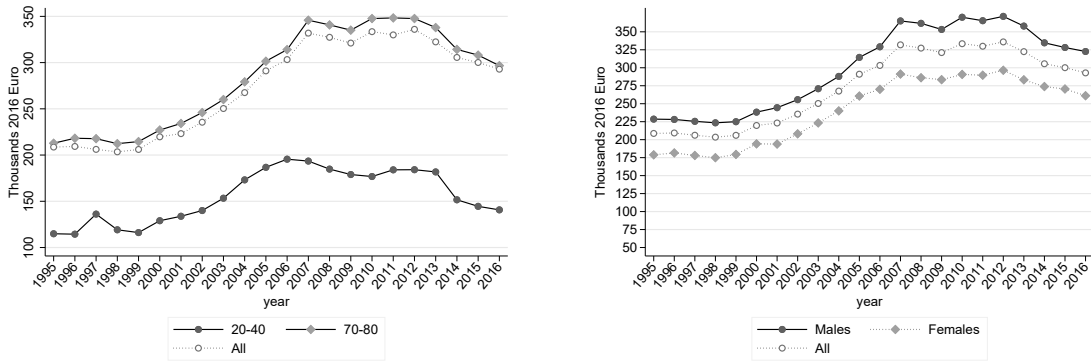
The average size of total estates has substantially increased over time and its patterns differ across age, gender, and geographical dimensions. Total wealth left at death averaged €210,000 in the mid-1990s and increased gradually to €330,000 in 2007 at the onset of the great financial crash, plateaued till 2013 before dropping to €290,000 in 2016 (cfr. Figure 9). Estates of every age group gained from the mid-1990s to 2007 and, similarly, all lost ground between then and 2016, especially age groups below 70 years old (see Figure 10).

Not surprisingly, average net estate value left at death generally increases with age. The value of wealth and possessions declared on behalf of individuals who died young (20 years old

or younger) was worth €90,000 on average in 2016. For the group of 80 years old and above, the average value is more than three times as high in the same year. A gender gap in the average value of declared net estate also exists and persists at a relatively constant rate throughout the period. Estates owned by women are worth on average 80% of that reported by men (cfr Table 5). The gender gap is close to zero in 2016 for most of the age groups, except the oldest ones above 70 years old. On the other hand, the gender gap in the total net estate value declared in the tax records starts to widen for groups of 50 years old and above in 1995 (cfr. Figure 12(a)).

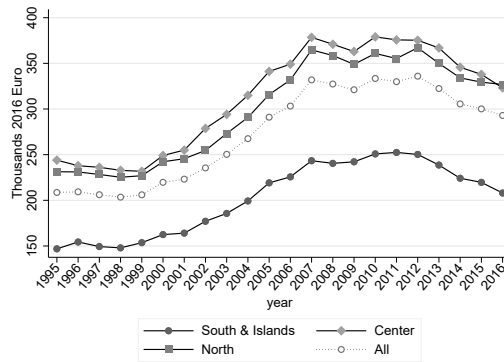
The geographic heterogeneity of total net estate value is also substantial, and estates in the southern regions have a systematically lower value than those in the center and north of the country. Throughout the years under analysis, the average estate left at death by residents in the south of Italy is worth between 64% to 71% of that declared in the north and 60% to 67% of the average in the center. Although the relative gap by macro areas appears to be stable over time, the absolute gap, measured in 2016 Euros, increased over time from €80,000 to €120,000 on average. The gap by macro areas persists across all age groups, although it is larger for older groups (see Figure 12(b)).

Figure 9: The evolution of the average net estate



(a) by selected age groups

(b) by gender



(c) by macro area

Figure 10: Average net estate across age groups: 1995, 2007, and 2016

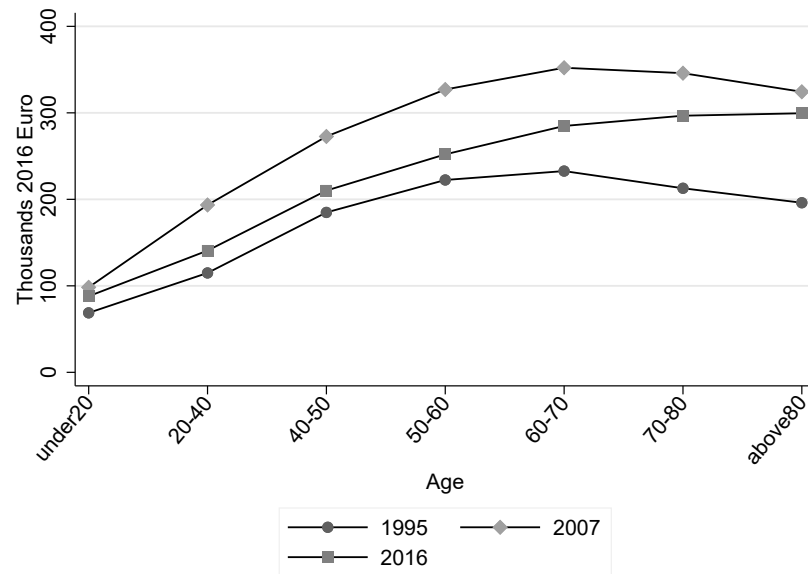
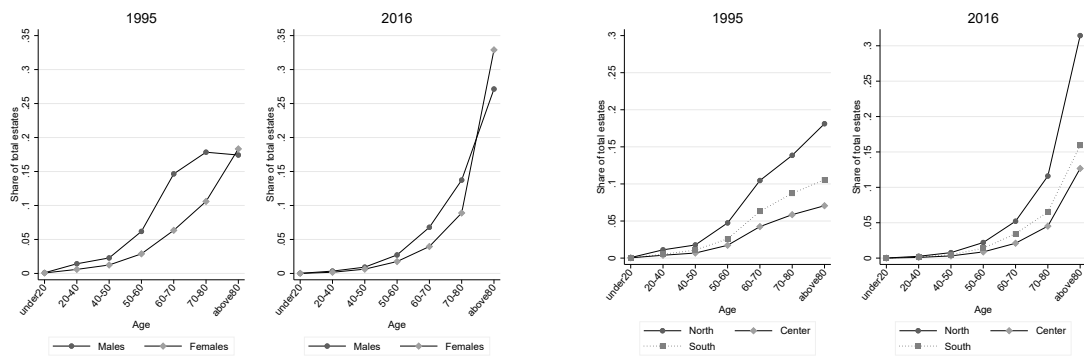


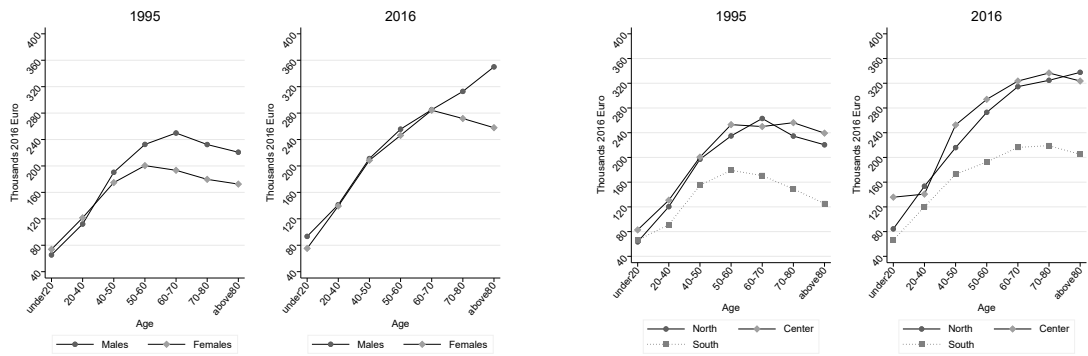
Figure 11: The age, gender, and geographical composition of reported estates left at death: 1995 vs 2016



(a) Share of estates by gender within age groups

(b) Share of estates by macro areas within age groups

Figure 12: The average value of reported estates left at death by age, gender, and geographical dimensions: 1995 vs 2015



(a) Average estates by age and gender groups

(b) Average estates by macro areas and age groups

## 5 The growing concentration of estates at death

One may also wonder what the shares of total estates held by different groups in the population are and how these have evolved over time. In order to estimate measures of estate concentration, such as the evolution of top estate shares, we need to derive a consistent measure of total estate in the economy. However, as mentioned above, the inheritance tax returns are not always mandatory and a fraction of small estates will not be observed in the tax records, and some of the assets may not be fully disclosed. We need, therefore, a measure of total estate held by the non-filers and a correction for underreporting. The derivation of total inheritance and gift flows described in Section 4 is useful here. In particular, we can use column E1 of Table 8 as the value of total estate. Different from the total estate reported on the tax record, the value accounts for the estates of non-filers and different forms of underreporting, with the exception of those linked to tax-exempt assets.<sup>23</sup>

Estates bigger than €1 million accounted for 1.2% of total deaths in 1995 and 2.5% in 2016. The share of millionaire estates to total estate value (adjusted for estates of non-filers) was 18.7% in 1995 and grew to 24.8% in 2016 (cfr. Figure 13 and Tables 10-13). These figures, it is worth recalling, do not adjust for any underreporting of total assets in the tax records.

Focusing on fixed groups of the population allows for a better analysis of the dynamics of estate concentration over time. In particular, we can compute population percentiles as the number of estates as a fraction of total decedent population in any given year (as derived from the official national mortality records) and not as a share of the total decedents appearing in the tax records. We can interpolate ranges of total net estate of the estate tabulations via the mean-split histogram approach to derive the estate share of the particular population groups in which we are interested in.

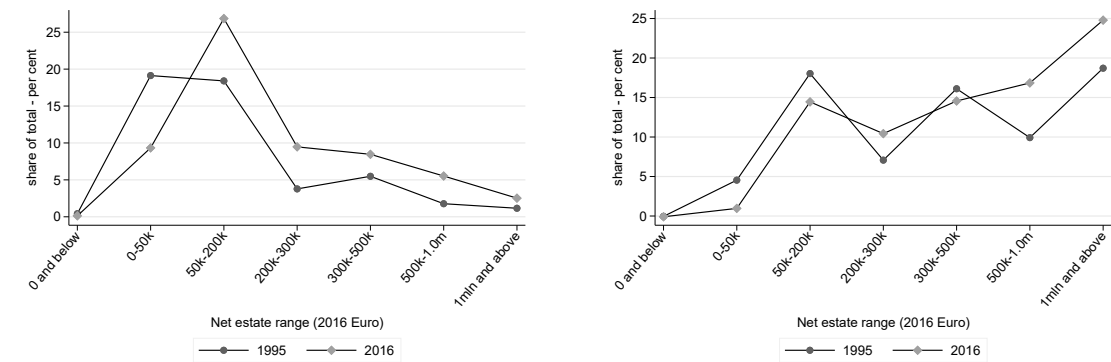
Table 1 shows values of estate shares over time at different cutoffs of the upper-end estate distribution, namely the share of total net estate held by the richest decedents (e.g., top 10%, top 1% or even top 0.01%). The estimates show that estate concentration declined during the mid-1990s for a few years but increased gradually from then to 2012, when it started declining again. Discounting these sub-period trends, the long-run dynamics of estate concentration appears more muted and stable across the period under analysis. The share of total estates held by the richest 1% of the decedent population (e.g., individuals with at least €1.6 million), held 17.5% of total estates in 1995. The share declined to 13.8% in 1998 and then increased to 18.3% by 2012. From 2012 to 2016 the top 1% estate share, as reported on tax records,

---

<sup>23</sup>We could also follow an alternative approach used in the literature by Alvaredo et al. (2018), deriving the estimates of missing estates by applying the average mortality rate to an estimate of total wealth of the missing living population, namely those people whose possessions are likely not to come to the notice of tax authorities when they die. Following the description of the inheritance tax code, this happens in Italy only if estates exclude any housing or land and if the total value of net estate is below the reporting threshold (e.g., €26,000 approximately until 2014 and €100,000 since then). A recent work by Acciari et al. (2020) derives this exact measure of missing wealth using data from the Italian Survey of Household Income and Wealth (SHIW). The wealth of the missing population can be derived as the sum of net financial and real assets (excluding housing) that is held by non-homeowner adults (individuals at least 20 years old) with total net wealth below the inheritance tax-reporting threshold described above. One limitation of this approach is that only the wealth of the non-filers is accounted for, and this might create a trend bias if underreporting has changed substantially over time.

declined by 5 percentage points. Concentration at the very top of the estate distribution followed a similar path, but here there is no sign of declining concentration in recent years. The wealthiest 0.01% almost tripled its share of total estate from 1.04% in 1998 to 2.67% in 2016.

Figure 13: Growing concentration of millionaire estates



(a) Number of reported estates by estate range (% of total deaths)

(b) Total reported estate value by estate range (% of total estate)

Table 1: Top estate shares

Year	% of total net estate					Threshold - current thousand €				
	Top10%	Top5%	Top1%	Top 0.1%	Top 0.01%	P Top10%	P Top5%	P Top1%	P Top 0.1%	P Top 0.01%
1995	47.96%	36.06%	17.48%	5.68%	2.09%	174.81223	278.2271	761.2688	2563.076	6962.759
1996	45.87%	34.21%	16.12%	4.80%	1.55%	187.48319	294.1865	806.0359	2612.488	6707.184
1997	42.93%	32.03%	15.09%	4.59%	1.45%	191.236	304.582	820.0102	2620.934	7068.104
1998	40.24%	29.86%	13.79%	3.96%	1.04%	198.95561	316.1935	840.539	2614.699	7468.72
1999	39.63%	29.55%	13.92%	4.19%	1.20%	204.39256	324.2812	866.838	2838.411	7674.551
2000	41.46%	31.04%	14.91%	4.95%	1.81%	220.3512	357.0365	947.0588	3052.226	9885.654
2001	42.28%	31.47%	14.72%	4.50%	1.37%	231.99689	377.9228	984.8594	3223.993	9495.565
2002	40.08%	30.64%	13.80%	4.35%	1.16%	172.88608	294.6255	912.1872	2864.014	9038.256
2003	43.18%	32.02%	14.82%	4.33%	1.11%	271.13659	439.4388	1150.179	3697.698	10584.11
2004	43.45%	32.24%	14.89%	4.17%	0.94%	300.87563	485.8937	1274.921	4146.624	10881.79
2005	43.92%	32.58%	15.01%	4.27%	1.05%	333.60869	538.2594	1416.116	4481.74	12518.82
2006	42.86%	31.75%	14.72%	4.33%	1.20%	362.82509	584.3624	1522.869	4874.907	13152.93
2007	50.19%	37.18%	17.29%	5.14%	1.42%	432.34513	692.7878	1803.164	5903.766	16416.34
2008	50.64%	37.44%	17.36%	5.14%	1.41%	443.03163	706.4649	1818.249	5924.597	16094.45
2009	49.56%	36.63%	17.12%	5.41%	1.83%	445.79775	708.1979	1813.181	5729.23	16534.45
2010	51.31%	38.10%	18.02%	5.62%	1.72%	458.21194	728.777	1890.272	6253.744	19444.91
2011	50.75%	37.40%	17.27%	5.14%	1.52%	467.46831	738.6275	1905.049	6057.967	16351
2012	53.74%	40.04%	19.30%	6.58%		473.51409	748.7994	1923.027	6452.076	
2013	51.32%	37.99%	18.01%	5.86%		467.32322	737.0361	1867.509	6240.961	
2014	50.15%	37.21%	17.87%	6.22%		444.54416	697.0676	1760.579	5951.75	
2015	47.88%	35.15%	16.30%	5.22%	1.70%	438.16378	684.5059	1700.898	5472.575	17768.07
2016	45.72%	33.77%	16.22%	5.89%	2.67%	432.04059	670.4863	1651.886	5308.614	16964.81

Note: The table shows the value of estates held by selected top estate groups (derived as a fraction of total decedent population in any given year) as a share of total estate value in any given year. Total estate value includes the estates of the non-filers.

## 5.1 The composition of estates

The wealth data obtained from digitized tax returns are grouped in four categories: real estate; business assets, equity and debt securities; other assets (including current and saving deposits, valuables, etc.); and liabilities and deductible expenses.<sup>24</sup> The data, therefore, lump together privately held business assets (classified as a form of real assets in the national balance sheets) with financial assets.

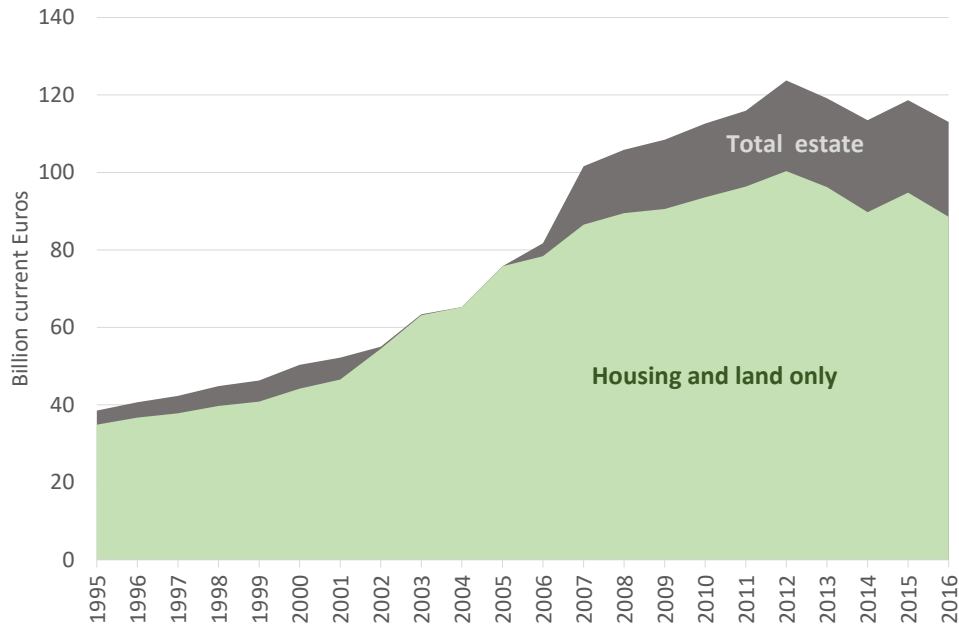
In view of the high prevalence of homeownership in Italy, the number of inheritance tax filers who declare real estate assets is above 90% on average every year. Similarly, the total declared net estate value is also mostly composed of real estate assets, ranging from 90% in 1995 to 78% in 2016 (cfr. Table 7). This is substantially higher than the relative share of housing and land assets reported in the national balance sheet data, which amounts to 51%–54% of total personal wealth (total net wealth of the household sector excluding nonprofit institutions serving households). The high share of real estate wealth in the tax records also depends on the extensive tax exemption of a number of financial assets. Similarly, the existence of a very high tax exemption threshold provides very little incentive for a full disclosure of assets other than housing and land for the lower segments of the wealth distribution. As shown in Figure 14, this argument was pushed to the extreme, when the inheritance tax was abolished from 2001 to 2006. In this period, land and housing were the only assets whose reporting continued to be mandatory, and they constitute almost 100% of total estate value.

<sup>24</sup>Starting from 2017, the paper module for the inheritance tax returns has been gradually dismissed and substituted by an electronic form that has a considerable amount of additional details about the composition of the estates.



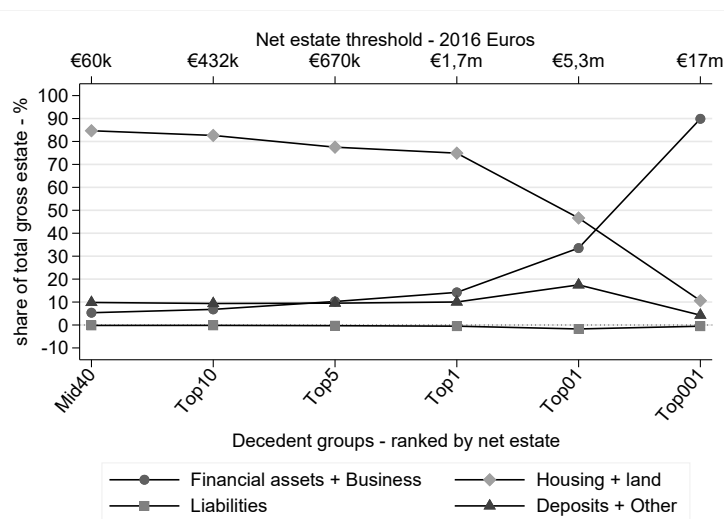
Nevertheless, our data preserve heterogeneity of portfolio composition across the distribution of total estate. On one hand, share of estates reporting land and housing assets changes across the distribution. On the other hand, the relative composition of declared portfolios changes drastically depending on the size of the estate. As shown in Figure 15, the richer the estate, the higher the relative share of reported financial and business assets. In 2016, only 10% of total gross estate is composed of housing and land for the group of richest 0.01% of total decedents, a group whose total declared net estate is at least €17 million. For this group, nearly 90% of total gross estate value is held in financial securities and privately held business assets. Meanwhile, for estates below the 99<sup>th</sup> percentile, housing and land account for at least 75% of total gross estate value. Such variation in estate portfolio also underlines the importance of acknowledging the existing heterogeneity within the upper estate brackets.

Figure 14: The composition of total reported estates in the tax records



Notes: Between October 2001 and October 2006 the inheritance tax was abolished but the reporting of housing and land assets remained compulsory. Total estate as reported in the tax records. Housing and land assets value is adjusted to transform the cadastral valuation for taxation purposes into market valuation.

Figure 15: The composition of estate portfolios in the tax records by estate size: 2016



## 6 Final comments

Inheritance is one of the key determinants of wealth accumulation. In a context of slowing economic growth, concern has risen about a potential return to “patrimonial capitalism” in which wealth and its associated power of influence and control over productive resources are increasingly concentrated, and parental wealth is key to determine life chances and opportunities Piketty (2014).

This paper systematically analyzes for the first time the full set of inheritance tax declaration forms in Italy, from 1995 to 2016. The work documents a substantial rise in the share of inheritance and gifts as a share of national income, from 8.4% in 1995 to 15.1% in 2016. The strong rise in the weight of personal wealth as share of national income in Italy, therefore, does appear to follow from an increasing weight of life-cycle savings (e.g., people are expecting to spend longer or more in retirement). Over the same period, total wealth left at death has also become increasingly concentrated. Millionaire estates were worth 18.7% of total estate in the mid-1990s and almost 24.8% in 2016. Although the share of total estate left by the richest 1% of decedents slightly declined from 1995 to 2016, it grew by approximately 5 percentage points between the end of the 1990s and 2012. By contrast, the total estate share left by the wealthiest group under analysis (i.e., top 0.01%) slightly increased from 1995 to 2016 and almost tripled between the end of the 1990s and 2016.

The distribution of estates has seldom been under extensive scrutiny as it typically served as the main building block for the application of the mortality multiplier method to derive the distribution of wealth of the living. Yet recent research has highlighted that the concentration of estates also provides, in and of itself, compelling information about the evolution of the concentration of wealth (Alvaredo et al., 2018). The ongoing work by Acciari et al. (2020), in a companion paper, shows that estate tax data in Italy can be very fruitful in the estimation of reliable series of wealth concentration. Similarly, historical tabulation of the Italian inheritance tax records may be used to derive historical series of wealth concentration, in periods where

little evidence exists about distribution of economic resources among the population (Gabbuti and Morelli, 2020).

The information about the concentration of estates left at death can be highly correlated with the concentration of inheritances received. This can have profound implications for intergenerational wealth mobility as well as the perceived equity of the current distribution of wealth. As recalled in a recent work by Cannari and D'Alessio (2018) “a society that registers a significantly higher possibility of economic success depending on inherited family wealth tends to generate discontent and is a source of possible tensions on the part of the disadvantaged population.” In his concluding remarks, Atkinson (2013) wrote that “[i]f inheritance is returning, then we need to look again at its role as a basis for taxation.” In stark contrast with this vision, this paper also documents how revenues collected from inheritance experienced a three-fold decline from 0.15% to 0.05% of total tax revenue between 1995 and 2016. The declining weight of the inheritance and gift taxes documented in this paper have, above and beyond other economic and fiscal factors, favoured the accumulation of wealth through interpersonal wealth transfers. This may well have had repercussions for the evolution of the wealth distribution too. As suggested by Cowell et al. (2018), wealth transfer taxes are very important for “the long-run distribution of wealth, reducing equilibrium inequality (the ‘predistribution’ effect) by a much larger amount than what is apparent in terms of the immediate impact of the tax (the ‘redistribution’ effect).”

## References

- P. Acciari, F. Alvaredo, and S. Morelli. The concentration of personal wealth in Italy: 1995-2016. 2020.
- F. Alvaredo, B. Garbinti, and T. Piketty. On the Share of Inheritance in Aggregate Wealth : Europe and the USA , 1900 – 2010. *Economica*, 84:239–260, 2017. doi: 10.1111/ecca.12233.
- F. Alvaredo, A. B. Atkinson, and S. Morelli. Top wealth shares in the UK over more than a century. *Journal of Public Economics*, 162(March):26–47, 2018. ISSN 0047-2727. doi: 10.1016/j.jpubeco.2018.02.008. URL <https://doi.org/10.1016/j.jpubeco.2018.02.008>.
- A. B. Atkinson. Wealth and Inheritance in Britain from 1896 to the Present. 2013. URL <http://eprints.lse.ac.uk/58087/>.
- A. B. Atkinson. Wealth and inheritance in Britain from 1896 to the present. *Journal of Economic Inequality*, 16:137–169, 2018.
- A. B. Atkinson and A. J. Harrison. *Distribution of personal wealth in Britain*. Cambridge Univ Press, 1978. ISBN 0521217350.
- F. Bloise. The poor stay poor, the rich get rich: wealth mobility across two generations in Italy. *CIRET Working paper*, (4), 2018.
- S. H. Boserup, W. Kopczuk, and C. T. Kreiner. The role of bequests in shaping wealth inequality: Evidence from danish wealth records. *American Economic Review*, 106(5):656–661, 2016. ISSN 00028282. doi: 10.1257/aer.p20161036.

- L. Cannari and G. D'Alessio. Education, income and wealth: persistence across generations in Italy. *Bank of Italy Occasional Paper*, (476), 2018.
- F. Cowell, V. de gaer Dirk, and H. Chang. Inheritance Taxation: Redistribution and Pre-distribution. In J. A. Bishop and J. G. Rodríguez, editors, *Inequality, Taxation and Intergenerational Transmission*, volume 26 of *Research on Economic Inequality*, pages 1–13. Emerald Publishing Limited, jan 2018. ISBN 978-1-78756-458-9, 978-1-78756-457-2/1049-2585. doi: 10.1108/S1049-258520180000026002. URL <https://doi.org/10.1108/S1049-258520180000026002>.
- G. Gabbuti and S. Morelli. Inheritances, Wealth Concentration and Regional Divides in Italy during the First Globalisation. 2020.
- T. Jappelli, M. Padula, and G. Pica. Do transfer taxes reduce intergenerational transfers? *Journal of the European Economic Association*, 12(1), 2014. ISSN 15424766. doi: 10.1111/jeea.12044.
- A. Killewald, F. T. Pfeffer, and J. N. Schachner. Wealth inequality and accumulation. *Annual Review of Sociology*, 43(1):379–404, 2017. doi: 10.1146/annurev-soc-060116-053331. URL <https://doi.org/10.1146/annurev-soc-060116-053331>.
- W. Kopczuk and E. Saez. Top Wealth Shares in the United States, 1916–2000: Evidence from Estate Tax Returns. *National Tax Journal*, LVII(2):445–486, 2004.
- R. J. Lampman. *The share of top wealth-holders in national wealth, 1922-56*. National Bureau of Economic Research, Inc, 1962.
- C. Luigi and D. Giovanni. La trasmissione intergenerazionale di reddito e ricchezza. *La Rivista delle Politiche Sociali - Italian Journal of Social Policy*, (3):105–127, 2018.
- OECD. Household savings (indicator), 2020. URL <https://data.oecd.org/hha/household-savings.htm>.
- T. Piketty. On the long-run evolution of inheritance: France 1820-2050. *Quarterly Journal of Economics*, 126(3):1071–1131, 2011. ISSN 00335533. doi: 10.1093/qje/qjr020.
- T. Piketty. *Capital in the Twenty-First Century*. Harvard University Press, Mass., 2014.
- T. Piketty and G. Zucman. Capital is Back: Wealth-Income Ratios in Rich Countries 1700–2010. *Quarterly Journal of Economics*, 129(3):1255–1310, 2014. doi: 10.1093/qje/qju018. Advance. URL <https://doi.org/10.1093/qje/qju018>.
- T. Piketty and G. Zucman. Wealth and Inheritance in the Long Run. In *Handbook of Income Distribution*, volume 2, chapter Ch. 15, pages 1303–1368. 2015. ISBN 9780444594297. doi: 10.1016/B978-0-444-59429-7.00016-9. URL <http://dx.doi.org/10.1016/B978-0-444-59429-7.00016-9>.

## A Adjusting the value of real estate in the inheritance tax records

Real estate assets are declared using a notional valuation (i.e. cadastral value) for inheritance tax purposes, rather the current market value. As Italian real estate cadastral values are typically well below market values, the use of unadjusted amounts declared in the inheritance tax returns will lead to distorted distributional information as well as an underestimation of the value of personal wealth. Ideally, one would want to substitute the cadastral value for its equivalent market price for every building recorded within tax data. However, this would require an extremely refined and sophisticated set of data which is not possible to access. To overcome this problem, instead, we multiply the cadastral values by an annual adjustment factor derived as the share of average national nominal house price and cadastral value.

The derived ratio of average market price to cadastral value of housing is observed to be constant over the years 2009-2012 and equal to 3.3. In the following years, and following the reduction of housing prices, the ratio declined to 3.2 in 2013, 3.0 in 2014-2015 and 2.9 in 2016. The detailed time series of adjustment factors applied to our data for 2009-2012 is shown in table 2.

Table 2: The evolution of average cadastral and market values for housing

	2009	2010	2011	2012
Cadastral rent - total value	13,060,818,875	13,354,007,469	13,824,649,519	14,047,787,404
N. of owners	26,742,044	27,058,332	28,269,412	28,502,721
Average rent	488	494	489	493
Market value - total value	4,983,370,521,246	5,107,630,342,488	5,319,036,384,226	5,294,979,063,776
N. of owners	26,757,715	27,063,237	28,278,342	28,511,215
Average market value	186,241	188,729	188,096	185,716
	488	494	489	493
	2009	2010	2011	2012
Calculation Cadastral value = (cadastral rent* 110 * 1,05)	1,508,524,580,063	1,542,387,862,670	1,596,747,019,445	1,622,519,445,162
N. of owners	26,742,044	27,058,332	28,269,412	28,502,721
Average cadastral value	56,410	57,002	56,483	56,925
Ratio Market Value/cadastral value	3.30	3.31	3.33	3.26
Ratio Market Value/cadastral value (one decimal point)	3.3	3.3	3.3	3.3

Average annual market value of properties for the years 2009-2016 is obtained from the “Osservatorio del Mercato Immobiliare - OMI”, published by the Revenue Agency/Nomisma. Similarly, data on the average annual cadastral rent of houses owned by physical persons are derived from the internal data of the Revenue Agency and the Ministry of Economics and Finance, “Analisi Patrimonio Immobiliare - API”, used for the annual publication by the Ministry of Economy and Finance “Gli immobili in Italia.

The average cadastral values are then derived multiplying average cadastral rents by tax coefficients used for the inheritance tax base. For owner-occupying houses the coefficient equals 100 up to 2003 and 110 since 2004, and since 1997 an additional flat re-valuation of cadastral value of 5 percent is applied for tax purposes.<sup>25</sup>

---

<sup>25</sup>The cadastral value for year 2013, as an example, would therefore be derived as the cadastral rent in 2013 times 110 times 1.05.

Table 3: Adjustment coefficient for cadastral value of real estates

	year	annual percentage change of nominal house prices (BIS)	assumed annual percentage increase cadastral rents	Inheritance tax coefficients on cadastral rent (owner occupied houses)	Inheritance tax revaluation coefficient of cadastral rent	Market value/ cadastral value
Estimates based on cadastral rent and market price evolution	1995	0.01	0.004	100	1	2.2
	1996	0.04	0.004	100	1	2.3
	1997	0.03	0.004	100	1.05	2.2
	1998	0.00	0.004	100	1.05	2.2
	1999	0.01	0.004	100	1.05	2.2
	2000	0.04	0.004	100	1.05	2.3
	2001	0.06	0.004	100	1.05	2.4
	2002	0.12	0.004	100	1.05	2.7
	2003	0.06	0.004	100	1.05	2.8
	2004	0.06	0.004	110	1.05	2.7
	2005	0.08	0.004	110	1.05	2.9
	2006	0.06	0.004	110	1.05	3.1
	2007	0.05	0.004	110	1.05	3.2
	2008	0.03	0.004	110	1.05	3.3
MEF - Official estimates	2009			110	1.05	3.3
	2010			110	1.05	3.3
	2011			110	1.05	3.3
	2012			110	1.05	3.3
	2013			110	1.05	3.2
	2014			110	1.05	3.0
	2015			110	1.05	3.0
	2016			110	1.05	2.9

Average cadastral value was relatively stable at around €56 thousand between 2009 and 2016, whereas the average marked value declined, over the same period, from €186 thousand to €162 thousand.

Unfortunately, for the years before 2009 we could not resort to the publication “Gli immobili in Italia” and we had to estimate the ratio of market price to cadastral value. To do so, we estimated the average market value by using the observed yearly variation of housing prices (using the Bank of International Settlements - BIS - estimates of nominal growth rate of house price index based on the published figures by the Bank of Italy for more recent years). Similarly, we made use of the average yearly percentage change of average cadastral rent over the period 2007-2013, to estimate the average cadastral value between 1995 and 2009. Cadastral rents increased, on average, by 0.4 percent every year. As explained above, allowance for changes in the tax legislation affecting the cadastral values should also be made. As detailed in table 3, the derived yearly adjustment factors applied to the cadastral values range between 1.9 in 1995 to 3.3 in 2013.

The use of a yearly national adjustment factor for cadastral values may have a series of shortcomings. First, the use of a national multiplier ignores disaggregated geographical heterogeneity. This may affect estimates of wealth concentration as long as such unobserved geographical heterogeneity correlates with wealth rankings. Similarly, we adopted a unique adjustment factor across cadastral classes. However, different cadastral classes has different cadastral adjustment coefficients to be applied to the cadastral rent for tax purposes. As written above, as of January 2004, 110 is the multiplier applied to the main owner-occupied housing (the so called ‘prima casa’, falling within the cadastral classes A/1 to A/11 with the exception of A/10). The coefficient, as of mid 2004, is 120 if the house is not the main residence.

These coefficients apply to regular dwellings, to castles, villas, and historical building alike. If most secondary houses were concentrated only in the hands of wealthy individuals, the use of a constant adjustment factor to house cadastral rents, may create a bias. Other things being equal, this may result in an upward bias for our estimates of wealth concentration, as the reported value of a secondary house in the inheritance tax return is 9% higher than the owner occupied house (120/110). However, the final effect on the wealth shares cannot be entirely known in advance as second homes may also have a larger systematic undervaluation of market value. Cadastral multiplier vary according to the type of real estate, 120 also applies to many buildings in the C cadastral categories such as covered car parks, cellars, stores, laboratories and small businesses, with the exception of shops (cadastral category C1), in this case the coefficient is 40.8. On land rents the coefficient is 90 and on offices rent (cadastral category A10) the coefficient is 60. Other cadastral categories mainly apply to public spaces and buildings and may not be relevant for personal ownership of real estates. As a systematic assessment of the market value of all different cadastral categories is not available, it is not possible to assess how the adjustment factor based on the owner-occupied houses we used fits with the degree of underestimation of cadastral values of other real estate categories. Unfortunately, we could not obtain the information about cadastral types from our individual data but we could observe the share composition of different types of buildings owned by different individuals across the income distribution. Although not precise this exercise provides informative results. Indeed, real estate different from housing represent less than 10% of household real estate wealth and is distributed quite evenly across income classes. Despite some existing heterogeneity, the share of houses and apartment structure remains quite high even for the highest income class (86%). Therefore, unless the cadastral heterogeneity is systematically correlated to unobserved geographical variations, allowing for different adjustment factors should not produce large biases in our estimates.

## B Estate description

Table 4: Tax records of estates at death: coverage and demographic composition

year	Tot deaths	Tot estates	coverage rate	under20	20 - 40	40 - 50	50 - 60	60 - 70	70 - 80	over80	below50	female	male	g.n.s.	Center	North	South
1995	556690	279131	0.501	0.0017	0.0202	0.0353	0.0907	0.2101	0.2844	0.3575	0.0572	0.4006	0.5991	0.0003	0.200	0.501	0.298
1996	554576	280748	0.506	0.0015	0.0196	0.0346	0.0868	0.2060	0.2852	0.3665	0.0556	0.4036	0.5962	0.0002	0.201	0.497	0.302
1997	561207	288770	0.515	0.0014	0.0169	0.0319	0.0844	0.1971	0.2928	0.3754	0.0503	0.4069	0.5928	0.0003	0.202	0.497	0.301
1998	574231	302629	0.527	0.0013	0.0163	0.0299	0.0809	0.1891	0.3073	0.3752	0.0475	0.4112	0.5887	0.0001	0.204	0.495	0.301
1999	567741	303272	0.534	0.0010	0.0156	0.0283	0.0786	0.1806	0.3210	0.3749	0.0449	0.4158	0.5841	0.0001	0.204	0.498	0.299
2000	560121	304254	0.543	0.0010	0.0149	0.0273	0.0755	0.1765	0.3306	0.3742	0.0432	0.4203	0.5796	0.0001	0.204	0.496	0.300
2001	556892	301083	0.541	0.0008	0.0142	0.0264	0.0740	0.1712	0.3294	0.3841	0.0414	0.4207	0.5792	0.0000	0.203	0.499	0.298
2002	560390	293406	0.524	0.0006	0.0117	0.0244	0.0709	0.1646	0.3257	0.4021	0.0367	0.4234	0.5765	0.0001	0.197	0.495	0.308
2003	584582	308481	0.528	0.0006	0.0104	0.0236	0.0675	0.1567	0.3176	0.4235	0.0346	0.4312	0.5688	0.0000	0.197	0.495	0.308
2004	541908	289829	0.535	0.0005	0.0100	0.0237	0.0677	0.1565	0.3152	0.4263	0.0342	0.4261	0.5739	0.0000	0.198	0.495	0.306
2005	565149	303600	0.537	0.0004	0.0094	0.0224	0.0643	0.1473	0.3040	0.4522	0.0322	0.4346	0.5654	0.0000	0.196	0.497	0.308
2006	555289	308083	0.555	0.0004	0.0095	0.0224	0.0648	0.1408	0.2953	0.4668	0.0323	0.4384	0.5615	0.0000	0.200	0.499	0.301
2007	569399	340667	0.598	0.0004	0.0094	0.0218	0.0589	0.1340	0.2845	0.4910	0.0316	0.4500	0.5500	0.0000	0.200	0.506	0.293
2008	578192	351210	0.607	0.0004	0.0087	0.0210	0.0560	0.1299	0.2753	0.5086	0.0301	0.4552	0.5447	0.0000	0.203	0.512	0.286
2009	585182	359465	0.614	0.0003	0.0083	0.0208	0.0534	0.1259	0.2694	0.5219	0.0294	0.4605	0.5395	0.0000	0.203	0.510	0.287
2010	581307	358034	0.616	0.0003	0.0077	0.0202	0.0508	0.1208	0.2645	0.5357	0.0282	0.4630	0.5370	0.0000	0.204	0.513	0.283
2011	593427	367143	0.619	0.0002	0.0071	0.0197	0.0495	0.1167	0.2577	0.5492	0.0270	0.4685	0.5315	0.0000	0.204	0.509	0.287
2012	612883	379634	0.619	0.0002	0.0068	0.0183	0.0469	0.1117	0.2486	0.5674	0.0254	0.4739	0.5261	0.0000	0.206	0.513	0.281
2013	600744	375388	0.625	0.0003	0.0060	0.0178	0.0461	0.1113	0.2438	0.5747	0.0241	0.4762	0.5238	0.0000	0.206	0.516	0.279
2014	598364	374375	0.626	0.0002	0.0056	0.0170	0.0454	0.1103	0.2383	0.5831	0.0228	0.4791	0.5209	0.0000	0.206	0.513	0.281
2015	647571	395823	0.611	0.0003	0.0052	0.0159	0.0445	0.1061	0.2299	0.5982	0.0213	0.4868	0.5132	0.0000	0.206	0.511	0.283
2016	615261	383259	0.623	0.0003	0.0052	0.0156	0.0448	0.1076	0.2263	0.6003	0.0210	0.4832	0.5168	0.0000	0.206	0.515	0.279

Notes: g.n.s. = gender not stated



Table 5: Average net estate at death

year	All	Females	Males	Under 20	20 - 40	40 - 50	50 - 60	60 - 70	70 - 80	Over 80	Center	North	South
1995	208657	178929.1	228577.1	68787.09	114897.3	184872.7	222377.4	232680.4	212797.7	196062.5	244.0173	231.3269	146.8694
1996	209313	181571.1	228136.2	71465.53	114433.3	180081.7	221809.3	226970.4	218194.7	197890.9	237.9023	231.0917	154.3754
1997	206166	178052.9	225501	69901.49	136141.9	177731.6	218975.3	219654.7	217718.7	193284.9	236.1782	228.3204	149.3647
1998	203500	174967.1	223449.8	54610.83	119182	174621.8	215362.6	217758.9	212339	192993.6	232.8599	225.2706	147.9303
1999	206051	179475.8	224982.9	38892.39	116154.7	183007.2	214262.5	223221.1	214562.9	194694.8	231.7554	226.9691	153.6253
2000	219728	194171.7	238281.5	54421.57	128990.7	189718.6	227656.2	233602.4	227061.5	211356.2	249.1016	242.2509	162.4831
2001	223186	193889.7	244473	59544.86	133802.7	182455.6	222662.1	236867.6	234191.2	214193.4	255.003	245.5748	164.0548
2002	235530	208130.5	255670	53230.96	139991.9	181054.3	226280.8	241650.4	245963.3	232562.8	278.7007	254.6397	177.0525
2003	250342	223283.8	270863.6	65768.09	153338.5	203888.6	236842.2	255783.5	260060.8	248427.3	294.1647	273.1952	185.6662
2004	267551	240031.5	287989.3	35922.76	173163.3	215435.5	253044.3	272943.9	279198.9	264653.8	315.0146	290.7755	199.2949
2005	291067	260688.4	314433.1	114875.1	186734.7	233857.4	268800.1	300589.6	301485.6	289299.3	341.1874	315.8683	219.1167
2006	303262	270084	329178.3	71516.27	195543.8	238172.3	282172.3	313984.2	314054.6	301628.3	349.081	331.7525	225.6866
2007	331901	291270.8	365145.6	98306.73	193505.3	272672.1	327001.9	352125.4	345854.3	324352.3	378.483	364.7484	243.3884
2008	327360	286161.8	361794.7	113864.9	184802.7	272139.6	318351.9	353376.1	340795.2	319338.8	370.9137	358.5821	240.5098
2009	321133	283458.3	353298.7	98577	178940	259209	302352.9	340059.6	335098.9	316138.8	362.9508	348.9511	242.1681
2010	333463	290773.6	370275.7	120923.3	176782.9	269423.2	314355.9	350499.8	347636.8	329227	379.022	360.8223	250.8324
2011	329954	289673	365462.4	122793.1	184014.3	251041.7	312363.1	338921.7	348325.3	325798.7	375.7198	355.3228	252.4579
2012	335963	296521.9	371487.9	174907.1	184155.7	246232.3	330553.3	344244.1	347661.9	334448.6	375.2983	367.1048	250.2711
2013	322417	283272	357999.2	98290.46	181775.8	258859	289900.2	331607.8	337898.6	320227.4	366.9001	350.008	238.6403
2014	305581	273901.8	334715.7	126931.9	151608	219729.2	319623.3	313326.5	314268.3	303525.8	345.7738	334.108	224.1868
2015	300129	270522	328213.3	147300.2	144527.8	236071.7	270767.6	291734.3	308098.6	303851.9	337.8968	329.4078	219.6809
2016	292908	261117.6	322633	87980.2	140727.4	210144.5	251990.7	284813.6	296700.4	299526.9	323.2362	326.8412	208.011

Table 6: The portfolio composition of net estate - frequency

year	Frequency of observation								
	Total	Housing and land	Financial Assets	Composition Deposits, valuables, and other	Liabilities	Assets sold	Memorandum items		
							Lifetime donations	Tax on global estate	Tax on inherited share
1995	279131	260594	25438	94511	44053	4225	8885	24418	19544
1996	280748	262341	26719	96648	45018	4056	8544	22494	17240
1997	288770	268261	29217	104021	42769	3931	8561	23184	15692
1998	302629	279240	33741	115950	43997	4054	9357	25390	16634
1999	303272	279135	36713	121077	44347	4000	9141	27583	17705
2000	304254	279475	39544	127356	33745	1984	8019	9428	13293
2001	301083	280174	35862	101963	17846	0	5124	92	6091
2002	293406	284111	4212	12821	1636	0	735	30	14
2003	308481	300212	1932	5384	556	0	379	30	14
2004	289829	282081	163	476	49	0	100	19	5
2005	303600	295546	2	15	22	0	63	13	13
2006	308083	294564	15644	31883	3302	0	912	55	7120
2007	340667	305905	79295	170095	14699	0	4340	91	32601
2008	351210	313908	85952	190278	15887	0	5052	65	35965
2009	359465	319467	88730	209644	16683	0	5443	73	37215
2010	358034	322041	91147	224241	18076	0	5654	57	37765
2011	367143	331944	95323	243327	19014	0	6002	57	38753
2012	379634	342640	102413	264786	20883	0	6793	52	40718
2013	375388	339229	100856	272072	21526	0	7979	37	39331
2014	374375	340310	97468	272953	22370	0	8744	36	39139
2015	395823	364231	98549	289607	24415	0	8575	38	41935
2016	383259	353086	93379	286908	24381	0	8583	15	39458

Notes: ‘Assets sold’ refers to the total value of assets sold within 6 months from death and reported in the inheritance tax records. The reporting was compulsory up to 2000.

Table 7: The portfolio composition of net estate - total value

Total value (Billion current Euros)									
year	Total gross	Housing and land	Financial Assets	Composition Deposits, val-ables, and other	Liabilities	Assets sold	Memorandum items		
							Lifetime donations	Tax on global estate	Tax on inher-ited share
1995	38.54	34.88	1.87	1.60	0.34	0.19	0.26	0.34	0.10
1996	40.65	36.70	2.06	1.74	0.36	0.16	0.26	0.37	0.09
1997	42.34	37.82	2.60	1.73	0.46	0.19	0.30	0.53	0.10
1998	44.84	39.73	2.87	2.06	0.41	0.18	0.33	0.50	0.11
1999	46.28	40.82	3.08	2.20	0.48	0.18	0.39	0.52	0.12
2000	50.34	44.17	3.51	2.58	0.37	0.09	0.37	0.25	0.12
2001	52.19	46.52	3.28	2.40	0.47	0.00	0.44	0.00	0.09
2002	55.00	54.46	0.27	0.27	0.02	0.00	0.45	0.00	0.00
2003	63.41	63.15	0.14	0.12	0.01	0.00	0.06	0.00	0.00
2004	65.26	65.24	0.01	0.01	0.00	0.00	0.04	0.00	0.00
2005	75.78	75.78	0.00	0.00	0.00	0.00	0.03	0.00	0.00
2006	81.71	78.38	1.95	1.38	0.07	0.00	0.21	0.00	0.07
2007	101.61	86.50	8.78	6.34	0.41	0.00	1.47	0.00	0.31
2008	105.84	89.51	9.35	6.98	0.38	0.00	0.52	0.00	0.34
2009	108.45	90.56	10.11	7.77	0.48	0.00	0.60	0.00	0.36
2010	112.63	93.58	10.37	8.68	0.61	0.00	0.64	0.00	0.37
2011	115.95	96.34	10.42	9.18	0.62	0.00	0.60	0.00	0.38
2012	123.75	100.34	12.48	10.93	0.67	0.00	0.74	0.00	0.46
2013	119.15	96.21	11.82	11.12	0.76	0.00	0.91	0.00	0.44
2014	113.47	89.73	12.35	11.39	0.64	0.00	0.90	0.00	0.42
2015	118.66	94.78	11.69	12.19	0.75	0.00	0.94	0.00	0.43
2016	113.04	88.55	12.69	11.80	0.78	0.00	0.99	0.00	0.42

Notes: ‘Assets sold’ refers to the total value of assets sold within 6 months from death and reported in the inheritance tax records. The reporting was compulsory up to 2000.

## C Inheritance and gifts flows

Table 8: The annual total flow of inheritance and gifts

Source : Acciari et al. (2020)										
	A	B	thousand	current billion €						
			C	D	E	F	%			
year	N estates	N deaths	Total population identified	Net wealth identified	Net personal wealth NA - excluding exempt assets	Net personal wealth NA	Identified W/Net personal wealth no exempt	G = D/E	H = D/F	
1995	279131.00	556690.00	24456.65	2810.44	3780.18	4101.68	74.35%		68.52%	
1996	280748.00	554576.00	24236.37	2912.01	4040.59	4391.55	72.07%		66.31%	
1997	288770.00	561207.00	24054.67	3015.71	4442.52	4819.89	67.88%		62.57%	
1998	302629.00	574231.00	24847.35	3093.63	4775.67	5142.50	64.78%		60.16%	
1999	303272.00	567741.00	25062.85	3209.00	5017.64	5371.92	63.95%		59.74%	
2000	304254.00	560121.00	25524.68	3547.52	5310.48	5716.03	66.80%		62.06%	
2001	301083.00	556892.00	25489.04	3678.69	5375.50	5863.43	68.43%		62.74%	
2002	293406.00	560390.00	23899.72	3723.77	5581.30	6268.42	66.72%		59.41%	
2003	308481.00	584582.00	24686.35	4236.39	5993.68	6687.68	70.68%		63.35%	
2004	289829.00	541908.00	23907.92	4567.86	6382.51	7176.50	71.57%		63.65%	
2005	303600.00	565149.00	24210.07	5148.08	7089.60	7908.89	72.61%		65.09%	
2006	308083.00	555289.00	24806.39	5584.93	7783.28	8596.57	71.76%		64.97%	
2007	340667.00	569399.00	27095.92	6854.36	8013.93	8719.91	85.53%		78.61%	
2008	351210.00	578192.00	27252.53	6982.00	8007.25	8694.07	87.20%		80.31%	
2009	359465.00	585182.00	27280.88	6895.74	8031.57	8725.47	85.86%		79.03%	
2010	358034.00	581307.00	27039.54	7129.15	7996.39	8716.06	89.15%		81.79%	
2011	367143.00	593427.00	27015.43	7137.18	7988.86	8725.63	89.34%		81.80%	
2012	379634.00	612883.00	27539.68	7469.68	7977.95	8734.17	93.63%		85.52%	
2013	375388.00	600744.00	26692.16	7115.79	7851.08	8624.19	90.63%		82.51%	
2014	374375.00	598364.00	26906.61	6926.23	7798.32	8633.40	88.82%		80.23%	
2015	395823.00	647571.00	27074.84	6648.82	7759.86	8648.00	85.68%		76.88%	
2016	383259.00	615261.00	26831.87	6300.11	7688.13	8627.91	81.95%		73.02%	
current billion €										
	A1	B1	C1	D1=B1+C1	E1=A1/G	F1=C1/G	G1=E1+F1	H1=A1/H	I1=C1/H	J1=H1+I1
year	Total net estate reported on inheritance tax records*	Total gifts reported on gift tax records	Total gifts reported on gift tax records*	Total inheritance and gifts declared on tax records*	Total net estate **	Total gifts 1 **	Total inheritance and gifts 1**	Total net estate 2 ***	Total gifts *** 2	Total inheritance and gifts 2 ***
1995	38.20	3.77	9.42	47.62	51.38	12.67	64.05	55.75	13.75	69.50
1996	40.30	3.97	9.94	50.24	55.91	13.79	69.71	60.77	14.99	75.76
1997	41.89	4.13	10.33	52.22	61.70	15.22	76.92	66.94	16.52	83.46
1998	44.42	4.38	10.96	55.38	68.58	16.92	85.50	73.85	18.22	92.06
1999	45.81	4.52	11.30	57.11	71.63	17.67	89.30	76.68	18.92	95.60
2000	49.97	4.93	12.33	62.30	74.80	18.45	93.26	80.51	19.86	100.38
2001	51.73	5.10	12.76	64.49	75.59	18.65	94.23	82.45	20.34	102.79
2002	54.98	5.42	13.56	68.54	82.41	20.33	102.73	92.55	22.83	115.38
2003	63.39	6.25	15.64	79.03	89.69	22.13	111.82	100.08	24.69	124.76
2004	65.26	6.44	16.10	81.36	91.19	22.50	113.69	102.53	25.29	127.83
2005	75.78	7.47	18.69	94.47	104.36	25.74	130.10	116.42	28.72	145.13
2006	81.64	8.05	20.14	101.78	113.77	28.07	141.84	125.66	31.00	156.66
2007	101.21	9.98	24.97	126.17	118.33	29.19	147.52	128.75	31.76	160.51
2008	105.46	11.69	27.72	133.19	120.95	31.79	152.74	131.32	34.52	165.85
2009	107.96	12.00	22.89	130.85	125.75	26.66	152.40	136.61	28.96	165.57
2010	112.02	12.11	27.57	139.59	125.65	30.93	156.57	136.95	33.71	170.66
2011	115.33	13.67	31.07	146.40	129.09	34.77	163.87	141.00	37.98	178.98
2012	123.08	19.70	44.97	168.05	131.45	48.03	179.48	143.91	52.58	196.50
2013	118.40	19.93	44.19	162.58	130.63	48.75	179.38	143.49	53.55	197.04
2014	112.84	21.33	42.55	155.39	127.05	47.91	174.96	140.65	53.04	193.70
2015	117.91	20.65	39.20	157.11	137.61	45.75	183.36	153.36	50.98	204.35
2016	112.26	24.15	41.37	153.63	136.99	50.48	187.47	153.74	56.65	210.39

Notes:\*=real estate adjusted valuation at market price; \*\*=adjusted for estate of the non-filers and underreporting of assets (excluding tax exempt assets); \*\*\*=adjusted for the estate of non-filers and underreporting of assets. Identified population and net wealth refers to the information on total estate at death declared in the tax records multiplied-up using the mortality multiplier method to be representative of the living population.

Table 9: The relative flow of inheritance and gifts

Year	%						(current billion €)			% of HDI	
	E*/NI	(E+gift)*/NI	(E+Gift)**/NI	(E+Gift)***/NI	(E+Gift)***/HDI	(E+Gift)***/NPW	National income (NI) - ISTAT	Household disposable income (HDI) - BoI	Net personal wealth (NPW) - BoI	Household saving rate - OECD	
1995	4.6%	5.7%	7.7%	8.4%	9.6%	1.7%	829.02	722.28	4,102	15.99%	
1996	4.6%	5.7%	7.9%	8.9%	9.8%	1.7%	881.78	772.60	4,392	16.47%	
1997	4.5%	5.6%	8.3%	9.1%	10.7%	1.7%	926.87	779.71	4,820	13.67%	
1998	4.6%	5.7%	8.9%	9.3%	11.6%	1.8%	964.11	793.65	5,143	9.96%	
1999	4.6%	5.7%	8.9%	9.9%	11.7%	1.8%	998.09	816.18	5,372	8.76%	
2000	4.7%	5.9%	8.9%	9.2%	11.7%	1.8%	1052.11	855.07	5,716	7.42%	
2001	4.7%	5.8%	8.5%	9.9%	11.5%	1.8%	1102.97	890.37	5,863	8.92%	
2002	4.8%	6.0%	9.0%	10.2%	12.5%	1.8%	1136.32	923.71	6,268	9.63%	
2003	5.4%	6.7%	9.5%	11.1%	13.0%	1.9%	1173.08	957.41	6,688	9.14%	
2004	5.3%	6.6%	9.3%	10.4%	12.8%	1.8%	1224.72	998.66	7,177	9.60%	
2005	6.0%	7.5%	10.3%	12.0%	14.1%	1.8%	1260.35	1027.10	7,909	9.09%	
2006	6.2%	7.8%	10.8%	11.9%	14.7%	1.8%	1312.46	1065.44	8,597	8.52%	
2007	7.5%	9.3%	10.9%	12.0%	14.5%	1.8%	1357.42	1105.08	8,720	8.09%	
2008	7.8%	9.9%	11.3%	12.1%	14.7%	1.9%	1352.01	1125.26	8,694	7.83%	
2009	8.3%	10.1%	11.7%	13.1%	15.1%	1.9%	1301.39	1099.07	8,725	7.05%	
2010	8.5%	10.6%	11.9%	13.1%	15.5%	2.0%	1321.20	1097.98	8,716	4.20%	
2011	8.6%	10.9%	12.2%	13.8%	15.9%	2.1%	1343.44	1126.31	8,726	3.71%	
2012	9.4%	12.8%	13.6%	15.4%	17.9%	2.2%	1316.08	1095.74	8,734	1.98%	
2013	9.1%	12.4%	13.7%	15.4%	17.9%	2.3%	1306.58	1100.09	8,624	3.61%	
2014	8.5%	11.7%	13.2%	14.8%	17.5%	2.2%	1325.84	1107.28	8,633	3.93%	
2015	8.8%	11.7%	13.7%	15.6%	18.2%	2.4%	1342.57	1122.77	8,648	3.25%	
2016	8.1%	11.0%	13.4%	15.1%	18.5%	2.4%	1394.17	1137.01	8,628	3.22%	

Notes:\*=real estate adjusted valuation at market price; \*\*=adjusted for estate of the non-filers and underreporting of assets (excluding tax exempt assets); \*\*\*=adjusted for the estate of non-filers and underreporting of assets.

## D Estate concentration

Table 10: Share of total net estate and total deaths by estate ranges: 1995-2000

2016 €		Current €		Current €-billion		%	
Year	Net estate range	Net reported estate (billion)	Number of estates	Total net es- tate (adjusted for estates of non-filers)	Total deaths	Share of total net estate	Share of total deaths
1995	0 and below	-0.02	2333	51.38	556690	-0.05%	0.42%
1995	0-50k	2.33	106480	51.38	556690	4.54%	19.13%
1995	50k-200k	9.26	102466	51.38	556690	18.03%	18.41%
1995	200k-300k	3.63	21027	51.38	556690	7.07%	3.78%
1995	300k-500k	8.28	30531	51.38	556690	16.11%	5.48%
1995	500k-1.0m	5.10	9862	51.38	556690	9.92%	1.77%
1995	1mln and above	9.61	6432	51.38	556690	18.71%	1.16%
1996	0 and below	-0.04	2561	55.91	554576	-0.07%	0.46%
1996	0-50k	2.27	101345	55.91	554576	4.05%	18.27%
1996	50k-200k	9.41	103520	55.91	554576	16.84%	18.67%
1996	200k-300k	9.77	46431	55.91	554576	17.47%	8.37%
1996	300k-500k	3.09	8950	55.91	554576	5.53%	1.61%
1996	500k-1.0m	5.59	10812	55.91	554576	9.99%	1.95%
1996	1mln and above	10.20	7129	55.91	554576	18.25%	1.29%
1997	0 and below	-0.10	3821	61.70	561207	-0.17%	0.68%
1997	0-50k	2.30	100868	61.70	561207	3.73%	17.97%
1997	50k-200k	9.81	107984	61.70	561207	15.89%	19.24%
1997	200k-300k	9.91	47394	61.70	561207	16.07%	8.45%
1997	300k-500k	3.43	9938	61.70	561207	5.57%	1.77%
1997	500k-1.0m	7.00	12888	61.70	561207	11.35%	2.30%
1997	1mln and above	9.53	5877	61.70	561207	15.45%	1.05%
1998	0 and below	-0.05	5412	68.58	574231	-0.08%	0.94%
1998	0-50k	2.35	101945	68.58	574231	3.43%	17.75%
1998	50k-200k	10.36	113705	68.58	574231	15.11%	19.80%
1998	200k-300k	10.55	50478	68.58	574231	15.39%	8.79%
1998	300k-500k	3.78	10936	68.58	574231	5.51%	1.90%
1998	500k-1.0m	7.52	13854	68.58	574231	10.96%	2.41%
1998	1mln and above	9.91	6299	68.58	574231	14.46%	1.10%
1999	0 and below	-0.10	5516	71.63	567741	-0.14%	0.97%
1999	0-50k	2.32	99199	71.63	567741	3.24%	17.47%
1999	50k-200k	10.49	114851	71.63	567741	14.64%	20.23%
1999	200k-300k	10.84	51807	71.63	567741	15.13%	9.13%
1999	300k-500k	3.85	11164	71.63	567741	5.38%	1.97%
1999	500k-1.0m	7.70	14168	71.63	567741	10.76%	2.50%
1999	1mln and above	10.71	6567	71.63	567741	14.95%	1.16%
2000	0 and below	-0.03	6685	74.80	560121	-0.04%	1.19%
2000	0-50k	2.19	92892	74.80	560121	2.92%	16.58%
2000	50k-200k	10.54	114290	74.80	560121	14.08%	20.40%
2000	200k-300k	11.24	53787	74.80	560121	15.03%	9.60%
2000	300k-500k	4.51	13073	74.80	560121	6.03%	2.33%
2000	500k-1.0m	8.66	15958	74.80	560121	11.57%	2.85%
2000	1mln and above	12.87	7569	74.80	560121	17.20%	1.35%



Table 11: Share of total net estate and total deaths by estate ranges: 2001-2006

2016 €		Current €		Current €-billion		%	
Year	Net estate range	Net reported estate (billion)	Number of estates	Total net es- tate (adjusted for estates of non-filers)	Total deaths	Share of total net estate	Share of total deaths
2001	0 and below	-0.20	7181	75.59	556892	-0.26%	1.29%
2001	0-50k	2.04	84791	75.59	556892	2.69%	15.23%
2001	50k-200k	15.26	141072	75.59	556892	20.18%	25.33%
2001	200k-300k	6.97	28651	75.59	556892	9.22%	5.14%
2001	300k-500k	4.76	13812	75.59	556892	6.30%	2.48%
2001	500k-1.0m	9.45	17388	75.59	556892	12.51%	3.12%
2001	1mln and above	13.45	8188	75.59	556892	17.79%	1.47%
2002	0 and below	0.00	10140	82.41	560390	0.00%	1.81%
2002	0-50k	6.71	136263	82.41	560390	8.14%	24.32%
2002	50k-200k	18.04	104596	82.41	560390	21.89%	18.66%
2002	200k-300k	5.14	14922	82.41	560390	6.24%	2.66%
2002	300k-500k	3.61	8103	82.41	560390	4.38%	1.45%
2002	500k-1.0m	7.81	11993	82.41	560390	9.48%	2.14%
2002	1mln and above	13.66	7389	82.41	560390	16.58%	1.32%
2003	0 and below	0.00	7852	89.69	584582	0.00%	1.34%
2003	0-50k	1.68	67088	89.69	584582	1.87%	11.48%
2003	50k-200k	16.39	146758	89.69	584582	18.28%	25.10%
2003	200k-300k	8.66	35509	89.69	584582	9.65%	6.07%
2003	300k-500k	10.42	27328	89.69	584582	11.62%	4.67%
2003	500k-1.0m	9.66	14851	89.69	584582	10.78%	2.54%
2003	1mln and above	16.58	9095	89.69	584582	18.49%	1.56%
2004	0 and below	0.00	7693	91.19	541908	0.00%	1.42%
2004	0-50k	1.41	56038	91.19	541908	1.55%	10.34%
2004	50k-200k	15.46	136037	91.19	541908	16.96%	25.10%
2004	200k-300k	8.70	35646	91.19	541908	9.54%	6.58%
2004	300k-500k	10.85	28457	91.19	541908	11.90%	5.25%
2004	500k-1.0m	10.43	15975	91.19	541908	11.44%	2.95%
2004	1mln and above	18.41	9983	91.19	541908	20.19%	1.84%
2005	0 and below	0.00	8051	104.36	565149	0.00%	1.42%
2005	0-50k	1.30	51608	104.36	565149	1.25%	9.13%
2005	50k-200k	15.96	138225	104.36	565149	15.29%	24.46%
2005	200k-300k	9.86	40314	104.36	565149	9.45%	7.13%
2005	300k-500k	12.90	33758	104.36	565149	12.36%	5.97%
2005	500k-1.0m	12.57	19205	104.36	565149	12.04%	3.40%
2005	1mln and above	23.19	12439	104.36	565149	22.23%	2.20%
2006	0 and below	0.00	8794	113.77	555289	0.00%	1.58%
2006	0-50k	1.25	49133	113.77	555289	1.10%	8.85%
2006	50k-200k	15.90	136012	113.77	555289	13.98%	24.49%
2006	200k-300k	10.38	42410	113.77	555289	9.12%	7.64%
2006	300k-500k	13.93	36433	113.77	555289	12.24%	6.56%
2006	500k-1.0m	14.03	21494	113.77	555289	12.33%	3.87%
2006	1mln and above	26.16	13807	113.77	555289	22.99%	2.49%

Table 12: Share of total net estate and total deaths by estate ranges: 2007-2012

2016 €		Current €		Current €-billion		%	
Year	Net estate range	Net reported estate (billion)	Number of estates	Total net estate (adjusted for estates of non-filers)	Total deaths	Share of total net estate	Share of total deaths
2007	0 and below	-0.06	8966	118.33	569399	-0.05%	1.57%
2007	0-50k	1.36	54400	118.33	569399	1.15%	9.55%
2007	50k-200k	16.23	137242	118.33	569399	13.72%	24.10%
2007	200k-300k	11.96	48780	118.33	569399	10.11%	8.57%
2007	300k-500k	17.20	44828	118.33	569399	14.54%	7.87%
2007	500k-1.0m	18.09	27623	118.33	569399	15.29%	4.85%
2007	1mln and above	36.42	18828	118.33	569399	30.78%	3.31%
2008	0 and below	-0.02	9046	120.95	578192	-0.02%	1.56%
2008	0-50k	1.38	55684	120.95	578192	1.14%	9.63%
2008	50k-200k	16.66	140177	120.95	578192	13.77%	24.24%
2008	200k-300k	12.39	50506	120.95	578192	10.24%	8.74%
2008	300k-500k	18.07	47041	120.95	578192	14.94%	8.14%
2008	500k-1.0m	22.08	32325	120.95	578192	18.25%	5.59%
2008	1mln and above	34.91	16431	120.95	578192	28.86%	2.84%
2009	0 and below	-0.06	6657	125.75	585182	-0.05%	1.14%
2009	0-50k	1.44	58834	125.75	585182	1.14%	10.05%
2009	50k-200k	17.10	143981	125.75	585182	13.60%	24.60%
2009	200k-300k	12.72	51836	125.75	585182	10.11%	8.86%
2009	300k-500k	18.54	48318	125.75	585182	14.74%	8.26%
2009	500k-1.0m	22.79	33325	125.75	585182	18.12%	5.69%
2009	1mln and above	35.43	16514	125.75	585182	28.18%	2.82%
2010	0 and below	-0.07	1935	125.65	581307	-0.05%	0.33%
2010	0-50k	1.40	57241	125.65	581307	1.12%	9.85%
2010	50k-200k	17.23	144395	125.65	581307	13.71%	24.84%
2010	200k-300k	13.05	53172	125.65	581307	10.39%	9.15%
2010	300k-500k	19.18	49924	125.65	581307	15.26%	8.59%
2010	500k-1.0m	23.23	33972	125.65	581307	18.49%	5.84%
2010	1mln and above	38.00	17395	125.65	581307	30.24%	2.99%
2011	0 and below	-0.08	690	129.09	593427	-0.06%	0.12%
2011	0-50k	1.41	57529	129.09	593427	1.10%	9.69%
2011	50k-200k	17.71	148167	129.09	593427	13.72%	24.97%
2011	200k-300k	13.52	55074	129.09	593427	10.47%	9.28%
2011	300k-500k	19.83	51645	129.09	593427	15.36%	8.70%
2011	500k-1.0m	24.61	36027	129.09	593427	19.06%	6.07%
2011	1mln and above	38.33	18011	129.09	593427	29.69%	3.04%
2012	0 and below	-0.15	751	131.45	612883	-0.11%	0.12%
2012	0-50k	1.42	57413	131.45	612883	1.08%	9.37%
2012	50k-200k	18.28	152678	131.45	612883	13.91%	24.91%
2012	200k-300k	14.11	57461	131.45	612883	10.73%	9.38%
2012	300k-500k	20.96	54542	131.45	612883	15.94%	8.90%
2012	500k-1.0m	25.70	37637	131.45	612883	19.55%	6.14%
2012	1mln and above	42.76	19152	131.45	612883	32.53%	3.12%

Table 13: Share of total net estate and total deaths by estate ranges: 2013-2016

2016 €		Current €		Current €-billion		%	
Year	Net estate range	Net reported estate (billion)	Number of estates	Total net es- tate (adjusted for estates of non-filers)	Total deaths	Share of total net estate	Share of total deaths
2013	0 and below	-0.12	718	130.63	600744	-0.09%	0.12%
2013	0-50k	1.42	57440	130.63	600744	1.09%	9.56%
2013	50k-200k	18.25	152364	130.63	600744	13.97%	25.36%
2013	200k-300k	13.96	56936	130.63	600744	10.69%	9.48%
2013	300k-500k	20.51	53369	130.63	600744	15.70%	8.88%
2013	500k-1.0m	24.91	36441	130.63	600744	19.07%	6.07%
2013	1mln and above	39.46	18120	130.63	600744	30.21%	3.02%
2014	0 and below	-0.07	605	127.05	598364	-0.06%	0.10%
2014	0-50k	1.44	58159	127.05	598364	1.13%	9.72%
2014	50k-200k	18.82	158018	127.05	598364	14.81%	26.41%
2014	200k-300k	13.70	55897	127.05	598364	10.78%	9.34%
2014	300k-500k	19.68	51298	127.05	598364	15.49%	8.57%
2014	500k-1.0m	23.24	34082	127.05	598364	18.29%	5.70%
2014	1mln and above	36.03	16316	127.05	598364	28.36%	2.73%
2015	0 and below	-0.11	770	137.61	647571	-0.08%	0.12%
2015	0-50k	1.35	58331	137.61	647571	0.98%	9.01%
2015	50k-200k	20.18	167844	137.61	647571	14.67%	25.92%
2015	200k-300k	14.80	60416	137.61	647571	10.75%	9.33%
2015	300k-500k	21.15	55142	137.61	647571	15.37%	8.52%
2015	500k-1.0m	24.77	36345	137.61	647571	18.00%	5.61%
2015	1mln and above	35.77	16975	137.61	647571	25.99%	2.62%
2016	0 and below	-0.13	786	136.99	615261	-0.10%	0.13%
2016	0-50k	1.33	57400	136.99	615261	0.97%	9.33%
2016	50k-200k	19.79	165228	136.99	615261	14.45%	26.85%
2016	200k-300k	14.29	58274	136.99	615261	10.43%	9.47%
2016	300k-500k	19.95	52074	136.99	615261	14.56%	8.46%
2016	500k-1.0m	23.08	33974	136.99	615261	16.85%	5.52%
2016	1mln and above	33.96	15523	136.99	615261	24.79%	2.52%
2016	1mln and above	33.96	15523	136.99	615261	24.79%	2.52%

## **E Estate tabulations**

Table 14: Inheritance tax records: estate tabulations (1995-2000)

1995					1996					1997				
Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net		Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net		Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net	
< -10000	2333	-23759			< -10000	2561	-39418			< -10000	3821	-101824		
0	5222	2530			0	4459	2221			0	3953	1925		
1000	13403	37771			1000	12676	36296			1000	11519	32758		
5000	12410	91682			5000	11424	84390			5000	10955	80765		
10000	20774	307453			10000	19638	292722			10000	20127	298869		
20000	54671	1894247			20000	53148	1850524			20000	54314	1887326		
50000	66038	4797224			50000	66045	4817374			50000	69123	5039471		
100000	36428	4467466			100000	37475	4596463			100000	38861	4765624		
150000	21027	3634585			150000	22153	3835512			150000	23024	3983682		
200000	22092	5358488			200000	24278	5934721			200000	24370	5931224		
300000	8439	2918914			300000	8950	3094371			300000	9938	3434734		
400000	4852	2164285			400000	5308	2366226			400000	5681	2531889		
500000	3057	1669519			500000	3377	1844576			500000	3420	1866738		
600000	1953	1263753			600000	2127	1376458			600000	2254	1456598		
700000	1319	986400			700000	1506	1123976			700000	1533	1145835		
800000	918	777409			800000	1070	906335			800000	1137	965707		
900000	756	715916			900000	788	745638			900000	833	789383		
1000000	1830	2202745			1000000	1981	2385320			1000000	2049	2467009		
1500000	661	1132958			1500000	782	1339236			1500000	847	1452207		
2000000	360	802659			2000000	390	870356			2000000	393	877895		
2500000	194	530911			2500000	202	548172			2500000	192	524457		
3000000	125	403136			3000000	125	402093			3000000	110	354897		
3500000	69	258417			3500000	87	324583			3500000	86	322953		
4000000	44	187287			4000000	58	244682			4000000	56	236870		
4500000	35	166390			4500000	29	137293			4500000	44	207823		
5000000	43	233673			5000000	42	224985			5000000	44	242643		
6000000	23	149152			6000000	18	115565			6000000	29	187635		
7000000	16	118646			7000000	12	90926			7000000	11	81897		
8000000	10	85649			8000000	9	77561			8000000	15	126139		
9000000	7	65192			9000000	6	56683			9000000	9	84578		
10000000	18	232476			10000000	18	232722			10000000	15	199586		
≥ 20000000	4	565189			≥ 20000000	6	376745			≥ 20000000	7	408548		

1998					1999					2000				
Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net		Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net		Lower net estate range (€)	Number of tax records	Total reported estate (thousand €)	re-net	
< -10000	5412	-53263			< -10000	5516	-100300			< -10000	6685	-27090		
0	3878	1907			0	3446	1705			0	3410	1688		
1000	11183	31933			1000	10668	30698			1000	9994	28878		
5000	10927	80740			5000	10663	78915			5000	9627	71648		
10000	20400	303260			10000	19428	288035			10000	18084	270180		
20000	55557	1933067			20000	54994	1919630			20000	51777	1814443		
50000	72071	5260145			50000	72486	5292067			50000	70857	5197815		
100000	41634	5102710			100000	42365	5196514			100000	43433	5337986		
150000	24500	4235909			150000	25042	4331000			150000	26350	4564192		
200000	25978	6315252			200000	26765	6506411			200000	27437	6679699		
300000	10936	3779464			300000	11164	3851602			300000	13073	4508135		
400000	6083	2706274			400000	6200	2759714			400000	7134	3167232		
500000	3728	2035848			500000	3782	2066258			500000	4075	2226174		
600000	2419	1564039			600000	2514	1628176			600000	2832	1831041		
700000	1624	1212847			700000	1672	1249809			700000	1917	1431572		
800000	1242	1052595			800000	1262	1069105			800000	1429	1213411		
900000	861	817124			900000	916	866823			900000	1059	1002305		
1000000	2256	2710408			1000000	2305	2782728			1000000	2689	3236348		
1500000	884	1523070			1500000	898	1538487			1500000	1051	1804292		
2000000	423	943211			2000000	440	979065			2000000	457	1022451		
2500000	207	562494			2500000	242	659281			2500000	303	824500		
3000000	115	373367			3000000	137	444064			3000000	162	524100		
3500000	75	278652			3500000	81	300938			3500000	95	354699		
4000000	40	168785			4000000	63	268030			4000000	64	270417		
4500000	42	199196			4500000	53	249674			4500000	43	203298		
5000000	55	298630			5000000	50	271178			5000000	64	352269		
6000000	31	199232			6000000	48	310176			6000000	50	324958		
7000000	20	151262			7000000	21	156758			7000000	26	194865		
8000000	8	67588			8000000	13	110712			8000000	12	101233		
9000000	5	47867			9000000	6	56760			9000000	10	94234		
10000000	29	367856			10000000	25	293305			10000000	41	565244		
≥ 20000000	6	153052			≥ 20000000	7	350373			≥ 20000000	14	777360		

Table 15: Inheritance tax records: estate tabulations (2001-2006)

2001				2002				2003			
Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net	Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net	Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net
< -10000	7181	-196343		< -10000	10140	620		< -10000	7852	-1044	
0	2902	1408		0	6245	18081		0	1588	791	
1000	8482	24588		1000	6925	51559		1000	5989	17414	
5000	8459	63033		5000	14135	213309		5000	6259	46860	
10000	16411	245935		10000	42034	1480077		10000	13222	199803	
20000	48537	1700473		20000	66924	4947099		20000	40030	1413900	
50000	69796	5130337		50000	45112	5550776		50000	66770	4963582	
100000	44115	5421800		100000	28338	4905164		100000	48426	5965121	
150000	27161	4703816		150000	31146	7583046		150000	31562	5465669	
200000	28651	6971332		200000	14922	5141149		200000	35509	8655485	
300000	13812	4758357		300000	8103	3612048		300000	17463	6024075	
400000	7673	3416861		400000	4927	2691275		400000	9865	4398154	
500000	4571	2495764		500000	3207	2073427		500000	6110	3336960	
600000	3004	1942227		600000	2215	1655582		600000	4012	2598412	
700000	2140	1599333		700000	1644	1393520		700000	2738	2042255	
800000	1594	1351923		800000	1250	1183816		800000	1991	1686964	
900000	1181	1120317		900000	3134	3779849		900000	1558	1476269	
1000000	2862	3453912		1000000	1323	2274947		1000000	3926	4715706	
1500000	1074	1848429		1500000	625	1388211		1500000	1538	2644467	
2000000	548	1215434		2000000	331	900962		2000000	761	1684688	
2500000	268	731590		2500000	213	694007		2500000	394	1075977	
3000000	203	656754		3000000	131	488836		3000000	265	856164	
3500000	116	434896		3500000	85	362520		3500000	154	577985	
4000000	72	303972		4000000	57	269088		4000000	100	423081	
4500000	46	217697		4500000	82	447263		4500000	72	340800	
5000000	74	403730		5000000	44	285672		5000000	117	639866	
6000000	51	331026		6000000	21	158047		6000000	66	431787	
7000000	26	194252		7000000	22	186978		7000000	36	269223	
8000000	12	102981		8000000	11	104453		8000000	23	195652	
9000000	10	94169		9000000	49	648506		9000000	19	179254	
10000000	39	487995		10000000	11	490125		10000000	51	655177	
≥ 20000000	12	498745		≥ 20000000	0	0		≥ 20000000	15	414053	

2004				2005				2006			
Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net	Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net	Lower net es- tate range (€)	Number of tax records	Total ported estate (thou- sand €)	re- net
< -10000	7693	-2		< -10000	8051	-131		< -10000	8794	-3669	
0	1206	618		0	1152	589		0	1192	579	
1000	4748	13753		1000	4406	13057		1000	4147	12331	
5000	5322	39833		5000	4905	36646		5000	4580	34293	
10000	10975	165884		10000	9583	143954		10000	9022	135470	
20000	33787	1189591		20000	31562	1109403		20000	30192	1064828	
50000	58848	4387100		50000	57415	4301975		50000	54752	4116608	
100000	46000	5674719		100000	47618	5895339		100000	46730	5789612	
150000	31189	5402447		150000	33192	5758173		150000	34530	5994883	
200000	35646	8695894		200000	40314	9860829		200000	42410	10379637	
300000	18150	6255573		300000	21360	7374422		300000	23037	7957472	
400000	10307	4595192		400000	12398	5521921		400000	13396	5973810	
500000	6416	3504643		500000	7717	4221400		500000	8641	4719142	
600000	4345	2813271		600000	5083	3285881		600000	5913	3823048	
700000	3040	2270680		700000	3673	2744501		700000	3972	2967810	
800000	2174	1843769		800000	2732	2315135		800000	2968	2516878	
900000	1635	1549929		900000	2010	1904886		900000	2313	2193299	
1000000	4290	5167968		1000000	5320	6410288		1000000	5788	6981594	
1500000	1655	2845001		1500000	2105	3618948		1500000	2304	3964277	
2000000	851	1890066		2000000	1037	2296365		2000000	1203	2679161	
2500000	492	1340156		2500000	622	1696613		2500000	664	1810757	
3000000	265	856275		3000000	356	1152351		3000000	448	1448589	
3500000	212	792513		3500000	258	961624		3500000	278	1040563	
4000000	124	525200		4000000	171	723547		4000000	154	651174	
4500000	92	435626		4500000	109	516091		4500000	128	606231	
5000000	130	704583		5000000	138	753271		5000000	167	907947	
6000000	65	422299		6000000	86	557509		6000000	110	706015	
7000000	47	350780		7000000	58	434057		7000000	57	425739	
8000000	25	211130		8000000	49	412512		8000000	53	449275	
9000000	28	266845		9000000	27	257496		9000000	24	229772	
10000000	65	861239		10000000	73	951729		10000000	98	1314454	
≥ 20000000	7	190091		≥ 20000000	20	546865		≥ 20000000	18	748153	

Table 16: Inheritance tax records: estate tabulations (2007-2012)

2007					2008					2009				
Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)		Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)		Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)	
< -10000	8966		-63045		< -10000	9046		-24997		< -10000	6657		-59176	
0	1735		850		0	1972		944		0	2258		1093	
1000	5024		14531		1000	5330		15535		1000	5883		16867	
5000	5090		38299		5000	5194		39039		5000	5625		42017	
10000	9521		143560		10000	9728		146552		10000	10201		153234	
20000	33030		1159904		20000	33460		1178670		20000	34867		1225943	
50000	53276		3986099		50000	53746		4025988		50000	55311		4142166	
100000	47211		5860941		100000	48242		5992861		100000	49523		6154074	
150000	36755		6386926		150000	38189		6638887		150000	39147		6806042	
200000	48780		11958026		200000	50506		12388347		200000	51836		12717093	
300000	27777		9600223		300000	29009		10026972		300000	30045		10383503	
400000	17051		7603160		400000	18032		8045016		400000	18273		8155665	
500000	10893		5953261		500000	11599		6340807		500000	11813		6462267	
600000	7536		4873153		600000	7813		5052623		600000	8209		5310301	
700000	5241		3914497		700000	5658		4224548		700000	5780		4317906	
800000	3953		3351944		800000	4142		3509618		800000	4321		3664240	
900000	3142		2977725		900000	3113		2951128		900000	3202		3035018	
1000000	7883		9529808		1000000	8255		9968916		1000000	8282		10004133	
1500000	3033		5207059		1500000	3303		5673196		1500000	3327		5705108	
2000000	1698		3784563		2000000	1649		3671079		2000000	1728		3847507	
2500000	889		2424838		2500000	932		2540341		2500000	945		2581627	
3000000	579		1870524		3000000	586		1893942		3000000	600		1940916	
3500000	364		1355858		3500000	416		1559745		3500000	412		1538556	
4000000	264		1121504		4000000	274		1161961		4000000	251		1061324	
4500000	178		838542		4500000	209		986356		4500000	181		860548	
5000000	247		1340485		5000000	243		1321134		5000000	259		1416666	
6000000	148		952707		6000000	149		957985		6000000	140		908590	
7000000	104		778864		7000000	101		751470		7000000	86		639415	
8000000	68		571365		8000000	78		660357		8000000	66		554090	
9000000	51		481579		9000000	51		484251		9000000	66		622206	
10000000	144		1898669		10000000	151		2017905		10000000	132		1812301	
≥ 20000000	36		1288647		≥ 20000000	34		1261748		≥ 20000000	39		1941162	

2010					2011					2012				
Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)		Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)		Lower net estate range (€)	Number of records	estate tax	Total reported net estate (thousand €)	
< -10000	1935		-65087		< -10000	690		-83308		< -10000	751		-150111	
0	2200		1045		0	2086		988		0	1938		915	
1000	5703		16298		1000	5674		16388		1000	5510		16033	
5000	5462		40860		5000	5398		40328		5000	5365		39960	
10000	9941		148456		10000	9972		149329		10000	10009		149518	
20000	33935		1195175		20000	34399		1207926		20000	34591		1215651	
50000	54788		4109660		50000	55932		4193258		50000	57020		4269219	
100000	49752		6182852		100000	50858		6321364		100000	52984		6592492	
150000	39855		6935044		150000	41377		7194935		150000	42674		7421696	
200000	53172		13050345		200000	55074		13515767		200000	57461		14105249	
300000	30794		10648579		300000	31946		11037202		300000	33642		11634414	
400000	19130		8529725		400000	19699		8792414		400000	20900		9322936	
500000	12026		6572215		500000	12893		7040933		500000	13568		7411604	
600000	8346		5398762		600000	8801		5696802		600000	9082		5875706	
700000	5937		4434943		700000	6233		4661980		700000	6567		4909972	
800000	4396		3724629		800000	4642		3932772		800000	4799		4068511	
900000	3267		3097440		900000	3458		3277412		900000	3621		3434040	
1000000	8637		10430738		1000000	8994		10855027		1000000	9601		11595049	
1500000	3498		6003770		1500000	3567		6134489		1500000	3837		6604545	
2000000	1753		3912285		2000000	1876		4178318		2000000	1896		4220109	
2500000	1003		2742661		2500000	1124		3072171		2500000	1102		3007898	
3000000	654		2117518		3000000	661		2134644		3000000	676		2185213	
3500000	414		1546225		3500000	414		1549647		3500000	470		1760378	
4000000	304		1292401		4000000	285		1210242		4000000	316		1338977	
4500000	206		972071		4500000	204		965177		4500000	245		1164333	
5000000	294		1602720		5000000	280		1528774		5000000	297		1623618	
6000000	169		1087706		6000000	173		1118855		6000000	194		1246692	
7000000	116		863006		7000000	101		754178		7000000	109		811700	
8000000	79		673360		8000000	82		691060		8000000	85		721871	
9000000	53		500383		9000000	62		585439		9000000	55		518438	
10000000	160		2155416		10000000	151		2003055		10000000	193		2544527	
≥ 20000000	55		2097470		≥ 20000000	37		1552991		≥ 20000000	76		3416888	

Table 17: Inheritance tax records: estate tabulations (2013-2016)

2013				2014				2015			
Lower net estate range (€)	Number of records	of tax	Total reported net estate (thousand €)	Lower net estate range (€)	Number of records	of tax	Total reported net estate (thousand €)	Lower net estate range (€)	Number of records	of tax	Total reported net estate (thousand €)
< -10000	718		-116767	< -10000	605		-71978	< -10000	770		-108805
0	1985		882	0	2042		922	0	2354		1002
1000	5659		16367	1000	5666		16375	1000	6749		19481
5000	5418		40364	5000	5490		40696	5000	6480		48028
10000	9791		145641	10000	10047		150367	10000	10818		160629
20000	34587		1217442	20000	34914		1233004	20000	31930		1122898
50000	56972		4274153	50000	59880		4497406	50000	61285		4617284
100000	52676		6549618	100000	55103		6843076	100000	59655		7409477
150000	42716		7424330	150000	43035		7476599	150000	46904		8154302
200000	56936		13964879	200000	55897		13700015	200000	60416		14798464
300000	32932		11390728	300000	31866		11014810	300000	34382		11882273
400000	20437		9114401	400000	19432		8667232	400000	20760		9262932
500000	12978		7095946	500000	12363		6758578	500000	13184		7205779
600000	8981		5810703	600000	8311		5377268	600000	8907		5759130
700000	6227		4658336	700000	5876		4393975	700000	6211		4643292
800000	4723		4002136	800000	4284		3631764	800000	4530		3834402
900000	3532		3347036	900000	3248		3078779	900000	3513		3330196
1000000	9212		11096900	1000000	8270		9986099	1000000	8750		10543594
1500000	3597		6183180	1500000	3319		5697637	1500000	3466		5965718
2000000	1779		3964630	2000000	1635		3639881	2000000	1681		3730672
2500000	1015		2778379	2500000	933		2538506	2500000	938		2560569
3000000	665		2147353	3000000	548		1768536	3000000	554		1793071
3500000	412		1536386	3500000	343		1286995	3500000	386		1439282
4000000	305		1291702	4000000	247		1043472	4000000	247		1046975
4500000	199		944131	4500000	180		854156	4500000	186		881878
5000000	294		1608108	5000000	252		1372685	5000000	222		1213060
6000000	147		952263	6000000	144		933842	6000000	134		864495
7000000	113		846306	7000000	105		776471	7000000	91		676080
8000000	89		748826	8000000	65		551526	8000000	64		541940
9000000	50		473698	9000000	56		528290	9000000	68		643992
10000000	181		2419055	10000000	148		1951055	10000000	136		1766566
≥ 20000000	62		2468052	≥ 20000000	71		3101121	≥ 20000000	52		2099019

2016			
Lower net estate range (€)	Number of records	of tax	Total reported net estate (thousand €)
< -10000	786		-133252
0	2544		1095
1000	6693		19245
5000	6351		47213
10000	10533		155952
20000	31279		1101660
50000	61148		4612435
100000	58567		7274955
150000	45513		7904666
200000	58274		14287971
300000	32553		11237185
400000	19521		8708047
500000	12502		6828709
600000	8353		5401442
700000	5844		4365670
800000	4115		3485994
900000	3160		2996826
1000000	8117		9770182
1500000	3146		5395094
2000000	1458		3240150
2500000	845		2309139
3000000	496		1604685
3500000	348		1303271
4000000	248		1052484
4500000	166		784489
5000000	225		1238514
6000000	142		921437
7000000	77		573450
8000000	51		432831
9000000	36		342022
10000000	123		1653269
≥ 20000000	45		3342697