

Reform of Capital Gains Tax for Private Residences

Summary

1. The government commits to preserving the value of private residences from CGT, and claims that the linear assessment method for private residence relief achieves this in the overwhelming majority of cases.
2. It is shown that in the real world this is only supportable when the method is supported by certain ancillary reliefs, particularly lettings relief.
3. The abolition or curtailment of these reliefs planned for 2020 will seriously increase the likelihood that the government will fail to meet their stated commitment.
4. An alternative approach based on indexed-assessments is proposed that will ultimately be more equitable and will restore credibility in the government commitment, particularly if supported by valuation-based appeals.
5. The new approach is no more complex to operate than the existing one, and is compatible with abolition of some ancillary reliefs. It should not reduce tax take over the long term and might very well increase it.

Abbreviations and notation

CGT	capital gains tax	HMRC	Her Majesty's Revenue and Customs
ESC	extra-statutory concession	HPI	house price index
FPE	final period exemption	LR	lettings relief
FPER	final period exemption relief	PRR	private residence relief

For brevity, values are expressed as £k (thousands of pounds)

Introduction

It is a government commitment that the value of a house used as a main residence should be free of CGT, meaning that any gain in value up to the point that it ceased to be a main residence should be preserved from CGT at that point. This reason for the commitment is that the increase in value of a main residence does not represent a real gain as it is usually required to fund a new main residence.

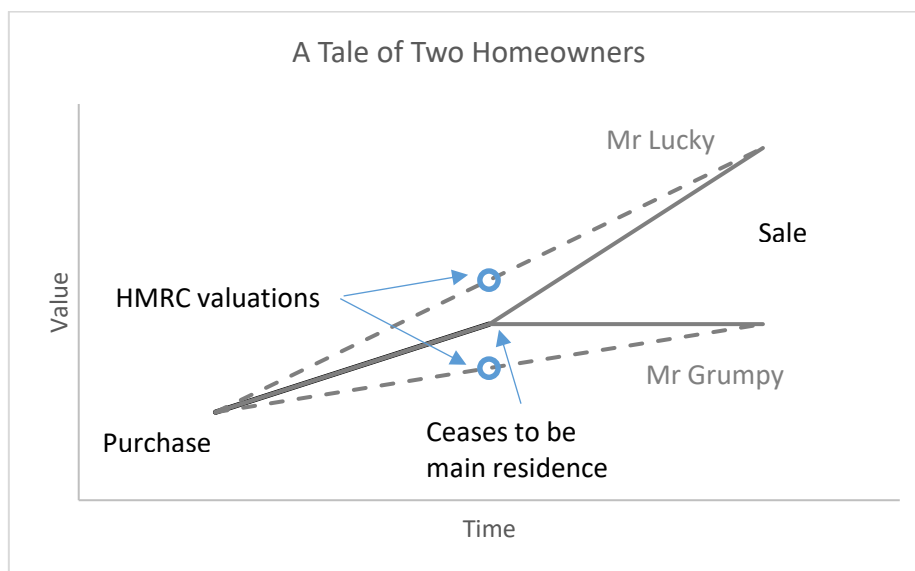
Sometimes a homeowner will fund the purchase of a new main residence by means other than the immediate sale of their existing house. They might use their savings, for example, or take out a new mortgage, reinstating the savings or paying off the mortgage when their former house is sold at a later date. Therefore the system should be capable of preserving from CGT the value of that house at transfer in perpetuity or the state will have crossed a line from taxing gain to taxing savings.

There are many for reasons for retaining a former main residence for a period after obtaining a new one: securing an income, prolonged renovations or construction of the new house, difficulty in selling due to market conditions, legal issues and so forth. Whatever the reason, home owners who do this create a conundrum for HMRC. Although the gain up to transfer should be preserved, capital gains tax should rightly accrue on any subsequent increase in value. But without a transaction at the point of transfer of main residence it is difficult to be certain of this value.

This problem also surfaces in a slightly more complex form when there are periods when old main residence or parts of it do not have the status of a main residence, such as when it is let or otherwise used as a business, continuously or periodically and in part or in whole. All of these situations are logically, legally (at present) and, in terms of assessing tax, mathematically similar. The central problem is how to meet the government commitment simply, transparently and without expending disproportionate HMRC resources.

The current method and its deficiencies

The assessment of CGT starts with two values known with certainty: the initial purchase price and the final sale price. The current method for valuing a home at any intermediate point in time, and so apportioning gain, is based on an assumption that property values increase linearly. Knowing the starting price and the ending price, the value at any point in between is determined on a pro-rata basis. This prescription, called time- or linear-apportionment, works brilliantly if house prices increase linearly everywhere, but they do not.



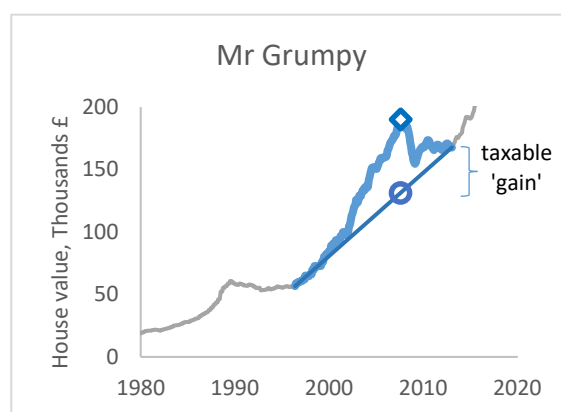
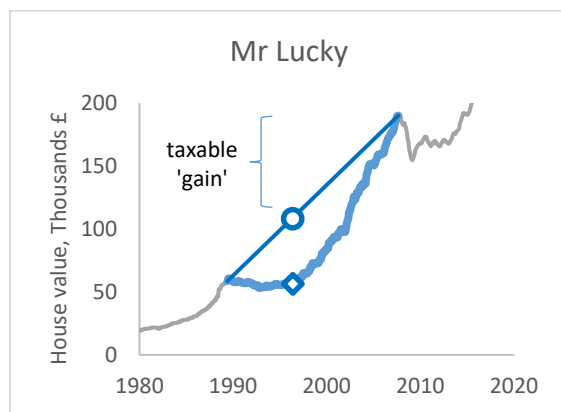
Consider two extreme scenarios, Mr Lucky and Mr Grumpy, whose house values increase at the same linear rate while a main residence but differently thereafter. There is a house price boom just after Mr Lucky's house ceases to be a main residence and so he makes a windfall gain during this period, realised on final sale. He gets a further bonus because the linear formula will overvalue the house at the point when it ceased to be a main residence (open circle) and so the subsequent capital gain will be underestimated. Mr Lucky is happy but the Treasury loses out; it should be sharing rather more of his windfall. Mr Grumpy suffers house price stagnation during this period. The linear formula will undervalue his house at the point where it ceased to be a main residence and he will become liable for CGT despite making no gain at all. The longer the stagnation lasts, the lower his house will be valued by linear apportionment and the more CGT liability will accrue. Worse, if there is a recession (a fall in house prices) then Mr Grumpy will still become liable for CGT despite a steadily increasing capital loss. Virtually the entire gain since first purchase could become liable for CGT if the stagnation or recession lasts long enough.

These are not abstract scenarios; they can be illustrated with concrete examples based on average house prices from the Land Registry (see 'real world examples'). It is the perfect injustice: those who enjoy large gains are rewarded and those less fortunate are further disadvantaged. This is neither equitable nor particularly apparent from the actual assessment procedure, where value is couched

in terms of gain and relief. The private residence relief (PRR) is supposed to be the true change in value (gain) of the house while a private residence but, except in rare cases, is only allowed by HMRC to be assessed from the overall gain using linear apportionment. The 'real world examples' do nothing more than present this relief in terms of assessed house value, showing how appallingly ineffective it can be in preserving that value.

Real world examples (booms, busts and stagnation)

In 1989 Mr Lucky bought a 3-bed semi for £60k. Prices fell for the next 7 years and when he bought a new house in 1996, letting the old one, his original house was worth about £56k (open diamond). There followed a decade-long boom before he sold it for £190k in 2007. He should be liable for CGT on a gain of £134k, its increase in value between 1996 and 2007 while not a main residence, but HMRC's linear formula will assess its value in 1996 as £104k (open circle), giving a taxable gain of only £86k. HMRC have valued his 3-bed semi as a 4-bed detached, gifting him an extra tax-free allowance of £48k, and Mr Lucky pays many thousands of pounds less in tax than he should.



In 1996 Mr Grumpy bought a 3-bed semi for £56k. Prices rose for the next decade and when he bought a new house in 2007, his original house was worth about £190k (diamond). There followed a financial crisis and he sold his old house for £168k in 2013. His CGT liability should be zero, as his house lost £22k in value between 2007, when it ceased to be the main residence, and 2013 when sold. HMRC's linear formula will value it at £132k in 2007, generating an entirely imaginary taxable gain of £36k. Mr Grumpy's £22k loss will be amplified by a tax bill of several thousand pounds.

For Mr Grumpy, the value of his house has not been preserved at the point where it ceased to be a main residence. About £58k, over 30%, has been wiped off its value by a mathematical pencil and ruler. His 3-bed semi has been valued as a 2-bed flat; it is plainly absurd. The CGT generated in this and similar scenarios becomes a tax not on gain but on savings, now held in bricks and mortar.

Luckily, there are mitigations in the form of ancillary reliefs. First, there is final period exemption (FPE). When Mr. Lucky and Mr. Grumpy (see 'real world examples') sold their properties, three tax-free years were allowed to sell an ex-main residence, equivalent to subtracting three years' worth of gain from the CGT liability. Also, for those who those who make their house available to tenants, there is lettings relief (LR). When this was introduced in 1980 it allowed up to £10k of tax free capital gain during a letting, increased to £40k in 1992. As shown later, if Mr Grumpy had tenanted his devaluing house these reliefs would have reduced his tax bill in 2013 to the correct value: zero. He would have lost money in the house price slump following the 2008 financial crisis, but at least he would have been spared tax on the loss. The government's commitment to preserving the value of a private residence was largely redeemed by these reliefs in this situation.

These mitigations are to be severely curtailed. In April 2020 FPE will be reduced to 9 months (having been reduced to 18 months in 2014) and LR will be abolished for non-resident landlords. The latter constitutes a radical change in policy from the 1980 Act that introduced it, which recognised an identity of all entities that had once been a main residence. This means that all of those who change dwelling during a period of stagnation or recession but have not, for whatever reason, sold their house within 9 months will potentially face a gradually increasing fictitious gain in the eyes of HMRC, whether or not they rent the unsold house. Taxation will eat into their brick and mortar savings rendering hollow the government's commitment to protecting them.

There is clearly a question of natural justice here. The tax system should not reinforce fortune and exacerbate misfortune. It should present a level playing field and fulfil its purpose of preserving from CGT the value of a house at the point that it ceased to be a main residence, ensuring that everyone pays the right tax, irrespective of the evolution of property prices.

Fixing it

Whilst perfection is hard to achieve, it is quite easy do a lot better using a combination of valuations and indexed assessments, as now described.

The gold standard: individual valuations

There are many reasons why the value of a property might perform badly after ceasing to be a main residence. There may be a general economic malaise, due to bank crises or Brexit perhaps. There may be locally reduced demand as a result of the closure of key employers, or the competition from new housing developments, or planning blight, or simple unfashionability. The property may have become dilapidated by the actions of its occupiers or by the neglect or failing health of its owner. Conversely, property may perform well: inward investment or increased local fashionability may bring a windfall. Few of these effects are amenable to rigorous mathematics.

Therefore, the only way of guaranteeing that everyone pays the right tax in all circumstances is via real valuations as opposed to mathematical ones. If, on purchase of a new main residence, the homeowner obtains a valuation on the existing one then HMRC will have a fixed and firm basis to calculate CGT at any future date in the same way as a buy-to-let landlord or any other purchaser. HMRC are quite used to this as they already allow various kinds of taxpayer-supplied valuations for several CGT purposes via form RC34; indeed they insist on it when a home has been gifted or sold for below market value.

Scrapping the linear formula and replacing it with an entirely value-based system would be possible, but may be resource intensive for both HMRC and the homeowner. It would greatly increase the volume of RC34 forms that HMRC would have to deal with and, on changing a main residence, homeowners would have to ensure that they always obtained valuations that would satisfy HMRC.

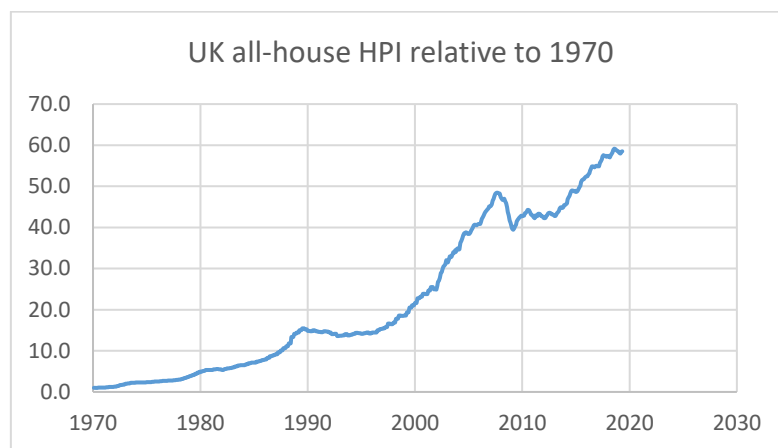
An alternative would be to retain the current linear assessment method but allow appeals where the homeowner feels particularly aggrieved and has the evidence to prove it (at present, no such recourse is allowed). This would produce a rather erratic workload for HMRC. They would see few appeals during housing booms, when fabulous gains would be enhanced by lower than deserved CGT, but they may be overwhelmed with RC34 forms during lulls or recessions where, without lettings relief, hordes of grumpy homeowners would be suffering taxed losses.

How do we even the load curve for HMRC and still attain fairness and even-handedness for the homeowner and general taxpayer?

A pragmatic partner: indexed assessments

Whilst many causes of house price changes are not amenable to mathematical treatment, long term national or regional trends are an exception. The venerable antique of linear apportionment is the standard way of doing this. It is nothing more than a simple form of house price index (HPI) that evolved before the days when prodigious effort was put into the compilation of real ones, which are now readily available from various sources such as the Land Registry. These offer a viable modern alternative. The linear model takes the start price and end price and uses a mathematical function, in this case a straight line, to get any value in between. Changing the straight line to any other variation, including a house price index tabulation, is quite straightforward. The fact that a real HPI is tabulated rather than calculated is a question of technique, not principle.

The similarity in methodology between an apportionment of gain based on a linear assumption and one based on house price index is set out in Appendix A. The following explores some real examples that demonstrate its practicality. The house price index used in these examples is the all-house UK-wide one available from the Land Registry and normalised to unity in 1970 and shown below, but any baseline date could be used provided it is consistent throughout the calculation.



The examples are given in terms of the HMRC system of reliefs. For clarity, the essentials are restated here. The starting point is the *Gain* on a residence, defined by:

$$\text{Gain} = \text{Final sale price} - \text{Original purchase price}$$

The part of this gain that is exempt from CGT (the relief) is subtracted from this total to give the gain chargeable to CGT:

$$\text{Chargeable Gain} = \text{Gain} - \text{Reliefs}$$

The main reliefs are private residence relief (PRR), final period exemption relief (FPER) and lettings relief (LR).

$$\text{Reliefs} = \text{PRR} + \text{FPER} + \text{LR}$$

There are a few other reliefs and concessions, considered later.

Private residence relief (PRR)

A useful approach is to construct a complete history of ownership of a home. Ownership is divided into periods of different main residence fractions, starting with the date of purchase and ending with the date of sale. If the dwelling is 100% used as a main residence the fraction is unity; if it is a second

home or 100% used for business the fraction is zero. If several rooms are rented, or an office is dedicated to trading activities, it will be between zero and one.

The particularly simple table for Mr. Grumpy is shown below. Time is measured in months but any units will do. A and B are the sums of the last two columns. His PRR is calculated from his gain multiplied by B/A. His gain was £112k so his PRR is £112k x 135.6/199.7 = £76k, giving a taxable gain of £112k-£76k = £36k as before (see 'Real world examples').

Table 1: Mr Grumpy's home ownership record for a linear CGT assessment

		Enter			Calculate	
period	description	from	to	main res. fraction (f)	duration (months)	f*duration (months)
1	Main Res.	13/05/1996	30/08/2007	1	135.6	135.6
2	Second home.	01/09/2007	04/01/2013	0	64.1	0.0
					199.7	135.6
					A	B

An indexed assessment looks very similar (below). The only difference is that instead of calculating the change in time, or duration, of each period, the change in HPI during the period is calculated from HPI values that are looked up. Mr Grumpy's PRR is £112k x 38.1/28.4 = £134.5k, giving a taxable gain of £112k-£134.5k = -£22.5k. The value is negative, correctly indicating that Mr. Grumpy has made a loss since his house ceased to be a main residence.

Table 2: Mr Grumpy's home ownership record for an indexed CGT assessment

		Enter			Look up		Calculate	
period	description	from	to	main res. fraction (f)	HPI at start	HPI at end	change in HPI	f x (change in HPI)
1	Main Res.	13/05/1996	30/08/2007	1	14.4	48.5	34.1	34.1
2	Second home.	01/09/2007	04/01/2013	0	48.5	42.8	-5.7	0.0
							28.4	38.1
							A	B

The linear formula is incapable of generating intermediate losses, and this ability of the indexed assessment has two corollaries:

- Mr Grumpy will pay no tax, which is the correct outcome.
- The loss can be offset against other gains.

This is illustrated by the following example. Mr. Grumpier has the same type of house as Mr Grumpy, bought and sold on the same day for the same price but after 3 years of ownership he loses his job. He starts up a business on the new 'eBay' platform devoting 20% of his house to it. After three years it is floundering but he finds a short-term job away from home, leaving the house empty but still claimable as a main residence (see Appendix A, absence reliefs). On his return he lets 30% of the house, changing this to fully let when he finds a long-term job in London and moves there. From a tax point of view it is immaterial whether he buys a new house in London or is obliged to rent accommodation. He sells the old house in 2013 when the job becomes permanent.

Using indexed apportionment (table below) his PRR is £112k x 28.5/28.4 = £112.4k. This is higher than his overall gain so he has made a slight loss and has no taxable gain - without claiming any further reliefs. This is because the gain in house value during his two periods of business use are offset by the loss during the final letting. Using the linear method it is an easy exercise to show that his taxable gain rises from the same as Mr Grumpy (£36k) to nearly £50k. Earlier gains are not set off against the loss during the final let.

Table 3: Mr Grumpier's home ownership record for an indexed CGT assessment

period	description	Enter			Look up		Calculate	
		from	to	main res. fraction (f)	HPI at start	HPI at End	change in HPI	f x (change in HPI)
1	Fully occupied	13/05/1996	27/03/1999	1	14.4	19.0	4.6	4.6
2	eBay (20%)	26/03/1999	03/03/2003	0.8	19.0	26.7	7.7	6.2
3	Main but absent	04/03/2003	03/03/2004	1	26.7	35.0	8.3	8.3
4	Part let (30%)	04/03/2004	30/08/2007	0.7	35.0	48.5	13.5	9.5
5	Full let	01/09/2007	04/01/2013	0	48.5	42.8	-5.7	0.0
							28.4	28.5
							A	B

Final period exemption (FPE)

The chargeable gain in these examples would be reduced by FPE, then 36 months. Using a linear model FPE relief (FPER), the gain attributable to this period, would have been £112k x 36/199.7 = £20k reducing chargeable gain to £16k for Mr Grumpy. This would have helped greatly to achieve justice (and still does with FPE at 18 months¹).

How do we approach FPE when using an indexed assessment? FPE relief prevents CGT liability for a period of time prior to sale after a house ceases to be a main residence. There is no need to do this if house prices really are rising linearly or faster as the homeowner will make a real windfall capital gain from delaying the sale. Apart from the short period between offer (when the price is fixed) and completion (when taxed), FPE only increases his luck. It is more useful in circumstances of low growth, stagnation or recession where it alleviates the bogus capital gain generated by the linear formula. FPE is an acknowledgement that linear growth model is imperfect over a short time scale.

It follows that if using the indexed model, which works in terms of HPI and so takes static or falling prices into account at all times, FPE could probably be abolished without financial detriment given an appropriate definition of the timing of a sale (the date of offer may be most appropriate). This applies to all FPE variants, including FPE for the disabled or those going into care.

Lettings relief (LR)

Chargeable gain is further reduced by lettings relief. This is a rather complex entity that depends on the PRR already calculated and the 'gain due to letting', subject to a maximum of £40k for a single person and £80k for a couple. On a linear assessment, had Mr Grumpy (Table 1) let his former house he would benefit from a letting relief of about £112k x (64.1-36)/119.7 = £26.3k which would have reduced his taxable gain from £36k to about £10k, still not the correct value of zero (no FPR can be added because the letting extends to sale) but close. Mr Grumpier's gain would also be reduced from nearly £50k to a similar amount; only the 'eBay' period would be taxable².

For indexed apportionment, the approach to LR depends upon its purpose. As demonstrated for the 'Grumpys', lettings relief mitigates the deficiencies of the linear assessment method if house prices are relatively static or falling, in the same way as FPE, but only for houses that are let. There is no need for this mitigation when using the index method, which takes static or falling prices into account, so lettings relief could be abolished on the same basis as FPE. This puts landlords and non-letting owners of second homes on the same basis.

¹ Using the FPE of 9 months intended from April 2020 would reduce gains by only £5k in a similar situation.

² Had lettings relief been abolished 7 years ago (in 2012) in the same retrospective way as planned for 2020 both loss-making 'Grumpies' would be thousands of pounds out of pocket.

However, if the aim of lettings relief is to encourage letting of empty rooms or properties then it could be retained and incorporated in the indexed assessment in several ways. Whatever the method, shorn of its mitigating role LRR becomes a straight inducement to an owner of an ex-main home or an active main residence large enough to have rooms to let.

Other reliefs

Whilst absence from a main residence does not generally attract PRR there are situations where it does (see Appendix B). For example, Mr Grumpier's period 3 is less than 36 months, so it is legitimate to put the main residence fraction, f , as unity. Had it been longer, period 3 would have to be split into two: one of 36 months attracting full PRR and a residue with no entitlement ($f = 0$). Unlike the linear approach, the issue of their order then arises, as the changes in HPI during each could affect the overall gain. Some work-related absences can be 48 months or longer, but the issues are the same. The mechanics are not difficult, but the time restrictions do introduce complications.

It would be slightly simpler if all such time restrictions were abolished. That is to say, if any citizen of the UK, normally resident in the UK, were be able to own one house denoted as a private residence that is free of CGT, irrespective of how long it is actually occupied by them³. However, the system is quite manageable without this amendment.

Some statutory concessions are noted in Appendix A, connected with renovations and main residence nomination. They can probably be discontinued or replaced with a suitable definition or declaration of the date when one residence becomes main.

Practical issues

The foregoing demonstrates that an indexed assessment looks little different from using linear time to apportion gains. There is one additional step, looking up HPI, which takes minutes to complete. Hand calculations of tax liability remain feasible, and even the lookup step could be automated in a simple App or spreadsheet such that the input required from the user would be exactly the same as the linear assessment. An indexed-based assessment will probably not, in the long term, reduce the income to the exchequer; this income will actually be higher if house prices consistently outstrip a linear growth (Appendix B).

Indexed assessment has the following advantages:

- It is fairer to everyone. In both booms and busts tax bills will more closely approximate true liabilities. Bonuses for landlord windfalls and scope for surreptitious pilfering of savings by government would be much reduced, or at least balanced across the taxpayer base.
- It is simpler in some respects, in that several reliefs can be discontinued.
- It alleviates concerns about future property prices and government policy on CGT allowances, rates and reliefs when managing the ultimate disposal of a former home.

There are a few issues to address:

- There are many house price indices, for different areas, property types and buyer profiles for example. The problem of statistical variations would probably dictate a national or large regional level.

³ It is not obvious what function the limits perform. Their effect is that someone who buys a house, their only owned property, but chooses or is obliged for whatever reason to then live elsewhere in the UK in rented accommodation, for however long, not be able to exchange the house for one of equal value when and where they are finally able to settle down. It hardly seems fair that the taxman should impede this dream by taking a large slice.

- No house price exactly follows any HPI. There may be significant local or individual variations. Extensive new build for example will bias house prices upwards making a locality seem to be undergoing a boom when legacy owners are experiencing relative stagnation.

However, the aim of the indexed method is not to achieve perfection, but to arrive at a routine tax assessment that is sufficiently accurate to minimise discontent. Assuming CGT allowances of £12,000 for a single person and £24,000 for a couple, any assessment method would have to undervalue by more than these amounts to upset most homeowners (those with no other gains). As seen earlier, and shown in more detail in Appendix B, discrepancies greatly in excess of this are not unusual with the linear method⁴, even for the average house, but are a lot less likely in the indexed model where national changes in value are accounted for and only local or individual discrepancies remain.

Full justice is served by allowing valuation-based appeals for those few cases where a homeowner feels particularly aggrieved and has the evidence to prove it, a recourse to justice that is denied at present. Possible sources of individual valuations (roughly in reverse order of credibility) are:

- Sale prices of similar houses in the immediate locality: probably reasonably reliable for the millions of bog-standard estate houses in the UK.
- Estate agent valuations: those contemplating keeping their former house may have also explored its sale and so could have several agent valuations. While these are often overestimates, they are usually not wildly so.
- Failed sales: those keeping their former house may very well have attempted a sale and have offers that were not accepted or that were accepted and fell through for some reason.
- RICS valuations: homeowners contemplating keeping a house would probably spend the few hundred pounds that these cost for future peace of mind if they were confident that it would be admissible as evidence.

Fraudulent manipulation of some of these could be a problem once their admissibility is generally known. This should not affect legacy valuations obtained in the absence of this knowledge.

Although indexed assessment and the natural disinclination of taxpayers to lock horns with HMRC should largely avoid appeals, some inducements and discouragements/restrictions might be legitimately deployed to reduce them further (Appendix B). Inducements might include measures to:

- Confer an additional CGT allowance on ex-main residences to deflect low-value appeals. As well as paying for itself in appeal reductions, the cost would probably be small compared with the tax levied by the rather inequitable enhanced CGT rate on property.
- Offer a choice of HPI. The taxpayer could be allowed to use a regional HPI instead of the national one, paying the lower tax of the two. In most cases there would probably not be a great deal of difference (except maybe for London and Northern Ireland; Appendix B) but enough, perhaps, to deflect an appeal. Switching HPI is not much more effort for the taxpayer, even if done by hand, and using an App it would be no more than an additional button press.
- Reduce the CGT rate for property to the same level as for passive investments. It is not obvious why it should be any higher.

⁴ Overpayment of CGT on any main residence let before the turn of the century is unlikely to be of any concern, whatever the model, unless general house values fall by more than 50%.

Some options for discouragement or restrictions are:

- Restrict appeals to simple cases, with only one or two valuation points. In most cases, one point will do, as most will leave a main residence only once.
- Make it known that HMRC will treat valuations with caution and may require diverse evidence (to combat fraud) or apply appropriate corrections to those deemed exaggerated.
- Allow appeals only if the disputed tax is above a certain threshold (either fixed or a small percentage of the asset value).
- Charge the taxpayer for appeals a sum related to their cost, or a percentage of the asset value or disputed tax.
- Impose penalties for fraudulent valuations at a high multiple of tax incurred.

With sufficient strong inducements, which bias the outcome slightly to the taxpayer, there would be little detriment in continuing to deny the right to appeal, obviating the need for discouragements. Appendix B sets out a method for ensuring this.

Even without appeals an indexed assessment would be fairer than a linear apportionment, particularly shorn of lettings relief. Its introduction as the primary method for calculating PRR or as an alternative to it, if necessary without any other ancillary allowances bar absence 'reliefs', is now essential, particularly if, as seems likely, the UK is entering a protracted period of house price stability. This scenario is highly desirable from the viewpoint of affordability and it is of no concern whatever that it should cost second home owners their profits. It is a little less just that the tax system should also cost them their savings. Recourse to a fairer form of assessment is urgently required.

Conclusions

On the one hand the government commits to protecting the value of a main residence from CGT but on the other hand presides over an assessment method with the potential to wipe many tens thousands of pounds off that value, resulting in large taxes on small gains or even on losses.

Mitigation of this anomaly depends on ancillary reliefs, but important ones are to be abolished or curtailed in 2020. A new methodology is urgently required to maintain equitability.

This paper offers an improved approach that, while not perfect, will deliver the government commitment with high reliability. Index-based assessments of private residence relief will do the bulk of the work as an alternative to, or ideally supplanting, linear apportionment.

Valuation-based appeals would cover exceptional cases, enabling full justice to be delivered for all: homeowners, HMRC and the general taxpayer.

The method might simplify the tax system by dispensing with some extraneous reliefs.

The proposal should not reduce overall tax take over the long term and may very well increase it.

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August 2019

Appendix A: Gain and Relief

This Appendix considers the mathematical aspects of switching from the current basis of linear apportionment for calculating CGT to one based on house price index (HPI) data.

Gain

The starting point of an assessment of CGT on a property is to evaluate the *Gain* realised on its sale, defined simply as the difference between the sale price (P_{sale}) and the original purchase price ($P_{purchase}$) of the property:

$$Gain = P_{sale} - P_{purchase}$$

Not all of this gain is chargeable to tax. The chargeable part is obtained by subtracting the tax-free parts, known as reliefs.

$$Chargeable\ Gain = Gain - Reliefs$$

The main reliefs are private residence relief (PRR), final period exemption relief (FPER) and letting relief (LR).

$$Reliefs = PRR + FPER + LR$$

There are several other reliefs which cover absences from the property for short periods.

As well as reliefs, there has to be a means of allowing for investments (capital sums spent on the property) and divestments (gains already made)

Reliefs

Private residence relief (PRR)

The design intent of PRR is to ensure that any gain made during periods of private residence is free from CGT in perpetuity. Periods where the dwelling is used for business are taxed on ultimate sale.

a) The Simple case: a single period of full main residency followed by business use

In the current linear apportionment method the tax free gain due to main residency (or PRR) is just gain over the whole life multiplied by the fraction of time that the house was a main residence:

$$PRR = Gain \times \frac{\Delta t}{(t_{sale} - t_{purchase})}$$

Here Δt is the duration that the house was a main residence. The remaining time it was used wholly for business.

It is a simple matter to express the gain in terms of house price index for this case, the formula is:

$$PRR = Gain \times \frac{\Delta H}{(H_{sale} - H_{purchase})}$$

Here ΔH is the change in house price index when the house was a main residence. In other words, take the gain over the whole life and multiply it by the fractional change in house price index during the period when the house was a main residence.

b) Multiple residence periods

If there are many periods where a house is a main residence interspersed with periods where it is not, the linear formula becomes:

$$PRR = Gain \times \frac{\sum \Delta t_i}{(t_{sale} - t_{purchase})}$$

and the indexed one is:

$$PRR = Gain \times \frac{\sum \Delta H_i}{(H_{sale} - H_{purchase})}$$

Here, the subscript '*i*' identifies a particular period of full main residency, Σ means 'sum of' and the Δt_i and ΔH_i are changes in *t* and *H* during each period. So $\Sigma \Delta t_i$ is just the total time that the house was a main residence, and $\Sigma \Delta H_i$ means add up all the changes in house price index when the house was a main residence.

Individual ΔH_i can be zero or negative, and this could give what appears to be an anomalous result. Consider two owners who buy identical houses for the same price, later sell them for the same higher price and in between let them for the same overall fraction of time. They would have the same tax liability on final sale using the linear formula, but could have quite different ones under the indexed formula if one of them had let during spring/summer (when house prices tend to rise) and the other during autumn/winter (when there is more of a tendency to stagnation or fall). This, however, reflects the real balance of its use as a main residence and as an investment.

c) Partial main residency

In the previous cases, the house is either fully a main residence or fully used for business. Sometimes part of the house a main residence and part used for business purposes. This is easily accommodated. For each period '*i*' we need to know the fraction of the house that is used as a main residence. Denoting this 'main residence fraction' as f_i the PRR in the linear approach is:

$$PRR = Gain \times \frac{\sum f_i \Delta t_i}{(t_{sale} - t_{purchase})}$$

In the indexed approach it is:

$$PRR = Gain \times \frac{\sum f_i \Delta H_i}{(H_{sale} - H_{purchase})}$$

The 'main residence fraction' f_i is the same as $(1 - g_i)$, where g_i is the fraction of the house that is used for business purposes during the period '*i*'.

Final period exemption relief (FPER)

Chargeable gain is reduced further by Final Period Exemption (FPE). This is a time period allowed prior to disposal, whatever the use. FPE was 36 months in 1992, is 18 months currently and will be 9 months from April 2020. FPE relief (in pounds, here denoted FPER) is the gain attributable to this period. On the linear model, it is calculated from the total gain over the whole period of ownership on a pro-rata basis. i.e.

$$FPER = Gain \times \frac{FPE}{(t_{sale} - t_{purchase})}$$

In principle, the same gain could be accorded in the indexed model, or the FPE could be expressed in terms of HPI, giving a relief of (for example):

$$FPER = Gain \times \frac{\Delta H_{FPE}}{(H_{sale} - H_{purchase})}$$

In practice, the concept of FPER is redundant in the indexed model if properly implemented. It is a matter of policy not mathematics and is discussed in the main text.

Lettings relief (LR)

Chargeable gain is further reduced by Lettings Relief (LR). Lettings relief is a rather complex entity, given by:

$$LR = \text{minimum of } \begin{cases} PRR \\ \text{Gain due to letting} \\ \text{£40,000} \end{cases}$$

The £40,000 limit is doubled for a couple. PRR is discussed above. The gain due to letting is given in the linear model by:

$$\text{Gain due to letting} = Gain \times \frac{\sum r_i \Delta t_i}{(t_{sale} - t_{purchase})}$$

Where r_i is the fraction rented during period i . r_i will normally be $1 - f_i$ unless part of the dwelling is used for other business purposes.

The gain due to letting in the indexed model, in terms of HPI, is:

$$\text{Gain due to letting} = Gain \times \frac{\sum r_i \Delta H_i}{(H_{sale} - H_{purchase})}$$

However, as with FPE, in the indexed model LR loses its function of mitigating the excesses of the linear model and becomes a matter of policy (whether to encourage or discourage letting) not mathematics. This is discussed in the main text.

Absence reliefs

Absence from a main residence is treated in a similar way as using it as a business or investment, in that PRR is not allowed. There are exceptions for certain classes of absence, related to employment, and for limited periods.

Job related accommodation relief applies where a person buys a residence that they intend to occupy as their only or main residence, but for work reasons they are required to live elsewhere. The dwelling is deemed to be occupied by the person as a residence during the period whilst the intention continues and ends when the intention ends.

Absences once a property becomes occupied as a main residence are also considered as occupation for: any absences totalling no more than 36 months; absences by reason of employment outside the UK; absences of 48 months due to remote working or to enable effective working. The first of these applies only if it is followed by a period of residency. The others apply if a person cannot return to their home afterwards because the nature of their work requires them to work away again, and also apply if the employment was of the spouse or civil partner.

The periods of valid absence affect PRR by being added to the duration, Δt , that the house was occupied as a main residence.

It is relatively easy to include these periods of 'pseudo-residence' in the indexed model, though the time limits on some of them could require a more careful breakdown of absences in cases where these limits are exceeded. While not difficult, it is not simply a case of adding the periods up as it is with the linear model. A possibility would be to retain the linear apportionment for these periods of pseudo-residence and these alone. However, a viable alternative might be to make the whole system good deal easier, as discussed in the main text.

Extra statutory concessions (ESC)

Two ESCs influence the calculation of PRR. One, D21, covers late claims in dual residence cases by those who were unaware of the requirement to declare which of their two or more residences is the main one. The second, D49, allows a short delay by owner-occupier in taking up residence, allowing a period of one year to be added in the assessment of PRR to allow for refurbishment before taking up residence.

It is relatively easy, but possibly redundant, to include these in the indexed model.

Main residence elections

Taxpayers may elect which of their properties is a main residence. These elections are not affected by a change to indexed assessment.

Investments and divestments

Finally any change to the method of tax assessment must be compatible with the treatment of investments in and divestments from a main residence during its ownership. If these are simply additive, i.e.

$$Gain = P_{sale} - P_{purchase} - I + D$$

where I is the sum of investments (capital sums spent on the property) and D the sum of divestments (gains already made), then there is no effect of changing to HPI. Nor is it a problem if divestments are charged at the point of divestment. Therefore, this is not considered further.

Conclusions

There is nothing complicated or different in principle about using an indexed assessment (HPI apportionment) instead of linear (time-based) apportionment in capital gain assessments. They are mathematically the same.

Arbitrary time limits in reliefs or concessions can require care when using an indexed assessment, as further exemplified in the main text.

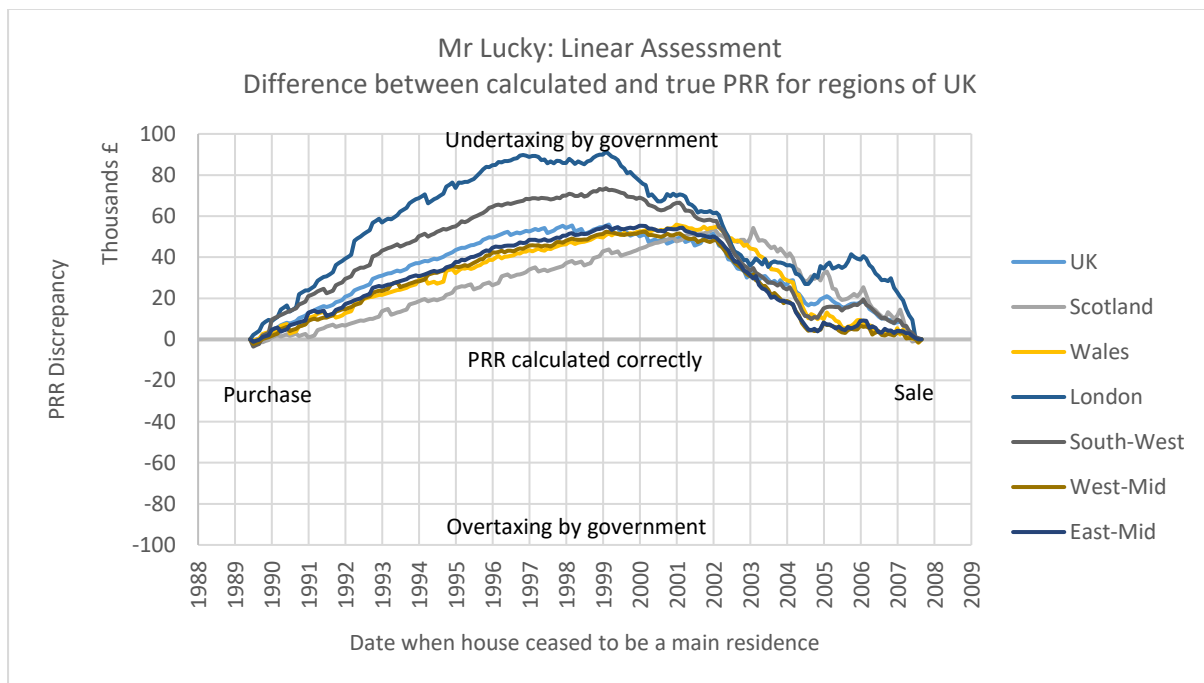
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August 2019

Appendix B: Comparisons and Feasibility

This Appendix takes a wider look at the differences between linear and indexed assessment of house value (or PRR) and discusses issues of underlying fairness and practicality in a question and answer format. It does not deal with the mechanics of CGT assessment procedure, which is sufficiently simple to be covered in the main text.

The Mr Lucky 'real world example' assumes that his house followed the UK-wide all properties HPI. What about regional variations?

It is straightforward to replace the UK-wide average house price curve with regional ones to estimate how Mr Lucky's house, bought in 1996 and sold in 2007, would have been valued everywhere and through the whole period of ownership. The purchase and sale prices are different for each region. The figure below shows the PRR discrepancy, the difference between assessed PRR and true PRR (or house value) for any year where the house stops being a main residence.



The ideal plot is a horizontal line along the zero axis. i.e. PRR is assessed correctly whatever year the house ceases to be a main residence, neither gifting the taxpayer with an artificially enhanced PRR (above the line) nor overtaxing him (below the line).

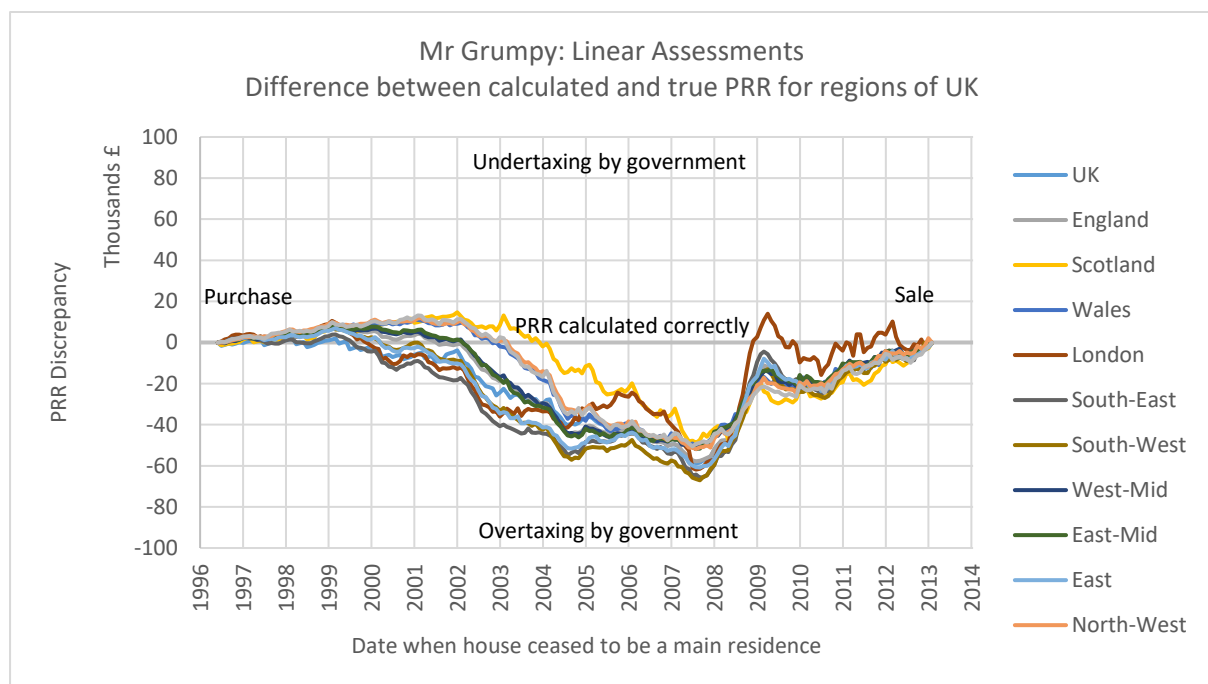
The results show that wherever Mr Lucky lived, he would have done rather well. His PRR would have been overestimated by up to £90k had he been a Londoner. In addition to this, FPE relief added $3/18 * £130k = £22k$ for much of the period (reducing to zero over the last 3 years). Lettings relief would have added up to £40k-£80k depending upon ownership and length of let. These reliefs are equivalent to moving the curves upwards, further into the undertaxed region.

The overestimation of PRR alone would have gifted Mr Lucky with a bonus on top of any gain on sale of thousands of pounds (possibly ~£20k) in underpaid CGT. The other reliefs, principally lettings relief (if let) could double this. These figures are for houses at average prices for each region. For houses at double the average price the overestimate of PRR by the linear formula doubles. Mr Lucky was certainly smiling and more broadly the more affluent he was.

Isn't this a justification for getting rid of lettings relief?

It is a justification for doing something, but we do not pay government to 'do something' we pay them to do the right thing. Getting rid of lettings relief does not cure the fundamental issue with Mr Lucky, which is poor estimation of PRR by the linear model. It is only a palliative, reducing his total 'bonus' nearer to that shown in the figure above, and it comes with side effects.

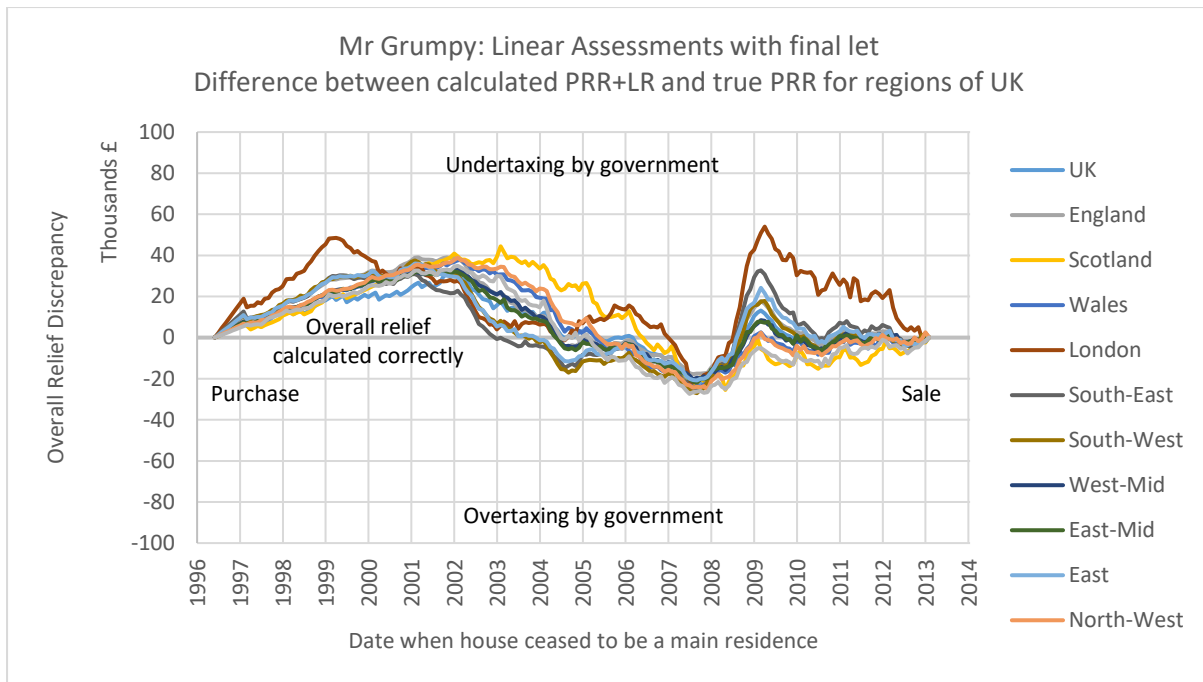
The main side effect is illustrated by the 'real world example' of Mr Grumpy (main text), and this can be generalised in the same way as above. The results (below) show that the linear assessment was not too bad for those Mr Grumpys that transferred residence between 1996 and 2001. Thereafter, PRR is increasingly underestimated until 2006/7, the years where transfer of main residence would have meant a loss at sale (due to the crash of 2008). At this point the deficit in PRR is £40k to £70k. For houses at twice the average price the discrepancies double. The curves omit FPE relief and also lettings relief.



If the linear assessment can be so bad, how can the government maintain that it gives fair results in the overwhelming majority of cases?

The government have never stated their basis for this belief. However, as shown above, it is certainly true in bust-boom (Mr Lucky) where linear apportionment is rather too fair. It is also adequate in boom-bust (Mr Grumpy) - provided lettings relief is considered an integral part of the package.

This is shown in the figure below, where it has been assumed that Mr Grumpy is single (maximum LR of £40k) and his property has been let for the whole period where it is not a main residence. The under-assessment of true total relief now reaches only ~£20k. It would have been less had he owned the property jointly. Lettings relief is capped and so it will not compensate to the same degree for more expensive properties, leaving many homeowners with a high tax liability despite losses on sale. Therefore, lettings relief helps but it is not a perfect mitigation of the excesses of linear apportionment.



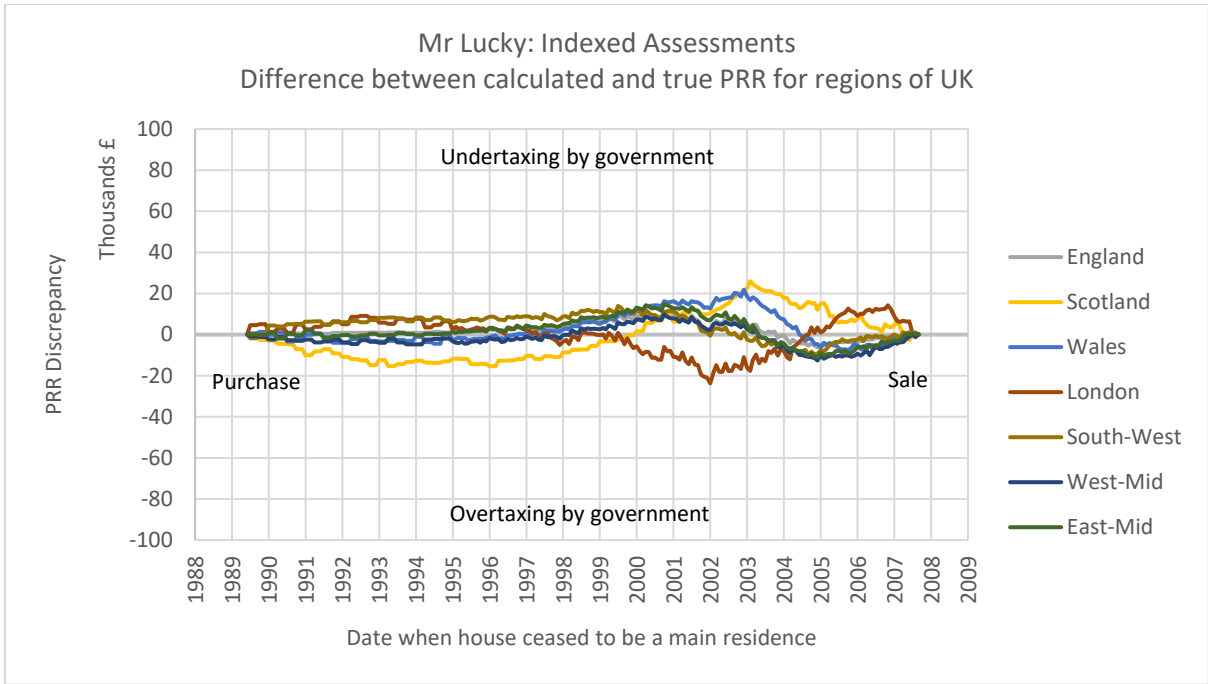
Being limited, lettings relief also eventually stops accruing so long-term recession, stagnation or low growth inexorably gives rise to increasing pilfering of the homeowner's savings on eventual sale. For various reasons, house prices currently seem unlikely to be on the verge of a boom, and if the UK is heading for stagnation or recession without lettings relief then large and nationwide government raid on landlord savings using the crowbar of linear apportionment is not in doubt.

No house price follows any index precisely, so will indexed assessment be any better than linear apportionment?

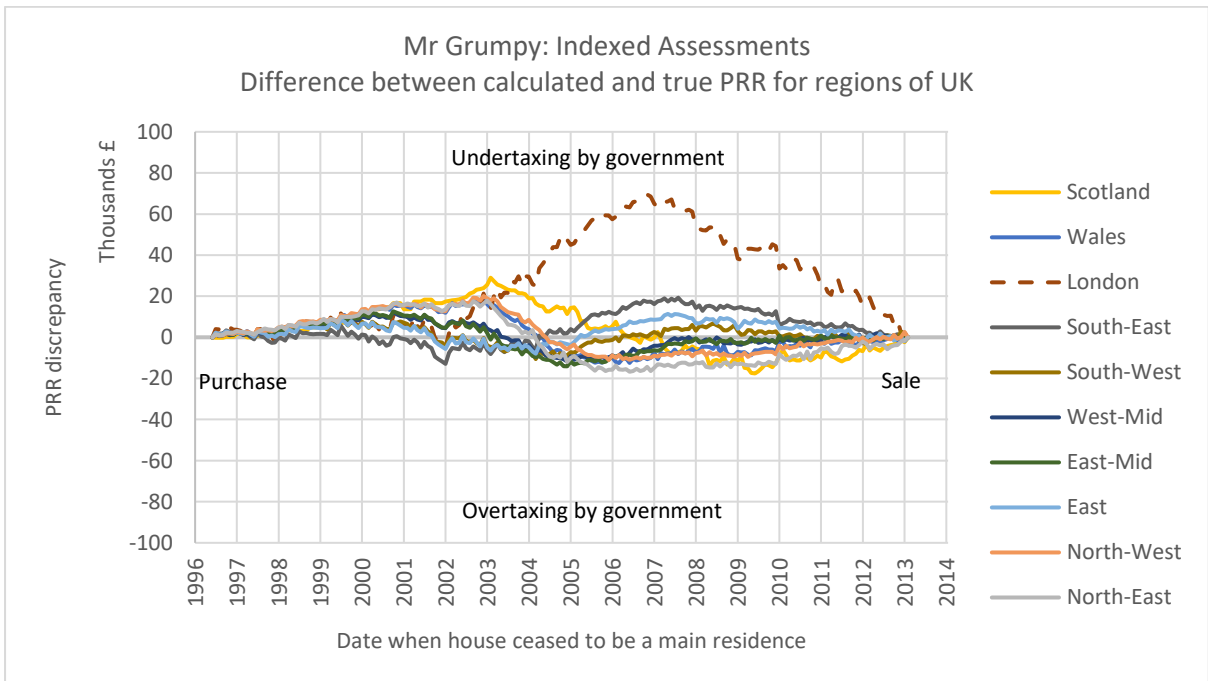
Yes. It will fix the problem of over-generosity to the Mr Luckys, without the side effects on the Mr Grumpys, doing a better job than lettings relief in achieving proper taxation.

It is true that no property follows any house price index exactly, so the use of a UK-wide all-house index might be considered too simplistic and will certainly not be perfect. How imperfect can be judged using a similar method to that used above for the linear assessment. We consider Mr Luckys and Mr Grumpys in various regions of the UK for which HPI data are available. All own the average house in their region with its corresponding purchase and sale price. On sale, we use the UK-average all-house HPI to calculate their PRR depending upon when the house ceased to be a main residence.

The results for Mr Lucky (ownership 1989-2007) are shown in the graph below. From Land's End to John o' Groats the smile might have been wiped off Mr Lucky's face, but the results are actually pretty fair. The PRR discrepancy is clustered reasonably around zero so on average PRR is estimated correctly. In half of the cases, the taxpayer still gets more PRR than merited, and in about half he'll get less, by up to about £20k in rare cases. For these, the underestimated PRR will result in an overcharge of tax, though with a large real gain due to the rapidly rising market Mr Lucky might not be too concerned.



The results for Mr Grumpy (below) are similar. For most regions, PRR is estimated correctly on average, in stark contrast with the linear formula. In about half of the cases, the taxpayer gets less PRR than merited, but nowhere near the savaging he gets from the linear formula. Overall, there is equality between Luckys and Grumpys however house prices develop. For houses valued at more than the average the discrepancies would be higher, but the equality of treatment between those less fortunate and those more so remains.



These calculations omit Northern Ireland, whose unique 2006/2007 housing bubble is a problem for apportionment using both time and UK-wide HPI, both of which are enormously disadvantageous to the taxpayer, even with lettings relief.

London looks quite different from the other regions. Is this a problem?

It is not ideal. Paradoxically it means that London Grumpys (rather than UK Luckys) would have benefited from a larger PRR than they deserved had indexed assessment then been applied. London is the one area of the country where a sale in January 2013 would have produced a profit (a real gain) for any date of transfer, and this profit would have been amplified by this higher than deserved PRR. This anomaly is caused by the quite significant difference in house price development between London and the rest of the country during the latter part of the period 1996 to 2007; in London, growth was strong between 2008 and 2013 when prices elsewhere were static or falling.

The idea that London Grumpys might have been treated rather well in this regime might worry the Treasury but it is small beer compared with how much the whole country can underpay using the linear method. Overall, the Treasury do rather well out of an indexed approach. A feasible solution if this is particularly irksome would be to oblige Londoners to use the London house price index. This would have removed this particular anomaly.

A more serious implication is that London, or another region, might suffer an anomaly in the other direction, a grossly underestimated PRR, causing much disaffection. This could have happened to the London Grumpys had London prices nosedived between 2008 and 2013, as they are now doing. Their only consolation would be that they would have suffered a lot more under the linear model.

There is still some underestimation of PRR, so many homeowners remain overtaxed to some extent. Can the system be made even fairer?

There are three broad ways of doing this. Either cluster the PRR discrepancies closer to the ideal (zero) line, bias the assessment so that they all move upwards above the zero line, or reduce CGT tax generally so that the discrepancies are less punishing. The government may prefer the first class, which ensures that everyone pays the correct tax, to the other two, where its commitment not to tax the gain on a principal private residence for everyone is bought at the expense of less than deserved taxes on the 'Mr Luckys' or of lower taxes in general.

The first category can be accomplished by generalising the suggestion for London, above. Owners could be obliged to use their country's HPI (with London treated as a separate country). Apart from London, there is some indication from the plots that Scotland would benefit from this separate treatment. Northern Ireland (not plotted) certainly would; its HPI evolution over the last few decades is very different from the rest of the UK and certainly far from linear and only a Northern Ireland HPI will do. Even more helpfully, instead of being obliged to use a national HPI, taxpayers could be given the option of using their national, or even regional, HPI in preference to a UK-wide one. Only a few minutes of taxpayer time would be needed to do the additional calculation. Finally, the taxpayer could be allowed to use an actual valuation of their house at the point where it ceased to become a main residence. This is usually considered to be impractical (too much time, trouble and expense) by the Treasury. The question of practicality is the subject of the next question.

The second category could include introducing an additional relief for ex-principal residences. The examples given in this Appendix show relatively low scatter. The negative PRR discrepancy is rarely more than £12k and never more than £24k. These are the CGT allowances for singles and couples, which suggests that no biasing is necessary, the system is fair enough. However, some may have used their allowance for other purposes. Also, the discrepancies would be twice as large for properties with twice the value of the average house in each region, and so on for even more expensive houses. In addition, the scatter might have been larger had house prices been subdivided more finely than by regions (by house types and purchasers for example). On the other hand, the

two cases of Mr Lucky and Mr Grumpy represent extremes of house price development so the overall scatter might not be much affected by adding more and more data. The exact level or schedule (perhaps with value) of such an allowance would require further thought along these lines.

The third and final category is typified by reducing CGT on property in general or specifically on former principal residences to that of more passive investments. It is much higher at present, and it is not clear why it should be any different. It is particularly unjust when the rate is effectively applied to losses or savings.

Will indexed apportionment make it practical to allow valuation-based appeals?

In a way, practicality is not the real issue. The embargo on valuation-based appeals is an admission of failure, an acknowledgement of the likely outcome. The system should be set up so that no-one should feel the need to appeal. Only when the likelihood of appeals is sufficiently low that the government are prepared to allow them can the assessment method be considered fair and just.

So the question comes back to: exactly how fair is indexed apportionment? The likelihood of appeal depends on the scatter of PRR discrepancies around the zero line. If the scatter in the negative direction (underestimate of PRR and overtaxation) is sufficiently low or covered by other allowances and reliefs then few appeals would be expected.

As noted above, the examples given in this Appendix show relatively low scatter but are based on limited, if extreme, cases. A more statistically significant view could be obtained by constructing thousands of cases since tabulated HPs began, sampling all purchase dates and all sale dates, covering ownership periods from 1 year to maybe half a century, and various levels of house price relative to the mean, appropriately weighted (the Land Registry data include numbers of transactions). This would not be a difficult exercise, and the resulting scatter plot would reveal the fraction of disposals per year that might result in appeal.

The likelihood is that they would be relatively few in number, especially if some biasing or other countermeasures were implemented. Those in this 'tail end' would probably be dominated by owners of high value properties. This Appendix has already shown that it is doubtful that Mr Average would be much troubled by the lack of an appeals process if indexation of PRR were implemented.

Should valuation-based appeals be allowed if the Treasury retain the linear apportionment?

Definitely. As stated above, only when the likelihood of appeals is sufficiently low that the government are prepared to allow them can the assessment method be considered fair and just. If appeals were allowed, the government would certainly not be restricting letting relief; they would be extending it. They would at least be offering a form indexed assessment as an alternative to linear, with the reasonable caveat that no other reliefs may be claimed at the same time (with the exception of 'absence' reliefs discussed in Appendix A). This would be simplicity itself for the taxpayer to comply with and for HMRC to assess.

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August 2019