Title: Leasehold Reform (Ground Rent) Bill: Impact assessment for the peppercorn ground rent policy **IA No:** **RPC Reference No:** **Lead department or agency:** Ministry of Housing, Communities and Local Government **Other departments or agencies:**	Impact Assessment (IA) **Date: 12/5/2021** **Stage: Final** **Source of intervention: Domestic** **Type of measure: Primary legislation** **Contact for enquiries:** Jo Cagney (jo.cagney@communities.gov.uk

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option (in 2016 prices)			
Total Net Present Social Value	**Business Net Present Value**	**Net cost to business per year**	**Business Impact Target Status**
Marginal	Marginal	Marginal	Qualifying provision

What is the problem under consideration? Why is government intervention necessary?

A consumer who buys a property under a long residential lease can be expected to pay an annual charge, known as a 'ground rent', to the freeholder of the building (the landlord) for the duration of the lease. Historically, ground rents were of nominal financial value, and represented a token in consideration of the lease contract.

Over the last 50 years it has become more common for ground rent to move away from the principle of a nominal amount to take on a financial value. This trend accelerated significantly from 2007/08 when some developers created leases with ground rents that started at a value of hundreds of pounds annually with upward review clauses that doubled the value of the ground rent every 10 or 15 years. In 2020, the Competition and Markets Authority's (CMA) investigation into mis-selling and unfair terms in the leasehold market found around 21,000 properties sold during 2000-2018 had a doubling escalation. Of these, 13,000 had review periods of 10 or 15 years. The CMA estimated that the total number of properties with 10-year or 15-year doubling clauses is about 18,000. Large freehold investors provided a market for such leases, offering to buy the freehold interest from the developers. We also know that high and increasing ground rent have caused harm to leaseholders due to resale and mortgage issues.

Leaseholders see no clear service in return for the ground rent they pay. We want to ensure more transparency in future, so that when purchasing their home, the costs are clear and prospective leaseholders can easily understand the cost of property ownership.

The market failure is an asymmetry of information between the developers offering the leases with these terms and the consumers buying them. Government intervention to prevent such ground rent terms in future leases is necessary to bring transparency to consumers (removing the information asymmetry).

What are the policy objectives and the intended effects?

The objective of the policy is to ensure that in future new long residential leases will be sold with ground rent set at a rate of one actual peppercorn per year, meaning for the first time that freeholders will no longer be able to make financial demands for ground rent. By doing this the policy will ensure greater transparency in future for leaseholders, protecting future consumers from entering contracts where they are required to pay ground rent for no clear service. The policy will apply to new long residential leases. It will not apply to business leases, statutory lease extensions, applicable community housing, home finance plans or existing long residential leases. It will apply to retirement properties, and for retirement properties will come into force no earlier than 1 April 2023, allowing for a transition period.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

There was significant negative publicity generated when the difficulties caused to consumers by doubling ground rent became well known. Despite the strength of this publicity the industry did not at the time respond by reducing the ground rent levels on new leases to zero.

Industry did, following encouragement from Government, establish a voluntary code of conduct titled the ‘Public Pledge to Leaseholders’ in March 2019. The stated aim of the signatories was to convert doubling leases to ones linked to the Retail Price Index (RPI) and so enable leaseholders to sell to new buyers and to not insert into any future lease agreement a clause whereby ground rent doubles more frequently than every 20 years. However, this voluntary action on the part of the industry has not resulted in an eradication of the issues caused by excessive ground rent, and monetary ground rent has continued to be the norm in the new build sector.

In England, the new two-year Help to Buy scheme, which commenced in April 2021, will only be available for purchasing leasehold properties if ground rents are restricted to zero financial value.
In Wales, Welsh Ministers introduced new criteria for Help to Buy-Wales and the Wales Property Development Fund in 2018 preventing new build leasehold houses from being built or bought through the Help to Buy schemes (except under certain circumstances). In Wales, only 2.6% of new build houses were leasehold in 2018 compared to 8.1% in 2017[1]. In England, houses sold under the leasehold tenure fell to 1.6% of all house sales in Q1 2020, from 10% in Q4 2017.

Primary legislation is considered necessary to restrict ground rent on new, long residential leases to a peppercorn for the wider market.

Will the policy be reviewed? It will not be reviewed. **If applicable, set review date: Not applicable**

Is this measure likely to impact on international trade and investment?					
Are any of these organisations in scope?	**Micro** Y	**Small** Y		**Medium** Y	**Large** Y
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** N/A		**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits, and impact of the leading options.

Signed by the responsible SELECT SIGNATORY: Eddie Hughes Date: 12 May 2021

[1] Leasehold and freehold residential property transactions in England and Wales: 2018

Summary: Analysis & Evidence — Policy Option

Description: Mandate that ground rent on new leasehold properties can be nothing more than one peppercorn per year

FULL ECONOMIC ASSESSMENT

Price Base Year 2020	**PV Base Year** 2022	**Time Period Years** 125	**Net Benefit (Present Value (PV)) (£m)**		
			Low: 0	**High: 0**	**Best Estimate: 0**

COSTS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Low	0		0	**0**
High	0		0	**0**
Best Estimate	0		0	**0**

Description and scale of key monetised costs by 'main affected groups'

The policy will apply to new long residential leases, it will not apply to existing leases. For new qualifying leases, we expect that restricting ground rent to one peppercorn per year will not result in a cost to developers because we expect that they will be able to capitalise the 'lost' stream of ground rent into sale prices – i.e. we expect that they will be able to increase sale prices to cover any potential cost. However, where such a transfer of cost occurs into the sale price, it will be fairer and more transparent for the leaseholder, who will be able more clearly to judge before buying whether the overall price is one they are willing to pay.

Other key non-monetised costs by 'main affected groups'

There are marginal potential economic costs arising if access to new build properties reduces due to any price increase. But many important factors, beyond this change, determine house price and any households that might no longer be able to purchase a new build home would have the option, other things being equal, to purchase a second-hand dwelling where prices are typically lower than those for equivalent new builds. Any impact on homeownership levels is therefore likely to be negligible.

BENEFITS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	0		0	**0**
High	0		0	**0**
Best Estimate	0		0	**0**

Description and scale of key monetised benefits by 'main affected groups'

The reduction in ground rent income across the lifetime of the lease can be offset by the increased purchase price of new properties. (We do not believe such price increases, where they occur, will be detrimental to purchasers for the reasons above and below.)

Other key non-monetised benefits by 'main affected groups'

There is a non-monetised benefit to future leaseholders of long residential leases who will now no longer be faced with information asymmetry from the ground rent terms of a leasehold property. In other words, future leaseholders will benefit from a simpler, more transparent approach which will support a more efficient and effective marketplace for purchasers.

Key assumptions/sensitivities/risks	**Discount rate**	3.5

The key sensitivity/risk of this option being a zero-cost option is the size of the freehold premium. This is explored extensively later in the Impact Assessment.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs: 0	**Benefits: 0**	**Net: 0**	0

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1. Policy Rationale

1.1. Current policy

Residential properties, both flats and houses, can be sold as freehold or leasehold tenure. In 2018-2019 there were an estimated 4.5 million leasehold dwellings in England making up almost 20% of total housing stock[1]. Of these 4.5 million leasehold dwellings 1.4 million or 31% were houses, and 3.1 million or 69% were flats[2]. In Wales, leasehold accounts for around 16% of all dwellings. This equates to, very approximately, 235,000 properties[3].

Historically, many ground rents were set at a nominal level. However, in recent years many ground rents have risen from nominal levels and some leases have included terms requiring frequent rent reviews where the ground rent amount doubles. Some leaseholders may face difficulties in selling or re-mortgaging or find it costly to buy the freehold through enfranchisement.

At present, where the leaseholder has broken the terms of the lease by failing to pay ground rent, and there is a forfeiture clause in the lease, the landlord can apply to the court for forfeiture of the lease by the leaseholder. This means that the leaseholder may lose their home and may become a renter on an Assured Tenancy.

1.2. Proposed change in policy

From the date of commencement following Royal Assent, the policy will prevent, outside of specific exemptions, any new applicable leasehold property coming on to the market with a ground rent higher than a peppercorn ground rent – that is one actual peppercorn per year. The policy will apply on an England and Wales basis.

Existing leasehold properties will be unaffected by this policy, except where a new lease is granted by way of a voluntary lease extension. The ground rent can only be charged for the unexpired term of the existing lease; once the period of the extension starts then the ground rent must revert to a peppercorn. The monetary ground rent for the unexpired term of the original lease must be for no more than the amount specified in the original lease.

The Government's intention to reduce ground rents in England on new leases to a peppercorn was announced on 21 December 2017. The Welsh Government announced on 17 March 2021 its ambition to similarly restrict ground rents on new leases. The date at which the legislation becomes law will be the date it commences.

Exemptions to this policy are:

- Business leases.
- Statutory lease extensions of houses or flats.
- Community housing leases.
- Home finance plan leases.

If a landlord (or person acting on the landlord's behalf) of a regulated residential long lease were to require a tenant to make a payment of prohibited rent, the tenant will be able to seek remedy by having the ground rent refunded and the lease amended with minimum cost. A financial penalty mechanism will be established to allow local enforcement authorities and the First-tier

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[1] *Estimating the number of leasehold dwellings in England 2017-18*, MHCLG Housing Statistical Release, 26 September 2019, p3.

[2] Ibid.

[3] Carr, H., Hunter, C., Owen, G., Makin, C., and Wallace, A.; (2021). *Research into the Sale and Use of Leaseholds in Wales*. Cardiff: Welsh Government, GSR report number 16/2021. Available at: https://gov.wales/research-sale-and-use-leaseholds-wales, p25.

Tribunal to enforce the policy. The standard statute of limitations will apply to this policy for the purpose of claiming a refund of ground rent but not to amend the lease.

1.2.1. Other options

Partial self-policing – In December 2017 Government announced its intention to reduce ground rents on new leasehold properties to a peppercorn at the same time as announcing a ban on new houses sold as leasehold in England. The negative publicity regarding leasehold houses led to the number of houses sold under the leasehold tenure fall from 10% of all house sales in Q4 2017 to 1.6% in Q1 of 2020.

On the issue of ground rents industry did, following encouragement from Government, establish a voluntary code of conduct titled the 'Public Pledge to Leaseholders' in March 2019. The stated aim of the signatories was to convert doubling leases to ones linked to the Retail Price Index (RPI) and so enable leaseholders to sell to new buyers and to not insert into any future lease agreement a clause whereby ground rent doubles more frequently than every 20 years. Many developers no longer include the most onerous doubling ground rents terms but do continue to sell new leasehold flats with ground rents at the maximum that mortgage providers will allow (the benchmark is ground rent at 0.1% of the property's value, although some mortgage providers accept applications where the ground rent is higher), with increases linked to RPI. This voluntary code of conduct on the part of the industry has not resulted in an eradication of the issues caused by excessive ground rent, and monetary ground rent has continued to be the norm in the new build sector.

In addition, in England, the new two-year Help to Buy scheme, which commenced in April 2021 will only be available for purchasing leasehold properties if ground rents are restricted to zero financial value. In Wales, Welsh Ministers introduced new criteria for Help to Buy-Wales and the Wales Property Development Fund in 2018 preventing new build leasehold houses from being built or bought through the schemes (except under certain circumstances). In Wales, only 2.6% of new build houses were leasehold in 2018 compared to 8.1% in 2017[4].

2. Rationale for Intervention

Ground rent terms pose a source of information asymmetry as potential leaseholders may not appreciate the full costs of their lease agreements set out by the freeholder. Some consumers will therefore not factor in the true cost of a property when thinking about their offer prices and purchase decisions.

By mandating peppercorn ground rent terms, we can eliminate a potential source of asymmetric information by reducing the financial value of the ground rent to nothing more than a peppercorn per year.

3. Description of Options Considered

3.1. List of options

3.1.1. Option 1 – Do nothing

The baseline is a 'do nothing' option with no policy intervention in the leasehold market on ground rents. Ground rent terms are set out in the lease. The freehold interest can subsequently be sold on. The ground rent terms contained within the lease can only be changed once created by agreement of both the freeholder and the leaseholder.

[4] Leasehold and freehold residential property transactions in England and Wales: 2018

3.1.2. Option 2 – Mandate ground rent on new properties can be nothing more than one peppercorn per year

Land law is highly complex and an outright ban on ground rents may have far reaching unforeseen consequences affecting leasehold properties. Therefore, this option of a nominal rent of one peppercorn per year for future long residential leases would ensure that no money is charged or paid as ground rent on regulated leases in future but avoids any unforeseen consequences.

3.1.3. Option 3 – Ask housebuilders to sign a voluntary code of practice that ground rent on new build properties must be a peppercorn amount of zero value

This option would ask housebuilders to enter into a voluntary code of practice to set ground rents at a peppercorn in their leasehold property terms for new builds.

However, the risk of information asymmetry may become more adverse if not all housebuilders sign up to the code. As this option would fail to address the market failure of asymmetric information and might make it worse it has not been considered further.

3.1.4. Option 4 – Mandate that ground rents on new properties must be a financial amount of low value

This option would mandate that on all future new build leasehold properties the ground rent charge must be a financial amount of low value. For example, a 2018 consultation referred to potentially capping ground rent at £10. This, however, would still be a financial sum paid for no tangible ongoing service. This would also still be a source of information asymmetry although a smaller value than otherwise would have been the case.

As this option would still fail to resolve the market failure of asymmetric information it has not been considered further.

4. Costs and Benefits of Main Options

4.1. Approach to the analysis

This section first sets out the ‘do nothing’ option, and then the lead policy option on ground rents is compared to this counterfactual ‘do nothing’ option.

The ‘do nothing’ option has no costs or benefits, but we set out the current state of play in terms of the average ground rents that are currently paid by leaseholders. We also estimate the average stream of ground rents over time.

For the lead policy option, we then assess the potential net financial impact on property developers as a result of changes to the ground rents policy. We do this by exploring whether the leasehold discount is large enough such that the stream of ground rents can be capitalised into leasehold sale prices. Or, in other words, can developers increase the price of leasehold properties to reflect the lost future stream of ground rents to ensure that they do not face a negative financial impact as a result of no longer being able to charge ground rents?

This is done by exploring various approaches to estimating the “leasehold discount” or conversely the “freehold premium”, i.e. if we have two properties that are identical except one is leasehold and one is freehold, how much cheaper is the leasehold property? In reality, we don’t have identical properties to compare, but we explore different approaches to estimating this discount/premium.

The analysis concludes that the leasehold discount is estimated to be sufficiently large such that we expect that developers, on average, will be able to capitalise the ‘lost’ ground rent income into sale prices without facing a negative financial impact. It concludes that this will not have an impact on supply nor on homeownership.

We then consider the potential impact of the policy on:

i) housing supply,

ii) institutional investors, and

iii) affordability for buyers.

We conclude the impacts will be marginal. As this policy's costs are within +/-£5 million equivalent annual net direct costs to business (EANDCB), the policy meets the requirements for a De Minimis Assessment.

4.2. Option 1 – Do nothing

For the purposes of this IA this option has no monetised or non-monetised costs or benefits as it represents the baseline all other options are compared against.

However, to illustrate the costs and benefits of the proposed option and their relationship to the counterfactual, the ground rent payment structure in the counterfactual is discussed below.

4.2.1. Existing leasehold properties

During the financial crisis the number of leasehold new build properties built fell from a peak of around 75,000 in 2006 per year to low as 26,000 by 2011. There was some initial recovery from 2011 to 2017 where the number of leasehold new build properties increased to around 56,000 a year.

On 21 December 2017, following a consultation exercise, the Government announced plans in England to tackle the growing problem of newly built houses being sold as leasehold rather than freehold, and to limit ground rents on newly created lease agreements.

In England, since the Government’s announcement there has been a reduction in the proportion of new build houses sold as leasehold from 10% in Q4 2017 to 1.6% in Q1 2020 meaning that nearly all new leasehold properties are now flats. Leasehold new build properties fell to 38,500 a year by 2019. By 2019 leasehold properties made up 31% of all new build properties sold: a fall from the peak of almost 59% of all new build properties in 2008. In Wales, the percentage of new build houses sold that were leasehold dropped from 8.1% in 2017 to 2.6% in 2018.

4.2.2. Existing ground rent terms

4.2.2.1. English Housing Survey

The English Housing Survey (EHS) is a representative survey of over 13,000 households in England. Data analysis has been conducted by MHCLG to understand the existing range of ground rent terms and lease lengths[5].

Most (80%) surveyed owner occupier leaseholders (i.e. leaseholders who live in their leasehold property) reported paying a ground rent. A greater proportion of owner occupier leaseholders in houses reported paying a ground rent than owner occupier leaseholders in flats (88%, compared with 75%).

The majority of owner occupier leaseholders (70%) reported that their ground rent is less than £200 per year; 81% of leaseholders in houses and 61% of leaseholders in flats reported this.

[5] Based on the 2017-18 EHS Data

The annual median ground rent is £50. The annual median ground rent for owner occupied leasehold houses is £20; for owner occupied leasehold flats it is £110.

Annual median ground rents range from £15 in the North West to £150 in London, the East, and the East Midlands.

4.2.2.2. ComRes leaseholder survey ground rent data

A survey of 1,000 owner occupier leaseholders in England was carried out by ComRes in 2019. Seven in ten (71%) surveyed leaseholders said they pay ground rent on their leasehold property compared to a quarter (25%) who said they do not. Almost four in five (78%) surveyed leaseholders who do not own a share of the freehold say they pay ground rent on their leasehold property. Surveyed leaseholders living in flats and houses were equally likely to report paying a ground rent (71% and 70% respectively).

Those surveyed who live in a property whose freehold is owned by a private company (88%) were more likely to say they pay ground rent than those who live in a property whose freehold is owned by a private individual (71%), local authority (78%) or housing association (68%). Three quarters (76%) of those surveyed who live in a new build property say they pay a ground rent compared to two thirds (67%) of those who live in a second-hand property.

Surveyed leaseholders who said they pay a ground rent reported a wide range of costs, from less than £10 to over £5,000. However, the median yearly ground rent cost is £210. For those surveyed who report paying a ground rent, the median ground rent per year reported by those living in a house (£250) is higher than those living in flats (£200).

Surveyed leaseholders who pay a ground rent in the North and the Midlands were more likely to report a cheaper cost than their Southern counterparts – 14% of those in the North and 15% of those in the Midlands said they pay up to £10, compared to 5% in the South (including London). Three in ten (28%) Northern and a quarter (24%) of Midlands leaseholders who pay a ground rent pay up to £50, compared to 16% in the South (excluding London). By contrast, one in six (15%) surveyed leaseholders in London who pay a ground rent said the cost is more than £5,000. There is, however, uncertainty around this figure. Housing costs in London are undoubtedly higher than in other parts of the country, but some reporting of ground rents in excess of £5,000 per year, as for in other parts of the country, may include some estimates where respondents have conflated total costs, including service charges.

As well as being more likely to pay a ground rent, those surveyed who live in new build properties are less likely (8%) than those who live in second-hand properties (29%) to pay up to £50 per year for their ground rent. The median ground rent for new build leaseholders (£300) is double that of second-hand property leaseholders (£150). Over two in five (43%) surveyed leaseholders who pay ground rent on their leasehold property said the level of payment is reviewed at least every year.

We have assumed those respondents who stated their ground rent was more than £5,000 were most likely due to conflation on part of the respondents of ground rent with their service charges or other leasehold costs. Taking the median of the ground rent responses would allow us to account for the skewedness of the data due to some outlying responses of those above £5,000 per annum. The fact that such a conflation of ground rent and service charge amounts may take place potentially further illustrates the information asymmetry faced by leaseholders from ground rent terms.

For the purposes of constructing our counterfactual, the survey data for new build leaseholders is the most pertinent. We have taken the median ground rent for new builds (£300) and discounted this by the differential between median ground rents on house (£250) and flats (£200); this is a £50 differential. The figures for the median ground rent on houses and median ground rent for flats is lower than the median new build ground rent as the former would include some flats/houses on older cheaper ground rent terms. Therefore, the assumed initial ground rent for a new build flat is estimated at £250 per annum.

4.2.2.3. Research into the Sale and Use of Leaseholds in Wales

Research on the use of leasehold in Wales also considered ground rent levels. A small sample survey (42 respondents) of leaseholders provided information about their current ground rent levels. For flat leaseholders the median rent was £150 and three leases specified 'peppercorn' ground rents. The range amongst participating flat leaseholders was from 'peppercorn' to £3000 per annum. Once again, this range may be explained by respondents conflating service charges and ground rents.

For the participating house leaseholders, the median rent was £200 and none of the leases specified a 'peppercorn' rent. The ground rents ranged from £4 to £300 per annum.

4.2.3. Leasehold assumptions in the counterfactual

It is assumed from the start of the proposed policy period all new build leasehold properties will be sold under the new RPI linked terms. These would on average be a 125-year lease with an initial ground rent of £250 fixed for 10 years after which it is adjusted at 10-year intervals by RPI for the remaining lease term. To note from 2030 the RPI and Consumer Price Index Including Owner Occupiers' Housing Costs (CPIH) will align leading to a lower estimate of RPI however the exact mechanics of this have not been finalised as of writing this analysis. Therefore, we have just used the OBR's latest long-term projection of RPI for the purposes of this analysis. Once RPI is aligned to CPIH we would expect the long-term projection to be lower leading to our analysis being an overestimate of the present value of ground rent payments.

This payment structure is shown below, alongside the payments adjusted to remove general inflation; a further row below shows these payments discounted by the Social Time Preference Rate as specified in the Green Book to illustrate these payments in present value terms[6].

	Year													
	1	2	3	4	5	6	7	8	9	10	11	12	…	125
Nominal payments	£250	£250	£250	£250	£250	£250	£250	£250	£250	£250	£339	£339	…	£9,749
Real payments	£250	£246	£241	£236	£230	£225	£220	£216	£211	£207	£274	£268	…	£653
Present Value payments	£250	£237	£225	£212	£201	£190	£179	£170	£160	£152	£194	£184	…	£19

Table 1 Average per-unit ground rent payments schedule under RPI terms

Over the lifetime of the lease this amounts to a total nominal payment of £314,822 or in present value terms is £9,143.

	Total
Nominal payments	£314,822
Real payments	£49,854
Present Value payments	£9,143

Table 2 Average total ground rent payment over the lifetime of a 125-year lease

[6] Standard STPR of 3.5% in Year 1- 30, 3.0% in Year 31 – 75, 2.5 % Year 71 – 125, 2% Year 126 – 200, 1.5% Year 201 – 300, 1% Year301+
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf

4.3. Option 2 – Mandate ground rents on new properties to be no more than one peppercorn per year

4.3.1. Leaseholder cost capitalisation

It is assumed the impact of mandating peppercorn ground rent of one actual peppercorn per year would be dependent on property developers' ability to capitalise the revenue loss from ground rent into the asking price of a property. Developers' ability to do this will affect both the impacts on individuals and the impacts on businesses.

In recent years analysis has been conducted by MHCLG and the National Audit Office (NAO) to determine whether, and how much, the costs of being a leaseholder are capitalised into property values. The purpose of this is to estimate the size of the freehold premium (or equivalently, the leasehold discount). This is the difference between the price that a leasehold home would sell for compared to an identical freehold home. Leasehold homeowners face charges that a freeholder usually does not, including service charges, ground rents, and home improvement permission fees.

For the purposes of this IA we are only interested in the ground rent element of the freehold premium.

4.3.2. Approaches to identify and quantify the freehold premium

The following section discusses the various analyses conducted by MHCLG and the NAO to estimate the freehold premium.

In an ideal world you could compare the market price for otherwise identical leasehold properties with different ground rents, such that any difference in the market price would reflect the capitalisation of the ground rents. Repeating this approach on a large enough sample size would provide a robust estimate of the extent to which ground rent terms are capitalised into upfront prices. However, no such data on identical properties' ground rents exists, so the second-best approach is to estimate the broader freehold premium (which will reflect how the total costs of leasehold, including ground rent as well as the other leasehold costs, are capitalised into prices). Ground rents can be a significant cost specific to leaseholders and therefore a key component of any freehold premium.

Again, in an ideal world you could simply compare the market price for two otherwise identical properties where one is a leasehold and one which is a freehold. Any price difference would be associated with a freehold premium as the properties are otherwise the same. Repeating this approach on a large enough sample size and you would have a robust estimate of the freehold premium, showing how much the leasehold costs are capitalised into prices and therefore how much scope there is for the ground rent changes to be capitalised into prices.

In reality however, leasehold and freehold properties do vary across various physical property characteristics, complicating the estimation of the freehold premium as these other characteristics need to be controlled for. The premium may also vary across region, property type and time, further obfuscating matters. For our purposes there are very few freehold flats and those that are freehold can be starkly different from the leasehold variety (e.g. where the owner of one unit also owns the freehold to the entire building, such as in conversions).

At the time of the analysis data was not available for Wales so analysis was conducted on England specific data. The various approaches for estimating the freehold premium for England are discussed below.

4.3.2.1. Regression Analysis

Ordinary Least Squared (OLS) regression was conducted by MHCLG on data on HM Land Registry (HMLR) Price Paid data comparing leasehold and freehold properties. A regression equation was constructed with a dummy variable to indicate whether a property was a freehold property or not. This coefficient on the dummy variable would then give us the freehold premium.

Comparisons were made between the cost of leasehold and freehold properties, controlling as far as possible for all the other factors which could explain price differences. Previously, econometric analysis was conducted on Land Registry data for leasehold and freehold house transactions, controlling for local authority, new build status and type of dwelling (e.g. terrace etc.). This found a freehold premium of 8%. The data for flats is more uncertain regarding what circumstances are included when a flat isn't listed as leasehold. However, simply running the same regressions but restricting to flats instead of houses, indicates a freehold premium of 20%.

This analysis is limited by the number of variables already available in the Price Paid data, so regressions relying on this data alone risk omitted variable bias (as there are numerous other property characteristics which will affect prices which are not available in the Price Paid data).

4.3.2.2. Decision tree modelling

More recently, MHCLG data scientists used decision trees to match data from Zoopla with AddressBase, Energy Performance Certificate (EPC), and Land Registry data.

Decision trees are versatile machine-learning algorithms that can be used to perform regression and classifications tasks. Decision-tree approaches are one of the most-used data science techniques, owing to their predictive power. Decision trees are typically much more flexible than traditional linear regression. For starters, they do not assume the relationship between feature and response is linear. Secondly, they also allow non-additive (multiplicative) interactions between features, leading to a much more advanced model. Extensions to the decision-tree model improve the predictive power and reduce the tendency to over-fit the data; commonly used extensions are named Bagging, Random Forests, and Boosting.

Gradient-boosted decision trees are such an extension and are popularly used to solve data science problems. This method works by generating a large number of trees, where each subsequent tree tries to correct its predecessor by trying to fit to the residual errors made by the previous predictor.

This analysis then used random forests to estimate the freehold premium, which was found to be at 1.9% for England. However, this analysis reported wide regional variation including -2.3% in the North East and 16.2% in the East of England. A second approach used a gradient-boosted decision-tree model to predict the sale price of the property twice: once assuming the property is freehold, and once assuming the property is leasehold. This found the freehold premium to be 1.6% on average in England, varying from -2.3% to 12.1% regionally.

In the North West the freehold premium is closer to zero. This area is also where leasehold properties are most common. This may be due to the (relative) rarity of freehold properties and thus not a credible alternative for property purchases leading to weaker bargaining power when negotiating the final property price. Alternatively, this may simply suggest an attitudinal difference in these regions where leasehold properties are more normalised and leasehold is less of a factor when deciding to buy a house.

MHCLG data scientists remark that for a number of reasons their model is not perfect and these figures themselves might not be entirely accurate, although they are likely to be superior to the OLS method. One reason is that we have limited data available with the number of aligned records in each region varying from 41k to 250k, which from a data science perspective is adequate but by no means perfect. Secondly, there are various potential data quality issues such as errors in the data itself, for example the lack of an indication of the age of a given property. Lastly, the gradient-boosted decision-tree model (and specifically XGBoost) has its own technical shortcomings.

The negative results generated in some regions by this methodology are counter to the theoretical logic that freehold properties would be more expensive than leaseholds, and it is not clear what is driving these results. We have assumed this is more likely to indicate a positive but close to zero or zero value, but further work would be needed to establish the accuracy of these estimates.

Nevertheless, the existence of a lower premium in the North West compared to other regions is supportive of the theory that, where possible, consumers will negotiate a lower offer price for a leasehold home than a freehold one to reflect the ongoing leasehold costs. Where there is less of an outside option of freehold (i.e. in the North West, where more houses are only available on a leasehold basis), consumers are less able to negotiate on this basis and therefore the freehold premium is reduced.

4.3.2.3. National Audit Office (NAO) Help to Buy analysis

Analysis by the NAO to assess the Help to Buy premium included a freehold dummy in their fixed effects regression model (so the purpose of this work was not directly about estimating the freehold premium but doing so was a necessary by-product). Their analysis estimated the freehold premium to be 5.2%.

Their models included data on property size from matching to EPC data, but did not include other physical property characteristics (such as number of bedrooms, garage, garden, quality etc), so whilst this approach is a step forward from the aforementioned linear regression on the HMLR Price Paid data (because the NAO's postcode-level fixed effects controls tightly for the influence of location on price), it is likely that this result still does not reflect the true effect due to omitted variable bias.

4.3.2.4. Fixed Effects Econometrics Analysis

Analysts utilised data from the Council of Mortgage Lenders (CML), Energy Performance Certificate (EPC) and HMLR to produce a fixed effects regression model for England.

Fixed effects model refers to a regression model in which the group means are fixed (non-random) as opposed to a random effects model in which the group means are a random sample from a population. Generally, data can be grouped according to several observed factors. In this data the observations were grouped at the postcode level to tightly control for the impact of location on price.

Observations in the datasets were assigned a Unique Property Reference Number (UPRN) based on their geographical location by the data science team. This was to allow matching of the different datasets to control for more variables that affect prices. Flats were necessarily excluded from the analysis as there is an insufficient sample of freehold flats. Furthermore, flats were unlikely to match well between the datasets due to too similar locations.

Some months of data were completely missing in the CML/EPC dataset. Due to this data issue, modelling has been done on a range of time samples. 2011- 2013 are the only complete years and so will be used as a sub sample.

The following variables were utilised in the model:

- Logarithm of the house purchase price, the dependent variable.
- Dummy variable taking the value of one if it was a freehold house at the point of sale.

- Number of bedrooms in the house. (We have excluded any houses with >10 bedrooms. Analysing the price of such houses and cross-checking data on Zoopla suggest that these instances are likely to be errors in the dataset).
- A dummy variable taking the value of one if the house has a garage included.
- A dummy variable taking the value of one if the house is a new build.
- Logarithm of the total floor area in meters squared.
- A dummy variable taking the value of one for a house that is terraced.
- Variables indicating which year and which month the transaction took place to control for seasonality and time fixed effects.
- A dummy variable taking the value of one if the house was in the North West.

This analysis showed an average freehold premium of 7.1%. Attempts were made to generate regional freehold premiums, however the sample sizes at the regional level were deemed too small to draw any reliably robust results. As such, the analysis only looked at England as a whole and England excluding the North West. The North West is atypical of the rest of the regions of England due to its relatively high abundance of leasehold houses. When viewing the results of England excluding the North West the freehold premium increases to 10.7%. Data for Wales was not included in this analysis.

4.3.2.5. Conclusions and impacts for the current policy analysis

In total four different estimates and approaches have been used here to try to illustrate, and through the different approaches triangulate an estimate of the freehold premium. As would be expected these different methodologies do not agree on the exact level, but they do all indicate the existence of a freehold premium.

Methodology	Freehold Premium
OLS Regression Analysis	8.0%
Decision tree modelling	1.9%
NAO Help to Buy Analysis	5.2%
Fixed Effects Econometrics Modelling	**7.1%**

Table 3 Freehold premium estimates by methodology

We have assumed for this analysis that a similar freehold premium would exist for flats if equivalent freehold flats were to exist. The existence of the premium for houses suggests that consumers would likely behave the same way. With the mandating of all new build leasehold properties to have a peppercorn ground rent of zero financial value, a significant leasehold cost would be removed allowing for the existence of a similar premium between these new properties and the existing stock of leasehold properties on older ground rent terms. However, this would be a gradual effect as new supply will be a low share of stock in the initial years.

The preferred approach for this analysis is the Fixed Effects Econometrics Modelling as we believe this approach has the highest level of control for other variables and we have the most familiarity with the dataset, the methodology, and a higher level of confidence in the theoretical underpinnings of the chosen model. We have assumed, in the absence of further data, that the findings on the freehold premium for England would be broadly similar to Wales and used the same estimate for the freehold premium in our analysis on Wales. Therefore, for our central estimate we have assumed the freehold premium is 7.1%.

4.3.3. Costs of ground rent capitalisation

Assuming that on average freehold houses and flats were to have a premium over their leasehold equivalents allows for the ground rent payments that would have occurred in the counterfactual to be instead capitalised in the initial property price. The series of ground rent payments in the counterfactual would now instead occur at the moment of purchase, leading to the initial price of the property increasing by the sum of the discounted ground rent payments.

For this to be possible, the present value of the counterfactual ground rent stream must be no higher than the freehold premium. Otherwise, the upfront cost of the new peppercorn leasehold would exceed the freehold equivalent price (which would not be possible in reality, as consumers would always be better off buying an alternative unit, so the freehold equivalent price acts as an effective cap on how much any avoided ground rents can be capitalised into prices).

The present value of the counterfactual ground rent stream should actually be lower than the premium by an amount equal to the present value of other leasehold costs of future enfranchisement and permission fees; since these are generally much lower than the ground rents on new build properties, we simplify this analysis by only considering the latter, but this is considered further in sensitivity analysis below.

If the size of the capitalised ground rents is not higher than the premium, then the whole amount can be capitalised into prices and there is no cost to developers (consumers pay the same, just with more transparency upfront – and so they can more easily judge whether the price is one they are willing to pay for the property).

Taking the assumed ground rent terms discussed in Option 1 (£250 per annum in England, £150 per annum in Wales), this would add £9,143 to the to the purchase price of the median new build flat in England, and £5,486 in Wales. Analysis of 2019 HMLR Price Paid data suggests the median price of a new build leasehold flat in England is £276,000 (£170,000 in Wales).

The capitalisation of the ground rent payments would therefore lead to a 3.3% increase in the flat price in England, and 3.2% in Wales.

	Median New build Flat in England	Median New build Flat in Wales
Property price	£276,000	£170,000
Present Value of Ground rent payments	£9,143	£5,486
Total price	£285,143	£175,486
% price increase	3.3%	3.2%

Table 4 Average ground rent capitalisation

The percentage price increase for the average new build leasehold flat is comfortably within our central estimate of the freehold premium of 7.1%, indicating that there is scope for the upfront price to increase to fully reflect the present value of the ground rents without breaching the freehold equivalent price (with a certain amount of leeway remaining to allow for the value of those continuing leasehold costs to still be reflected).

As this price increase is equivalent to the present value of the ground rent payments over the lifetime of the lease, the freeholder would receive the equivalent economic value from the property under this option as they would in the counterfactual. This results in a net zero cost to the freeholder from a change in property value. Equivalently the average new build leaseholder would pay the same amount in ground rent in present value terms over the lifetime of the lease as they would under this option with the initial increase in price. This would result in net zero cost to the leaseholder under this option from the change in property price and has the benefit of being more transparent.

This conclusion is for the average new build leasehold. Sensitivity analysis is presented below to test how this conclusion holds when we look at a range of property values.

4.3.4. Land value and housing supply

Our assessment is that there is a low risk of these reforms having an impact on housing supply. We expect the impact on supply to be negligible, as business models will adjust to the lack of capitalised income from peppercorn ground rents and factor this into land and house prices. In the short term, the move to peppercorn ground rents may decrease the viability of some sites, where revenue from capitalised ground rents is expected, if prices do not quickly adjust. This may have a small, temporary impact on supply in these cases.

Evidence supporting this conclusion was presented to the Select Committee inquiry into Leasehold Reform, where the main volume developers stated that the ground rent ban would have no impact on supply. Witnesses from Bellway, Permission and Taylor Wimpey, when asked specifically whether the ground rents policy would affect housebuilding numbers, all three replied that it would not, with Persimmon stating, 'as for the effect on production, it would not have any impact at all'[7]. This supports the analysis above of a low risk to supply.

The gross development value [GDV] is a key factor in determining the viability of a site. It represents the total revenue the builder gets from the built-out site:

GDV = (price of dwelling) x (number of dwellings)

However, developers of leasehold dwellings also profit from ground rent income. In an efficient market with perfect information (and liquidity), the capitalisation of the ground rent revenue, plus the leasehold price, is equivalent to the freehold price:

GDV: (price of dwelling + ground rent) x (number of dwellings) = GDV: (higher price of dwelling) x (number of dwellings)

Typically, if the cost of bringing forward a development exceeds the gross development value, to make the site viable, developers would slow their build out rate until the price increases. In the short run, this would decrease private supply. In the medium to long run, we know that this 'new normal' is already being factored into negotiations between landowners and developers for the price paid for land. As a result, we would expect land prices to quickly be revised to reflect any changes. Lower land prices may make it less likely for landowners to release land, dragging down long-term supply.

The underlying assumption of this analysis and what our econometric analysis has shown is that where upfront leasehold property prices are lower to reflect ground rent payments, the benefit of reduced ground rents would be expected to be capitalised into higher prices (and therefore gross development value is not affected).

4.3.5. Institutional Investors

Institutional investors have argued that restricting ground rents would remove all financial incentive to purchase freehold interests, and they would withdraw from the market. Developers would therefore no longer benefit from the income source of capitalised ground rents, which some currently use to help fund new developments. However, if the value of the ground rents is instead capitalised into upfront sale prices, gross development value is unaffected. Institutional

[7] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/housing-communities-and-local-government-committee/leasehold-reform/oral/92747.html
https://parliamentlive.tv/event/index/2d3dece9-ed83-420c-8a5d-666e8c299a93

investors would continue to benefit from existing investments in ground rents as the ground rent changes are not retrospective. The counterfactual investment in new build capitalised ground rents may be redirected elsewhere (that is not in scope of this Impact Assessment).

4.3.6. Impact on purchasers

Where the ground rent is capitalised, we expect that the price of the average leasehold property will increase by the capitalised ground rent. This will require future buyers to secure marginally larger sums of money as deposit or borrow slightly more for their potential leasehold property. This may not be viable for all those potential buyers who were only able to purchase a leasehold home at the previous property price – accepting that many factors, beyond this change, affect prices.

Many factors come together to determine house prices and affordability – both for new and second-hand dwellings. New dwellings typically cost more because of their newness. So, any increase in prices as outlined above may mean some households are no longer be able to purchase a new build home. But, as ground rents are expected to be included in the budgeting section of a mortgage application, without ground rents as an outgoing the typical purchaser has £21 per calendar month (an annual typical ground rent of £250 in England divided by 12 months) more available to commit to servicing a mortgage. This would not be enough to fully offset the increase in financial capital required to acquire a mortgage and afford the deposit of a new build property with the new purchase price from ground rent capitalisation, which may mean some price sensitive purchasers change their preferences. The second-hand prices of homes are lower than that for an equivalent new build and so, in situations where ground rents are capitalised into prices, any households who were able to buy a new build before could still purchase a second-hand home as the proposed policy only targets new build homes from 2022. Therefore, overall homeownership figures should not change.

4.3.7. Retirement Housing Sector

Some developers of specialist housing for older people use ground rents in a similar way to mainstream developers, to support investment in new supply. As with other leaseholders, retirement homeowners may be affected by information asymmetry and should also benefit from this reform. The peppercorn ground rents policy will therefore apply to retirement properties. However, in recognition of a previous announcement that such properties would be exempt, the introduction of the policy will not come into force any earlier than 1 April 2023 in relation to retirement properties.

Operators that use ground rents argue that they fund communal areas such as lounges, restaurants, guest suites and staff accommodation, which they say typically account for around 25-30% of total floorspace (compared with around 15% communal space in mainstream developments). While a service charge can recover the running costs of communal areas, it cannot by law be used to recover the initial construction costs.

Stakeholder responses to our technical consultation in 2018 and subsequent engagement indicates that the capitalisation of ground rent into the purchase price of a retirement property could lead to a £15,000 - £18,000 increase in up front purchase price (we estimate this to be around a 5% increase). As the ground rent terms of retirement properties are usually higher than the terms for an equivalent leasehold property and the purchase price is typically lower, it is not a surprise that the capitalisation rate would also be higher than the one estimated in the central scenario.

Overall, we expect that, as with mainstream developers, developers of retirement properties will be able to capitalise the lost ground rent income into a higher purchase price (if ground rent is the funding model they use).

4.3.8. Leasehold properties and Ground rents in Wales

The Welsh Government announced on 17March 2021 its intention to similarly restrict ground rents on new leases.

In Wales, leasehold accounts for around 16% of all properties in Wales. This equates to, very approximately, 235,000 properties. Across Wales, only 2.6% of new build houses were leasehold in 2018 compared to 8.1% in 2017[8]. In 2018, Welsh Ministers introduced new criteria for Help to Buy-Wales and the Wales Property Development Fund preventing new build leasehold houses from being built or bought through the schemes (unless under certain circumstances). Welsh Ministers have announced that leasehold properties sold through Help to Buy-Wales from April 2021 will also be required to have ground rents set to zero.

Research on the use of leasehold in Wales also considered ground rent levels. A small sample survey (42 respondents) of leaseholders provided information about their current ground rent levels; this survey is too small to be representative, so the following figures should only be considered as highly illustrative (this is considered further in sensitivity analysis below). For flat leaseholders the median rent was £150 and three leases specified ‘peppercorn’ ground rents. The range amongst participating flat leaseholders was from ‘peppercorn’ to £3000 per annum. For the participating house leaseholders, the median rent was £200 and none of the leases specified a ‘peppercorn’ rent. The ground rents ranged from £4 to £300 per annum.

Using the median ground rent of £150 and applying the same methodology as in the earlier section gives ground rent payment structure is shown below:

	Year													
	1	2	3	4	5	6	7	8	9	10	11	12	…	125
Nominal payments	£150	£150	£150	£150	£150	£150	£150	£150	£150	£150	£204	£204	…	£5,850
Real payments	£150	£147	£144	£141	£138	£135	£132	£129	£127	£124	£165	£161	…	£392
PRESENT VALUE payments	£150	£142	£135	£127	£120	£114	£108	£102	£96	£91	£117	£110	…	£11

Over the lifetime of a 125-year lease this amounts to a total nominal payment of £188,893 or in present value terms is £5,486.

Taking the assumed ground rent terms discussed above, this would add £5,486 to the to the purchase price of a property. Analysis of 2019 HMLR Registry Price Paid data suggests the median price of a new build leasehold flat in Wales is £170,000.

The capitalisation of the ground rent payments would therefore lead to a 3.2% increase in the flat price. In the absence of any further evidence, it is assumed that our central freehold premium estimate for England of 7.1% applies equally in Wales, therefore the conclusion holds that there is scope for the ground rents to be fully capitalised into prices.

	Median New build Flat in Wales
Property price	£170,000
Present Value of Ground rent payments	£5,486
Total price	£175,486
% price increase	3.2%

Table 5 Average ground rent capitalisation for Wales

[8] Leasehold and freehold residential property transactions in England and Wales: 2018

4.4. Summary of options

Option 1 carries no costs and benefits as it is the ‘do nothing’ option.

Option 2, to mandate ground rents on new properties to be a peppercorn amount, also carries no benefits or costs.

As has been shown above the percentage price increase for the average new build leasehold flat is comfortably within our central estimate of the freehold premium, indicating that there is scope for the upfront price to increase to fully reflect the present value of the ground rents without breaching the freehold equivalent price (with a certain amount of leeway remaining to allow for the value of those continuing leasehold costs to still be reflected).

As this price increase is equivalent to the present value of the ground rent payments over the lifetime of the lease, the freeholder would receive the equivalent economic value from the property under this option as they would in the counterfactual. This results in a net zero cost to the freeholder from change in property value. Equivalently the average new build leaseholder would pay the same amount in ground rent in present value terms over the lifetime of the lease as they would under this option with the initial increase in price. This would result in net zero cost to the leaseholder under this option from the change in property price but the benefit to the buyer will be that this cost is more transparent and less easy to exploit.

As this policy's costs are within +/-£5 million equivalent annual net direct costs to business (EANDCB), the policy meets the requirements for a De Minimis Assessment.

5. Sensitivity Analysis

Below we have conducted sensitivity analysis on our assumptions to see under which assumptions our conclusions may no longer hold and the potential variance of our results if we were to adjust our starting assumptions.

5.1. Regional prices and ground rent capitalisation

Using the HMLR price paid data as above we can get estimates for the median price of new build flats in 2019 by region.

Region	Median New build Flat price
North East	£139,995
North West	£146,891
Yorkshire and the Humber	£130,000
East Midlands	£125,266
West Midlands	£179,995
East of England	£230,500
London	£506,223
South East	£255,000
South West	£198,250
Wales	£170,000

Table 6 Median New build Flat Price

Using the same national average ground rent terms as in Section 4 (£9,143 Present Value terms), we test what this means for regional-level price increases from capitalising ground rents, and how that compares with the estimated freehold premium.

Region	Price increase if capitalising the national average ground rent
North East	6.5%
North West	6.2%
Yorkshire and the Humber	7.0%
East Midlands	7.3%
West Midlands	5.1%
East of England	4.0%
London	1.8%
South East	3.6%
South West	4.6%
Wales	5.4%

Table 7 Regional Price increase from ground rent capitalisation

We recognise that this approach is likely to show artificially high capitalised ground rents as a percentage price increase in regions where house prices are lower. This is because there is a vast difference in property prices and ground rents by region and therefore using the national average ground rent is probably not reflective of reality. Nonetheless, almost all the regional price increases suggested from capitalising ground rents lie within our central estimate of the freehold premium. The East Midlands slightly exceeds it and since other regions are close, this implies there could be scope for price increases to exceed the premium at a sub-regional level.

We therefore attempt to test this further by looking at the ground rents at a more granular regional level.

Regional new build ground rent data was unavailable at the time of this analysis, but according to the ComRes leaseholder survey, leaseholders who pay a ground rent in the North and the Midlands were more likely to report a lower ground rent cost than their Southern counterparts – 14% of those in the North and 15% of those in the Midlands said they pay up to £10, compared to only 5% in the South (including London). Three in ten (28%) Northern and a quarter (24%) of Midlands leaseholders who pay a ground rent pay up to £50, compared to only 16% in the South (excluding London).

In the market, a value of 0.1% has become a benchmark of what is generally viewed as an ‘onerous’ ground rent, after Nationwide publicly stated it would not lend on new build properties if the ground rent was more than 0.1% of the purchase price. In reality, therefore, the ground rent tends to be related to the property value and will vary accordingly by region.

We assume housebuilders would aim to keep their new build ground rent terms at most 0.1% to minimise the risks of potential buyers being unable to obtain a mortgage. We use this to create regional-level estimates of ground rents to better test the price increases from capitalising ground rents under these terms:

Region	Present Value Ground rent	Price increase from capitalising ground rents
North East	£5,120	3.7%
North West	£5,372	3.7%
Yorkshire and the Humber	£4,754	3.7%
East Midlands	£4,635	3.7%
West Midlands	£6,582	3.7%
East of England	£8,429	3.7%
London	£18,528	3.7%
South East	£9,344	3.7%
South West	£7,204	3.7%
Wales	£6,217	3.7%

Table 8 Regional Ground rent capitalisation under the 0.1% rule

The regional price increase from capitalising ground rents under these standard terms now falls comfortably within the average estimated freehold premium of various estimates, in all regions. This indicates that the overall conclusion – that there is scope for ground rents to be capitalised into upfront sale prices without exceeding a price that the market could bear, in a way that is more transparent and fairer for leaseholders – holds in all of the English regions and in Wales.

5.2. Length of lease

The starting length of leases also have significant variance and would have an input on the total amount of Present Value ground rent payments the freeholder would receive from the property. Below we look at the potential Present Value ground rent payments from the most common lengths of leases and whether they could be capitalised under our assumed freehold premium estimates.

Lease Length	Present Value ground rent
99 Year	£8,546
125 Year	£9,143
250 Year	£9,327
999 Year	£9,327

Table 9 Present Value of ground rent by lease length

The Present Value ground rent payments for a 250 year and 999 year lease are equivalent as the ground rent payments from year 150 onwards are marginally above £0 due to the amount of discounting applied, leading to almost no difference between the Present Value amount for any leases beyond 150 years.

Assuming these Present Value ground rent payments are capitalised into the property price of median new build flat price of England of £276,000 gives the following property price increase:

Lease Length	Present Value ground rent	% price increase
99 Year	£8,546	3.1%
125 Year	£9,143	3.3%
250 Year	£9,327	3.4%
999 Year	£9,327	3.4%

Table 10 Price increase by lease length

Irrespective of lease length the Present Value of the ground rent payments can be comfortably capitalised into the average property price under our estimated freehold premium.

5.3. Initial ground rent payment

The initial ground rent payment can also vary significantly by region and property type. The ComRes Survey presented the following breakdown of ground rent payments by surveyed respondents:

How much ground rent do you pay per year?	Respondents
Up to £10	10%
£11 - £50	11%
£51 - £100	11%
£101 - £200	18%
£201 - £300	12%
£301 - £500	9%
£501 - £1,000	9%
£1,001 - £5,000	12%
£5,001+	8%

Table 11 Survey responses on ground rent payments per year

For those surveyed who report paying a ground rent, the median ground rent per year reported by those living in a house (£250) is higher than those living in flats (£200). Median ground rent for new build leaseholders (£300) is double that of second-hand property leaseholders (£150).

Those responses of ground rents above £1,000 are most likely due to leaseholders or older ground rent terms or from conflation with other leaseholder costs. As such they will not impact our analysis or sensitives as we are only concerned with new leases and ground rent terms being introduced after the policy is live.

In the central scenario we picked an assumed ground rent of £250 as this was the survey suggested an average ground rent difference of £50 for flats and houses. We applied this £50 difference to £300 to arrive at £250. If we were to instead repeat the initial analysis with ground rent initially set at £300, we would have the following ground rent payment schedule:

	Year													
	1	2	3	4	5	6	7	8	9	10	11	12	…	125
Nominal payments	£300	£300	£300	£300	£300	£300	£300	£300	£300	£300	£407	£407	…	£11,699
Real payments	£300	£295	£289	£283	£276	£270	£265	£259	£253	£248	£329	£322	…	£784
Present Value payments	£300	£285	£270	£255	£241	£228	£215	£203	£192	£182	£233	£221	…	£22

Table 12 Average per-unit ground rent payments schedule under £300 initial ground rent

Over the lifetime of the lease this amounts to a total nominal payment of £377,787 or in present value terms £10,971.

	Total
Nominal payments	£377,787
Real payments	£59,825
Present Value payments	£10,971

Table 13 Total lease lifetime costs of ground rent under £300 initial ground rent

Taking the assumed ground rent terms as above, this would add £10,971 to the to the £276,000 purchase price of a median new build flat in England. The capitalisation of the ground rent payments would therefore lead to a 4.0% increase in the flat price. This still lies within our 7.1% estimate of the freehold premium so even if the assumption on ground rent terms for future leases were to not hold the conclusion of ground rent capitalisation causing net zero monetary impact still holds.

	Median New build Flat in England
Property price	£276,000
Present Value of Ground rent payments	£10,971
Total price	£286,971
% price increase	4.0%

Table 14 Price increase from ground rent capitalisation under £300 initial ground rent

The small (42 respondent) survey on ground rent terms in Wales was not deemed robust enough to explore the variance of ground rent terms. The ComRes data was survey data from England only so would not be applicable to ground rent terms in Wales. Therefore, this sensitivity was not explored for Wales.

5.4. New vs Old ground rent terms

For our analysis we have assumed in our counterfactual that all new build properties sold from 2022 onwards would be sold under the new terms of an initial ground rent of £250 fixed for 10 years after which it is adjusted at 10-year intervals by RPI and then linked to RPI for the remaining lease term.

If instead we were to assume new builds were to be sold on a mixture of new and old terms, if for example some builders were not to change their terms. Based on the current mix of properties on new and old term ground rent payments as estimated by the Homeowners association survey leads a weighted average of the nominal payment increase every 10 years was taken. The weighted average ground rent payment increase was 1.54 every 10 years.

Taking the average be 125-year lease with an initial ground rent of £250 fixed for 10 years gives the following payment schedule:

	Year												
	1	2	3	4	5	6	7	8	9	10	11	12	..	125
Nominal payments	£250	£250	£250	£250	£250	£250	£250	£250	£250	£250	£391	£391	..	£52,737
Real payments	£250	£250	£245	£240	£235	£230	£225	£220	£215	£215	£322	£315	..	£3,639
Present Value payments	£250	£241	£229	£217	£205	£194	£183	£173	£164	£155	£228	£216	..	£103

Table 15 Ground rent payment profile under a mix of new and old ground rent terms

Over the lifetime of the lease this amounts to a total nominal payment of £1,197,609 or in present value terms £16,600:

	Total
Nominal payments	£1,197,609
Real payments	£150,541
Present Value payments	£16,660

Table 16 Total lease lifetime costs of ground rent under mixed ground rent terms

Taking the assumed ground rent terms as above, this would add £16,660 to the to the £276,000 purchase price of a median new build flat in England. The capitalisation of the ground rent payments would therefore lead to a 6.1% increase in the flat price. This still lies within our 7.1% estimate of the freehold premium so, even if the assumption on ground rent terms for future leases were to not hold, the conclusion of ground rent capitalisation causing net zero monetary impact still holds.

	Median New build Flat in England
Property price	£276,000
Present Value of Ground rent payments	£16,660
Total price	£292,600
% price increase	6.0%

Table 17 Price increase from ground rent capitalisation under mixed ground terms

The Homeowners association survey data was on England only and would not be an accurate representation of the ground rent term mix for Wales. Wales-specific data on ground rent terms was not available at the time of this analysis and therefore this sensitivity was not explored for leasehold properties in Wales.

5.5. Additional leaseholder costs

Beyond ground rents leaseholders also face additional costs associated with being a leaseholder, such as permission fees. Our assumption is that these make up a portion of the freehold premium and we have attempted to assess how much in order to stress test the conclusion that the capitalised ground rents do not increase purchase prices above the freehold equivalent.

Data from a 'Which?' survey[9] estimated the unweighted average permission fee cost is £900. Data from the ComRes survey suggests median permission and admin fees were lower than this; we use the higher 'Which?' figure here to be conservative. Data was not available on the average number of times permission fees would be paid by a leaseholder so a range of 4, 7 and 10 times was taken to be examined to see the potential impacts on leasehold cost capitalisation.

It was assumed permission would be sought/permission fees paid an equal number of years apart. This leads to the following lifetime permission fee costs over the lease:

Number of times permission sought	Present Value Cost of Permission fees
4	£593
7	£1,264
10	£1,958

Table 18 Present Value of permission fees

Adding these costs to the central estimate of ground rent capitalisation leads to the following cost profiles:

	4 times	7 times	10 times
Average England new build price	£276,000	£276,000	£276,000
Present Value of Ground rent payments	£9,143	£9,143	£9,143
Present Value Cost of Permission fees	£593	£1,264	£1,958
Total price	£285,735	£286,407	£287,100
% increase	3.5%	3.8%	4.0%

Table 19 Price increase from ground rent capitalisation and permission fees (England)

	4 times	7 times	10 times
Average Wales new build price	£170,000	£170,000	£170,000
Present Value of Ground rent payments	£5,486	£5,486	£5,486
Present Value Cost of Permission fees	£593	£1,264	£1,958
Total price	£176,078	£176,750	£177,443
% increase	3.6%	4.0%	4.4%

Table 20 Price increase from ground rent capitalisation and permission fees (Wales)

Even in the high scenario of 10 permission fees paid the additional costs keeps the capitalisation of leasehold costs within our assumed central estimate of 7.1%.

9 https://www.which.co.uk/news/2018/06/to-have-or-to-leasehold-inside-the-scandal-rocking-the-new-homes-industry/