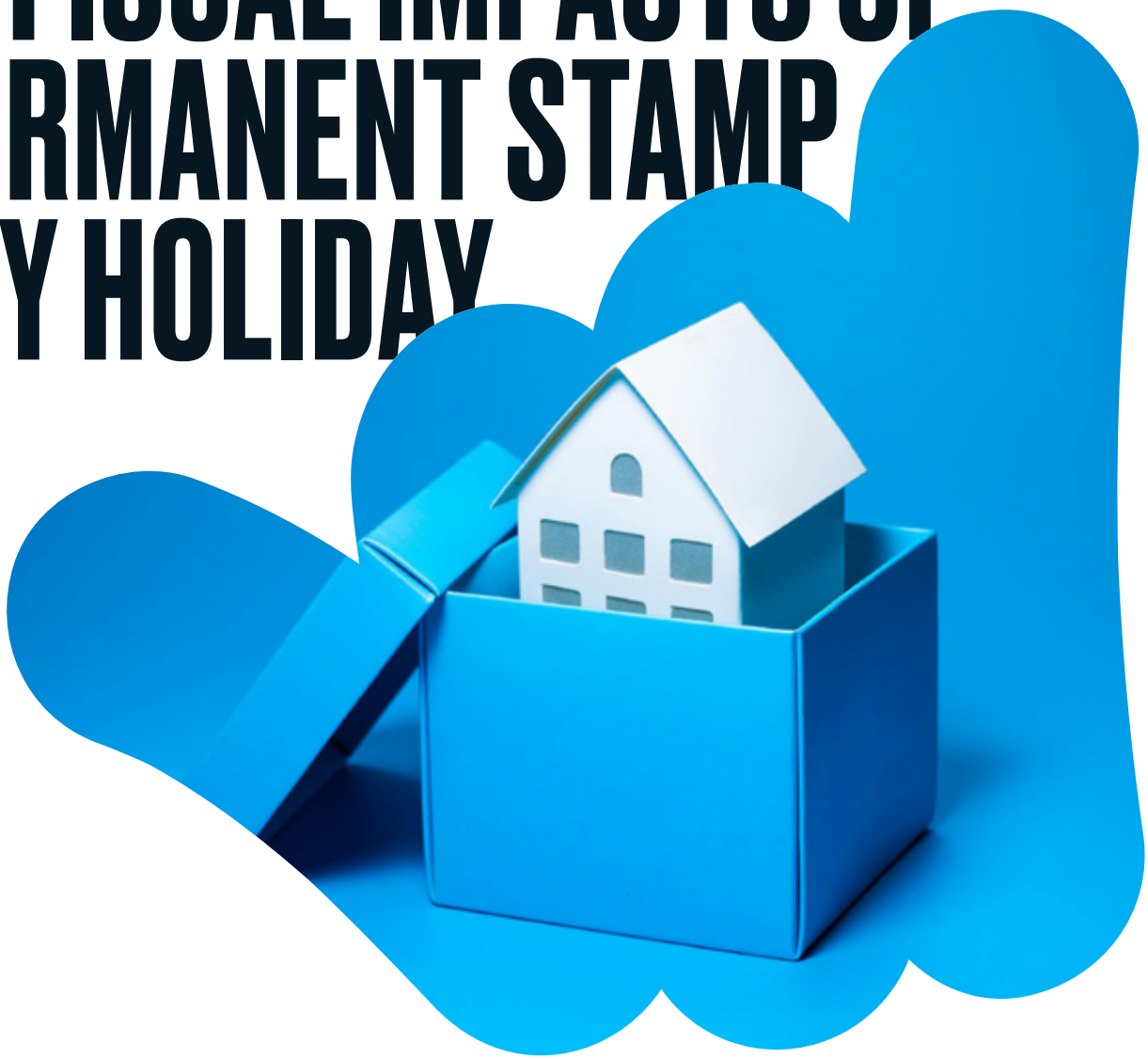
Kensington

THE FISCAL IMPACTS OF A PERMANENT STAMP DUTY HOLIDAY



Research conducted by:

Cebr

December 2020

FOREWORD

Kensington

2020 has been a very difficult year for all of us but there has been a bright spot. The housing market - brought to life following the first lockdown by Chancellor Sunak, care of a bold piece of temporary tax reform. The stamp duty holiday, which saw the threshold for paying Stamp Duty Land Tax (SDLT) rise from £125,000 to £500,000, worked wonders for the beleaguered market.

Thousands of people have used this as an opportunity to get on the ladder, to upsize, to flee town for a more rural clime or to downsize and free up capital and take on a more manageable property. Up and down the country we've seen activity, which has seen house price growth, a return of consumer sentiment and a boost to the UK economy. On top of everything else, this policy has been hugely popular and fuelled the ideals of home ownership.

And yet, the policy is likely to be scrapped at the end of March 2021. Why?

The government will argue that it would be fiscally irresponsible to risk a long-term loss of significant tax revenue, especially at a time when government debt is at an all time high. On the surface this looks a reasonable and valid argument. Making the cut permanent would cost £3.9bn a year in lost tax receipts.

But we at Kensington Mortgages got to thinking – would it really be fiscally negative to make the stamp duty holiday permanent? After all, a range of positive knock-on effects would result from a higher threshold.

We wanted to put our thesis to the test. So we commissioned the Cebr to conduct some research on our behalf. The results are striking, backing up our gut feeling that the Treasury has perhaps been too conservative in its fiscal impact calculations. The research shows that in the upper bound scenario, rather than experiencing a long-term decline in tax take, maintaining the current threshold sees Her Majesty's Treasury recoup all the money it previously raised through the stamp duty and end up net positive to the tune of £139m.

Stamp duty is a blunt instrument. The spike in activity following the introduction of the changed thresholds tells its own story. It has been altering behaviours for years – discouraging older people from downsizing and making moving across the country for a new job a costly and complicated endeavour. None of that is helpful in an economy trying to re-orientate itself to changed realities and deal with long-standing productivity issues.

With one of the main barriers to buying and selling a home removed, our research estimates that there would be approximately 37,000 additional housing transactions per year due to the reduced friction in the trade. Lower taxes bring a clear benefit to consumption and would boost UK households' property wealth, with a clear correlation on spending. All this helps the economy.

So the government, according to Cebr's upper bound estimates, could have its cake and eat it. Recoup more tax whilst maintaining the giveaway. Encourage downsizing and free up valuable housing stock. What Chancellor could ask for more?

We hope that you find the research of interest and a source of positivity at the end of what has been a very long year.

Mark Arnold, CEO
Kensington Mortgages
December 2020

CONTENTS

EXECUTIVE SUMMARY

Kensington

Stamp duty has long been a controversial tax. Critics highlight the role of the tax in stifling housing market activity and the seemingly arbitrary penalty it applies to properties that change hands more frequently, while advocates point to the tax's progressive structure and its role in deterring speculation in the housing market. Since July 2020, a stamp duty holiday has been in place, which is scheduled to come to an end on 31st March 2021. The policy's apparent success so far in reigniting the housing market has caused many to question the wisdom of terminating the stamp duty holiday so early on in the UK's economic recovery.

Central to this debate are the conflicting objectives of rebuilding the economy following the devastating impacts of the COVID-19 pandemic while also keeping the public finances under control. The fiscal implications of stamp duty are highly complex, given the interlinkages that exist between the UK housing market and the wider economy.

This report presents a comprehensive analysis of the fiscal impacts of making the current stamp duty holiday permanent, drawing from a wealth of academic literature and government data. The key findings are:

- Extending the stamp duty holiday would be close to fiscally neutral or potentially even fiscally positive, with the new tax revenues generated by higher consumption and housing market activity recouping between £2.3 billion and £4.1 billion. In the upper bound estimate, this leads to a fiscal surplus of £139 million associated with a permanent extension of the stamp duty holiday.

- Holding property prices and transaction numbers constant, extending the stamp duty holiday would lead to a £3.9 billion decline in revenues from Stamp Duty Land Tax (SDLT), Land and Buildings Transactions Tax (LBTT) and Land Transactions Tax (LTT).

- However, our analysis shows that the reduction in the rate of stamp duty would lead to 37,000 additional property transactions taking place each year, generating £266 million in revenues annually.

- If the stamp duty holiday were to be made permanent, HMRC's derived elasticities suggest that future UK house prices would be on average 1.3% higher than they otherwise would have been. Moreover, the structure of the SDLT schedule means that the percentage change in prices would be greater for higher value properties, leading to a 1.9% increase in households' collective property wealth. These higher property values would have a positive effect on SDLT, LBTT and LTT receipts, generating £256 million in additional revenues each year.

- Our analysis further shows that the increase in house prices would lead to an estimated 0.36% - 0.75% increase in household consumption. This additional economic activity would generate estimated tax revenues of up to £2.9 billion per year.

- Making the stamp duty holiday permanent would reduce UK households' collective stamp duty burden by £3.4 billion each year. In our lower-bound estimate, we assume that this will stimulate a further £1.0 billion of consumption, generating £290 million in tax revenues each year. In our upper-bound estimate, aggregate consumption rises by £2.0 billion per year, leading to a £561 million increase in tax revenues.

- Finally, by increasing the value of capital gains from the sale of residential properties, a permanent extension of the stamp duty holiday would generate an estimated £124 million in capital gains tax revenues in the first year, with this amount diminishing in future years.

Figure 1 Share of initial decline in tax revenues recouped via various channels (upper estimate)

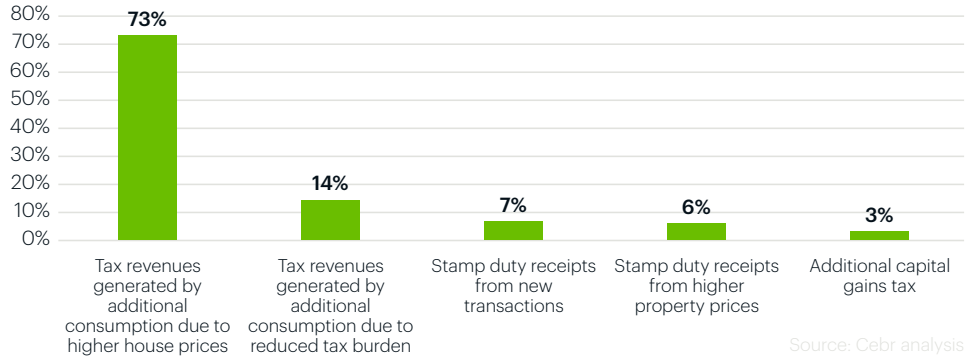
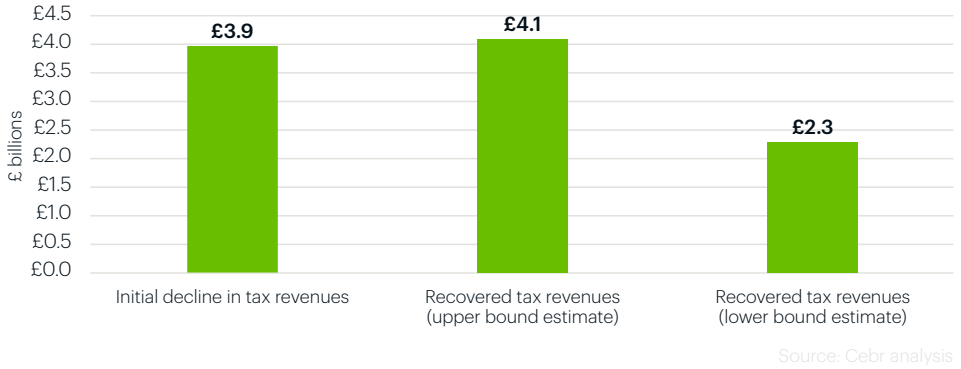
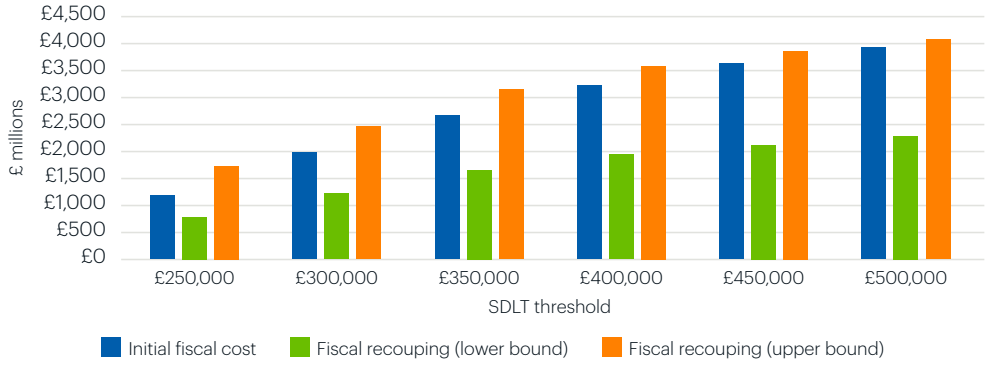


Figure 2 Comparison of initial decline in tax revenues vs recovered tax revenues



- This study also examines the fiscal impacts of extending the stamp duty holiday beyond March 2021, but with varying levels of SDLT thresholds below which stamp duty would not be payable. The analysis finds that the potential fiscal benefits steadily increase as the SDLT threshold is lowered.
- According to Cebr's upper bound estimate, maintaining the SDLT threshold at £500,000 would lead to a net increase in tax revenues of £139 million each year, relative to a scenario where the SDLT regime reverts back to its structure prior to the stamp duty holiday. If the SDLT threshold were instead to be lowered to £450,000, the net increase in tax revenues would rise to £247 million based on Cebr's upper bound estimate.
- Lowering the SDLT threshold to £300,000 would lead to a net increase in tax receipts for the Treasury of £491 million per year in our upper bound estimate relative to a scenario where the previous SDLT schedule is restored. Meanwhile, reducing the threshold to £250,000 would deliver a fiscal uplift of £546 million based on the upper bound estimate and a fiscal shortfall of £398 million in the lower bound scenario.
- These findings indicate that raising the SDLT threshold on a permanent basis would lead to an increase in the total tax revenues received by the Treasury each year.

Figure 3 Fiscal impacts of different SDLT thresholds



1. BACKGROUND TO THE STAMP DUTY HOLIDAY

Kensington

1.1 A short history of Stamp Duty in the UK

Dating back to 1694, stamp duty is one of the UK's oldest taxes, far predating income tax which was introduced in 1799. It was originally brought into place to raise funds for England's war against France for a period of four years.[1] 326 years on, Stamp Duty Land Tax (SDLT) – a descendent of stamp duty – continues to have a major impact on the UK's housing market. In 1694, stamp duties were applied to an array of legal documents including leases, patents, pardons and university degrees. Today, the scope of such taxes is largely confined to transfers of land (stamp duty land tax) and shares. Since SDLT payments do not involve a physical stamp, the tax is technically classed as a transaction tax rather than a stamp duty.

Rates of SDLT have been frequently adjusted over the past twenty years. One of the most significant changes took place in 2014, when the system moved from a "slab" structure – whereby a single tax rate was applied to the entire transaction value – to a "slice" structure, where portions of the transaction value are taxed at increasing rates.

In 2000, a rate of 0% was applied to transactions under £60,000, which rose to 1% for transactions between £60,001 and £250,000, 2.5% for transactions between £250,001 and £500,000 and 3.5% for transactions above £500,000. At the start of 2020, the threshold at which SDLT was payable was significantly higher, at £125,000. However, a rate of 2% was payable for the portion of a transaction between £125,001 and £250,000, 5% was payable for the portion between £250,001 and £925,000, 10% was payable for the portion between £925,001 and £1.5 million, and 12% was payable for the amount above £1.5 million.[2]

These tax schedules mean that in the year 2000, the SDLT bill for a £200,000 property transaction would have been £2,000. At the start of 2020, this transaction would have been subject to £1,500 of SDLT. However, it is important to note that average house prices have increased significantly since 2000, meaning that the amounts paid in stamp duty for a typical transaction have also soared. In Q1 2000, the average UK house price was £86,000. At the start of 2000, a transaction of this value would have incurred an SDLT bill of £860 (or approximately £1,283 in today's money). In Q1 2020, the average UK house price was £232,000. A transaction of this value at the start of 2020 would have generated an SDLT liability of £2,140.

Table 1 SDLT rates in England and Northern Ireland at the start of 2020

SDLT rate	Value band
0%	£0 - £125,000
2%	£125,001 - £250,000
5%	£250,001 - £925,000
10%	£925,001 - £1.5 million
12%	£1.5 million or above

Source: https://www.gov.uk/stamp-duty-land-tax/residential-property-rates

1 In so far as these funds aided efforts to suppress the Stuart's attempts to reclaim the English throne following the Glorious Revolution in 1688, the proceeds from the earliest form of stamp duty helped to solidify the principle of parliamentary sovereignty (as opposed to sovereignty of the monarch). This proved a critical juncture in world history by sowing the seeds of the economic and political institutions that later fostered the industrial revolution in Great Britain.

2 In Scotland, the Land and Buildings Transaction Tax replaced the Stamp Duty Land Tax in 2015. In Wales, the Land Transaction Tax replaced the Stamp Duty Land Tax in 2018.

1.2 The 2020-2021 SDLT holiday

As part of a package of measures designed to stimulate demand in the economy in the aftermath of the first wave of the COVID-19 pandemic, UK Chancellor Rishi Sunak announced an SDLT holiday running from 8th July 2020 until 31st March 2021. During this holiday, property transactions at a price below £500,000 (which make up nearly 90% of transactions in England and Northern Ireland) are exempted from stamp duty. Meanwhile, SDLT of 5% is payable on the portion of transactions between £500,000 and £925,000, 10% is payable on the portion between £925,001 and £1.5 million and 12% is payable on the amount above £1.5 million. The stamp duty surcharge for second-home purchasers or buy-to-let investors has remained at 3% on the value above £40,000. From the 15th July, the threshold for Land and Building Transaction Tax (LBTT) in Scotland was lifted from £145,000 to £250,000, while in Wales the threshold for Land Transaction Tax (LTT) was lifted from £180,000 to £250,000 from 27th July. Both of these land transaction tax holidays are scheduled to end in 31st March 2021, in line with the ending of the stamp duty holiday in England and Northern Ireland.

The UK is still at the foothills of the economic recovery, with GDP 9.6% lower in Q3 2020 than it was during the same quarter in 2019. The UK government now faces a delicate balancing act of supporting the economic recovery while avoiding a potentially destabilising increase in levels of government debt. Given the fragile state of the UK economy, with unemployment on the rise, high levels of business debt and the closure of otherwise viable companies, the appropriate time to withdraw fiscal stimulus is a critical public policy question.

When it comes to SDLT, there are a number of dynamics that complicate the fiscal impacts of changes to the tax schedule. This report seeks to estimate the fiscal impact of making permanent the stamp duty holidays that were brought into place in July. This involves quantifying:

1. The decline in residential SDLT receipts as a result of making the stamp duty holidays permanent;

2. The rise in residential SDLT receipts associated with the increase in transaction numbers and house prices brought about by the extension of the stamp duty holidays;

3. The rise in capital gains tax receipts associated with the increase in house prices;

4. The rise in economy-wide tax receipts generated by increased levels of consumption associated with an increase in house prices, and;

5. The rise in economy-wide tax receipts generated by increased levels of consumption associated with the reduced SDLT burden for UK households.

2. FISCAL IMPACTS OF MAKING THE STAMP DUTY HOLIDAY PERMANENT

Kensington

2.1 Direct fiscal impacts

Cost to the Treasury

In the 2019/20 financial year, residential stamp duty land tax generated £8.4 billion in revenue for the Treasury. Meanwhile, Scotland's Land and Buildings Transactions Tax brought in £414 million and Wales' Land Transaction Tax raked in £166 million. This equates to a total of £9.0 billion in revenues generated by the UK's various land transaction taxes over the preceding financial year.[3] Excluding the revenues received from the surcharge rates of tax applied to additional dwellings (which have remained in place throughout the stamp duty holiday), the total revenue generated by SDLT, LBTT and LTT in the 2019/20 financial year was £7.2 billion.

In order to estimate the decline in stamp duty receipts brought about by a permanent extension of the stamp duty holiday, Cebr has analysed data on the number of transactions that took place in the 2019/20 financial year within 47 property value bandings in England, Scotland, Wales and Northern Ireland. By combining this with the reduction in the effective tax rate applied to different property transaction values, Cebr estimates that, holding property prices and transaction numbers constant, a permanent extension of the current SDLT, LBTT and LTT holidays would bring down the annual revenues from these taxes (excluding revenues from higher rates of tax applied to additional dwellings) from £7.2 billion to £3.2 billion. This corresponds to a cost to the Treasury of £3.9 billion per year. This calculation is based on the numbers of property transactions in different price brackets in each of the UK's four constituent nations as well as the specific attributes of each nation's transaction tax holiday.

Effect of stamp duty holiday on prices and transactions

Crucially, the £3.9 billion cost to the Treasury of extending the stamp duty holiday neglects the effect of this policy on housing market activity and the corresponding impacts on receipts from SDLT, LBTT and LTT. HMRC has previously developed estimates of the impact of changes in the rate of stamp duty on average prices and transaction numbers, based on outcomes observed following changes to the stamp duty schedule that were introduced in 2014. These estimates are outlined in Table 2 below. Note that the "semi-elasticities" presented represent the percentage change in house prices or transaction numbers brought about by a one percentage point change in the rate of SDLT payable on certain transactions. For instance, a price semi-elasticity of -1.5 for a property worth between £250,000 and £1 million implies that a decline in the effective rate of SDLT from 1.5% to 0.5% of the property's value would lead to a 1.5% increase in that property's value.

Table 2 Semi-elasticities of residential property prices and transaction numbers with respect to the rate of SDLT

	Properties worth less than £250,000	Properties worth between £250,000 and £1 million	Properties worth more than £1 million
Price semi-elasticity	-2	-1.5	-1.5
Transactions semi-elasticity	-6	-4.5	-6

Source: Office for Budget Responsibility

3 The COVID-19 pandemic and the associated economic downturn has led to a significant decline in revenues from most taxes. The modelling presented in this report is based on levels of housing market activity in the 2019/20 financial year, which will not have been distorted as significantly by COVID-19 related disruption.

By combining HMRC's derived semi-elasticities with the change in the rate of SDLT for different transaction values, Cebr has estimated the effects of making the stamp duty holiday permanent on transaction numbers and prices for 47 separate property value bandings in each of the four nations of the UK. The results of this modelling suggest that making the stamp duty holiday permanent would lead to an additional 37,000 property transactions taking place in the UK each year relative to a counterfactual scenario in which the original stamp duty schedules are restored after 31st March 2021. These additional property transactions would generate an estimated £266 million in SDLT, LBTT and LTT revenues each year.

Meanwhile, by lowering the tax burden of property transactions, reductions in stamp duty also have a positive effect on house prices. Applying the same approach as described above for transaction numbers but this time using the HMRC's estimates for the semi-elasticity of price with respect to the rate of stamp duty, Cebr projects that the value of UK households' property wealth would be 1.9% higher in the event that the stamp duty holiday is extended. This increase in property values would increase the SDLT, LBTT and LTT revenues generated by each transaction. Cebr estimates that the effect of higher property prices on SDLT, LBTT and LTT receipts would bring in £256 million in additional revenues each year.

Taken together, higher property values and transaction numbers brought about by the permanent extension of the stamp duty holiday would generate £523 million of annual revenues to the Treasury, compensating for 13% of the initial decline in tax revenues associated with this policy.

2.2 Indirect fiscal impacts

Impact of house price increases on capital gains tax receipts

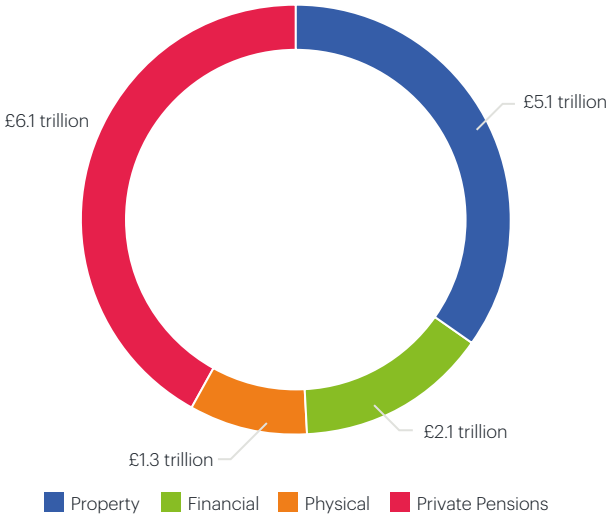
When an individual sells a property that is not their main residence, they are liable to capital gains tax (CGT) on the profits associated with an appreciation of the property's value which took place during the period in which the individual owned the property. CGT is charged on any gains in excess of the personal annual allowance, which currently stands at £12,300.

According to HMRC, during the 2017/18 financial year (the most recent year for which data are available), the value of residential property transactions in which the seller was liable to CGT was £26.6 billion. The 1.9% increase in aggregate property wealth associated with the permanent extension of the stamp duty cut implies that the value of residential property transactions in which the seller is liable for CGT would rise by £505 million each year. The rate of CGT depends on the seller's taxpayer status. For sellers with a taxable annual income in excess of £50,000 per year, gains from residential property transactions are taxed at 28%. For sellers with a taxable annual income of £50,000 or lower, gains from residential property transactions are taxed at 18%. Based on the income distribution of individuals that had CGT liabilities during the 2018/19 financial year, Cebr estimates that the average rate of CGT applied to residential property transactions is 25%. Based on this, we estimate that the increase in property values brought about by a permanent extension of the stamp duty holiday would bring in £124 million in additional CGT receipts during the first year. This effect would diminish in future years as a growing share of the property owners who benefitted from the increase in property values eventually pay the associated CGT liabilities.

Consumption impacts of house price increases

According to the latest wave of the Office for National Statistics' Wealth and Assets survey, UK households' gross property wealth stood at £6.3 trillion between 2016 and 2018. Adjusting for £1.2 trillion of mortgage debt leaves UK households' net property wealth at £5.1 trillion. This equates to 35% of total household net wealth including private pensions and 60% of total wealth if you exclude private pensions.

Figure 4 Breakdown of total household net wealth in the UK

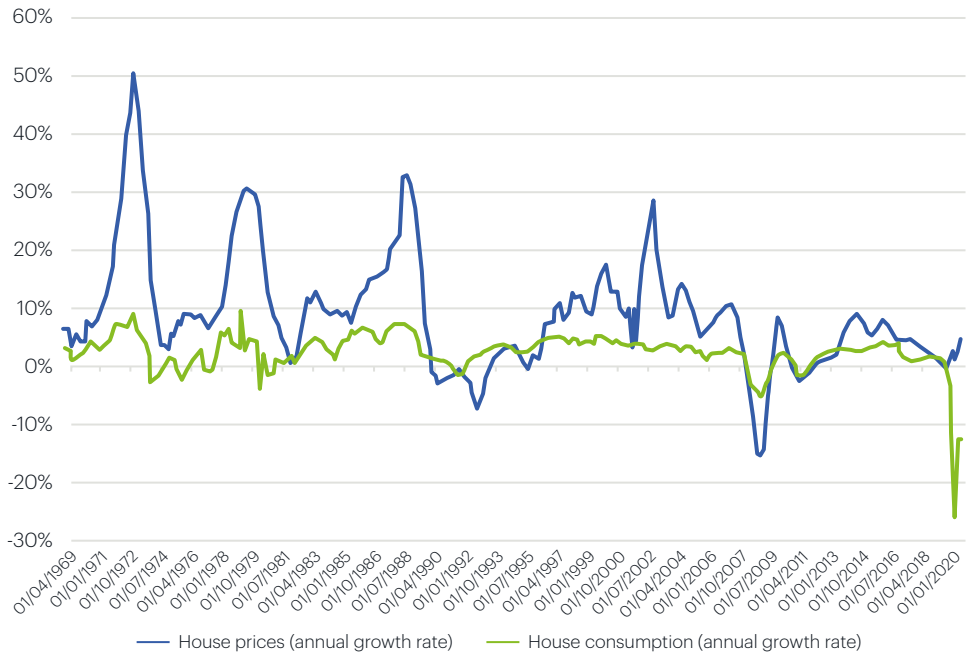


Source: Office for National Statistics, Cebr analysis

With a significant share of households' wealth contained within property, movements in house prices have a major effect on total levels of wealth in the UK. Based on elasticities derived by HMRC, Cebr estimates that a permanent extension of the stamp duty holiday would lead to house prices being 1.3% higher on average than they otherwise would have been, while the total value of households' property wealth would be 1.9% higher. This would equate to a £113 billion increase in UK households' collective net wealth.

There is a rich economic literature examining the effects of increases in wealth on households' consumption patterns. Historically in the UK, periods of house price appreciation have often coincided with periods of rising consumption. One of the main theories that has been proposed to explain this relationship between house prices and consumption is the presence of a "wealth effect".[4] This theory posits that an increase in an individual's level of wealth causes them to feel more secure and confident about their financial position, inducing them to put aside a smaller share of their income and thus increase their spending.

Figure 5 UK house price and consumption growth, 1969 - 2020



Source: Office for National Statistics, Cebr analysis

4 https://www.bankofengland.co.uk/knowledgebank/how-does-the-housing-market-affect-the-economy

Another explanation for the positive relationship between house prices and consumption is the presence of imperfect capital markets. The Life-Cycle theory proposes that individuals seek to smooth their consumption (or equivalently their level of material well-being) evenly across the span of their life.[5] This is achieved by borrowing or drawing down savings during periods of low income and accumulating savings during periods of high income. However, the realities of credit markets mean that this consumption path is not always feasible. Indeed, many individuals are not able to borrow money to the extent that would be necessary to smooth consumption over their lifetime. Increases in house prices can ease credit constraints by allowing people to borrow more against the value of their home. This in turn enables individuals that were previously credit constrained to raise their consumption if they so desire. A practical example of this is when individuals experience a fall in their income as a result of redundancy. Under these circumstances, individuals may wish to borrow in order to maintain their level of consumption during the period in which they are searching for a job. Rises in house prices mean a greater number of individuals are able to obtain the credit necessary to smooth their consumption in this manner.

There is also a possibility that the co-movement of house prices and consumption is driven by independent factors which affect both house prices and consumption. For instance, increases in expected future earnings or declines in interest rates can fuel a rise in both house prices and consumption. Unlike the first two theories for the relationship between house prices and consumption, this final theory would suggest that there is not a causal link between house price growth and consumption growth.

Using data from the UK Family Expenditure survey between 1988 and 2000, Campbell and Coco (2005)[6] estimate that the elasticity of consumption with respect to house prices is 0.57. This implies that a 1% increase in UK house prices is associated with a 0.57% rise in consumption. The study also finds that the elasticity of consumption with respect to house prices is significantly higher for older homeowners than it is for younger homeowners. This is consistent with the fact that older homeowners are more likely to downsize to a smaller property later in life while young homeowners are more likely to move into a larger property.

This means that older homeowners benefit the most from house price increases, since the increase in their property wealth more than offsets the expected increase in the cost of purchasing future properties. For instance, for a couple currently living in a £200,000 house but planning to move into a £100,000 house once the children leave the nest, a 5% rise in house prices would increase the sale price of their current property by £10,000 while only increasing the purchase price of their next property by £5,000. By contrast, a young family planning to move from a £100,000 house to a £200,000 house would see the £5,000 increase in their home value more than offset by a £10,000 increase in the price of their next home.

Muellbauer and Murphy (2006)[7] examine the degree to which the relationship between house prices and consumption in the UK may be driven by changes in credit conditions, which have the potential to influence both house prices and consumption. Credit conditions are assessed via a composite index, which takes into account levels of consumer credit, mortgage approvals, loan-to-income ratios and loan-to-value ratios at different points in time. The paper also considers expected future incomes, which is another factor that could potentially affect both house prices and consumption. The analysis finds that after controlling for changes in credit conditions and expected future income, housing wealth still has a statistically significant effect on consumption in the UK. However, the implied elasticity is considerably lower than that estimated by Campbell and Coco (2005). The study estimates that a one unit increase in the value of property wealth divided by annual income is associated with a 3.7% increase in consumption. This implies an elasticity of consumption with respect to housing wealth of 0.19, based on the current ratio of average property wealth to income in the UK.[8]

Other studies have arrived at similar elasticities. For instance, Case et al. (2001)[9] estimate an elasticity of consumption with respect to property wealth of between 0.11 and 0.17, based on a cross-country study of 14 countries, including the UK. Meanwhile, Attanasio et al. (2005) estimate an elasticity of consumption with respect to house prices of between 0.04 and 0.21 depending on age group, although the paper concludes that this is not predominantly a causal relationship.[10]

Given the range of estimate that exist for the effect of house price on aggregate consumption, Cebr has developed a lower bound and upper bound estimate. For the lower bound estimate, the elasticities derived

5 https://www.richmondfed.org/-/media/richmondfedorg/publications/research/econ_focus/2016/q3-4/jargon_alert.pdf
6 John Campbell and Joao Coco, 2005: "How do house prices affect consumption? Evidence from micro data"
7 Muellbauer and Murphy, 2006: "Housing Wealth, Credit Conditions and Consumption"
8 Orsetta Causa, Nicolas Wolosxko and David Leite, 2019: "Housing, wealth accumulation and wealth distribution: evidence and stylized facts"
9 Karl Case, John Quigley and Robert Shiller (2001): "Comparing wealth effects: the stock market versus the housing market"
10 Orazio Attanasio, Laura Blow, Robert Hamilton and Andrew Leicester (2005): "Booms and busts: consumption, house prices and expectations"

by Muellbauer and Murphy (2006) have been applied, while for the upper bound estimates the elasticities derived by Campbell and Coco (2005) have been applied. In the lower bound estimate, it is assumed that the 1.9% increase in housing wealth leads to a 0.36% increase in annual consumption. In the upper bound estimate, it is assumed that the increase in housing wealth generates a 0.75% increase in consumption.

The fiscal implications of this increase can be calculated by examining the average tax revenue generated in the UK economy from a unit of economic activity. In the 2019/20 financial year, the Treasury took in 37 pence in taxes for every £1 of economic output generated.[11] After accounting for the share of consumption that is derived from imported goods and services, Cebr estimates that the increase in aggregate consumption would generate £1.4 billion in tax revenues each year in the lower bound scenario and £2.9 billion in the upper bound scenario. These estimates rely to a certain degree on the assumption that the UK economy has the spare capacity necessary to absorb this increase in demand without generating inflation. However, with the annual rate of inflation at just 0.9% in October 2020 and UK GDP in Q3 2020 9.6% below its level in Q3 2019, it is reasonable to assume that this spare capacity exists at present.

Consumption impacts of reduced tax burden

Another key outcome that would arise from making the stamp duty holiday permanent is that, despite a small uptick in stamp duty revenues resulting from higher prices and transaction numbers, the total amount of SDLT, LBTT and LTT being paid each year would fall significantly. As shown at the beginning of this chapter, Cebr estimates that UK households' stamp duty payments would decline by £3.4 billion each year if the stamp duty holiday were to be extended, which amounts to a significant tax cut. The remainder of this section will analyse how much of that £3.4 billion annual tax-cut, if any, consumers can be expected to spend, thereby indirectly creating further tax revenues for the Treasury.

The theory of Ricardian equivalence posits that tax cuts have a limited impact on consumer spending, since households anticipate corresponding tax increases in the future when the government eventually seeks to pay down the debt incurred in order to finance the original tax cut.

There are a number of reasons why this theory does not perfectly hold in practice. Firstly, the theory relies upon an infinite lifespan of consumers (or alternatively a high degree of intergenerational altruism such that individuals do not distinguish between the consumption of themselves and of future generations). In reality, finite lifespans mean that in many cases, individuals can rationally assume that they will not face an increase in taxation in the future to cover the costs of a tax cut today, meaning that their lifetime resources and thus present-day consumption will increase. Secondly, borrowing constraints mean that many individuals are not able to smooth their consumption over their lifespan as they would ideally like to. For these individuals, a reduction in taxes would allow them to raise their level of consumption in the present-day to their optimal level. Another key point relates to the value that individuals place on income today compared to the prospect of income in future periods. Bayoumi and Sgherri (2006) find that the discount rate that individuals apply to income in future periods is far higher than the interest rate.[12] If individuals discount the future at a faster rate than the rate of interest paid by the government, a present-day tax cut leads to an increase in their lifetime resources and thus to an increase in spending.

Meissner and Rostam-Afschar (2014) conclude that the behaviours of 62% of respondents in a laboratory experiment were not consistent with Ricardian equivalence.[13] Moreover, Reitschuler and Cuaresma (2004) find significant deviations from Ricardian-style behaviours in the UK.[14] While the evidence is mixed on the degree to which Ricardian equivalence holds in practice, it is clear from the academic literature that the expectation of future tax increases does temper the spending response to present-day tax cuts. Based on a cross-country analysis of the relationship between government deficits and consumption, Bernheim (1987) estimates that £1 of deficit spending stimulates roughly 40 pence in consumption.[15] Meanwhile, using data from the post-war period in Japan, Carroll (2000) concludes that consumers spend as little as 30% of the additional income they receive from permanent tax cuts.[16] Other studies have found evidence of a larger response of consumer spending

11 Office for National Statistics
12 Tamim Bayoumi and Silvia Sgherri (2006): "Mr. Ricardo's great adventure: estimating fiscal multipliers in a truly intertemporal model"
13 Thomas Meissner, Davud Rostam-Afschar (2014): "Do tax cuts increase consumption? An experimental test of Ricardian equivalence"
14 Gerhard Reitschuler, Jesus Crespo Cuaresma (2004): "Ricardian equivalence revisited: evidence from OECD countries"
15 Douglas Bernheim (1987): "Ricardian equivalence: an evaluation of theory and evidence"
16 Christopher Carroll (2000): "Risky habits and the marginal propensity to consume out of permanent income, or, how much would a permanent tax cut boost Japanese consumption"

to tax cuts. For instance, Souleles (2000)[17] estimates that US consumers spent up to 90% of the income they received from the Reagan tax cuts of the 1980s.[18]

Drawing from the academic research outlined above, Cebr has assumed a marginal propensity to consume of 0.3 out of the stamp duty tax savings. This is broadly in line with estimates presented by Bernheim (1987) and Carroll (2000). This implies that 30 pence out of every £1 in stamp duty savings would be spent by consumers. Based on this assumption, Cebr estimates that aggregate consumption would rise by a further £1.0 billion per year as a result of the reduced stamp duty burden, generating tax revenues of £290 million annually.

The above figures are applied to the lower bound scenario because they do not account for the increase in consumption associated with the increase in house prices (as discussed previously), which would generate between £1.4 billion and £2.9 billion in tax revenues. This lowers the amount the government would be required to borrow (and implicitly tax in the future) each year to finance the stamp duty cut from £3.4 billion to around £1.3 billion. Therefore, it can be argued that the tax savings that individuals receive can be decomposed into a "funded" component (i.e. the component financed by an increase in tax revenues elsewhere) amounting to £2.1 billion and an "unfunded" component amounting to £1.3 billion (i.e. the component not financed by other increases in tax revenues).

To calculate an upper-bound estimate for the tax revenues resulting from the reduced stamp duty tax burden, we assume that for the "unfunded" portion of the tax savings, individuals have a marginal propensity to consume of 0.3. This is consistent with the assumptions underpinning the lower-bound estimate. Meanwhile, the "funded" portion of the stamp duty savings can be considered a permanent increase in individuals' lifetime resources. This means that the spending response would not be tempered by the expectation of future tax increases. However, individuals generally do not consume their entire lifetime resources, due to a desire to transfer wealth to future generations as well as precautionary savings motives. Using data from the US, Straub (2019) estimates that the elasticity of consumption with respect to permanent (i.e. long-term average) income is 0.7.[19] Meanwhile, Carroll (2010) calculates a marginal propensity to consume out of permanent income shocks in the range of 0.75 to 0.92.[20] For the purposes of this analysis, Cebr has assumed that 75 pence out of every £1 of the "funded" portion of the stamp duty savings would be spent back into the economy each year. Based on these assumptions, Cebr's upper-bound estimate is that the reduced stamp duty burden would generate tax revenues of £561 million annually.

17 Nicholas Souleles (2002): "Consumer response to the Reagan tax cuts"

18 Most of the academic literature on the topic analyses the effects of changes to production or income taxes. Land transaction taxes differ from other forms of taxes because individuals typically face these taxes on only a handful of occasions during their lives. This means that the direct impacts of a change in stamp duty are highly concentrated among the relatively small subset of the population that purchase a property during a given year. However, the effects of a change in stamp duty will not be confined to those purchasing a property in the very near future. Indeed, individuals planning to purchase a property in the medium to long term may decide that they need to save less of their current income in order to facilitate a future housing transaction, allowing them to consume more in the current period. In this way, it is assumed that while the boost to incomes associated with a permanent extension of the stamp duty holiday would be concentrated among a relatively small number of individuals, the effects on consumption will be more evenly distributed across the UK population.

19 Ludwig Straub (2019): "Consumption, savings, and the distribution of permanent income"

20 Christopher Carroll (2010): "Precautionary savings and the marginal propensity to consume out of permanent income"

2.3 Fiscal impacts of different SDLT regimes

The SDLT schedule that is currently in force is just one of many potential stamp duty regimes. Indeed, there are a range of intermediate SDLT thresholds that could be applied which fall between the current level of £500,000 and the pre-stamp duty holiday level of £125,000. In order to examine this, the analysis described in the preceding sections has been replicated for five additional SDLT schedules, as summarised below:

Table 3 SDLT schedule for six scenarios analysed

Value band	£250,000 SDLT threshold	£300,000 SDLT threshold	£350,000 SDLT threshold	£400,000 SDLT threshold	£450,000 SDLT threshold	£500,000 SDLT threshold
£0 - £250,000	0%	0%	0%	0%	0%	0%
£250,001 - £300,000	5%	0%	0%	0%	0%	0%
£300,001 - £350,000	5%	5%	0%	0%	0%	0%
£350,001 - £400,000	5%	5%	5%	0%	0%	0%
£400,001 - £450,000	5%	5%	5%	5%	0%	0%
£450,001 - £500,000	5%	5%	5%	5%	5%	0%
£500,001 - £925,000	5%	5%	5%	5%	5%	5%
£925,001 - £1.5 million	10%	10%	10%	10%	10%	10%
£1.5 million or above	12%	12%	12%	12%	12%	12%

The results of these analyses indicate that the potential fiscal upside increases as the stamp duty threshold is reduced. Indeed, in our upper bound estimate, net tax revenues would be £139 million per year higher in a scenario where the stamp duty holiday is extended in its current form than in a scenario where the previous regime is restored. This amount increases for lower SDLT thresholds: for an SDLT threshold of £400,000, the net fiscal gain in the upper bound estimate rises to £363 million, while for a threshold of £250,000, the net annual fiscal gain reaches £546 million (relative to a scenario where the pre-holiday stamp duty schedule is restored).

Similarly, the downside fiscal risk diminishes in scenarios with a lower stamp duty threshold. In our lower bound estimate, the Treasury would recoup £2.3 billion of the initial £3.9 billion decline in annual tax revenues associated with a permanent extension of the current stamp duty regime, amounting to a shortfall of £1.6 billion. This fiscal shortfall drops to £1.3 billion in a scenario where the SDLT threshold is lowered to £400,000. Meanwhile, reducing the threshold to £250,000 would limit the fiscal shortfall in our lower bound estimate to £398 million.

3. CONCLUSIONS

The results presented in this report make a compelling case for an extension of the current stamp duty holiday. Cebr estimates that, while the initial reduction in stamp duty receipts would amount to £3.9 billion per year, between £2.3 billion and £4.1 billion of this sum would be recouped via a combination of higher transaction numbers, higher property prices and an increase in aggregate consumption brought about by this rise in house prices and diminished stamp duty tax burden. The channels through which the foregone stamp duty revenues are regained are summarised below:

Table 4 Summary of annual fiscal impacts of permanent extension of stamp duty holiday

	Lower-bound	Upper-bound
Initial reduction in stamp duty receipts	-£3.9 billion	
New stamp duty receipts from additional transactions	£266 million	
New stamp duty receipts from higher prices	£256 million	
Capital gains tax receipts associated with increase in property values	£124 million	
Tax revenues associated with rise in consumption generated by reduced stamp duty burden	£290 million	£561 million
Tax revenues associated with rise in consumption generated by increase in property values	£1.4 billion	£2.9 billion
Taxes recouped	£2.3 billion	£4.1 billion

Even in the lower bound estimates, the cost to the Treasury of extending the stamp duty holiday is only a fraction of the increase in economic activity that would be stimulated by the rise in property values and reduced tax burden on households. In the upper bound scenario, the government could achieve the benefits associated with the surge in economic activity while also improving its fiscal position. The potential fiscal uplift for the Treasury grows in size in scenarios where the SDLT threshold is lowered below its current £500,000 level but remains higher than its level prior to the stamp duty holiday.

A critical assumption underpinning this argument is that the economy has the spare capacity, which means it is in a position to raise production in response to the increased demand brought about by the extension of the stamp duty holiday. If this is not the case, the policy would have the potential to generate inflationary pressures, eroding the value of the government's tax receipts in real terms. However, with UK GDP in Q3 2020 nearly 10% lower than pre-coronavirus levels, the economy is currently a long way from full capacity. Moreover, rising unemployment, high levels of business debt and the ending of the UK's transition period with the European Union are all set to weigh on demand in the short to medium term.

This study has focused primarily on the demand side impacts of a permanent extension of the stamp duty holiday, and how increased consumer activity would help to recoup the initial costs of the policy. However, stamp duty also has an important effect on the supply side of the economy. By deterring

people from moving homes, the presence of stamp duty makes workers less geographically mobile. This inhibits their ability to find work in locations where they can be most productive or where their skills are most valued, which in turn has knock-on consequences for the economy's productive capacity as a whole. While a quantification of the impacts of a permanent extension of the stamp duty holiday on the UK's supply side capacity is beyond the scope of this research, it is clear that these effects would further offset the initial costs of the stamp duty reduction.

When an economy is collectively producing less than its productive resources are capable of, this ultimately leads to unnecessary declines in standards of living alongside higher joblessness. In addition to the obvious human costs, these outcomes can also lead to an erosion of an economy's productive capacity through the deterioration of skills and lower levels of investment. Therefore, while demand in the economy remains weak, policies that can effectively stimulate economic activity – such as reductions in stamp duty – are a sensible tool to deploy. Further down the road if and when inflationary pressures are mounting, policymakers must then determine how best to deflate the economy. While almost all tax rises are unpopular and have the potential to generate inefficiencies, the distortions created by land transaction taxes are particularly acute. The most serious of these is the disincentive that they create for owner-occupiers to move between properties, resulting in reduced labour market mobility and a sub-optimal allocation of housing resources that sees many people living in properties that are surplus to their requirements.

Authorship and acknowledgements

This report has been produced by Cebr, an independent economics and business research consultancy established in 1992. The views expressed herein are those of the authors only and are based upon independent research by them.

The report does not necessarily reflect the views of Kensington Mortgages.

London, December 2020

KMC/PM/0063/001/DEC20