

# Who gains?

The importance of accounting for capital gains

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## Executive Summary

Household income statistics are a crucial lens for understanding UK living standards and inequalities. But what counts as ‘income’ is not always clear-cut. Capital gains (the profits from disposing of an asset for more than it was worth when you acquired it) are not included in existing UK income statistics. This exclusion – part of a broader exclusion of irregular receipts – has led to some important trends being missed. In this report we set out what we know about taxable capital gains over recent years; share ground-breaking research that shows the effects of including capital gains in top income measures; and discuss whether and how the UK’s income statistics could be improved to account for a broader range of income.

### Taxable capital gains are an important part of top incomes, and more than doubled between 2012-13 and 2017-18

Capital gains are a significant omission from income statistics. HMRC statistics show that taxable, realised gains (excluding trusts) totalled £55 billion in 2017-18 - the latest year for which data is available. This is equivalent to over £1,000 for every adult in the country.

Capital gains also matter for our understanding of income trends because they have not been stable over time. Taxable capital gains more than doubled between 2012-13 to 2017-18 (after adjusting for inflation), rising from £24 billion to £55 billion, while the number of individuals with taxable gains hit a record

high of 260,000 in 2017-18. However, after accounting for the Capital Gains Tax (CGT) policies of taper relief and indexation allowance, total gains were even higher in 2007-08 (hitting £87 billion in 2017-18 prices before these reliefs), due to both the economic cycle and tax planning. Nonetheless, capital gains in recent years have been high by historical standards – though the 2020 coronavirus crisis is very likely to have ended this streak for now.

We should also care about capital gains because of their very uneven distribution. Even among those 260,000 people (around 0.5 per cent of UK adults) making taxable gains in 2017-18 – equivalent to £210,000 each - 62 per cent (£34 billion) went to just 9,000 people who each realised over £1 million in gains. The flow of these very large gains tripled between 2012-13 and 2017-18, explaining 69 per cent of total capital gains growth over this period.

Finally, the exclusion of capital gains from income statistics matters because gains are often substitutable with other forms of income. For example, investments in listed shares can often yield either dividends (which are included in income statistics) or capital gains (making up £5 billion of total capital gains in 2016-17, yet not included in income measures), and to investors both are valuable. And a large proportion of capital gains cannot be attributed to these sorts of arms-length investments. For instance:

- ‘Carried interest’ - a form of performance bonus for investment fund managers - totals £2 billion per year, with an average gain of around £1 million for the 2,000 people receiving it.
- Share option schemes for employees have become more popular. For example, £600 million in capital gains were realised in 2017-18 through Enterprise Management Incentive schemes, with around 7,000 people making an average of around £85,000 each. The number of companies participating in Enterprise Management Incentive schemes grew by around 60 per cent between 2011-12 to 2017-18.

- There has been a large rise in the number of closely-held companies, with the number of people receiving payment as sole directors having more than doubled from around 400,000 in 2012 to 900,000 in late 2019. This opens up the opportunity to ultimately take earnings as capital gains via a Members' Voluntary Liquidation. These liquidations more than doubled between 2011 and 2019 (with a further jump in early 2020), and we estimate that £3 billion of assets were distributed in this way in 2017-18, with average assets at liquidation of £380,000 (though the capital gains on these disposals will be lower).
- Private companies (or shares in them) may also be sold by owner-managers, who are often forgoing alternative career choices where their earnings would be counted in statistics as income. A clear majority of all gains (62 per cent, or £32 billion) came from disposals of unlisted shares in 2016-17, and – similarly - gains eligible for entrepreneurs' relief (where the recipient must have been an employee or director of the company) totalled £24 billion in 2017-18.

Combining carried interest with those gains that are eligible for entrepreneurs' relief, a conservative estimate is that around half of taxable capital gains are now closely linked to people's occupations.

Although the growth in gains since 2008-09 has been aided by the economic cycle, it is clear that tax policy has played a key role. The highest CGT rate is now 28 per cent for carried interest and property, and 20 per cent for other capital gains, while entrepreneurs' relief provides a 10 per cent tax rate for eligible gains. For comparison, since April 2010 the top rate of Income Tax has been at least 45 per cent (usually with some National Insurance on top of this). It is safe to say that these tax differentials have affected behaviours. Indeed, in response to the trend towards capital gains, the Government cut the lifetime limit for capital gains eligible for entrepreneurs' relief (now renamed as business asset disposal relief) from £10 million to £1 million in March 2020.



All of this shows that specific forms of capital gains have been an important part of income trends over the 2010s; that some forms of remuneration that are classed as capital gains by HMRC look a lot like 'income' from any other perspective; and that tax policy can lead to changes in the form of people's income. It is undesirable that workers' choices about how to take their income should determine whether those earnings get counted or not in official statistics, and so how we think about top incomes needs to reflect this. Otherwise, the danger is that a decision to under-tax such gains leads directly to them being undercounted.

### Including capital gains in income statistics reveals rising top income shares

Existing statistics about UK income inequalities tend to be based on household surveys or Income Tax data (or a mix of the two). To look at what happens to our understanding of income trends if we broaden our definition of income to include taxable capital gains, we present new research that combines Income Tax data with Capital Gains Tax records.

We focus on the roughly 540,000 adults who have the highest incomes in the UK: the top 1 per cent. When including capital gains as income, this group has an average taxable income of around £200,000 each, and a minimum income of £130,000. 92 per cent of taxable capital gains go to this (reranked) top 1 per cent. Those who 'join' the top 1 per cent once capital gains are included – replacing around one in ten of the 'previous' top 1 per cent – are on average older – with half of the joiners being over sixty (compared with only one in seven of those they replace); and are more likely to be pensioners, investors or company owner-managers.

With capital gains being so heavily skewed towards the top of the distribution, the inclusion of gains increases top income shares. Adding capital gains to incomes increases the share of taxable income going to the top 1 per cent in 2017-18 from 13.8 per cent to 16.8 per cent (one sixth), and increases the top 0.1 per cent's share of total income from 5.6 per cent to 8.1 per cent.

The addition of capital gains also affects our impression of trends over time. The increase in the top 1 per cent's share of income between 1996-97 and 2017-18 has been twice as large if capital gains are included, with a rise of 3.1 percentage points (from 13.7 per cent to 16.8 per cent) compared to 1.5 percentage points if capital gains are excluded. In particular, the top 0.1 per cent's share of income, including capital gains, has risen from around 5.4 per cent in 1996-97 to 8.1 per cent in 2017-18 – a rise of 50 per cent (compared to a 30 per cent rise without capital gains).

These 2017-18 levels are lower than the peak of 2007-08 which, once capital gains are included, is likely to have had the highest top income share of the post-war period. But recent top income shares have also been high by historical standards once capital gains are accounted for, with the rise since 1996-97 coming on top of rising top income shares over the 1980s and 1990s (although we do not have capital gains data for these periods).

More research will be needed to look at the effect of capital gains on incomes *after* taxes, where low tax rates on capital gains imply an even larger effect on top income shares; and at household (total) rather than individual (taxable) incomes, given that there is likely to be substantial splitting of capital gains within couples for tax purposes.

### It is reasonable to include taxable, realised capital gains as 'income'

The exclusion of capital gains from existing statistics about the income distribution is problematic. It is clear that the choice makes a material impact, and that tax policy or other reasons can lead people to switch between receiving capital gains (that are not recorded) and other income (that is). It is important, however, to consider some of the conceptual and practical questions that relate to capital gains:

- 1. Should inflation be accounted for?** Some realised gains are from assets that have been held for years. There is an argument that purely inflationary gains should not count as income (and indeed the CGT system used to reflect this). However, this same argument can be made of all capital



income: for example, if your bank account interest only just maintains the spending power of your savings, then perhaps it should not be counted as income. But comprehensively addressing this in income data would require precise knowledge of people's wealth, saving and dissaving each year, and this is not practical. In addition, most CGT records no longer include acquisition dates, making it difficult to adjust for inflation even for capital gains alone. In an age where inflation is relatively low, and when capital gains are often short-term (particularly in the case of gains related to people's jobs), the case for inflation adjustment is weaker.

- 2. What sorts of capital gains should count as 'household income'?** The analysis in this report is based on capital gains that are both realised and taxable. This excludes, for example, unreported gains below the annual exempt amount (currently £12,300), as well as unreported losses (which we would ideally deduct from people's income). Most importantly, it excludes realised capital gains for people's main residences, which totalled an estimated £170 billion in 2017-18. Practically, any statistics may be constrained by what is available in tax records. And gains on people's homes might be seen differently to other gains by most people, as it is harder to see these gains as substitutes for other income, and they are also more likely to be long-term (raising the question of inflation again) and/or not realised before death. More data on all forms of capital gains would be welcome, however.
- 3. Is the lumpiness of capital gains (and losses) a problem, and are there alternatives?** One objection to including realised capital gains in annual income statistics is that they are often, by their nature, irregular and that this may be misleading about people's current living standards. However, many forms of income, such as dividends, can be volatile yet are included in existing income statistics. We do not agree that 'regularity' should always be a criterion when considering the distribution of income, and the exclusion of irregular income risks systematically biasing income data, given that a characteristic feature of being rich is having

more flexibility about when and how to receive income. At an individual level, there is some attraction to looking at accrued rather than realised gains, to spread any gains over time. Yet at an aggregate level accrued gains are far more volatile and – in any case – we have detailed tax records about realised gains and no records about accrued gains.

In our view, including taxable realised capital gains in distributional statistics is more reasonable than excluding them. And thanks to the growing use of administrative data, it is now practical to do so using CGT records.

### A supplementary definition of household income is needed

Capital gains are not the only form of income that is excluded from household income statistics on the basis of ‘irregularity’. Notably, irregular pension pot withdrawals are not counted as income in existing household income statistics. This omission is a major problem given that pension lump sums now total over £25 billion a year, and it has become more common for pension income to be taken in this way. Another omission are inheritances and (large) gifts, which total £155 billion a year and – although they should not be included in National Accounts measure such as GDP – matter a great deal for the distribution of spending power.

For all of these forms of irregular income, more data and research are needed. HMRC should consider adding CGT records into the publicly available Survey of Personal Incomes dataset, which currently only focuses on the Income Tax system. The ONS, which has now gained access to self-assessment tax records, should also seek to make use of (and share) the CGT information that this includes. Administrative data could also be used in future to develop better statistics on housing capital gains, while new survey questions could fill in areas of uncertainty such as gains below the annual exempt amount, the ownership of closely-held companies, and add more information about inheritances and pension lump sums. Including data on irregular forms of income in a broader range of datasets

would at least make the impacts of existing definitional choices more transparent, as we have shown that income statistics are sensitive to these choices.

It is also time to include irregular income in official measures of income. **We recommend the introduction of a supplementary definition of household income: specifically that the ONS should add an ‘Including Irregular Income’ measure to its published income and inequality statistics and to its microdata (particularly the new Household Finance Survey and related Effects of Taxes and Benefits on Household Income data).** On top of ‘regular’ income, this would include taxable capital gains, irregular pension withdrawals and inheritances and (large) gifts. It might also include less significant irregular sources of income such as redundancy payments, as well as ‘imputed rental’ income. An ‘Including Irregular Income’ measure would be a complement to existing ‘regular’ income series (as well as planned ‘Distributional National Accounts’ and wealth and expenditure statistics), providing an expansive income definition that more fully represents the resources available to households. It would make best use of the ONS’s new access to administrative data, as well as survey data that it already collects.

It is an important time for UK income statistics, with far greater use being made of administrative data. But such statistics should not overlook capital gains and other irregular income, either due to a focus on income assessable for Income Tax or on ‘regular’ income. As we have shown, existing statistics may have missed important elements of the story of UK top incomes – and the impacts of tax policy - over the 2000s and 2010s. We should aim for a more comprehensive understanding in the 2020s.

## Section 1

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### Introduction: the importance of income data, and difficulties in defining 'income'

Statistics on the income distribution are of crucial importance to understanding living standards and inequalities, and how these have changed over time. We know, for example, that overall household income inequality ticked up in 2017-18 and 2018-19 but has remained relatively flat over the last twenty years (measuring income before considering housing costs).

But exactly how we should define 'income' is not as obvious as it might first seem. Very similar economic activity can result in many different forms of remuneration, some of which are not included in official definitions of income. This report will focus on the exclusion of capital gains – as well as some other 'irregular' income – from income statistics.

#### UK income data tells us a lot about prosperity and inequalities

Individual and household-level income data is crucial to our understanding of society and how it is changing. We want to know not just how national GDP is growing (or shrinking) but how real living standards are changing for particular groups and places, and how society's output is being shared. Statistics about levels, trends and inequalities of incomes are therefore of great public interest.<sup>1</sup>

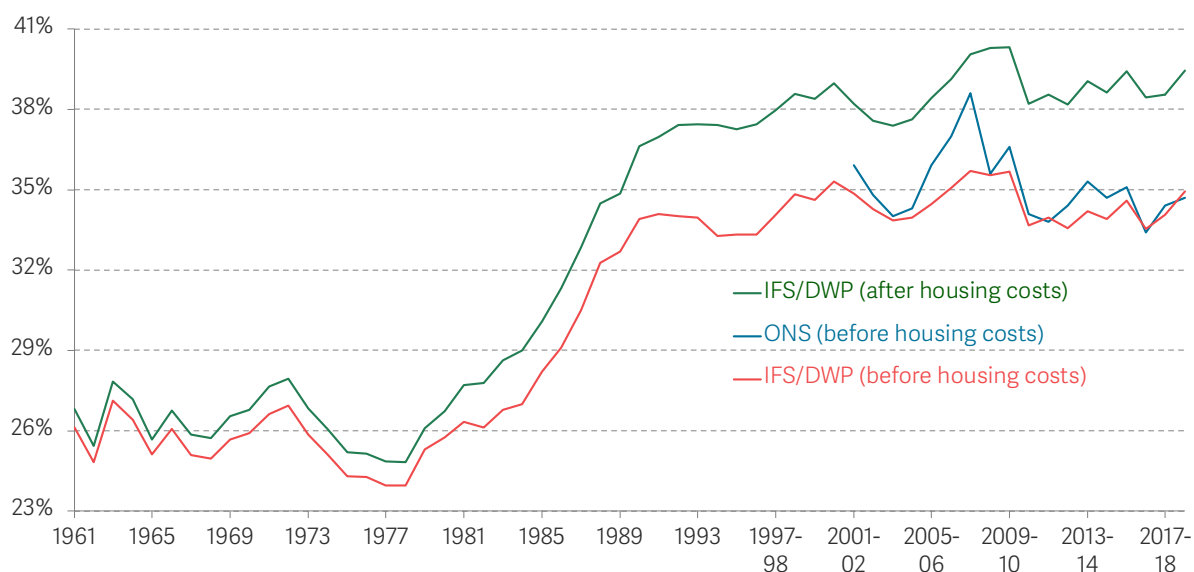
Figure 1, for example, shows the Gini coefficient since 1961 (where zero represents total equality). On this measure – and particularly looking at incomes before housing costs – although there was a notable surge in inequality between around 2004-05 and 2007-08, the big picture is of little major change since around 1990, after a rapid rise in the 1980s that has never been reversed. (Note, however, that this is a measure of relative inequality: absolute gaps between income groups have continued to grow.)<sup>2</sup>

<sup>1</sup> Our focus in this report is on income rather than wealth or consumption. Although all three concepts are useful, income statistics are the most developed. See also M Brewer, *What Do We Know And What Should We Do About Inequality?*, SAGE, June 2019.

<sup>2</sup> See A Corlett, S Clarke, C McCurdy, F Rahman & M Whittaker, *The Living Standards Audit 2019*, Resolution Foundation, July 2019 for further discussion of absolute inequality.

FIGURE 1: We have better data than ever about how income inequality has changed over time

Gini coefficient for equivalised household disposable income



NOTES: UK, except IFS/DWP series before 2002-03 which are GB. The ONS series (for 2001-02 onwards) uses more extensive and accurate top income data than the DWP series.

SOURCE: Department for Work and Pensions (DWP), Households Below Average Income; Institute for Fiscal Studies (IFS), Living Standards, Inequality and Poverty; and Office for National Statistics (ONS), Effects of taxes and benefits on UK household income.

In the UK, we already have a great deal of data on income and living standards, and further statistical improvements are in train. To measure household incomes – including all sources of earnings, benefits, investment income and more – the Office for National Statistics (ONS) and the Department for Work and Pensions (DWP) commission large, detailed household surveys. These are now also being increasingly combined with administrative microdata (e.g. tax or benefit records) for greater accuracy. For example, ‘Real Time Information’ administrative data is allowing timely, precise results about the distribution of employees’ wages.<sup>3</sup> And the ONS has recently improved its estimates of income inequality (included in Figure 1) using tax records to fix under-estimated incomes at the top of the distribution.<sup>4</sup>

However, our understanding of the UK income distribution is still developing. There is more to be done to improve the accuracy of income statistics (not least in terms of how well it captures income from social security benefits and in identifying who actually has the lowest incomes).<sup>5</sup> And there are many different ways of measuring inequality: such as the Gini coefficient, top income shares, or ratios between income groups; and the

<sup>3</sup> ONS, *Earnings and employment from Pay As You Earn Real Time Information*, May 2020.

<sup>4</sup> ONS, *Household income inequality, UK: financial year ending 2019*, March 2020.

<sup>5</sup> See A Corlett, S Clarke, C D’Arcy & J Wood, *The Living Standards Audit 2018*, Resolution Foundation, July 2018; and M Brewer, B Etheridge and C O’Dea, *Why are households that report the lowest incomes so well off?*, *The Economic Journal*, October 2017.

unit of analysis could be households or individuals, for example. But there is also the more fundamental question of what we mean by 'income', and in this respect our existing statistics have some significant problems.

## There are some big omissions in existing 'income' data

To measure people's material living standards, we generally want to know the total amount of money that they receive, accounting for their earnings, private pensions, investment income, receipt of social security benefits and more. In many cases, income is straightforward to measure, but in other cases there is a somewhat arbitrary dividing line between what household surveys currently count as income or don't (as well as between what is taxable income and what isn't).

To illustrate this, imagine someone – let's call her Jane – working in management consultancy. Jane's income as an employed consultant might be very straightforward: it's simply her annual salary, as recorded on her payslip and tax records. Reasonable people, HM Revenue and Customs (HMRC), and household surveys would all agree that this is part of Jane's 'income'.

Alternatively, suppose that Jane chooses to work alone as a 'self-employed' trader. Clients pay her directly, and she then reports these receipts on her personal tax return, along with any expenses. In this case, although Jane's earnings would take a slightly different form, her resulting income would still be relatively clear.

Now, imagine that Jane decides instead to operate as a single-person company. In this case, clients pay 'Jane's Services Ltd' instead of Jane directly. Out of these receipts, Jane might pay herself a small salary, while the remainder (after expenses) forms the profits of her company. Should these profits count as Jane's own income immediately when they are received? Or only when she withdraws the profits from the company as dividends, which might be some years later?

By convention, the definition of income used for statistical purposes (such as when estimating the series for the Gini coefficient shown in Figure 1) mostly tracks the tax system's approach. The tax system treats Jane and her company separately, even though in reality the company is entirely controlled by Jane. And since Income Tax is only payable when profits are paid out in the form of dividends, it is only at this point that Jane's receipts become treated as 'income', both for personal taxation and statistical purposes.

To complicate matters further, Jane might choose to keep retaining her earnings in Jane's Services Ltd indefinitely, without taking any dividends. Then when she wants to retire, she can sell or liquidate her company and withdraw the money that way. Typically, the sums received by Jane in this form would not be liable to Income Tax at all and instead would



be classed by HMRC as a 'capital gain': consequently, these earnings would at no stage appear in income statistics – which, as we will discuss, do not currently include capital gains as income. Indeed, Jane could even be treated for statistical purposes as having zero income, and so be recorded as living in poverty.

It should be clear from this example that the sensitivity of our income statistics to the form in which money is received is not ideal. The point of having statistics on the income distribution is to show who has control over resources, and in some cases we are getting this wrong.

In this report we focus primarily on the problem of omitting capital gains from income statistics – given that (as we show) these are significant in total volume, unevenly shared, have changed over time, and (as in the example above) are often close substitutes for labour or investment income that would not be omitted from statistics. We also explore broader arguments around whether some forms of income – including but not limited to capital gains – should be excluded from measurement on the basis of their 'irregularity'.

## The rest of this report is set out as follows

- Section 2 explores what publicly available statistics can tell us about taxable capital gains and what has driven increases over time;
- Section 3 presents novel research using restricted tax data to show how the income distribution changes if taxable capital gains are included as income;
- Section 4 discusses related conceptual challenges in more detail, including the broader issue of 'irregular' income, and explores options for future statistics; and
- Section 5 concludes and lists our specific recommendations.

## Section 2

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# The nature and changing importance of capital gains

Capital gains – increases in asset values – are a significant omission from income statistics, with £55 billion of realised, taxable gains in 2017-18. These gains are highly concentrated, with only 260,000 people – around 0.5 per cent of UK adults - making taxable gains, and 62 per cent going to just 9,000 people who realised over £1 million in gains each. The flow of these ‘super’ gains tripled between 2012-13 and 2017-18. The total amount of taxable gains has also increased, with 130 per cent growth since 2012-13 in real terms. Aggregate gains were, however, even higher in 2007-08, due to both the economic cycle and tax planning, but were much lower in the 1990s and early 2000s.

The majority of gains come from unlisted shares, with gains eligible for entrepreneurs’ relief accounting for 43 per cent of all taxable gains in 2017-18. Adding to this £2 billion a year of ‘carried interest’ received by investment fund managers, we conclude that around half of taxable gains are now closely related to people’s occupations, rather than arms-length investments. It is clear that low rates of Capital Gains Tax have encouraged income to be taken in the form of capital gains (which are not included in existing income statistics), rather than other forms of income (which are).

### The flow of ‘capital gains’ is large

The focus of this report is on capital gains. A ‘capital gain’ is the increase in the value of something you own: for example, some artwork, shares in a company, or a house. For as long as you still own the asset, any increase in value is referred to as an ‘accrued’ gain; but when you sell the asset (or otherwise ‘dispose’ of it), this gain is then said to be ‘realised’. The realised gain is equal to the difference between the cost of the asset when you

acquired it and its value when you disposed of it. In other words, in most cases, a realised capital gain is the profit that you cash in when you sell something for more than you paid for it.

The role of capital gains is particularly interesting because, as we shall see, capital gains are significant in value and yet are entirely missing from existing statistics about the income distribution.<sup>6</sup> We will also show that capital gains can often be seen as the direct result of someone's occupation, rather than a passive return on an investment.

Our focus is on taxable realised capital gains – in other words, those liable for Capital Gains Tax - and it is worth noting what this excludes. Individuals are exempt from Capital Gains Tax (CGT) on any gains made on their main home ('primary residence') and on any assets (such as shares) that are held within an ISA. Additionally, individuals are not required to report their gains to HMRC if these are below the 'annual exempt amount', currently set at £12,300. Finally, regardless of the type of asset, personal capital gains are ignored when assets are transferred to a charity or upon the death of the owner.<sup>7</sup>

Despite these exclusions, in the tax year 2017-18 taxable capital gains realised by individuals totalled £55 billion.<sup>8</sup> This is around 2.6 per cent of GDP, or equivalent to over £1,000 for every adult in the country. As Figure 2 shows, for comparison total dividend income among Income Tax payers was £66 billion in the same year, so capital gains are clearly significant in scale.

Figure 2 also shows estimates for realised non-taxable gains per year (although there is significant uncertainty around these estimates). Non-taxable gains are large in aggregate, with gains realised on the disposal of main homes totalling £170 billion in 2017-18,<sup>9</sup> and other tax-free gains coming to around £30 billion overall. The exclusion of these non-taxable gains from our available data is discussed in further detail in Section 4. Our focus on taxable gains in the remainder of this section and in Section 3 is partly for practical reasons: there is far better data available on taxable gains, precisely because they are taxable and so information on them is collected by HMRC. But – as we will show – taxable gains are also often more similar in nature to other forms of income than gains on main homes (for example), and so warrant special attention.

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<sup>6</sup> Although HMRC publishes annual statistics on taxable capital gains, these do not provide all of the information needed to estimate the full picture of economic inequality including gains.

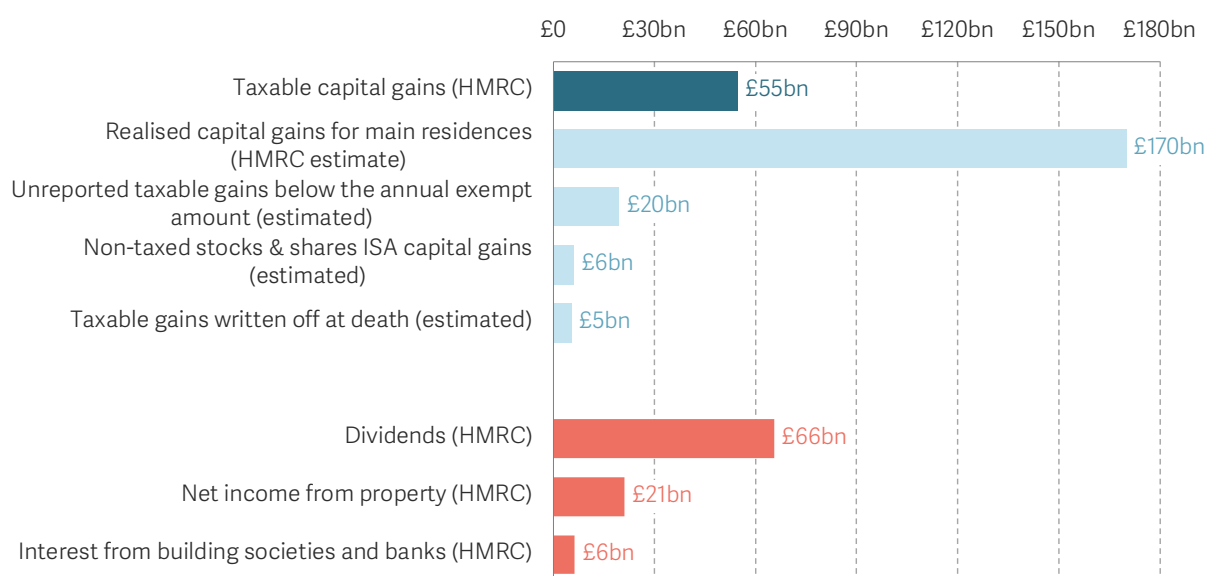
<sup>7</sup> Transfers to spouses are also free of CGT at the point of transfer, but if the spouse later disposes of the asset then the original acquisition value is used.

<sup>8</sup> This excludes gains realised by trustees (i.e. on assets held in trust), which totalled another £3 billion. In this report we focus on gains by individuals, unless otherwise stated. Unless otherwise stated, all figures in this report refer to the entire UK.

<sup>9</sup> HMRC Freedom of Information request, February 2020. Figure is an estimate for 2017-18, for realised gains assuming no rollover relief (and before accounting for forgiveness on death).

## FIGURE 2: £55 billion of taxable capital gains is missing from income data, and there are non-taxable gains in addition to this

Selected flows of realised capital gains and other income in 2017-18



Note: No estimate is available for gains transferred to charities. Gains below the annual exempt amount estimated based on a HMRC figure for the value of this allowance in 2016-17, and assuming a 20 per cent tax rate. ISA figure estimated based on non-cash savings in stocks & shares ISAs and assuming a (conservative) 2 per cent return via realised capital gains. Gains at death estimated using an earlier HMRC tax expenditure estimate, updated in line with CGT revenues and assuming a 20 per cent tax rate.

SOURCE: HMRC, various; and RF analysis.

## Capital gains grew rapidly through the 2010s, but peaked in 2007-08

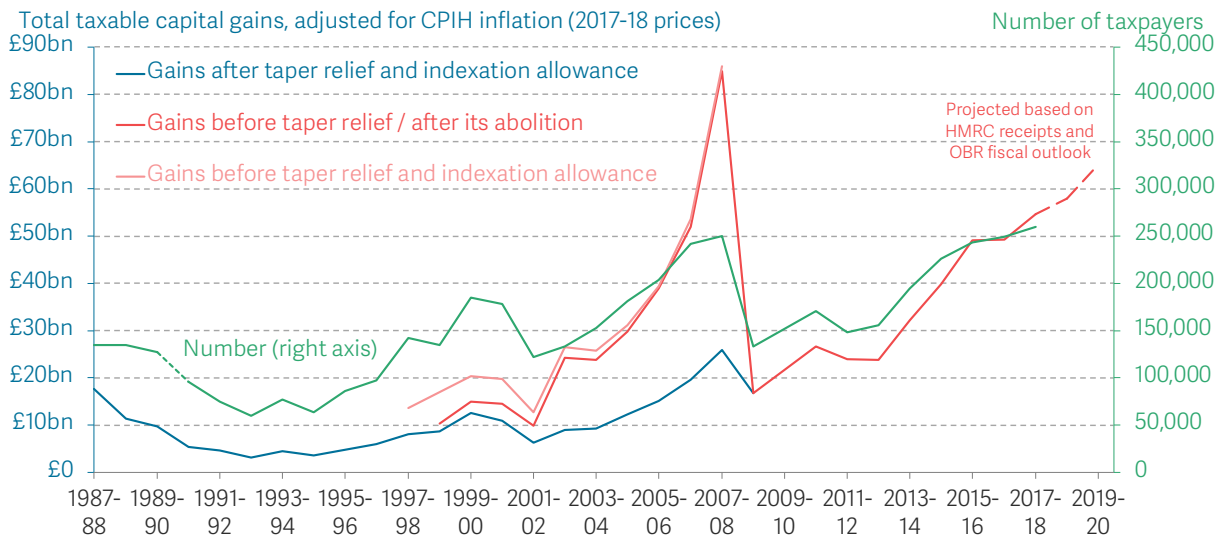
Taxable capital gains grew rapidly during the 2010s, as Figure 3 shows. They more than doubled (an increase of 130 per cent) in the five years from 2012-13 to 2017-18, from £24 billion to £55 billion, after adjusting for general price inflation; while the number of people with taxable gains hit a new record high of 260,000 in 2017-18.

We do not yet have firm data on capital gains for the years beyond 2017-18, but tax receipts and OBR projections suggest the total for 2018-19 will show further growth. The projection for 2019-20, also shown in Figure 3, is uncertain: on the one hand, anticipation of reforms to CGT announced in the March 2020 Budget is likely to have pushed up gains reported in that year;<sup>10</sup> on the other hand, the sharp falls in the stock market that occurred towards the very end of the tax year as a result of the coronavirus will have led to some individuals realising capital losses. In the current tax year, 2020-21, we can expect a large number of individuals to report net losses, as well as a general fall in the number of disposals due to reductions in the liquidity of most assets and the physical inability at times to sell assets such as housing.

<sup>10</sup> There is already some evidence of this from statistics on Members' Voluntary Liquidations: see Figure 12.

**FIGURE 3: Gains have grown very rapidly since 2012-13, though were higher just before the financial crisis**

Total taxable capital gains and number of taxpayers, excluding trusts



Note: Prior to 2008-09, the blue series is affected by taper relief and indexation allowance and for a consistent nominal gains series these would be removed. The effect of indexation allowance is estimated. Prior to 1990-91, couples might count as one individual taxpayer. CPIH index for 1987-88 is estimated. SOURCE: HMRC, Capital Gains Tax statistical tables, Table 1; HMRC Freedom of Information response; supplementary indexation allowance calculations; HMRC tax receipts and National Insurance contributions for the UK; OBR, Economic and Fiscal Outlook, March 2020.

Despite the rapid rise in capital gains during the late 2010s, the record level of capital gains was actually set in 2007-08, on the eve of the financial crisis. This previous peak has hardly been remarked upon, perhaps because it is not easily apparent from HMRC's official statistics, which are affected by 'taper relief' that reduced taxable gains for longer-held assets until its abolition in 2008-09. To provide a like-for-like comparison with the post-2008-09 period, Figure 3 includes a measure of total gains before taper relief. On this consistent measure, capital gains rocketed to £87 billion in 2007-08 (adjusted to 2017-18 prices).

In part, the record gains reported in 2007-08 reflected the peak of the economic cycle before the financial crisis. But the rapid increase in aggregate gains between 2002-03 and 2007-08 was also driven by changes in tax policy. Taper relief, which was formally introduced in 1998 but which only took full effect starting in the early 2000s, dramatically increased the relative tax advantage of capital gains over income, compared with the preceding system. Moreover, the pre-announcement that both taper relief and another policy called 'indexation allowance' were going to be abolished from 2008-09 will have resulted in a further spike from forestalling (i.e. bringing forward the realisation of gains) in 2007-08, especially for longer held assets.

This detailed account of tax policy changes is important because the rise in capital gains since the financial crisis can partly be seen as a bounce back from a post-crisis, post-forestalling low. But, as we will show, just as in the 2000s, capital gain trends in the past decade have also been affected by structural changes to the tax system that affect the incentives to take remuneration in the form of gains instead of income.

Overall, the long-term picture is one of rising capital gains, with both the last few years and the pre-financial-crisis peak being exceptional by comparison with anything seen in the 1990s or early 2000s.

## Gains are highly concentrated, and ‘super gains’ have grown the most

Gains are important for our understanding of inequality, not just because of their overall size but because of how they are distributed. The total of £55 billion of gains in 2017-18 equates to over £1,000 for each adult in the UK. However, in reality, most people do not receive any gains at all. With 260,000 individuals (0.5 per cent of adults) receiving taxable gains, this group received an average of £210,000 each. But the distribution of gains is also highly skewed even within this group. The vast majority (200,000 individuals) received less than £100,000 each, while 60,000 individuals (just over 0.1 per cent of adults), each with gains of £100,000 or more, collectively took 88 per cent of all taxable gains between them: equivalent to around £800,000 each.

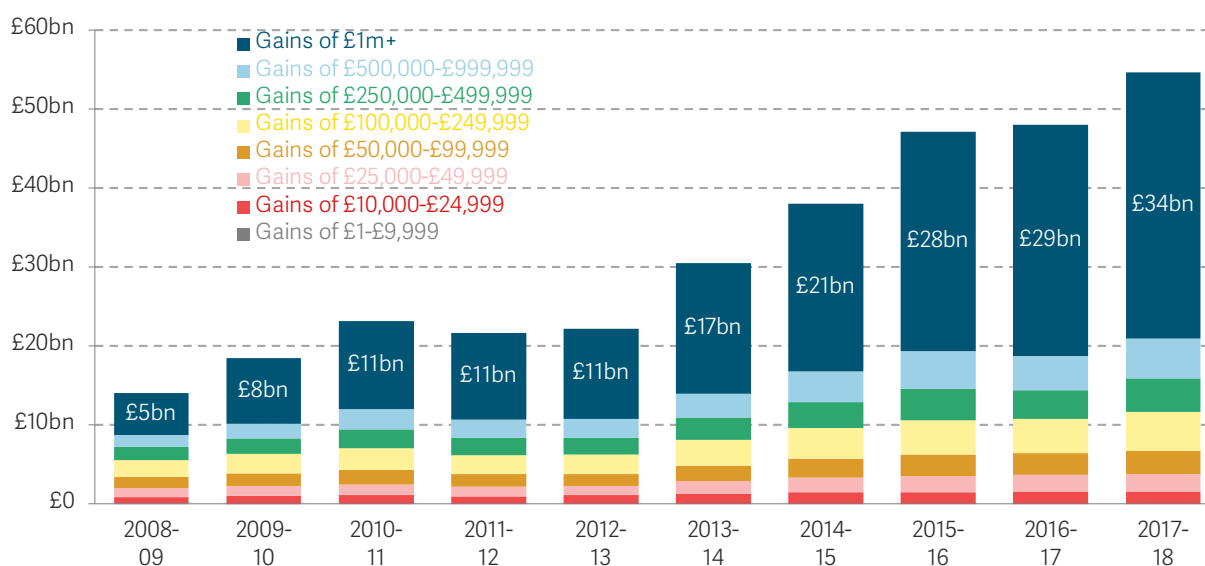
At the very top, 9,000 individuals each received at least £1 million in gains in 2017-18. Together these ‘super gainers’ took 62 per cent of all taxable gains, totalling £34 billion (an average of £3.7 million each), as Figure 4 shows. (It should be noted that these figures refer to the size of the capital gain, and this would imply either that some individuals have extremely large investments, or are obtaining very high rates of return, or (as we’ll see) that the gains do not strictly relate to what most people would think of as investments.)

Figure 4 also shows that increases in these ‘super gains’ above £1 million have been the main driver of the overall rise in gains since 2008-09. The total amount of gains above £1 million rose by over 600 per cent between 2008-09 and 2017-18 and tripled just since 2012-13 – explaining 69 per cent of total capital gains growth over the last five years.



FIGURE 4: 62 per cent of total capital gains come in gains of over £1 million, and these have tripled in volume since 2012-13

Total taxable capital gains, by size of capital gain



Note: Nominal.

SOURCE: HMRC, Capital Gains Tax statistical tables, Table 2.

## The majority of capital gains are from unlisted shares

If asked to imagine a typical 'capital gain', most people would probably picture a landlord selling their buy-to-let property, or expensive artwork being sold at auction. Maybe they would think of people saving through a small portfolio of listed stocks and shares. But in the UK this would now be a somewhat inaccurate view overall.

Figure 5 breaks down gains from disposals in 2016-17 into six broad asset groups.<sup>11</sup> Gains realised on residential property (excluding main homes, as discussed above) totalled £7 billion: this sum includes buy-to-let landlords and others selling their second homes. There was an additional £2 billion in gains by individuals holding commercial property. Gains from 'other non-financial' assets, such as collectibles like artwork, totalled £4 billion. Around £5 billion of gains came from shares listed on the London stock exchange, a large proportion of which is likely to go to retail investors, such as individuals saving for their retirement.

But a clear majority of total gains (62 per cent) came from disposals of unlisted shares, or in other words, shares held in private businesses that are not listed on the London stock exchange. Such unlisted businesses range from small 'personal service companies' (like 'Jane's Services Ltd' discussed in Section 1) up to large enterprises that may be considering an initial public offering.

<sup>11</sup> A decomposition of gains by asset type is not yet available for 2017-18. HMRC produce these statistics using a stratified sample (known as the 'asset-level survey') of all submitted capital gains tax returns. This is based on a different dataset to that used in Section 3, so breakdowns might not align with the figures there.

FIGURE 5: The majority of capital gains are from unlisted shares

Breakdown of capital gains in 2016-17, by asset type

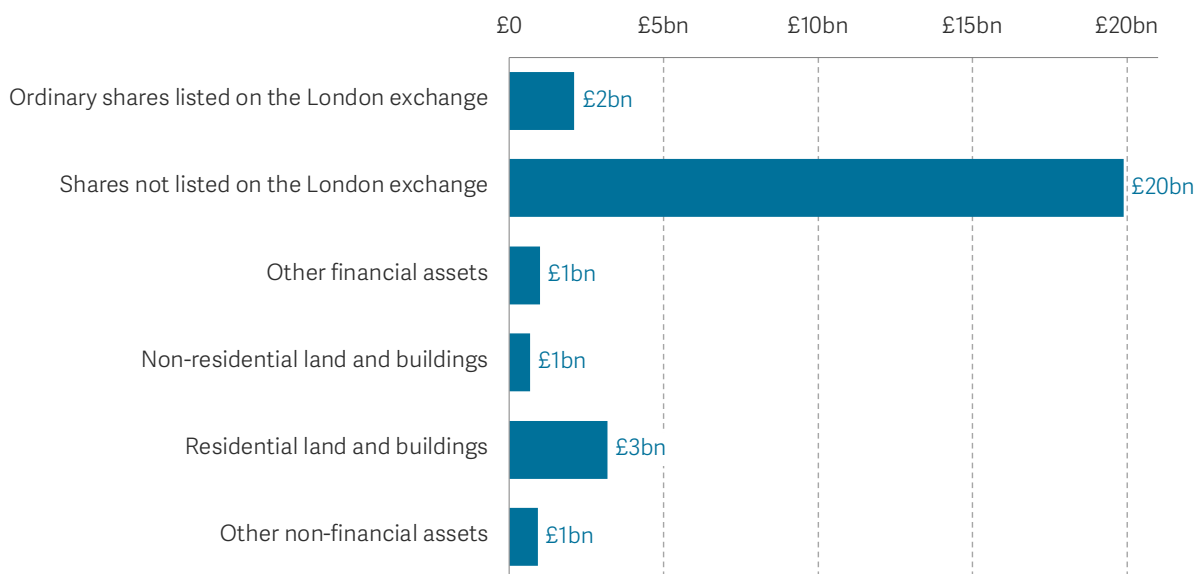


Note: Includes trusts. Includes both UK and foreign assets.  
 SOURCE: HMRC, Capital Gains Tax statistical tables, Table 7.

Gains in unlisted shares were not only the single largest class of gains in 2016-17, they are also the class that has grown the most rapidly of late – with a £20 billion increase between 2012-13 and 2016-17, as Figure 6 shows.

FIGURE 6: 72 per cent of capital gains growth since 2012-13 has been among unlisted shares

Growth in total capital gains between 2012-13 and 2016-17, by asset type



Note: There has been a reclassification between “other financial assets” and “ordinary shares listed on the London exchange”, which may affect those values.  
 SOURCE: HMRC, Capital Gains Tax statistical tables, Table 7; and earlier Table 14.6.

## Capital gains are taxed at much lower rates than other income

To help understand the rise of capital gains during the 2010s (and particularly this rise in gains from unlisted shares), we must consider the role of CGT policy. There were major reforms to CGT in 2008, followed by a series of incremental changes to rates and reliefs throughout the 2010s; but the broad current structure of CGT is as follows:

- Gains below the annual exempt amount (currently £12,300) are untaxed;
- The headline rate of CGT (applicable to higher or additional rate taxpayers) is 20 per cent on most gains, but 28 per cent on residential property (and carried interest);
- Individuals with combined income and gains less than the higher rate Income Tax threshold (currently £50,000) pay a lower rate of 10 per cent on most gains, but 18 per cent on residential property;
- Gains eligible for 'entrepreneurs' relief' are subject to a rate of 10 per cent, up to a lifetime limit that until very recently covered £10 million in gains; this was reduced to £1 million in the March 2020 Budget.<sup>12</sup>

It is important to emphasise just how low these tax rates on gains are, when compared with the effective tax rates on income. The top rate of Income Tax (applied to incomes above £150,000) is currently 45 per cent; and on top of this workers pay a further 2 per cent in National Insurance. Dividends may be taxed at a marginal rate of up to 38.1 per cent.

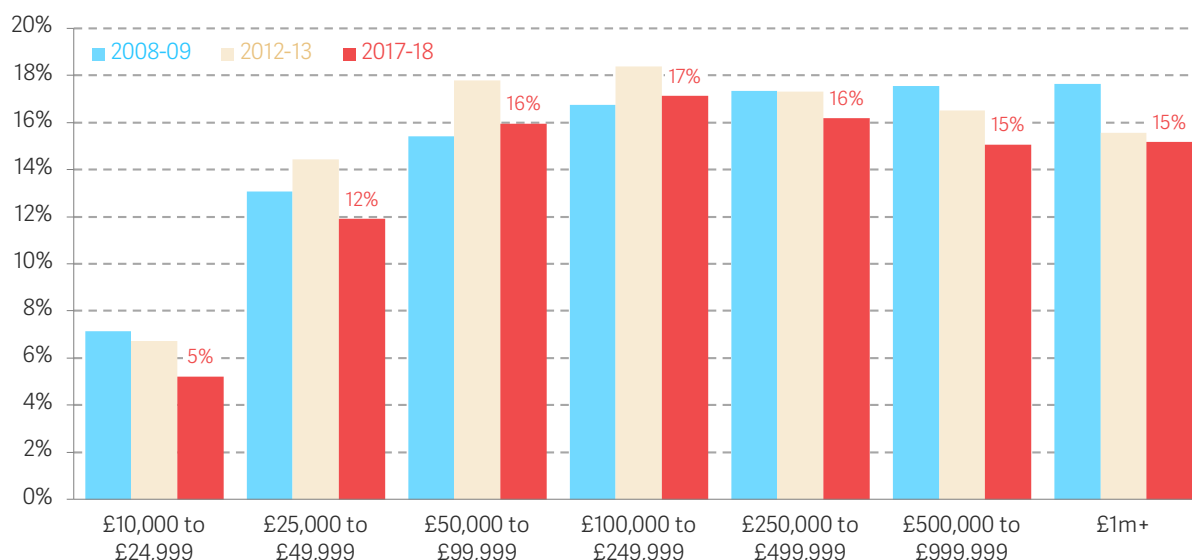
We can use HMRC statistics to estimate the average (rather than marginal) tax rates on capital gains, as shown in Figure 7. The average tax rate on gains is only 17 per cent for individuals who received gains between £100,000 and £250,000, and actually declines further as the total size of gains increases, to around 15 per cent for those 'super gainers' who received over £1 million each in gains. In this respect, the tax treatment of capital gains is regressive with respect to the size of gain; in other words, the average tax rate tends to decline as gains increase.

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<sup>12</sup> To be eligible for this relief, the person disposing of business assets must have been an employee or director of the company and usually own at least 5 per cent of the shares. The relief has now been renamed 'business asset disposal relief'.

FIGURE 7: Effective tax rates on capital gains are low and somewhat regressive

Total effective tax rate, by size of capital gains



Note: Based on total gains and total tax paid by size of gain.

SOURCE: RF analysis of HMRC, Capital Gains Tax statistical tables, Table 2.

Moreover, average tax rates on the largest gains were lower in 2017-18 than they were in 2012-13, which in turn were lower than in 2008-09. This decline both over time and as gains increase in size, is no doubt due to the 10 per cent rate provided by entrepreneurs' relief, as we discuss further in Box 1.

### BOX 1: Entrepreneurs' relief policy has helped drive the rise in 'super gains'

Probably the single largest driver of the increase in 'super gains' (gains over £1 million), which in turn explains most of the rise in aggregate gains during the 2010s, has been the expansion of eligibility for entrepreneurs' relief to cover extremely large gains. Entrepreneurs' relief is available to business managers on gains from the sale or liquidation of their business and provides for a 10 per cent tax rate.

When it was first introduced in 2008, individuals could claim entrepreneurs' relief on gains up to a maximum of £1 million in their lifetime (the 'lifetime limit'). In the early years of the Coalition Government, this limit was increased to £5 million (in 2010) and then quickly raised again to £10 million (in 2011).

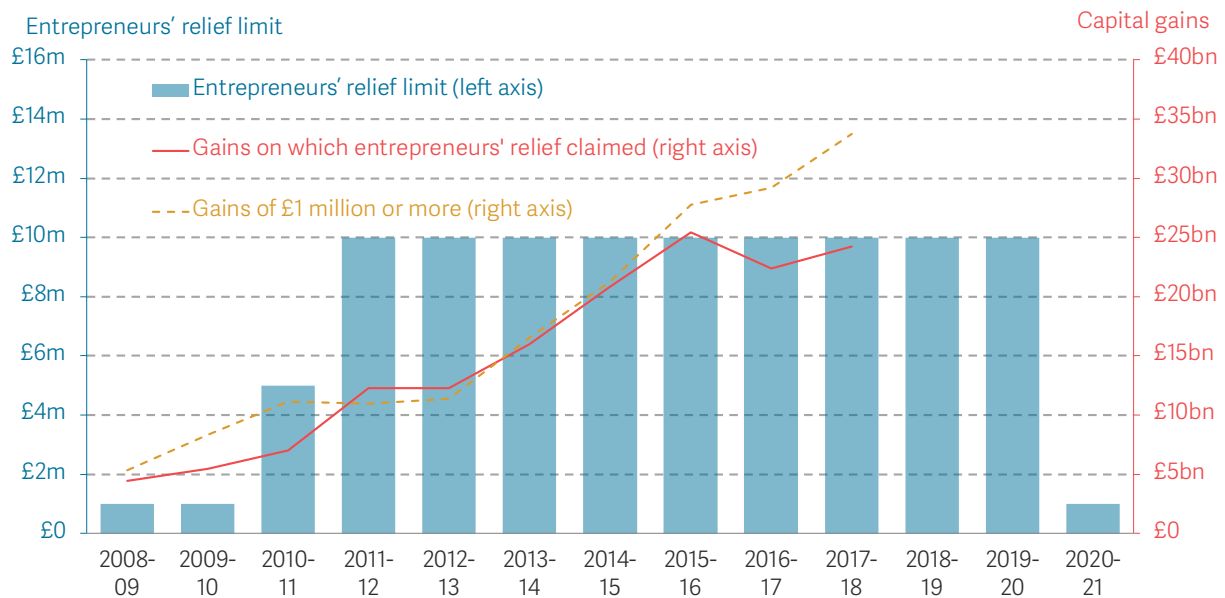
Figure 8 tracks these changes to the entrepreneurs' relief lifetime limit and shows the associated rise in total

claims for the relief. By 2017-18 (the most recent year for which statistics are available), gains to which entrepreneurs' relief applied totalled £24 billion, or 43 per cent of all taxable gains. Furthermore, these gains are extremely top-heavy, with the 5,000 individuals who received super gains of £1 million

or more, receiving 73 per cent (£17.5 billion) of the total. So the timing of the dramatic rise in 'super gains' above £1 million that we highlighted in Figure 4 also coincides closely with the increase in the entrepreneurs' relief lifetime limit from £1 million to £10 million, and the rise in total entrepreneurs' relief claims.

**FIGURE 8: The introduction of entrepreneurs' relief, and the increase in its lifetime limit to £10 million, helped drive the rise of very large gains**

Entrepreneurs' relief capital gains limit and claims, and total gains of £1 million or more



Note: The lifetime limit was briefly £2 million, from 6 April 2010 and 22 June 2010.  
SOURCE: HMRC, various.

In the March 2020 Budget, the Chancellor took the very welcome step of reducing the lifetime limit on entrepreneurs' relief back to £1 million (and the relief has been renamed as 'business asset disposal relief'). It remains to be seen whether this will

lead to any long-term reduction in the flow of very large capital gains (and a boost to other forms of income), or merely an increase in the amount of gains that are taxed at 20 per cent rather than 10 per cent.

## Gains are often, and increasingly, substitutes for labour-related earnings

As we have outlined, the majority of taxable capital gains come from unlisted shares; and 43 per cent of all gains in 2017-18 were eligible for entrepreneurs' relief. The latter especially are always related to business managers or employees: making gains on their share of the company they work for/through.

Capital gains that are closely related to people's own labour are of interest both because they challenge traditional conceptions of capital gains as being returns on arms-length investments; and because they have been an important part of the large capital gains increase over the last decade – driven especially by tax policy.

We now turn to consider three particular groups of capital gain that can be seen as close substitutes for labour-related earnings: employee share schemes; 'carried interest'; and the disposal of closely-held or other private companies.

### Employee share schemes have grown

Normally, any benefits that an employee obtains in the course of their employment, whether paid in the form of salary or otherwise, are treated as 'earnings' and subject to Income Tax and National Insurance. But under an employee share scheme, employees may be able to acquire shares (or the option to buy shares)<sup>13</sup> in their employer's company in a tax-advantaged way. There are many different types of employee share scheme, some 'approved' by HMRC and others unapproved, each with slightly different qualifying conditions and tax implications. But under most such schemes, the profit made from selling the shares for more than their initial value (or the value of the option) is taxed as a capital gain. Since these shares or share options are typically offered in lieu of salary, these schemes effectively turn some labour income into capital gains.

For example, we know that over 11,000 companies (all necessarily with fewer than 250 full-time employees), offer Enterprise Management Incentive (EMI) schemes, under which selected employees can be granted share options up to a total value of £250,000 each. In 2017-18, £600 million in capital gains were realised through this scheme, with around 7,000 people making an average of around £85,000 each.<sup>14</sup> As Figure 9 shows, the number of companies participating in EMI schemes grew by around 60 per cent between 2011-12 to 2017-18.

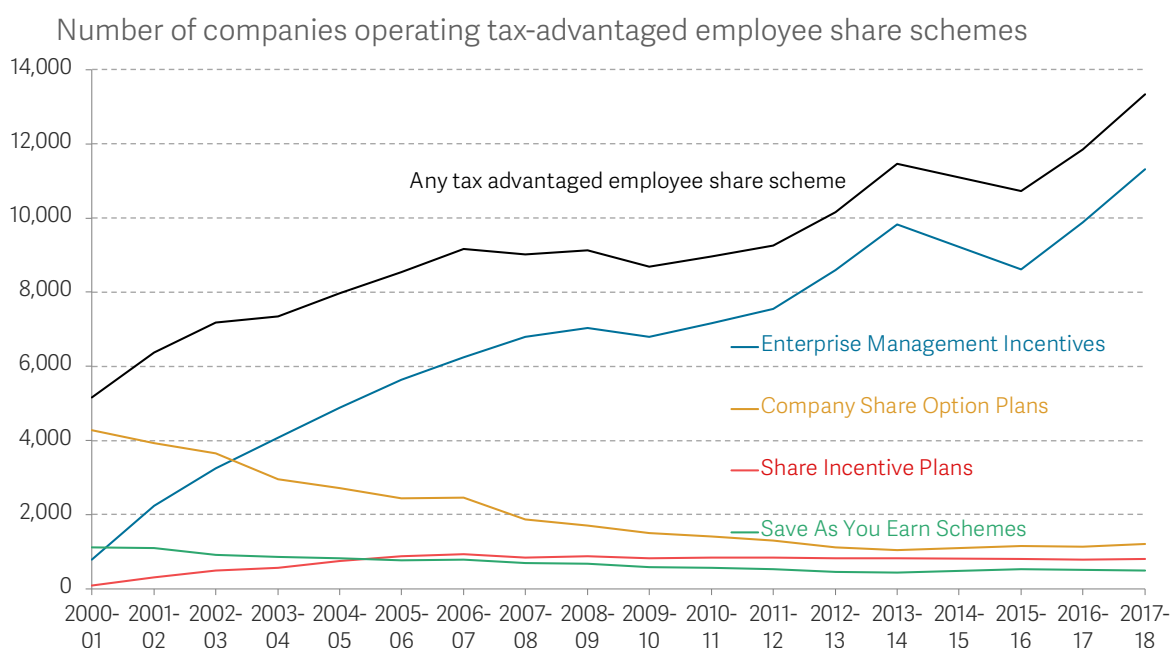
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<sup>13</sup> A share option is a right to buy a fixed number of shares, at a fixed price, during a set period of time. For the option-holder, it functions effectively like a one-way bet.

<sup>14</sup> HMRC, [Employee share schemes statistics, Table 6.6](#), June 2019.



**FIGURE 9: There has been an increase in the use of discretionary employee share schemes like Enterprise Management Incentives, which can lead to capital gains**



Note: There is no data for 2014-15.

SOURCE: HMRC, Employee share schemes statistics, Table 6.2.

There are number of alternative ways in which employees can take their remuneration in shares or share options that cannot be tracked systematically because they do not fall within a specific HMRC approved scheme like those in Figure 9. For example, 'growth shares' involve the creation of a new class of shares that can be acquired by employees at a very low base cost that is subject to Income Tax and National Insurance, with any increase in value then taxed as a capital gain. Other schemes work by allowing shares to be jointly owned by the employee and an Employee Benefit Trust, according to which the employee is entitled only to the increase in value of the shares, again taxed as a capital gain. Such schemes are a particularly popular form of remuneration as part of Long-Term Incentive Plans (LTIPs) for top executives in publicly listed companies.

Although the gains from EMI schemes are substantial, they are not particularly large in the context of all gains; and while the scale of other schemes is harder to assess, it is similarly unlikely that these explain a large portion of the rise in total gains over the 2010s. Nevertheless, these schemes clearly emphasise the porous boundary between labour-related earnings and capital gains, as well as the strong incentive to forego salary in favour of other more lightly taxed forms of remuneration, for those with the financial flexibility to do so.

## Carried interest runs to £2 billion a year and is extremely concentrated

Private equity managers select and manage investments in private companies, on behalf of investors in a fund. The pay that they negotiate with investors takes two main forms: first, they receive a 'management fee' calculated as a percentage of the initial value of the fund; second, if the fund performs well, they receive an additional performance fee known as 'carried interest',<sup>15</sup> calculated as a share of the investment returns of the fund, above a set hurdle. Both fees are in substance a reward for the fund manager's personal services, effectively equivalent to a basic salary plus a bonus, respectively. Nevertheless, whereas the management fee is taxed as income, the carried interest is currently taxed as a capital gain.

The tax treatment of carried interest is in one sense a matter of legal technicality, and derives from a Memorandum of Understanding originally agreed between HMRC and the British Venture Capital Association in 1987 and updated in 2003.<sup>16</sup> This arrangement has long been subject to criticism.<sup>17</sup>

In most practical respects, carried interest is indistinguishable from income except for the fact that it is taxed at a much lower rate. The major reforms to CGT in 2008 were prompted partly by public outrage that taper relief was enabling private equity managers to pay just 10 per cent tax on their carried interest, leading to the much-quoted observation by an industry insider that "any common-sense person would say that a highly paid private equity executive paying less tax than a cleaning lady or other low-paid workers ... can't be right."<sup>18</sup> In 2008, CGT was changed to a flat rate of 18 per cent; and from 2016-17, the rate applicable to carried interest in particular has been increased further to 28 per cent: significantly higher than it was, but still much lower than the effective rate of tax on income.

The reason why carried interest matters for our understanding of inequality – particularly at the very top – is that as well as being essentially equivalent to other income, it is also extremely concentrated in the hands of a small number of exceptionally high-income individuals. Table 1 shows previously unpublished figures from HMRC that document the scale and spread of carried interest. Only around 2,000 individuals reported any carried interest in 2016-17 and 2017-18, but it has totalled over £2 billion a year, giving an average receipt of over £1 million. Further details of the distribution of carried interest are given in Section 3.

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<sup>15</sup> The name 'carried interest' goes back to shipping, with the traders who carried cargo receiving a share of (or interest in) the profits.

<sup>16</sup> HMRC, *Investment managers: Capital Gains Tax treatment of carried interest*, July 2015.

<sup>17</sup> See A Seely, *Capital gains tax: the 2008 reforms*, House of Commons Library, June 2010.

<sup>18</sup> Financial Times, Buy-out tax rate is 'lower than a cleaner's', June 2007.

TABLE 1: Carried interest accounts for £2 billion a year of capital gains

HMRC carried interest statistics

	2016-17	2017-18
Total	£2,351,000,000	£2,069,000,000
Number of people	2,000	2,000
Average per person	£1,200,000	£1,000,000

Note: Figures are rounded.

SOURCE: HMRC Freedom of information request response.

This report does not take a view on the optimal tax treatment of carried interest.<sup>19</sup> But even if there were good reasons for maintaining its privileged tax status, it is hard to think of any reason why our statistics should be sensitive to its formal legal status as a capital gain.

Incorporation and retained earnings offer a way to swap other income for gains

An important economic trend in the UK over the last decade – with relevance for capital gains - has been a rise in the number of small, ‘closely-held’ companies: particularly sole-director and dual-director companies (and in the latter case the two directors are often spouses)<sup>20</sup>. Many closely-held companies function as ‘personal services companies’ (PSCs): just as in the hypothetical example of Jane’s Services Ltd described in Section 1. A characteristic feature of these PSCs is that the company operates with little to no fixed capital: the corporate structure is simply a vehicle used by the main director to supply their personal (labour) services to clients.

To give a sense of the kind of work these directors are doing, Table 2 shows the most common industries and occupations in 2018 to 2019 for those engaged via sole-director companies. The process of ‘incorporation’, whereby an individual switches from trading in their personal capacity to trading via a company, occurs in a variety of industries. However, it is particularly common in construction (management), management consultancy and IT consultancy. These are all service-intensive industries, where the main cost of the product that the company supplies is the director’s own time.

<sup>19</sup> The figures in Table 1 give some indication of potential revenue gains as a result of policy change. If we assume that carried interest is on average taxed at 28 per cent, this suggests around £620 million a year is raised in carried interest CGT, and that a tax rate of 47 per cent (the additional rate of Income Tax plus National Insurance) would raise around £420 million a year extra – assuming no behavioural change.

<sup>20</sup> J Cribb, H Miller & T Pope, *Who are business owners and what are they doing?*, IFS, June 2019.

**TABLE 2: Some of the largest industries for sole-directorship are forms of consulting**

Top industries and occupations for numbers of people receiving payment as sole directors, 2018 and 2019

Top industries		Top occupations		
	Construction of buildings	41,000	Production managers and directors in construction	27,000
	Business and other management consultancy activities	39,000	Financial managers and directors	27,000
	Computer consultancy activities	33,000	Managers and directors in retail and wholesale	22,000
	Engineering activities and related technical consultancy	26,000	IT and telecommunications professionals (not elsewhere classified)	21,000
	Specialised design activities	15,000	Managers and proprietors in other services (not elsewhere classified)	20,000
	Computer programming activities	13,000	Management consultants and business analysts	19,000
	Hairdressing and other beauty treatment	12,000	Marketing and sales directors	19,000
	Accounting, bookkeeping and auditing activities; tax consultancy	12,000	Production managers and directors in manufacturing	18,000
	Other activities auxiliary to financial services	12,000	Programmers and software development professionals	17,000
	Joinery installation	11,000	Construction and building trades (not elsewhere classified)	14,000

Note: Based on 4-digit SIC/SOC codes.

SOURCE: RF analysis of Labour Force Survey.

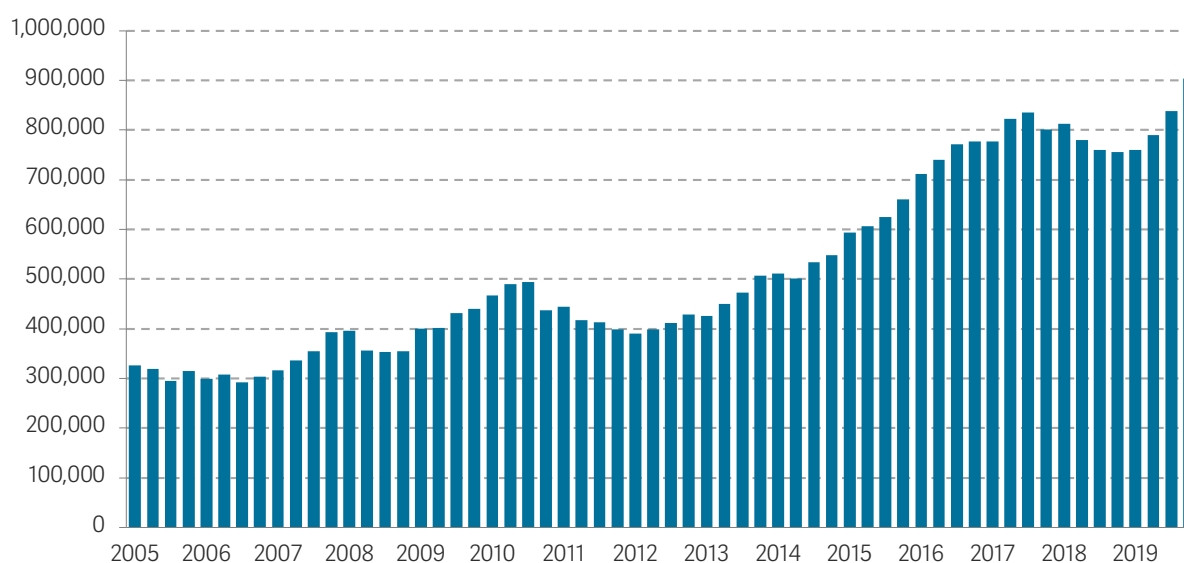
Based on analysis of the Labour Force Survey, the total number of people receiving payment as sole directors of their own company averaged around 400,000 in 2012, but this had doubled to 800,000 by 2017, and hit 900,000 in late 2019, as shown in Figure 10. This analysis also shows that the growth in incorporation has been particularly large among those over the age of 50; and that people becoming company owner-managers, while changing legal form (away from sole trading or employment), are generally not changing industry. This suggests that the increase in incorporation is being driven by substitution from other forms of work.

There are a number of reasons why incorporation might have become more common, but one is tax policy. As a company owner-manager, someone can choose how much salary to take; how much to take in dividends, and when (and indeed share these with their spouse/partner); and also open up opportunities (explored below) to take income in the form of a capital gain, typically benefiting from the 10 per cent entrepreneurs' relief rate. All of this offers more flexibility to receive money as tax efficiently as possible.<sup>21</sup> Changes to company law also made it easier, from 2008, to set up a company, by removing the requirement to have a separate company secretary.

<sup>21</sup> See for example Figure 25 in A Corlett, *The shifting shape of UK tax*, Resolution Foundation, November 2019.

**FIGURE 10: The number of sole directors rose roughly doubled between 2012 and 2017**

Number of people receiving payment as sole directors of their own limited business



NOTES: Based on survey data.

SOURCE: RF analysis of Labour Force Survey.

Not only have more people chosen to incorporate, but there is also evidence of changes in how or when those companies distribute profits. Profits might be distributed rapidly via dividends; retained to be paid out later via dividends; or ultimately distributed as a capital gain. Work by the Institute for Fiscal Studies, shown in Figure 11, gives a clear example.<sup>22</sup> Relatively high-income closely-held companies saw a large drop in taxable (distributed) income from around 2010-11, relative to lower income companies. But this was not down to the financial crisis or tax disincentives hitting their profits: these remained unchanged, relative to lower income companies. Nor was there an increase in investment.

Instead, increases in the top rates of Income Tax in April 2010 (the 50 per cent additional rate; and withdrawal of the Personal Allowance) – with related dividend tax rises – led affected closely-held companies to reduce dividends on average, and instead retain income within those companies, to be distributed at a later date.

The same work shows that taxable income is often kept just at or below tax thresholds, and that a larger share of profits is retained among older age groups. For some individuals, the retention of profits inside the company functions much like a private pension scheme: these profits can be drawn down later after retirement, when the individual's marginal tax rate is likely to be lower.

<sup>22</sup> H Miller, T Pope & K Smith, [Intertemporal income shifting and the taxation of owner-managed businesses](#), IFS, Working Paper W19/25, September 2019.

**FIGURE 11: Tax changes did not lead to reduced profit-making but did lead to more money being kept in some closely-held companies rather than taken as dividends**

Log income difference in profits and distributed income of higher-income closely-held companies, relative to middle-income ones



Note: Error bars show robust standard errors. Closely-held companies with at most two directors and two shareholders. Higher-income companies (the treatment group) are those with taxable income between £95,000 and £200,000. Middle-income ones (as a control group) are those with taxable income between £50,000 and £95,000.

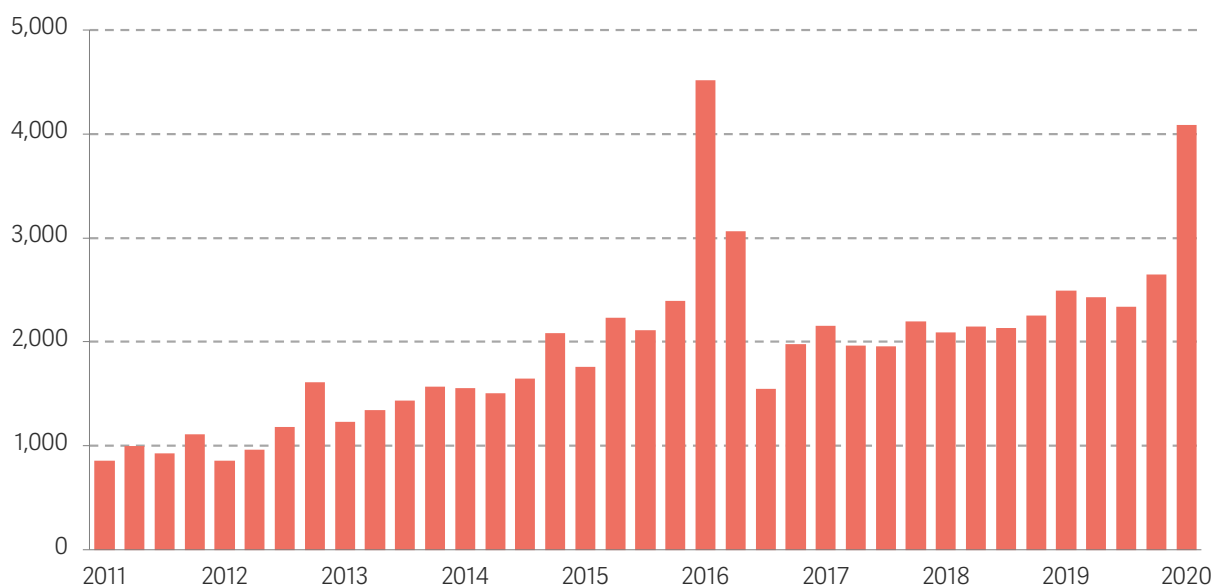
SOURCE: Reproduces Fig.5.5.a from H Miller, T Pope & K Smith, Intertemporal income shifting and the taxation of owner-managed businesses, IFS, Working Paper W19/25, September 2019.

One common way to extract retained profits as a capital gain is through a process called 'Members' Voluntary Liquidation'. Here, rather than selling the business to someone else, the owners simply wind up the company such that it ceases to exist. On winding up, the assets of the company – which include any retained profits – can be distributed to shareholders in the form of capital, rather than as a dividend. Accordingly, they are subject to CGT instead of Income Tax. There are some limits on this, arising from 'phoenixing' provisions and other anti-avoidance rules, such that HMRC may not allow unlimited retained profits to be extracted in this way. But, particularly for those approaching retirement, this has provided an opportunity to directly convert income into capital gains and pay only 10 per cent tax (via entrepreneurs' relief) as a result.

Figure 12 shows that 'Members' Voluntary Liquidations' have more than doubled between 2011 and 2019. And the influence of tax policy can also be clearly seen in the two spikes. New rules came into effect in April 2016 to limit the worst abuses of this method for extracting profits, leading to a spike in liquidations around that date; and many appear to have wound up their companies in early 2020, in anticipation of the heavily-trailed reforms to entrepreneurs' relief at the March 2020 Budget.

**FIGURE 12: The number of Members' Voluntary Liquidations has more than doubled since 2011**

Number of Members' Voluntary Liquidations per quarter



Note: New anti-avoidance rules came into effect in April 2016. In November 2019 the Conservative manifesto promised to review entrepreneurs' relief (which was then curtailed in March 2020).

SOURCE: Companies House, Incorporated Companies in the UK.

Analysis of a random sample of such liquidations suggests that around £3 billion of assets were distributed in this way in 2017-18 (see Table 3). These are large sums, with a median asset value of £90,000 and a mean of £380,000 (reflecting some very large sums at the top).<sup>23</sup>

**TABLE 3: Estimated Members' Voluntary Liquidations disposals totalled around £3 billion in 2017-18**

Assets of companies undergoing Members' Voluntary Liquidations in 2017-18

	2017-18
Number of companies	7,272
Estimated median assets	£90,000
Estimated mean assets	£380,000
Estimated total assets	£2,800,000,000

NOTES: Based on a random sample of 60 resolutions for voluntary winding up. Assets may be split among multiple shareholders.

SOURCE: RF analysis of London Gazette; and Companies House.

<sup>23</sup> Note that these assets may include outstanding balances on a Director's Loan Account, with the director(s) having borrowed money from the company: meaning they do not necessarily have to wait until the company is wound up to spend that income.



Capital gains received via these liquidations are particularly noteworthy because they show again the fine line between capital gains and other income. An individual's decision about whether to take income via dividends or to wait and receive it through a Members' Voluntary Liquidation (i.e. a capital gain) changes both the legal status and the statistical treatment of that income.

However, the possible scale of gains made via Members' Voluntary Liquidations does not appear large enough to explain a major portion of the £24 billion of capital gains that were eligible for entrepreneurs' relief in 2017-18. Instead, this must be accounted for by the sale of other private businesses, or shares in them.

To return again to the example of Jane's Services Ltd: if Jane eventually expanded her business and brought in some employees or additional directors, she might in time sell this operation to someone else or even back to the company via a share buy back. Again, she would then make a capital gain on any profit from this sale, and potentially benefit from entrepreneurs' relief.

For owners with larger commercial operations, there is a very blurred line between the return on capital investment (i.e. any money that the individual invested in the business) and remuneration for the manager's own work (i.e. for services that the individual performed for the business). But if an individual (like Jane) sacrifices a large salary working for an established firm in order to set up or join a new company doing similar work, in the hope of later realising a capital gain, then that capital gain is effectively interchangeable with labour-related earnings.

### Around half of all capital gains now relate to people's occupations

Put simply, we can say that the £24 billion of gains that are eligible for entrepreneurs' relief (which will include some gains made via employee share schemes; via voluntary liquidations; and via the sale of unlisted shares) relate to cases where the person receiving the gain is personally involved in that business as part of their job. Onto this we can add the £2 billion of carried interest, which is also definitely related to people's labour. Together these imply that 48 per cent of capital gains in 2017-18 (and 52 per cent in 2016-17) related to people's occupations rather than any arms-length investment. And while this is painting with a broad brush in terms of the nature of gains, these figures are conservative in that they do not include gains that would have been eligible for entrepreneurs' relief but which breached the lifetime limit (discussed in Box 1), nor those related to any listed shares that form part of top executives' remuneration.

An understanding of trends in capital gains is therefore not only necessary for assessing the investment returns of the wealthy, but for assessing all sorts of incomes, including the remuneration of employees and company owner-managers.

The story of capital gains over the past decade – of rapid growth, dominated by the largest gains and encouraged by entrepreneurs’ relief – is important to help inform tax policy.

But these changes over time should also be concerning from a statistical point of view. As we have briefly noted, capital gains are not included in existing statistics about the UK’s income distribution. This means that any of the ways we have discussed by which income may be transformed into capital gains result in a decrease in measured incomes. So the more someone chooses to receive income as a capital gain rather than dividends or salary, for instance, the worse off they would appear in income statistics; despite their income having merely changed form.<sup>24</sup> Conversely, if tax changes (such as the recent change to entrepreneurs’ relief) were to lead some owners of very profitable businesses to take more of their remuneration in the form of dividends rather than capital gains, this would lead to an increase in those people’s measured income – and therefore a rise in measures of overall inequality – which would be a strange conclusion to draw from a progressive tax rise.

These perverse results indicate the potential pitfalls of relying on the legal boundary between the Income Tax and CGT systems as a guide to what should be counted within the definition of income for statistical purposes; and in the following section we show that this definitional choice does indeed matter for our understanding of top incomes and their trends over time.

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<sup>24</sup> There are parallels here with dividend income, as the rise in incorporation also led to more income being received as dividends rather than wages or self-employment earnings. See OBR, [Blue Book 2017 and dividend income](#), October 2017. But this is not so concerning for statistics about the income distribution, because dividends are counted as income.

## Section 3

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### How including capital gains as income changes the income distribution

New analysis using tax microdata shows that the addition of capital gains to individuals' other income increases top incomes and top income shares. Adding capital gains to incomes increases the share of taxable income going to the top 1 per cent in 2017-18 from 13.8 per cent to 16.8 per cent (one sixth). This is because capital gains are very heavily skewed to the top of the distribution, with 92 per cent of taxable capital gains going to the (reranked) top 1 per cent of adults.

The addition of capital gains to the concept of income also affects our impression of trends over time. The increase in the top 1 per cent's share of income between 1996-97 and 2017-18 has been twice as large if capital gains are included, with a rise of 3.1 percentage points compared to 1.5 percentage points if capital gains are excluded. And the top 0.1 per cent's share of income including capital gains, has risen from around 5.4 per cent in 1996-97 to 8.1 per cent in 2017-18 – a rise of 50 per cent. Although we do not have adjusted data before 1996-97, the last few years are likely to have had some of the highest top income shares in decades.

Research on other rich countries has also shown that including capital gains tends to lead to higher top income shares, and to greater increases over time, showing that the choice about what counts as income matters for our impression of the nature of income inequality.

### Tax records confirm that overall capital gains are dominated by large gains

The previous section showed that the scale of capital gains is large, that taxable capital gains are often substitutable with other income, and that there have been important trends in such substitution. We believe that, for the purposes of statistics about the income distribution, taxable capital gains should generally be treated as income and –

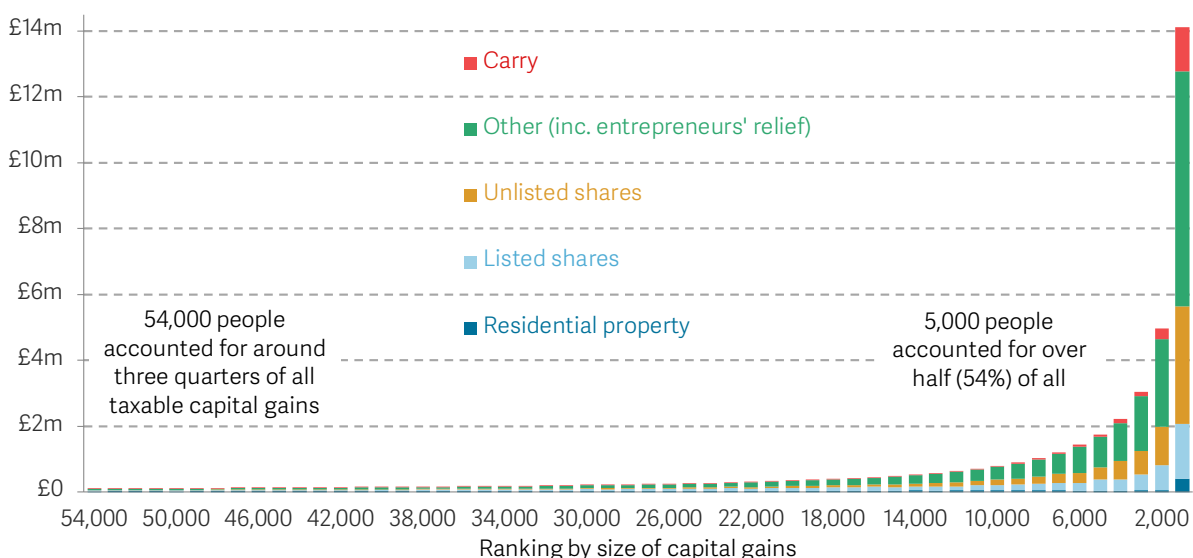
although there are conceptual questions which we explore further in Section 4 – that excluding them in official estimates causes more problems than it solves. In any case, it is useful to know what the inclusion of capital gains does to our impression of the distribution of income.

In this section we present ground-breaking new research by two of the authors of this report. Using HMRC administrative data, we were able to combine individuals' Income Tax records with the same individuals' Capital Gains Tax records to get a measure of individuals' total remuneration.<sup>25</sup> Unless otherwise stated, all of the statistics stated in this section are taken from this work.<sup>26</sup>

As suggested by the published statistics analysed in Section 2, taxable capital gains are very unevenly distributed. Figure 13 shows that, while around 54,000 people had capital gains over £100,000 in 2016-17, gains are extremely concentrated even within this group. The 5,000 people with the highest gains received 54 per cent of the total value of reported capital gains realised across the UK (for comparison, if we exclude capital gains, the richest 5,000 people received only 2 per cent of all other taxable income). The 1,000 people who saw the largest capital gains in 2016-17 received an average of £14 million each, with a minimum of £6.9 million.

**FIGURE 13: The majority of taxable capital gains are concentrated among a few thousand people per year**

Distribution of capital gains, excluding those with gains below £100,000, 2016-17



NOTES: Around 75 per cent of reported gains are accounted for by people with gains above £100,000, and therefore included in this chart.

SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020. Calculations based on HMRC administrative datasets.

<sup>25</sup> Specifically, data on capital gains is collected directly from individuals' SA108 Capital Gains Tax returns.

<sup>26</sup> For further details see A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020; and A Advani & A Summers, Capital Gains and UK Inequality, CAGE policy briefing No. 19, May 2020. All figures are for the entire UK.

Figure 13 also shows the composition of these gains. Residential property is only a small proportion of the total among those with large capital gains, while carried interest and listed shares are important minorities. But the majority of gains at the top come from unlisted shares and 'Other', which here includes all claims for entrepreneurs' relief (i.e. generally also unlisted shares).

## Capital gains are concentrated at the very top of the income distribution

With the distribution of capital gains being so dominated by the largest gains, we focus now on the incomes of the top 1 per cent of adults, and the impact of capital gains on our understanding of this group.

There are roughly 540,000 people in the richest 1 per cent of UK adults. Figure 14 shows that the threshold for this group in 2017-18 was around £125,000 of taxable income,<sup>27</sup> ignoring capital gains, and that this group had a mean income of £180,000. Counting capital gains as income – and therefore changing the make-up of this group – raises the minimum threshold to £130,000, and the mean to £200,000.

However, incomes within the top 1 per cent are very unequal. To make it into the top 0.1 per cent in 2017-18 (or the richest 54,000 adults), an income of £480,000 excluding gains would have been required, and this rises to £600,000 including gains. The minimum income to be in the top 0.01 per cent of adults excluding gains (approximately the richest 5,400 adults) by income was £2,000,000 but – reflecting the significant number of very large capital gains – the threshold including gains was £3,230,000: 61 per cent higher.

The top 1 per cent are a slightly different group depending on whether capital gains are included as income or not, with one in ten being replaced once capital gains are included. Those who "join" the top 1 per cent when capital gains are included have slightly different characteristics: they are more likely to be pensioners, investors or owner-managers; they are also on average older – with half of the joiners being over sixty (compared with only one in seven of the leavers); and they are more likely to be female.<sup>28</sup>

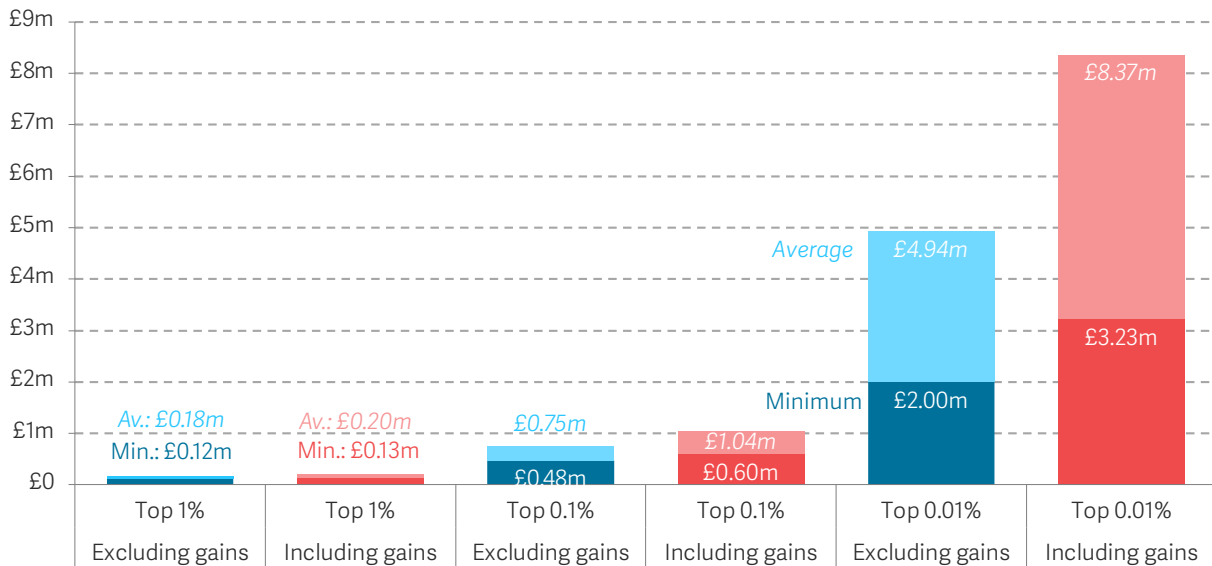
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<sup>27</sup> Taxable income – the basis of our analysis in this section – does not include non-taxable benefits nor, for example, income within ISAs or foreign-income of 'non-doms'.

<sup>28</sup> See A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020 for more details on the top 1 per cent's joiners, leavers and stayers.

**FIGURE 14: Including capital gains, the top 1 per cent are those with incomes above £125,000, but far more is required to make it into the top 0.1 or 0.01 per cent**

Minimum threshold and average income for top income groups (individual taxable income among UK adults, 2017-18), with and without capital gains



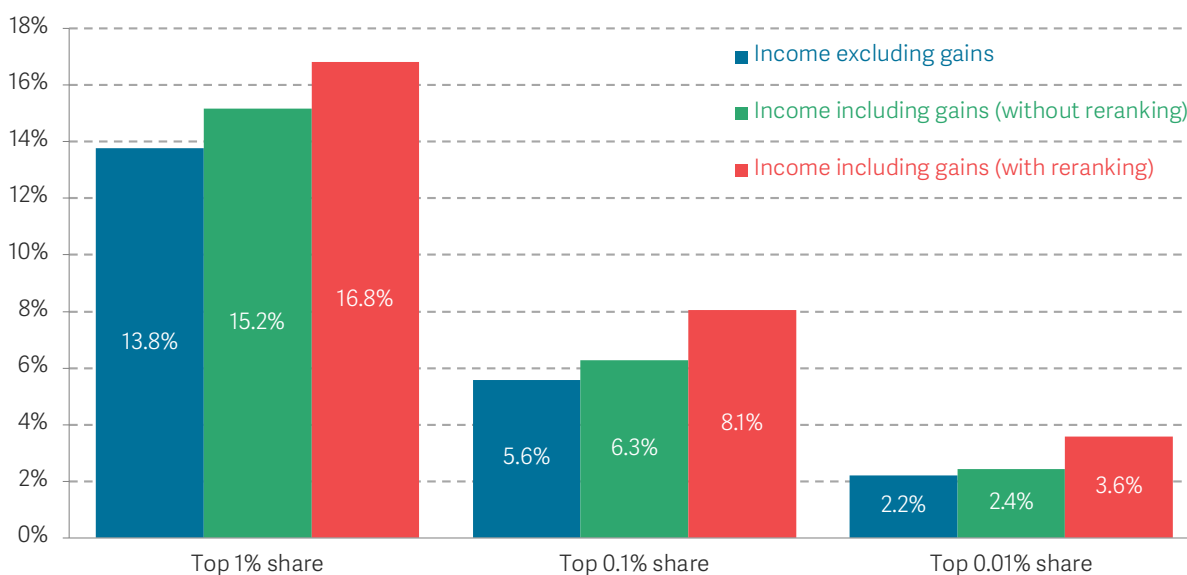
NOTES: Incomes are ranked either excluding or including gains.  
 SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020.  
 Calculations based on HMRC administrative datasets.

## Inequality is higher when capital gains are taken into account

Given the extreme concentration of gains at the top, including gains as income changes our picture of the distribution of resources. As Figure 15 shows, the top 1 per cent of adults’ share of pre-tax, taxable income was 13.8 per cent in 2017-18, if gains are excluded. If we keep the make-up of the top 1 per cent fixed (i.e. not including the “joiners” discussed above), the addition of capital gains raises this share to 15.2 per cent. This reflects the fact that 45 per cent of capital gains went to those who were already in the top 1 per cent before accounting for capital gains. Reranking people’s incomes after including capital gains, the top 1 per cent’s share rises to 16.8 per cent: one in every six pounds of taxable income. 92 per cent of capital gains go to the reranked top 1 per cent.

FIGURE 15: Including capital gains as income increases the income share of the top 1 per cent to one sixth of all taxable income

Top shares of taxable income, 2017-18



NOTES: Reranking refers to recalculating who is in these top income groups, after including capital gains as income.

SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020. Calculations based on HMRC administrative datasets.

At the very top of the income distribution, the implications of including capital gains are even more extreme. The top 0.1 per cent's share of income excluding gains was 5.6 per cent in 2017-18 but including gains (and reranking) increases this to 8.1 per cent, with this group accounting for 74 per cent of capital gains. And the top 0.01 per cent's share of income rises from 2.2 per cent to 3.6 per cent when we include capital gains: 360 times their proportion of the population. Accounting for tax would lower some of these shares, given the overall progressivity of the tax system. But it would also increase the impact of including capital gains, given that they are taxed at relatively low rates (as discussed in Section 2).

## Accounting for capital gains shows the top 1 per cent's income share has rarely been higher

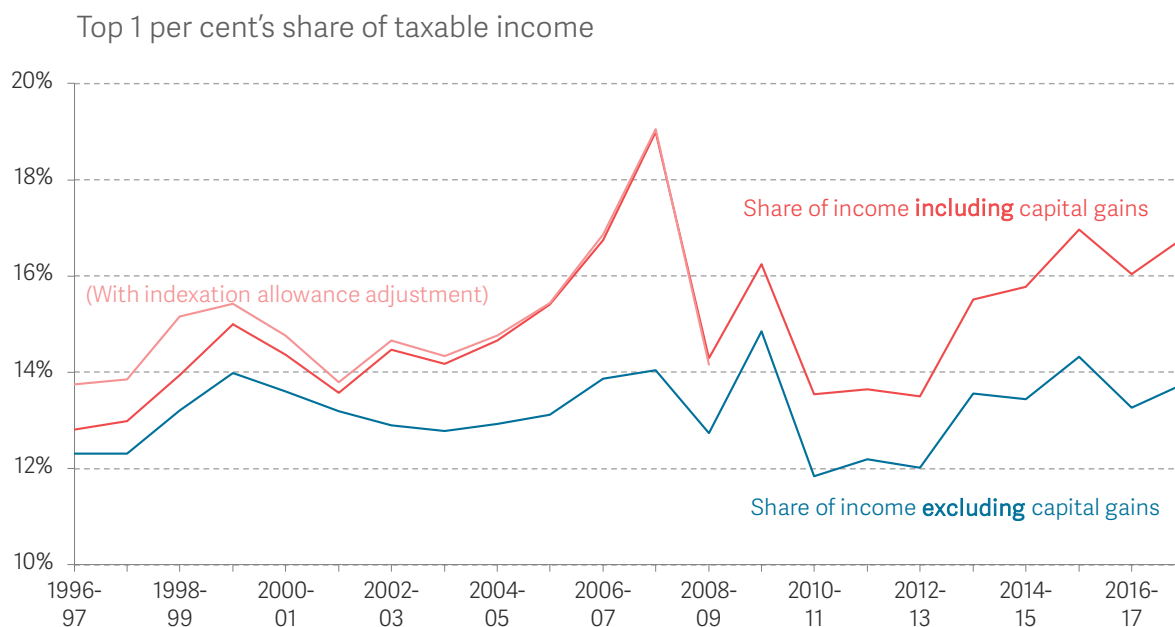
Over the 1980s and 1990s, the share of taxable income (excluding gains) that went to the top 1 per cent more than doubled.<sup>29</sup> As Figure 16 shows, change using this measure has been more limited over the past 20 years. Between 1998-99 and 2017-18, the top 1 per cent's share of income – excluding capital gains – remained relatively flat at around 13.3 per cent on average. However, there have been fluctuations, caused by: the financial crisis in 2008-09; pre-announced increases in top tax rates (which led income to be

<sup>29</sup> See Figure 17 in this report; M Brewer, *What Do We Know And What Should We Do About Inequality?*, SAGE, June 2019; and M Brewer & C Samano-Robles, *Top Incomes in the UK: Analysis of the 2015-16 Survey of Personal Incomes*, ISER, June 2019.



brought forward into 2009-10); the partial reversal of that increase (which led income to be delayed until 2013-14); and dividend tax changes (which led income to be brought forward into 2015-16).

**FIGURE 16: The top 1 per cent's share of income including capital gains has been particularly high in recent years, though not as high as in 2007-08**



NOTES: Prior to 2008-09, the red series is affected by indexation allowance. In the pink series, an estimated adjustment is made to remove this to give total nominal gains. The impact of taper relief is removed in both series. Income shares excluding capital gains differ slightly from those shown in the fiscal income series of the World Inequality Database (WID), which is based on Survey of Personal Incomes data, for reasons explained in CAGE Working Paper 465.

SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020. Calculations based on HMRC administrative datasets.

However, accounting for capital gains gives a different picture. In particular, including gains makes the top 1 per cent's share more volatile, but also leads to a larger increase over time, as shown in Figure 16.<sup>30</sup> It should be noted that the tax records for capital gains up to 2007-08 are partially affected by 'indexation allowance' (whereby capital gains accrued up to 1998 accounted for RPI inflation), meaning that they understate the full amount of nominal gains, but Figure 16 also shows an aggregate adjustment to try and account for this to provide a consistent series for the top 1 per cent's share of income including capital gains.<sup>31</sup> Using these more comparable figures, the top 1 per cent's share

<sup>30</sup> To best reflect living standards, reported capital losses are included in the year when that net loss was realised (rather than when offset against gains).

<sup>31</sup> This adjustment makes use of HMRC tables on the length of asset holdings to calculate approximately the aggregate indexation allowance that would have been made (given the policy's use of RPI inflation), and therefore what nominal gains would have been in its absence. These asset holding lengths are banded and so we evenly split HMRC's multi-year 'bins', and distribute open-ended bins by gradually reducing the yearly allocation of gains until the full amount is reached. We distribute bins of unknown holding length according to the distribution of known assets. We assume indexation allowance applies equally across the income distribution, with top income groups benefiting from the allowance in proportion to their capital gains. However – given the concentration of gains at the top – alternative assumptions make little difference. No holding period data is available for 1996-97 or 1998-99, so holding lengths for realisations in these years are taken from adjacent years.

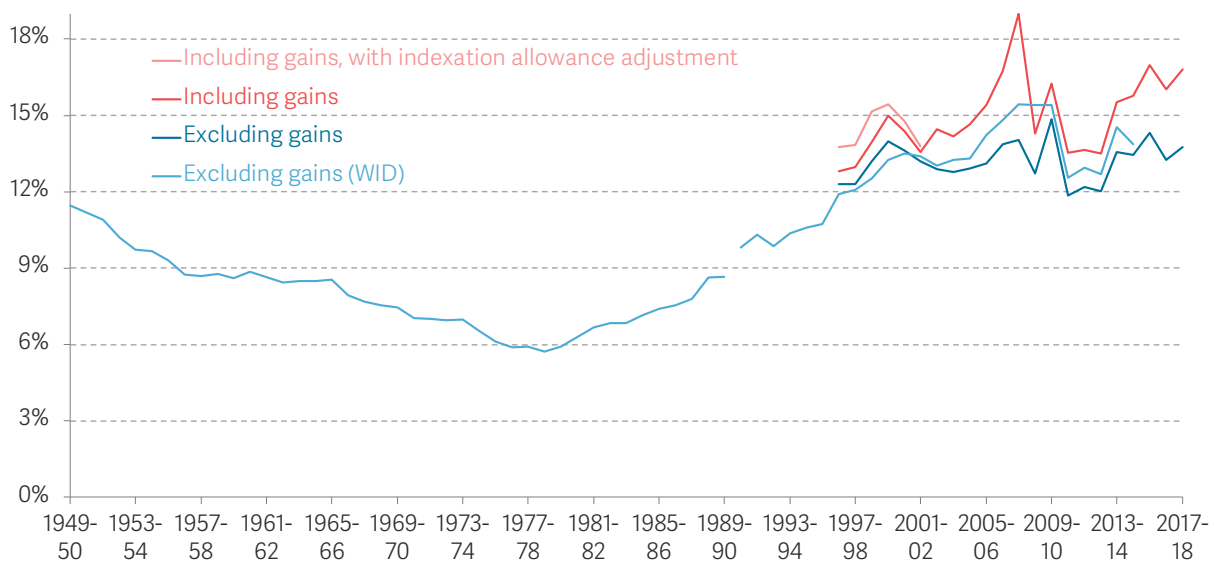
of overall income averaged around 14.5 per cent in the late 1990s and early 2000s, but by 2017-18 this share was 16.8 per cent. Overall since 1996-97, the top 1 per cent's share has risen by 3.1 percentage points if capital gains are included (from 13.7 per cent to 16.8 per cent), compared to 1.5 percentage points if they are not.

Figure 16 also shows a strikingly-high top income share in 2007-08, followed by a sharp fall. This reflects the overall trend in capital gains shown in Figure 3, with both the financial crisis and behavioural effects as a result of changes in CGT policy (which was completely reformed in April 2008) having very large effects.

Our results begin in 1996-97, but – as Figure 17 shows – given what we know about incomes excluding capital gains, it seems likely that the top 1 per cent's share of overall income (including capital gains) reached its post-war high in 2007-08. Other than that exceptional year, 2015-16 may have been the second highest share, and 2017-18 the third highest, over the last few decades, if not for longer.

**FIGURE 17: It is probable that the top 1 per cent's share of income including capital gains in 2017-18 was the third highest since at least World War Two**

Top 1 per cent's share of taxable income

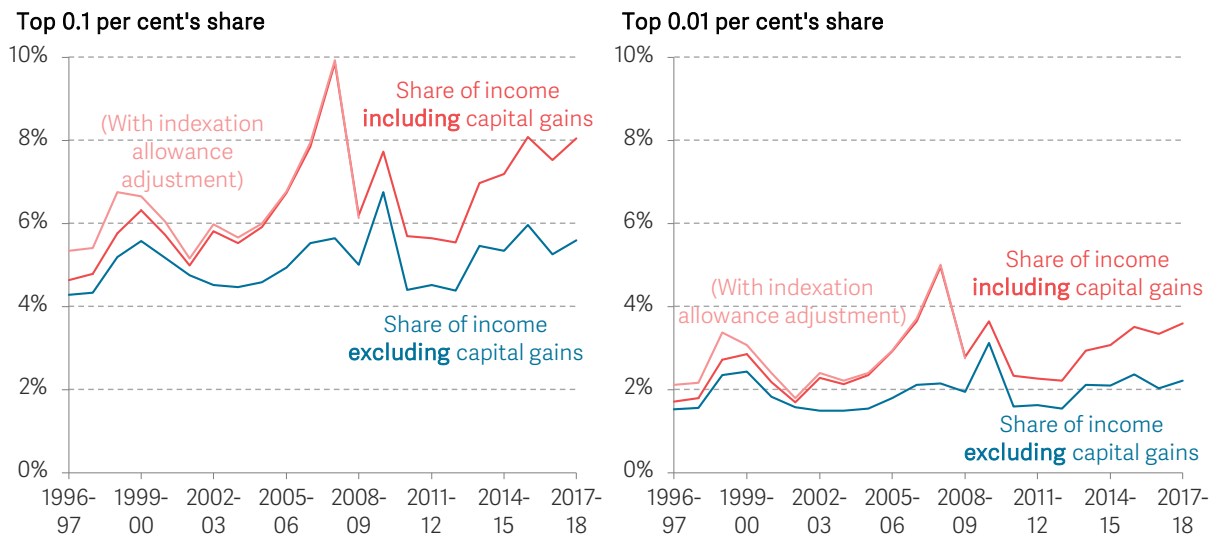


NOTES: Unit of analysis changes in 1990, from married couples (where applicable) to individuals. Prior to 2008-09, the red series is affected by indexation allowance. In the pink series, an estimated adjustment is made to remove this to give total nominal gains. The impact of taper relief is removed in both series. Income shares excluding capital gains differ slightly from the World Inequality Database (WID) data, for reasons explained in CAGE Working Paper 465.

SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020 (Calculations based on HMRC administrative datasets); World Inequality Database.

A rise over time is also seen when looking at the top 0.1 per cent and top 0.01 per cent, as shown in Figure 18. For instance, the top 0.1 per cent's share of income, including capital gains, has risen from around 5.4 per cent in 1996-97 (including an approximate adjustment for indexation allowance) to 8.1 per cent in 2017-18 – a rise of 50 per cent.

FIGURE 18: A growing share of income has gone to a small number of people  
Top 0.1 / 0.01 per cent's share of taxable income



NOTES: Prior to 2008-09, the red series is affected by indexation allowance. In the pink series, an estimated adjustment is made to remove this to give total nominal gains. The impact of taper relief is removed in both series. Income shares excluding capital gains differ slightly from those shown in the fiscal income series of the World Inequality Database (WID), which is based on Survey of Personal Incomes data, for reasons explained in CAGE Working Paper 465.

SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020. Calculations based on HMRC administrative datasets.

Given that aggregate capital gains are expected to have been high in 2018-19 and 2019-20 (as seen in Figure 3), it currently seems unlikely that top income shares fell significantly in those years.<sup>32</sup> Of course, it is likely that the picture in 2020-21 will prove quite different as a result of the coronavirus crisis and falls in asset prices. Whether top income shares will continue to rise over the long-term, however, remains to be seen – and will depend on public policy.

## Further work will be needed to look at net incomes and at earlier periods

This is the first time that analysis has been done of total taxable income including capital gains. But there is still a lot we don't know.

<sup>32</sup> Bear in mind that total dividends have also increased since 2017-18 (see [ONS series C3ZT](#)).

The analysis above looks at incomes before tax but, from a living standards perspective, it would be useful to also look at net incomes. Given that capital gains attract low effective tax rates – as shown in Figure 7 – the effect of including capital gains on measures of net income inequality is likely to be even more striking.

The analysis so far has also been constrained to look at the taxable income of individuals, but in time it should be possible to look at the income of households, and to move from taxable income to total disposable income including non-taxable income such as most benefits. This will require linking capital gains data to household survey data, as we discuss further in Section 4.

Further work should also try to assess the impact of taxable capital gains on inequality statistics before 1996-97 (where our analysis begins). This will be difficult and imperfect because tax microdata is not available for earlier decades, and it will require strong assumptions to combine the published tabulations of income and capital gains. But there are good reasons to suspect that estimates of income inequality for earlier decades will also be affected by the omission of capital gains.

Some work has been done on the effects of capital gains and other missing incomes in the immediate post-war period of the 1940s and 1950s. An estimate for 1959 gave the top 1 per cent an income share of 8.3 per cent without capital gains but 14.1 per cent with capital gains included.<sup>33</sup> And in 1962, Richard Titmuss argued that the apparent decline in inequality that followed World War Two was largely an illusion, based on the way in which income statistics were compiled.<sup>34</sup>

The period of the 1960s and 1970s is often regarded as a golden era of declining inequality, associated with extremely high Income Tax rates that hit a top marginal rate of 83 per cent (or 98 per cent including the 'investment income surcharge') in 1974. However, these high rates also generated huge incentives to convert income into capital gains, which remained taxed at much lower rates. What's more, many of the anti-avoidance provisions that exist today were yet to be enacted, and a litany of schemes such as 'bond-washing' and 'bed and breakfasting' facilitated widespread Income Tax avoidance using capital gains.

An awareness of the potential impact of capital gains therefore reminds us to be cautious when interpreting long-term trends in income statistics. The extent of the incentive – and ability – to take income in the form of capital gains has varied greatly with changes in the tax code over time. While at a superficial level, official statistics have remained consistent in their reliance on the concept of 'taxable income', beneath the surface the items covered by this definition have ebbed and flowed, and continue to do so.

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<sup>33</sup> A Prest & T Stark, *Some aspects of income distribution in the UK*, The Manchester School, Vol. 35, 1967.

<sup>34</sup> R Titmuss, *Income Distribution and Social Change*, 1962.

International experience also demonstrates the importance of considering capital gains, both for levels and trends in inequality, as explored in Box 2.

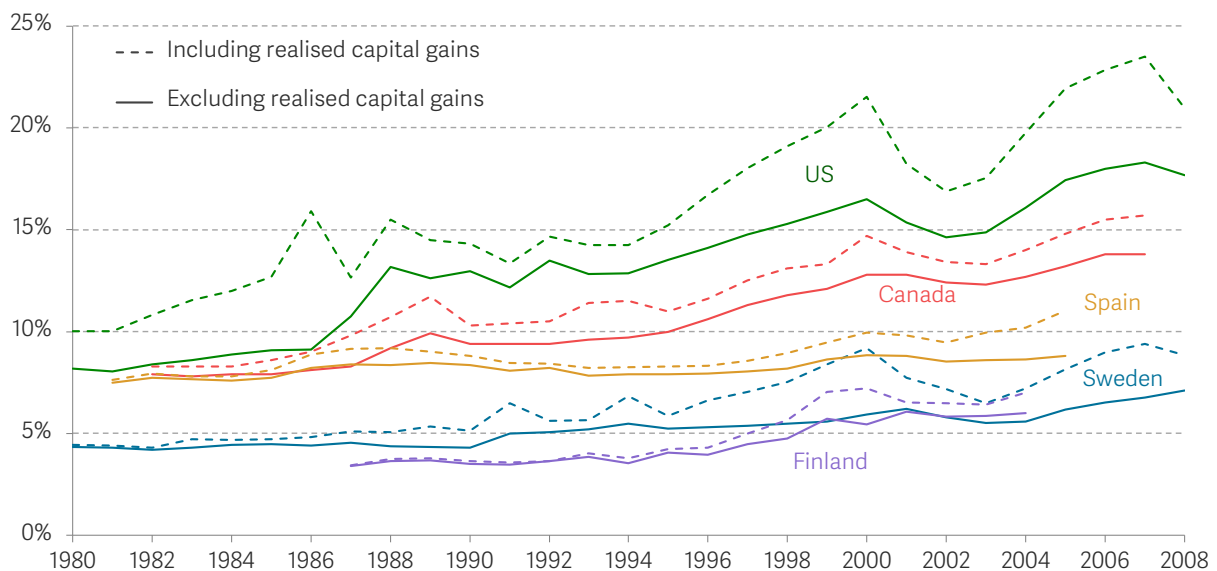
## BOX 2: International experience of including capital gains in income statistics

Although this work is the first to look in detail at trends in income inequality in the UK with and without capital gains, research on this topic in other countries is more developed. Sweden's national statistics agency, for example, publishes parallel series with and without capital gains.<sup>35</sup> And in the United States, the Congressional Budget Office includes capital gains in its analysis of the income distribution.<sup>36</sup>

Figure 19 shows that – across five countries – the inclusion of capital gains increases the top 1 per cent's share of income; increases volatility of the series; and shows a greater increase over time (though in the U.S. the distinction is actually less important).<sup>37</sup> Similar cyclical patterns can also be seen across countries (including the UK), such as around the early 2000s recession and the global financial crisis.

**FIGURE 19: In other countries, including capital gains in income increases top income shares and their rise over time**

Top 1 per cent's share of taxable income



NOTES: Incomes are ranked either excluding or including gains.

SOURCE: J Roine & D Waldenström, *On the role of capital gains in Swedish income inequality*, Review of Income and Wealth, September 2012. Series are ultimately by A Atkinson & T Piketty, except Canada which is by M Veall.

<sup>35</sup> e.g. Statistics Sweden, *Income and taxes 2018, final*, January 2020.

<sup>36</sup> e.g. CBO, *The Distribution of Household Income*, 2016, July 2019.

<sup>37</sup> J Roine & D Waldenström, *On the role of capital gains in Swedish income inequality*, Review of Income and Wealth, September 2012.

As we discuss in Section 4, the UK should aspire to produce data on a broader set of income definitions; both learning from, and advancing, international experience.<sup>38</sup>

So it should be clear that the choice of whether to include or exclude taxable capital gains in the concept of income is an important one. On balance, we think that the statistics that include gains are a better reflection of reality, capturing important trends such as those set out in Section 2 and real differences in living standards. Of course, there is room in the world for multiple definitions of income. In the next section, we explore in more detail the conceptual arguments for and against changing the usual definition of income, and set out how we think income statistics should be changed.

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<sup>38</sup> See also J Robbins, [Capital Gains and the Distribution of Income in the United States](#), Society for Economic Dynamics 2019, Meeting Papers 202, 2019; and (looking at Norway) A Fagereng, M Blomhoff Holm, B Moll & G Natvik, [Saving Behavior Across the Wealth Distribution: The Importance of Capital Gains](#), National Bureau of Economic Research, NBER Working Papers 26588, 2019.

## Section 4

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### How should income data be reformed?

We believe there is a strong case for accounting for capital gains when looking at the distribution of income. They are currently excluded from income statistics but, given the increasing use of administrative tax data, there is no longer any great technical barrier to incorporating taxable capital gains. There are conceptual counterarguments, which we explore in detail, but overall, we conclude that including realised, taxable capital gains as income is more appropriate than excluding all capital gains. In particular, income should not be excluded from household surveys purely on the basis of perceived 'irregularity'.

Capital gains are not the only form of income that is currently excluded from statistics on the income distribution on the basis that it is 'irregular'. Another is irregular pension pot withdrawals, which is a significant problem given that pension lump sums now total over £25 billion a year, and grew rapidly over the 2010s. Another omission are inheritances and gifts which, although they do not count as income from a National Accounts perspective, can be seen as income, and total £155 billion a year. We believe a supplementary 'Including Irregular Income' measure, that includes taxable capital gains and other irregular income, should be introduced by the ONS to complement existing income statistics and the ongoing development of Distributional National Accounts. In any case, more data on irregular forms of income should be made available.

#### There is a strong case for including capital gains in the definition of personal income...

The implication of our argument so far is that the exclusion of all forms of capital gains from statistics about the income distribution, (such as in the DWP's Households Below Average Income (HBAI) data and the ONS's Effects of Taxes and Benefits on Household Income (ETB) data), is problematic. In the real world, there is plenty of substitution between labour market remuneration that appears as 'income' and other



remuneration that never appears in Income Tax data or income surveys. Similarly, there is substitution between investment returns that are counted and those that are not. These substitutions, which often depend on legal formalities and the intricacies of the tax system, distort our impression of the changing extent of inequality in the UK, and so risk undermining the reliability of official statistics. From a more basic point of view, if statistics make it appear that people who, from a common-sense perspective, are evidently extremely well-remunerated have zero or minimal 'income', then something has gone wrong.

So, should capital gains be included in the definition of income? There are some existing frameworks that can help us think about this question (as explored in Box 3). In particular, including taxable capital gains would move us closer (though not all the way) to a comprehensive 'Haig-Simons' income measure that is derived from theories of well-being and economic power.

### BOX 3: Existing frameworks for considering 'what is income?'

The question of what should count as 'income' is not a new one, both from a theoretical perspective and in designing tax policy (discussed further in Box 4). In practice, income statistics may be limited by what data can feasibly be collected, but it is useful to consider the main overarching frameworks for defining income.

**1. Fiscal (or taxable) income:** One practical framework that has been used in statistics about the income distribution (and HMRC's Survey of Personal Incomes dataset) is based specifically on income reported on tax returns. In the UK, this has meant anything 'assessable' for Income Tax, before any deductions (including allowances) or reliefs. This approach is based on tax law, and does reflect

living standards to the extent that Income Tax is based on ability to pay, but – as we have seen – can in many cases be arbitrary. For example, the definition of fiscal income excludes income from ISA savings accounts and the foreign income of UK resident 'non-doms', as well as capital gains.

**2. National Accounts income:** The field of national accounting is well-developed, and best known for producing GDP figures. National Income is a good measure of long-term increases in prosperity, but it is focussed on aggregate productive activity rather than on day-to-day household living standards. For example, a National Accounts approach would not include retired households' income from private

pensions, as these are a draw-down of existing wealth, and would instead count working-age people's pension contributions as income, making it hard to assess the current living standards of retired households. The National Accounts income concept forms the basis of a recent international initiative to develop new inequality statistics known as 'Distributional National Accounts'.

### 3. Haig-Simons personal income:

Although rooted in practical discussion about the base for income taxation, economists Robert Haig and Henry Simons (as well as earlier German scholars) offered a more comprehensive, well-being-based view of income: specifically, "the money value of the net accretion to one's economic power between two points of time".<sup>39</sup> Mathematically, this presented income as the sum of a person's consumption and the change in their net worth. This definition includes (accrued) capital gains, inheritances and imputed rent as income.

**4. Canberra Handbook household income:** The UN 'Canberra Group Handbook on Household Income Statistics' is an international guide to provide advice on the production of national household income statistics.<sup>40</sup> The broad conceptual

aim of the handbook's approach is "the measurement of economic well-being".<sup>41</sup> But, as it says, "the approach to defining income taken in these guidelines is essentially consumption-based" (with income effectively acting as an easier-to-measure rough proxy for consumption) and for that reason it recommends that 'irregular' receipts such as inheritances and capital gains are excluded – somewhat arbitrarily and inconsistently – on the basis that "it is unlikely that they will be spent immediately on receipt". However, the expert group responsible did recommend that capital gains might be included "perhaps via a satellite account" or "as a memorandum item which may, optionally, be added to income measures for certain analyses".

When considering the economic well-being of households, the UK's statistics on the distribution of income have tended to follow approach (4). On the other hand, analysis of top incomes or analysis of very long-run trends have tended to use approach (1), due to the availability of tax data.<sup>42</sup> But given that some of the choices involved in these approaches are fairly arbitrary, and with a greater availability of data than in the past, we believe it is time to explore additional options.

<sup>39</sup> R Haig, *The Concept of Income - Economic and Legal Aspects*, The Federal Income Tax, 1921.

<sup>40</sup> *Canberra Group Handbook on Household Income Statistics*, Second Edition, 2011.

<sup>41</sup> Taken from the *Final Report and Recommendations of the Expert Group on Household Income Statistics*, 2001.

<sup>42</sup> e.g. A Atkinson & T Piketty, *Top Incomes Over the Twentieth Century: A Contrast Between Continental European and English-Speaking Countries*, 2007.

We believe there is a strong case for viewing capital gains as income – at least as a supplementary perspective – when looking at the distribution of income. And whereas it may have once been difficult to measure realised capital gains via household income surveys, it is now quite possible (as demonstrated in Section 3) to make use of administrative tax data for accurate results. We set out a practical way forward later in this section.

## ... but there are some arguments against including capital gains in the definition of income

However, there are some key problems to consider in thinking about how and whether to include capital gains in income measures. These can be both conceptual (reflecting the different viewpoints explored in Box 3), and practical (given imperfect knowledge about people's resources). We now explore three broad sets of considerations in turn.

### 1. Should inflation be accounted for?

If someone originally bought an asset for £50,000 and 35 years later sold it for £100,000, with the value having risen (only) in line with CPI inflation, should that really boost their 'income' in the year of sale by £50,000? They would not have gained any real purchasing power, so we might instead conclude that their capital gain was zero. A theoretically-pure measure of capital gains might need to account for these inflation or indexation effects. Indeed, the CGT system – discussed in Box 4 - used to account for inflation.

But the idea that we should account for inflation when measuring capital gains quickly runs into practical difficulties. Most of HMRC's CGT records no longer include any information on when assets were acquired.<sup>43</sup> In the case of retained earnings in companies, we would also need to know when all the profits were made, requiring further linking to Corporation Tax records. A robust inflation adjustment for capital gains would therefore be challenging in practice.

And there is an even bigger challenge. If we were to adjust capital gains for inflation, then for consistency we should also account for inflation when considering other sources of capital income (which are included in household income measures), such as bank account and ISA interest, or dividends. For example, consider someone who originally put £50,000 in a bank account, and where the bank paid an interest rate equal to the rate of inflation. In real terms, the purchasing power of this money is unchanged, but the current statistical practice would treat the flow of interest that the account holder receives as income.

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<sup>43</sup> Although some figures are available for a random sample of records, even within this sub-group the length of ownership is listed as "unknown" for 40 per cent of share disposals. HMRC, [Capital Gains Tax statistical tables](#), Table 7, 2016-17.

If we did want to account for inflation consistently when considering income from capital, then this would point to measuring the overall real change in the value of each person's net wealth. This would take us towards the Haig-Simons approach set out in Box 3, but it would be a large conceptual leap from simply recording realised capital gains. And in practice, it would require recording a person's exact wealth each year, as well as any active saving or dissaving: levels of detail that are beyond even the ONS's Wealth and Assets Survey, arguably making this impossible to implement.

However, among taxable capital gains, very long-term investments are not the norm, and, as we have shown, many capital gains are better thought of as repackaged labour-related income rather than as investment returns. For example, for the sub-sample of CGT records where holding periods are known, we can see that two thirds (65 per cent) of gains on unlisted shares in 2016-17 were from shares owned for less than ten years; and that capital gains on average made up a whopping 45 per cent of disposal value for these shares.<sup>44</sup> This suggests an average return of 83 per cent for these shares - compared to average RPI inflation of around 3 per cent a year and average CPIH inflation of around 2 per cent a year - meaning that the contribution of inflation to these overall nominal returns is small.

So, in an age in which inflation is relatively low, and where the nature of gains is often relatively short-term, it is far more straightforward to ignore inflation. This has the benefit of simplicity, with 'income' then being (primarily) the actual cash each person has acquired in a given year to spend.

## 2. What sorts of capital gains should count as household income?

The analysis in Sections 2 and 3 is based on taxable capital gains. As shown in Figure 2, this is not a comprehensive measure of capital gains. In particular, it excludes:

- Gains that are not reported to HMRC because they are below the annual exempt amount (currently £12,300);<sup>45</sup>
- Gains within stocks and shares ISAs, which are tax-free;
- Gains that are inherited, as these are effectively written-off by HMRC at death, or made on assets given away to charity; and
- Capital gains on people's main residences, which total an estimated £170 billion a year.

It should also be noted that people can realise capital losses, and for consistency we should include these as income (potentially giving some people negative income).

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<sup>44</sup> HMRC, [Capital Gains Tax statistical tables](#), Table 7, 2016-17.

<sup>45</sup> However, gains must be reported when disposals exceed four times the annual exempt amount.

Losses can be reported to HMRC (to offset against future gains) but they might not be (where individuals are not expecting to realise substantial gains in future) and would then not be included in tax data.

All of these omissions in the tax data raise the question of whether we should aim instead to include all realised capital gains (and losses) as income, rather than only taxable gains (or – as in current statistics – no gains at all).

There are practical considerations, however. For example, although it is not ideal that the total volume of reported capital gains is influenced by the government of the day's choice about the level of the annual exempt amount, very little data currently exists about capital gains below that amount.

The specific but important case of main residences also raises the question of what counts as 'realising' a gain. If you sell your home for more than you bought it for then you have clearly made a capital gain, but if you immediately move to an equally – or more - expensive home then it is harder to argue that there has been a boost to your 'income' that year. Allowing for this kind of asset 'rollover' (as happens in the CGT system), and the fact that a lot of main residence gains would therefore not be realised until after death (and therefore also excluded from household income statistics), would greatly reduce the £170 billion figure above.

In addition, the question of whether to account for inflation would become much more pressing if main residence gains were to be included, given their often long-term nature. But there is also a more subjective argument: that the passive increase in the value of someone's home (even when realised) is less likely to be seen by the public as 'income' than are capital gains that derive from active labour market or investment decisions. Indeed, the reason that some gains are taxed and others are not is arguably partly a function of whether the public perceive them as being income – and therefore legitimate targets for taxation. So a focus on taxable over untaxed capital gains may be not only more practical but also more acceptable than a definition in which income statistics are greatly affected by property value changes that most people would (rightly or wrongly) not consider to be income.

Although more data on all forms of capital gains would be welcome, the priority should be to record gains that are easily substitutable with other forms of income, as discussed in Section 2. While relying on taxable realised gains is not conceptually pure, we should not let the best be the enemy of the good.

### 3. Is the lumpiness of realised capital gains (and losses) a problem, and are there alternatives?

One objection to including realised capital gains in income statistics is that they are often, by their nature, irregular, and that this can then give a misleading impression of people's actual living standards. For example, someone realising a gain of £100,000 in one year would appear to be near the top of the income distribution once capital gains are included. But if that was their only measured income for 10 years, then that would be the equivalent of only £10,000 a year. Saying that they had an income of £10,000 a year might be a more realistic estimate of their living standards position than saying that they were very rich in one year and lived in poverty for the other nine.

Furthermore, as we noted above (and as discussed further in Box 4), individuals can suffer a 'capital loss', where they sell an asset for less than its purchase cost – adding to the potential volatility of capital gains. While some individuals may receive large gains in a single year – greatly boosting their overall income – others may end up with a negative income overall.

In an ideal world, we might want data about people's entire lifetime income – better reflecting people's long-term living standards. But that is not what we have: the tax system is based on measures of annual income, and our statistics of the income distribution tend to follow the same approach. Measuring income over short periods of time always exaggerates inequalities where some people have volatile income, but that applies to many sources of income. Dividends and bonuses, for example, can be extremely volatile and yet are not excluded from income data, and household income surveys already count net losses among the self-employed as negative income.<sup>46</sup> So it is not clear why, for example, carried interest – typically received every five to seven years – should be treated any differently from bank staff cash bonuses. Furthermore, our analysis shows that, of those who reported gains of over £100,000 in 2016-17, one in six received average gains of over £100,000 a year over the previous four years, and one in three averaged over £20,000 a year.<sup>47</sup> So, although gains are typically infrequent, for many they are certainly more than a one-off occurrence.

Some people argue that one way to avoid the volatility of realised capital gains is to instead include accrued capital gains in a measure of income: i.e. changes in asset prices each year would be recorded as income regardless of whether the asset is retained or disposed of; rather than accounting for the capital gain in full at the point of disposal. However, while using accrued gains (and losses) might reduce volatility in the case of some individuals (such as in the example above, which would spread the

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<sup>46</sup> Incomes measured after housing costs may also be negative. Some summary statistics do exclude negative incomes, however.

<sup>47</sup> A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020.

£100,000 gain over ten years), on the aggregate level it would greatly add to the cyclical volatility of income statistics, with many more people during recessions making unrealised losses than realised losses, for example.<sup>48</sup> Also, measuring unrealised gains is generally not possible with current sources of data, given the need to assess asset values every year.<sup>49</sup> And, given that we have a CGT system based around taxing realised gains, the concept of net accrued capital gains would be extremely awkward. We also think that the timing of gain-realisation represents important information about households' cashflow.

An accruals approach might be easier to use for closely-held companies specifically, where retained earnings could instead be classed as personal income.<sup>50</sup> However, this would require removing corresponding UK company dividends from income (to avoid double counting); precludes knowing what tax will be paid upon distribution; and, for individual-level data, requires linking personal to corporate tax records. Outside of some closely-held companies (for which a match is possible using HMRC tax microdata), the lack of a shareholder register in the UK would make this difficult.

Given that the UK has ample administrative data on realised (taxable) gains, and very little on accrued gains, it is clear that the emphasis should be on the former for now. And we do not think that the potential infrequency of capital gains is a good reason for their exclusion: instead, it is a greater error to entirely exclude them from measures of income.

#### BOX 4: Many of these questions are also asked in the context of Capital Gains Tax policy

The focus of this report is not tax policy. But many of the questions that arise when considering how to measure capital gains in income statistics also apply when considering how best to tax them:

**1. Should they be taxed?** Prior to 1962, capital gains were not taxed at all. At times, short-term gains have been taxed like ordinary income (and this is still the case in the US). At other times (including currently), gains have

<sup>48</sup> J Ruser, A Pilot & C Nelson, *Alternative Measures of Household Income*, Presentation to the Federal Economic Statistics Advisory Committee, November 2004.

<sup>49</sup> It is possible to impute accrued capital gains based on stocks of wealth and average rates of return, but this is necessarily only an estimate. See for example P Armour, R Burkhauser & J Larrimore, *Levels and Trends in United States Income and Its Distribution: A Crosswalk from Market Income Towards a Comprehensive Haig-Simons Income Approach*, National Bureau of Economic Research, June 2013, and note also that the results including accrued gains (e.g. Figure 2 in that paper) are extremely volatile.

<sup>50</sup> e.g. R Aaberge, J Modalsli, M Francesconi & O Vestad, *For A Fistful of Kroner? How Improving The Measurement of Business Income Affects Income Inequality Estimates*, ESCoE presentation, December 2019.



been taxed, but separately from other income.

**2. What should the tax's scope be?** In the UK, main residences have always been outside the scope of CGT, for example. From the point of the tax system, such gains are not considered income.

**3. Should inflation be accounted for?**

This is a question that has dogged the design of CGT. Indexation was introduced in 1982, significantly reformed in 1988, effectively frozen in 1998, and then completely abolished in 2008. For gains by companies, indexation continued until 2018. Some proposals argue that only 'super-normal' returns should be taxed, to try and make the tax system neutral about whether people delay consumption (by saving), and to avoid 'lock-in'.<sup>51</sup>

**4. Should gains be taxed when accrued or when realised?** In the US there has been discussion of taxing unrealised gains instead of realised gains, but the focus of taxation so far has, for practical reasons, been realised gains.<sup>52</sup>

**5. How should capital losses be treated?** Individuals are allowed to offset any realised losses against any gains that they made on other

disposals in the same year. Where an individual has suffered a net loss, they can carry this forward (or in limited circumstances, backwards) to offset against gains in other years. There is however very little scope for offsetting capital losses against other income. In other words, the UK tax system does not allow individuals to 'mix and match' their capital gains/losses and income across different tax bases. From a tax policy perspective, the limited interaction between Income Tax and CGT liability is sensible, because it is needed to prevent artificial arrangements that use capital losses to avoid Income Tax liability.<sup>53</sup>

There has also been much debate historically – in the UK and elsewhere – about the tax treatment of specific forms of activity, such as how carried interest ought to be taxed, or whether entrepreneurs' relief is desirable (both discussed in Section 2). Often these debates are ultimately about whether the tax treatment might affect economically desirable behaviour, but such questions can be separated from our focus here: should they count as income for the purposes of distributional statistics?

<sup>51</sup> IFS, [Tax by design](#), September 2011. Lock-in is caused by the fact that one can effectively push the payment of CGT into the future by not yet realising a gain, and future tax paid is - after sensible discounting - worth less than tax paid today.

<sup>52</sup> e.g. G Enda & W Gale, [How could changing capital gains taxes raise more revenue?](#), The Brookings Institution, January 2020.

<sup>53</sup> In countries that freely allow mixing and matching between income and gains, such as the US, there is evidence of widespread avoidance using this technique. See for example: New York Times, [How a Simple Tax Rule Let Donald Trump Turn a \\$916 Million Loss Into a Plus](#), October 2016.

## Creating and opening up more capital gains data is a ‘no regrets’ option

The three difficulties above may help explain why capital gains are not included in the main official definitions of household income. We discuss below whether these definitions should change. But a less controversial recommendation is simply that more data should be made available to researchers so that the impact of different definitional choices can be investigated and made more transparent.

Primarily, this means widening access to HMRC’s data on CGT, collected from self-assessment returns. It is very welcome that these data have been made available to academic researchers working within HMRC’s facilities that allow controlled access to confidential taxpayer data: this has made possible the findings republished in Section 3, and further work is ongoing. But HMRC should also make available a public-use dataset that combines Income Tax and CGT data, to enhance the existing ‘Survey of Personal Incomes’ Public Use Tape which only covers Income Tax data.

Crucially, the ONS have now also gained access to HMRC self-assessment tax microdata, with a plan to link these to information provided by respondents to their household surveys. The ONS should look to make use not just of the Income Tax data but also the CGT information included in this dataset, which could be incorporated into analysis at little extra cost. Through this process, ONS household survey microdata could in time be supplemented with accurate data about taxable (and after-tax) capital gains; and the same may also apply in future to household survey data collected by the DWP. In both cases, the main technical challenge is the linking of the household survey responses with tax records, rather than the inclusion of capital gains alongside other income.

There may also be a role for additional questions in household surveys about capital gains, to supplement the data from tax records. In particular, it would be good to identify – even roughly - the presence of gains below the annual exempt amount of £12,300 (currently).<sup>54</sup> It is likely that such gains are common, given the tax incentive for individuals to realise gains just below that limit, to minimise both their obligations to report details to HMRC and the amount of CGT paid. And, given the importance of closely-held companies, the UK could do with much better survey data on who owns these, both in household finance surveys and the Labour Force Survey.<sup>55</sup>

Finally, although we believe that capital gains on main residences are qualitatively

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<sup>54</sup> HMRC could, however, potentially require those completing self-assessment for other reasons to report any gains below this amount. This extra data would also aid with policy making.

<sup>55</sup> The Labour Force Survey identifies those self-employed (and some employees not paid a salary) who receive payment as “a sole director of your own limited business”, but it is not clear if directors who pay themselves a salary would always be identified in this way. More data is also needed on where members of a couple are both directors (and/or shareholders) of a firm. The Family Resources Survey does not identify cases where wages or dividends come from a closely-held company.

different from other sources of capital gain, research in this area could also be improved with better access to data. Hopefully, it will soon prove possible to link household survey data to Council Tax records, Energy Performance Certificates, and (housing transaction) Price Paid Data or Stamp Duty records, to add accurate data about survey respondents' property values and even to record such capital gains directly.

Including taxable capital gains in survey data would allow us to assess whether conclusions about household income growth and overall inequalities are sensitive to the income definition (just as we showed was the case with measures of top income shares in Section 3). It would also improve the policymaking process. CGT is a significant source of government revenue but – unlike for many other taxes – it is very difficult for anyone outside of HMRC to model the fiscal and distributional impacts of changes to its structure,<sup>56</sup> or to look at the combined impact of the full range of UK taxes, and this lowers the quality of public debate.

## The conceptual treatment of other irregular income – notably pensions and inheritances – should also be revisited

The main conceptual justification for not including capital gains in the measure of income used in UK statistics on the income distribution is that they are irregular (or infrequent). But capital gains are not the only type of irregular income that has been excluded. In our view, the main other causes for concern are irregular private pension receipts, and inheritances and gifts.<sup>57</sup>

Excluding these from the measure of income follows the recommendations made by the 'Canberra Handbook', which, as we discussed in Box 3, is a UN-approved handbook with guidance on estimating the income distribution.<sup>58</sup> This states that "Household income consists of all receipts whether monetary or in kind (goods and services) that are received by the household or by individual members of the household at annual or more frequent intervals, but excludes windfall gains and other such irregular and typically one-time receipts."

But this suggested exclusion of irregular income should not be considered sacrosanct. As noted in Box 3, the argument underlying this suggestion is that transfers that are typically large and irregular are "unlikely ... [to] be spent immediately on receipt".<sup>59</sup> But

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<sup>56</sup> For example, in the 2019 election Labour and the Liberal Democrats proposed radical changes to CGT while the Conservatives proposed to reform entrepreneurs' relief. None of these policy proposals can be easily modelled outside of government.

<sup>57</sup> Redundancy payments are also excluded from the household income definition, but their aggregate impact is typically relatively small (£4 billion a year, according to RF analysis of ONS, Wealth and Assets Survey). Other sources of irregular income are: gambling or lottery winnings, but this is both conceptually difficult (as a form of leisure) and in practice relatively small; insurance claims, which are also arguably conceptually distinct; and state pension lump sum payments, totalling around £800 million a year (although their treatment in the household surveys used to collect information on the income distribution is unclear). Distributions from trusts may be another addition.

<sup>58</sup> *Canberra Group Handbook on Household Income Statistics*, Second Edition, 2011.

<sup>59</sup> Taken from the *Final Report and Recommendations of the Expert Group on Household Income Statistics*, 2001.

'regular' income may also of course be saved rather than spent immediately, and the concept of income should be distinct from that of consumption (for which we also have household survey data).

The exclusion of irregular income also systematically biases income data – particularly that relating to top incomes. These income sources are often more likely to be received by the rich, because a characteristic feature of being rich is having more flexibility about when and how to take your remuneration. This approach also risks significant distortions over time as behaviours change, particularly in response to changes in tax incentives. So it is time to look again at the treatment of all forms of 'irregular' income, and we discuss the most important of these below.

### Irregular pension income

The exclusion of irregular pension income in UK statistics on the income distribution is particularly problematic.<sup>60</sup> Such forms of income include tax-free lump sums, a long-running feature of the UK's private pension system, which can be as large as 25 per cent of an individual's total private pension pot. But the exclusion of irregular pension income has become much more problematic from 2015, since when all pension savings can be accessed flexibly (as opposed to being used to buy an annuity). The Financial Conduct Authority reports that 55 per cent of defined contribution pension pots (355,000 plans) accessed for the first time in 2018-19 were withdrawn in full; and such withdrawals would not have counted as 'household income' in the statistics on the income distribution.<sup>61</sup> At the extreme, all private pension income could in theory disappear from the survey data over time, ruining the utility of official pensioner income data.

Figure 20 shows the scale of the problem. HMRC data shows that a specific form of irregular pension income – the taxed component of flexible pension withdrawals – now totals around £10 billion a year. More broadly, the ONS's Wealth and Assets Survey recorded £25 billion a year of total (taxable and tax-free) lump sums in 2017-18. This compared to £94 billion of regular private pension income, suggesting that around one fifth of total pension income is irregular.<sup>62</sup> What's more, the ONS data suggests that both the volume of lump sums and their relative importance compared to other pension income increased rapidly over the 2010s, which is fully in line with the 2015 changes to how pension pots can be accessed.

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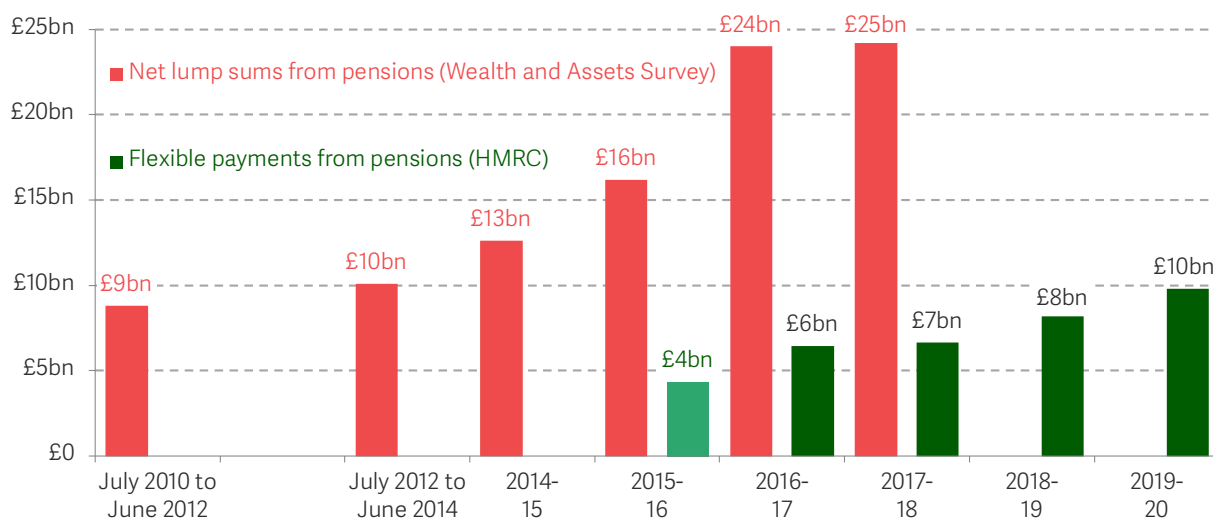
<sup>60</sup> Note that SPI tax data does include any taxed lump-sums in its measure of income.

<sup>61</sup> Financial Conduct Authority, [Retirement income market data 2018/19](#), September 2019.

<sup>62</sup> All values from the Wealth and Assets Survey exclude Northern Ireland, the very north of Scotland and the Isles of Scilly.

**FIGURE 20: Irregular pension withdrawals are large and growing but are generally not counted as pensioner income**

Taxable flexible payments from pensions / Net lump sums from pensions, annual



NOTES: 'July to June' figures are annualised. WAS data covers GB; HMRC data covers UK. HMRC figures are not comprehensive: "The numbers published for tax year 2015 to 2016 are not comprehensive as to manage the burden on industry, reporting was optional for tax year 2015 to 2016 but compulsory from April 2016. HMRC only receives information on taxable flexible payments. Tax free payments or any elements of payments that are not taxed are not included in these statistics."

SOURCE: HMRC, Flexible Payments from Pensions; RF analysis of ONS, Wealth and Assets Survey.

These are large flows of money, particularly given that they go to only a small proportion of the population each year: with 600,000 people per year receiving an average of roughly £40,000 each in pension lump sums.<sup>63</sup>

The argument against including pension lump sums in measures of income is purely about lumpiness: that doing so might overstate the living standards of newly-retired pensioners who draw down their savings. The Family Resources Survey does try to distinguish between 'regular' and 'irregular' lump sums, and treat the former as income, but this is an imprecise distinction. Excluding irregular pension income means that a lot of pensioners' income now never appears in our statistics of the income distribution (neither when pension contributions are made, nor when that pension is drawn down). It also means that statistics on pensioners' incomes are sensitive to policy choices related to the taxation of lump sums and flexibility of pension drawdown.

Given the size of this problem, we think there is a strong case for changing – or supplementing – the definition of income used in our statistics on the income distribution to include all lump sums (discussed further below). Moreover, as with capital gains, greater emphasis should simply be placed on collecting and incorporating such

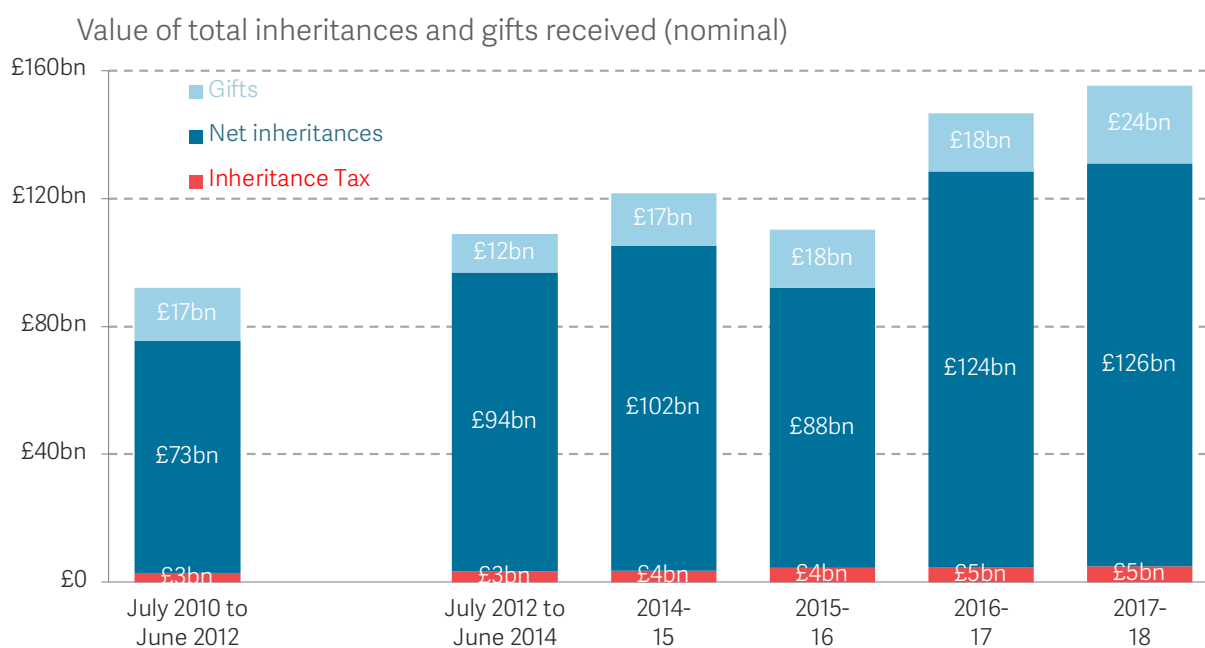
<sup>63</sup> RF analysis of ONS, Wealth and Assets Survey.

data in these surveys, to help reduce the risk of drawing incorrect conclusions from an incomplete picture of incomes.

## Inheritances and gifts

Unlike irregular pension receipts, and some capital gains, inheritances and lifetime gifts are in some senses qualitatively different from other income. But for the person receiving them, they are a source of purchasing power like any other income, and in the classic Haig-Simons definition of income (discussed in Box 3) such receipts count as income.<sup>64</sup> Current practice in UK statistics is somewhat inconsistent (though rooted again in 'regularity'): the HBAI series includes some parental contributions to students' living costs as income for the students, but ignores all other transfers.<sup>65</sup>

**FIGURE 21: There are over £150 billion a year of inheritances and gifts, which are not counted as income in current statistics**



NOTES: 'July to June' figures are annualised. Dates refer to survey periods but respondents may report receipts from the last two years (but annualised). UK (with scaling for WAS figures). Excludes trusts. HMRC figures are based on when tax is received. Includes inheritances of £1,000 or more; and gifts of £500 or more.

SOURCE: RF analysis of ONS, Wealth and Assets Survey; HMRC, Inheritance Tax statistics.

<sup>64</sup> Note that in the case of household income analysis, we might want to exclude transfers within couples. There is also the possibility of universally deducting transfers from donors' income but: in practice, given that the bulk of transfers are from the deceased, this is irrelevant; and in theory, it also seems undesirable to mark down people's income simply because they choose to use it for gifts rather than personal consumption. Charitable donations, for example, are not deducted from household income. As Henry Simons put it, "[Even] If it is not more pleasant to give than to receive, one may still hesitate to assert that giving is not a form of consumption for the giver." H Simons, *Personal Income Taxation: the Definition of Income as a Problem of Fiscal Policy*, 1938.

<sup>65</sup> DWP, *Households Below Average Income (HBAI) Quality and Methodology Information Report 2018-19*, March 2020.

The scale of inheritances and gifts is large. We calculate there were £155 billion of inheritances and gifts in 2017-18 (excluding the smallest transfers), as Figure 21 shows. This figure is again based on the Wealth and Assets Survey, which provides invaluable information. But the major income surveys ask nothing about inheritances or gifts. Someone appearing in one of the surveys used to estimate the income distribution could have inherited £1 million and be spending most of their year yachting and yet be classed as in poverty.

## We propose an ‘Including Irregular Income’ measure, to complement regular income and the development of Distributional National Accounts

It could be argued that capital gains, irregular pension income, and inheritances should be seen as separate issues. One approach could simply be to make data about all these sources of income more available, so that researchers can make their own choices (transparently) about the income definition. But these different income forms are also related, through the Canberra Handbook’s distinction between regular and irregular income.

We believe there should be an income measure that includes taxable capital gains, irregular pension income, and inheritances and (large) gifts.<sup>66</sup> For specificity, we refer to this as an ‘Including Irregular Income’ (III) measure.<sup>67</sup>

This could be supplementary to the existing income definitions used in the UK’s statistics about the income distribution (in keeping with the Canberra Group’s suggestion of a ‘satellite account’ for capital gains), if for no other reason than that creating such data retrospectively is unlikely to be possible (there is little information on inheritances or pension lump sums prior to the introduction of the Wealth and Assets Survey in 2006,<sup>68</sup> and capital gains microdata does not go back beyond 1996-97).

Formalising a distinction between regular income and Including Irregular Income measures would also build on the Wealth and Assets Survey’s inclusion of a ‘net irregular income’ variable. This survey is in the process of being merged with other ONS data into a combined Household Finance Survey, which ETB will incorporate, and so this may be the ideal time to standardise income definitions.

As with existing household income data, there is a separate question of how housing costs should be treated in an Including Irregular Income measure. The HBAI data series

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<sup>66</sup> As mentioned in footnote 57, some smaller forms of irregular income could be included, with redundancy payments being the clearest case.

<sup>67</sup> As we have shown, capital gains are not always irregular, in the temporal sense, and nor are other forms of income always regular, but the ‘irregular’ term is used in the Wealth and Assets Survey and Canberra Handbook.

<sup>68</sup> On pension lump sums, the English Longitudinal Study of Ageing is one earlier exception.



deals with this issue by having separate 'before housing costs' and 'after housing costs' disposable income measures (as shown in Figure 1). But the ONS is also developing 'imputed rent' data that reflects the fact that homeowners are (all else equal) better off than non-homeowners due to not having to pay rent. Although this is a theoretically sensible way to account for the benefits of housing wealth – and imputed rent is an important part of the national accounts and of the CPIH measure of inflation – it is clearly distinct from cash income. To avoid a proliferation of measures, there may therefore be a case for including imputed rents alongside taxable capital gains, irregular pension income, and inheritances and (large) gifts in an Including Irregular Income definition. Such a measure would be close to the Haig-Simons 'comprehensive' income definition (although a theoretically pure approach would use accrued and real - rather than realised and nominal – capital gains).<sup>69</sup>

Introducing an Including Irregular Income measure would be very welcome. But a further consideration is the ONS's desire to move towards 'Distributional National Accounts' – buoyed by interest in such series around the world. One element of this is to better reconcile survey data with the aggregate income figures in the National Accounts. As we have set out, better accounting for some irregular income would aid with this. Pension lump sums are no different from regular pension income from a National Accounts point of view. Nor is it helpful for capital gains on liquidation and carried interest to be missing from statistics about the income distribution, given that they too are forms of remuneration for economic activity.

On the other hand, some irregular income is clearly not 'income' from a National Accounts perspective. Inheritances are private transfers rather than being related to economic production, and some capital gains are also not part of National Income. But that does not mean we should not be interested in them; indeed, part of the point of household income data is to focus on real living standards and inequalities rather than more abstract notions such as GDP. Again, this is comparable to the established question of how the (regular) receipt of pensions should be recorded. From a National Accounts perspective, we might record pension contributions as part of workers' remuneration, and record pension fund growth as investment income, while ignoring the actual draw-down of pensions as a mere liquidation of assets. But household income surveys have long been interested in that actual receipt, as a good measure of current living standards.

So an Including Irregular Income measure would be a complement to both National Accounts based approaches and the existing 'regular' income definition (as well as to

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<sup>69</sup> Note also that – in a roundabout way – including inheritances and imputed rents in living standards statistics would help reflect the great importance of housing wealth trends, even if main residence capital gains were not directly included.



expenditure and wealth statistics), and would provide a more expansive income measure to help give a broader understanding of living standards and inequalities.

Finally, it should be noted that household surveys have an important role to play in measuring 'irregular' income. Administrative data can act as a useful complement (or even, in time, a replacement) for data collected in household surveys: such as when measuring earnings, regular pension income, income from social security benefits, and taxable capital gains. But there are other areas where administrative data cannot help, as the relevant information is not collected for any administrative reasons. These include capital gains below the annual exempt amount (as discussed earlier), tax-free pension lump-sums, and inheritances.<sup>70</sup> There is a strong argument that household surveys should therefore begin to add further questions in these areas, as the use of administrative data becomes more common for others. It is also worth noting that while the Wealth and Assets Survey is already a valuable source of information about some irregular income, it does not cover Northern Ireland, nor the very north of Scotland or the Isles of Scilly.

Overall then, for the fullest picture of incomes and inequalities we believe the ONS should not overlook taxable capital gains if, or when, it makes use of self-assessment tax data; it should ensure that survey questions increasingly focus on forms of income that administrative data can't provide; and it should move towards pairing statistics on regular income with an Including Irregular Income measure. We bring together our specific recommendations in the following section.

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<sup>70</sup> In the case of inheritances, administrative data is based on estates (i.e. the deceased) but does not include any information about amounts received by each inheritor. This is a consequence of how Inheritance Tax works in the UK, but it is information about recipients' individual inheritances that is needed for understanding living standards.

## Section 5

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### Conclusion and recommendations

Income statistics are a critical tool for scrutinising the economy and society, especially in difficult times such as the current coronavirus crisis. And the next few years are set to be an important time for the production of such statistics. The ONS is merging surveys to create bigger sample sizes; using administrative data to make broad adjustments; planning to use administrative data directly to get accurate incomes; experimenting with purely admin-based approaches that allow fine geographic analysis; and – like other researchers around the world – adding distributional elements to the National Accounts.<sup>71</sup> Distributional statistics may also become more timely (as has recently happened for earnings using Real Time Information),<sup>72</sup> and nowcasting and forecasting methods – including at the Resolution Foundation – now give a good sense of where trends are heading.<sup>73</sup> HMRC's Datalab is also allowing researchers to do novel analysis, including linking individual income data with multiple other tax data sources; and in future we may also see links with other types of administrative data, such as around education or migration.

These are ongoing processes. But the broad conclusion of this report is that income statistics should not be rigidly tied to the concept of 'taxable income' (i.e. income assessable for Income Tax), nor to that of 'regular income' (as set out in the Canberra Handbook). The distinctions that these throw up do not always match the realities of living standards and economic inequalities, and risk hiding important trends and income gaps.

Given the emergence of new data sources, and to make the most of the UK's income statistics revolution, the table below brings together our specific recommendations. We hope these might provide a basis for a new consensus about the income concepts used in UK statistics, and help fill in some of the gaps in the understanding of household incomes.

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<sup>71</sup> For more details on some of these, see: ONS, [Transformation of ONS household financial statistics: ONS statistical outputs workplan, 2018 to 2019](#), June 2018.

<sup>72</sup> e.g. ONS, [Earnings and employment from Pay As You Earn Real Time Information](#), May 2020.

<sup>73</sup> e.g. ONS, [Effects of taxes and benefits on UK household income – provisional estimate: financial year ending 2019](#), July 2019.

## Summary of recommendations for income statistics and microdata

To bring capital gains and other irregular income into the UK's income analysis, our central recommendation is that:

- The ONS should add a supplementary 'Including Irregular Income' measure of household income to its published income and inequality statistics and its microdata, particularly the new Household Finance Survey and related Effects of Taxes and Benefits on Household Income data. This data would therefore include (both individually and within the supplementary total measure):
  - Taxable capital gains, ideally taken directly from HMRC tax records;
  - Irregular pension withdrawals, as collected in the Wealth and Assets Survey;
  - Inheritances and (large) gifts, as collected in the Wealth and Assets Survey;
  - Potentially: smaller irregular sources such as redundancy payments, as collected in the Wealth and Assets Survey; and
  - Potentially: imputed rent, as in unpublished ONS microdata.

To aid this goal and provide additional information:

- HMRC should add CGT records into the current public use Survey of Personal Incomes dataset
- When the ONS (and, ideally, the DWP) begins linking individual household survey (particularly Household Finance Survey) responses to administrative tax data, taxable capital gains data should also be carried over, both for ONS research and for inclusion in public microdata
- The ONS's experimental, purely 'admin-based' household income analysis should also consider using data on taxable capital gains
- Other sources of income excluded from taxable income, such as foreign income of 'non-doms', some income from trusts, ISA income, and untaxed pension lump sums should also be accounted for where possible by users of tax-based data, recognising that the Survey of Personal Incomes does not include all forms of personal income
- The DWP and ONS should explore whether the exclusion of irregular pension income has affected any income trends in recent years, and standardise approaches to regular and irregular lump sums

- The ONS and DWP should extend the Wealth and Assets Survey's inheritance questions to other surveys, so as to increase the number of households providing information on inheritances, and to ensure that such questions cover the whole of the UK
- The ONS and DWP should add or amend survey questions to better identify those working through closely-held companies (via both the Labour Force Survey and household income surveys)
- The ONS should seek to use administrative data to add accurate house price information (potentially including main residence capital gains) into its survey microdata
- The ONS and DWP should consider whether household surveys can provide new information on unreported gains – and losses – below the annual exempt amount
- Other owners of household surveys that provide information on income - including the "Understanding Society" dataset - should also consider adopting these recommendations

Although settling on any practical definition – or definitions - of income is not easy, our research emphasises the sensitivity of current income and inequality measures to such definitional choices. This shows that there is at the very least a need to widen access to data on irregular incomes, so that the impacts of these choices can be made more transparent. And we hope that the more expansive definition of income that we recommend would be a valuable addition to the UK's income statistics.

Finally, although the focus of this report is not on tax policy, Sections 2 and 3 of this report reemphasise that having different tax rates for different forms of labour market activity is a longstanding problem for horizontal equity and the robustness of the UK's tax system.<sup>74</sup> Changes in the March 2020 Budget have helped to ameliorate these (particularly in relation to entrepreneurs' relief), and the current crisis will no doubt reduce capital gains in the short term at least, but the UK tax system remains plagued by horizontal inequities that will continue to unnecessarily distort people's financial choices. We have also shown that vertical inequities remain a problem: with high top income shares and a very uneven distribution of wealth still an important part of the backdrop for British policymaking.

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<sup>74</sup> A Corlett, [The shifting shape of UK tax](#), Resolution Foundation, November 2019.

The Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low to middle incomes by delivering change in areas where they are currently disadvantaged.

We do this by undertaking research and analysis to understand the challenges facing people on a low to middle income, developing practical and effective policy proposals; and engaging with policy makers and stakeholders to influence decision-making and bring about change.

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