ORIGINAL ARTICLE

Intergenerational wealth transfers in Great Britain from the Wealth and Assets Survey in comparative perspective

Brian Nolan[1] | **Juan C. Palomino[1]** | **Philippe Van Kerm[2]** |
Salvatore Morelli[3]

[1]INET and Department of Social Policy and Intervention, University of Oxford

[2]University of Luxembourg; Luxembourg Institute of Socio-Economic Research (LISER)

[3]Law Division, University of Roma Tre; Stone Center on Socio-Economic Inequality at the Graduate Center, CUNY

Correspondence
Brian Nolan, Department of Social Policy and Intervention, Barnett House, 32 Wellington Square, Oxford, OX1 2ER.
Email: brian.nolan@spi.ox.ac.uk

Submitted February 2021

Abstract
Wealth surveys that collect information on intergenerational transfers provide new scope for comparative study of those transfers and their relationship with wealth across rich countries. However, this is problematic in the case of Great Britain, due to specific features of the Wealth and Assets Survey (WAS), the central source of survey-based household wealth data, in particular the extent of missing information in its first wave. This has severely constrained efforts to investigate patterns of wealth transfer in Great Britain in comparative perspective. In this paper, we set out these issues and present ways of dealing with them. On this basis, we then examine the main similarities and differences in patterns of intergenerational transmission of wealth between Great Britain, France, Germany, Italy, Spain and the United States. Our findings reveal common features across these countries as well as some important respects in which Great Britain was distinctive, though less of an outlier than the US. About 35 per cent of British households reported receiving an intergenerational wealth transfer at some point, similar to most of the comparator countries but much higher than the US. We conclude by setting out how WAS can be enhanced to address these issues at source, proposals with which the Office for National Statistics is seriously engaged.

KEYWORDS
wealth, intergenerational transfers, surveys, Great Britain

---

1 | INTRODUCTION

Comparative research on wealth and its distribution has accelerated in recent years because of the availability of data from dedicated household wealth surveys. This has included a certain amount of research on wealth transferred from one generation to the next in the form of inheritances and gifts, which is of particular interest as a channel for intergenerational transmission of advantage and disadvantage and a source of wealth inequality. This has shed new light on patterns of wealth transfer and their effects and how these differ across countries, though many key contributions to the literature are for individual countries (such as Boserup, Kopczuk and Kreiner (2016) for Denmark, Crawford and Hood (2016) for England, Elinder, Erixson and Waldenström (2018) for Sweden and Black et al. (2022) for Norway) from which it is hazardous to generalise. As comparative research on this topic grows, it becomes more important that Great Britain is included – not only for those seeking to understand behaviour and frame policy in a British context but also as an interesting case more broadly.

The official dedicated British household survey on wealth is the Wealth and Assets Survey (WAS) implemented by the Office for National Statistics (ONS) from 2006. This has allowed the distribution of wealth in Great Britain to be compared with other countries[1] and (anonymised) micro data to be included in the Luxembourg Wealth Study (LWS) database. In principle, this should also allow for a comparative analysis of the role of intergenerational wealth transfers in Britain compared with elsewhere. However, although WAS does gather information on those transfers, it has not served this purpose so far for a variety of reasons. This is highly problematic as WAS is regarded by ONS as the most suitable source of data for analysis of wealth and wealth inequality, and is the source of British data included in the databases widely employed for comparative analysis of wealth including intergenerational transmission.

Here we tease out the issues involved and show how they can be addressed to produce estimates of intergenerational transfers from WAS aligned with other rich countries. This includes addressing the extent of missingness in the retrospective information sought in the initial wave of WAS, which has been the most substantial obstacle to employing data from this source to study lifetime receipt of intergenerational transfers. On this basis, we compare patterns of lifetime intergenerational transfer receipt in Britain with five other major rich countries – namely, France, Germany, Italy, Spain and the US. We conclude by setting out how the most serious issues identified with respect to wealth transfer data in WAS could be addressed for the long term by modest adaption of the survey, in particular by incorporating fully retrospective questions in each wave.

Our findings reveal common features across these countries as well as some important respects in which Great Britain was distinctive, though less of an outlier than the US. About 35 per cent of British households reported receiving an intergenerational wealth transfer at some point, similar to most of the comparator countries but much higher than the US. About 30 per cent of British households had received an inheritance and 9 per cent a substantial intergenerational gift, with gift amounts much lower on average than inheritances. A relatively high proportion of younger respondents reported receipt in Great Britain compared with elsewhere but received much lower amounts on average than older ones. More than one-third of those towards the top of the wealth distribution in Great Britain had not received any inheritance or gift, but those who did received particularly large amounts on average, which was also the case elsewhere. Those with higher levels of education were more likely to have received an inheritance or gift except in Italy and Spain. Low current wealth was associated with a

---

[1] See, for example, Cowell et al. (2017) and Balestra and Tonkin (2018).

lower probability of having received a wealth transfer in all countries, but this was the case for low current income only in Great Britain. The variation in transfer amounts received among recipients is most strongly related to current levels of household wealth.

Section 2 provides a review of the recent research literature. Section 3 briefly describes the data on intergenerational wealth transfers now available from household wealth surveys for the US and for eurozone countries which serve as key comparators, and then turns to the data available from WAS. We identify the difficulties faced in seeking to derive a full retrospective picture of intergenerational transfers received from WAS, which can be aligned with those in other rich countries, and then describe how these obstacles – including missing values and definitional differences – can be addressed. Section 4 compares patterns of wealth transfer receipt in Britain with those elsewhere. Section 5 presents estimation results for a two-stage model of transfers received. Section 6 concludes.

2 | INTERGENERATIONAL WEALTH TRANSFERS IN RICH COUNTRIES

Intergenerational wealth transfers have been of long-standing research interest, with national studies seeking to capture and understand the behavioural processes at work. There has also been a particular focus on the role that these transfers play in the accumulation of wealth and the generation of wealth inequality, in, for example, Davies and Shorrocks (2000), Wolff (2002), Klevmarken (2004), Wolff and Gittleman (2014), Boserup, Kopczuk and Kreiner (2016), Elinder, Erixson and Waldenström (2018) and Nekoei and Seim (2019).

Most of these studies have been for individual countries, reflecting the national specificity of tax-based data and the absence until recently of survey data that are high-quality and sufficiently comparable. Exceptions are Fessler, Mooslechner and Schürz (2008), who investigate the characteristics associated with wealth transfer receipt in seven rich countries using survey data from the Luxembourg Wealth Survey, and Fessler and Schürz (2018), who use data from the Household Finance and Consumption Survey (HFCS) for eurozone countries around 2010 to look at the incidence of inheritance and the net wealth of households that did versus did not report inheritance receipt. Balestra and Tonkin's (2018) study of household wealth for the OECD covering HFCS countries plus Canada compares patterns of wealth transfer receipt, overall and by age and income. Cowell et al. (2017) look at eight rich countries, comparing the share of households that report having received inheritances or gifts and the total value of those receipts by level of current net worth.

For Great Britain, Karagiannaki (2011, 2015 and 2017), Karagiannaki and Hills (2013) and Atkinson (2018) have presented a picture of the extent and nature of intergenerational wealth transfers using data from HM Revenue and Customs (HMRC) collected in administering estate taxes alongside surveys such as the British Household Panel Survey and the 2004 Attitudes to Inheritance Survey. Crawford and Hood (2016) use data from the English Longitudinal Study of Ageing (ELSA) to investigate the impact of lifetime inheritances and gifts received on the distribution of wealth, concluding that for marketable wealth that impact is equalising but when pension wealth is included it is negligible. Hood and Joyce (2017) also use data from ELSA to capture the distribution of lifetime inheritances received among (most) current pensioners, showing that for this generation inheritances were not a significant source of economic resources for the majority, but a small number received very substantial inheritances. Data from WAS have been used by, for example, Gardiner (2017) to describe patterns of inheritance but only based on reported receipts over the previous two years, for reasons that will become clear in the next section.[2]

---

[2] WAS also includes data on the expectations of respondents about inheritances they may receive in the future, a key ingredient together with data from ELSA in the projections by Bourquin, Joyce and Sturrock (2021) of the effects of inheritances on the lifetime incomes of current younger generations.

3 | CAPTURING INTERGENERATIONAL WEALTH TRANSFERS IN RICH COUNTRIES

3.1 | Data on wealth transfers for comparator countries

To place patterns for Great Britain from WAS in comparative perspective, we will be focusing for convenience on France, Germany, Italy, Spain and the US, all large rich countries with suitable survey data on wealth and wealth transfers. For the US, the Survey of Consumer Finances (SCF) has been in place since 1983, for the most part as a cross-sectional survey every third year. For the four European countries, we draw figures from the HFCS, also (mostly) a cross-sectional survey carried out by national central banks or statistical offices, coordinated by the European Central Bank (ECB) in conjunction with the Household Finance and Consumption Network (HFCN). The fieldwork for the first wave was carried out in most countries around 2010, with the second wave generally around 2014 and the third around 2017.[3] Harmonisation is sought via common definitions of variables, a common blueprint questionnaire, and a variety of other centralised procedures with respect to sampling, checking, imputation and weighting. Nonetheless, differences across the national surveys in terms of sampling frame and questionnaires arise for a variety of reasons.

Capturing the top of the wealth distribution is challenging for household surveys, and many of the lessons from efforts to understand and correct for such problems at the top of the income distribution apply. Both sufficient coverage of those at the top in the sampling frame and unit-non-response for those who are sampled contribute to under-capture.[4] A widely employed strategy for statistical agencies in wealth surveys specifically is to seek to oversample towards the top. The SCF does so via an oversample of wealthy families drawn from a list provided by the Internal Revenue Service,[5] while sampling designs for a majority of HFCS countries also have some oversampling of the wealthy, though Italy does not do so. France, Germany and Spain have particularly high oversampling rates, though a high oversampling rate in itself may not indicate that much additional coverage of the top has been achieved, which also depends on the basis on which the oversampling has been done. The SCF can oversample based on wealth levels inferred from reported incomes from wealth, whereas the oversampling in Germany uses a frame which is only indirectly linked to wealth and income. This is reflected in the results of Bach, Thiemann and Zucco (2018), who compare the top tail of the wealth distribution in Germany, France and Spain in HFCS with imputations from an estimated Pareto distribution derived using additional data points of millionaires and billionaires from rich lists; they find the imputed top 1 per cent wealth share to be considerably higher than the observed one in Germany, whereas for France and Spain the difference is much more modest. For Great Britain, Advani, Bangham and Leslie (2020) merge data from WAS and the Sunday Times Rich List to adjust wealth concentration measures, and find the estimated share of wealth held by the top 10 per cent increases from 51 per cent to 55 per cent while the top 1 per cent share increases from 18 per cent to 23 per cent. The fact that the very top of the distribution may be better captured in the surveys for some countries than others thus has to be kept in mind, here as more generally.

In both SCF and HFCS, one respondent, considered the most financially knowledgeable member, provides the information for the entire family/household. With respect to intergenerational wealth transfers, the SCF seeks details on inheritances and gifts received by household members at any point over their lifetime. Respondents are asked whether they or their partner have ever received an inheritance or been given substantial assets, and if so how many. For each of the largest three, they are then asked whether it was an inheritance, trust or transfer/gift, the approximate value when received, the year of receipt, and from whom it was received. Where there were any other receipts (apart from

---

[3] See, for example, Household Finance and Consumption Network (2013).

[4] See, for example, Vermeulen (2018) and Kennickell (2019).

[5] See Bricker, Henriques and Moore (2017) and Kennickell (2019).

the three largest), their total market value taken together is also sought. The HFCS similarly seeks details on inheritances and gifts received by household members at any point over their lifetime. The blueprint questionnaire asks the main household respondent whether their current main residence was acquired by inheritance or received as a gift. It then asks whether, in addition to the household main residence, they or any member of the household has ever received an inheritance or a substantial gift, including money or any other assets, from someone who is not a part of the current household. If so, the respondent is asked how many were received and, for each of the largest three, the year received, what kinds of assets were involved, how much it was worth at the time, whether it was a gift or an inheritance, and from whom it was received.

3.2 | Data on wealth transfers for Great Britain from WAS

WAS is a longitudinal survey carried out by ONS covering Great Britain but not Northern Ireland (and thus not the entire UK). It is designed to be the main source of micro-level data on wealth for British households, regarded by ONS as the most suitable source of data to use for analysis of wealth and wealth inequality for the period it covers. The longitudinal nature of WAS distinguishes it from the cross-sectional wealth surveys available for other countries discussed earlier. This is in many respects a strength, providing scope to track change over time, but in combination with specific issues in implementation it greatly complicates the use of WAS to provide a comprehensive picture of intergenerational wealth transfers.

The first wave, carried out from mid 2006 to mid 2008, interviewed about 30,000 households, but significant attrition in Wave 2 (mid 2008 to mid 2010) meant that in Wave 3 (mid 2010 to mid 2012) a new 'refreshed' sample was added and one-third of those successfully interviewed were from those new households. Subsequent waves/rounds added further 'supplemented' households to the sample from the previous wave (Office for National Statistics, 2022). Full retrospective information about inter-household wealth transfers was not sought for those supplemented samples, but only for those who were in Wave 1. In Wave 1, all adult individual respondents were asked for details of inheritances received in the previous five years, and separately for details on inheritances received before that. For gifts, respondents were asked about those received in the previous two years. Each subsequent WAS wave then asked only about transfers received in the previous two years, to cover the period from the previous wave. Table 1 sets out the information about inheritances and gifts sought in WAS Wave 1 compared with subsequent waves, and also compared with the corresponding information sought in the SCF and HFCS as described in Section 3.1.

TABLE 1 Information sought about intergenerational transfers by the household surveys being employed

	Details sought on:	
	Inheritances	**Gifts**
SCF	Each of three largest gifts/inheritances ever received, including whether inheritance or gift, plus total amount of any other receipts	
HFCS	Each of three largest gifts/inheritances ever received including whether inheritance or gift	
WAS Wave 1	Each of three largest inheritances received in previous five years Each of three largest inheritances received more than five years ago	Largest gift received in previous two years
WAS Waves 2–	Each of three largest inheritances received in previous two years	Largest gift received in previous two years

Total lifetime receipts – at least in so far as the surveys succeed in capturing them – are what are sought in our comparator countries. For Great Britain, in principle adding the inheritances reported in each subsequent wave to those in Wave 1 should produce a picture of total lifetime receipts for the longitudinal sample 'continuing' from Wave 1 in that wave. For gifts, adding the amounts reported in subsequent waves to the Wave 1 'base' will provide a picture of receipts only from two years before Wave 1 up to the interview in question for the continuing cases.[6]

3.3 | Missing values in WAS

Major problems then arise with the extent of item non-response in Wave 1 about the values of transfers received. On the question about inheritances received more than five years ago, no information is recorded about its value for more than one-fifth of those reporting such a receipt (802 out of 3,598). The more serious information deficit though is for those saying they had received an inheritance in the previous five years: more than three-quarters of these (1,862 out of 2,384) have no value for the amount received. It appears that the latter reflects a problem in the administration of the first wave of the survey in terms of questionnaire design/routeing – with only a minority of interviewers ignoring an incorrect instruction to bypass the detailed questions about amounts for those who reported receipt in the previous five years.

ONS has carried out some imputation of missing values for inheritances from Wave 3 onwards, involving only a handful of observations, but no imputation of these variables has been done in the data released from Wave 1 (or 2). This seriously compromises the picture of inheritances provided by Wave 1 when it is employed as a cross-section, and also of inheritances in the longer term as seen from subsequent waves (which only have information on receipts since the previous wave) when these are linked to the Wave 1 'base'. This 'hole' in the WAS Wave 1 data is the most important obstacle to using WAS data to provide a cross-sectional picture of wealth transfers received at any time in the past, including comparatively.

To address these missing values on transfer amounts in Wave 1, we apply an imputation procedure for respondents who have provided the critical information that an inheritance or gift *was* received but for which no value is present in the data set. The imputation method used is Predicted Mean Matching as operationalised in the R package MICE.[7] This 'hot deck' imputation procedure seeks to obtain plausible values for the missing observations from responses from similar individuals for whom the information is observed. While the number of missing observations that need imputation is substantial relative to the number of available observations, the key assumption of 'missingness at random' for the imputation algorithm is likely to be satisfactory since the largest share of missing data arises from a questionnaire routeing problem independent of the characteristics of the respondents.[8]

Predictive Mean Matching is a popular multiple imputation algorithm.[9] The method first determines, among the non-missing data, a set of observations that can be considered close to the missing observations based on a regression of matching variables for which data are complete. For this step, the variables we used were age, type of tenure of main residence, expectation of future inheritance (which is also asked in the survey), number of inheritances reported to have been received more than five years before the survey, and number of more recent inheritances received. For each missing value, the method builds a small set of candidate recipients (we used the method default of five) from all

---

[6] Since the data from WAS in the Luxembourg Wealth Study are drawn from individual waves, studies using the latter for Great Britain (such as Cowell et al. (2017)) will only capture recent rather than lifetime receipts of transfers, and so have non-comparable and downward-biased estimates when compared with lifetime receipts for other countries.

[7] Van Buuren and Groothuis-Oudshoorn, 2011.

[8] In such a context, missing data are likely to be 'missing completely at random', but this stronger assumption is not necessary for our imputation algorithm.

[9] Van Buuren, 2018.

complete cases that have predicted values – in the first-step regression – closest to the predicted value for the missing observation. One recipient is randomly drawn from these candidates, and its value is used to replace the missing value. This process is stochastic since the method then repeats this process a number of times using different subsamples, in order to obtain different plausibly imputed values.

We implemented the imputation for missing values of four WAS Wave 1 variables: the first and second inheritances received more than five years before the survey and the first and second inheritances in the five years before the survey.[10] Following common practice in the HFCS and SCF, we generated five multiply imputed data sets.

The online appendix provides a comparison of the characteristics of cases for which imputation is and is not required. Reassuringly, for inheritances received more than five years ago (both the largest and second-largest), this shows that the imputed and observed cases are similar in terms of mean age and household wealth and the shape of the wealth distribution. The mean, standard deviation and median values of the imputed observations are similar to those observed, and values at different points of both distributions (percentiles 5, 10, 25, 50, 75, 90 and 95) are also similar. For the largest inheritances received in the previous five years, however, there are some differences between the imputed and observed cases (despite the fact that the source of this specific missingness was a questionnaire error that might have impacted randomly). Those with missing data in this instance are somewhat younger and have lower mean wealth, and accordingly the inheritance amounts imputed to them are lower than those observed on average. For the much smaller number reporting a second-largest receipt in the previous five years, imputed and observed amounts are very similar.[11]

While the main cause of missingness in the data makes an imputation procedure straightforward, the extent of imputation of inheritance values required in WAS Wave 1 must clearly be kept to the fore in assessing the results presented here: about one-third of the households reporting transfer receipts have some component of the amount received affected. However, it must also be emphasised that this relates to *amounts* received rather than who does or does not receive inheritances, which is of course a central feature of wealth transfers to be analysed and understood in itself. Also, the amounts received do not rely solely on WAS Wave 1, as we instead combine these with results from Waves 2 and 3 as described below.

Finally, it is important to be aware that the survey data for some of the countries we are using as comparators also include considerable imputation of transfer amounts received. For Spain and the US, for example, about one-quarter of households reporting receipt have the amount received affected by imputation. While it is important to rectify the structural problem with WAS carried through from Wave 1, which can be done in the way we set out in the conclusions, that need not mean that WAS is ignored as a source of data on lifetime wealth transfers in the meantime.

3.4 | Aligning WAS with comparator countries

Having imputed those missing inheritance values in WAS Wave 1, one option for producing a cross-sectional picture of transfer receipt would be to simply employ the data from that wave. However, valuable additional information on gifts and inheritances received is obtained in subsequent waves, and the timing of Wave 3 also facilitates comparisons with countries in the first wave of the HFCS. We therefore concentrate on the longitudinal Wave 3 sample comprising 13,394 households. This is considerably smaller than the original Wave 1 sample due to the scale of attrition but is similar to the full Wave 3 sample and the initial Wave 1 sample in terms of key demographic (average age and share

---

[10] We looked at alternative specifications: one omitting tenure type and another adding total household wealth and household income to the set of matching variables. These produced very similar results.

[11] For inheritances received more than five years before the survey, the year of receipt was also missing in most of the cases where amounts had to be imputed. This information is needed to update the value of receipts to current terms and was also imputed. The correlation between year of receipt and amounts is very similar in the imputed and observed samples.

of female household reference persons) and economic characteristics (median and mean household wealth and income).[12] By adding the inheritances reported in Waves 2 and 3 to those reported (or imputed) in Wave 1, we can arrive at a picture of total receipts received at any point up to the Wave 3 interview. Later WAS waves will have even fewer households continuing from Wave 1, so this seems the most satisfactory compromise in terms of the wave to employ. While the observation window for gifts is still then restricted to the previous six years, gifts are much smaller on average than inheritances in WAS (as documented below) and only a small proportion of the total amount transferred will be 'missed' by this restriction.[13]

Since WAS Wave 3 relates to 2010–12, to align in so far as possible across countries we use data from the 2010 SCF and from HFCS Wave 1 for France, Germany and Spain. For Italy, HFCS Wave 2 data for 2014 are used because the questionnaire section on intergenerational transfers and gifts was not included in the first wave.

A number of issues arising from differences in the way information about wealth transfers is sought in WAS versus SCF and HFCS also need to be addressed. Inheritance questions in WAS explicitly ask for the value of inheritances or gifts received 'after tax and other deductions'. Whether amounts net or gross of tax are sought, and what is actually provided by respondents, is less clear for the comparator countries we are using, but for the most part these seem more likely to be gross of tax.[14] While the net receipt may in fact be the more relevant in terms of its impact on wealth accumulation, to improve alignment with the other rich countries we estimated the before-tax values for Great Britain from the reported after-tax figures using the marginal tax rates and thresholds appropriate for the year of receipt of each past inheritance. (Since tax was levied on the bequest and that may have been divided among several beneficiaries, we assumed that half the total bequest came to the recipient responding in the survey when determining effective tax rates.) The UK had a top marginal tax rate for bequests (estate duty and capital transfer tax) between 75 per cent and 85 per cent from 1949 to 1983, and it decreased gradually until the current flat 40 per cent inheritance tax was established in 1988. We also took into account recent evidence that the effective tax rate at the top of the distribution of inheritances is considerably lower than the statutory rate, for a variety of reasons due to reliefs and exemptions etc.[15,16] The issue of net versus gross inheritance/gift amounts has received little attention in comparative analysis and merits further investigation, but this seems the 'least bad' approach to take at this stage.

Another issue to be addressed relates to a difference in the way in which questions about inheritances and gifts were framed. In both the SCF and the HFCS, respondents were asked whether they had ever received an inheritance or *substantial* gift, whereas in WAS no such qualifier was used. As a consequence, a greater number of quite small amounts are included in the reported receipts of British respondents. To bring the data sets into closer alignment, we apply a threshold set at 10 per cent of median income in the country in question, which for Britain is about £3,000 (2010 values), which coincidentally is the annual gift exemption threshold for inheritance tax; receipts lower than that threshold are not counted. This has a significant impact on the proportion of British households reporting receipt of gifts, reducing that by about half, whereas the impact on inheritances is marginal.

---

[12] For details, see Nolan et al. (2020).

[13] For details, see Nolan et al. (2020).

[14] The SCF questionnaire does not specify whether gross or net amounts are intended but, in response to our enquiry, SCF staff have confirmed that gross amounts are being sought. In the HFCS, documentation from the ECB states that amounts should if possible be net but national data producers or users in France, Italy and Spain also confirm that gross amounts are intended there, though one cannot be sure what respondents actually provide. The German questionnaire is distinctive in asking respondents whether the figure they provide is gross or net of taxes, but this information is not carried through to the HFCS. We are grateful to a referee for highlighting this issue.

[15] Office of Tax Simplification, 2018.

[16] Large intergenerational transfers may have been in the form of land or businesses, which are taxed only lightly, for example. To account for this, we assume that for very high amounts (above 10 times the general exemption threshold at the time of receipt), only half of the transfer was taxed at the top rate. The overall impact of our net to gross conversion is to increase intergenerational transfers by 12 per cent. Following discussion with ONS, the possibility of seeking pre-tax amounts in the WAS questionnaire is being considered.

The application of the threshold also makes little difference to the percentage receiving either gifts or inheritances in the other countries. This reinforces our belief that the application of the threshold, by excluding small gifts that would not have been counted in the other surveys, improves the alignment between the figures for Britain and those for these comparator countries.

Inheritances from a deceased spouse are specifically to be included in WAS, as the question posed to respondents makes clear, but are excluded in both SCF and HFCS. Since it is intergenerational transfers that are the focus anyway, we therefore exclude inheritances and gifts received from spouses in WAS.

The responses on receipt of inheritances and gifts are at the individual level in WAS, the relevant questions being part of the individual questionnaire to which each adult in the household was asked to respond. These responses have to be aggregated to the household level, since that is the unit employed in the data for the comparator countries. The household unit in question in WAS is that observed in Wave 3.[17]

Since we wish to aggregate inheritances and gifts received at different points in time, some many years ago, and these are reported in nominal terms, the impact of price changes on their real value has to be taken into account by converting them to a common basis. We therefore update to 2012 values for Great Britain, and for the corresponding wave year value for other countries, using the consumer price index. When values are reported in common currency, this refers to 2010-priced US dollars.

Uprating amounts reported as inheritances or gifts only by the rate of consumer price inflation since they were received is a relatively conservative approach, taking no account of the return that recipients could have generated on those receipts if they saved and invested them. A common approach to take this into account is to 'capitalise' receipts assuming a real rate of return of 3 per cent per annum, a crude simplification in the absence of information about how much was saved rather than spent and the actual returns generated. This would serve to increase total transfer amounts derived from the WAS data we are studying here substantially but has little impact on the transfer patterns reported.[18] Practically, capitalisation also has the undesirable consequence of inflating the present value of distant transfers, which are those more likely to suffer from recall bias and measurement error.

4 | PATTERNS OF WEALTH TRANSFER RECEIPT IN COMPARATIVE PERSPECTIVE

Table 2 shows the incidence of receipt of inheritances, gifts and either for each country. The percentage reporting receipt of an inheritance ranges from 17 per cent in the US up to 30 per cent for Britain, with the other countries between 22 and 27 per cent. Substantial gifts are most frequently reported in France and Germany, at 17 per cent and 13 per cent respectively; Britain and Italy are at 9 and 7 per cent, and very few gifts are seen in the cases of Spain and the US, though the figure for Spain must be heavily

TABLE 2 Percentage receiving intergenerational transfers

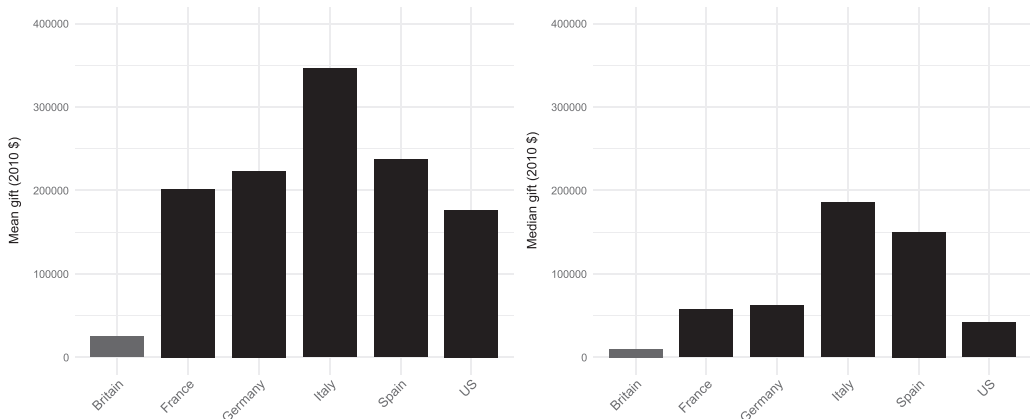| %	Britain	France	Germany	Italy	Spain	US
Inheritances	29.6	22.2	22.7	25.7	26.9	17.1
Gifts	8.6	17.4	12.6	7.1	3.3	2.4
Inheritances or gifts	34.5	36.1	32.7	31.6	29.5	19.0

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US.

---

[17] After consultation with ONS, to derive weights at the household level we average the weights for the household members for each household.

[18] See Nolan et al. (2020).

FIGURE 1 Mean and median amounts of lifetime inheritances among recipient households in common currency
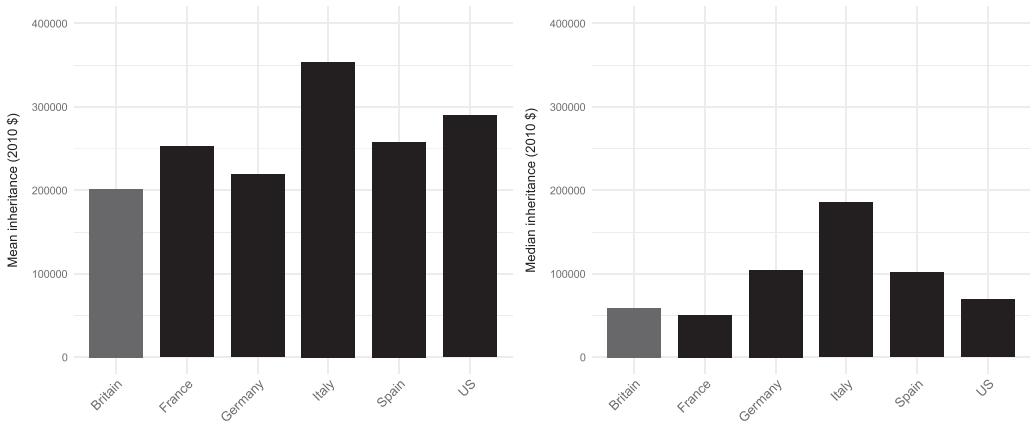
Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US
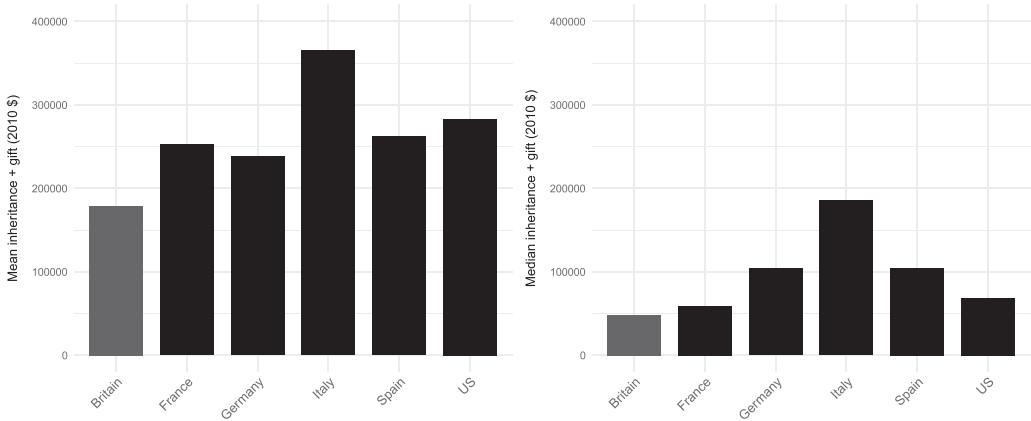
FIGURE 2 Mean and median amounts of lifetime gifts among recipient households in common currency

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US

qualified.[19] Taking inheritances and gifts together, about one-third of households report some receipt in Britain, France, Germany and Italy. For Spain this figure is slightly lower at 30 per cent, and the US is a clear outlier with only 19 per cent of households reporting receipt.

Turning to the amounts received and focusing first on inheritances, Figure 1 shows the mean and median values of the inheritances received among recipients expressed in common currency (US$) terms in 2010 values. The mean value of amounts received ranges from about $200,000 in Britain up to close to $300,000 in the US and $350,000 in Italy. In all countries, mean values are much higher than the median, reflecting the fact that the average is pulled up by a small number of very large amounts received.

The corresponding means and medians for gifts, shown in Figure 2, are much smaller than inheritances in the case of Britain and the US, whereas for France, Germany, Italy and Spain the amounts received in the form of gifts are similar in scale to inheritances.

---

[19] The breakdown between inheritances and gifts is often missing in the HFCS for Spain as it was not sought in the underlying Spanish survey (which pre-dates the HFCS) in the case of transfers in the form of financial assets, which are therefore all counted as inheritances. The gifts figure for Britain is also biased downwards by the fact that the retrospective observation window available for gifts in WAS Wave 3 was only the previous six years.

FIGURE 3   Mean and median amounts of lifetime transfers among recipient households in common currency

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US

TABLE 3   Mean and median intergenerational transfers

2010$, '000	Value	Standard error	95% confidence interval	
Mean transfers				
Great Britain	179.0	55.0	46.8	311.2
France	252.6	14.4	224.4	280.9
Germany	238.2	26.1	187.0	289.6
Italy	365.1	20.2	325.5	404.7
Spain	261.0	44.8	167.2	354.9
US	282.8	32.8	218.4	347.3
Median transfers				
Great Britain	48.1	5.4	34.1	62.3
France	59.4	2.2	54.9	63.9
Germany	104.2	8.3	88.0	120.4
Italy	185.6	5.7	174.5	196.7
Spain	104.5	7.8	89.1	119.9
US	68.4	5.1	58.5	78.4

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US.

Aggregating inheritances and gifts, the mean and median for the aggregate transfers received are shown in Figure 3. Both average and median transfer receipts are lowest for Britain and highest for Italy. The mean/median ratio ranges from 2.0 in Italy to 2.3 in Germany, 2.5 in Spain, 3.7 in Britain and over 4 in France and the US.

In assessing these differences in amounts received, such survey-based figures are clearly subject to error for a variety of reasons even before imputation of missing values is taken into account. Table 3 shows the estimated standard errors and confidence intervals for the mean and median of total transfer amounts received, derived taking into account uncertainty introduced by both imputation and sampling variability (in Great Britain and elsewhere). This shows that the standard errors are relatively large and confidence intervals relatively wide in Great Britain, Spain and the US. The 95 per cent confidence interval for the mean value of total transfers for Great Britain overlaps with those for most of the other countries but not for Italy. Distinguishing inheritances and gifts separately and taking estimated

TABLE 4   Intergenerational transfers by age group

% receiving any	**Britain**	**France**	**Germany**	**Italy**	**Spain**	**US**
Inheritances						
Aged under 35	19.0	6.7	5.1	11.2	13.1	6.5
Aged 35–54	24.6	15.1	20.0	20.3	23.4	13.2
Aged 55–64	40.0	34.3	35.7	33.4	37.3	26.6
Aged 65 or over	34.5	34.8	31.6	31.4	33.9	27.9
Gifts						
Aged under 35	19.7	14.7	12.3	8.1	3.1	2.0
Aged 35–54	11.6	20.5	18.3	9.8	4.6	2.9
Aged 55–64	6.0	19.1	11.5	7.3	3.0	2.9
Aged 65 or over	1.5	14.1	5.7	3.7	1.6	1.5
Inheritances or gifts						
Aged under 35	31.6	20.3	16.5	18.3	16.0	8.4
Aged 35–54	31.6	32.2	35.3	28.6	27.3	15.4
Aged 55–64	42.4	47.5	43.8	39.6	39.5	28.7
Aged 65 or over	35.0	44.9	34.2	34.2	34.9	29.1

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US.

confidence intervals for those into account (not shown), the mean and median levels of gifts in the British case are significantly lower than those in most of the other countries.

Receipt of inheritances and gifts from the previous generation is strongly related to where individuals and their parents are in their life cycles. Table 4 shows the percentage reporting receipt of inheritances and gifts distinguishing four age groups for the household 'reference person' or equivalent. For most countries, the share having received an inheritance is similar for those aged 55–64 and those aged 65 or over, and higher than for younger ages. Gifts are generally less concentrated among older groups than inheritances. This could be because gift-giving has increased over time, or reflect recall bias among older cohorts. Focusing on inheritances or gifts taken together, some such receipt is quite common across the entire age distribution, often affecting about one in three or one in four households, though in the US few under 35 report any.

Figure 4 shows the average transfer receipt (aggregating inheritances and gifts) by age group expressed as a ratio of the overall average receipt, which is consistently lowest for the youngest age group but with considerable variation in how the middle and older age groups compare. Older recipients have had longer to accumulate transfers, and younger recipients are more likely to have received gifts which are often lower than inheritances, so it is not surprising that average receipts for those under 35 are relatively low. The evolution of aggregate wealth stocks, growing over time but at differing rates, could also contribute to differing gaps between more recent transfers and those received further back in time.

Figure 5 shows that across all the countries, very little of the total amount transferred – typically only about 5 per cent – has been received by the youngest age group. Those aged 65 or more have had the longest time to accumulate transfers and received the largest share of the total in Britain, Italy, the US and especially France, but the 'middle-aged' have done so in Germany and Spain. This distribution of transfers reflects the combined effects of the varying proportions reporting receipt across age groups, the differing average amounts received by those recipients, and also differences across countries in the share of all households located in the age group in question.

Table 5 shows how the percentage receiving some transfer varies across the (equivalised) income distribution. The proportion reporting receipt generally rises with income, but the variation is often

FIGURE 4 Average amount (relative to overall mean) of intergenerational transfers received by each age group

Age Group ■ Under 35 ■ 35 to 54 ■ 55 to 64 ■ 65 and over
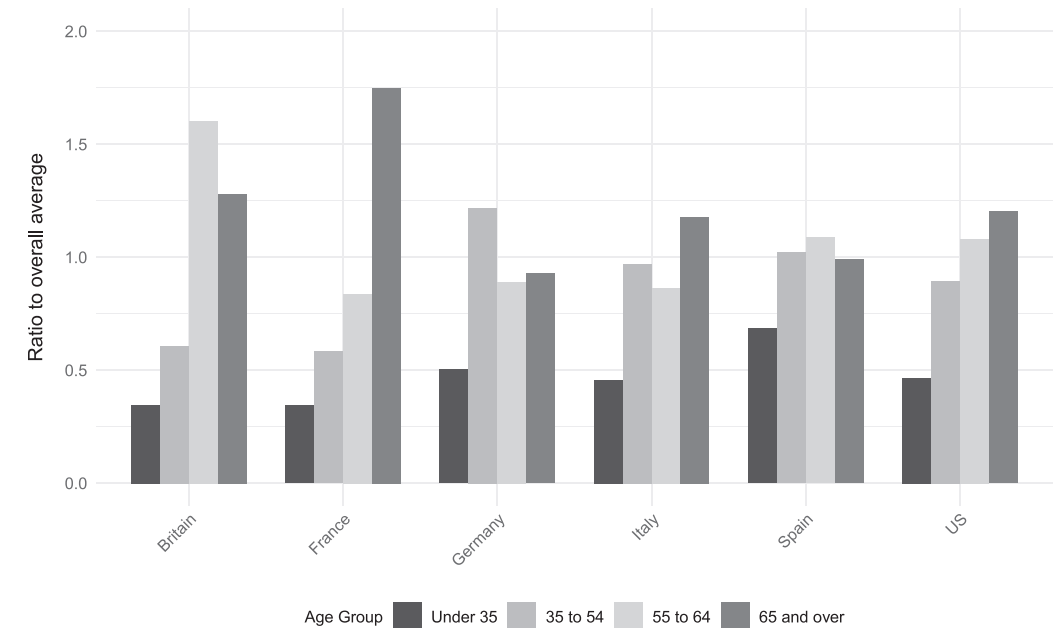
Note: Shows average amount received in transfers by recipients in age group divided by average amount received across all recipients.
Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US

FIGURE 5 Share of the total value of intergenerational transfers going to each age group

Age Group ■ Under 35 ■ 35 to 54 ■ 55 to 64 ■ 65 and over
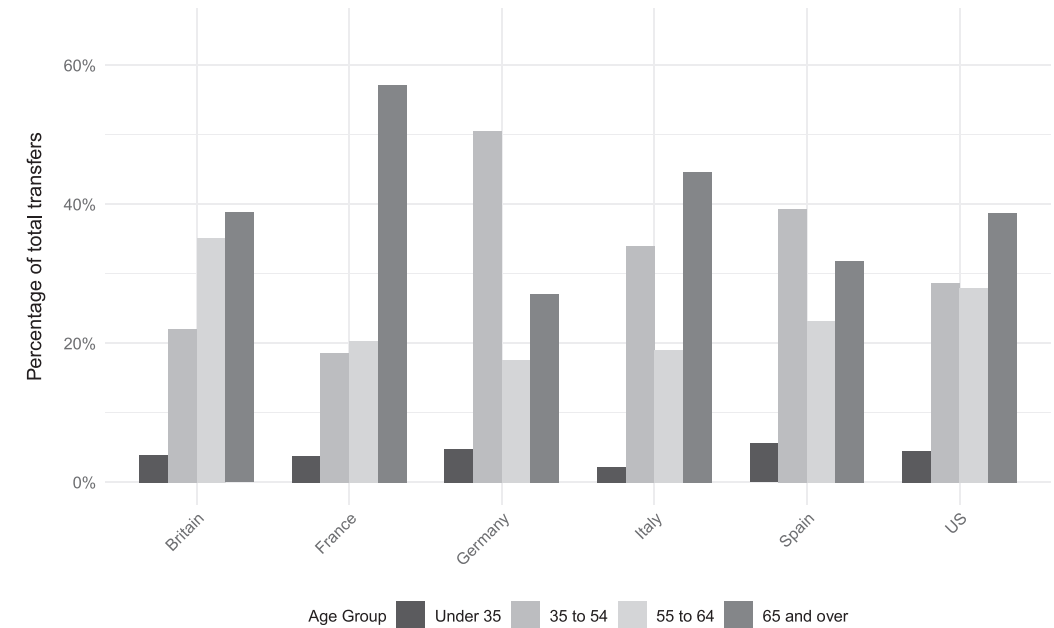
Note: Shows aggregate amount in transfers going to recipients in age group as a percentage of total transfers going to all recipients.
Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US

TABLE 5   Incidence of inheritance or gift receipt by position in the income distribution

% receiving any	**Britain**	**France**	**Germany**	**Italy**	**Spain**	**US**
First quartile	22.4	26.3	20.5	26.6	27.6	21.8
Second quartile	28.5	32.5	28.3	27.3	29.0	14.9
Third quartile	39.7	36.9	34.3	33.7	27.2	17.2
Fourth quartile	47.6	48.5	48.2	39.3	34.3	23.3
Top decile	49.8	53.2	50.1	42.2	39.4	28.7
Top 1%	54.1	68.0	49.7	40.9	50.3	29.7

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US.

TABLE 6   Incidence of inheritance or gift receipt by position in the wealth distribution

% receiving any	**Britain**	**France**	**Germany**	**Italy**	**Spain**	**US**
First quartile	14.9	11.9	6.7	3.4	12.9	5.4
Second quartile	29.3	29.7	21.3	34.6	24.0	12.0
Third quartile	38.0	42.2	40.8	39.4	32.5	22.7
Fourth quartile	55.9	60.4	62.2	49.2	48.5	36.0
Top decile	62.6	68.9	63.0	54.7	55.0	43.3
Top 1%	62.9	73.5	68.9	53.9	66.5	40.2

Source: WAS Waves1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US.

not particularly strong. In Britain, about half the households in the top quarter report having received some transfer, compared with 22 per cent for the bottom quarter. The latter figure is, however, still quite substantial – transfers are certainly not only relevant at the top or even in the top half of the income distribution. There is also often little variation in the incidence of receipt towards the top of the distribution: for Britain, for example, about half the households in the top 10 per cent (decile) or top 1 per cent received some transfer, no higher than the corresponding figure for the top quarter. The very top is not distinctive in being more likely to have benefited from a transfer – at least when ranking is by income – except in France and Spain. In most countries, variation in the incidence of receipt across the income distribution is more pronounced for inheritances than it is for gifts, though for Britain there is also substantial variation for the latter.

Table 6 shows the corresponding picture when households are ranked instead by their net worth (defined here as total assets excluding public and occupational pensions minus outstanding liabilities).[20] The likelihood of having received an inheritance or gift increases rather consistently as one moves up the wealth distribution, except at the very top where the figure for the top 1 per cent is not markedly different from that for the top decile. (This will of course reflect, inter alia, the impact that receipt of the inheritance or gift has had on current wealth and location in the wealth distribution.) A substantial proportion of those at the very top reported no inheritance or gift receipt, however, and this is particularly pronounced for the US where 60 per cent of the top 1 per cent had none.

However, this needs to be seen alongside the patterning of the average amount received shown in Figure 6. These amounts generally also rise as one moves up the wealth distribution but are by far the largest for recipients in the top 1 per cent. So while a substantial proportion of those now in the top 1 per cent of the wealth distribution did not benefit from receipt of intergenerational transfers,

---

[20] Note that to align with the other countries, the wealth measure we employ differs from that used by ONS in publications based on WAS, which – unlike those countries – does not include the estimated value of own businesses and does include the value of 'household contents'.

FIGURE 6 Average amount (relative to overall mean) of intergenerational transfers received by each wealth group
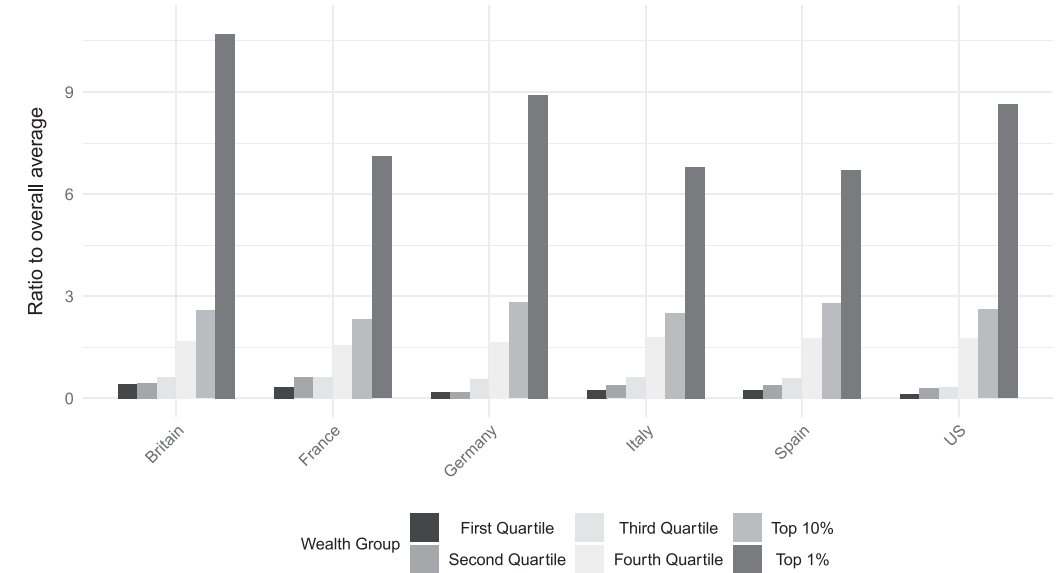
Note: Shows average amount received in transfers by recipients in specified wealth category divided by average amount received across all recipients.
Source: WAS Waves 1–3 for Great Britain; HFCS Wave 1 for France, Germany and Spain; HFCS Wave 2 for Italy; SCF 2010 for US

those who did received particularly large amounts on average, which can only have been beneficial to their accumulation of wealth. In terms of how total intergenerational transfers were distributed across the wealth distribution, for Great Britain the top quarter received about two-thirds of the total amount transferred whereas the bottom quarter received less than 5 per cent.

It is important to assess whether the observed pattern of transfer receipt is primarily driven by the fact that both transfer receipt and position in the wealth distribution are systematically related to age. Detailed cross-tabulations (available from the authors) show that within age groups, amounts received still generally rise as one moves up the wealth distribution (though the bottom quartile is sometimes not as distant from the rest) and the most striking feature remains the very large amounts going to those right at the top of the distribution.

5 | REGRESSION ANALYSIS

We now move to regression analysis to probe how patterns of intergenerational transfers are associated with a range of characteristics of households. This is clearly a descriptive exercise and we are not claiming to identify causal relationships. The exercise is, however, informative especially in a comparative context as many such analyses have been done for individual countries. The most common approach applied in this context[21] is to first examine the characteristics associated with whether the household has received any transfer by estimating a logit regression for the probability of receipt, and then examine how the amounts received vary across recipients. One could alternatively include both in one model, but treating them separately – as well as being commonplace in the literature – has particular appeal given the points highlighted earlier about the imputation required for amounts received but not affecting the incidence of receipt itself. We include as independent variables

---

[21] For example, Crawford and Hood (2016).

TABLE 7 Regression analysis of probability of receipt of intergenerational wealth transfer

	Great Britain			France			Germany		
	Base prob.	**Std err.**	**Pr(>|t|)**	**Base prob.**	**Std err.**	**Pr(>|t|)**	**Base prob.**	**Std err.**	**Pr(>|t|)**
Baseline	0.26**	0.098	0.000	0.20**	0.10	0.000	0.17**	0.24	0.000
Average marginal effects	**dy/dx**	**Std err.**	**Pr(>|t|)**	**dy/dx**	**Std err.**	**Pr(>|t|)**	**dy/dx**	**Std err.**	**Pr(>|t|)**
Age 40s	−0.04**	0.02	0.034	0.05**	0.02	0.005	0.12**	0.03	0.000
Age 50s	0.00	0.02	0.804	0.13**	0.02	0.000	0.14**	0.04	0.000
Age 60 or over	0.03*	0.02	0.067	0.20**	0.02	0.000	0.10**	0.03	0.001
Male reference person	0.00	0.01	0.788	0.01	0.01	0.509	−0.01	0.02	0.527
Higher secondary education	0.08**	0.01	0.000	0.05**	0.01	0.000	0.04	0.04	0.300
Tertiary education	0.15**	0.02	0.000	0.13**	0.02	0.000	0.11**	0.04	0.007
Low income (quintile 1)	−0.06**	0.01	0.000	−0.02	0.02	0.296	0.03	0.04	0.358
High income (quintile 5)	0.05**	0.01	0.001	0.02*	0.01	0.093	0.03	0.03	0.300
Low wealth (quintile 1)	−0.17**	0.01	0.000	−0.23**	0.02	0.000	−0.29**	0.02	0.000
High wealth (quintile 5)	0.18**	0.01	0.000	0.20**	0.02	0.000	0.23**	0.03	0.000
Children in household	−0.02	0.01	0.149	−0.03*	0.02	0.067	0.05	0.03	0.144

	Italy			Spain			US		
	Base prob.	**Std err.**	**Pr(>|t|)**	**Base prob.**	**Std err.**	**Pr(>|t|)**	**Base prob.**	**Std err.**	**Pr(>|t|)**
Baseline	0.28**	0.149	0.000	0.24**	0.23	0.000	0.09**	0.129	0.000
Average marginal effects	**dy/dx**	**Std err.**	**Pr(>|t|)**	**dy/dx**	**Std err.**	**Pr(>|t|)**	**dy/dx**	**Std err.**	**Pr(>|t|)**
Age 40s	0.05*	0.03	0.083	0.03	0.06	0.710	0.06**	0.02	0.003
Age 50s	0.10**	0.03	0.001	0.11**	0.04	0.012	0.12**	0.02	0.000
Age 60 or over	0.08**	0.03	0.003	0.07	0.05	0.221	0.17**	0.02	0.000
Male reference person	−0.01	0.01	0.389	0.01	0.03	0.648	−0.02**	0.01	0.026
Higher secondary education	−0.02	0.02	0.187	−0.06	0.07	0.438	0.08**	0.01	0.000
Tertiary education	0.01	0.02	0.730	0.00	0.07	0.969	0.10**	0.02	0.000
Low income (quintile 1)	0.05**	0.02	0.013	0.03	0.03	0.254	−0.02	0.02	0.210
High income (quintile 5)	−0.03*	0.02	0.089	−0.02	0.04	0.632	−0.02	0.01	0.179
Low wealth (quintile 1)	−0.35**	0.01	0.000	−0.23**	0.04	0.000	−0.12**	0.01	0.000
High wealth (quintile 5)	0.15**	0.02	0.000	0.17**	0.04	0.001	0.11**	0.02	0.000
Children in household	0.02	0.02	0.392	−0.03	0.04	0.442	−0.02	0.01	0.223

Note: Baseline probability here is that of the omitted category of the set of dummies: female reference person under 40 years old, with less than higher secondary education, no children, and both income and wealth higher than the first quintile and lower than the fifth quintile. It is obtained from the intercept value (*cons*) of the logit regression: $Prob = \frac{odds}{1+odds} = \frac{\exp(cons)}{1+\exp(cons)}$. This value is, for example, 0.26 (26 per cent) for Great Britain. The average marginal effects (AMEs) on probability of receipt in a logit regression can be interpreted as the average increase in the probability of receipt – other things equal – when the relevant dummy is switched. For example, having tertiary education increases the probability of receipt by 0.15 (15 per cent) in Great Britain, on average in the sample. ** indicates that the effect is statistically significant at the 5 per cent level and * that it is at the 10 per cent level. Inference takes into account both multiple imputation and sampling variability.

TABLE 8 Regression analysis of size of intergenerational transfer ('000 US$ 2010) among recipients

	Great Britain			France			Germany		
	Intercept	Std err.	Pr(>|t|)	Intercept	Std err.	Pr(>|t|)	Intercept	Std err.	Pr(>|t|)
	−26.3	102.6	0.798	20.1	45.7	0.661	75.8	83.4	0.364
Average marginal effects	dy/dx	Std err.	Pr(>|t|)	dy/dx	Std err.	Pr(>|t|)	dy/dx	Std err.	Pr(>|t|)
Age 40s	22.2	16.5	0.190	−5.6	17.2	0.745	111.9	88.4	0.206
Age 50s	49.7[*]	26.6	0.070	2.1	18.4	0.910	56.4	53.1	0.288
Age 60 or over	192.9	130.4	0.165	251.2[**]	37.3	0.000	46.9	54.8	0.393
Male reference person	5.0	33.6	0.881	−14.9	28.8	0.605	−53.7	57.3	0.349
Higher secondary education	17.5	28.0	0.532	−4.3	29.3	0.882	−16.8	58.4	0.774
Tertiary education	90.3	96.2	0.352	76.5[*]	42.2	0.070	−31.0	45.1	0.492
Low income (quintile 1)	−18.7	21.6	0.390	29.7	44.6	0.505	−4.8	39.2	0.903
High income (quintile 5)	86.9	91.8	0.346	104.6[**]	35.5	0.003	59.5	86.4	0.498
Low wealth (quintile 1)	19.6	43.0	0.651	−31.6	27.9	0.258	−56.1	39.3	0.155
High wealth (quintile 5)	154.8[**]	51.7	0.017	239.4[**]	31.5	0.000	328.6[**]	70.6	0.000
Children in household	−28.9	25.9	0.273	−36.4[**]	15.9	0.022	67.1	112.0	0.549
	Italy			**Spain**			**US**		
	Intercept	Std err.	Pr(>|t|)	Intercept	Std err.	Pr(>|t|)	Intercept	Std err.	Pr(>|t|)
	49.4	54.0	0.360	125.4[*]	63.5	0.051	59.9	69.6	0.390
Average marginal effects	dy/dx	Std err.	Pr(>|t|)	dy/dx	Std err.	Pr(>|t|)	dy/dx	Std err.	Pr(>|t|)
Age 40s	117.3[**]	47.6	0.014	5.8	79.3	0.942	−3.2	41.0	0.938
Age 50s	76.8[*]	46.3	0.097	8.1	129.6	0.950	85.4	79.1	0.281
Age 60 or over	186.1[**]	62.5	0.003	12.2	82.9	0.884	−34.8	50.0	0.486
Male reference person	2.5	44.1	0.955	−3.8	88.8	0.966	−50.7	61.3	0.408
Higher secondary education	42.3	41.7	0.311	−48.7	149.3	0.750	57.5	78.6	0.464
Tertiary education	201.6[**]	93.8	0.032	−11.0	111.3	0.922	70.8	89.1	0.427
Low income (quintile 1)	−8.9	38.0	0.815	−13.1	41.6	0.755	133.4	97.1	0.170
High income (quintile 5)	−29.3	58.6	0.617	89.7	129.2	0.496	22.5	70.9	0.751
Low wealth (quintile 1)	−116.4[**]	52.3	0.026	−55.9	54.0	0.305	−77.9[**]	25.2	0.002
High wealth (quintile 5)	454.3[**]	53.9	0.000	348.4[*]	169.1	0.057	433.5[**]	112.6	0.000
Children in household	−4.3	49.8	0.931	14.7	72.9	0.840	−27.2	42.6	0.523

Note: Average marginal effects (AMEs) of linear regression of amount received on the set of socio-economic variables. AMEs in a linear Ordinary Least Squares regression are the coefficients of the regression. For example, having tertiary education increases the amount received by 76.5 thousand US$ in France, on average in the sample. ** indicates coefficients that are statistically significant at the 5 per cent level and * those that are at the 10 per cent level. Inference takes into account both multiple imputation and sampling variability.

the main ones included in studies such as Crawford and Hood (2016) – namely, age, gender and education (of the household reference person), the presence of children in the household, and whether the levels of household income and household wealth are relatively high or low for the country in question (with dummy variables for income/wealth in the bottom and top quintiles of the relevant distribution). Some of those who have not received any such wealth transfer to date may of course do so in the future (and valuable information about expectations in that regard is obtained in the surveys which we do not seek to exploit here).

Table 7 presents results from estimating this model for the countries being studied, showing the average marginal effects on the probability of receipt of each of the variables included. In all countries, age is a relevant factor in predicting whether some transfer has been received. The steepness of this age effect is particularly marked in France and the US. Those with higher levels of education are more likely to have received an inheritance or gift in a majority of countries but this was not the case in Italy or Spain. Low current wealth is associated with a lower probability of having previously received a wealth transfer in all countries; receipt or non-receipt will have influenced current wealth, of course, so this does not necessarily mean that wealthy people are more likely to receive gifts or inheritances.

To then probe the characteristics associated with the varying size of transfers received among transfer recipients only, we estimate a linear regression with the value of that receipt as dependent variable, and with the same set of independent variables. The standard errors are estimated taking the imputation described earlier into account. Table 8 shows that the total amount received via inheritance or gifts is significantly related to current wealth: high wealth is associated with having received higher amounts everywhere, and low wealth with having received relatively low amounts everywhere except Great Britain. (Once again, such receipt in the past will be among the influences on current wealth.) Transfer amounts received are not generally strongly related to age when wealth is included, and the same is true of tertiary education; if wealth is omitted, a stronger association with both is seen. While these results include the values we have imputed for amounts received in Great Britain as described earlier, when those cases (and those affected by imputations in the other countries) are omitted a similar pattern of association dominated by current wealth is found, as documented in the online appendix.

6 | CONCLUSIONS

Wealth surveys that collect information on intergenerational wealth transfers allow for comparative study across rich countries of transfers received at any point in the past and their relationship with current wealth. However, this is problematic for Great Britain due to specific features of the Wealth and Assets Survey (WAS), the central source of survey-based household wealth data; the most significant issue is the extent of missing values in Wave 1 for wealth transfer amounts received up until then, with subsequent waves only seeking information about transfers received since the previous wave rather than lifetime receipts. This has severely constrained efforts to investigate patterns of lifetime wealth transfers in Great Britain in comparative perspective. In this paper, we set out these issues and presented ways of dealing with them to produce a data set for 2010–12 that allows for meaningful comparisons between Great Britain and other rich countries of patterns of intergenerational wealth transmission. On this basis, we investigated how Great Britain compares in that respect with France, Germany, Italy, Spain and the United States, descriptively and by comparing estimated regression models.

This revealed common features across these countries as well as some important respects in which Great Britain was distinctive, though less of an outlier than the US. About 35 per cent of British households reported receiving an intergenerational wealth transfer at some point, similar to most of the comparator countries but much higher than the US. About 30 per cent of British households had received an inheritance and 9 per cent a substantial intergenerational gift, with gift amounts much lower on average than inheritances. Gifts were rarer but much larger on average in the US, whereas for France and Germany receipt of gifts was almost as common as inheritances and mean amounts were similar for both. A relatively high proportion of younger respondents reported receipt in Great Britain but received much lower amounts on average than older ones. About 56 per cent of those in the top quarter of the British wealth distribution had received an inheritance or gift compared with 15 per cent in the bottom quarter. More than one-third of those in the top 10 per cent or top 1 per cent of the wealth distribution in Great Britain had not received any inheritance or gift but those who

did received particularly large amounts on average, which was also the case elsewhere. For Great Britain, the top quarter of the current wealth distribution received about two-thirds of the total amount of wealth transferred whereas the bottom quarter received less than 5 per cent.

The characteristics of those who had versus had not received intergenerational transfers were probed via logit regression analysis. Age was a relevant factor in predicting whether some transfer has been received, with the steepness of the relationship particularly marked in France and the US, and those with higher levels of education were more likely to have received an inheritance or gift except in Italy and Spain. Low current wealth was associated with a lower probability of having received a wealth transfer in all countries, but this was the case for low current income only in Great Britain. Analysing the variation in amounts received among recipients via linear regression, the strongest relationships were with current levels of household wealth in all countries.

While this paper has concentrated on patterns of intergenerational wealth transfer, the data set constructed from WAS described here can also be used to investigate related issues in a comparative perspective, including the much-debated topic of the impact of those transfers on wealth inequality and intergenerational transmission of advantage (on which see Nolan et al. (2021) and Palomino et al. (2021)). The factors that may underpin differences in transfer patterns across countries include demographic profiles and institutional contexts, with the latter most obviously including the way in which those transfers are taxed but more broadly having to encompass welfare state structures and provisions much more broadly. Relevant material on the variation in wealth transfer tax structures across the countries studied here is provided in Nolan et al. (2020), but no straightforward link between that and the differences in transfer patterns reported here emerges.

While enabling comparative analysis of lifetime wealth transfers for Great Britain for those who responded in the first wave of WAS and remained in the sample to Wave 3, in the longer term the need to employ the various 'data treatments' described here and to restrict analysis to those respondents only could be obviated by adding a limited number of questions to WAS. Each wave could ask not only about inheritances and gifts since the previous wave, but also about transfers received at any point before that. While some of these receipts will have been reported in previous waves, this is the only way to remedy the gaps in information from Wave 1 and those affecting households joining in subsequent waves that have been highlighted here. Following fruitful discussions with ONS staff, this was to have been incorporated into the WAS questionnaire prior to the onset of the pandemic, but that necessitated a switch to a much shorter questionnaire with telephone interviewing. Implementation of those changes post-pandemic is planned and should greatly enhance the value of WAS for understanding patterns of wealth transfers and framing policies affecting them, including how they are taxed.

REFERENCES

Advani, A., Bangham, G. & Leslie, J. (2020), The UK's wealth distribution and characteristics of high-wealth households. Wealth Tax Commission, Evidence Paper 1.

Atkinson, A. B. (2018), Wealth and inheritance in Britain from 1896 to the present. *Journal of Economic Inequality*, 16, 137–69.

Bach, S., Thiemann, A. & Zucco, A. (2018), Looking for the missing rich: tracing the top tail of the wealth distribution. DIW Berlin, Discussion Paper 1717.

Balestra, C. & Tonkin, R. (2018), Inequalities in household wealth across OECD countries: evidence from the OECD Wealth Distribution Database. OECD Statistics Working Paper 2018/01.

Black, S. E., Devereux, P. J., Landaud, F. & Salvanes, K. G. (2022), The (un)importance of inheritance. National Bureau of Economic Research, Working Paper 29693.

Boserup, S., Kopczuk, W. & Kreiner, C. (2016), Wealth inequality: evidence from the role of bequests in shaping wealth inequality. *American Economic Review*, 106, 656–61.

Bourquin, P., Joyce, R. & Sturrock, D. (2021), Inheritances and inequality over the life cycle: what will they mean for younger generations?. Institute for Fiscal Studies, Report R188.

Bricker, J., Henriques, A. & Moore, K. (2017), Updates to the sampling of wealthy families in the Survey of Consumer Finances. Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, 2017-114.

Cowell, F., Nolan, B., Olivera, J. & Van Kerm, P. (2017), Wealth, top incomes and inequality. In K. Hamilton and C. Hepburn (eds), *National Wealth: What is Missing, Why it Matters*, Oxford: Oxford University Press.

Crawford, R. & Hood, A. (2016), Lifetime receipt of inheritances and the distribution of wealth in England. *Fiscal Studies*, 37, 55–75.

Davies, J. B. & Shorrocks, A. F. (2000), The distribution of wealth. In A. B. Atkinson and F. Bourguignon (eds), *Handbook of Income Distribution*, volume 1, Amsterdam: North Holland.

Elinder, M., Erixson, O. & Waldenström, D. (2018), Inheritance and wealth inequality: evidence from population registers. *Journal of Public Economics*, 165, 17–30.

Fessler, P., Mooslechner, P. & Schürz, M. (2008), How inheritances relate to wealth distribution? Theoretical reasoning and empirical evidence on the basis of LWS data. Luxembourg Wealth Study, Working Paper 6.

Fessler, P. & Schürz, M. (2018), Private wealth across European countries: the role of income, inheritance and the welfare state. *Journal of Human Development and Capabilities*, 19, 521–49.

Gardiner, L. (2017), The million dollar be-question: inheritances, gifts, and their implications for generational living standards. Resolution Foundation Intergenerational Commission.

Hood, A. & Joyce, R. (2017), Inheritances and inequality across and within generations. Institute for Fiscal Studies, Briefing Note BN192.

Household Finance and Consumption Network (2013), The eurosystem Household Finance and Consumption Survey: methodological report for the first wave. European Central Bank, Statistics Paper 1.

Karagiannaki, E. (2011), The impact of inheritance on the distribution of wealth: evidence from the UK. Centre for the Analysis of Social Exclusion, CASE Paper 148.

Karagiannaki, E. (2015), Recent trends in the size and distribution of inherited wealth in the UK. *Fiscal Studies*, 36, 181–213.

Karagiannaki, E. (2017), The impact of inheritance on the distribution of wealth: evidence from Great Britain. *Review of Income and Wealth*, 63, 394–408.

Karagiannaki, E. & Hills, J. (2013), Inheritance, transfers and the distribution of wealth. In J. Hills, F. Bastagli, F. Cowell, H. Glennerster, E. Karagiannaki and A. McKnight (eds), *Wealth in the UK: Distribution, Accumulation and Policy*, Oxford: Oxford University Press.

Kennickell, A. B. (2019), The tail that wags: differences in effective right tail coverage and estimates of wealth inequality. *Journal of Economic Inequality*, 17, 443–59.

Klevmarken, A. (2004), On the wealth dynamics of Swedish households. *Review of Income and Wealth*, 50, 469–91.

Nekoei, A. & Seim, D. (2019), How do inheritances shape wealth inequality? Theory and evidence from Sweden. Centre for Economic Policy Research, Discussion Paper 13199.

Nolan, B., Palomino, J. C., Van Kerm, P. & Morelli, S. (2020), The wealth of families: the intergenerational transmission of wealth in Britain in comparative perspective. Nuffield Foundation Report, INET at the Oxford Martin School, https://www.inet.ox.ac.uk/publications/the-wealth-of-families-the-intergenerational-transmission-of-wealth-in-britain-in-comparative-perspective/.

Nolan, B., Palomino, J. C., Van Kerm, P. & Morelli, S. (2021), Intergenerational wealth transfers and wealth inequality in rich countries: what do we learn from Gini decomposition?. *Economics Letters*, 199, 109701.

Office for National Statistics (2022), Wealth and Assets Survey QMI. https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/debt/methodologies/wealthandassetssurveyqmi

Office of Tax Simplification (2018), Inheritance Tax Review – first report: overview of the tax and dealing with administration.

Palomino, J. C., Marrero, G. A., Nolan, B. & Rodríguez, J. G. (2021), Wealth inequality, intergenerational transfers and family background. *Oxford Economic Papers*, in press, https://doi.org/10.1093/oep/gpab052.

van Buuren, S. (2018), *Flexible Imputation of Missing Data*, 2nd edition, Boca Raton, FL: CRC Press.

van Buuren, S. & Groothuis-Oudshoorn, K. (2011), mice: multivariate imputation by chained equations in R. *Journal of Statistical Software*, 45(3), 1–67.

Vermeulen, P. (2018), How fat is the top tail of the wealth distribution?. *Review of Income and Wealth*, 64, 357–87.

Wolff, E. (2002), Inheritances and wealth inequality, 1989–1998. *American Economic Review*, 92, 260–4.

Wolff, E. & Gittleman, M. (2014), Inheritances and the distribution of wealth or whatever happened to the great inheritance boom?. *Journal of Economic Inequality*, 12, 439–68.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.