

Wealth transfers and net wealth at death: evidence from the Italian inheritance tax records 1995-2016

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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 share of inheritance and gifts as a share of total national income, from 8.4% in 1995 to 15.1% in 2016. Consistently with the substantial and 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 millionaire estates were worth 14% of total estate in the mid 1990s and almost 25% in 2016. This paper also documents that revenues collected from the inheritance tax experienced a threefold decline from 0.15% to 0.05% of total tax revenue between 1995 and 2016. Data also allow a disaggregated analysis by demographic and geographic characteristics.

Keywords: Wealth transfers, Estate concentration, Wealth concentration, Gifts, Taxation of Estates, Inheritances, and Gifts.

JEL Codes: D3, H2, N3

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Introduction

Wealth transfers, including bequests, inheritances, and inter-vivos gifts, are crucial economic resources for households and for their accumulation of wealth. In rich countries, their scale relative to total national income has increased substantially in recent decades. The path-breaking work by Piketty (2011) documented 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 tendency for inheritances and gifts to increase their relevance in other economies, such as the UK, Germany, Sweden, and the U.S.

In Italy, the stock of household sector net wealth is equivalent to six years of national income and almost eight years of household disposable income as of 2016, making it one the countries with the highest wealth-to-income ratio in the world.¹ Very little attention has been devoted to understanding whether this rise in the wealth-income ratio led to an increase in bequests and in the wealth being passed on from one generation to the next. What is the empirical importance of inheritance and intervivos gifts in Italy? More, broadly how are inheritances distributed among the population? In a context of rising importance of 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 rankings, 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 administration of the inheritance tax, that provides direct measure of the flows of bequests (e.g. wealth holding of decedents), and that has never been systematically exploited so far. The dataset assembles the universe of inheritance tax forms filed to 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 usual claims of avoidance and evasion as distinguishing traits of tax systems, including the Italian one. This is the result of the combination of the very high home-ownership rate, with a key administrative feature of the tax, which is strictly connected to the up-keeping 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 of the data is very 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). The analysis of the distribution of estates left at death has received very little attention in the economics literature. However, this source of data provides direct relevant information about the aggregate magnitude as well as the concentration of bequests (and inheritance, indirectly) and can be the object of independent scrutiny(Alvaredo et al., 2018).

¹See wid.world.

This work makes a series of contributions. First of all, we derive a new series of total annual 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 annual wealth transfers almost doubled as a share of household disposable income during the past 20 years, from approximately 9.6% in 1995 to 18.5% in 2016. On the contrary, wealth accumulated via savings have dropped from 16% of annual disposable income in 1995 to 3.2% in 2016. This is an important indication that, other things being equal, the relative importance of ‘self-made’ wealth (i.e., savings) has been declining with respect to that of inherited wealth. Second, we provide a detailed account of estate, inheritance, and gift taxation in the country, which underlined substantial changes throughout the period under analysis. We also document, the decline of tax revenues resulting from wealth transfers as well as the share of 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 the very wealthy groups to uncover important heterogeneity in the estate composition: financial assets become the most important holdings at the very top. Finally, the evidence also suggests that bequests are becoming more concentrated. Millionaire estates were worth almost 15% of total net estate and this share increased to 25% of total by 2016. The share of total estates left at death by the richest 0.01% of decedents (individuals with a declared total estate greater than €17 million), 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 mid 1990s as the reference year. A growing concentration of estates left at death may imply a growing concentration of inheritance over time generating, in turn, profound implications for wealth mobility.

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 wealth transfer taxation in the country. In the third section we describe the main features of the inheritance data. New measures of the relative weight 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 dimension as well as detailed account of the estate portfolio across the estate distribution. 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.

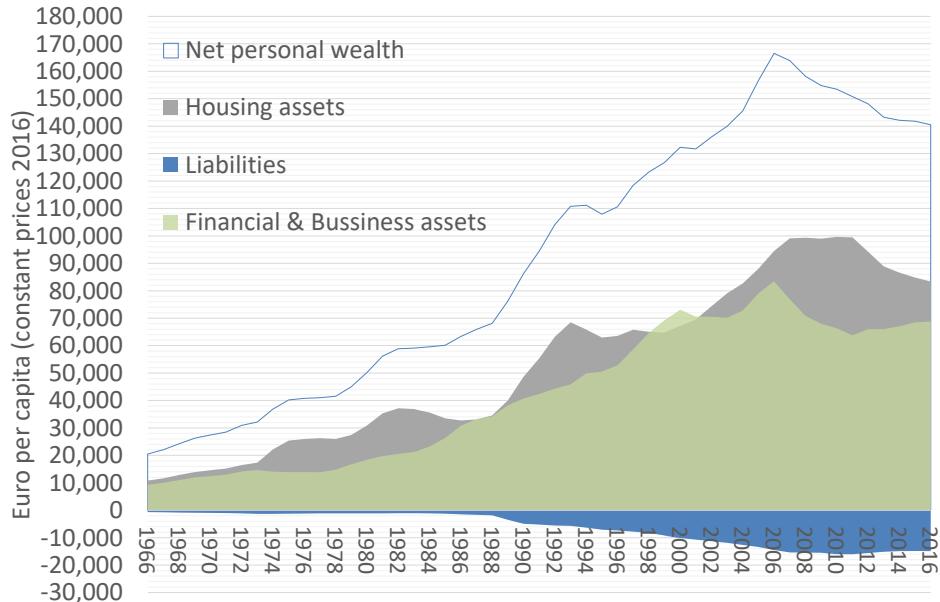
1 The growing relevance of personal wealth in Italy

According to the national balance sheets, Italian households are, on average, among the wealthiest and least indebted among the 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 8-fold 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. Such a remarkable drop of 16% did not occur in any of the other advanced economies with the exception of Spain.

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, with the exclusion of the non profit sector serving households, and that 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 definition of personal net wealth is aligned with that of the national balance sheet according to the System of National Accounts (SNA 2008) and the European System of Accounts (ESA 2010).² This definition is grounded in conventional economic theory, where wealth represents a store of value for present and future consumption.

Figure 1: The growing relevance of personal wealth



A substantial fraction of personal wealth is composed of housing and land assets, whose share increased from 51% to 54% over the 50 years going 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 accounts for approximately €15,000 per capita in recent years, one of the lowest levels currently recorded in the rich world.

²The 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)

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 almost eight years of households gross disposable income are needed to account for the net worth of the household sectors. This ratio was close to 2 around 1970. The ratio of private wealth (household sector plus non profit institutions serving households) and national income is close to 6 in other rich countries like France, Japan, and the UK, or to 5 and 4 as the case for the US and Germany, respectively.³

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 resident 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) as the one applied in the US and the UK today.⁴

Different proportional rates apply depending on the degree of kinship. For spouses and direct descendants or ascendants, 4% above any inheritance share whose net value is higher than €1 million.⁵ For brothers and sisters, 6% above €100,000. For relatives within the fourth degree, direct relatives in law, side relatives in law within the third degree, 6% with no exemption threshold; 8% applies on all other parties with no exemption threshold. The same rates and structure correspond to inter-vivos gifts.⁶. Till 2016 the exemption threshold was reduced in 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.⁷

The administration of the tax is linked to the up-keeping 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).

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

³The 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 non profit institutions serving households.

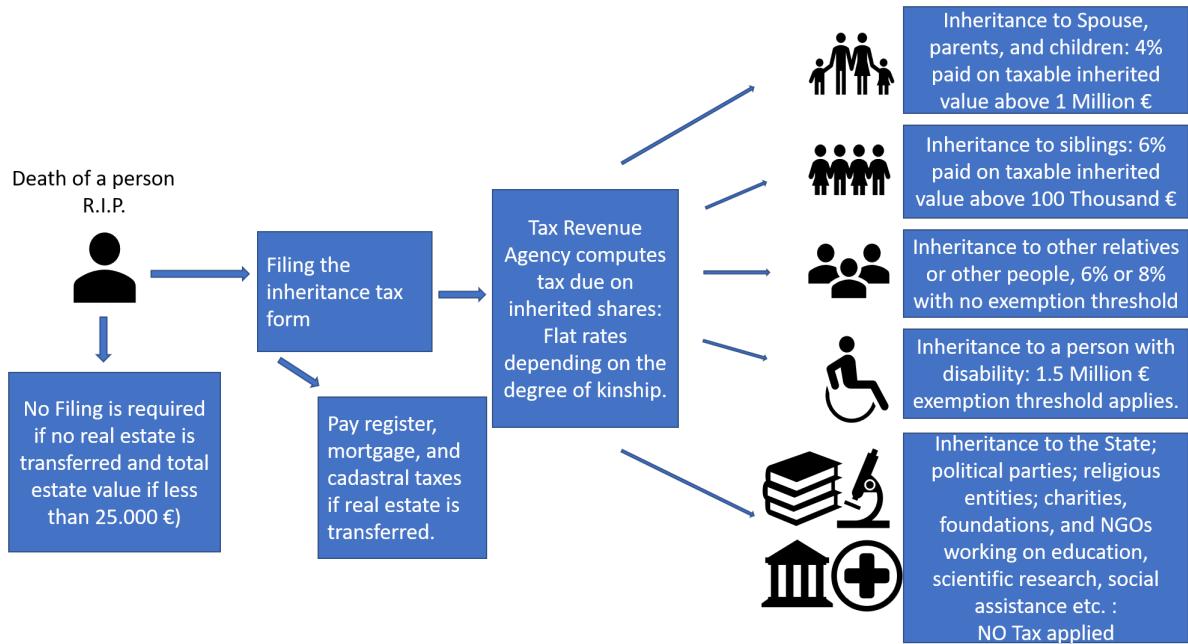
⁴The inheritance tax is calculated only on the net value of assets located in Italy in the case a person is not deemed to be domiciled in Italy for fiscal reason.

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

⁶As 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 year 2000 and 2001 when gift flat tax rates were 1 percentage point lower than the inheritance tax rates.

⁷It 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, irrespectively 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* will be 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



holdings are not reported in the tax returns.

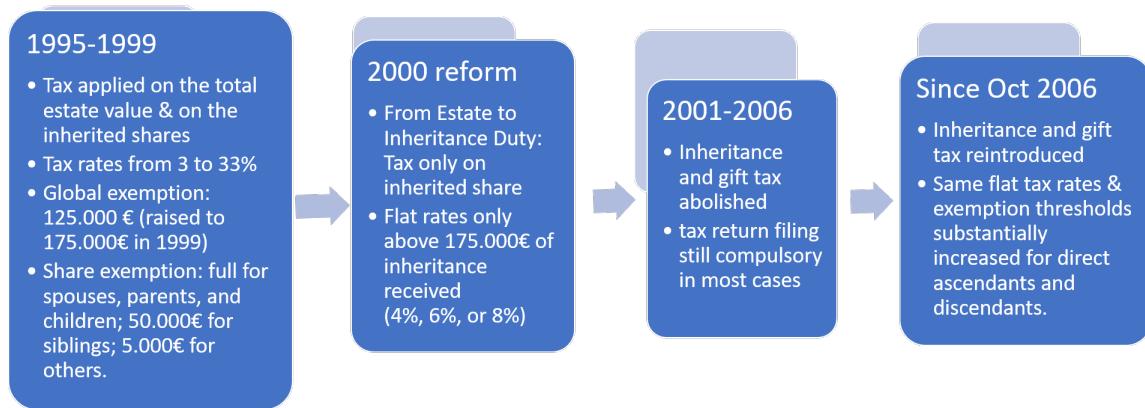
Full exemption is granted to private pension and life insurance funds, postal saving bonds (i.e. *Buoni Fruttiferi Postali*), and a number of national and extra-national government securities.⁸ Albeit exempted, the reporting of government bonds is often advised by tax accountants and most certainly happens in those cases where securities are bundled with other assets in investment funds, as documented by banks and other financial intermediaries 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. The list of exempted assets also include 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 the spouse.⁹

Changes in the taxation structure. The period under investigation witnessed substantial changes to the tax code. Three major reforms were enacted in 2000, 2001, and 2006. 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 percent, and an inheritance tax (levied on the share

⁸There 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’, necessary to get access to more favourable tax treatment.

⁹The 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 this categories: religious entities, NGOs, political parties, state, regional or local authorities, and research institutions.

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



received by the heir or beneficiary) with a further graduation of marginal rates up to 33 percent. The latter applied only to recipients different from the spouse and direct relatives. In 2000, the tax was transformed into a pure inheritance tax and lost 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 as well as exemption thresholds for spouses, direct descendants, ascendants and disabled individuals. Such structure remained until today, although the exemption thresholds are, since 2006, much more generous (e.g. €1 million for spouses and off-springs).

In 2001 the inheritance and gift taxes were abolished, but reintroduced in 2006. Despite their repeal over six years, assets transfers both through gifts or due to death remained compulsory for estates including housing or land wealth. In this period, then, he declared information about housing and land assets remain reliable, whereas very little information is provided about other wealth holdings.

The inheritance tax revenue and its coverage.

The tax revenue collected from the estate and inheritance taxes combined experienced a three-fold decrease from approximately 0.15% in 1995 to 0.05% of total fiscal revenue in 2016. This happened as a result of the profound changes occurred to the tax structure. The total revenue generated from the inheritance tax associated to individuals who died in 1998 was €100 million. The revenue related to estate tax only was 5 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 was worth approximately €400 million. The official figure of the Ministry of Economy and Finance for the inheritance tax revenue is €558 million in 2016 but the latter is measured at the year of account and not at year of death.¹⁰ Additional €183 million came from the taxes

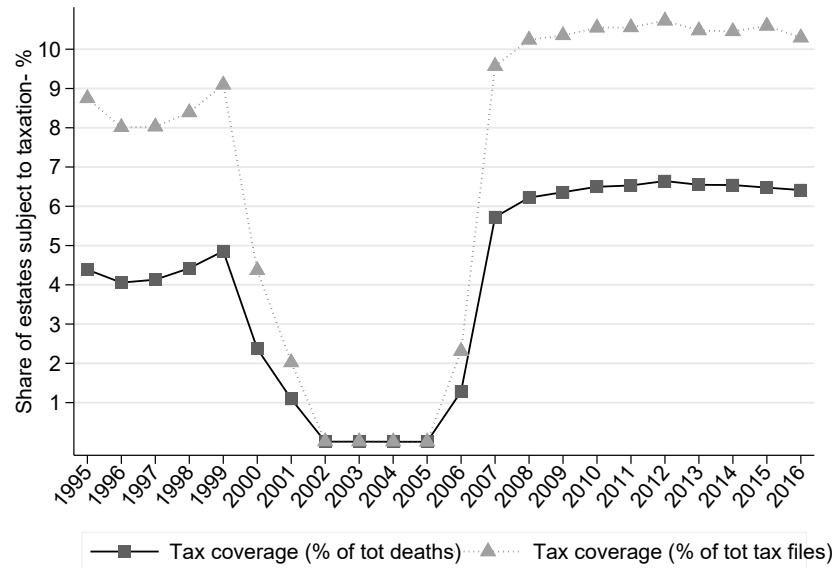
¹⁰ Although an official measure of tax gap does not exists for the inheritance tax, the tax authority, Agenzia delle Entrate, runs audit programs. The results of this activity should be visible from the field “Ruoli” within

levied on *intervivos* gifts.

Only a small fraction of estates are subject to estate or inheritance tax. In the mid-90s, between 8 and 9% of estates recorded to have paid any taxes, 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 €10 thousand approximately (cfr. tables 6 and 7).

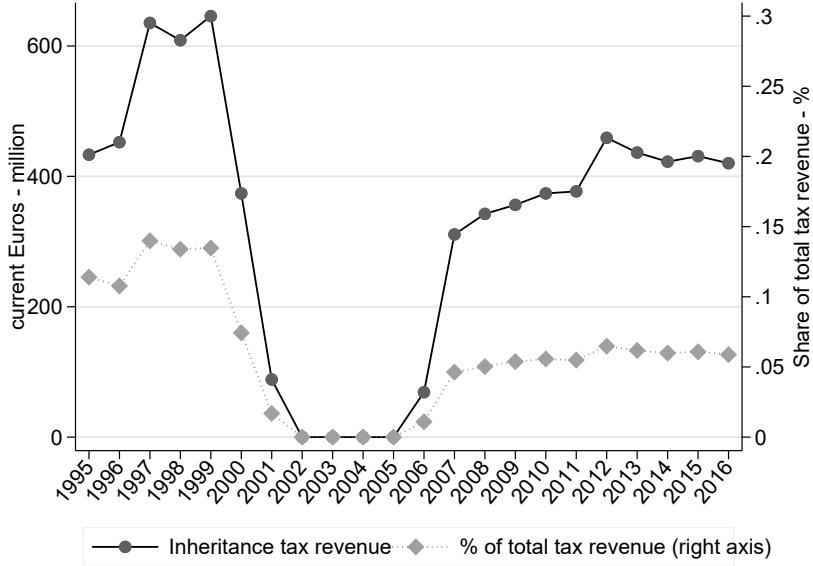
It may seem counter intuitive that under the current tax regime, the share of estates subject to taxation increased despite a substantial increase in the tax exemption threshold, especially for transfers of wealth to spouses and children. However, many smaller estates are now subject to taxation due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

Figure 4: The share of total estates subject to taxation

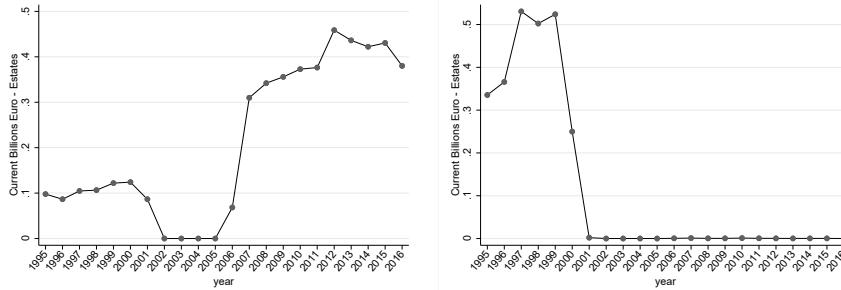


the publication ‘Rendiconto dello Stato’ In the 2015 volume available on the website of the Ragioneria Generale dello Stato <http://www.rgs.mef.gov.it>. At pages 303/142 and 303/144 one can observe that the ordinary amount of inheritance tax receipt is around 640 mln, whereas the extraordinary receipts through “ruoli” amounts to 9 mln (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% - pag. 303/1 e 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 the universe of the inheritance tax returns, referred to as ‘successions’ opened between 1995 and 2016 (evaluated at year of death).¹¹

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 the deceased individuals to the designated heirs. Our data refers to the total net wealth of deceased individuals represented in the tax records, independently of how the assets are distributed among heirs.

The concept of net wealth is determined by adding all reported financial and real assets and

¹¹The 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’.

subtracting all liabilities. We also add the market value of the assets sold within six months from death, which was 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 net estate. The microdata 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 going from negative values to the highest range worth €20 million or more. The demographic information is provided by 7 age groups (i.e. under 20, 20 to 40, 40 to 50, 50 to 60, 60 to 70, 70 to 80, and over 80), 3 gender groups (i.e. males, females, and gender not stated), and 3 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 the 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 administration features of the Italian inheritance tax, linked to the up-keeping of the real estate cadastral register as well as the administration of taxes on the transaction of land and housing. The coverage rate reached 63% in 2014, the highest on record, and 62% in 2016. The coverage rate dropped to 61% in 2015, also due to unexpectedly high mortality rate in that year.¹²

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



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

¹²Total deaths in 2015 amount to 648 thousand units, approximately 40 thousand units greater than the average deaths in 2012, 2013, 2014, and 2016. The relative decline of 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).

(*delle Entrate*) in the province where the deceased had residence¹³. 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 assets 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 proof the book value of any company; 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.^{footnote} In a few cases the tax administration suggests to report 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. Third, not every dead is represented in the tax records and allowance should be done for the wealth of unidentified population in the tax data. Moreover, only real properties are reported between 2001 and 2006, when the inheritance and gifts taxes were abolished. Fourth, under-reporting may be pervasive due to tax avoidance and evasion, or more simply, due to lack of incentives to disclose fully assets and possessions on the inheritance tax records (e.g. filling 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.¹⁴ 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 ones. As we detail in the Appendix A, the yearly adjustment factor is defined as the ratio of (average) market price and cadastral valuation at the national level.

The wealth of ‘non filers’. The inheritance tax returns are mandatory only if rights on any real estate are transferred at death, or if the net value of the estate of the deceased is above €25822 thousand.¹⁵ Hence, only a fraction of total deaths are observed in the tax records: in

¹³The 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 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.

¹⁴This is particularly the case of older building whose value has not been typically 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.

¹⁵The threshold was expressed in 50 thousand Italian Lira, converted into € using the official conversion rate

2013, 365 thousand estates out of 600 thousand deaths. Although incomplete, such a coverage rate, more than 60%, is very high compared to evidence in other rich countries: in the UK, the coverage rate is just below 50%, whereas in the US it is lower than 1%.

Our data is representative of the living adults whose wealth arrangements are such to come to notice to 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 the non filers or the so-called “missing population” is necessary if we want to assess the full cross-sectional distribution of estates for the entire population dying 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, 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 to the value received at death. In fact, the capitalized value to the date of death of all *inter-vivos* donations done at anytime by the deceased before death also need to be reported within the tax forms.¹⁶ Also, keeping track of donations and transfers of assets during lifetime is fundamental to compute the reserved share of total estate (so called “*quota legittima*”) guaranteed by the Italian civil law to the spouse (and to civil partner since 2016), direct descendants, and ascendants of the deceased depending on circumstances.¹⁷.

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

of 1936.27 Lira for €1. The filing exemption threshold has then been increased to €100 thousand at the end of year 2014. It is too early to assess how this change will affect the nature of inheritance tax statistics in the future.

¹⁶The 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.

¹⁷The reserved share of a single child is a half, whereas in case of multiple children the children are entitled to 2/3 of the total estate in equal shares. If there is a spouse and one child, the reserved portion is 2/3 split equally between the spouse and the child. If there is a spouse and more than one child, the spouse has 1/4 and the children's 1/2. If there are only ascendants, the reserved portion is 1/3. 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 preserve the right to inhabit the family home, even if not owned fully or partially, and the right to use the furniture in it.

capital income from trusts (*Redditi da capitale imputati ai trusts*) using similar rates as in Kopczuk and Saez (2004) for the US and in Alvaredo et al. (2018) for the UK, getting an estimate of total wealth held in trusts of €200-300 millions.¹⁸ This estimate is rather small in magnitude suggesting that the use of trusts in Italy may indeed be not as widespread as in the US or the UK.¹⁹

Liabilities. The concept of net worth used in this paper subtracts all liabilities from real and financial assets. However, it is expected that the existence of very high tax exempt thresholds, as for the current inheritance tax in Italy, reduces the incentive of detailed reporting of liabilities for most of the (non taxable) estates. A further limitation of tax records is linked to the fact that liabilities can be reported together 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 entity 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 the 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 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 amount 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 making no 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 the estate data series applied in the UK after the year 1979 in the work by Atkinson (2013, 2018). This is consistent with the fact that the existing provisions and reporting requirements about gift tax means that the Italian data on gifts are relatively rich and more complete than other countries, like the UK where only gifts done within seven years from death are reported and taxed. Making allowance for the market prices of donated rights on real properties would increase total estate value by 36%. Total adjusted estates and gifts are worth €153.63 billion in 2016 (see column D1 in table 8).²⁰

¹⁸The rate of return used in the capitalization exercise is 5.6%

¹⁹It is, nonetheless, possible that such estimate is likely to be substantially under-estimated due to the fact that several sources of capital incomes are not directly observed on income tax records in Italy as they are taxed at the source.

²⁰The derivation of market prices of the value 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 official Ministry

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 under-reporting of assets linked to mis-valuation of assets, tax avoidance, and tax evasion.

A related work 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 of the living identified from the inheritance tax records and its distribution among the population. 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 Account. 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 the wealth of the living population, through a re-weighting process of the decedent population. This happens in so far 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 males have, for instance and other things being equal, a higher mortality rate than younger people and females, 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 a death. This rough adjustment indirectly accounts for different types of under-reporting 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).²¹ One could also use a different denominator, moving from national

of Economics and Finance publication, namely the “Analisi statistiche - Atti del registro” 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.

²¹This approach differs from the approach used in the literature and described in the 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 data to obtain an indication about tax evasion, avoidance, and missing wealth that cannot be accounted for in

income (equal to the gross domestic product excluding capital depreciation and including net foreign factor income) to the household disposable income (national income minus taxes plus cash transfers), or even to total net wealth of the households. As disposable household income accounts for between 81 and 86% of national income, the relative increase of inheritance and gifts since 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).

The use of 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 it is almost six times higher than the share of household disposable income that is accumulated through savings. According the the OECD data, household saving rate in Italy, was the highest in the OECD world in 1995, at around 16% and it dropped dramatically to 3.2% in 2016 (see figure 8).

The relative weight of Italian inheritance and gifts flows is slightly higher than other countries for which similar estimates are available. The last direct estimate from tax records by Piketty (2011) 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 to income appears lower 8.2% (Table 2 in Atkinson, 2013). The relative high weight of inheritance in countries like Italy has been predicted by Piketty (2011) who wrote that “In 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 inheritance and gifts does not bear direct or mechanic consequences for the distribution of wealth or income, economists and social scientists care about the role of self-made versus inherited wealth. The main reason lies in the fact that a growing role of inheritance in the economy have direct consequence on the extent of inter-generational wealth mobility. Consistently with our findings, works based on the analysis of the Italian survey on household income and wealth data estimate coefficient of intergenerational persistence in education, income, and wealth levels that are relatively high by international standards, and generally showing signs of a positive trend. In Italy, the levels of education, income, and wealth of parents are very good predictors of the education, income, and wealth levels of children. Intergenerational mobility in Italy is relatively low by international standards (Bloise, 2018, Cannari and D’Alessio, 2018). 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. kil summarized the 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.

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 μ_t is the ratio between average wealth of the deceased and average wealth of the living.

Figure 7: The growing relevance of inheritance and gifts

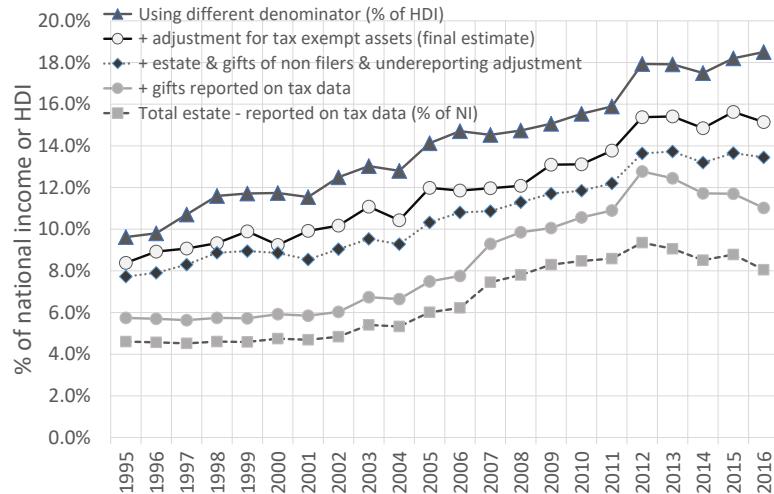
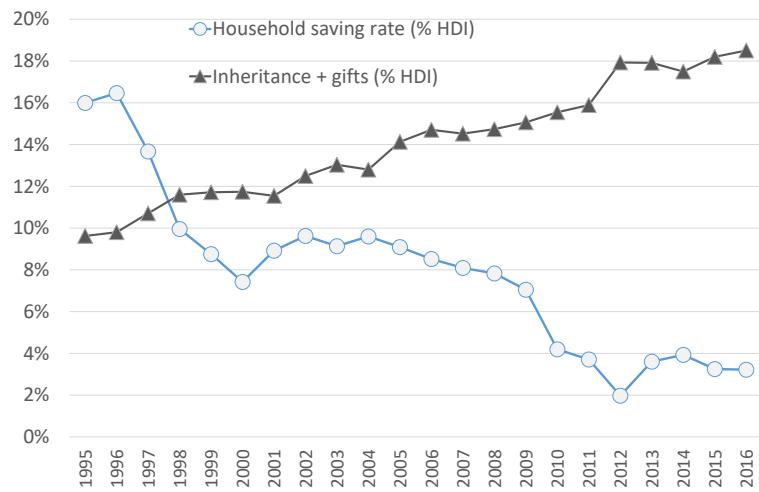


Figure 8: Inheritance vs saving rates (% of household disposable income -HDI)



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 percent of declared estates belonged to individuals who died at 80 years old or above; the number grew up to 60 percent in more recent years. In 1995, only 6% of total reported estates belonged to individuals with 50 years or less and this figure dropped to 2% in 2016. The gender composition of estates is more unbalanced in the mid 1990s when 60% of total reported estates are related to males. In 2016, this relative share is approximately 52% (see table 4). Yet, males are not over represented in all age groups. Reported estates belonged to males in 45% of the 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 the period approximately 50% of total reported estates, with a slight increase in such share 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 the age, gender, and geographical dimensions too. Total wealth left at death averaged €210 thousand in the mid-1990s and increased gradually to €330 thousand in 2007 at the onset of the great financial crash, plateaued till 2013 before dropping to €290 thousand in 2016 (cfr. figure 9). Estates of every age groups gained from mid-1990s to 2007 and, similarly, they all lost ground since then till 2016, especially age groups below 70 years old (see figure 10).

Not surprisingly, average net estate value left at death is generally increasing with age. The value of wealth and possessions declared on behalf of individuals who died young (20 years old or younger) is worth €90 thousand on average in 2016. For a 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 exist and remained relatively constant throughout the period. Female decedents estates are worth on average 80% of males decedents estates (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 contrary, 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. 12(a)).

The geographic heterogeneity of total net estate value is also substantial, and estates in the southern regions have systematically a lower value than those in the center and the 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 value recorded in the center. Although the relative gap by macro areas appears to be stable over time, the absolute gap, measured in 2016 €, increased over time from €80 thousand to €120 thousand on average. The gap by macro areas persist across all age groups, being larger for older groups (see 12(b)).

Figure 9: The evolution of the average net estate

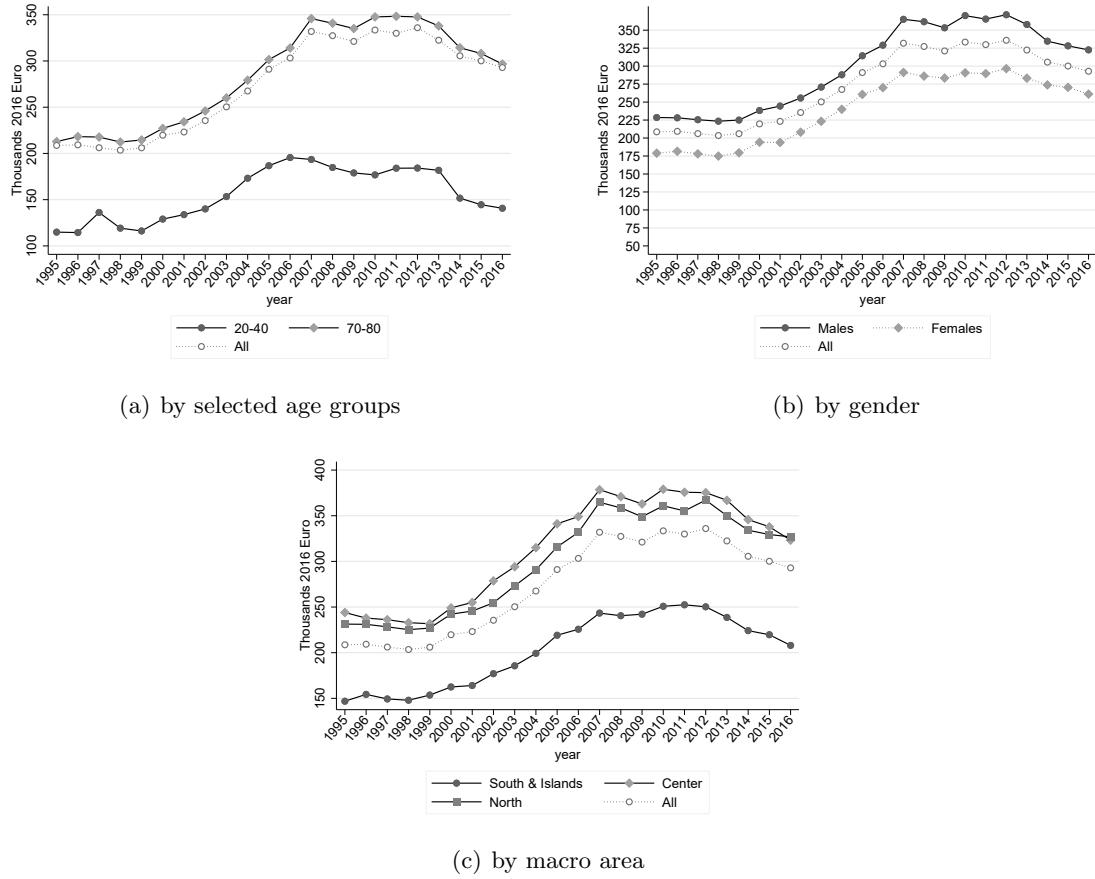


Figure 10: Average net estate across age groups: 1995, 2007, and 2016

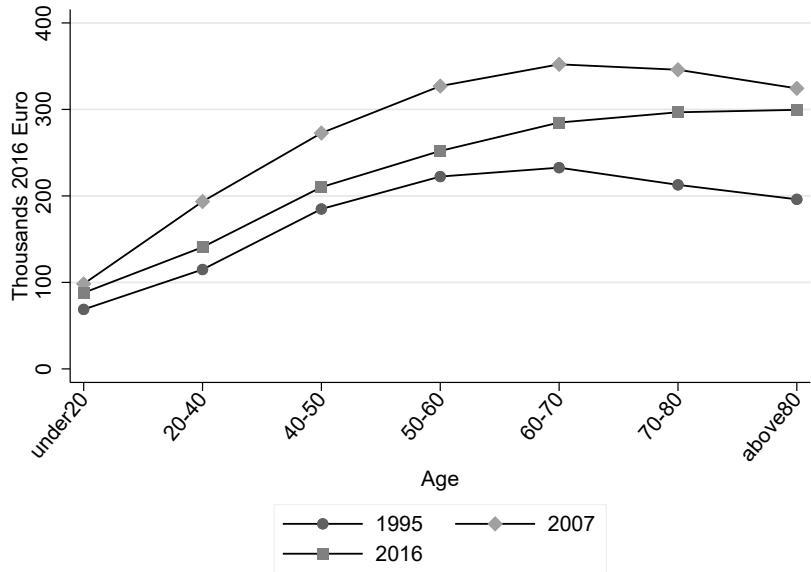
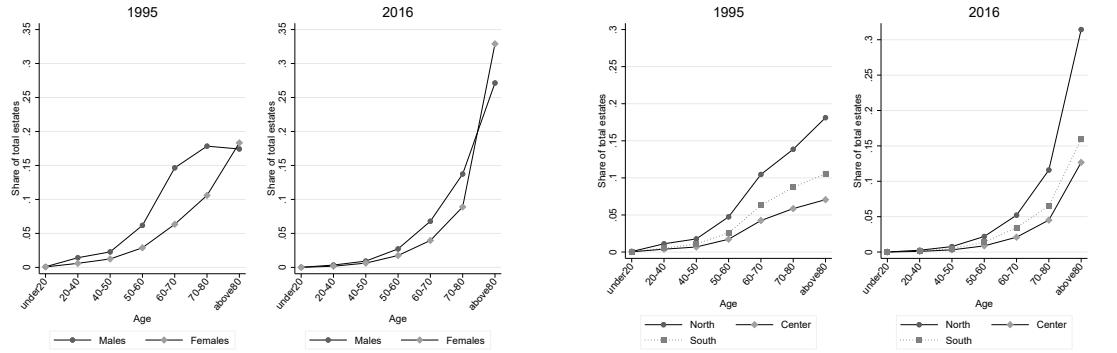


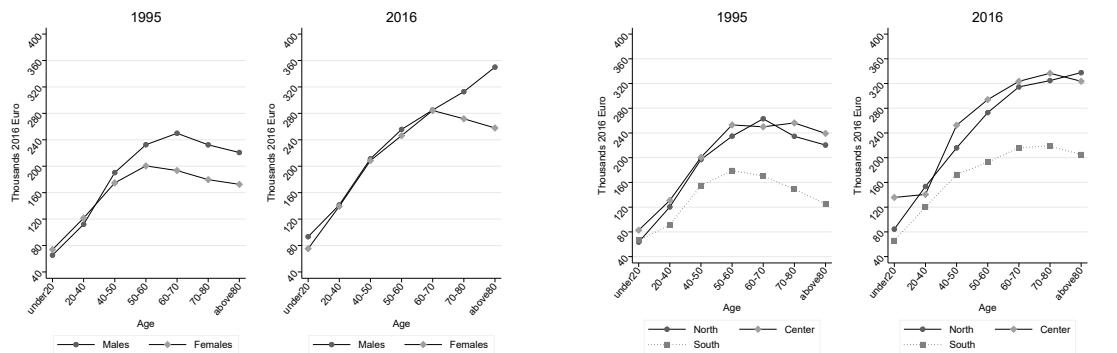
Figure 11: The age, gender, and geographical composition of reported estates left at death: 1995 vs 2016



(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 a death

In the previous section we described the heterogeneity of the portfolio of assets across different groups in the population including a selection of top fractiles (e.g. richest top 5, top 1 or top 0.01% of total estates).

One may also wonder what is the share of total estates held by different groups in the population and how these have evolved over time. In order to estimate measures of the 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 is 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 under-reporting. The derivation of total inheritance and gifts flow described in section 4 turns useful here. In particular, we can use column E1 of table 8 as the value of total estate. Differently from the total estate reported on the tax record the value accounts for the estate of non filers and different forms of under-reporting with the exception of those linked to tax exempt assets.²²

Estates bigger than €1 million accounted for 0.62% of total deaths in 1995 and 2.5% in 2016. The share of total estate represented by millionaire estates was 13.8% in 1995 and it grew to 24.7% in 2016 (cfr. figure 13). These figures, it is worth recalling, do not adjust for any under-reporting of total assets in the tax records.

Focusing on fixed groups of population would allow to better analyse the dynamics of estate concentration over time. In particular we can compute population percentiles as the number of estates as share of total decedent population in any given year (as derived from the the National official mortality records) and not as a share of the total decedents appearing in the tax records. We can interpolating 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 we are interested in.

Table 1 shows values of estate shares over time at different cutoffs of the upper-end estate distribution, namely showing 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 mid-1990s for a few years but increased gradually since then and till 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

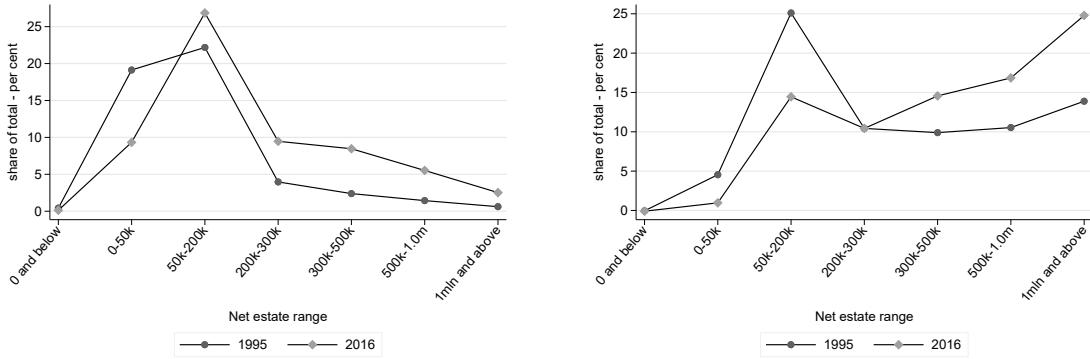
²²We could also follow an alternative approach used in the literature by Alvaredo et al. (2018) deriving the estimates of missing estates applying the average mortality rate to an estimate of total wealth of the missing living population, namely those people whose possessions are likely not come to notice to the 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 thousand approximately till 2014 and €100 thousand 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 with 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 under-reporting has changed substantially over time.

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

total estates held by the richest 1% of 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 substantially to 18.3% by 2012. From 2012 to 2016 the top 1% estate share 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 1 in 10 thousand estates (i.e. top 0.01% group) 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)

5.1 The composition of estates

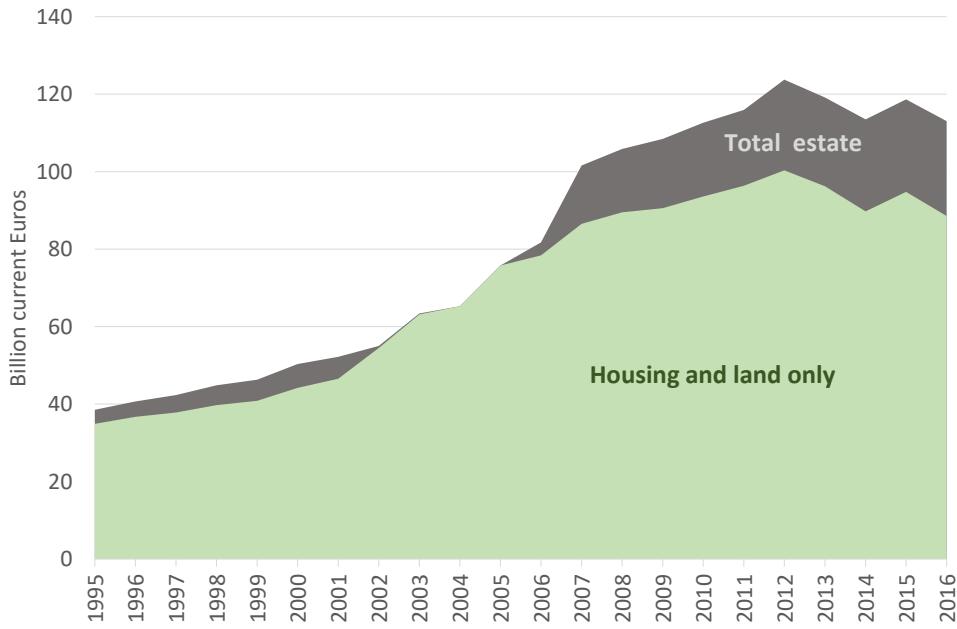
The wealth data obtained from digitized tax returns are grouped in four categories: real estate; business assets, equity and debt securities; other assets (including current and saving deposits, valuables, etc.); and liabilities and deductible expenses.²³ The data, therefore, lump together privately 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 home-owners in Italy, the number of inheritance tax filers who declare real estate assets is above 90 percent on average every year. Similarly, the total declared net estate value is also mostly composed of real estate assets: ranging from 90 percent in 1995 to 78 percent 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 the non-profit 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 to 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 is 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.

Nevertheless, our data preserve substantial heterogeneity of portfolio composition across the distribution of total estate. On the one hand the 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 size is composed of housing and land for the group of richest 0.01 percent 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. On the contrary, for the estates below the 99th 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.

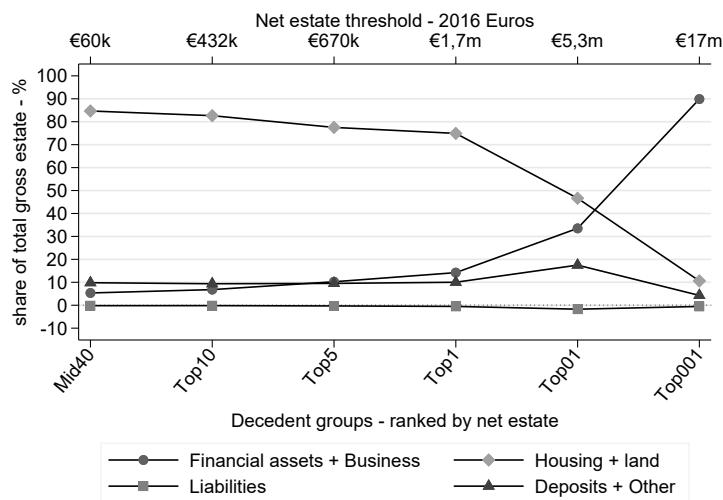
²³Starting from 2017, the paper module for the inheritance tax returns has been gradually dismissed and substituted by an electronic form which has considerable amount of additional details about the composition of the estates.

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 analyzes systematically 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 not necessarily 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. The millionaire estates were worth 14% of total estate in mid 1990s and almost 25% 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. On the contrary, 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 the use of estate tax data in Italy can be very fruitful to estimate reliable series of wealth concentration.

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 current distribution of wealth. As recalled in a recent work by Cannnari 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 “If 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 the inheritance experienced a threefold 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 wealth distribution too. As suggested by Cowell et al. (2018), wealth transfer taxes are very important for the “the long-run distribution of wealth, reducing equilibrium inequality (the ‘predisistribution’ effect) by a much larger amount than what is apparent in terms of the immediate impact of the tax (the ‘redistribution’ effect)”.

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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 than 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
	1.010496435	0.990893001	1.007822964	
	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.²⁴

²⁴The 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 house nominal price (BIS)	annual percentage increase cadastral rents (MEF)	Inheritance tax coefficients on cadastral rent (owner occupied houses)	Inheritance tax revaluation coefficient of cadastral rent	Market value/ cadastral value
Estimates based on 14* cadastral rend 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
8*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 (e.s. “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, as shown in table A4 (**ADD TABLE**), 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 appurtenant structure remains quite high even for the highest income class (86%). Therefore, unless the cadastral heterogeneity is systematically correlated to unobserved geographical variations, adjusting 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	236842.3	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	23857.4	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	Total	Frequency of observation						Memorandum items		
		Housing and land	Financial Assets	Deposits, valuables, and other	Liabilities	Assets sold	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

year	Total gross	Composition						Memorandum items		
		Housing and land	Financial Assets	Deposits, valuables, and other	Liabilities	Assets sold	Lifetime donations	Tax on global estate	Tax on inherited 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

year	N estates	N deaths	Total population identified	Source : Acciari et al. (2020)				
				current billion €			%	
				D	E	F	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%

year	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
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 1 **	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 undereporting of assets (excluding tax exempt assets); ***=adjusted for the estate of non-filers and undereporting 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	% Year						(current billion €) Year			% of HDI Year
	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 per- sonal wealth (NPW) - BoI	
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 undereporting of assets (excluding tax exempt assets); *** = adjusted for the estate of non-filers and undereporting of assets.

D Estate concentration

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

Year	Current billion €			Current billion €	Total net estate (adjusted for estates of non-filers)	Total deaths	%	
	Net estate range	Net reported estate	Number of estates				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	12.90	123493	51.38	556690	25.11%	22.18%	
1995	200k-300k	5.36	22092	51.38	556690	10.43%	3.97%	
1995	300k-500k	5.08	13291	51.38	556690	9.89%	2.39%	
1995	500k-1.0m	5.41	8003	51.38	556690	10.54%	1.44%	
1995	1mln and above	7.13	3439	51.38	556690	13.89%	0.62%	
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	13.25	125673	55.91	554576	23.70%	22.66%	
1996	200k-300k	5.93	24278	55.91	554576	10.61%	4.38%	
1996	300k-500k	5.46	14258	55.91	554576	9.77%	2.57%	
1996	500k-1.0m	6.00	8868	55.91	554576	10.73%	1.60%	
1996	1mln and above	7.43	3765	55.91	554576	13.28%	0.68%	
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	13.79	131008	61.70	561207	22.35%	23.34%	
1997	200k-300k	5.93	24370	61.70	561207	9.61%	4.34%	
1997	300k-500k	5.97	15619	61.70	561207	9.67%	2.78%	
1997	500k-1.0m	6.22	9177	61.70	561207	10.09%	1.64%	
1997	1mln and above	7.78	3907	61.70	561207	12.60%	0.70%	
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	14.60	138205	68.58	574231	21.29%	24.07%	
1998	200k-300k	6.32	25978	68.58	574231	9.21%	4.52%	
1998	300k-500k	6.49	17019	68.58	574231	9.46%	2.96%	
1998	500k-1.0m	6.68	9874	68.58	574231	9.74%	1.72%	
1998	1mln and above	8.04	4196	68.58	574231	11.73%	0.73%	
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	14.82	139893	71.63	567741	20.69%	24.64%	
1999	200k-300k	6.51	26765	71.63	567741	9.08%	4.71%	
1999	300k-500k	6.61	17364	71.63	567741	9.23%	3.06%	
1999	500k-1.0m	6.88	10146	71.63	567741	9.61%	1.79%	
1999	1mln and above	8.77	4389	71.63	567741	12.25%	0.77%	
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	15.10	140640	74.80	560121	20.19%	25.11%	
2000	200k-300k	6.68	27437	74.80	560121	8.93%	4.90%	
2000	300k-500k	7.68	20207	74.80	560121	10.26%	3.61%	
2000	500k-1.0m	7.70	11312	74.80	560121	10.30%	2.02%	
2000	1mln and above	10.65	5081	74.80	560121	14.24%	0.91%	

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

Year	Current billion €			Current billion €	Total net estate (adjusted for estates of non-filers)	Total deaths	%	
	Net estate range	Net reported estate	Number of estates				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	8.18	21485	75.59	556892	10.82%	3.86%	
2001	500k-1.0m	8.51	12490	75.59	556892	11.26%	2.24%	
2001	1mln and above	10.98	5413	75.59	556892	14.52%	0.97%	
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	6.30	13030	82.41	560390	7.65%	2.33%	
2002	500k-1.0m	10.09	11450	82.41	560390	12.24%	2.04%	
2002	1mln and above	8.70	3005	82.41	560390	10.56%	0.54%	
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	11.14	16409	89.69	584582	12.42%	2.81%	
2003	1mln and above	15.10	7537	89.69	584582	16.84%	1.29%	
2004	0 and below	0.01	13647	91.19	541908	0.02%	2.52%	
2004	0-50k	11.46	154932	91.19	541908	12.56%	28.59%	
2004	50k-200k	20.35	84985	91.19	541908	22.32%	15.68%	
2004	200k-300k	4.60	10307	91.19	541908	5.04%	1.90%	
2004	300k-500k	6.32	10761	91.19	541908	6.93%	1.99%	
2004	500k-1.0m	13.68	12794	91.19	541908	15.00%	2.36%	
2004	1mln and above	8.85	2403	91.19	541908	9.70%	0.44%	
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	14.47	21215	104.36	565149	13.87%	3.75%	
2005	1mln and above	21.29	10429	104.36	565149	20.40%	1.85%	
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	16.22	23807	113.77	555289	14.26%	4.29%	
2006	1mln and above	23.96	11494	113.77	555289	21.06%	2.07%	

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

Year	Current billion €			Current billion €	Total net estate (adjusted for estates of non-filers)	Total deaths	%	
	Net estate range	Net reported estate	Number of estates				Share of total net estate	Share of total deaths
2007	0 and below	-0.06	8966	118.33	569399	569399	-0.05%	1.57%
2007	0-50k	1.36	54400	118.33	569399	569399	1.15%	9.55%
2007	50k-200k	16.23	137242	118.33	569399	569399	13.72%	24.10%
2007	200k-300k	11.96	48780	118.33	569399	569399	10.11%	8.57%
2007	300k-500k	17.20	44828	118.33	569399	569399	14.54%	7.87%
2007	500k-1.0m	21.07	30765	118.33	569399	569399	17.81%	5.40%
2007	1mln and above	33.45	15686	118.33	569399	569399	28.27%	2.75%
2008	0 and below	-0.02	9046	120.95	578192	578192	-0.02%	1.56%
2008	0-50k	1.38	55684	120.95	578192	578192	1.14%	9.63%
2008	50k-200k	16.66	140177	120.95	578192	578192	13.77%	24.24%
2008	200k-300k	12.39	50506	120.95	578192	578192	10.24%	8.74%
2008	300k-500k	18.07	47041	120.95	578192	578192	14.94%	8.14%
2008	500k-1.0m	22.08	32325	120.95	578192	578192	18.25%	5.59%
2008	1mln and above	34.91	16431	120.95	578192	578192	28.86%	2.84%
2009	0 and below	-0.06	6657	125.75	585182	585182	-0.05%	1.14%
2009	0-50k	1.44	58834	125.75	585182	585182	1.14%	10.05%
2009	50k-200k	17.10	143981	125.75	585182	585182	13.60%	24.60%
2009	200k-300k	12.72	51836	125.75	585182	585182	10.11%	8.86%
2009	300k-500k	18.54	48318	125.75	585182	585182	14.74%	8.26%
2009	500k-1.0m	22.79	33325	125.75	585182	585182	18.12%	5.69%
2009	1mln and above	35.43	16514	125.75	585182	585182	28.18%	2.82%
2010	0 and below	-0.07	1935	125.65	581307	581307	-0.05%	0.33%
2010	0-50k	1.40	57241	125.65	581307	581307	1.12%	9.85%
2010	50k-200k	17.23	144395	125.65	581307	581307	13.71%	24.84%
2010	200k-300k	13.05	53172	125.65	581307	581307	10.39%	9.15%
2010	300k-500k	19.18	49924	125.65	581307	581307	15.26%	8.59%
2010	500k-1.0m	23.23	33972	125.65	581307	581307	18.49%	5.84%
2010	1mln and above	38.00	17395	125.65	581307	581307	30.24%	2.99%
2011	0 and below	-0.08	690	129.09	593427	593427	-0.06%	0.12%
2011	0-50k	1.41	57529	129.09	593427	593427	1.10%	9.69%
2011	50k-200k	17.71	148167	129.09	593427	593427	13.72%	24.97%
2011	200k-300k	13.52	55074	129.09	593427	593427	10.47%	9.28%
2011	300k-500k	19.83	51645	129.09	593427	593427	15.36%	8.70%
2011	500k-1.0m	24.61	36027	129.09	593427	593427	19.06%	6.07%
2011	1mln and above	38.33	18011	129.09	593427	593427	29.69%	3.04%
2012	0 and below	-0.15	751	131.45	612883	612883	-0.11%	0.12%
2012	0-50k	1.42	57413	131.45	612883	612883	1.08%	9.37%
2012	50k-200k	18.28	152678	131.45	612883	612883	13.91%	24.91%
2012	200k-300k	14.11	57461	131.45	612883	612883	10.73%	9.38%
2012	300k-500k	20.96	54542	131.45	612883	612883	15.94%	8.90%
2012	500k-1.0m	25.70	37637	131.45	612883	612883	19.55%	6.14%
2012	1mln and above	42.76	19152	131.45	612883	612883	32.53%	3.12%

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

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

E Estate tabulations

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

1995			1996			1997		
Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)
< -10000	2333	-23759	< -10000	2561	-39419	< -10000	3821	-101828
0	5222	2531	0	4459	2222	0	3953	1922
1000	13403	37769	1000	12676	36298	1000	11519	32757
5000	12410	91686	5000	11424	84391	5000	10955	80767
10000	20774	307453	10000	19638	292725	10000	20127	298873
20000	54671	1894251	20000	53148	1850527	20000	54314	1887330
50000	66038	4797224	50000	66045	4817373	50000	69123	5039471
100000	36428	4467469	100000	37475	4596467	100000	38861	4765624
150000	21027	3634583	150000	22153	3835513	150000	23024	3983681
200000	22092	5358487	200000	24278	5934725	200000	24370	5931223
300000	8439	2918913	300000	8950	3094372	300000	9938	3434737
400000	4852	2164286	400000	5308	2366229	400000	5681	2531888
500000	3057	1669517	500000	3377	1844578	500000	3420	1866739
600000	1953	1263754	600000	2127	1376461	600000	2254	1456601
700000	1319	986402	700000	1506	1123980	700000	1533	1145834
800000	918	777408	800000	1070	906335	800000	1137	965708
900000	756	715916	900000	788	745636	900000	833	789383
1000000	1830	2202744	1000000	1981	2385317	1000000	2049	2467008
1500000	661	1132961	1500000	782	1339235	1500000	847	1452206
2000000	360	802659	2000000	390	870357	2000000	393	877896
2500000	194	530913	2500000	202	548173	2500000	192	524457
3000000	125	403136	3000000	125	402090	3000000	110	354897
3500000	69	258417	3500000	87	324584	3500000	86	322954
4000000	44	187287	4000000	58	244684	4000000	56	236870
4500000	35	166391	4500000	29	137294	4500000	44	207823
5000000	43	233675	5000000	42	224984	5000000	44	242644
6000000	23	149151	6000000	18	115565	6000000	29	187634
7000000	16	118644	7000000	12	90927	7000000	11	81896
8000000	10	85647	8000000	9	77561	8000000	15	126140
9000000	7	65192	9000000	6	56683	9000000	9	84576
10000000	18	232481	10000000	18	232722	10000000	15	199587
≥ 20000000	4	565188	≥ 20000000	6	376744	≥ 20000000	7	408547
1998			1999			2000		
Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)
< -10000	5412	-53263	< -10000	5516	-100295	< -10000	6685	-27087
0	3878	1904	0	3446	1708	0	3410	1690
1000	11183	31932	1000	10668	30694	1000	9994	28878
5000	10927	80740	5000	10663	78916	5000	9627	71650
10000	20400	303262	10000	19428	288034	10000	18084	270184
20000	55557	1933070	20000	54994	1919628	20000	51777	1814439
50000	72071	5260143	50000	72486	5292064	50000	70857	5197812
100000	41634	5102715	100000	42365	5196516	100000	43433	5337985
150000	24500	4235908	150000	25042	430999	150000	26350	4564191
200000	25978	6315252	200000	26765	6506409	200000	27437	6679703
300000	10936	3779466	300000	11164	3851604	300000	13073	4508135
400000	6083	2706274	400000	6200	2759712	400000	7134	3167232
500000	3728	2035844	500000	3782	2066258	500000	4075	2226174
600000	2419	1564035	600000	2514	1628176	600000	2832	1831041
700000	1624	1212847	700000	1672	1249814	700000	1917	1431574
800000	1242	1052594	800000	1262	1069105	800000	1429	1213412
900000	861	817124	900000	916	866824	900000	1059	1002305
1000000	2256	2710409	1000000	2305	2782727	1000000	2689	3236349
1500000	884	1523069	1500000	898	1538490	1500000	1051	1804292
2000000	423	943211	2000000	440	979065	2000000	457	1022448
2500000	207	562494	2500000	242	659282	2500000	303	824497
3000000	115	373368	3000000	137	440463	3000000	162	524098
3500000	75	278649	3500000	81	300935	3500000	95	354698
4000000	40	168785	4000000	63	268031	4000000	64	270414
4500000	42	199195	4500000	53	249672	4500000	43	203297
5000000	55	298632	5000000	50	271178	5000000	64	352270
6000000	31	199231	6000000	48	310176	6000000	50	324957
7000000	20	151263	7000000	21	156759	7000000	26	194867
8000000	8	67587	8000000	13	110712	8000000	12	101234
9000000	5	47865	9000000	6	56761	9000000	10	94236
10000000	29	367854	10000000	25	293306	10000000	41	565245
≥ 20000000	6	153049	≥ 20000000	7	350372	≥ 20000000	14	777360

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

2001			2002			2003		
Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)
< -10000	7181	-196341	< -10000	10140	623	< -10000	7852	-1046
0	2902	1409	0	6245	18084	0	1588	788
1000	8482	24588	1000	6925	51558	1000	5989	17416
5000	8459	63034	5000	14135	213310	5000	6259	46855
10000	16411	245937	10000	42034	1480075	10000	13222	199804
20000	48537	1700471	20000	66924	4947097	20000	40030	1413897
50000	69796	5130335	50000	45112	5550774	50000	66770	4963582
100000	44115	5421800	100000	28338	4905163	100000	48426	5965123
150000	27161	4703817	150000	31146	7583044	150000	31562	5465669
200000	28651	6971328	200000	14922	5141154	200000	35509	8655488
300000	13812	4758358	300000	8103	3612050	300000	17463	6024073
400000	7673	3416859	400000	4927	2691273	400000	9865	4398153
500000	4571	2495768	500000	3207	2073427	500000	6110	3336961
600000	3004	1942229	600000	2215	1655582	600000	4012	2598414
700000	2140	1599334	700000	1644	1393519	700000	2738	2042254
800000	1594	1351921	800000	1250	1183814	800000	1991	1686963
900000	1181	1120313	900000	3134	3779851	900000	1558	1476271
1000000	2862	3453910	1000000	1323	2274948	1000000	3926	4715707
1500000	1074	1848429	1500000	625	1388212	1500000	1538	2644466
2000000	548	1215435	2000000	331	900961	2000000	761	1684687
2500000	268	731592	2500000	213	694006	2500000	394	1075977
3000000	203	656752	3000000	131	488836	3000000	265	856164
3500000	116	434894	3500000	85	362520	3500000	154	577986
4000000	72	303972	4000000	57	269090	4000000	100	423079
4500000	46	217697	4500000	82	447266	4500000	72	340800
5000000	74	403728	5000000	44	285672	5000000	117	639865
6000000	51	331027	6000000	21	158046	6000000	66	431787
7000000	26	194253	7000000	22	186978	7000000	36	269224
8000000	12	102981	8000000	11	104453	8000000	23	195652
9000000	10	94169	9000000	49	648506	9000000	19	179253
10000000	39	487997	10000000	11	490125	10000000	51	655177
≥ 20000000	12	498745	≥ 20000000	0	0	≥ 20000000	15	414054
2004			2005			2006		
Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total net estate (thousand €)
< -10000	7693	14369	< -10000	8051	-131	< -10000	8794	-3670
0	1206	39834	0	1152	587	0	1192	581
1000	4748	165884	1000	4406	13056	1000	4147	12327
5000	5322	1189592	5000	4905	36645	5000	4580	34295
10000	10975	4387100	10000	9583	143953	10000	9022	135474
20000	33787	5674720	20000	31562	1109405	20000	30192	1064828
50000	58848	5402445	50000	57415	4301975	50000	54752	4116607
100000	46000	8695897	100000	47618	5895338	100000	46730	5789614
150000	31189	6255574	150000	33192	5758174	150000	34530	5994885
200000	35646	4595192	200000	40314	9860828	200000	42410	10379634
300000	18150	3504642	300000	21360	7374421	300000	23037	7957471
400000	10307	2813271	400000	12398	5521923	400000	13396	5973811
500000	6416	2270679	500000	7717	4221401	500000	8641	4719142
600000	4345	1843767	600000	5083	3285881	600000	5913	3823049
700000	3040	1549927	700000	3673	2744501	700000	3972	2967811
800000	2174	5167970	800000	2732	2315135	800000	2968	2516877
900000	1635	2845001	900000	2010	1904886	900000	2313	2193303
1000000	4290	1890066	1000000	5320	6410290	1000000	5788	6981593
1500000	1655	1340155	1500000	2105	3618948	1500000	2304	3964276
2000000	851	856274	2000000	1037	2296365	2000000	1203	2679161
2500000	492	792514	2500000	622	1696613	2500000	664	1810756
3000000	265	525201	3000000	356	1152352	3000000	448	1448590
3500000	212	435625	3500000	258	961624	3500000	278	1040563
4000000	124	704582	4000000	171	723546	4000000	154	651175
4500000	92	422300	4500000	109	516091	4500000	128	606231
5000000	130	350779	5000000	138	753271	5000000	167	907949
6000000	65	211131	6000000	86	557509	6000000	110	706015
7000000	47	266846	7000000	58	434057	7000000	57	425738
8000000	25	861239	8000000	49	412512	8000000	53	449275
9000000	28	190091	9000000	27	257496	9000000	24	229773
10000000	65	0	10000000	73	951730	10000000	98	1314455
≥ 20000000	7	0	≥ 20000000	20	546864	≥ 20000000	18	748153

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

2007			2008			2009		
Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)
< -10000	8966	-63047	< -10000	9046	-24995	< -10000	6657	-59183
0	1735	852	0	1972	945	0	2258	1090
1000	5024	14533	1000	5330	15534	1000	5883	16864
5000	5090	38298	5000	5194	39036	5000	5625	42016
10000	9521	143558	10000	9728	146551	10000	10201	153235
20000	33030	1159903	20000	33460	1178668	20000	34867	1225939
50000	53276	3986100	50000	53746	4025985	50000	55311	4142166
100000	47211	5860939	100000	48242	5992855	100000	49523	6154072
150000	36755	6386928	150000	38189	6638888	150000	39147	6806043
200000	48780	11958024	200000	50506	12388349	200000	51836	12717093
300000	27777	9600222	300000	29009	10026970	300000	30045	10383501
400000	17051	7603163	400000	18032	8045018	400000	18273	8155662
500000	10893	5953262	500000	11599	6340806	500000	11813	6462264
600000	7536	4873151	600000	7813	5052626	600000	8209	5310303
700000	5241	3914500	700000	5658	4224551	700000	5780	4317906
800000	3953	3351947	800000	4142	3509617	800000	4321	3664238
900000	3142	2977728	900000	3113	2951127	900000	3202	3035019
1000000	7883	9529809	1000000	8255	9968916	1000000	8282	10004135
1500000	3033	5207058	1500000	3303	5673201	1500000	3327	5705107
2000000	1698	3784562	2000000	1649	3671076	2000000	1728	3847509
2500000	889	2424841	2500000	932	2540341	2500000	945	2581628
3000000	579	1870523	3000000	586	1893946	3000000	600	1940917
3500000	364	1355858	3500000	416	1559747	3500000	412	1538555
4000000	264	1121503	4000000	274	1161963	4000000	251	1061323
4500000	178	838537	4500000	209	986356	4500000	181	860547
5000000	247	1340485	5000000	243	1321135	5000000	259	1416666
6000000	148	952705	6000000	149	957984	6000000	140	908590
7000000	104	778868	7000000	101	751471	7000000	86	639411
8000000	68	571367	8000000	78	660358	8000000	66	554092
9000000	51	481582	9000000	51	484253	9000000	66	622207
10000000	144	1898669	10000000	151	2017903	10000000	132	1812301
≥ 20000000	36	1288645	≥ 20000000	34	1261746	≥ 20000000	39	1941160
2010			2011			2012		
Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)
< -10000	1935	-65091	< -10000	690	-83304	< -10000	751	-150111
0	2200	1044	0	2086	984	0	1938	914
1000	5703	16296	1000	5674	16389	1000	5510	16029
5000	5462	40859	5000	5398	40331	5000	5365	39956
10000	9941	148460	10000	9972	149331	10000	10009	149522
20000	33935	1195172	20000	34399	1207925	20000	34591	1215649
50000	54788	4109658	50000	55932	4193258	50000	57020	4269221
100000	49752	6182853	100000	50858	6321365	100000	52984	6592490
150000	39855	6935044	150000	41377	7194933	150000	42674	7421693
200000	53172	13050343	200000	55074	13515762	200000	57461	14105248
300000	30794	10648575	300000	31946	11037201	300000	33642	11634416
400000	19130	8529725	400000	19699	8792413	400000	20900	9322940
500000	12026	6572213	500000	12893	7040933	500000	13568	7411604
600000	8346	5398761	600000	8801	5696801	600000	9082	5875710
700000	5937	4434939	700000	6233	4661979	700000	6567	4909971
800000	4396	3724632	800000	4642	3932773	800000	4799	4068510
900000	3267	3097443	900000	3458	3277410	900000	3621	3434041
1000000	8637	10430743	1000000	8994	10855029	1000000	9601	11595050
1500000	3498	6003772	1500000	3567	6134489	1500000	3837	6604546
2000000	1753	3912279	2000000	1876	4178319	2000000	1896	4220110
2500000	1003	2742663	2500000	1124	3072170	2500000	1102	3007899
3000000	654	2117521	3000000	661	2134641	3000000	676	2185216
3500000	414	1546226	3500000	414	1549648	3500000	470	1760378
4000000	304	1292401	4000000	285	1210242	4000000	316	1383977
4500000	206	972071	4500000	204	965176	4500000	245	1164332
5000000	294	1602721	5000000	280	1528769	5000000	297	1623620
6000000	169	1087704	6000000	173	1118857	6000000	194	1246692
7000000	116	863005	7000000	101	754180	7000000	109	811700
8000000	79	673361	8000000	82	691059	8000000	85	721872
9000000	53	500386	9000000	62	585437	9000000	55	518436
10000000	160	2155415	10000000	151	2003054	10000000	193	2544530
≥ 20000000	55	2097471	≥ 20000000	37	1552987	≥ 20000000	76	3416888

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

2013			2014			2015		
Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)	Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)
< -10000	718	-116764	< -10000	605	-71977	< -10000	770	-108811
0	1985	879	0	2042	918	0	2354	1005
1000	5659	16365	1000	5666	16371	1000	6749	19475
5000	5418	40371	5000	5490	40699	5000	6480	48024
10000	9791	145648	10000	10047	150364	10000	10818	160631
20000	34587	1217446	20000	34914	1232996	20000	31930	1122900
50000	56972	4274149	50000	59880	4497413	50000	61285	4617284
100000	52676	6549617	100000	55103	6843076	100000	59655	7409473
150000	42716	7424330	150000	43035	7476601	150000	46904	8154302
200000	56936	13965092	200000	55897	13700290	200000	60416	14798465
300000	32932	11390728	300000	31866	11014806	300000	34382	11882278
400000	20437	9114399	400000	19432	8667237	400000	20760	9262936
500000	12978	7095947	500000	12363	6755853	500000	13184	7205782
600000	8981	5810705	600000	8311	5377274	600000	8907	5759126
700000	6227	4658339	700000	5876	4393973	700000	6211	4643298
800000	4723	4002135	800000	4284	3631763	800000	4530	3835209
900000	3532	3347037	900000	3248	3078779	900000	3513	3330194
1000000	9212	11096902	1000000	8270	9986101	1000000	8750	10543593
1500000	3597	6183182	1500000	3319	5697638	1500000	3466	5965718
2000000	1779	3964635	2000000	1635	3639877	2000000	1681	3730674
2500000	1015	2778383	2500000	933	2538500	2500000	938	2560568
3000000	665	2147352	3000000	548	1768534	3000000	554	1793071
3500000	412	1536382	3500000	343	1286996	3500000	386	1439283
4000000	305	1291704	4000000	247	1043473	4000000	247	1046974
4500000	199	944134	4500000	180	854162	4500000	186	881880
5000000	294	1608108	5000000	252	1372689	5000000	222	1213063
6000000	147	952260	6000000	144	933841	6000000	134	864495
7000000	113	846305	7000000	105	776472	7000000	91	676083
8000000	89	748826	8000000	65	551527	8000000	64	541940
9000000	50	473701	9000000	56	528288	9000000	68	643988
10000000	181	2419057	10000000	148	1951053	10000000	136	1766562
≥ 20000000	62	2468048	≥ 20000000	71	3101123	≥ 20000000	52	2099018
2016								
Lower net estate range (€)	Number of tax records	Total reported net estate (thousand €)						
< -10000	786	-133251						
0	2544	1093						
1000	6693	19244						
5000	6351	47213						
10000	10533	155961						
20000	31279	1101660						
50000	61148	4612438						
100000	58567	7274953						
150000	45513	7904666						
200000	58274	14287975						
300000	32553	11237185						
400000	19521	8708049						
500000	12502	6828708						
600000	8353	5401442						
700000	5844	4365674						
800000	4115	3485995						
900000	3160	2996825						
1000000	8117	9770172						
1500000	3146	5395096						
2000000	1458	3240150						
2500000	845	2309142						
3000000	496	1604684						
3500000	348	1303271						
4000000	248	1052484						
4500000	166	784489						
5000000	225	1238510						
6000000	142	921434						
7000000	77	573448						
8000000	51	432833						
9000000	36	342019						
10000000	123	1653268						
≥ 20000000	45	3342701						