Policy Brief

Ten Key Fact about Carried Interest

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CEN TAX

Ten Key Facts about Carried Interest

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Key facts summary

1. **Carried interest has increased rapidly since 2017, although the future is uncertain.** From 2017-2023, the number of carry recipients has grown steadily from 1,850 to 3,140 (a 70% increase). However, while **total reported carry grew from £2.3 billion to £3.7 billion (a 60% increase), the growth has been volatile with a sharp fall in 2023**, making future projections highly uncertain.

2. **Existing statistics underestimate carried interest.** We **estimate £1.7 billion in unreported carry between 2018 and 2020, which is an extra 21% on top of the £7.7 billion that was reported to HMRC**. Around half (£820 million) of the extra comes from carry 'misclassified' as residential property gains on the SA108 tax form (although with no underpayment of tax), while another half (£850 million) comes from foreign unremitted carry of remittance basis users, which is currently not reported or subject to UK tax.

3. **Carried interest is extremely concentrated amongst a small number of top executives.** **The top 30 individuals alone received around a quarter of all carry in 2023, totalling £1 billion – an average of over £33 million each.** The top 100 received a total of £1.8 billion, almost half (45%) of all carry in that year. Even aggregating over a seven-year period from 2017-2023 we find that the top 100 still received more than a third (36%) of all carry, an average of £90 million per person over the period.

4. **Carry recipients fit the 'City' stereotype even more than others in finance.** **Men make up 85% of carry recipients and receive 96% of all carry**. Middle aged individuals, between 40 and 60, make up more than two thirds of recipients and receive three quarters (76%) of all carry. Carry recipients also live predominantly in London and the South East (82%), with these regions together receiving 88% of all UK carry. **Residents of Kensington receive more carry than everyone living outside London and the South East** (16% vs 12%).

5. **Almost half of carry recipients are foreign, but most have lived in the UK for a long time.** Carry recipients are much more international than the general population (44% versus 15%). However, **four out of five (79%) foreigners receiving carry have already lived in the UK for at least 10 years, corresponding to 91% of the reported carried interest going to foreigners.** Even accounting for the unremitted carried interest of remittance basis users, it is still the case that 60% of all carry going to foreigners is received by individuals who have been resident in the UK for at least 15 years.

6. **Foreign carry recipients come from a wide range of countries.** UK ‘natives’ comprise just over half (56%) of carry recipients and receive just over half (55%) of all UK carry. **US nationals receive 10% of all carry, while European nationals receive a 20% share**, with 14% going to individuals from the ‘EU-6’ in particular. **Three in ten carry recipients are not from the US or Europe**, with Australia and India being the most common. Executives from the US and India are the best-paid on average, with Australian and Spanish executives the least well-paid out of the ten most common nationalities.

7. **Carry recipients do not put much of their own capital at risk.** On average co-investment by carry recipients was not more than 0.8% of fund commitments based on carry received between 2018-2020, although this varies significantly across individuals. **Two in five (42%) carry recipients had no co-investment,** with most co-investment driven by a relatively small number of the most highly paid executives. **One quarter (25%) of carry recipients, each with total pay over £5 million, account 70% of all co-investment**.

8. **Carry makes up a small share of total pay for most recipients, but is more important at the top.** **For two-thirds of carry recipients (68%), carry is no more than half of their total pay** (carry plus earnings) over 2018 and 2020. This share tends to rise for the best-paid executives. Amongst the one third (35%) of carry recipients who received less than £1 million in total pay, carry only made up around 30% of their pay, on average, whereas **among the 8% of carry recipients who received over £10 million in total pay, carry made up 60% on average**.

9. **Most carry recipients only receive carry occasionally, although it is more regular at the top.** One third of carry recipients received carry only once in the seven-year period from 2017-2023. **Less than 10% received carry every year, although they received more than a third (35%) of total carried interest** in this period. Carry is received more regularly by older executives: 34% of individuals aged 60+ receive carry for all years (17%) or all but one year (17%), and account for 68% of the carry going to this age group.

10. **Carry recipients currently pay much lower effective tax rates than other top earners in finance.** At levels of total pay (earnings plus carry for those that receive it) over £100,000, the effective average tax rate of carry recipients is 7.7 percentage points lower than that of non-PE individuals in the finance industry. **For individuals with pay over £2 million, the effective average tax rate is more than 10 percentage points lower for carry recipients compared with others working in finance.**

Introduction

'Carried interest' (or 'carry') is one of the main forms of pay in the private equity industry. Unlike earnings, which are taxed at a top marginal rate of 47%, carried interest is currently taxed as a capital gain at the rate of 28%. The tax treatment of carried interest is highly controversial. Following the 2024 General Election, the Government reiterated its intention to 'close the carried interest loophole' by taxing carry like other performance-related rewards. However, it has come under significant pressure to scale back these plans following claims by industry insiders that increasing taxes on private equity executives could lead to a mass exodus of individuals and investment from the UK.

Despite extensive public interest in this debate, there is virtually no statistical evidence in the public domain about how much carried interest private equity executives actually receive, how often they receive it, their demographic characteristics, how much (if any) of their own capital they put at risk in their funds, and so on. Although some high-level statistics have been released by HMRC via responses to Freedom of Information (FOI) requests, the Government does not currently publish any official statistics on carried interest or the private equity industry, and (until now) there have been no independent studies on this topic.

In this paper, we provide new quantitative evidence on carry recipients using representative data, to help set high-profile anecdotes in context. We use de-identified tax data, accessed via the HMRC Datalab,[1] covering everyone who received carried interest over the seven-year period from 2017 to 2023.[2] These data allow us to paint an unprecedented picture of who receives carried interest in the UK and how remuneration within the private equity industry is structured. In a companion paper (Advani et al, 2024), we also use this analysis to inform estimates of the revenue that could be raised from reforming the taxation of carried interest, after accounting for how carry recipients might respond.

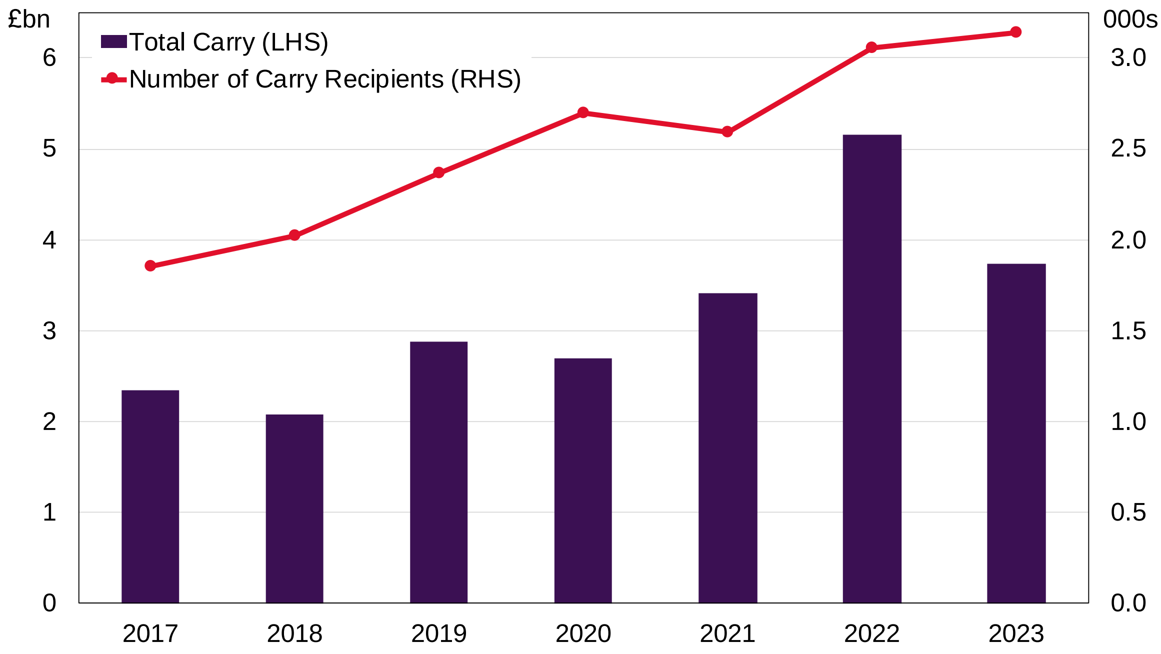
[1] For further information see https://www.gov.uk/government/publications/hmrc-datalab/about-the-hmrc-datalab.
[2] Editorial note: tax years are referred to by the later year e.g. '2023' is tax year 2022/23.

1. Carried interest has increased rapidly since 2017, although the future is uncertain

Despite concerns about Brexit and the impact of competition from preferential tax regimes introduced in some European countries, reported carried interest and the UK's population of carry recipients have grown strongly in the seven-year period from 2017 to 2023. Over this period, reported carried interest increased by a total of 60% (from £2.3 billion in 2017 to £3.7 billion) and the number of carry recipients increased by 70% (from 1,850 to 3,140). This equates to an average growth rate of 6.9% and 7.8% per year for carried interest and carry recipients, respectively.

However, while the number of carry recipients has mostly increased year-on-year (except for a 4% fall between 2020 and 2021), the amount of carried interest received has been volatile, with modest declines in 2018 and 2020 and a sharp fall in 2023 (Figure 1). In particular, carried interest is much more volatile than aggregate gains from other assets (non-carry gains), which show a consistent increasing trend between 2017 and 2022 (Figure 2). Carry displays a more similar trend to other gains on unlisted shares (excluding carry), although still appears more volatile.

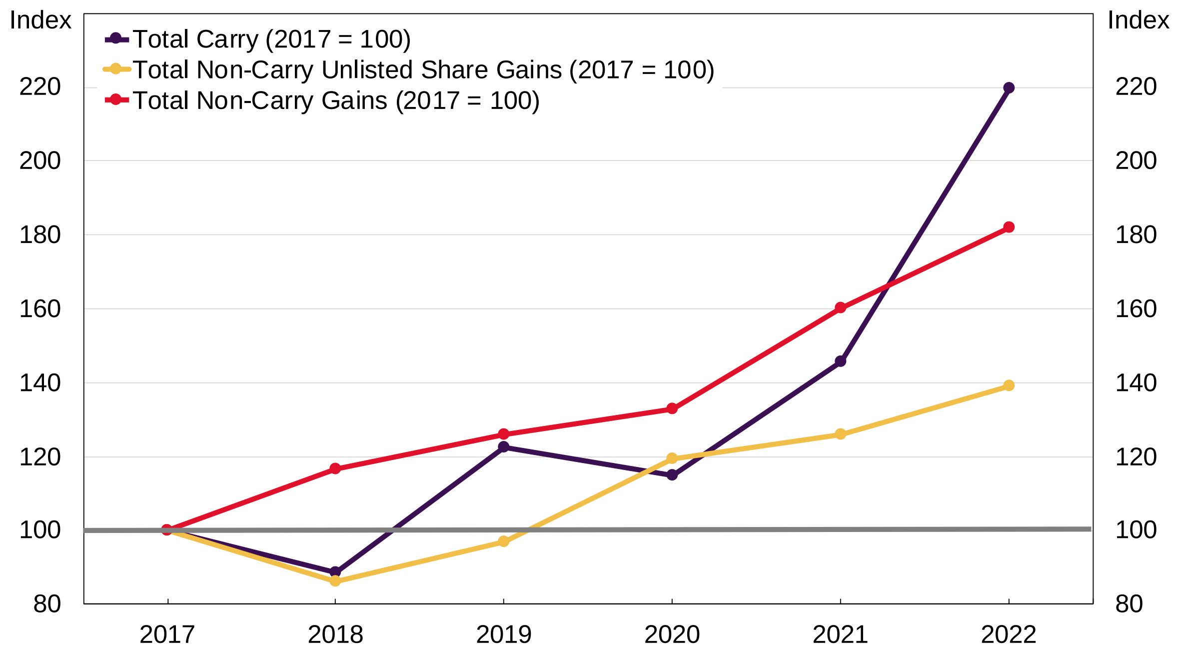
Figure 1: Number of carry recipients and total carry value, 2017 - 2023



Notes: Number of carry recipients and total carry value is measured using carried interest reported on Box 13 of the SA108 tax form.

Source: Authors' calculations based on HMRC administrative datasets.

Figure 2: Total carry, non-carry unlisted share gains and non-carry capital gains, 2017 - 2022 (all series indexed to 2017)



Notes: We subtract total carry from total gains on unlisted shares and total amount of gains of individual taxpayers obtained from official HMRC CGT statistics to calculate total non-carry unlisted share gains and total non-carry gains, respectively. Each series is then scaled using the corresponding 2017 values. HMRC CGT statistics on unlisted shares are not available for 2023 and as such, trends are only shown up to 2022.

Source: Authors' calculations based on HMRC administrative datasets and HMRC CGT statistics.

Especially given its historic volatility, past trends in carried interest are not necessarily a good guide to the future. The amount of carried interest arising in future years will depend on two main factors: the size of the funds that are reaching maturity in that year and the rate of return on those funds. Macfarlanes LLP (2024) extend a methodology developed by Phalippou (2024) to produce forecasts using these determinants and predict aggregate carry of £7.3 billion in 2025/26. Whilst it would be possible to apply this methodology to produce projections beyond 2026, such estimates would be subject to greater uncertainties given that they are more dependent on rate of return forecasts for future years.

2. Existing statistics underestimate carried interest

The few statistics that have so far been published on carried interest, based on Freedom of Information (FOI) requests to HMRC, underestimate the total carried interest received by UK residents, in two respects. We discuss each of these in turn, followed by their aggregate impact on total carried interest.

2.1 Misclassified carried interest

Since 2017, taxpayers have been requested to report the amount of carried interest received in a specific box on the self-assessment return (Box 13 in SA108). The purpose of this box is to specify how much of the total gains taxed at the rate applicable to residential property and carried interest (i.e. 18% for Basic Rate taxpayers and 28% for Higher and Additional Rate taxpayers) are carried interest.[3] However, since Box 13 does not directly affect the tax calculation and is therefore strictly 'for information' only, there is a risk that some taxpayers either fail to report their carried interest separately in Box 13, or conversely report residential property in this box by mistake. Although this issue does not result in any underpayment of tax, it complicates the measurement of carried interest for analytical purposes.[4]

We estimate that a total of £1.9 billion in carried interest (8.3% of reported carry) was misclassified as residential property between 2017 to 2023, and this should be considered a lower bound estimate as we apply a conservative methodology.[5] This correction only adds 110 individuals to the number of unique carry recipients over the period (which increases from 6,440 to 6,550), because most misclassified carry comes from individuals who have reported carry in Box 13 in another year but not in the year under consideration, so they were already counted as carry recipients. In terms of 'individual-year' observations (that is, non-unique cases of individuals in the seven-year period) there are 1,740 cases where carry is misclassified as a residential property gain, implying an average misclassified carry of £1.1 million per 'individual-year' observation.

Conversely, we also identify cases where residential property appears to have been misclassified as carried interest. In particular, there are a total of 710 unique individuals over the period 2017-2023 who do not appear to have any connection to private equity and who reported very low carry values (below £5,000). Although we cannot be certain, these cases seem unlikely to be genuine carried interest and we suspect this to be a data quality issue. Consequently, we drop these individuals from our total carry estimate and from all subsequent analysis of the carry population. Despite constituting a sizeable share (11%) of the population of individuals that reported receiving carried interest, excluding these small amounts only reduces the estimate of total carry by £3 million (0.01% of reported carry).

2.2 Unremitted carried interest

For the period that we observe from 2017-2023, the non-dom regime exempted remittance basis users (RBUs) from UK taxation on unremitted foreign income and gains, including any carried interest that was defined as foreign source. As well as

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[3] From 6th April 2024, the Higher Rate for residential property was reduced to 24%, so the design of the SA108 tax form will presumably change for tax year 2024/25.
[4] We note that this issue could have been avoided if the box for reporting carried interest had been structured differently on the form, such that it fed directly into the tax calculation. Although the issue does not directly lead to any underpayment of tax, it presumably could affect analysis used for targeting compliance activities, as well as statistical analysis for policy purposes.
[5] For further details, see Appendix A.

being exempt from UK tax unless remitted to the UK, there was no requirement to report the amount of foreign carry to HMRC. Since 2015, foreign carry has been defined as that relating to the provision of investment management services outside the UK. Foreign carry can be apportioned on any 'just and reasonable' basis, although in practice this typically depends on the number of workdays for the fund spent in the UK and abroad.

In the first year covered by our data (2017), the remittance basis was available to all non-doms regardless of the length of time they had been resident in the UK. The 2017 deemed domicile reform means that for the last 6 years covered by our data (2018-2023), the remittance basis was only available for non-doms who had been UK residents for less than 15 years. In the March 2024 Budget, it was announced that the remittance basis would be abolished from April 2025 and replaced with a new regime that would apply only for the first four years of UK residence. The new Government has stated its intention to proceed with this reform. From 2025/26, the carry tax base for remittance basis users with 5 to 15 years of UK residence will therefore increase, as they will become subject to UK tax on their worldwide carried interest.

HMRC does not currently collect information on the amount of foreign carry received by RBUs so we estimate it to have a more accurate measure of the tax base for 2025/26 onwards, when any reform to the tax treatment of carried interest would apply. For this purpose, we use an approach for estimating foreign carry developed in previous work that estimated the overall level of foreign income and gains of the entire RBU population (Advani, Burgherr & Summers, 2023). We refine this approach to tailor it to the population of carry recipients, by matching carry recipients who are RBUs to UK-domiciled carry recipients (who are therefore not eligible for the remittance basis) with comparable levels of total earned income (which includes the management fees they are paid from the fund).[6] The difference between this estimate and the amount of carry that the RBUs report is our estimate of foreign unremitted carry.[7]

We are only able to estimate unremitted carry for the three years from 2018 to 2020, because we lack income information (required for our estimation method) in later years. Over this period, we estimate an average of £280 million per year in unremitted carry. This equates to around 12% of the total carry reported by the entire carry population. As a 'sense check', Macfarlanes LLP (2024) estimates that unremitted carry makes up 15% of total carry each year. From 2025/26, the tax base will increase by the amount of unremitted carry received by remittance basis users

[6] In our previous work to estimate foreign income and gains of the entire remittance basis population, we match the RBUs to UK doms with comparable total earned incomes and additional characteristics like industry, age, location, and gender. Given that carry recipients are all from the same industry, are concentrated in age and location, and are predominantly male (see later facts), for the purpose of this analysis, matching based on total earned incomes should suffice.
[7] For further details, see Appendix B.

with 5 to 15 years of UK residency. Adjusting for this, we add an average of £210 million per year in unremitted carry to the tax base between 2018 and 2020.

It is important to note that our estimate of unremitted carry is sensitive to certain assumptions, which we discuss in detail in Appendix B, where we also provide lower bound and upper bound estimates of the amount of unremitted carry. Given this uncertainty, whilst our estimation strategy helps us to get an understanding of total unremitted carry at an aggregate level, it is not sufficiently reliable at an individual level to use it for the purpose of analysing the individual characteristics of carry recipients according to their total carry (including unremitted carry). Thus, the carry values that we use in the key facts that follow are only adjusted for the amount of misclassified carry and do not include our estimate of unremitted carry for RBUs.

2.3 Aggregate impact of misclassified and unremitted carried interest

Table 1 shows a summary of the impact of misclassified and unremitted carry on the 'true' amount of total carried interest received by UK residents. Since we are only able to estimate unremitted carry for the period 2018-2020 (where we have income information needed for this estimation), our estimates of the aggregate impact are similarly limited to these years.

Table 1: Estimate for number of carry recipients and total carry value, 2017-2023

Year	**Reported Carry** (From SA108 Box 13)		**+ Misclassified Carry** (Carry reported as residential property)		**- Misclassified Carry** (Residential property reported as carry)		**+ Unremitted Carry**	**Final Estimate of Carry**	
	Value (£m)	**Count**	**Value (£m)**	**Count**	**Value (£m)**	**Count**	**Value (£m)**	**Value (£m)**	**Count**
2017	2,346	1,851	336	250	0.3	148	NA	NA	NA
2018	2,082	2,023	338	280	0.3	174	352	2,773	2,129
2019	2,878	2,370	219	313	0.4	236	299	3,395	2,447
2020	2,698	2,699	266	335	0.8	426	203	3,166	2,608
2021	3,415	2,590	270	261	0.4	254	NA	NA	NA
2022	5,153	3,053	270	156	0.3	198	NA	NA	NA
2023	3,742	3,137	155	144	0.4	224	NA	NA	NA
Total	22,315	17,723	1,854	1,739	3.0	1,660	NA	NA	NA

Notes: Count is the number of carry recipients associated with the corresponding value of carry. Figures may not sum due to rounding. NAs in the table are because we cannot estimate unremitted carry for 2017 and 2021-2023 for reasons explained in Appendix B. Final estimate of carry is more than the tax base under reform because new arrivals will be exempt from tax on their foreign carry for first four years of residence under the new four-year FIG regime.

Source: Authors' calculations based on HMRC administrative datasets.

We estimate total carry of £9.3 billion between 2018-2020 from 3,720 unique individuals, which is £1.6 billion (21%) more than HMRC's estimate of £7.7 billion in total reported carry.[8] Of this difference, around half (£820 million) comes from misclassification of carry as residential property gains, and the other half (£850 million) from the foreign unremitted carry of non-dom RBUs.[9] For 2020 specifically, our estimate of total carry is £3.2 billion, received by 2,610 individuals. This estimate is £460 million (17%) more than HMRC's estimate of £2.7 billion, with a little over half (£270 million) of the difference coming from misclassification of carry and the remainder (£200 million) from the unremitted carry of RBUs.[10] In terms of the number of carry recipients, our estimate is 3% less than HMRC's estimate of 2,700, partly due to our removal of individuals with very low carry amounts.

3. Carried interest is extremely concentrated amongst a small number of top executives

It is well-known that individuals who receive carried interest are highly remunerated on average. However, these averages fail to capture just how concentrated carried interest is even within this very small and elite population. Table 2 shows the concentration of carry amongst top executives, in the most recent available year (2022/23). The top 100 individuals (representing the top 3.3% of carry recipients) received £1.8 billion in carry in 2023, which is 45% of all carried interest for that year. Of these, 30 individuals received around a quarter of all carry between them, totalling £1 billion – an average of over £33 million each.

Table 2: Share of carry (by recipients and value), total carry and mean carry of top 30, 50 and 100 individuals of the carry distribution, 2023

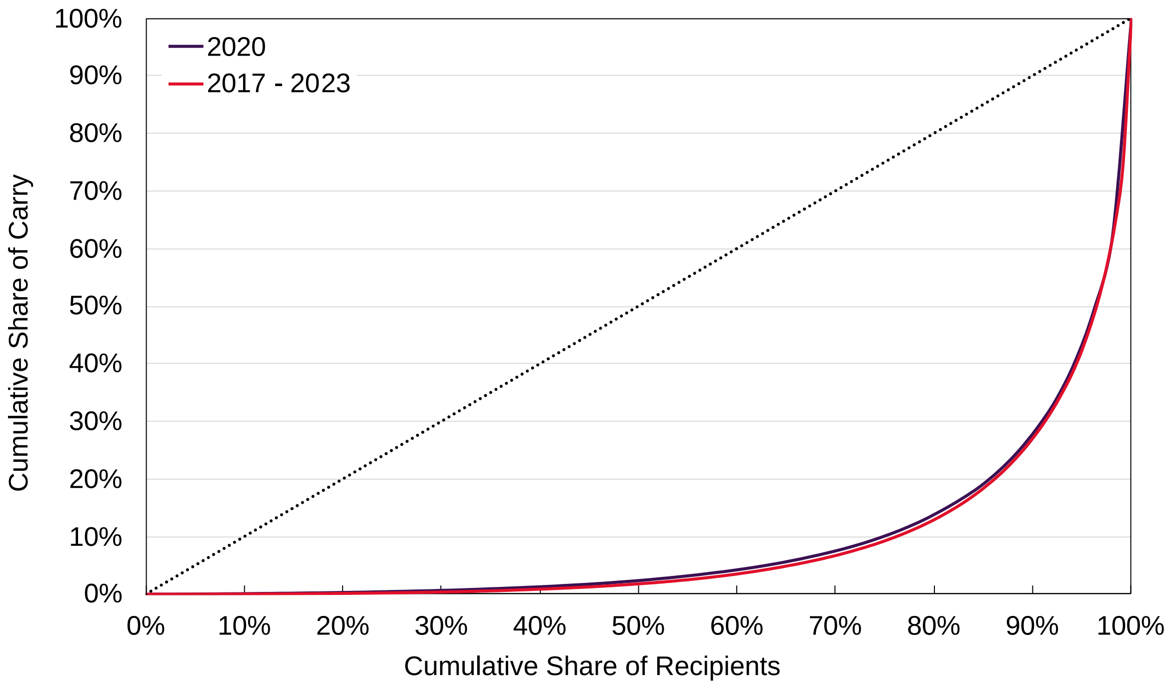
Group	Share of		Total Carry (£m)	Mean Carry (£m)
	Carry Recipients	Carry Value		
Top 30	1.0%	26%	995	33
Top 50	1.6%	33%	1,272	25
Top 100	3.3%	45%	1,754	18

Notes: The shares (by recipients and value) in the table correspond to shares of the whole population of carry recipients in 2023. There are 3,140 carry recipients who received a total carry of £3.7 billion in this year.

Source: Authors' calculations based on HMRC administrative datasets.

[8] HMRC's estimate is taken from a response to an FOI request made to HMRC on 14/04/24 [Ref FOI2023/17740].
[9] Figures may not sum due to differences in rounding and different timings of the SA108 data extracts used by the authors and HMRC. In terms of the count of individuals, while we do not have information on the unique number of individuals receiving carry between 2017 and 2020 from HMRC, year-on-year our estimate lies between ± 4% of the counts provided by HMRC through FOI requests.
[10] Figures may not sum due to differences in rounding and different timings of the SA108 data extracts used by the authors and HMRC.

Figure 3: Carry concentration using Lorenz curves, 2020 vs 2017–2023



Notes: For 2020, we look at the full population of carry recipients and arrange individuals by the amount of carry received. We then divide the sorted series into bins of fifty individuals, and calculate each bin's share of total carry for the year to obtain the Lorenz curve. We repeat the same exercise for the curve for 2017 – 2023 by using the total carry across the seven-year period for each individual and arranging the individuals by this individual-level total before splitting the series into bins of fifty. To calculate the share of each bin, we use total carry across all individuals for the seven years.

Source: Authors' calculations based on HMRC administrative datasets.

One concern with these statistics might be that carried interest is only received infrequently, so the picture could look different over a longer period. However, Figure 3 shows that even when summing the total carry received by each individual over the seven years from 2017-2023, the same pattern emerges. Over this period, the top 100 individuals still received more than a third (36%) of all carry. In absolute terms, this amounts to a total of £8.8 billion going to 100 individuals, or an average of around £90 million per person.

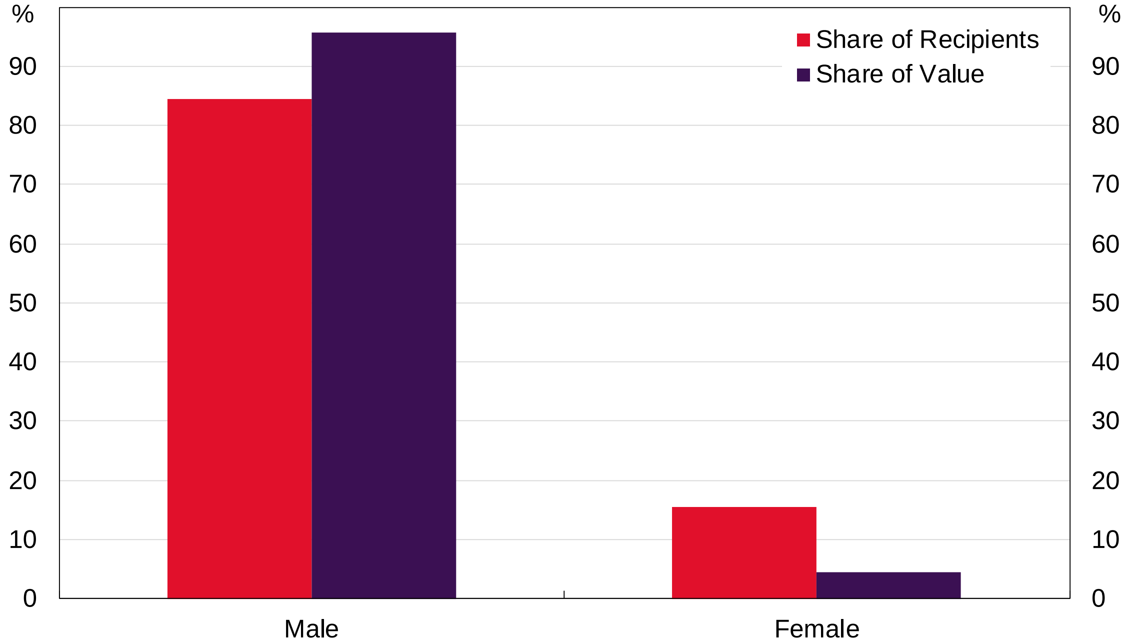
4. Carry recipients fit the 'City' stereotype even more than others in finance

It is reasonable to assume that carry recipients would have similar characteristics to others top earners in the finance industry, and our analysis confirms that this is largely the case. In fact, we find that the 'City' stereotype is even stronger amongst carry recipients, who are even more male-dominated, more concentrated within certain age groups, and more London-centric.

4.1 Carry recipients are almost entirely men

85% of carry recipients are men, and men receive 96% of all carried interest (Figure 4). This is even more unequal than the gender distribution in our reference group of other top earners within finance, which we define as finance workers (excluding those linked to private equity) with total earned incomes over £100K. In this group, which we refer to as 'other finance workers' for short, the share of men is 'only' 78%.

Figure 4: Recipients and value of carry by gender, 2020



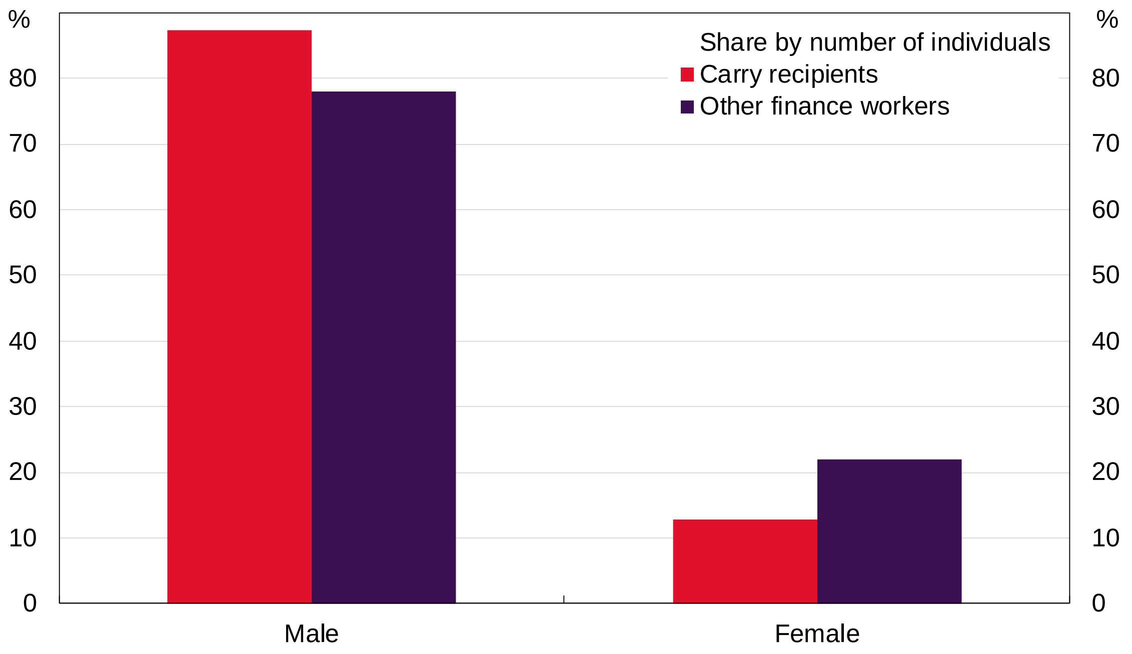
Source: Authors' calculations based on HMRC administrative datasets.

When we look at total pay (carry plus total earned income) instead of just carried interest, the population of carry recipients is still more male-dominated than others in finance (Figure 5b).[11] Among carry recipients earning over £100K, 94% of total pay goes to men, compared with 'only' 84% for others in finance.

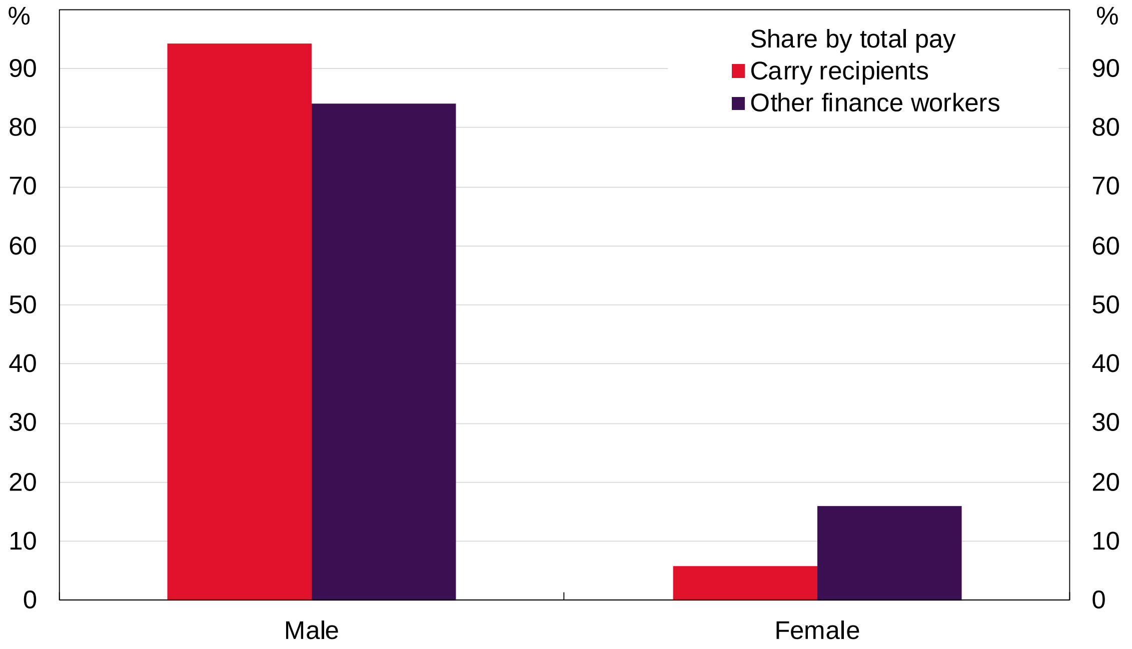
[11] In this paper, total pay refers to total earned income for our finance reference group and carry plus total earned income for carry recipients. Total earned income includes all employment income and partnership trading profits (including management fees in the case of carry recipients) but does not include investment income.

Figure 5: Total pay comparison of carry recipients and other finance workers earning over £100K by gender, 2020

(a) Share by number of individuals



(b) Share by total pay



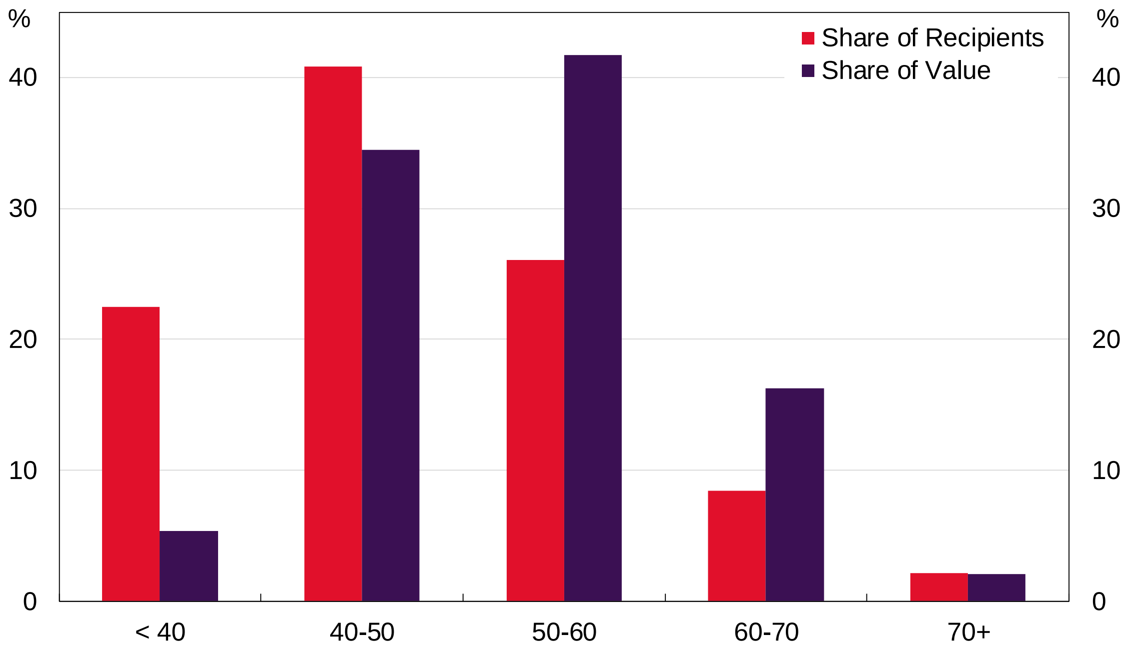
Notes: The figures include individuals earning over £100K in total pay. For carry recipients, 'total pay' implies carry plus total earned income. For other finance workers, this implies total earned income.

Source: Authors' calculations based on HMRC administrative datasets.

4.2 Carry recipients are concentrated in older age groups

Carry recipients tend to be older than other top earning finance workers. While 32% of other finance workers are below 40 years of age, this share is only 23% for the population of carry recipients. This is not entirely surprising since carry typically goes to the more senior executives within a firm, and there is a significant lag between becoming entitled to carry and receiving the first payout. More than two thirds of carry recipients are between the ages of 40 and 60, and this group receives around three quarters (76%) of all carried interest (Figure 6). Carried interest recipients continue receiving large payouts into their 60s: individuals aged 60 or above account for 18% of total carry while making up 11% of the population.

Figure 6: Recipients and value of carry by age, 2020



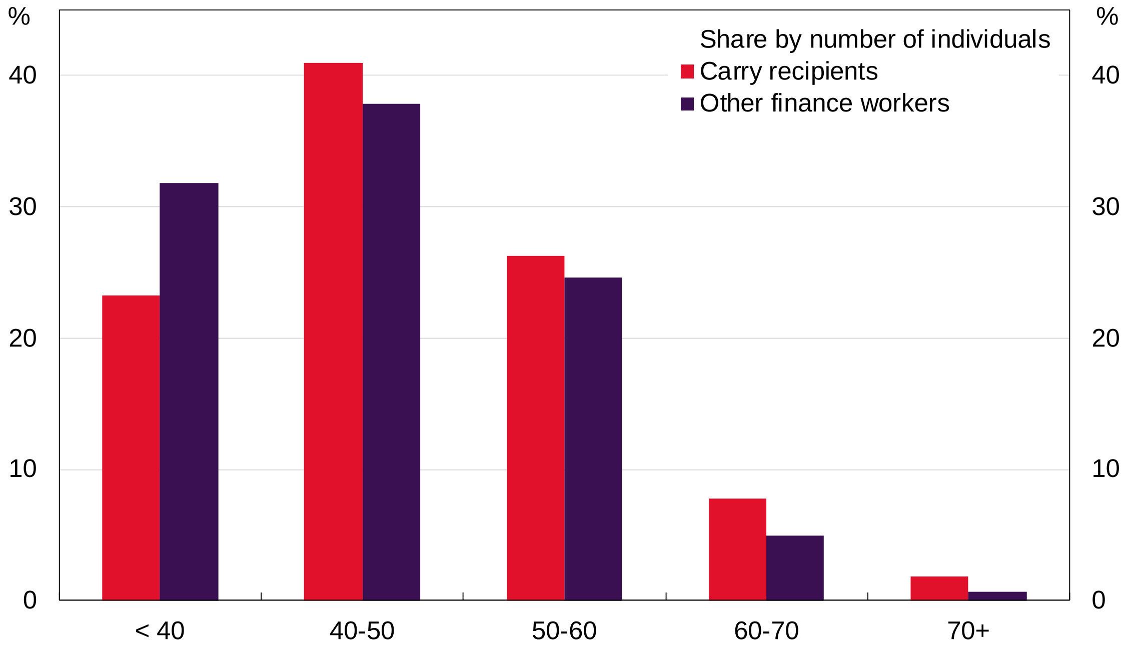
Notes: The age bands include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

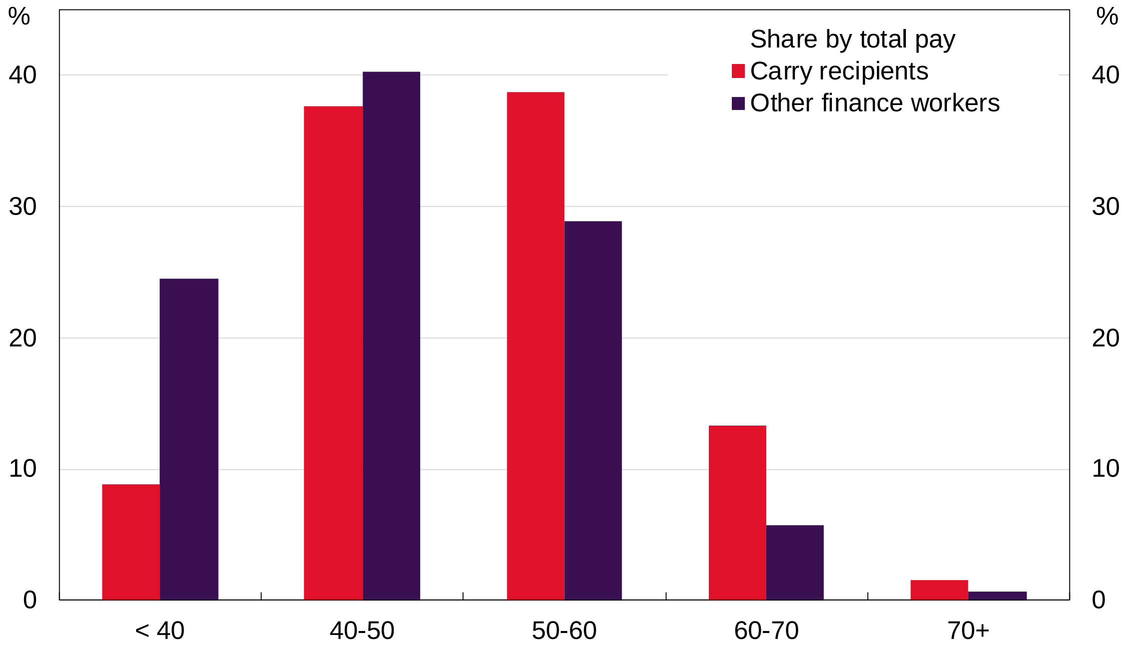
Total pay (carry plus total earned income) is also more concentrated among older carry recipients when compared with other workers in finance (Figure 7b). 76% of the total pay among carry recipients who earn over £100K (in total pay) goes to those aged 40 to 60, while just 9% is received by those under 40. In comparison, finance workers aged 40 to 60 at comparable levels of pay receive a relatively smaller share (69%) of total pay, while younger executives aged below 40 receive a much larger (25%) share.

Figure 7: Total pay comparison of carry recipients and other finance workers earning over £100K by age, 2020

(a) Share by number of individuals



(a) Share by total pay



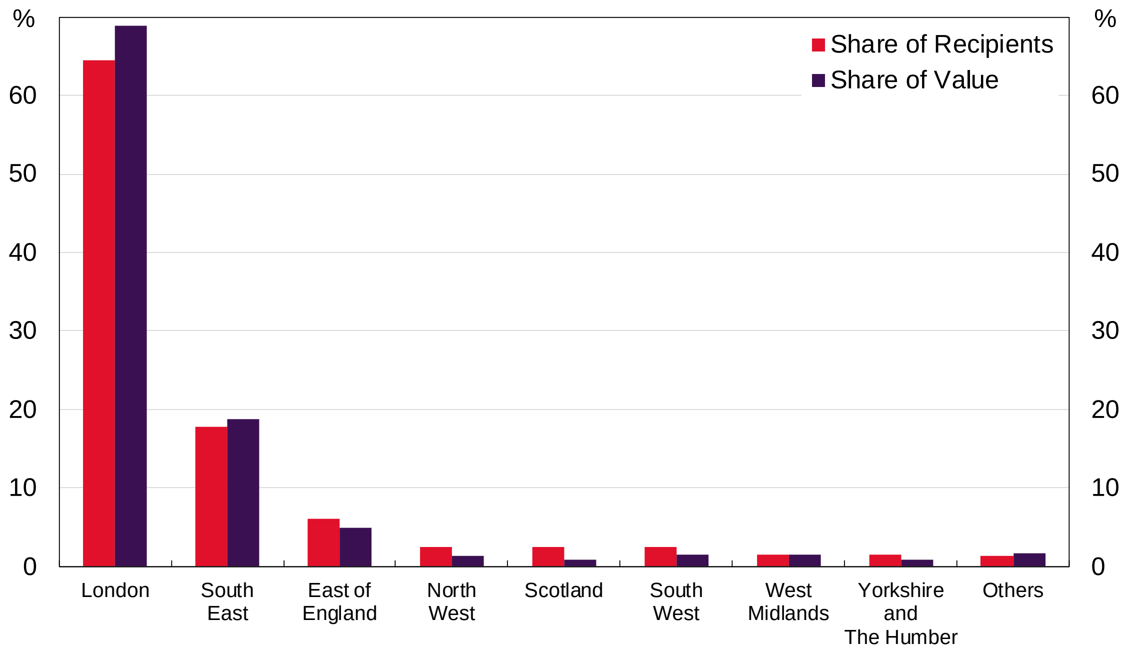
Notes: (i) The figures include individuals earning over £100K in total pay. For carry recipients, 'total pay' implies carry plus total earned income. For other finance workers, this implies total earned income; (ii) The age bands include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

4.3 Carry is extremely London-centric

Almost two thirds (64%) of the carry population resides in London, with a further one fifth (18%) living elsewhere in the South East (Figure 8).[12] By value, these two regions account for 88% of all carried interest received. This is substantially more concentrated than the (already highly concentrated) distribution of taxable capital gains from all assets: London and the South East receive 48% of all taxable capital gains while their residents account for 42% of Capital Gains Tax payers (Advani, Lonsdale & Summers, 2024).

Figure 8: Recipients and value of carry by region, 2018 - 2020



Notes: (i) 'Others' include East Midlands, Wales, North-East and individuals with missing location in the data; (ii) The shares (by recipients and value) in the figure correspond to shares out of the total number of carry recipients and the total carry value between 2018 - 2020.

Source: Authors' calculations based on HMRC administrative datasets.

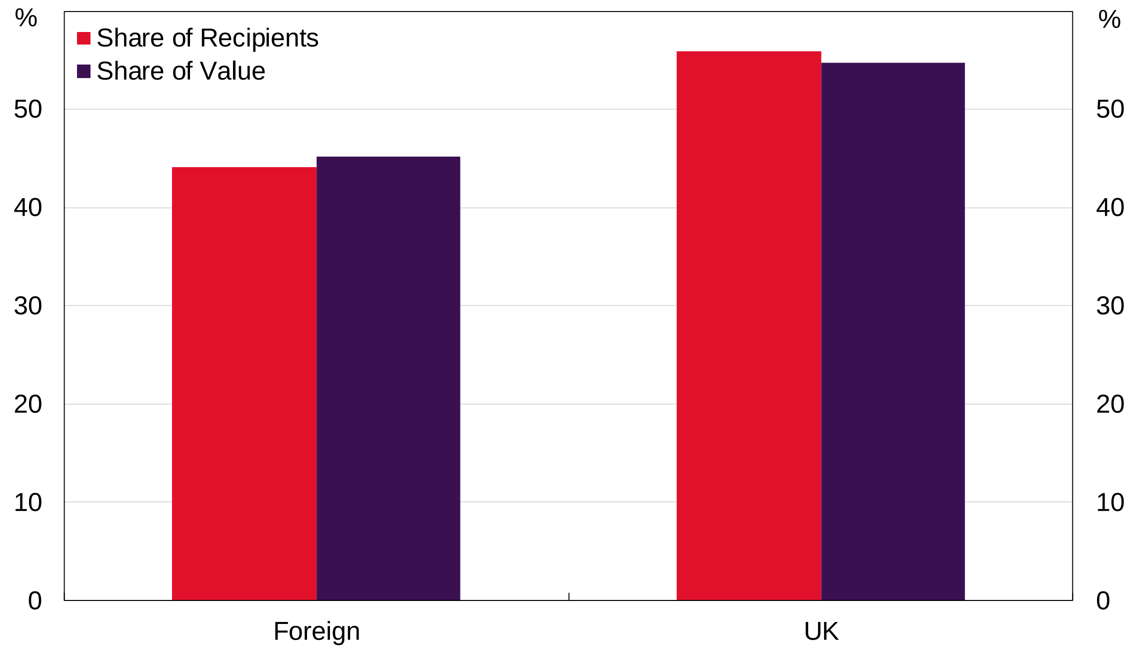
Within London, individuals receiving carry are also very concentrated within a few boroughs, and they get a disproportionate share of all carry. Just over four in ten carry recipients (42%) residing in London live in only three constituencies – Kensington (18%), Chelsea and Fulham (12%), and Cities of London and Westminster (12%) – and they receive over half (52%) of all carried interest received by London residents. Notably, Kensington residents alone receive 16% of all carried interest, which is more than the combined carry (12%) received by all regions of the UK outside London and the South East.

[12] The region classification used is based on International Territorial Levels (ITLs) from the ONS: https://www.ons.gov.uk/methodology/geography/ukgeographies/eurostat#london

5. Almost half of carry recipients are foreign, but most have lived in the UK for a long time

It is widely claimed that PE executives are highly international, and thus highly responsive to tax changes. It has also been reported that non-doms receive around 40% of all carried interest (Macfarlanes, 2024), which suggests that almost half of the tax base could be highly mobile. Our analysis confirms that carry recipients are much more international than the general population: 44% are 'foreigners' defined as individuals who arrived in the UK after the age of 18, compared to around 15% in the UK overall population (Figure 9). However, our analysis also shows that most foreigners have lived in the UK for many years, and new arrivals receive relatively low amounts of (reported) carried interest (Figure 10).

Figure 9: Recipients and value of carry by foreigners vs UK 'natives', 2020



Notes: We define foreigners as individuals who first arrived in the UK after age 18. UK 'natives' includes all other carry recipients, which could therefore include individuals who arrived in the UK as a child. 'Returners' who grew up in the UK but spent time abroad are classified as natives.

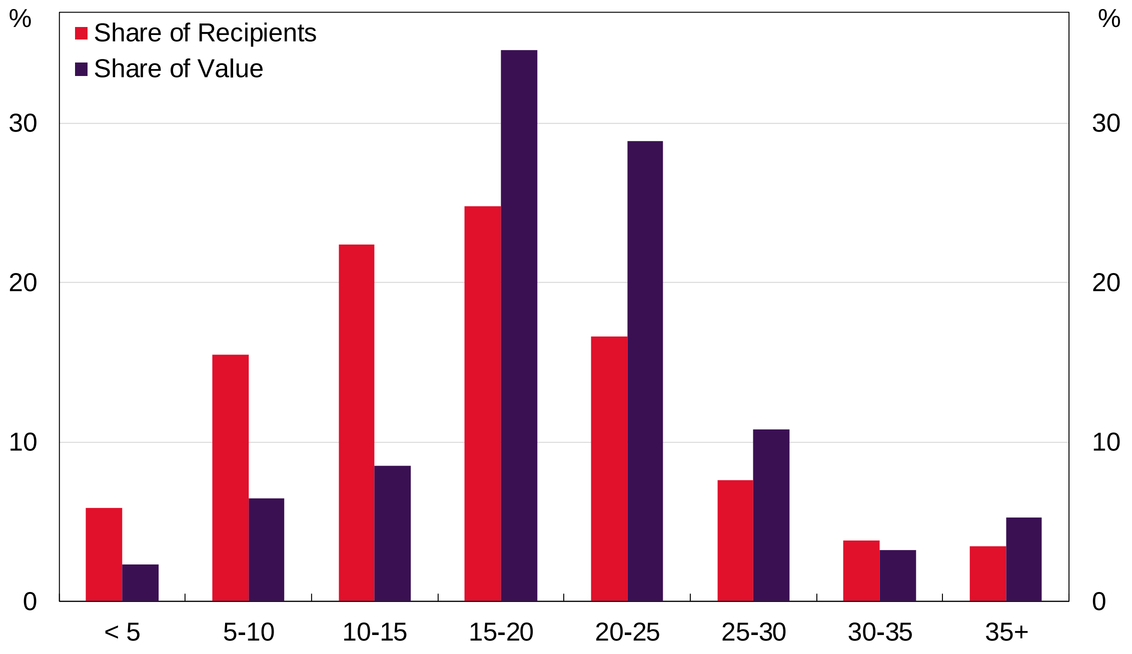
Source: Authors' calculations based on HMRC administrative datasets.

In total, 19% of the carry population are foreigners who have arrived in the UK in the last 15 years, and they receive only 8% of all reported carry. The share of new arrivals (within the first four years of residence) is even lower (2.6%), and they receive only 1% of reported carry. Of course, this is true partly by construction, because new arrivals could have high amounts of unremitted carry from services performed abroad before arriving in the UK. Once we correct for this using our estimation of unremitted carry (see Fact 2), and find that at an aggregate-level, new arrivals have unremitted carry equal to 2 to 3 times of their reported carry between 2018 and

2020. Consequently, even after accounting for unreported carry, the share of all carry attributable to new arrivals is still less than 3%.

In 2020, four out of five (79%) foreigner carry recipients had already lived in the UK for at least 10 years, corresponding to 91% of the reported carried interest going to foreigners. Over half (56%) of foreigner carry recipients had been resident for at least 15 years, and their share of all carry reported by foreigners was 83%. These figures do not include unremitted carry. When we account for this and take the share over the three years from 2018-2020, as in Advani et al 2024, it is still the case that 60% of all carry going to foreigners is received by individuals who have been resident in the UK for at least 15 years.

Figure 10: Recipients and value of carry among foreigners by number of years spent in the UK, 2020



Notes: (i) We define foreigners as individuals who have arrived in the UK after age 18; (ii) The bands for number of years spent in the UK include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

Given plans to abolish the non-dom regime from April 2025, it is relevant to consider the interaction between these reforms and potential changes to the taxation of carried interest (Table 3). We find that although 27% of all carry recipients currently claim non-dom status, the vast majority (79%) of carried interest is received by non-doms who have been UK residents for more than 15 years, meaning that they are already deemed domiciled in the UK for tax purposes. The removal of the remittance basis will not have any additional impact on this group, although they will still be affected by the removal of 'trust protections' for income and gains and any changes to Inheritance Tax that may be announced in the Autumn Budget 2024.

The group most affected by reforms to the existing non-dom regime are the 38% of foreign carry recipients (17% of all carry recipients, receiving 7% of all carry), who have been in the UK between 5 and 15 years. These individuals would lose access to the remittance basis on their foreign carry, as well as being affected by any other reforms to the non-dom regime, for example for Inheritance Tax. Lastly, approximately 5.8% of foreign carry recipients are new arrivals (arriving in the last 4 years) and would therefore not face any immediate impact from the non-dom reforms,[13] although of course these individuals could still respond in anticipation of losing access to preferential tax treatment.

Table 3: Estimating the population affected by the non-dom reform and/or carry reform

Group	Affected by non-dom reform	Affected by carry reform	Carry recipients		Carry value	
			Total	Share	Total (£m)	Share
Arrived >15 years ago (already deemed domicile)	Trust protections, IHT reform	Yes	636	56%	1,097	83%
Arrived in the last 5 to 15 years	Remittance basis, IHT reform	Yes	428	38%	198	15%
Arrived in the last 4 years (new arrivals)	No immediate impact	Yes, but foreign carry exempt	66	5.8%	31	2.3%

Notes: (i) The shares (by recipients and value) in the table correspond to shares out of the total number of carry recipients who are foreigners and the total carry value received by them. They are not shares of the general population of carry recipients. (ii) Figures may not sum due to rounding.

Source: Authors' calculations based on HMRC administrative datasets.

[13] This assumes that the share of new arrivals among the population of carry recipients is fairly stable. It also assumes that carry will be within the scope of the preferential tax treatment of the new FIG regime.

6. Foreign carry recipients come from a wide range of countries

The private equity industry in London includes the offices of a number of US and pan-European firms. In line with this, we find that 67% of foreigner carry recipients are either US (15%) or European (52%) nationals, defined according to the primary nationality that they reported when they first arrived in the UK. However, this also means that three out of ten foreigners who receive carry are not from the US or Europe.

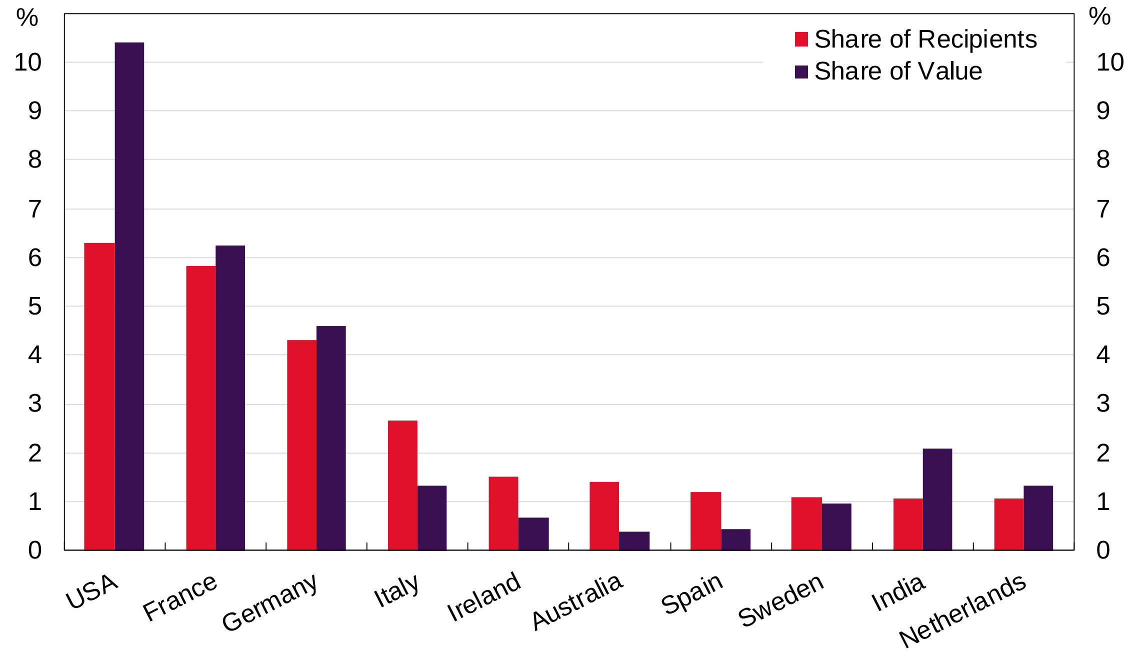
We find that 29% of all carry recipients are either US (6%) or European (23%) nationals, with 15% from the ‘EU-6’ in particular (Belgium, France, Germany, Italy, Luxembourg and the Netherlands). After the UK ‘natives’, US and European nationals who together form an 85% share of all carry recipients, remaining 15% belong to other nationalities. Figure 11 shows the top 10 foreign nationalities by number of carry recipients. Outside the US and Europe, only Australia and India make the top 10, between them accounting for around 2.5% of all carry recipients.

When looked at from the perspective of amount of carry received, we find that US nationals receive 10% of all carry, while European nationals receive a 20% share, with 14% going to individuals from the ‘EU-6’ in particular. By comparing the share of individuals from a given country with their share of total carry, we can see which nationalities received the most carry per person. On this metric, executives from the US and India stand out as the best-paid on average, with Australian and Spanish executives the least well-paid out of the ten most common nationalities.

Aside from idle interest, these statistics about where carry recipients come from are informative of their ‘outside options’ in terms of relocation. For example, if the UK increases the tax rate on carry, it is relatively more likely that Italian PE executives would emigrate to Italy compared with executives from English-speaking countries. Of course, executives could emigrate to a third country (i.e. besides their home country) but return migration to one’s home country is more common, even amongst economic elites (Advani, Poux & Summers 2024).

However, consistent with Fact 5, we also find that most US and European nationals (who make up a majority of foreign carry recipients) are long-term settled in the UK, and therefore less likely to emigrate in response to a tax hike. 40% and 51% of US and European nationals, respectively, have been UK residents for more than 15 years. These individuals receive 73% and 85% of all carry going to US nationals and European nationals, respectively.

Figure 11: Recipients and value of carry for top 10 foreign (non-UK) nationalities, 2018 - 2020



Notes: The shares (by recipients and value) in the figure do not sum to 100 across the countries because they correspond to shares of the whole population of carry recipients (that is, inclusive of UK 'natives' and other non-top 10 foreign nationalities). We use the total number of carry recipients and the total carry value between 2018 - 2020 to calculate these shares.

Source: Authors' calculations based on HMRC administrative datasets.

7. Carry recipients do not put much of their own capital at risk

It is often argued that carried interest should be taxed as a capital gain because PE executives put their own capital at risk in the funds they are managing. There have also recently been suggestions that the Government could continue to allow PE executives to obtain preferential tax treatment on their carried interest, provided that they meet a new minimum threshold for 'co-investment' in their funds.[14] Consequently, it is useful to study how much co-investment carry recipients make in their funds at present.

There are two main ways in which a PE executive might effectively put their own capital at risk in the fund they are managing. First, a PE executive may occasionally pay money up front in exchange for their entitlement to carried interest (which we term 'consideration for carry'). Such payments are permitted as a deduction from the total carry proceeds for the purpose of calculating their gain taxed at 28%. Second, and more often, a PE executive may invest their own capital into the fund

[14] Why UK private equity is 'encouraged' by Labour's signals on promised tax crackdown (Financial Times, 18 June 2024).

Table 4: Breakdown of the capital invested and total return by each gain type for all and top 100 carry recipients, 2018 – 2020

Gain Type	All Carry Recipients			Top 100 Carry Recipients		
	Number of Individuals receiving carry/gains	Total Capital Invested (£m)	Total Return (£m)	Number of Individuals receiving the Gain	Total Capital Invested (£m)	Total Return (£m)
Carry	3,724	137	8,480	100	34	3,392
Unlisted Shares	1,737	1,520	1,510	78	453	762
Listed Shares	1,300	3,505	274	68	1,311	63
Other Property	745	1,193	380	37	711	66

Notes: We estimate total capital invested using the reported 'allowable cost' for each gain type on SA108 tax form. A detailed explanation of the methodology is provided in Appendix C.

Source: Authors' calculations based on HMRC administrative datasets.

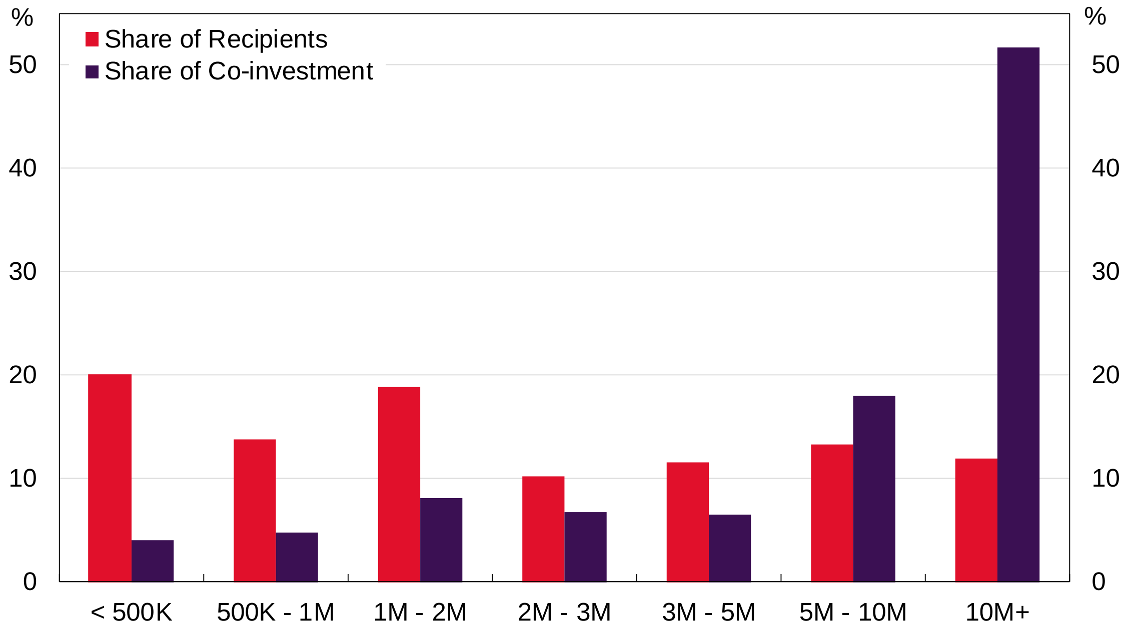
on the same terms as third party investors (known as 'co-investment').[15] Any gain on co-investment is not treated as carried interest but is instead taxable at the main CGT rate, currently set at 20%.

Using tax data from the SA108 form, we estimate the total capital put at risk by carry recipients in their funds, via consideration for carry and co-investment. PE executives may sometimes make co-investment in funds that never pay carried interest or do not pay carried interest in a given year. For PE executives who never receive carry, we will miss this co-investment in our measure. However, to reduce this problem as far as possible, we aggregate the carry and co-investment gains received by individuals over three years (2018-2020), so that even if an individual does not receive carry in a particular year, their co-investment gains for that year (within this period) will still be counted.

We estimate consideration for carry using the reported 'allowable cost' for carried interest reported in Box 5 on SA108. For co-investment, we include the total allowable cost reported by carry recipients for their gains on unlisted shares.[16] This measure could overstate the actual amount of co-investment in the funds that the carry recipient is managing, since it would also include the base cost on any other personal investments that the carry recipient made outside their funds.[17] In Table 4, we also show the total allowable costs for listed shares and 'other property',

[15] According to the BVCA's response to 'The tax treatment of carried interest – A call for evidence' (2024), requirements for co-investment generally range from less than 0.5% of fund's commitment, up to 2%.
[16] For further details see Appendix C.
[17] We acknowledge that some of the disposals linked to carry could be from listed shares and other property. They could be from listed shares if the disposal takes place post-IPO. However, without a way to distinguish disposals linked to personal investments and those linked to carry, including

Figure 12: Co-investment by total pay (carry plus total earned income) bands, 2018 - 2020



Notes: (i) The figure includes individuals who have made co-investment at any point between 2018 - 2020; (ii) The shares (by recipients and co-investment) in the figure correspond to shares out of the total number of carry recipients who made a co-investment and the total value of co-investment between 2018 - 2020; (iii) Bands of total pay (carry plus total earned income) include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

although we do not include these in our main estimate of co-investment because it is more likely that these gains reflect personal investments made by the carry recipient.

Our analysis suggests that between 2018-2020, carry recipients invested a total of £1.7 billion of their own capital (via consideration for carry and co-investment) in exchange for a total return (from carried interest and co-investment gains) of £10 billion.[18] Since we do not have information on the size of each fund from which carried interest was generated, we cannot directly compute co-investment as a share of fund commitments, which is the industry-standard metric. However, if we assume that funds are on average making 20% returns,[19] then it appears that co-investment by carry recipients is currently not more than 0.8% of fund

listed shares gives a high amount (£5.2 billion between 2018 and 2020) of co-investment at the aggregate-level. Thus, we do not include listed shares in our estimate of total co-investment. This should not make much of a difference as exits through public offering represent a very small proportion of PE divestments (BVCA Report on Investment Activity 2022 stated that only 2.2% of divested amounts were through public offerings). As for 'other property gains', gains made by PE funds should very rarely be reported here (e.g. swap payments).

[18] We look at the co-investment over multiple years (and not a single year) because given the distribution waterfall of PE funds, co-invest and carry gains are likely to arise in different years.

[19] This is in line with the average industry returns reported by the BVCA since 2013 (BVCA, 2023a), although there is substantial variation at the fund level.

commitments, on average.[20] This finding is in line with industry reports that co-investment is typically between 0.5% to 2% of fund commitments, although this varies widely across funds (BVCA, 2024).

However, we also find that there is significant variation in co-investment at an individual level. Over half (56%) of carry recipients appeared to have made no co-investment at all (42%) or invested an amount that was less than 1% of their total carry and co-investment gains (15%) between 2018 and 2020.[21] Figure 12 shows that most co-investment is driven by a relatively small number of the most highly paid executives. We find that one quarter (25%) of carry recipients, each with total pay over £5 million, were responsible for 70% of all of the co-investment that we observe between 2018-2020. Indeed, over half of all co-investment by value (52%) came from executives with total pay above £10 million.

8. Carry makes up a small share of total pay for most recipients, but is more important at the top

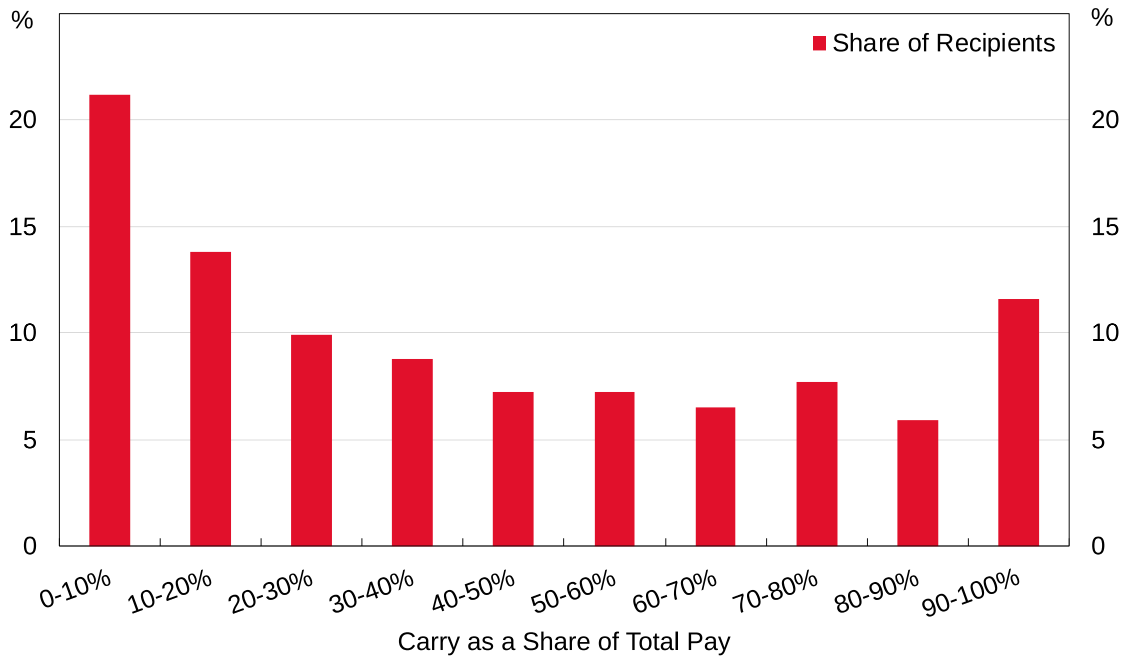
When looking at a single year (2020), carried interest made up less than half of total pay for most (61%) carry recipients (Figure 13).[22] However, there is significant variation: for just over one in five (21%) carry recipients, carry made up less than 10% of their total pay, whereas for just under one in five (18%), it made up more than 80%. Looked at from this perspective, it would appear that carried interest is an important part of overall remuneration for at least a minority of carry recipients.

However, carry is typically not received every year (Fact 9), so it is perhaps unsurprising that for some individuals it makes up a large share of total pay in the years in which they receive it. To give a more realistic impression of the importance of carry within the overall pay structure of carry recipients, we also look at the share of carry in total pay across the three-year period (2018-2020) for which we have information on both carried interest and other sources of earned income.

Over this longer timeframe, carried interest made up less than half of total for 68% of carry recipients (Figure 14). The proportion of carry recipients for whom carry made up less than 10% of total pay rises to almost three in ten (29%), whereas only 13% of carry recipients received more than 80% of total pay from carry. Still, this leaves more than one in ten carry recipients for whom even over a three-year period, carry makes up the vast majority of their pay.

[20] Co-investment as a share of carry is 19.5% based on tax data. Carry is 20% of the fund's return. If the fund's return is 20% (in line with industry average), then carry would be 4% of the fund's investment ($\frac{carry}{fund\ return} * \frac{fund\ return}{fund\ investment} = 20\% * 20\%$). This implies that co-invest as a percentage of the fund's investment would be 0.78% ($\frac{co-investment}{carry} * \frac{carry}{fund\ investment} = 19.5\% * 4\%$). This estimation also assumes that, at the aggregate level, the ratio of co-investment to carry is stable.
[21] Figures may not sum due to rounding.
[22] Here, as elsewhere, we define 'pay' as carried interest plus total earned income, which would include management fees as well as any other income from employment or partnership trading profits.

Figure 13: Recipients of carry by share of carry out of total pay (carry plus total earned income), 2020

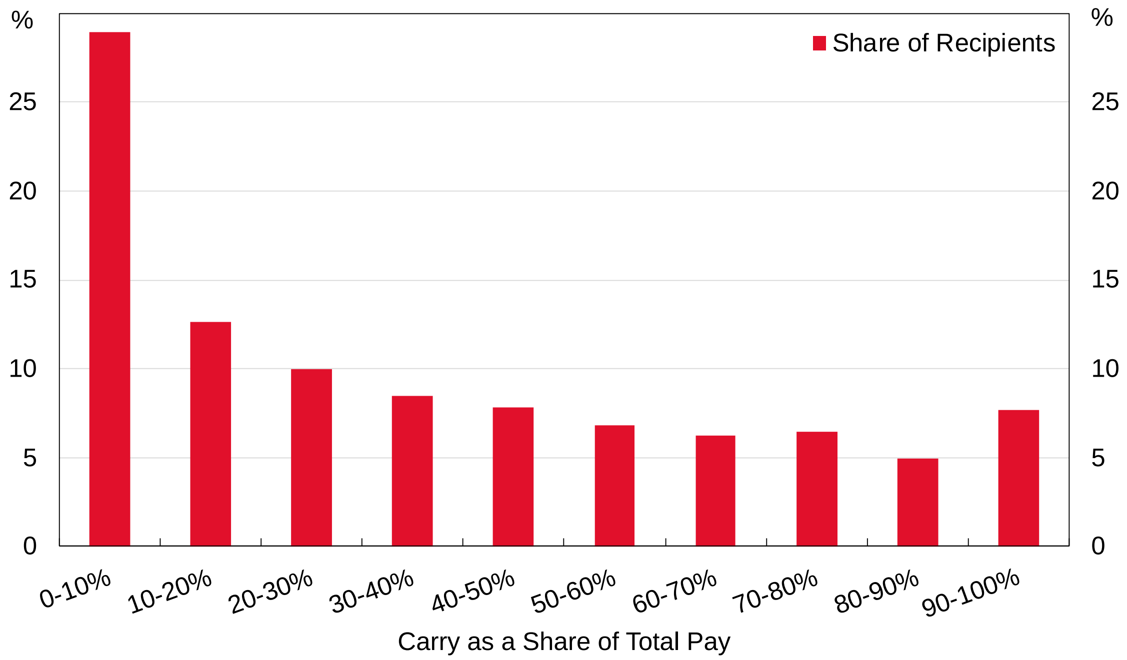


Notes: (i) The figure shows the share of all carry recipients, by share of total pay (carry plus total earned income), where total carry and total earned income of 2020 are used for the calculation; (ii) Bands of 'carry as a share of total pay' exclude the lower limit (except for the first band, where zero is included) but include the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

We also find that the share of carry out of total pay tends to increase with total pay. In other words, carry is a more important part of remuneration for the best-paid executives. As Figure 15 shows, for the approximately one third (35%) of carry recipients who received less than £1 million in total pay, carry only made up around 30% of their pay, on average. By contrast, among the 8% of carry recipients who received over £10 million in total pay, carry made up 60% on average.

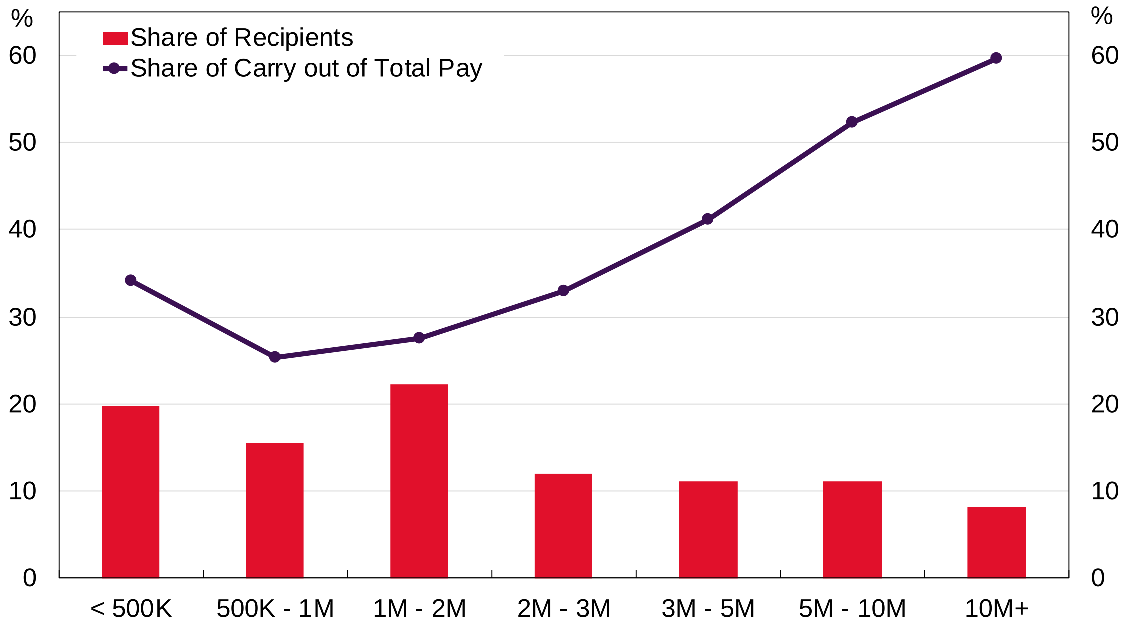
Figure 14: Recipients of carry by share of carry out of total pay (carry plus total earned income), 2018 - 2020



Notes: (i) The figure shows the share of all carry recipients, by share of total pay (carry plus total earned income), where total carry and total earned income of 2018 - 2020 are used for the calculation; (ii) Bands of 'carry as a share of total pay' exclude the lower limit (except for the first band, where zero is included) but include the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

Figure 15: Share of carry out of total pay (carry plus total earned income) by total pay bands, 2018 – 2020



Notes: (i) The figure uses carry and total earned income between 2018 - 2020 for the calculation of carry as a share of total pay (carry plus total earned income); (ii) Bands of total pay include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

In our companion paper (Advani et al, 2024) where we provide revenue estimates for increasing the tax rate on carried interest, we include carry as part of total *remuneration* to assess the impact of the tax change on total take-home income. For this purpose, instead of carry plus total earned income, we use carry plus total income, which includes investment income in addition to earned income. On this measure, we find that the bottom 80% of carry recipients receive on average only around one third (35%) of their total remuneration from carry. It is only within the top 20% of carry recipients that carry makes up more than half their total pay on average, rising to around 60% of pay amongst the top 100 best-paid executives.

9. Most carry recipients only receive carry occasionally, although it is more regular at the top

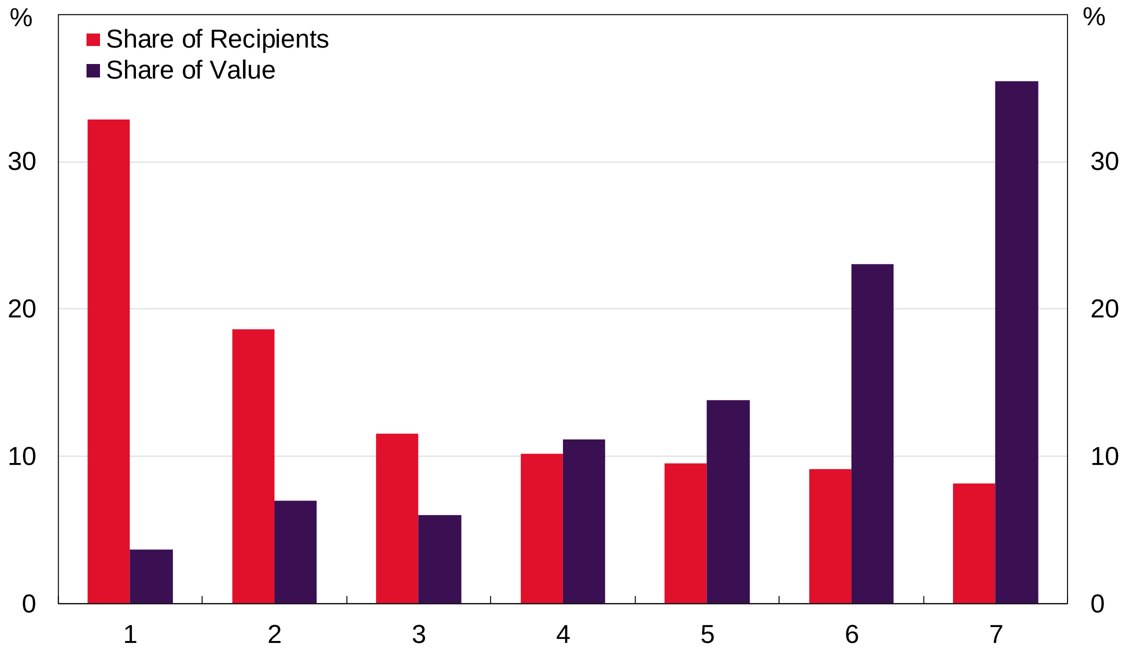
PE executives generally do not receive carried interest every single year (Figure 16). In fact, a third of the carry recipients we see in the data only receive carried interest once in the seven-year period we analyse.

Out of the seven tax years from 2017 to 2023, 8.1% of carry recipients received carry every year ('every-year carry recipients'), while 9.1% received carry in all but one year, 50% received carry in two to five years, and 33% received carry only in one year during this period.

This is relevant for decisions around tax design. If carried interest is received only once every few years, the possibilities for tax planning/avoidance expand, as carry recipients could, for example, avoid UK tax on a substantial part of their returns to labour by becoming non-resident for the year they expect to receive carry. To prevent this, imposing a 'tail' for taxation of carried interest in the years immediately after departure seems sensible.

Although the vast majority of carry recipients do not receive carried interest annually, individuals who do receive carry every year are more likely to receive large amounts of carry. In aggregate, every-year carry recipients receive 35% of total carried interest despite only representing 8.1% of carry recipients. They also receive

Figure 16: Recipients and value of carry by frequency of gains, 2017 - 2023



Notes: For each individual, we first calculate the number of years they have received carry in 2017 - 2023. We then divide the individuals into frequency groups - those who receive carry in all 7 years, 6 out of 7 years and so on. These groups are mutually exclusive.

Source: Authors' calculations based on HMRC administrative datasets.

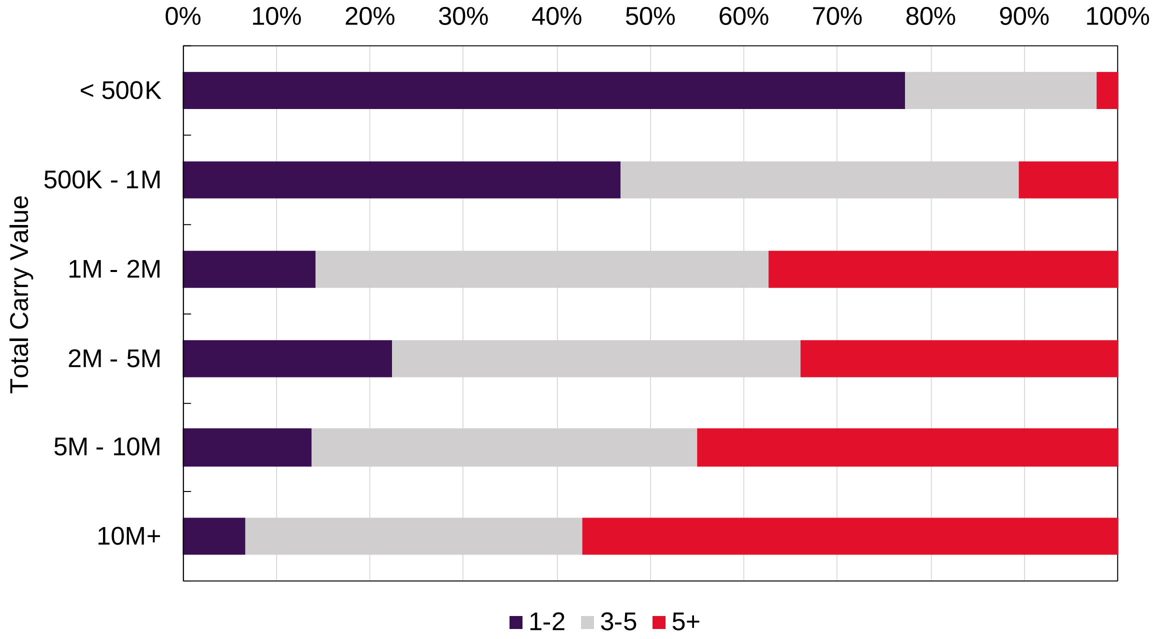
the largest amounts of carry in any given year - £2.6 million per year on an average. This contrasts with £473,000 received by an individual who receives carry for only one year or £783,000 (per year) received by an individual who receives carry for two out of six years.

To shed more light on this insight, we observe individuals by bands of total carry received between 2017-2023 (Figure 17). 45% of those with total carry between £5-10 million and 57% of those with total carry over £10 million in the seven-year period receive carry at least five times in this period. In comparison, out of those receiving £500,000-1 million in total carry between 2017-2023, only 11% receive carry at least five times in the seven years. This pattern is consistent even when we look at top carry recipients in a single year. Out of those who received over £5 million in carry in 2020, 65% received carry in at least four out of the other six years, while this share is 47% for those with an annual carry value between £500,000-1 million.

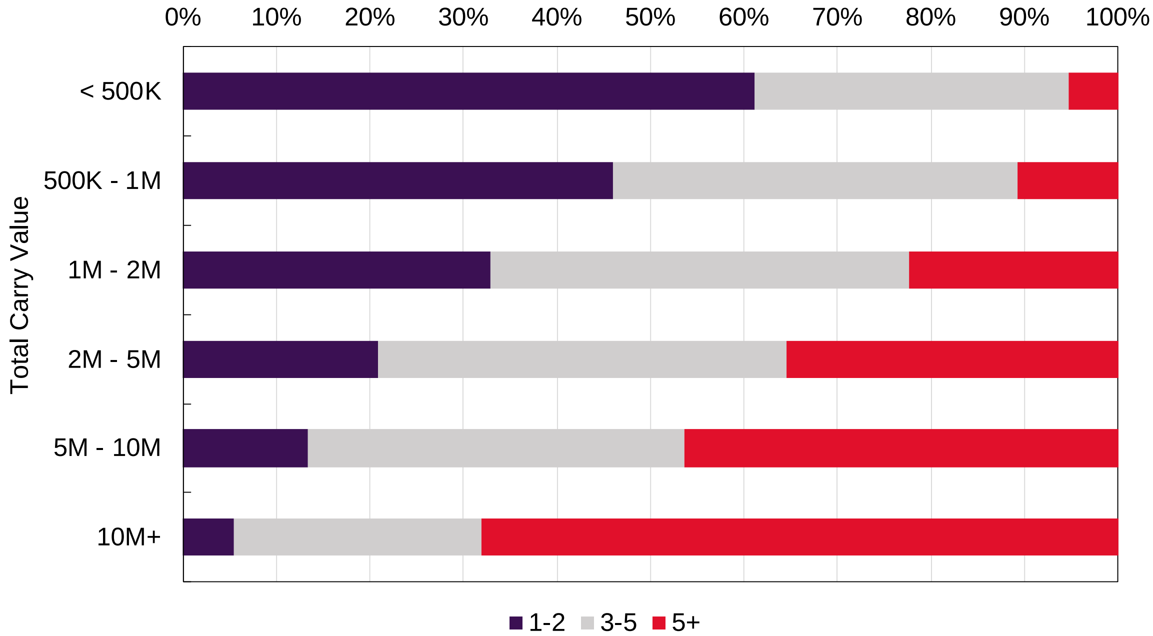
The frequency of carry receipts also varies with age (Figure 18). Older PE executives (those aged 40 to 60) are more likely (1.5-1.7 times) to receive carry in all seven years as compared to younger ones (below 40 years in age). Among older executives, around 42-52% of the total carry received goes to those who persistently receive carry in all years, while this share is only 24% among junior PE executives. In addition, not only do the PE executives continue receiving disproportionately large shares of carry towards the end of their careers (see Fact 4) but carry receipts amongst this group are also very persistent: 34% of individuals aged 60+ receive carry for all years (17%) or all but one year (17%), and account for 68% of the carry going to this age group.

Figure 17: Recipients and value of carry by amount of carry and frequency of gains, 2017 - 2023

(a) Share of recipients



(b) Share of value

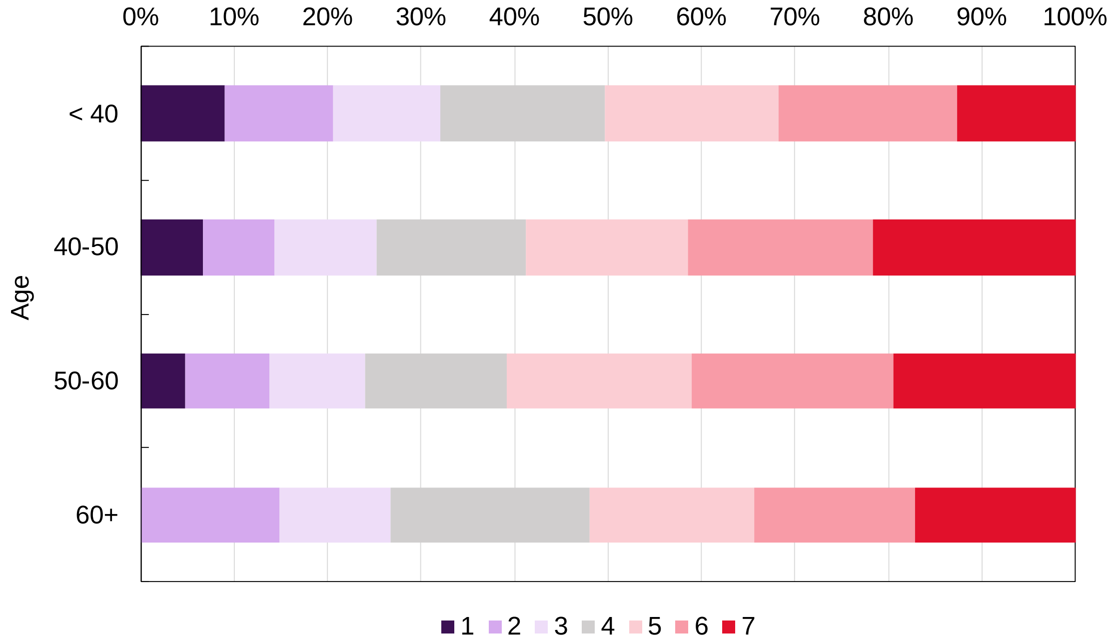


Notes: We split individuals into bands of total carry received between 2017 - 2023. In (a), within each band, we plot the share of individuals (represented by the stacked bars) who receive carry in more than 5 out of 7 years, 3 to 5 years and 2 years or less between 2017 - 2023. In (b), we plot the share of total carry received between 2017 - 2023 (represented by the stacked bars) by the same frequency groups as in (a). For statistical disclosure purposes, Figure 17 uses more aggregated frequency groups than Figures 16 and 18.

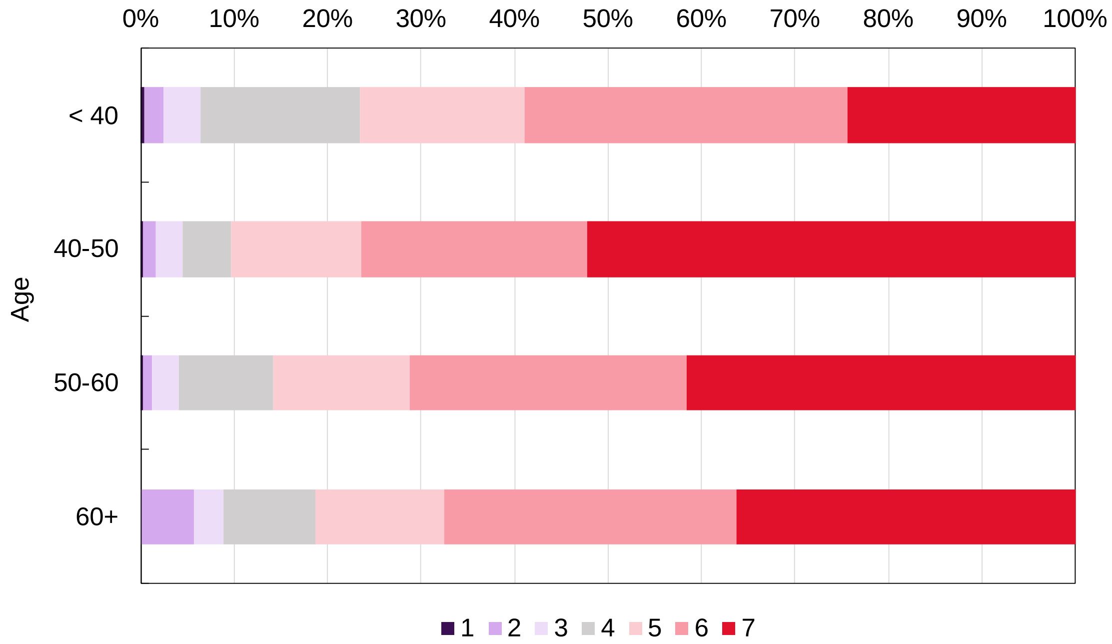
Source: Authors' calculations based on HMRC administrative datasets.

Figure 18: Recipients and value of carry by age and frequency of gains, 2017 – 2023

(a) Share of recipients



(b) Share of value



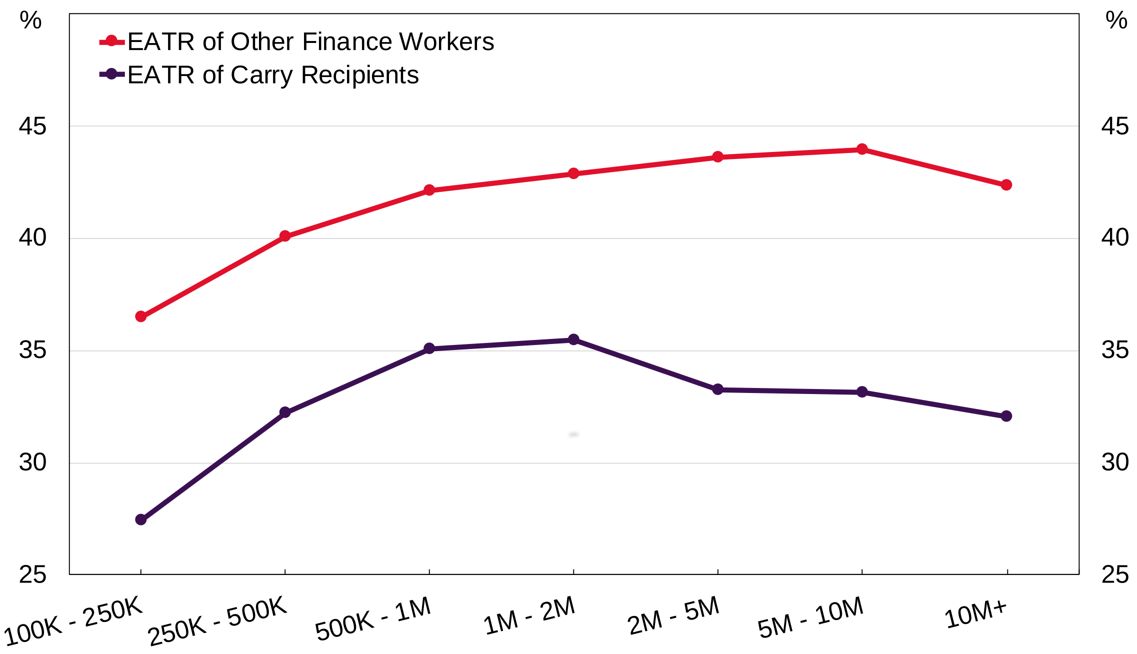
Notes: We first look at individuals who received carry in 2020 and split them into bands of age. In (a), within each band, we plot the share of individuals (represented by the stacked bars) who receive carry in all 7 years, 6 out of 7 years and so on between 2017 - 2023. In (b), we plot the share of total carry received between 2017 - 2023 (represented by the stacked bars) by the same frequency groups as in (a).

Source: Authors' calculations based on HMRC administrative datasets.

10. Carry recipients currently pay much lower effective tax rates than other top earners in finance

Those advocating for an increase in the tax rate on carried interest often do so on the basis that there is an inherent unfairness in allowing PE executives to pay a much lower tax rate than others at the same levels of income (as well as some with much lower incomes). To underscore the tax advantage currently enjoyed by PE executives, we compare the effective average tax rate (EATR) of carry recipients with other workers in the finance industry at equivalent levels of total pay (Figure 19). For individuals with total pay over £100,000, the EATR paid by carry recipients on their total taxable income and gains is 7.7 percentage points lower than that of other workers in the finance industry. The difference is even more pronounced at higher levels of total pay, with the gap increasing to over 10 percentage points for total pay above £2 million.

Figure 19: Effective average tax rates (EATRs) for carry recipients and other finance workers by total pay bands, 2018 - 2020



Notes: The figure includes individuals earning over £100K in total pay in each year that they are present in the data. For carry recipients, 'total pay' implies carry plus total earned income. For other finance workers, this implies total earned income. Average EATR is the sum of Income Tax, CGT and NICs (excluding Employer NICs) across all individuals divided by sum of total remuneration (total taxable income plus total taxable gains) across all individuals over 2018 - 2020. These EATRs are then plotted against bands of total pay (total earned income plus carry). Bands of total pay include the lower limit but exclude the upper limit.

Source: Authors' calculations based on HMRC administrative datasets.

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Appendix A: Misclassified Carried Interest

Since 2017, there has been a box designated for carried interest on SA108 (Box 13). There is also a general box where the total of residential property gains and carried interest (Box 6) is supposed to be reported. Since the tax liability for residential property gains and carried interest is same (both taxed at 28% between 2017 and 2023), there is a chance that some carry recipients report their carried interest only in the general box and not in the one designated for carried interest. Although this will not lead to an underreporting of tax, it would lead to carried interest being misclassified as a residential property gain (false negative). Using the base cost (purchase price) reported by the individuals on their returns, we have been able identify such cases and reclassify their reported residential property gains as carried interest.

We start by looking at individuals who explicitly report carry. The total amount of carry reported in Box 13 between 2017 and 2023 is £22.3 billion, which corresponds to a total of 6,440 unique individuals across the years. However, we exclude individuals below £5,000 in carry because such low carry values are unlikely and we suspect that these could be individuals who mistakenly report their residential property gains as carry (false positives). Imposing this restriction on the minimum value of carry leads to us excluding 710 of the 6,440 people reporting carry on SA108 Box 13, and 1,660 out of 17,720 people-year observations. Despite this large drop (11%) in the number of individuals with carried interest, since their carry values are by construction low, the total reported carried interest that is excluded is only £3 million.

As for false negatives (carried interest being misclassified as a residential property gain), we look at individuals who have reported zero carry but a residential property gain of at least £5,000 in a year (using the same restriction for the minimum value of explicitly reported carry). We split this population into four categories:

1. Those who have reported carry in other years but not in the specific year being looked at - 'ever carry'
2. Those who have never reported carry but are partners in partnerships reported by carry recipients – 'partnership links'
3. Those who have never reported carry and do not have partnership links but are employees in employers reported by carry recipients – 'employer links'
4. Those who have never reported carry and do not have partnership or employer links – 'no links'

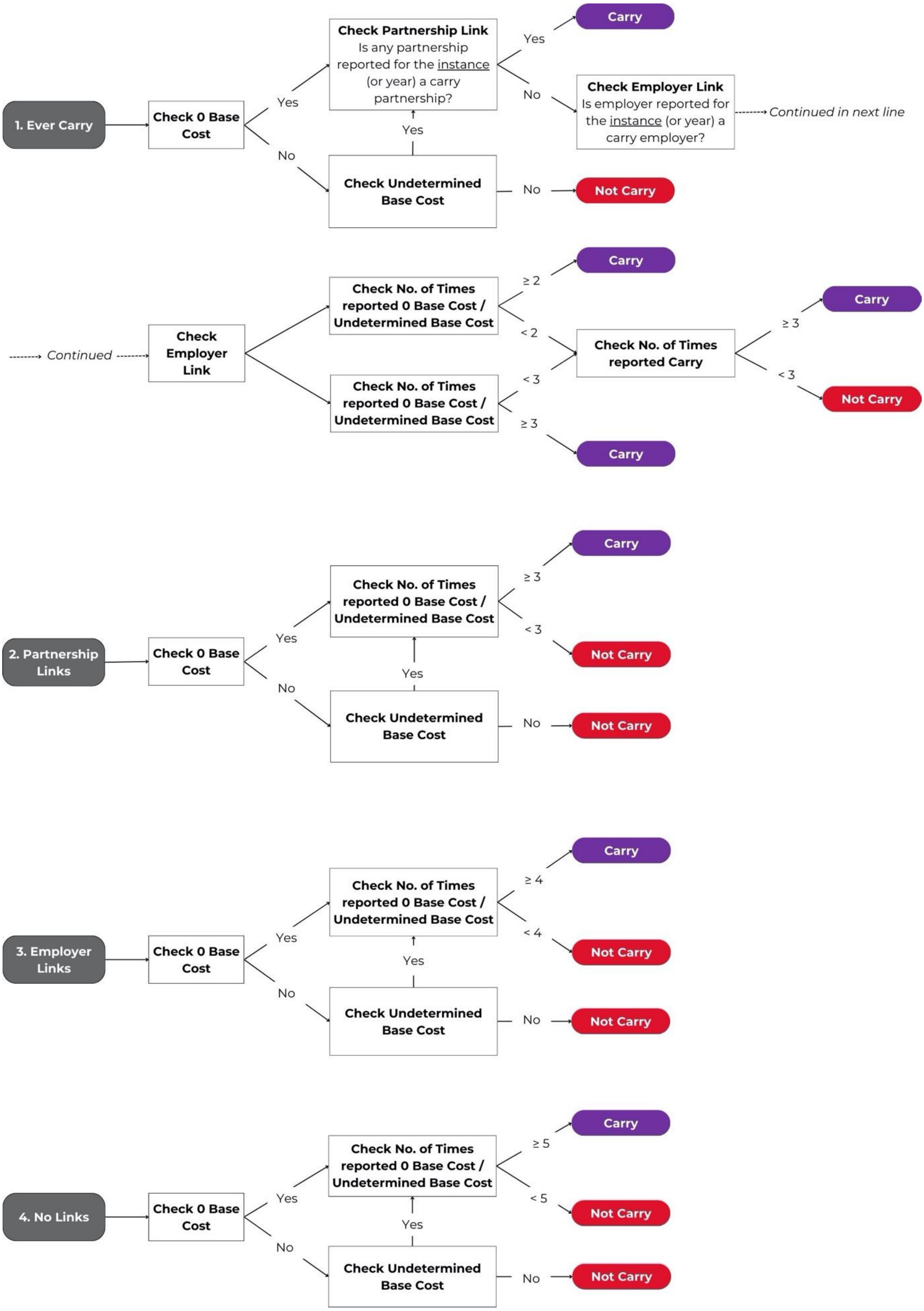
For each of these categories, we look at the base cost corresponding to the reported residential property gain which is reported in the allowable costs box on SA108 (Box 5). However, some people might not fill this in. They would instead fill the general box for residential property gains and carried interest (Box 6) and disposal proceeds (Box 4). In such cases, base cost (purchase price) is calculated as the difference between the disposal proceeds (selling price) and the gain (profit) reported in Box 6. A non-zero base cost is reflective of a true residential property transaction. However, a zero base cost can be suspected carried interest. We perform further checks for such cases based on which population category they come from.

For an 'ever carry' case with a zero base cost, the fact that the individual has received carry at some point is a strong indicator of their carry being misclassified as a residential property gain in the year being looked at.[23] If this individual also belongs to a partnership that has been reported by someone who explicitly reported carry (that is, they have a partnership link), that will be an even stronger signal of misclassification. Thus, we first check if an individual from the 'ever carry' category has partnership links in the same year. If yes, we reclassify their residential property gain as carry. However, if no partnership link is reported, we check if an employer link (employer reported by someone who explicitly reported carry) is present instead. Since an employer link is a weaker condition than having a partnership link to someone with carry, even if a person reports an employer link, we perform further checks before reclassifying the residential property gain as carry. This includes checking for a repeated pattern of reporting residential property gains at zero base cost. If this pattern is present in at least two out of seven years (2017 to 2023), we reclassify the gain as carry. However, if not, we perform further checks. If the individual has reported carry in at least three out of seven years, we reclassify the gain as carry, otherwise not.[24]

We follow a similar methodology for the other three population categories but with stricter conditions. See Figure A1 for details.

[23] For illustrative purposes, we only explain the case of zero base cost. However, there are also cases where base cost is not determinable. For example, this happens when an individual reports a positive value in the general box for residential property gains and carried interest (Box 6) but their base cost (Box 4) as well as disposal proceeds (Box 5) are zero. Here, we do not have a way of deriving the base cost since it could purely be a case of the individual not filling in boxes 4 and 5 on their return. However, we still suspect these cases to be carry and perform further checks on them to decide whether to reclassify the gain as carry.
[24] In the tax data, we currently do not have complete coverage for partnership and employer links beyond 2021 and 2020, respectively. As such, our estimates for misclassified carry in 2021-2023 are underestimates.

Figure A1: Flowchart explaining steps taken to identify misclassified carry from residential property gains for each population category



Following the steps in the flowchart (Figure A1), we estimate £1.9 billion of the reported residential property gains to be carried interest and a total of 5,840 carry recipients between 2017 and 2023.

- Around 88% of this additional carry comes from 1,010 individuals who have previously reported carry ('ever carry' category), but they do not report carry in the year being looked at. Therefore, these cases only add to the total carry estimate and not to the count of carry recipients. Amongst these 'ever carry' cases, most (64%) carry is added from individuals who report a residential property gain at a zero (or undetermined) base cost with a partnership link to another individual receiving carry in the same partnership.
- The rest 12% of the additional carry comes from 110 individuals who have never reported carry in the seven-year period. Around 95% of the carry added through these cases comes from the 'partnership links' category, that is, from individuals who belong to a partnership reported by carry recipients. In addition, they report a residential property gain at a zero base cost and have repeated this pattern in at least three out of the seven years being looked at.

A breakdown of misclassified carry by each population category is given in Table A1.

Table A1: Breakdown of misclassified carry by population category, 2017 - 2023

Category	Count of new individuals added	Count of individual-year observations added	Total carry added (£mn)
Ever carry	-	1,390	1,651
Partnership links	110	215	193
Employer links		33	1
No links		101	10
Total	**110**	**1,739**	**1,854**

Notes: (i) Figures may not sum due to rounding. (ii) For statistical disclosure reasons, a breakdown of the count of new individuals added for each category cannot be provided.

Source: Authors' calculations based on HMRC administrative datasets.

Appendix B: Unremitted Carried Interest

UK non-doms claiming the remittance basis do not report their worldwide carry on SA108 unless it is remitted to the UK. Thus, to get an estimate of the worldwide carry received by these remittance basis users (RBUs), we match them to domiciled individuals receiving carry and with comparable total earned income levels (which include the management fees which is not directly observed in the data) in the same year.[25] This approach builds on our previous work (Advani, Burgherr and Summers, 2023) on estimating foreign income and gains of the entire non-dom RBU population. We refine this approach to tailor it to the population of carry recipients. We assume that at comparable income levels the share of carry (out of total earned income plus carry) received should be similar and use this assumption to scale up the carry received by the RBUs.[26]

As an overview of our methodology (details below) to get the estimate of unremitted carry, we assume that UK domiciled individuals (i) within the same firm, (ii) at comparable levels of total earned income, and (iii) with at least as much UK-carry as RBU carry recipients, should receive a similar share of carry out of total pay (total earned income plus carry). Based on this assumption, we scale up the carried interest of the RBUs to match the average share of carry received by all matched doms within the same firm.[27] For any RBU carry recipients for whom we are unable to identify any domiciled carry recipients within the same firm, we expand the search outside of the firm.

While the carry that the RBUs report on SA108 is supposed to be UK source carry plus any foreign remitted carry, we assume that any carry that they report on SA108 is UK-source carry. Hence, after scaling up the carry of the RBU using the carry received by a comparable UK dom, we get the estimated worldwide carry of the RBU. The difference between this estimate and the actual reported value by the RBU on their SA return is the estimate for foreign unremitted carry.

We only conduct this analysis for the years 2018-2020. The choice of the years 2018-2020 is for two reasons. First, while we have data on carry for 2017, we drop this year in our estimation because it is the year impacted by the non-dom reform and has an unusually high number of remittance basis users (500 in 2017 versus 350 on an average between 2018-2020). Restricting our focus to after 2017 thus avoids this

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[25] We do this estimation only for remittance basis users with unremitted amounts over £2,000.
[26] In our previous work to estimate foreign income and gains of the entire remittance basis population, we match the remittance basis users to UK doms with comparable total earned incomes and additional characteristics like industry, age, location, and gender. Given that carry recipients are all from the same industry, have concentration in certain ages and locations, and are predominantly males (see Fact 4), for the purpose of this analysis, matching based on total earned incomes should suffice.
[27] There is a risk that we match individuals with different exposures to carry in their overall pay, as different job types within PE firms will have different ratios of carry in their overall pay. The risk is limited to the fact that we are only matching carry recipients. The risk is also limited because any overestimation due to this will (at least partially) be offset by RBUs that do not receive any UK-sourced carry in the period of observation (so we do not match them for the purpose of estimating their foreign carry).

concern. Second, we do not have full data coverage (importantly, we lack information on income) post-2020 to carry out estimation of unremitted carry for the years 2021-2023.

Estimating unremitted carry for 2018-2020

Broadly speaking, there are three steps required for this estimation.

Step 1: Iterative 'within firm' matching

We start by matching each RBU in the population to every other UK dom carry recipient:[28]

1. With a comparable level of total earned income, where income levels are considered comparable if they lie within ±10% of the RBU's total earned income.[29]
2. Within the same firm, expecting pay structure to be consistent within a firm.
3. Receiving at least as much carry as a share of total pay (total earned income plus carry) as the RBU. This is done to ensure that we do not scale down any reported carry values of the RBU. It also helps to control for the risk of matching individuals with the same pay but different job types and different shares of carry within the same firm (as would happen with finance directors and 'deal executives') to get matched.

After shortlisting the potential matches for each non-dom, we calculate the share of carry out of total pay for the matched UK doms. Since we have multiple matches for a single RBU, we calculate the mean of the carry shares across all matches (s) and use the below formula to get the worldwide carry for the RBU:

$$Worldwide\ Carry\ of\ RBU\ = Total\ Earned\ Income\ of\ RBU * \frac{s}{1-s}$$

The formula is derived by equating the share of carry out of total worldwide pay for the RBU to the mean share across all matches of doms (s), that is,

$$s = \frac{Worldwide\ Carry\ of\ RBU}{Worldwide\ Carry\ of\ RBU + \ Total\ Earned\ Income\ of\ RBU}$$

The difference between the above estimate of worldwide carry and the UK reported carry of the RBU will give the unremitted carry estimate.

From this step, we get a total unremitted carry of £225 million between 2018 and 2020 (an average of £75 million per year). However, while there are 350 RBUs per year on an average, we are able to get unremitted carry for only 60 (16%) RBUs per year in this step. Ideally, it is likely for every RBU to have some overseas workdays and therefore some carry attributable to those days, hence we would want an estimate of unremitted carry for each RBU. In the estimation so far, we are able to

[28] We exclude deemed doms while performing this match.
[29] To estimate unremitted carry, the population used includes carry recipients identified through misclassified carry analysis. This is to accurately capture all potential RBU to UK dom matches within the carry-recipient population.

scale-up only a limited number of cases primarily because of our assumption of matching an RBU to doms within ±10% of the RBU's total earned income. This restricts the matching pool, so we relax this threshold to ±20% for the remainder RBUs. We then repeat the same exercise as we did with the ±10% threshold to get the unremitted carry for the RBUs who find matches using this new threshold. We further relax this threshold (iteratively from ±20% to ±50% to ±80%) before we exhaust all our options within a firm to estimate unremitted carry for each RBU.

Step 2: Iterative 'full population' matching

For RBU carry recipients for whom we are unable to identify any domiciled carry recipients within the same firm, we expand the search outside of the firm but now using stricter thresholds for the match (since pay structures may be different across firms), iteratively relaxing the threshold from ±1% to ±5% to ±10%. We also put another restriction to match partner (non-partner) RBUs to other partner (non-partner) UK doms, to ensure that we are matching individuals who are likely to have similar pay structures.

Step 3: Restricting the amount of unremitted carry for long-term RBUs

After step 2, we split the RBU population into two sub-populations: (1) new arrival RBUs, those who arrived in the UK in the last 4 years, and (2) long-term RBUs, those who arrived in the UK in the last 5 to 15 years.[30] We do this population splitting because the amount of unremitted carry will differ for these two sub-populations. New arrival RBUs could be receiving a large share of their carry from services performed abroad before coming to the UK and hence can have high amounts of unremitted carry. However, long-term RBUs are unlikely to spend more than half of their time outside of the UK. Assuming that they receive an equivalent amount of unremitted carry irrespective of where the management services are performed, this will mean that a long-term RBU can only have a maximum unreported carry equal to their UK reported carry (that is, worldwide carry can only be twice as much as UK reported carry). Thus, while we do not limit the amount of unremitted carry for new arrivals, if any long-term RBU has an unremitted carry estimate (from steps 1 and 2 above) greater than their UK reported carry we cap it at the value of their UK reported carry.

Following steps 1 to 3, we get the (central) estimate of unremitted carry as in Table A2 below. We estimate total unremitted carry by non-doms to be £850 million between 2018 and 2020 (an average of £280 million per year). On average, this is around 12% of the total carry reported by the entire carry population in each of these years.

[30] Anybody who arrived more than 15 years ago is already deemed domicile by the 2017 deemed dom reform and cannot claim the remittance basis.

Table A2: Central estimate of foreign unremitted carry, 2018-2020

Year	**All carry recipients**					**Carry recipients who are RBUs**				
	Total count	**Total carry (£mn)**			**% unremitted carry**	**Total count**	**Total carry (£mn)**			**% unremitted carry**
		Reported on SA108	Net misclassified	Unremitted carry			Reported on SA108	Net misclassified	Unremitted carry	
2018	2,129	2,082	338	352	17	344	334	82	352	106
2019	2,447	2,878	218	299	10	347	396	25	299	75
2020	2,608	2,698	265	203	8	365	339	17	203	60

Notes: (i) Unremitted carry is reported as a percentage of total carry reported on SA108. However, as explained in an earlier footnote, the estimation of unremitted carry is done after adjusting for misclassified carry. (ii) Net misclassified carry is the total carry from false negatives (carried interest reported as residential property gains) in the misclassified carry analysis net of the total carry from false positives (residential property gains reported as carried interest).

Source: Authors' calculations based on HMRC administrative datasets.

In Table A3, we give a step-by-step breakdown of total unremitted carry added at each step of estimation of unremitted carry.

Table A3: Step-by-step summary of unremitted carry estimation (central estimate), 2018-2020

Step	RBU population used	Threshold on % difference in total earned income (±)	2018			2019			2020		
			Cumulative count of RBUs with unremitted carry	Cumulative amount of unremitted carry		Cumulative count of RBUs with unremitted carry	Cumulative amount of unremitted carry		Cumulative count of RBUs with unremitted carry	Cumulative amount of unremitted carry	
				As a % of RBU carry	*As a % of total carry*		*As a % of RBU carry*	*As a % of total carry*		*As a % of RBU carry*	*As a % of total carry*
Step 1: Iterative 'within firm' matching											
1.1	All	10%	42	19	3	59	31	4	68	12	1
1.2	Unmatched in (1.1)	20%	62	26	4	86	48	7	102	36	5
1.3	Unmatched in (1.2)	50%	109	45	7	124	57	8	154	72	9
1.4	Unmatched in (1.3)	80%	139	73	12	150	69	10	188	80	10
Step 2: Iterative 'full population' matching											
2.1	Unmatched in (1.4)	1%	267	152	24	271	131	18	301	112	14
2.2	Unmatched in (2.1)	5%	309	183	29	309	154	21	337	131	17
2.3	Unmatched in (2.2)	10%	322	211	34	322	171	23	345	138	17
Step 3: Restricting the amount of unremitted carry for long-term RBUs											
3.1	Long-term RBUs in (2.3)	-	322	106	17	322	75	10	345	60	8

Notes: (i) Unremitted carry is reported as a percentage of total carry reported on SA108. (ii) Each step in the table shows the cumulative amounts added up to that step.

Source: Authors' calculations based on HMRC administrative datasets.

Sensitivity Analysis

Our estimation of unremitted carry is subject to certain assumptions which can impact the final estimate of unremitted carry. Thus, to understand this impact we study the sensitivity of our estimate to each assumption.

<u>Assumption 1: Matching pool (within firm versus full population)</u>

We match RBUs to UK doms within the same firm before doing a 'full population' match. This is based on the assumption that pay structures are similar within a firm and as such, we should try to find the best possible matches within a firm first. However, this also restricts the matching pool for a particular RBU and makes the estimate too sensitive to a limited number of matches within a firm. If pay structures are consistent across PE firms, we could be losing potential matches by restricting the matching to within firms. Thus, we estimate the case where we only perform a full population match by matching each RBU to doms within ±10% of the RBU's total earned income, followed by higher thresholds of ±20%, ±50% and ±80% and show results in Table A4. We also consider the case of a 'within firm' match followed by a 'full population' match at the same thresholds used within firms, and also the extreme case of a full population match without any thresholds. In each of these three cases, we retain the restriction to match partner (non-partner) RBUs to other partners (non-partners) UK doms to make sure that we are matching individuals who are likely to have more similar pay structures.

Table A4: Sensitivity of unremitted carry estimate to the matching pool (within firm versus full population)

Year	Cumulative amount of unremitted carry as a % of total carry			
	Central estimate	**Full population match with iterative thresholds** (10%, 20%, 50%, 80%)	**Within firm match followed by full population match with same iterative thresholds** (10%, 20%, 50%, 80%)	**Full population match without any thresholds**
2018	17	20	21	28
2019	10	12	12	20
2020	8	9	9	16
Average	**12**	**14**	**14**	**21**

Notes: Unremitted carry is reported as a percentage of total carry reported on SA108.

Source: Authors' calculations based on HMRC administrative datasets.

<u>Assumption 2: Percentage difference threshold on total earned income levels of RBU and UK dom</u>

We define a 'comparable' income level to match RBUs to UK doms by setting an upper bound on the acceptable percentage difference between the total earned incomes of the RBU and a potential UK dom match. While a lower acceptable threshold would help us get as close a match as possible, it would also mean that we have a smaller matching pool, making the estimate of unremitted carry too sensitive to the exact observations being matched to. Changing this threshold may increase or decrease the amount of unremitted carry depending on the matching pool for each individual. To check this, keeping all else equal, we change the 'within firm' matching thresholds by ±5pp and 'full population' matching thresholds by ±0.5pp and summarise results in Table A5. We also consider the extreme case of a 'within firm' match at no thresholds followed by a 'full population' match at no thresholds.

Table A5: Sensitivity of unremitted carry estimate to the percentage difference thresholds on total earned income levels of RBU and UK dom

Year	Cumulative amount of unremitted carry as a % of total carry			
	Central estimate	**Lower thresholds** (within firm: -5pp w.r.t central thresholds; full population: -0.5pp w.r.t central thresholds)	**Higher thresholds** (within firm: +5pp w.r.t central thresholds; full population: +0.5pp w.r.t central thresholds)	**No thresholds** (within firm: no thresholds; full population: no thresholds)
2018	17	11	13	28
2019	10	11	13	19
2020	8	7	8	15
Average	**12**	**10**	**11**	**21**

Notes: Unremitted carry is reported as a percentage of total carry reported on SA108.

Source: Authors' calculations based on HMRC administrative datasets.

<u>Assumption 3: Number of years up to which there is no cap on foreign unremitted carry</u>

We assume that new arrival RBUs can continue receiving foreign carry for services performed abroad before arriving in the UK for up to four years of residency in the UK. As such, we do not cap the amount of their unremitted carry. For RBUs who have been resident in the UK for more than four years, we assume that they would spend a maximum of 50% of their time working abroad and cap their total worldwide carry at twice their UK reported carry (that is, unremitted carry can be at most equal to their UK reported carry). However, if we assume that new arrivals receive foreign carry for services performed abroad before arriving in the UK for more (less) than 4 years post-arrival in the UK, this will increase (decrease) the amount of unremitted carry, as can be seen in Table A6.

Table A6: Sensitivity of unremitted carry estimate to the number of years up to which there is no cap on foreign unremitted carry

Year	Cumulative amount of unremitted carry as a % of total carry				
	Years up to which no cap on foreign unremitted carry				
	Central estimate	**1**	**3**	**5**	**7**
2018	17	14	16	18	22
2019	10	8	8	12	14
2020	8	7	7	8	10
Average	**12**	**10**	**11**	**13**	**15**

Notes: Unremitted carry is reported as a percentage of total carry reported on SA108.

Source: Authors' calculations based on HMRC administrative datasets.

Given the results of the sensitivity analysis (Tables A4 to A6), on an average, unremitted carry as a percentage of total reported carry can be anywhere between 10% (in the case where there is only one year up to which there is no cap on foreign unremitted carry; Table 6) and 21% (in the case of a full population match without any thresholds; Table 4) per year. In absolute terms, unremitted carry can be between £240 million to £525 million per year on an average. Therefore, our central estimate of 12% unremitted carry per year (or an average £280 million per year in absolute terms) is on the conservative end of the estimated range.

It is important to note that interaction effects between assumptions would mean that unremitted carry as a percentage of total reported carry could be lower or higher than 10% and 21%, respectively. For example, if a full population match without any thresholds (on the absolute percentage difference between total earned income levels of RBUs and UK doms) is done with 7 years up to which there is no cap on foreign unremitted carry, the percentage of unremitted carry will be as high as 33% per year on an average. However, there is no credibility in doing a full population match without any threshold restrictions on the match and hence this case is very unlikely.

Appendix C: Co-Investment

A PE executive can put their own capital at risk in the fund they are managing through two ways: consideration for carry and other co-investment (Fact 7). Thus, to estimate co-investment, we look at the base cost of two types of disposals:

1. Residential property: These disposals are used to account for cases when a carry recipient reports a base cost linked to their carry in the box for residential property. To get base cost linked to carry from the residential property box for allowable costs (Box 5), we check if an individual reports a positive value in this box. We then check if their carried interest (Box 13) is equal to the gains before losses (Box 6 which is supposed to be the sum of carried interest and residential property gains). If yes, this implies that they only have carry gains and no residential property disposals. Hence, the full base cost from Box 5 is counted towards the co-investment estimate. However, if the individual reports a greater value in Box 6 than the carry box, we calculate their share of carry out of the total of gains (residential property and carry) and absolute losses (Box 7), if any. We apply this share to attribute base cost proportionally to carry, which is then used in the co-investment estimate.[31]
2. Unlisted shares: These disposals are used because they are the typical disposals of a PE fund. We first look at base cost or allowable costs on unlisted shares in SA108 (Box 33). If an individual reports a positive value, we count it as a co-investment. In case an individual reports a zero value in this box (or does not fill this box),[32] we look at the net gain on unlisted shares (Box 34 minus Box 35) and the disposal value (Box 32). If the difference between disposal value and net gains (selling price minus profit) is positive, we count the base cost (cost price) as a contribution towards co-investment.

The estimate of aggregate co-investment from unlisted shares between 2018-2020 is £1.5 billion, while the estimate from carry over this period is £140 million. Summing the two gives a measure of total co-investment equal to £1.7 billion. We acknowledge that some of the unlisted share disposals could be personal investments of the individual. However, our approach would only overestimate the amount of co-investment and is thus conservative.

We also produce estimates on co-investment coming from other property gains (£1.2 billion) and listed shares (£3.5 billion), if they were to be included in the co-investment. These use the same estimation methodology as for unlisted shares. However, other property disposals are unlikely in PE funds. As for listed shares, while PE fund disposals could include these post-IPO, the share of these types of exit are very low, as explained in Fact 7. Thus, these listed shares could mostly be personal investments of an individual and the risk of including false positives in our co-invest measure would be high. Our final estimate of co-investment therefore only includes unlisted shares and any base cost on carry.

[31] The same apportionment strategy is used for cases where gains (Box 6) are zero but carry (Box 13) and losses (Box 7) are reported. Here, the share of carry is calculated out of the total of carry plus the absolute value of the losses.
[32] Note that we cannot distinguish between a zero and a missing value in the data.