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PRE-DEATH GIFTS AND REGRESSIVE WEALTH TRANSFER TAXATION: EVIDENCE FROM BELGIUM

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PRE-DEATH GIFTS AND REGRESSIVE WEALTH TRANSFER TAXATION: EVIDENCE FROM BELGIUM*

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Abstract

The Belgian wealth transfer tax system stands out internationally by the large wedge between inheritance and gift tax rates, even shortly before death. I document an increased use of gifts at the top of the distribution, thereby rendering the wealth transfer tax system regressive at the very top despite highly progressive inheritance tax rates. I further analyze the wealth transfer distribution by gender, age, region, and education. The research is based on 2009-2022 administrative inheritance tax data with full population coverage, linked to gift tax microdata, census data, and national registry data. I compare the administrative transfer flows to HFCS survey data, finding substantial undercoverage in HFCS data. This finding suggests caution in interpreting survey-based estimates of wealth transfer flows.

Keywords: Inheritance, gift, wealth transfer, inequality, Belgium

JEL Codes: D3, G5, H2, N3

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1 Introduction

Motivation. Aggregate wealth in Belgium is high and of increasing importance. Belgium's wealth-to-income ratio in 2022 is around 6.5 times national income, one of the highest ratios in the world.[1] The wealth-to-income ratio in 1980 (the first available data year) was slightly over 3.5 times national income, meaning it has risen by over 80% in the last four decades.[2]

Wealth transfers (i.e. inheritances and gifts) are a crucial channel of household-level wealth accumulation. In Western countries, the importance of wealth transfers compared to national income is on a rapidly increasing trajectory (Acciari and Morelli 2022). Seminal work by Piketty (2011) for France, and later work for Sweden (Ohlsson et al. 2020), the UK (Atkinson 2018), Germany (Schinke 2012), Italy (Acciari and Morelli 2022), and the US (Alvaredo et al. 2017) all indicate rising transfer-to-income ratios in recent decades.

In a context where wealth gains a renewed importance, understanding the nature of wealth transfers and their distribution is crucial (Acciari and Morelli 2022). Moreover, inheritance taxation is sometimes seen as an important policy alternative to capital income or wealth taxation in order to lower wealth inequality or correct for regressive income taxation (Boadway and Keen 2026). Using inheritance taxation as a policy tool requires a good understanding of the distribution of wealth transfers and the tax system's impact on this distribution.

The Belgian wealth transfer tax system stands out by the large gap between inheritance and gift tax rates, up to the moment of death. Here I investigate in detail the distribution of estates and pre-death gifts in Belgium, and the distributive implications of the Belgian wealth transfer tax system.

Contribution. Using administrative microdata on wealth transfers, I make four main contributions. First, I provide a detailed description of the timing and distribution of estates and pre-death gifts in Belgium. Second, I analyse the distributive implications of the Belgian wealth transfer tax system. Third, I quantify the fiscal cost of the gift-inheritance tax wedge. Lastly, I show that survey data substantially undercounts wealth transfer flows, underscoring the value of administrative microdata for analysing wealth transfers.

Main findings. Pre-death gifts in Belgium tend to take place shortly before death, with gifts spiking the day before death. Pre-death registered gifts are highly concentrated with the top 1% holding 58% of all gifts, and around 90% of decedents having no registered gift in the 3 years before death. In contrast, the estate distribution is much more equal, with the top 1% holding 15% of all estates.

The joint estate and pre-death gift distribution is unequal along several dimensions. Men and highly educated individuals are highly overrepresented at the top and underrepresented at the bottom. Flemish individuals are overrepresented at the top and underrepresented at the bottom, while the opposite is true for Walloon decedents. Interestingly, decedents from Brussels are overrepresented at both the bottom and the top of the distribution, indicating high inequality in wealth at death. Younger decedents (40-79 years old) are overrepresented at the top. In contrast, older decedents (80-99 years old) are underrepresented at both the bottom and the top, possibly due to

[1] See wid.world.

[2] As per wid.world estimates.

lifecycle effects and the social gradient in mortality.

Estates are generally taxed progressively throughout the distribution. However, when taking pre-death gifts into account, the Belgian wealth transfer tax system becomes strongly regressive from the top 0.1% of the distribution onwards. This regressivity reflects both the concentration of gifts at the top and the high share of lower-taxed movable property gifts compared to immovable property gifts at the top. Moreover, decedents at the top of the distribution are more likely to time their registered gifts shortly before death, which may suggest use of those gifts for tax optimisation purposes.

The tax wedge between pre-death gifts and inheritances entails a substantial fiscal cost. Under the observed pre-death gifting behaviour, the foregone tax revenue from the wedge amounts to 125-710 million euros per year, depending on the pre-death gift time horizon considered. Such an amount would suffice to completely eliminate wealth transfer taxation on between 23-50% of decedents, or to reduce the tax burden on all estates with 1 896 to 15 854 euros.

Much research on wealth transfers relies on survey data. As I show by comparing administrative and survey-based transfer flows, such survey data substantially undercounts wealth transfers, at least in the Belgian context. This underscores the value of using administrative microdata to obtain a more complete picture of Belgium's wealth transfer distribution.

Outline. The paper is structured as follows. Section 2 gives a brief overview of the Belgian wealth transfer tax system and a comparison with other European countries. Section 3 describes the data underlying the analysis, the imputation process for missing data, and the scope of the analysis. Section 4 goes on to analyse the distribution of wealth transfers across the decedent population, and Section 5 analyses the tax regressivity of the Belgian wealth transfer tax system. In Section 6 I quantify the fiscal cost of the gift-inheritance tax wedge. Lastly, Section 7 shows that administrative data on wealth transfers is much more reliable than the available survey data. Section 8 concludes.

2 Legal context

In this Section I first give an overview of the Belgian wealth transfer tax system. I then compare the Belgian system to other European countries.

2.1 Belgian wealth transfer tax system

Inheritance taxation. In principle the entire estate of persons whose de facto main residence is situated in Belgium at the time of their death is subject to inheritance taxation. Valuation is at market value, while liabilities at death and funeral costs are subtractable. Unregistered gifts up to 3 years before death are considered to be part of the estate for tax purposes.[3] Unregistered gifts are gifts which are not officially registered and on which no gift tax is thus due (see below). Tax rates are 'doubly progressive', i.e. differ by degree of kinship and by the value of the inheritance.

[3] In Wallonia this period has been heightened to 5 years from 2022 onwards (Bourgeois and Zee 2022), in Flanders this period has been heigtened likewise to 5 years from 2025 onwards, and in Brussels from 2026 onwards.

Succession law has been regionalised since 1989 (Decoster et al. 2009). Since then, the place of fiscal residence determines which regional tax system is applicable (Delanote 2022). Most notably and only in Flanders, since 1997 'movable' and 'immovable' property are taxed according to the same tariffs but separately, implying a large tax cut for inheritances made up of both movable and immovable property (Verdonck 2009).[4] Immovable assets consist of land, buildings, and rights on land and buildings. All other assets are classified as movable.

The nominal inheritance tax schedule in 2025 shows small differences between regions (Figure 1, panel a). However, the difference becomes larger for inheritances made up of both movable and immovable property. In the extreme case of a 50-50 split between movable and immovable property, the nominal marginal tax rate can be almost three times lower in Flanders than in Brussels and Wallonia for values between 250k and 500k.

Gift taxation. Only gifts registered in Belgium are subject to gift taxation. Immovable property situated in Belgium can only be gifted with registration in Belgium (and is thus always subject to transfer taxation). Gifts of immovable property situated outside Belgium are not subject to Belgian gift taxation. Movable property can be gifted without registration to some extent.[5] For example, deposits or shares held through a securities account can be gifted tax free if unregistered.

Gift law was regionalised in 2002 (SERV 2010). In 2004, Flanders aggressively lowered the tax rate on gifts of movable property. As a result, the associated Flemish tax revenue increased by 450% in 2005 compared to 2003. Brussels and Wallonia implemented a similar reform in 2005 and 2006 respectively, which led to substantial increases in tax revenue in both regions. The tax revenue increase indicates that registered gifts of movable property became much more common after the gift tax rate cut.

From 2015 onwards, the tax rate on gifts of immovable property was lowered in Flanders, with the explicit reason of encouraging such gifts and increasing short-term government revenue. From 2016 onwards, the tax rates on immovable property gifts in Brussels were lowered to mimic the Flemish rates. In 2017, the Walloonian tax rates on immovable property gifts were lowered somewhat, but this lower tax rate did not induce heightened property gifts (in contrast to Flanders and Brussels). In 2018, the Walloonian tax rates were lowered to similar levels as in Flanders.

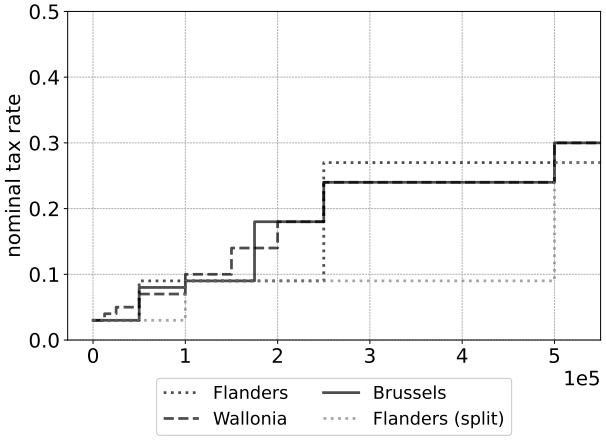
Regional gift tax schemes are highly similar in 2025 (Figure 1, panel b). The only difference is that movable property gifts in Wallonia are taxed at a slightly higher rate (3.3% instead of 3%).

Tax wedge. There is a large tax wedge between inheritance and movable gift tax rates in Belgium (Figure 1, panel c). There is a considerably smaller yet still substantial tax wedge between inheritance and immovable gift tax rates.

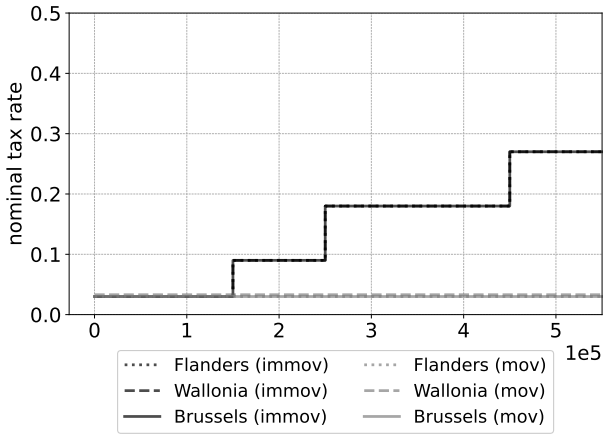
Exemptions and reductions. The Belgian wealth transfer taxation system is complex, containing many exemptions and reductions that are left undiscussed here. However, exempted and reduced assets are in principle still registered at their total market value in the inheritance and registered gift tax data. An inheritance tax declaration is also required if the deceased person had net liabili-

[4]The stated reason for this split was to encourage tax payers to disclose more movable property, since declared movable property is easier to invest (as it is legally obtained) than undeclared movable property (Deblauwe 1997).

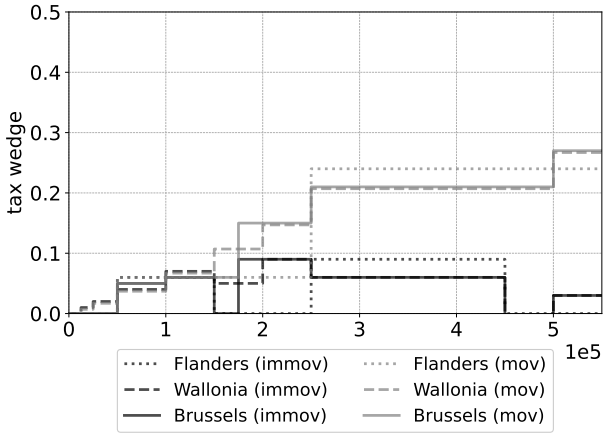
[5]Unregistered gifts of movable property were subject to inheritance taxation if the donor died within 3 years. This pre-death period has been heightened to 5 years in Wallonia in 2022 (Bourgeois and Zee 2022), in Flanders in 2025, and in Brussels in 2026.



(a) Nominal marginal inheritance tax rate



(b) Nominal marginal gift tax rate



(c) Tax wedge (inheritance minus gift tax rate)

Figure 1: Nominal marginal inheritance tax rate (panel a), gift tax rate (panel b), and tax wedge by region, 2025. This figure shows the nominal inheritance and gift tax rates for wealth transfers to children. The split Flanders inheritance rate schedule shows the rates in case of a 50-50 split between immovable and movable assets, given that those are taxed seperately but according to the same rate schedule. The tax wedge is defined as the difference between the nominal marginal inheritance and the gift tax rate. **Source:** EY (2025).

ties or if the inheritance is fully exempted.

2.2 International comparison

Here I compare the Belgian wealth transfer tax system to France, Germany, Italy, Spain, the Netherlands, and the UK. These include the four largest European economies and Belgium's main neighbours.[6] A similar country selection (excluding the Netherlands) is used in comparative work by Nolan et al. (2022).

[6]Luxembourg has a doubly progressive inheritance tax schedule and a flat rate gift tax schedule differentiated by degree of kinship. However, direct line inheritances are untaxed (on the condition that each heir receives their legal share) whereas a flat 1.8% rate is applied to direct line gifts. Luxembourg also allows for tax-free unregistered gifts. See EY (2025) for a discussion.

Inheritance taxation. France, Germany, Spain, and the Netherlands have doubly progressive inheritance tax schedules, similar to Belgium.[7] Italy has a flat inheritance tax rate differentiated by degree of kinship. In contrast, the UK has an estate tax with a flat rate. An estate tax is levied on the net wealth of the deceased person, rather than an inheritance tax levied on the receiver.

Clearly, Belgium's tax rate scheme is not particulary progressive compared to other countries (Figure 2, panel a). France has much higher marginal tax rates at the top of the distribution. Moreover, likewise comparable to Belgium, the Spanish inheritance tax has no base exemption for children, whereas the Dutch inheritance tax has a small base exemption of around 25k.

Gift taxation. France, Germany, Italy, Spain, and the Netherlands all tax gifts according to the same rate schedule as inheritances.[8] In France gifts made up to 15 years before a new gift or inheritance are added to the latest transfer to determine the applicable tax rate. In Germany the same policy applies but over a 10 year period. In Spain gifts made up to 4 years before death are added to the inheritance, while gifts within a 3 year period are considered to be a single gift for tax purposes. In the Netherlands gifts within the same calendar year are added together for tax purposes, while gifts within 180 days before death are considered part of the estate for inheritance tax purposes. The UK considers gifts made up to 7 years before death part of the estate, although the estate tax rate applied to those gift declines with the elapsed time (gifts made 0-3 years before death are fully taxed, gifts made 3-7 years before death are taxed at reduced rates).

In contrast to Belgium, other countries do not distinguish between movable and immovable property for gifts taxation (Figure 2, panel b). Gift tax rates on movable property are generally much higher in other countries compared to Belgium, although the Belgium system does not have the relatively high base exemption that exists in Germany and Italy. The UK is an outlier given its non-taxation of gifts made over 7 years before death.[9]

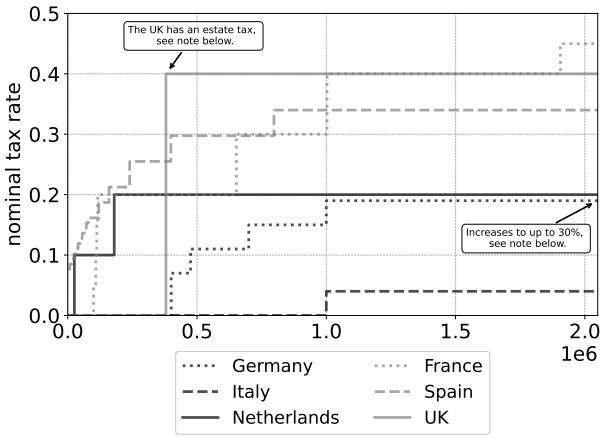
Tax wedge. In contrast to Belgium, other countries do not have a tax wedge between inheritance and gift tax rates (Figure 2, panel c). The only exception is the UK due to its non-taxation of gifts.

Exemptions and reductions. All countries have various exemptions and reductions in place, which are left undiscussed here. Notably, all countries at least partially exempt certain business assets from wealth transfer taxation.

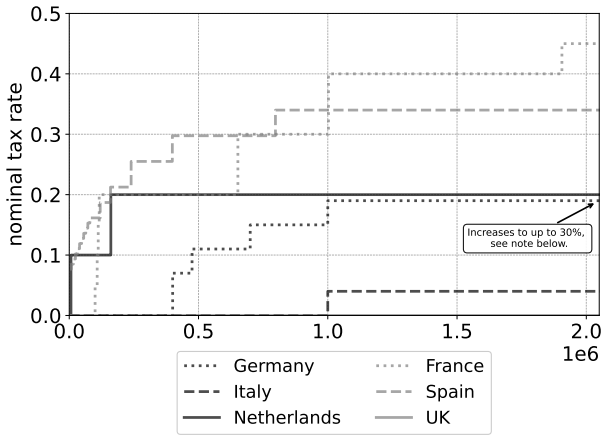
[7] The Spanish rate schedule discussed here is at the national level. In various Spanish regions lower rate schedules have been implemented. See EY (2025) for a discussion.

[8] In France undeclared hand-to-hand gifts can take place untaxed under stringent conditions. Such gifts become taxable if (i) the gift was declared later voluntarily or in response to a request or audit by the tax administration, (ii) a later notarial gift was made between the same persons or (iii) the beneficiary of the gift was one of the donor's heirs.

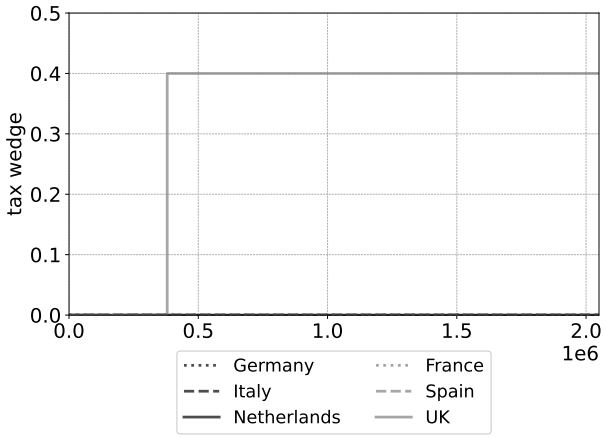
[9] As mentioned, gifts up to 7 year before death are considered part of the estate.



(a) Nominal marginal inheritance tax rate



(b) Nominal marginal gift tax rate



(c) Tax wedge (inheritance minus gift tax rate)

Figure 2: Nominal marginal inheritance tax rate (panel a), gift tax rate (panel b), and tax wedge for major European countries and main Belgian neighbours, 2025. This figure shows the nominal inheritance and gift tax rates for wealth transfers to children. It takes into account general exemptions applying to all assets and all children-receivers. The tax wedge is defined as the difference between the nominal marginal inheritance and the gift tax rate. The UK has a flat estate tax on net wealth of the decedent, rather than an inheritance tax levied on the receiver. German inheritance and gift tax rates further increase to 23% at 6.4 million, 27% at 13.4 million, and 30% at 26.4 million. Note that at the very bottom the Dutch tax wedge is negative, since gifts are taxed at 10% between around 6k to 25k while inheritances are untaxed over the same range. **Source:** EY (2025).

3 Data and scope

3.1 Data

Here I discuss the main data sources underlying the analysis.

Gift and inheritance tax microdata. Registered gifts have been recorded administratively from 1990 onwards for movable assets, and from 2003 for immovable assets. The gift data for movable assets are unfortunately unreliable before 2013 (Apostel 2025). Inheritance tax data are available starting in 2009. All pre-2015 microdata are held by the federal tax administration (AAPD), while Flemish data from 2015 onwards are managed by the Flemish tax administration (VLABEL).

While the microdata is comprehensive, there are some limitations. Gift microdata could only be accessed in the context of this article for deceased individuals. Moreover, the microdata available for this article are from the perspective of the decedent or donor, rather than the recipient. Additionally, in 9% of observations representing 5% of total gift value, no distinction is made between donors and recipients (only the aggregated 'holder' count is recorded). In the baseline, I conservatively allocate the gift value equally across holders.[10] Alternative allocations yield very similar results (Supplementary Material Section J). Lastly, for a number of gifts the information on payable tax is not recorded in the microdata. The imputation procedure for these missing gift tax values is explained in the next subsection.

Statbel census and national registry data. For 1991, 2001, 2011, and 2021, Statbel holds census-microdata on socioeconomic characteristics for the entire Belgian resident population. From 1992 onwards, Statbel has annual national registry microdata on demographic characteristics. The Statbel microdata are linked to decedents in the inheritance and gift tax microdata.

3.2 Data imputation

The federal tax administration (AAPD) has recorded gift tax microdata in different formats over time. Up to 2015, gifts of immovable property were recorded without information on payable tax. As mentioned in the previous subsection, movable property gift data is unreliable before 2013. From 2013 onwards, the information on payable tax is occasionally missing for movable property gifts (in 10% of all gifts, equivalent to 16% of all movable property gifts).

The payable tax on immovable property gifts cannot be imputed based on the available microdata. The reason is that immovable property gifts are taxed according to a progressive rate schedule differentiated by the value of the received gift and the degree of kinship between the donor and the recipient (Section 2). Unfortunately, the administrative microdata does not include a breakdown of the value of the gift by recipient, which is necessary to determine the applicable tax rate. Moreover, the microdata does not include information on the degree of kinship between the donor and the recipient, which is also necessary to determine the applicable tax rate. Hence, there is no

[10] More precisely, I allocate the gift value across all holders except a non-deceased or (if all holders are deceased) the most recently deceased holder. This correction assumes that a living holder or the most recently deceased holder is most likely the recipient of the gift. The correction is conservative as it spreads out gift values, thus lowering the concentration of gifts relative to other correction procedures.

straightforward way to impute payable tax on immovable property gifts based on the available microdata.

The payable tax on movable property gifts can be imputed based on the available microdata since movable property gifts are taxed at a flat rate throughout the analysis period. However, the flat rate differs by degree of kinship and no kinship information is available in the microdata. Nonetheless, the rate difference between kinship categories is generally minor (the maximal difference is 4.4%). Moreover, the rates themselves are generally low (between 3% to 7%).

As a baseline, I impute the payable tax on movable property gifts by applying the average gift tax rate across all kinship categories. To compute this average, I take into account regional variation in the tax schedule and changes to the schedule over time. The baseline imputed gift tax rate may in general be somewhat of an overestimate, since gifts are likely to be made to close family members who are subject to the lowest tax rates. As a robustness check, I further impute tax rates based on both the lowest and the highest applicable tax rate across kinship categories. I also include a run where missing gift tax rates are imputed as zero tax rates. The results are highly similar across the different imputation methods (Supplementary Material Section J).

3.3 Scope

Definition of wealth transfer types. I distinguish between three types of wealth transfer concepts: (i) 3-year pre-death gifts, i.e. the sum of all registered gifts up to 3 years before death (henceforth, pre-death gifts), (ii) estates, i.e. the net value of the estate of a deceased individual, (iii) 3-year pre-death gifts and estates (henceforth, total transfers), i.e. the sum of (i) and (ii). The term 'estate' is used rather than 'inheritance' to emphasise the donor perspective of the analysis. The 3-year baseline pre-death gift and total transfer time horizon is motivated by the legal treatment of unregistered gifts (see next paragraph). However, results based on other pre-death time horizons are highly similar (Supplementary Material Section I).

Unregistered gifts. An important limitation of the analysis that follows is that movable property can be gifted tax-free in Belgium via an unregistered gift (Section 2). Such gifts are not captured in the administrative dataset on which this article relies. However, unregistered gifts within 3 years before death are considered part of the estate and recorded as such in the microdata.[11] Hence, the 3-year pre-death total transfer concept should in principle capture all wealth transfers within 3 years before death, regardless of whether they were registered as a gift or not.

Average results for 2019-2022. Tax rates on gifts are sometimes lacking and can only be imputed from 2016 onwards. Given the baseline 3-year pre-death gift time horizon, the first year in which pre-death gifts and total transfers are available is 2019. For consistency, all plots in the main text are either based on 2019-2022 averages or on individual years. Results for other time periods are highly similar (Supplementary Material Section K).

Belgium as baseline. The results presented below pertain to Belgium as a whole. In the Appendix, the results are replicated for Flanders (Supplementary Material Section H.1), Wallonia (Supplementary Material Section H.2), and Brussels (Supplementary Material Section H.3) sep-

[11] This period has been heightened to 5 years in Wallonia from 2022 onwards, in Flanders from 2025 onwards, and in Brussels from 2026 onwards.

arately. While in principle the regional results could differ due to compositional differences or differences in the applicable tax regime, the results for Flanders and Wallonia are highly similar to the Belgium-wide results. The results for Brussels occasionally differ, but the distributional and regressivity findings are consistent.[12] Hence, the results are robust to different aggregation levels.

4 Belgian wealth transfers and their distribution

Here I shortly describe the main descriptive statistics on wealth transfers and their distribution in Belgium. This is the first distributive analysis of 21st century Belgian wealth transfers.

Pre-death gifts versus total gifts. The microdata available for this article makes it possible to track registered gifts of decedents from 2013 onwards. The microdata captures between 5 to 38% of the total gift flow in a given year (Supplementary Material Section A). The coverage ratio of the microdata generally declines over the sample period, due to the decreasing amount of decedents and the shorter pre-death horizon (e.g. the 2013 microdata includes registered gifts from people who died in 2013-2022, whereas the 2022 microdata only includes registered gifts from people who died in 2022).

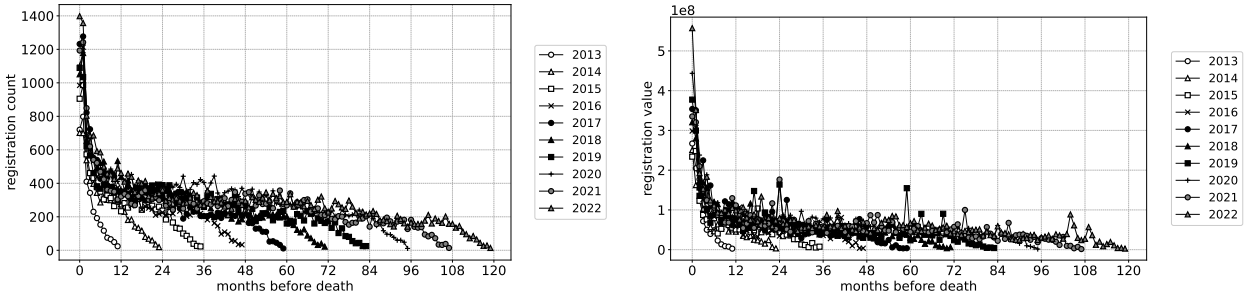
Gift timing. As tax rates on gifts are considerably lower than inheritance tax rates (Section 2), there is a clear tax incentive to transfer wealth before death. In deviation from the remainder of this article, here I first look at the timing of individual registered gifts (rather than a summed-up gift amount over a certain time horizon). Registered gifts captured in the microdata spike close to a person's death (Figure 3). The pattern holds regardless of whether one looks at registration counts (Figure 3, panel a) or gift value (Figure 3, panel b). Moreover, even within a month before death, registered gifts in the microdata are highly concentrated at the days immediately preceding death (Figure 4).

In Supplementary Material Section B I further analyse who gifts when close to death. Considering gifts over a period up to 3 years before death, men are overrepresented in the months closer to death. A similar pattern holds for highly educated individuals and younger age groups. The pattern by region is less clear, although Flanders is lightly overrepresented in the months closer to death.

Gift distribution. Pre-death registered gifts (i.e. the sum of registered gifts made by an individual up to 3 years before death) are highly concentrated (Figure 5, panel a). Remarkably, around 90% of decedents have no registered gift in the 3 years before death. As a result, the average pre-death gift total in the top 0.01% of the pre-death gift distribution is around 1300 times higher than the average pre-death gift amount overall. The top 0.1% jointly holds around 28% of pre-death gifts, and the top 1% jointly holds 58% of pre-death gifts.

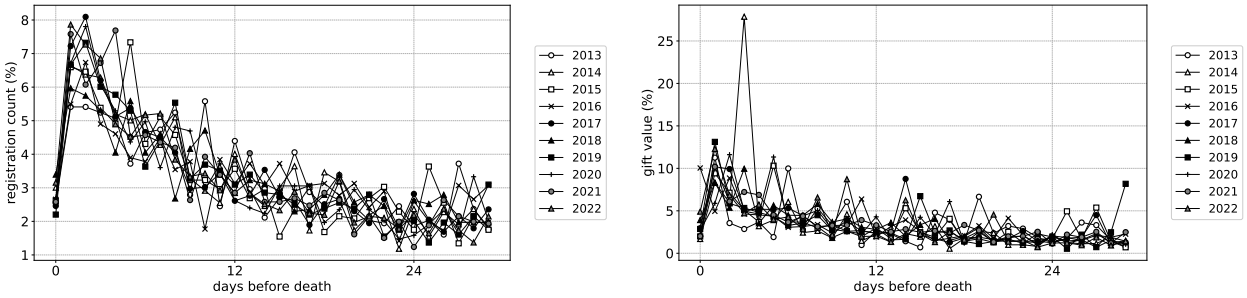
In Supplementary Material Section C, I further analyse the distribution of pre-death registered gifts along several dimensions. Men are generally overrepresented, with their overrepresentation spiking at over 20%-points in the top 0.1% excluding the top 0.01% of the pre-death gift distribution. Flanders is likewise strongly overrepresented, as are highly educated individuals and

[12] Registered gifts in Brussels are roughly uniformly distributed in the month before death. Moreover, there are some differences with respect to age, gift share in total transfers, timing of gifts, and gift composition at the top 0.1% and top 0.01% of the distribution. See Supplementary Material Section H.3.



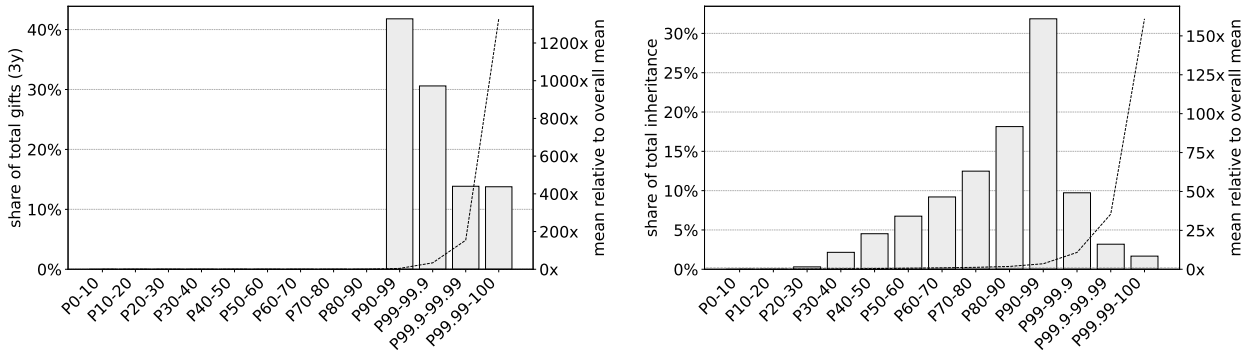
(a) Count **(b)** Value

Figure 3: Distribution of registered gifts in Belgium over time, 2013-2022, by registration count (panel a) and gift value (panel b). Reliable gift data is only available from 2013 onwards, hence the differences in time horizons for the different year-of-death series. For the gift value series, the 10 highest-valued gifts were removed to avoid indirect identification. The decline in count and value at the end of each year-of-death series is to be expected, as deaths at the end of the year have a higher available gift period in the microdata (given the fixed start at the beginning of 2013). **Source:** Own calculations based on administrative wealth transfer microdata.



(a) Count **(b)** Value

Figure 4: Distribution of registered gifts in Belgium up to 30 days before death, 2013-2022, by registration count (panel a) and gift value (panel b). Reliable gift data is only available from 2013 onwards. **Source:** Own calculations based on administrative wealth transfer microdata.



(a) Pre-death gifts

(b) Estates

Figure 5: Distribution (left axis) and within-percentage-category average relative to overall average (right axis) for pre-death gifts (panel a) and estates (panel b), 2019-2022. For an alternative plot with observations ranked according to total transfer value rather than gift resp. estate value, see Supplementary Material Section E. **Source:** Own calculations based on administrative wealth transfer microdata and macro gift flow data.

younger age groups. These overrepresentation patterns tend to be less pronounced at the very top of the distribution (the top 0.01%).

Estate distribution. The estate distribution is considerably less concentrated than the gift distribution. The average estate in the top 0.01% is around 160 times larger than the average estate overall. The top 0.1% jointly holds around 5% of total estates, and the top 1% jointly holds around 15% of total estates (Figure 5, panel b).

As shown in Supplementary Material Section D, the distribution of estates is strongly unbalanced at the top along several dimensions. Men and highly educated individuals are strongly overrepresented at the top. In fact, individuals with higher education are overrepresented by 40%-points in the top 0.01% of the estate distribution. Wallonia is generally overrepresented at the bottom and underrepresented at the top. Flanders is underrepresented at the bottom and overrepresented at the subtop of the distribution. Intrestingly, Brussels is overrepresented at both the bottom and the top of the distribution, indicating high inequality in wealth at death. Younger age groups (40-79) are somewhat overrepresented at the top. Older individuals (80-99) are overrepresented at both the bottom and the top, which may reflect lifecycle behaviour (dissaving at old age) and the social gradient in mortality.

Total transfer distribution. The total transfer distribution (i.e. the sum of pre-death gifts and estates) is more concentrated than the estate distribution, but less concentrated than the gift distribution (Figure 6). The average total transfer in the top 0.01% is around 250 times larger than the average total transfer. The top 0.1% jointly holds around 7% of total transfers, and the top 1% jointly holds around 18% of total transfers.

Similarly to the distribution of both pre-death gifts and estates, men are strongly overrepresented at the top of the total transfer distribution. Women are overrepresented at the bottom and underrepresented at the top (Figure 7, panel a). Flanders is underrepresented at the bottom and overrepresented at the top, while the reverse holds for Wallonia. Brussels is overrepresented at both the bottom and the top, indicating high inequality in wealth transfers (Figure 7, panel b).

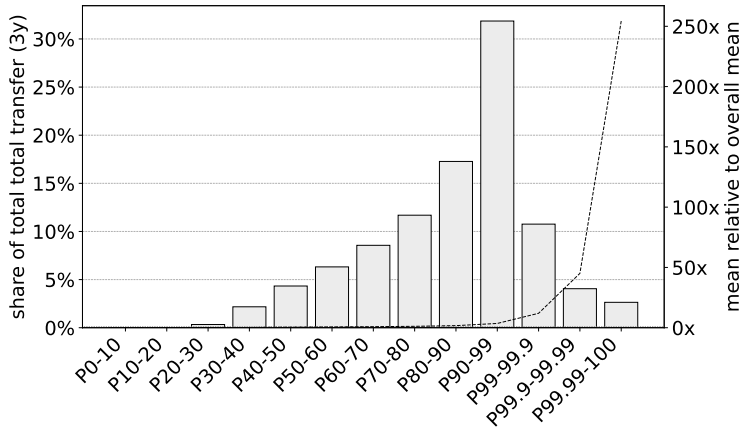
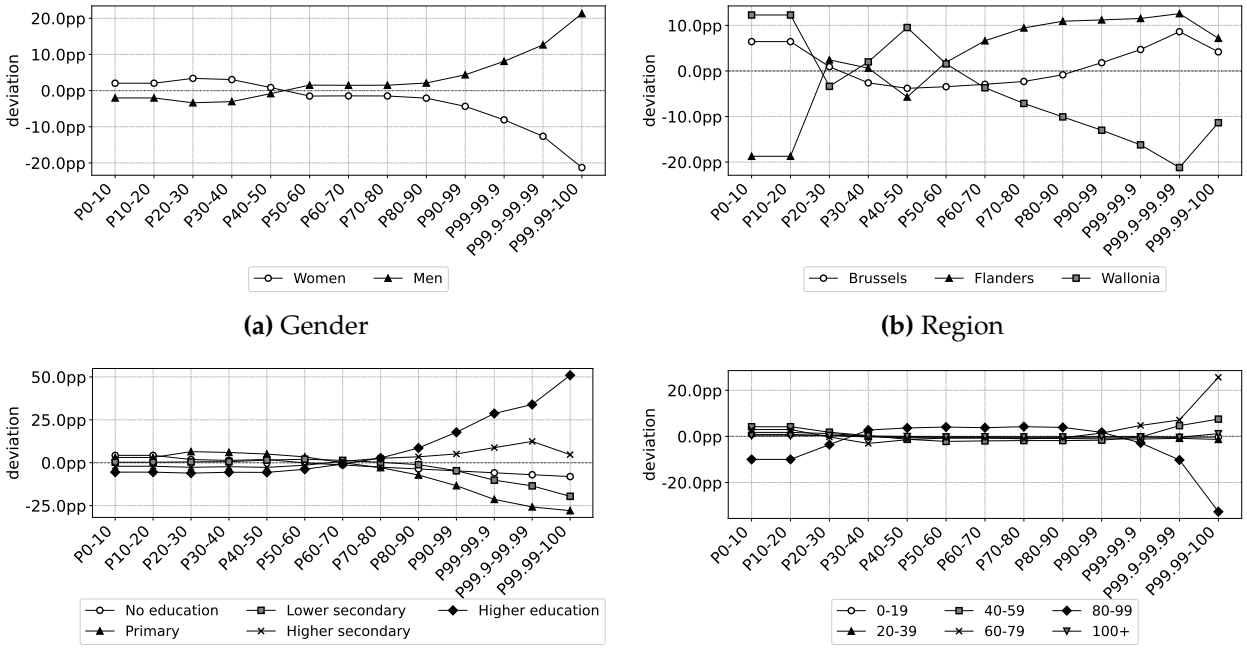


Figure 6: Distribution of total transfers (left axis) and within-percentage-category average relative to overall average (right axis), 2019-2022. Observations are ranked according to 3-year back total transfer value. **Source:** Own calculations based on administrative wealth transfer microdata and macro gift flow data.

Highly educated individuals are strongly overrepresented at the top, with an overrepresentation of around 50%-points in the top 0.01% (Figure 7, panel c). Younger age groups (40-79) are somewhat overrepresented at the top, while older age groups (80-99) are underrepresented at both the bottom and the top, possibly reflecting lifecycle behaviour and the social gradient in mortality (Figure 7, panel d).



(a) Gender **(b)** Region

(c) Education **(d)** Age

Figure 7: Deviation of actual versus expected share by gender, region, education, and age, percentage points, 2019-2022 average. The above plots substract the overall (across all percentage categories) annual share of a certain dimension value (e.g. being a woman) from the actual share of that dimension value in the percentile category. Results are then averaged by percentile category across all years. Observations are ranked according to 3-year back total transfer value. **Source:** Own calculations based on administrative wealth transfer microdata.

5 Tax regressivity due to pre-death gifting

Compared to the four largest European economies and Belgium's main neighbours, Belgium stands out due to the large tax wedge between gift and inheritance tax rates (Section 2).[13] Here I analyse whether and how this tax wedge impacts the progressivity of the Belgian wealth transfer tax system.

Effective tax rates. Effective tax rates are calculated as the total tax paid on a transfer divided by the transfer amount. Effective tax rates on estates are calculated by dividing the inheritance tax paid on the estate by the estate value, whereas effective tax rates on total transfers are calculated by dividing the sum of inheritance and gift tax paid by the sum of estate and pre-death gift value.

Effective tax rate on estates. The Belgian wealth transfer tax system is generally progressive for estates throughout the distribution, with only a small decline in the effective tax rate for the top 0.01% relative to the top 0.1% (Figure 8). This small decline at the top could be due to differences in estate allocation (since in Belgium inheritances to individual recipients are taxed rather than the estate itself) or in heightened use of specific inheritance tax reductions such as those on business assets. Unfortuntately, the microdata available for this article does not allow to further investigate the drivers of this small decline (since neither sufficient receiver-level information nor a breakdown by exemption type is available).

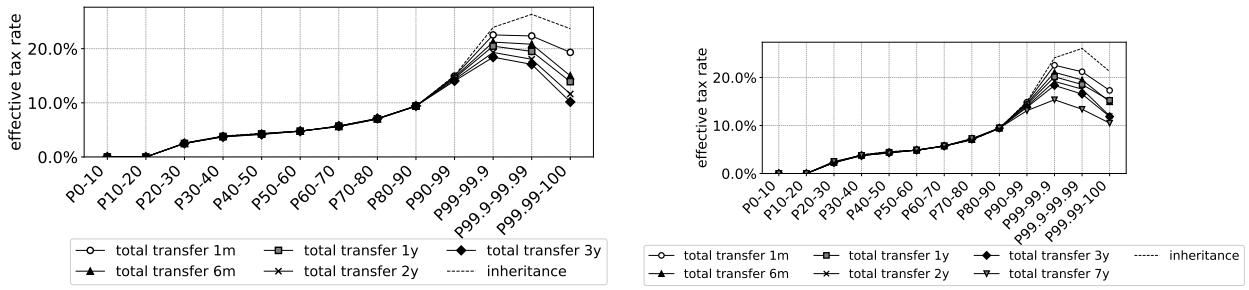
Effective tax rate on total transfers. Taking into account pre-death gifts, the Belgian wealth transfer system becomes strongly regressive at the top of the distribution (Figure 8). Considering a 3-year pre-death horizon, the effective tax rate paid by the top 0.01% is roughly equal to the tax rate paid by individuals in the 80th to 90th percentile, and considerably lower than the effective rate paid by other individuals in the top decile. Similarly, the top 0.1% excluding the top 0.1% pays a consistently lower rate then the remainder of the top 1% regardless of the time horizon considered. This regressivity finding even holds when considering gifts up to 7 years before death (the longest pre-death horizon available in the microdata). Using pre-death registered gifts allows the top 0.01% to obtain an effective tax rate more than 50% lower than in the estate-only case.

There are two reasons for the strong regressivity at the top of the total transfer distribution. The first reason is that registered gifts are highly concentrated (Figure 9, panel a). For a 3-year pre-death period, around 60% of the total transfer value at the top 0.01% consists of registered gifts whereas even the 90th to 99th percentile only have around 16% of their total transfer value in registered gifts over the same horizon.

The second reason is that registered gifts at the top of the distribution exist almost entirely of movable property, whereas gifts at the rest of the distribution include a substantial share of immovable property (Figure 10). Since immovable property gifts are generally taxed at much higher rates than movable property gifts (Section 2), this composition difference further strengthens top-level tax regressivity.

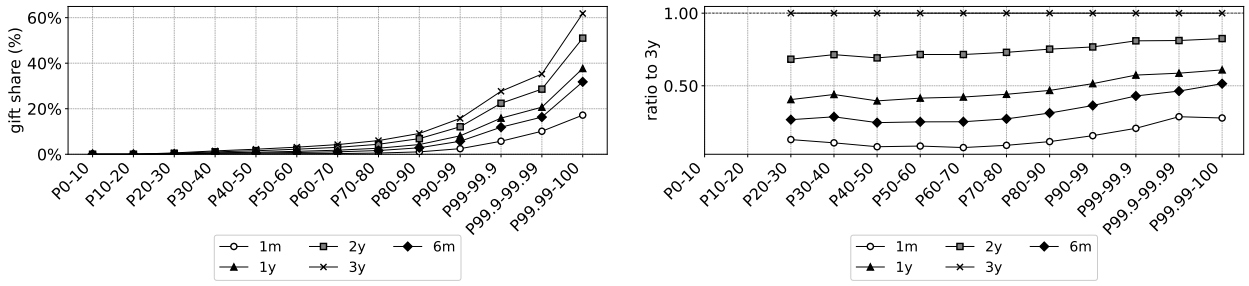
When considering the timing of gifts, it becomes clear that decedents at the top of the total transfer distribution are considerably more likely to make a registered gift closely before death (Figure 9, panel b).

[13] While the UK does not tax gifts made at least 7 years before death, there is no tax wedge for gifts made up to 3 year before deaths and for estates. Gifts between 7-3 years before death are taxed at a lower rate than estates.



(a) 2019-2022 average **(b)** 2022

Figure 8: Effective tax rates on estates and total transfers in Belgium, 2019-2022 average (panel a) and 2022 (panel b). Some movable property gift taxes are imputed for Wallonia and Brussels. Given that immovable property gift tax rates are only available from 2016 onwards and are non-imputable, up to 7 year before-death gift tax rates are only available for 2022. '1m' takes into account registered gifts up to 1 month before death, '6m' does the same but for a 6 month pre-death period, '1y' for a 1 year, '2y' for a 2 year, '3y' for a 3 year, and '7y' for a 7 year pre-death period. For each plotted line, observations are reranked according to the applicable transfer concept. For corresponding plots with observations ranked according to 3-year horizon total transfer values across all plotted transfer concepts, see Supplementary Material Section F. **Source:** Own calculations based on administrative wealth transfer microdata.



(a) Share of gifts in total transfers **(b)** Relative to 3-year gift share

Figure 9: Share of gifts in total transfers (panel a) and relative share (panel b) along different pre-death horizons in total transfer value by total transfer percentage category, 2019-2022. '1m' takes into account registered gifts up to 1 month before death, '6m' does the same but for a 6 month pre-death period, '1y' for a 1 year, '2y' for a 2 year, and '3y' for a 3 year. Observations are ranked according to 3-year back total transfer value. **Source:** Own calculations based on administrative wealth transfer microdata and macro gift flow data.

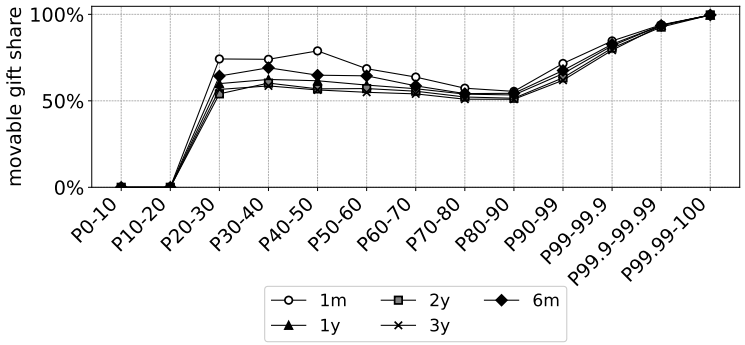


Figure 10: Share of movable gifts in total gifts across different gift time horizons by total transfer percentage category, 2019-2022 average. '1m' takes into account registered gifts up to 1 month before death, '6m' does the same but for a 6 month pre-death period, '1y' for a 1 year, '2y' for a 2 year, and '3y' for a 3 year. Observations are ranked according to 3-year back total transfer value. **Source:** Own calculations based on administrative wealth transfer microdata.

6 Fiscal cost of the gift-inheritance tax wedge

In contrast to other countries, Belgium is unique in its large tax wedge between gift and inheritance tax rates (Section 2). The analysis above shows that a substantial share of wealth transfers takes place via gifts. The wedge thus entails a fiscal cost: under observed gifting behaviour, taxing pre-death gifts at lower rates than inheritances foregoes tax revenue that would otherwise have been collected.

Fiscal cost estimation. Below I estimate the foregone tax revenue under current wealth transfer behaviour due to lower taxation of gifts made shortly before death compared to inheritances. This estimation requires a hypothetical effective tax rate for the gift component of a decedent's total transfer amount. Ideally, such an effective tax rate would be based on a microsimulation of the applicable tax schedule. Unfortunately, the available microdata is not sufficiently detailed to implement a microsimulation approach.[14] Hence, I rely on several alternative assumptions to obtain a hypothetical effective tax rate for the gift component:

- **Effective tax rate on the estate of the same individual.** This is a highly conservative assumption, since taxing gifts and inheritances jointly would likely lead to higher effective tax rates due to the progressive inheritance tax schedule.
- **Effective tax rate on the estate of the individual with the closest total transfer amount but no gifts.** Here I look for the decedent with the closest total transfer amount but no gifts in the same region as the decedent with gifts[15], and assign the effective tax rate on that decedent's estate to the gift component of the decedent with gifts. This approach is less conservative than the first approach, as it takes into account the fact that taxing gifts and inheritances jointly would likely lead to higher effective tax rates. However, it could be that such zero gift decedents are not comparable to decedents with gifts due to differences in their recipient composition (e.g. decedents with gifts could be more likely to have children).
- **Effective tax rate on the estate of decedents with a similar total transfer amount (baseline).** Here I first divide the data by year and region, and then in 1000 0.1%-size total transfer bins.[16] I go on to calculate the average effective tax rate on estates for all decedents in each bin, and assign this average effective tax rate to the gift component of decedents with gifts in the same total transfer bin. This approach is less conservative than the first approach, but more conservative than the second approach, as it also takes into account decedents with gifts when calculating the average effective tax rate in each bin.
- **Effective tax rate on the estate of decedents with no gifts but a similar total transfer amount.** Here I first divide the data by year and region, and then in 1000 0.1%-size total transfer bins. I then calculate the average effective tax rate on total transfers for decedents with no gifts in each bin, and assign this average effective tax rate to the gift component of decedents with gifts in the same total transfer bin. While this approach is clearly less conservative than the first approach, it could be that such zero gift decedents are not comparable

[14] The most important reason is that no breakdown between gift recipients is available, and that gift recipients and estate recipients are not linked.

[15] Due to the different tax schedules applicable in each region.

[16] The compartmentalisation by region is necessary due to the regional differences in wealth transfer tax schedules.

to decedents with gifts due to differences in their recipient composition (e.g. decedents with gifts could be more likely to have children).

As a baseline for the fiscal cost estimation, I rely on the third approach mentioned above. There is no doubt that the hypothetical rate obtained with this approach is an underestimate of the actual effective tax rate on gifts under under tariff alignment if wealth transfer behaviour were to remain unchanged. Results for the other approaches are similar in magnitude (Supplementary Material Section G).

I consider six different pre-death time horizons to jointly tax gifts and inheritances: 1 month, 6 months, 1 year, 2 years, 3 years, and 7 years. Reliable gift data on effective gift tax rates is only available from 2016 onwards, so 7 years is the longest pre-death horizon that can be simulated. The fiscalcost estimate is based on 2022 microdata, as this is the most recent year for which data is available.

The results presented in the main text are for Belgium as a whole, given the illustrative nature of the exercise. Regional results are presented in Supplementary Material Section H, and show a similar pattern as the Belgium-wide results.

Interpretation of fiscal cost estimates. The estimation procedure measures the fiscal cost of the current tax wedge under the observed behavioural pattern. The sharp spike in registered gifts shortly before death (Section 6) suggests that gift timing is partly driven by the existence of the tax wedge itself. If tax rates were equal, some of these gifts would presumably take place at a different time. However, it is also the case that unregistered gifts cannot be included in the calculations, as no data on these gifts are available. The exclusion of unregistered gifts leads to an underestimation of the fiscal cost.[17] The estimated fiscal cost cannot therefore be fully interpreted as an estimate of the revenue from a reform that aligns the rates between inheritances and gifts made before death.

Fiscal cost results. Depending on the pre-death time horizon considered (going from 1 month to 7 years), the fiscal cost of the gift-inheritance tax wedge amounts to around 125 to 710 million euros in 2022 (Table 1). The average effective transfer tax rate would increase moderately if gifts were taxed similarly to inheritances, with between 0.5 to 2.4%. However, given that gifts are highly concentrated at the top of the transfer distribution, the effective transfer tax rate at the top 0.1% would increase by 4.5-7.4%.

Illustrative uses of an equivalent amount. To illustrate the amount of foregone tax revenue, I examine two possible uses of an equivalent amount. The first hypothetical use is a targeted elimination of the wealth transfer tax on the smallest total transfers. It consists of ranking all observations by total transfer amount, and then eliminating the wealth transfer tax on the smallest total transfers until the fiscal cost amount is exhausted. The second hypothethical use is a uniform (i.e. same for all decedents) reduction of the wealth transfer tax. It consists of calculating what base amount (i.e. the same for every deceased person) of the tax on total transfers can be deducted up to the equivalent of the fiscal cost amount.

Both applications are calculated on the basis of the effective tax rates that would apply if the rates on gifts were aligned with those on inheritances.

[17] If the period for which the fiscal cost is estimated exceeds the period during which unregistered gifts are considered part of the estate and taxed as such, see Section 3.

Illustrative use results. The targeted reduction would completely exempt an additional 23-49% of total transfers from transfer taxation, again depending on the pre-death time horizon during which gift and inheritance taxation are unified (Table 2). The uniform base reduction would be between 1 896 to 15 854 euros and would still lead to the full exemption of between 12-41% of all total transfers.

Table 1: Fiscal cost of the gift-inheritance tax wedge, and corresponding increase in the effective tax rate following the alignment of tax rates (2022)

Category	Pre-death period	Fiscal cost	Additional ETR (pp)
Bottom 50%	1 month	42 462	0.00
Bottom 50%	6 months	81 857	0.00
Bottom 50%	1 year	143 884	0.01
Bottom 50%	2 years	258 865	0.01
Bottom 50%	3 years	318 655	0.02
Bottom 50%	7 years	36 362 303	1.43
50-90%	1 month	4 046 220	0.04
50-90%	6 months	11 408 752	0.10
50-90%	1 year	17 330 863	0.15
50-90%	2 years	27 893 734	0.24
50-90%	3 years	35 572 371	0.30
50-90%	7 years	108 588 988	0.85
90-99%	1 month	25 692 156	0.35
90-99%	6 months	57 235 939	0.75
90-99%	1 year	83 343 052	1.06
90-99%	2 years	121 205 671	1.47
90-99%	3 years	151 149 780	1.76
90-99%	7 years	234 433 756	2.54
99-99.9%	1 month	35 807 354	1.62
99-99.9%	6 months	72 342 791	2.98
99-99.9%	1 year	94 176 147	3.68
99-99.9%	2 years	126 924 183	4.61
99-99.9%	3 years	152 582 515	5.23
99-99.9%	7 years	195 593 357	5.95
Top 0.1%	1 month	59 156 933	4.48
Top 0.1%	6 months	78 732 385	5.43
Top 0.1%	1 year	87 417 483	5.83
Top 0.1%	2 years	114 805 599	6.89
Top 0.1%	3 years	123 262 496	7.13
Top 0.1%	7 years	135 336 374	7.38
Total	**1 month**	**124 745 126**	**0.52**
Total	**6 months**	**219 801 725**	**0.89**
Total	**1 year**	**282 411 429**	**1.12**
Total	**2 years**	**391 088 052**	**1.49**
Total	**3 years**	**462 885 817**	**1.72**
Total	**7 years**	**710 314 778**	**2.40**

Note: The increase in the effective tax rate is calculated per gift horizon relative to the total wealth transfer within the same horizon (inheritance plus gifts in that period before death). **Source:** Own calculations based on administrative wealth transfer tax data.

Table 2: Targeted and uniform tax reductions equivalent to fiscal cost (2022)

		Targeted reduction		Uniform reduction	
Category	Pre-death period	Exempted (%)	Upper bound	Exempted (%)	Amount
Bottom 50%	1 month	0.00	0	0.00	1
Bottom 50%	6 months	0.06	4 035	0.01	1
Bottom 50%	1 year	0.13	7 032	0.01	2
Bottom 50%	2 years	0.31	9 661	0.02	3
Bottom 50%	3 years	0.37	10 424	0.03	4
Bottom 50%	7 years	10.40	94 982	3.25	489
50-90%	1 month	2.18	30 733	0.42	55
50-90%	6 months	4.85	50 989	1.18	156
50-90%	1 year	6.51	63 057	1.77	237
50-90%	2 years	8.98	80 735	2.78	383
50-90%	3 years	10.45	90 928	3.45	488
50-90%	7 years	20.52	150 137	9.40	1 540
90-99%	1 month	8.48	73 621	2.72	357
90-99%	6 months	14.15	106 441	6.00	814
90-99%	1 year	17.98	127 836	8.39	1 206
90-99%	2 years	22.19	151 991	11.38	1 796
90-99%	3 years	25.08	169 287	13.44	2 276
90-99%	7 years	31.00	210 798	18.27	3 639
99-99.9%	1 month	10.49	85 294	3.81	502
99-99.9%	6 months	16.50	118 700	7.47	1 043
99-99.9%	1 year	19.30	134 587	9.40	1 376
99-99.9%	2 years	22.78	155 024	11.85	1 890
99-99.9%	3 years	25.19	169 963	13.56	2 301
99-99.9%	7 years	28.26	193 992	15.64	2 952
Top 0.1%	1 month	14.45	106 389	6.31	847
Top 0.1%	6 months	17.40	123 356	8.10	1 141
Top 0.1%	1 year	18.54	130 727	8.76	1 270
Top 0.1%	2 years	21.51	148 321	10.88	1 692
Top 0.1%	3 years	22.35	154 459	11.30	1 816
Top 0.1%	7 years	23.25	164 678	11.34	1 957
Total	**1 month**	**22.84**	**149 375**	**12.49**	**1 896**
Total	**6 months**	**30.74**	**195 909**	**19.95**	**3 611**
Total	**1 year**	**34.64**	**223 945**	**24.02**	**4 864**
Total	**2 years**	**39.99**	**270 871**	**29.92**	**7 287**
Total	**3 years**	**42.57**	**299 087**	**33.08**	**9 035**
Total	**7 years**	**49.23**	**395 420**	**40.90**	**15 854**

Note: The exempted share in this table refers to total transfers that are exempted on which tax was owed. A non-negligible share of total transfers is untaxed (for example, due to a negative net estate at death or the use of exemptions).
Source: Own calculations based on administrative wealth transfer tax data.

7 Undercoverage of survey data

This article is based on administrative microdata. The alternative to administrative microdata is survey data. For Belgium, the only available wealth transfer survey data is the ECB's Household Finance and Consumption Survey (HFCS). Here I show that HFCS survey data substantially underestimates the actual transfer flow. The use of administrative microdata is thus a strong advantage of the research in this article.

HFCS wealth transfer concept. The Household Finance and Consumption Survey (HFCS) contains detailed information on wealth transfer receipts for Belgium.

Several HFCS questions need to be combined to obtain a wealth transfer concept. First, the HFCS asks respondents how they acquired their main residence. Inheritance, gifts, and 50% inherited or gifted are among the answer options. Follow-up questions on main residence also include (i) year of acquisition, (ii) market value at acquisition, and (iii) ownership share at time of interview. By assuming that the ownership share at acquisition is equal to the ownership share at interview, one can calculate the value of the main residence acquired via inheritance or gift.

Second, the HFCS asks respondents whether they received any other significant[18] inheritance or gift (excluding the main residence) from someone who is not part of the current household. Follow-up information is collected for up to three of those significant transfers (starting from the highest). The collected information includes (i) year of receipt, (ii) value at receipt, and (iii) transfer type (inheritance or gift).

Third, respondents are asked about the total amount of private transfers (that are not significant gifts or inheritances) in the 12 months before the interview.

By summing up the value of the main residence acquired via inheritance or gift, the value of the significant inheritances and gifts, and the value of the total private transfers in the 12 months before the interview, one can obtain a measure of wealth transfer receipts in the HFCS.

Issues with HFCS survey data. The HFCS-based wealth transfer measure is subject to several issues. These issues originate from both the specific transfer-related questions and the overall survey design.

The main residence acquisition question forces respondents to indicate a single acquisition method. In case of mixed acquisition, the respondent is asked to indicate the method that accounts for the largest share, which is imprecise and could lead to a bias on the aggregate level.

The significant transfer question has a number of limitations. The HFCS only collects data on the three most significant inheritances and gifts. The exclusion of other significant wealth transfers introduces a downward bias in the total transfer amount. Furthermore, the HFCS significant transfer question explicitly excludes transfers between *current* household members. This phrasing is somewhat ambiguous, and may or may not induce respondents to leave out bequests received from deceased partners.[19] At the same time, the HFCS significant transfer question explicitly

[18] What significant means is left at the discretion of the respondent, with the interviewer providing a suggested definition of 'has made a significant impact on the household's financial situation' if in doubt.

[19] Nolan et al. (2022) interprete this question as excluding bequests from deceased partners.

captures transfers that went untaxed[20] and thus unrecorded in the administrative data. Lastly, the significant transfer question does not indicate whether households should report the gross or net transfer value.[21]

The non-significant transfer question may capture some gifts that are not captured in the administrative data, as it is highly unlikely that all or even most non-significant private transfers in the last 12 months were registered/taxed and thus included in the administrative data.

Then there are also a few broader survey-related issues. The HFCS survey data reference population excludes certain categories of transfer recipients (most notably non-profits). In addition, it is well-known that survey respondents have a tendency to underreport their wealth and that rich households are less likely to respond to surveys (e.g. Apostel and O'Neill 2022). No correction for these survey issues is applied as no straightforward correction method is available, but the presence of these survey limitations induces a clear downward bias on the aggregate transfer flow.

Even if the HFCS wealth transfer concept were fully comparable to the wealth transfer concept captured in the administrative data, there is still the issue of timing. The HFCS aims to be representative for a given reference period. Based on the HFCS data, wealth transfer flows can be constructed for previous years (by summing up transfers by transfer date). However, given demographic change, the HFCS sample in a given wave will not be representative for previous years. Mortality in particular implies a downward bias in HFCS-based wealth transfer flows that grows over time (e.g. the HFCS-based wealth transfer flow in 1900 is zero as no respondents were alive then, so no transfer could have been received in that year). This issue is especially relevant when analyzing either annual or donor-side transfer flows.

Undercoverage of wealth transfer flow in HFCS data. As a result of these comparability issues, the HFCS-based wealth transfer flows largely underestimate the actual transfer flow. In the case of inheritances, the HFCS-based flow is on average around 22-48% (depending on the wave) of the administrative-data-based flow in 2000-2022 (Figure 11, panel a). The HFCS-based gift flow is on average around 21-47% (depending on the wave) of the administrative-data-based flow in 2000-2022 (Figure 11, panel b).[22] The administrative-data-based transfer flow is itself a lower bound for the true transfer flow, given the limitations of the administrative data (e.g. unregistered gifts of movable property and tax evasion).

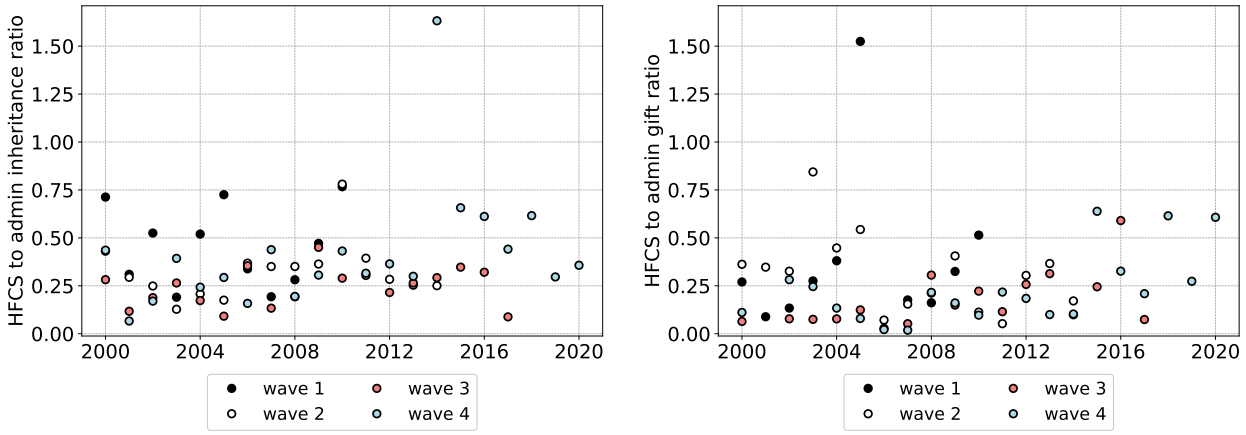
It would have been interesting to investigate the extent to which this undercoverage affects the distribution of transfers in the survey sample, but HFCS-based transfers are recorded by recipient while the microdata available for this article only contains decedent-level information.

The finding that HFCS-survey based transfer flows substantially underestimate the actual transfer flows is in line with previous findings for the INSEE survey in France and the Survey of Consumer Finances for the US (Alvaredo et al. 2017). Authors of previous HFCS-based work on transfer

[20] In the case of Belgium, unregistered gifts of movable property are untaxed and not included in the administrative microdata. Their aggregate relevance is unclear but could be substantial.

[21] Nolan et al. (2022) interprete this question as asking for gross transfer values, see footnote 14 of their article for a justification.

[22] As explained above, the undercoverage of the HFCS-based transfer estimates likely increases when the temporal distance with the HFCS wave increases. When averaging over the 5 most recent data years for each wave, the HFCS-based inheritance flow is on average between 26-46% of the administrative-data-based flow, whereas the HFCS-based gift flow is on average between 20-41% of the administrative-data-based flow.



(a) Inheritance HFCS coverage ratio

(b) Gift HFCS coverage ratio

Figure 11: HFCS-based inheritance flow (panel a) and gift flow (panel b) relative to administrative-data-based transfer flows, 2000-2022. HFCS data are plotted for each wave seperately by year of transfer receipt. Transfers of the main residence and small private transfers are included in the HFCS gift total. HFCS data are averaged over the 5 implicate datasets. Administrative pre-2009 inheritance data and pre-2013 gift data are imputed. **Source:** Own calculations based on HFCS survey data and administrative wealth transfer microdata.

taxation are well-aware of the limitations of survey data (e.g. Nolan et al. 2022). While the severity of undercoverage likely varies by country, it seems advisable to carefully investigate this issue using administrative data wherever possible.

8 Conclusion

In a context where wealth gains a renewed importance, understanding the nature of wealth transfers and their distribution is crucial. Moreover, inheritance taxation is sometimes seen as an important policy alternative to capital income or wealth taxation in order to lower wealth inequality or correct for regressive income taxation.

Belgium stands out internationally by the large gap between inheritance and gift tax rates, even shortly before death. Using administrative microdata on wealth transfers, I make four main contributions. First, I provide a detailed description of the distribution of estates and pre-death gifts in Belgium. Second, I analyse the distributive implications of the Belgian wealth transfer tax system. Third, I quantify the fiscal cost of the gift-inheritance tax wedge. Lastly, I show that survey data substantially undercounts wealth transfer flows, underscoring the value of administrative microdata for analysing wealth transfers.

Pre-death gifts in Belgium tend to take place shortly before death, with gifts spiking the day before death. Remarkably given their large tax advantage, only 10% of decedents makes use of any registered gifts up to 3 years before death. As a result, pre-death registered gifts are highly concentrated with the top 1% holding 58% of all gifts. In contrast, the estate distribution is much more equal, with the top 1% holding 15% of all estates.

The joint estate and pre-death gift distribution is unequal along several dimensions. Men and highly educated individuals are highly overrepresented at the top and underrepresented at the bottom. Flemish individuals are overrepresented at the top and underrepresented at the bottom, while the opposite is true for Walloon individuals. Interestingly, decedents from Brussels are overrepresented at both the bottom and the top of the distribution, indicating high inequality in wealth at death. Younger decedents (40-79 years old) are overrepresented at the top. In contrast, older decedents (80-99 years old) are underrepresented at both the bottom and the top, possibly due to lifecycle effects and the social gradient in mortality.

Estates are generally taxed progressively throughout the distribution. However, when taking pre-death gifts into account, the Belgian wealth transfer tax system becomes strongly regressive from the top 0.1% of the distribution onwards. This regressivity reflects both the concentration of gifts at the top and the high share of lower-taxed movable property gifts compared to immovable property gifts at the top. Moreover, decedents at the top of the distribution are more likely to time their registered gifts shortly before death, which may suggest use of those gifts for tax optimisation purposes.

The tax wedge between pre-death gifts and inheritances entails a substantial fiscal cost. Under the observed pre-death gifting behaviour, the foregone tax revenue from the wedge amounts to 125-710 million euros per year, depending on the pre-death gift time horizon considered. Such an amount would suffice to completely eliminate wealth transfer taxation on between 23-50% of decedents, or to reduce the tax burden on all estates with 1 896 to 15 854 euros.

Much research on wealth transfers relies on survey data. As I show by comparing administrative and survey-based transfer flows, such survey data substantially undercounts wealth transfers, at least in the Belgian context. This underscores the value of using administrative microdata to obtain a more complete picture of Belgium's wealth transfer distribution.

References

Acciari, Paolo and Salvatore Morelli (2022). "Wealth Transfers and Net Wealth at Death: Evidence from the Italian Inheritance Tax Records 1995–2016". In: *Measuring Distribution and Mobility of Income and Wealth*. Studies in Income and Wealth. University of Chicago Press.

Alvaredo, Facundo, Bertrand Garbinti, and Thomas Piketty (Apr. 2017). "On the Share of Inheritance in Aggregate Wealth: Europe and the USA, 1900–2010". In: *Economica* 84.334, pp. 239–260. ISSN: 0013-0427, 1468-0335. DOI: 10.1111/ecca.12233. URL: https://onlinelibrary.wiley.com/doi/10.1111/ecca.12233 (visited on 08/05/2025).

Apostel, Arthur (2025). *Belgian Wealth Inequality, 1935-2022*. Working paper 477. National Bank of Belgium. URL: https://www.nbb.be/en/publications-and-research/publications/all-publications/belgian-wealth-inequality-1935-2022.

Apostel, Arthur and Daniel W. O'Neill (June 2022). "A One-off Wealth Tax for Belgium: Revenue Potential, Distributional Impact, and Environmental Effects". In: *Ecological Economics* 196, p. 107385. ISSN: 09218009. DOI: 10.1016/j.ecolecon.2022.107385. URL: https://linkinghub.elsevier.com/retrieve/pii/S0921800922000477 (visited on 07/30/2024).

Atkinson, Anthony B. (June 2018). "Wealth and Inheritance in Britain from 1896 to the Present". In: *The Journal of Economic Inequality* 16.2, pp. 137–169. ISSN: 1569-1721, 1573-8701. DOI: 10.1007/s10888-018-9382-1. URL: http://link.springer.com/10.1007/s10888-018-9382-1 (visited on 10/07/2025).

Boadway, Robin and Michael Keen (2026). "Debate: A Global Minimum Wealth Tax: Some Issues of Economics and Implementation [Pre-Publication]". In: *Intertax*, pp. 1–6. ISSN: 0165-2826. URL: http://www.kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals%5CTAXI%5CTAXI2026008.pdf.

Bourgeois, Marc and Kaj Zee (2022). "Het Waals Decreet Voor Een Rechtvaardiger Belasting". In: *Algemeen Fiscaal Tijdschrift* 4, pp. 19–35.

Deblauwe, Rik (1997). "De Hervorming van de Vlaamse Successierechten". In: *Notarieel en fiscaal maandblad* 6, pp. 157–180.

Decoster, André, Christian Valenduc, and Magali Verdonck (2009). "L'autonomie fiscale des Régions en Belgique: Evaluation et perspectives". In: *Documentatieblad FOD Financiën* 69.4, pp. 167–191.

Delanote, Mark (2022). *De Erfbelasting*. Brugge: die Keure. 285 pp.

EY (2025). *Worldwide Estate and Inheritance Tax Guide*. London: EY, p. 524. URL: https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/technical/tax-guides/documents/en-gl-worldwide-estate-and-inheritance-tax-guide-09-2025.pdf.

Nolan, Brian et al. (June 2022). "Intergenerational Wealth Transfers in Great Britain from the Wealth and Assets Survey in Comparative Perspective". In: *Fiscal Studies* 43.2, pp. 179–199. ISSN: 0143-5671, 1475-5890. DOI: 10.1111/1475-5890.12299. URL: https://onlinelibrary.wiley.com/doi/10.1111/1475-5890.12299 (visited on 07/31/2024).

Ohlsson, Henry, Jesper Roine, and Daniel Waldenström (June 1, 2020). "Inherited Wealth over the Path of Development: Sweden, 1810–2016". In: *Journal of the European Economic Association* 18.3, pp. 1123–1157. ISSN: 1542-4766, 1542-4774. DOI: 10.1093/jeea/jvz038. URL: https://academic.oup.com/jeea/article/18/3/1123/5551538 (visited on 07/30/2024).

Piketty, Thomas (Aug. 2011). "On the Long-Run Evolution of Inheritance: France 1820–2050 *". In: *The Quarterly Journal of Economics* 126.3, pp. 1071–1131. ISSN: 0033-5533, 1531-4650. DOI:

10.1093/qje/qjr020. URL: https://academic.oup.com/qje/article-lookup/doi/10.1093/qje/qjr020 (visited on 07/30/2024).

Schinke, Christophe (2012). "Inheritance in Germany 1911 to 2009: A Mortality Multiplier Approach". In: *SSRN Electronic Journal*. ISSN: 1556-5068. DOI: 10.2139/ssrn.2131208. URL: http://www.ssrn.com/abstract=2131208 (visited on 07/30/2024).

SERV (2010). *20 Jaar Vlaams Fiscaal Beleid De Impact Op Gezinnen En Ondernemingen*, p. 77.

Verdonck, Magali (2009). "Evaluating the Decentralization of Tax Powers: Lessons from the Belgian Regions". Unpublished working paper.