The long and the short of it: Inheritance and wealth in Ireland

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The long and the short of it: Inheritance and wealth in Ireland

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Inheritances matter for wealth accumulation, and are often central to policy debates on wealth taxes. This letter shows that up to 2020 over one-third of households in Ireland had received inherited wealth, the cumulated value of which (*€97 billion)* accounts for approximately one sixth of current net wealth for these households. But the impact is potentially wider than the *direct* value of the inheritance itself: inheritors are typically much wealthier and own more property. Nevertheless, inherited wealth represents a larger share of total net wealth for households in the middle of the wealth distribution than for the wealthiest households. As a result, our analysis shows that inheritances in Ireland contribute little to wealth inequality, and may even have reduced it over time, similar to findings for Britain and the United States.

Introduction

The role of intergenerational wealth transfers (inheritances and gifts) in wealth inequality has been debated for some time. Using data for Britain, France, Germany, Italy, Spain and the United States, Nolan et al. (2021) shows that wealth transfers account for between a tenth and a third of current net wealth and that the contribution to wealth inequality is ambiguous. Differences in demographics, the propensity to transfer between generations and the evolution of wealth stocks and asset prices over time account for the differences across countries.

In Ireland, the debate on wealth taxation centres on ways to increase the amount of tax collected, minimise distortions and improve equity.[2] Using self-reported data on inheritances from the Household Finance and Consumption Survey (HFCS), this *Economic Letter* describes how important inherited wealth is for Irish households. The key findings are:

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[1] Irish Economic Analysis Division, Central Bank of Ireland. The views expressed in this *Letter* are those of the authors only and do not necessarily reflect the views of the Central Bank of Ireland nor the European System of Central Banks. We would like to thank the ICW team in the CSO for granular data access, colleagues in the Central Bank of Ireland and HFCN Research Seminar participants for useful comments, and Brian Nolan for discussions on the methodology. Corresponding author: tara.mcindocalder@centralbank.ie

[2] See, for example, "Foundations for the Future" (2022), the report of the 2022 Commission on Taxation and Welfare.

- By 2020, over one-third of households had received an inheritance or gift. For these households, the real value of inherited wealth is €97 billion and accounts for approximately one sixth of their total net wealth (assets minus debts).

- The incidence of inheritances appears to be increasing over time with a higher proportion of households receiving inheritances in the last 20 years than previously. Older households in 2020 (those whose head of household is aged 60 and over) are more likely to have received inheritances than similar households in 2013.

- Wealthier households are more likely to have received inheritances. However, for those households who have received an inheritance, the value of inherited wealth is a *larger* share of total wealth for those in the middle of the wealth distribution than for those at the top.

- Due to the relatively larger size of inherited wealth in total net wealth for households in the middle of the wealth distribution, inheritances in Ireland do not appear to contribute to wealth inequality, and may even reduce wealth inequality (similar to findings for Britain, the United States and Germany).

Data and stylised facts

The Household Finance and Consumption Survey (HFCS) is a Eurosystem survey, coordinated by the European Central Bank (ECB) and conducted by the Central Statistics Office (CSO) in Ireland. It collects cross-sectional household-level data on wealth, income, and consumption. In this *Letter*, we use data for Ireland from the latest wave, conducted in the second half of 2020 on a representative sample of 6,020 households.

The HFCS includes questions on wealth that households inherited at any point in the past up to and including the year 2020.[3] In this *Letter*, we refer to inherited wealth as wealth received in the form of both inheritances and gifts. However, as of 2020 the vast majority of the cumulative value of inherited wealth consists of inheritances (90 per cent). Non-inherited wealth is any other type of wealth (total wealth minus inherited wealth).

Just over a third of Irish households report having received inheritances (Table 1). The relationship between net wealth and receiving an inheritance is positive (first column), but the value of such inheritance declines as a share of overall net wealth (second column).

Inheritances and net wealth – that is, the value of a household's assets minus its debt – are positively correlated (Table 2). Inheritors' median gross income and net wealth are 17 and 155 per cent higher respectively than those that have not inherited. Inheritors are also more likely to own a home or private business, relative to those without inherited wealth (23 and 13 percentage points higher, respectively). Whilst these are correlations, as opposed to causation, this provides tentative evidence of what Benetton et al. (2022) call 'dynastic home equity', whereby persistence in homeownership across generations in the United States – i.e., when donors (parents) own housing or property – generates a substantial increase in young adults' housing wealth inequality.

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[3] See the CSO (2022) report for a full overview of intergenerational transfer of wealth in the 2020 HFCS.

Table 1 | Households receiving substantial inheritances by net wealth quintile

	% of households with inheritances	Value of inheritances as % of net wealth, conditional medians[1]
1st quintile	15.6	0.0
2nd quintile	27.7	25.8
3rd quintile	33.7	14.0
4th quintile	42.4	9.7
5th quintile	62.8	12.5
All households	36.4	11.8

Source: HFCS and authors' calculations.

Note: Values of reported inheritances (including gifts) inflated to 2020 values using CPI. [1] Conditional on having received an inheritance or gift. The median for the first quintile is zero due to the presence of negative and zero net wealth. Small differences with CSO (2022) are due to the fact that we do not implement any imputation methodology to assign values to missing data for non-respondents.

Table 2 | Composition and value of wealth for households (2020 values)

	With inheritances	Without inheritances	All households
Net wealth (median)	€331,500	€130,079	€193,100
Homeownership (%)[1]	86.0	63.1	71.4
Private business ownership (%)	23.9	11.1	15.7
Income (equivalised, median)[2]	€34,733	€29,654	€31,490

Source: HFCS and authors' calculations.

Notes: [1] Homeownership means owning all or part of the residence or use it for free.

[2] Equivalised income is defined as total gross annual household income equivalised using the modified OECD equivalence scale which accounts for the number of consumption units in the household.

Small differences with CSO (2022) are due to the fact that we do not implement any imputation methodology to assign values to missing data for non-respondents.

Income and age are also a relevant factor in wealth, homeownership and business ownership. But even controlling for these, we find a strong correlation with inheritances. Controlling for income and age, we find that:

- Households who receive an inheritance have higher net wealth. At the median, a 1 per cent increase in inheritance (log) relates to a 0.2 per cent increase in net wealth.

- Households who receive an inheritance are on average 2.7 per cent more likely to own a home and 6 per cent more likely to own a private business.[4]

Using the self-reported year of the inheritance, inherited wealth appears to have increased over time. Specifically, the proportion of households who have inherited wealth in the past 20 years is

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[4] 2.8 and 6.3 are the marginal effects from a probit model with homeownership and business ownership dummies as dependent variables, respectively, estimated at the average inheritance log value. All estimations control for the log of income, age, and age squared

higher than at any time prior to this. When disaggregating this information by age cohort, we find that older households (i.e., those whose head of household is aged over 60) in the 2020 survey are more likely to have received inheritances or gifts than comparable households in the 2013 survey (Figure 1).[5] Younger cohorts however, show a similar likelihood in both 2013 and 2020.

Figure 1 | Households receiving inherited wealth over time by age, share
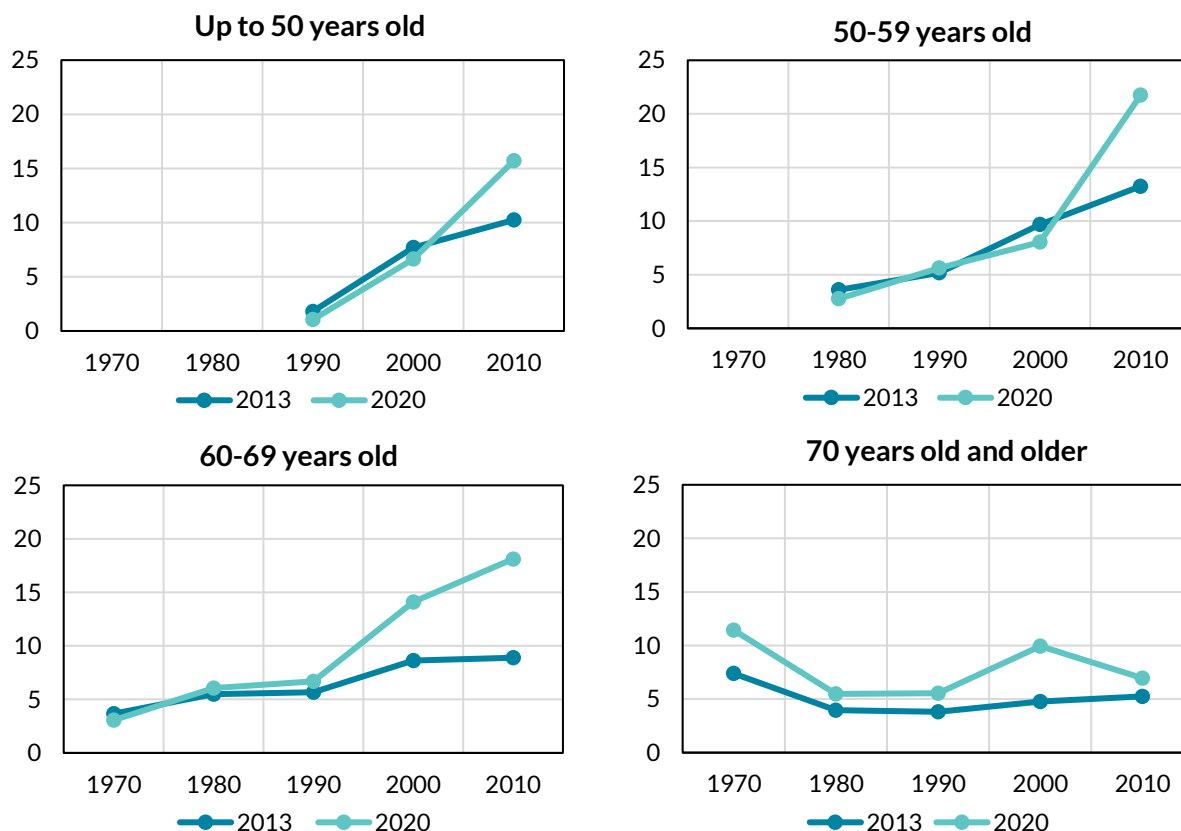
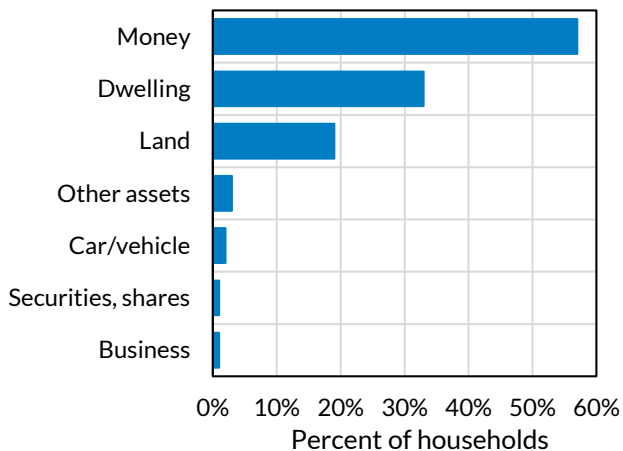Source: HFCS 2013 and 2020 and authors' calculations.
Notes: The years refers to when the household received the inheritance/gifts. Age refers to the age of the household head in the survey year (2013 or 2020). Missing observations due to small cell sizes for some decade-cohort pairs.

Money was the most common type of asset received (57 per cent) by households who reported ever having received an inheritance (Figure 2). Dwellings (33 per cent) and land (19 per cent) were the other most common asset types reported by households in the 2020 survey. Figure 3 shows the proportion of the total value of all inheritances accounted for by each type of inheritance. Land and dwellings represent about 70 per cent of the cumulative value of all inheritances received by households by 2020 (Figure 3).

Dwellings and land represented the largest value in total inheritance up to the 1980s (Figure 4). Thereafter, money became a consistent part of the value of transfer wealth. This decomposition reflects the changes that the Irish economy, and thus Irish households, have experienced over time. The vast majority of disposers were parents of the beneficiary (Figure 5). Parents account for 78 per cent of the total value of all inheritances and gifts as of 2020.

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[5] The 2013 HFCS survey was the first wave in which Ireland collected data and it was conducted on a representative sample of 5,419 households between March and September 2013.

**Figure 2 | Type of inherited wealth, % of household**

**Figure 3 | Type of inherited wealth, cumulated value in 2020**
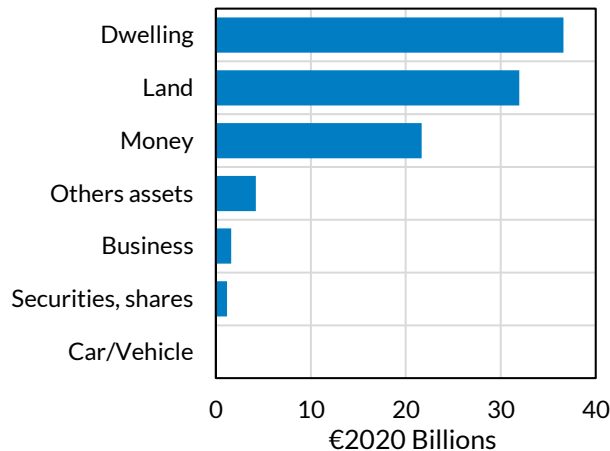
Source: HFCS and authors' calculations

Notes: Both participation and value figures are conditional on having received an inheritance or gift. The figures includes all the inheritances and gifts received at any point in time, reported in 2020. "Other assets" includes use of dwelling, jewellery/furniture/artwork, life insurance, and residual. Values of reported gifts and inheritances are inflated to 2020 values using the Consumer Price Index (CPI) and then cumulated over time.

Figure 4 | Inherited wealth over time by type of asset received, % of total value
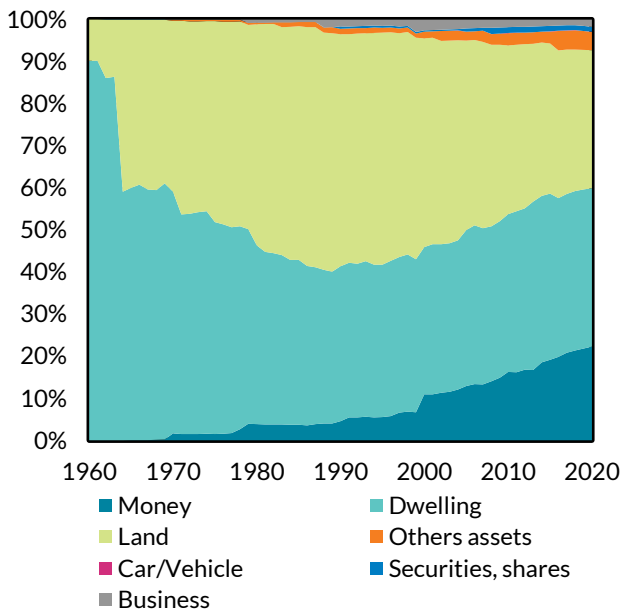
Figure 5 | Inherited wealth over time by relation with disposer, % of total value
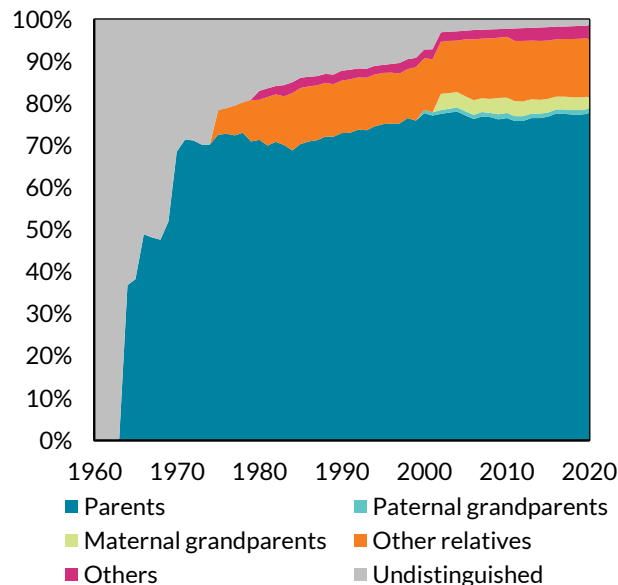
Source: HFCS and authors' calculations

Notes: No return/disinvestment on transfer wealth is assumed. Due to data confidentiality, "undistinguished" include the sum of all categories with less than 30 cumulative observations at that point in time and residuals from missing classification.

Decomposing the wealth Gini

Inherited wealth can plausibly impact on wealth acquisition in a variety of ways. For example, households can spend out of inherited wealth or use it to stimulate additional saving (i.e., use

inherited wealth to acquire additional assets). Here, we decompose changes in wealth inequality – as measured by the Gini coefficient – into contributions from inherited wealth ("transfers") and other sources of wealth ("non-transfers").[6] We use methodologies developed in Nolan et al. (2021) and Lerman and Yitzhaki (1985).

The Gini coefficient for total net wealth (G_W) is separated into the weighted contributions from transfer (C_T) and non-transfer (C_{NT}) wealth, with the shares in total wealth of the two types of wealth as weights (S_T and $1 - S_T$):

$$G_W = \underbrace{(S_T \cdot G_T \cdot R_T)}_{Transfers\ Contribution\ (C_T)} + \underbrace{((1 - S_T) \cdot G_{NT} \cdot R_{NT})}_{Non-Transfers\ Contribution\ (C_{NT})}$$

G_T and G_{NT} are the Gini coefficients for transfer and non-transfer wealth, while R_T and R_{NT} are the respective correlations with total wealth.

Table 3 shows the decomposition results, where all disclosed intergenerational inheritances and gifts received by households in the 2020 HFCS have been inflated to 2020 values, using the Consumer Price Index (CPI).[7] As inherited wealth can change wealth both directly and indirectly – that is, by investing it and/or using it to acquire additional assets – we report both a 'baseline' decomposition, and one that allows for wealth capitalisation by assuming a literature-based 3 per cent real return on inherited wealth.

Similar to Nolan et al. (2021), the distribution of inherited wealth in Ireland is highly unequal (see Appendix for cross-country comparison). The inheritances Gini coefficient (G_T, 0.91) is similar to that for Britain, France, and Germany (around 0.89). The correlation of inherited wealth to total wealth (R_T, 0.67) is lower than the correlation of non-inherited wealth (R_{NT}, 0.98), similar to findings for the UK and euro area countries. Moreover, the share of inheritances in total wealth is particularly low (S_T, 0.12), which resembles the results for Britain and the United States (0.12 and 0.09 respectively). Together, these three factors – the last one in particular – explain why the contribution of transfer wealth to total wealth inequality is small (C_T, 0.07), and far more modest than the contribution of non-transfer wealth (C_{NT}, 0.58).

The combination of the relative inequality of inherited wealth (G_T) and the low correlation of inherited wealth with total wealth (R_T), means that a proportionate increase in transfer wealth of 1 per cent would *reduce* Ireland's Gini of total wealth (G_w) by 0.79 per cent. This estimated change in wealth inequality is equivalent to one third of the average annual fall in the Gini observed in the data between the first survey wave (2013) and the latest one (2020).[8]

Our finding that increasing inherited wealth is potentially lowering overall wealth inequality in Ireland is consistent with data presented in Table 1. This is because whilst the share of households

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[6] The Gini coefficient is a statistical measure of the degree of concentration of wealth. An index of 0 means perfect equality (i.e., wealth is split equally among all individuals), while an index of 1 denotes perfect inequality (i.e., one individual owns all the wealth).

[7] We deflate inheritances and gifts using the CPI to adjust for inflation changes and to align the stylised facts with the empirical methodology following Nolan et. al, 2021.

[8] This figure is calculated by comparing the annual fall in wealth Gini between HFCS 2013 and HFCS 2020 (0.014) with the implied change in wealth Gini computed by applying the estimated elasticity from the decomposition to the Gini from HFCS 2020 (0.005).

receiving substantial inheritances or gifts is *increasing* in the distribution of net wealth, the value of these transfers in total household net wealth – where inheritances are present – is *falling* in the distribution of net wealth. Of the other countries for which the decomposition method used here has been carried out, only Spain sees a weaker correlation between inherited wealth and total wealth.

Table 3 | Contribution to total wealth inequality from transfer and non-transfer source

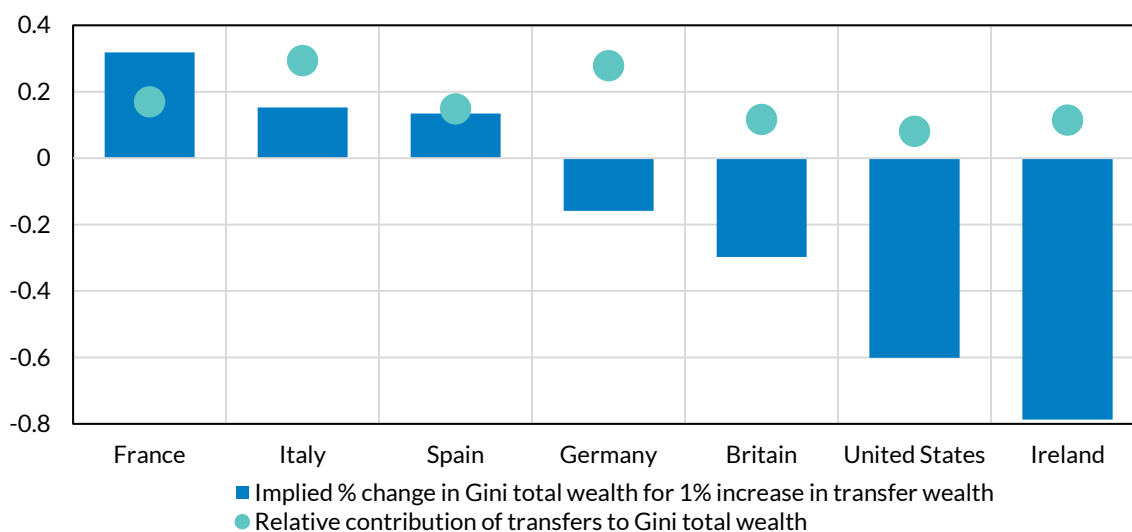|	Without capitalisation	With 3% capitalisation
Gini total wealth (G_W)	0.65	0.65
Gini transfer wealth (G_T)	0.91	0.91
Gini non-transfer wealth (G_{NT})	0.67	0.69
Share of transfers in total wealth (S_T)	0.12	0.19
Correlation transfers with total wealth (R_T)	0.67	0.69
Correlation non-transfers with total wealth (R_{NT})	0.98	0.95
Contribution of transfer wealth to Gini total wealth (C_T)	0.07	0.12
Contribution of non-transfer wealth to Gini total wealth (C_{NT})	0.58	0.53
Relative contribution of transfers to Gini total wealth (C_T/G_W)	0.11	0.18
Implied percentage change in Gini total wealth for an equiproportionate 1 per cent increase in transfer wealth: $\left(\dfrac{G_T \cdot R_T}{G_W} - 1\right) \cdot S_T \cdot 100$	-0.79	-0.59

Source: HFCS and authors' calculations.

Figure 6 provides a visual summary of our results, compared with those from Nolan et al. (2021) for other advanced economies. Our findings for Ireland are similar to results for Britain, Germany, and the United States.

As a robustness check, we apply the same 3 per cent real annual return on inheritances used in the reference paper, to allow comparability. Results (shown in the second column in Table 4) are similar to the baseline. As in Nolan et al. (2021) the major difference is the share of transfers in total wealth (S_T), which increases to 0.19 when returns are taken into account. The marginal change in the total wealth Gini (G_w) following an increase in transfers remains negative, but slightly lower. We do not find significant differences when applying a more data-oriented return (i.e. 6.3 per cent).[9]

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[9] Median wealth return in advanced economies from Jordà et al. (2021), net of median inflation in Ireland, over the period 1995-2020 (1995 is the 25th percentile of the distribution of years in which inheritances/gifts were received).

Figure 6 | **Cross-country comparison of results**

- Implied % change in Gini total wealth for 1% increase in transfer wealth
- Relative contribution of transfers to Gini total wealth

Source: Nolan et. al (2021), HFCS and authors' calculations.

Notes: Our estimates are based on the 2020 wave of HFCS, while the estimates from Nolan et. al (2021) for France, Italy, Spain, Germany, Britain, and the United States are based on the first wave of HFCS (2010/11). Results refers to the "without capitalisation" specification.

We run two additional robustness checks. First, we run the decomposition considering only inheritances and gifts received after 1995.[10] Results are similar to the benchmark specification, confirming that the main finding is not driven by some inheritances being underreported because they were received a long time ago or misreported due to currency changes. Second, we replicate the analysis using data from the first wave of the HFCS for Ireland (2013) instead of the 2020 wave and find a similar and consistent result. The estimated implied percentage change in Gini total wealth following a 1 per cent increase in transfer wealth in -0.67, compared to -0.79 estimated using the most recent data.

Conclusion

By 2020, over one-third of households had received an inheritance or gift. For these households, the cumulative real value of inherited wealth by 2020 stood at €97 billion and accounts for approximately one sixth of household total net wealth (assets minus debts). The value of inherited wealth in Ireland has been rising over time, with a greater proportion of households in 2020 inheriting wealth in the past 20 years than any time prior to this. Households that received inheritances or gifts are substantially wealthier and own more homes and businesses than households that did not inherit any wealth. Notwithstanding these stylised facts, we find that inheritances and gifts contribute little to the overall distribution of wealth in Ireland. We find that inheritances may actually have *reduced* overall wealth inequality over time, as their contribution to net wealth is higher for households in the middle of the wealth distribution than for households at the

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[10] HFCS asks households about the three main inheritances and gifts received. The 25th percentile of the year of receipt is 1995 for first and third group and 1997 for the second group. For this robustness check, we set to zero all the inheritances and gifts received prior to this threshold. Given that we do not drop these households from the sample but rather assume they did not receive the inheritance/gift, the Gini coefficient for total wealth remains unchanged.

top. These results are consistent with Nolan et al. (2021), with Ireland notably more similar to Britain than euro area countries. This is not surprising given the similarities in economic and institutional setups in the two countries.

There are some caveats that the methodology and HFCS data cannot address. First, we cannot comment on the transfers of intangibles. There is evidence that human capital transfers across generations are persistent (Alesina et al., 2020) and that family environment is also important for these transfers (Black et al., 2020). Second, the HFCS does not measure contingent household assets well, including state pensions and defined benefit occupational pensions, which have been shown to be an important source of income-generating wealth in the United States, especially for lower income and lower wealth families (Jacobs et al., 2020). In addition, it is important to bear in mind that the effect we find for Ireland relates to households already in receipt of inherited wealth. This *Letter* does not say anything about the likelihood of receiving an inheritance in the first place, nor does it speak to the effects on wealth inequality of changes in this likelihood across households or over time. Further, apart from inheritances there are numerous other structural drivers of wealth inequality.[11]

Although beyond the scope of the current *Letter*, understanding in more detail the mechanisms by which the wealth equalising effect of transfers may operate in Ireland is important. The stylised facts presented in Tables 1 and 2 suggest one mechanism. Inherited wealth may allow households, in particular those in the middle of the net wealth distribution, to acquire assets which would be more difficult in the absence of inheritances. If this were the case, the effect of inheritances on households in the middle of the distribution may be important for home ownership, which is the most important indicator of net wealth levels in Ireland (Arrigoni, Boyd, McIndoe-Calder, 2022). For instance, Horan, Lydon and McIndoe-Calder (2020) note that households purchasing property for the first time between 2014 and 2018 are likely to receive an inheritance within three years of becoming owners, with strong correlation between the value of inheritances received and the size of deposits used to purchase the property (0.60).

Many structural factors and policy levers affect the overall distribution of wealth. The mechanisms generating these changes in the distribution of net wealth within countries remain an area of on-going research endeavour and are not well understood. Focusing on one specific channel of wealth accumulation, this *Letter* shows that intergenerational inheritance transfers are likely to affect the distribution of net wealth in Ireland, albeit their contribution does appear limited.

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[11] Noted recently in remarks by Central Bank of Ireland Governor Makhlouf at Social Justice Ireland (Central Bank, 2022).

Appendix

Comparison decomposition with other countries

Table A1 | Contribution to total wealth inequality from transfer and non-transfer source

	Ireland	Britain	France	Germany	Italy	Spain	US
Gini total wealth (G_W)	0.65	0.67	0.68	0.78	0.60	0.58	0.87
Gini transfer wealth (G_T)	0.91	0.89	0.89	0.89	0.85	0.89	0.95
Gini non-transfer wealth (G_{NT})	0.67	0.69	0.71	0.82	0.69	0.62	0.88
Share of transfers in total wealth (S_T)	0.12	0.12	0.17	0.28	0.29	0.15	0.09
Correlation transfers with total wealth (R_T)	0.67	0.73	0.78	0.87	0.72	0.66	0.85
Correlation non-transfers with total wealth (R_{NT})	0.98	0.97	0.96	0.95	0.88	0.94	0.99
Contribution of transfer wealth to Gini total wealth (C_T)	0.07	0.08	0.12	0.22	0.18	0.09	0.07
Contribution of non-transfer wealth to Gini total wealth (C_{NT})	0.58	0.59	0.56	0.56	0.42	0.49	0.80
Relative contribution of transfers to Gini total wealth (C_T/G_W)	0.11	0.12	0.17	0.28	0.29	0.15	0.08
Implied % change in Gini total wealth for 1% increase in transfer wealth: $\left(\dfrac{G_T \cdot R_T}{G_W} - 1\right) \cdot S_T \cdot 100$	-0.79	-0.30	0.32	-0.16	0.15	0.13	-0.60

Source: Nolan et. al (2021) for Britain, France, Germany, Italy, Spain, and the United States. Authors' calculations for Ireland.

Notes: Results refer to the "without capitalisation" benchmark. Note that our estimates are based on the 2020 wave of HFCS, while the estimates from Nolan et. al (2021) comes from the first wave of HFCS (2010/11).

Decomposition methodology

The decomposition methodology uses ranked, or non-parametric, correlations. These are Pearson non-parametric correlations between values of transfer and non-transfer wealth ranked by their rank in the total wealth distribution, rather than by their own distribution. This means that transfer, non-transfer, and total wealth values are ordered from the smallest to the largest before computing

correlations. The only assumption required of the data is that the two series are monotonic in their ranks. In other words, the ranked correlation allows transfers and non-transfers to be related to total wealth in a way that does not assume linearity, which is important for variables like wealth which tend to be very concentrated in particular parts of the population.

As in Nolan et al. (2021), whenever the values of transfer wealth are larger than total wealth for a given household, we cap the former at the latter value. Piketty et al. (2014) suggest this procedure as resulting in a plausible estimation of transfer wealth by better accounting for the coexistence of savers and dissavers out of transfer wealth.