# Office for **Budget Responsibility**

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Forestalling ahead of property tax changes

Paul Mathews October 2016

# Forestalling ahead of property tax changes

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#### **Abstract**

Changes in tax policy often create incentives for individuals and companies to change behaviour in order to reduce the amount of tax due. Pre-announcing a policy provides a window to change the timing of a taxable activity – either to bring it forward or push it back – for such reasons. Recent years have seen a number of pre-announced property tax increases that have led to the bringing forward of transactions, known as 'forestalling', to benefit from lower tax rates. This paper reviews six episodes of forestalling in property tax. We find that in each case the pre-announcement of an upcoming tax increase led to sizeable forestalling. We also find a positive correlation between the amount of forestalling and the tax saving. The most striking example is the recent 3 per cent surcharge on additional properties where we estimate 60,000 transactions were brought forward generating a net tax loss of over £300 million.

We would like to thank analysts from HM Revenue and Customs, HM Treasury, the Scottish Government and Revenue Scotland, as well as colleagues at the Office for Budget Responsibility for their assistance in producing this paper. The estimates are based on a snapshot of 'live' administrative data. They are thus liable to revision as more information becomes available and may not precisely reproduce aggregates statistics. The results have been screened by HMRC and Revenue Scotland to ensure confidentiality. All remaining errors are our own.

# 1 Introduction

#### The OBR and the costings process

- 1.1 The Office for Budget Responsibility (OBR) was created in 2010 to provide independent and authoritative analysis of the UK's public finances. To that end we produce two 5-year-ahead forecasts for the economy and the public finances each year, alongside the Budget and Autumn Statement. In each of these forecasts we need to estimate and explain the likely fiscal and economic impact of any newly announced tax and spending policies.
- 1.2 Although we are ultimately interested in the aggregate impact of all the policies announced in each statement on the public finances, in the interest of transparency it is helpful to show the impact of individual measures. Alongside each statement the Treasury publishes a 'scorecard' of policy costings showing the impact of particular measures on public sector net borrowing. Under the Charter for Budget Responsibility, the Treasury is free to decide which measures to include in the scorecard and what costs or yields to attribute to them in its own publications. In practice it does so after a detailed process of scrutiny and discussion with the OBR and the department responsible for implementing the policy.
- 1.3 The policy costing will include the static impact of the policy (i.e. the impact we would see in the absence of any resulting change in behaviour), plus the direct impact of 'first round' behavioural effects. An example would be the effect we discuss in this paper, where a policy change is pre-announced, thereby providing taxpayers with an incentive to change the timing of their activities in order to minimise the tax they will pay. We also take into account broader 'second round' macro-level behavioural effects resulting from individual policies or the policy package as a whole. In doing so, our goal is to end up with the best forecast for the public finances that we can, given the information available, incorporating the expected impact of all announced policy decisions.
- 1.4 Once we deem a costing to be reasonable and central it is given a formal certification. At each fiscal event, we state whether we believe that each of the Treasury's published costings is reasonable and central. This is normally done in Annex A of our Economic and fiscal outlook (EFO), which is reproduced in the Treasury's Policy costings document. If the OBR were to disagree with a costing that the Treasury decided to publish, it would state this transparently and set out what alternative costing it had used in its forecast and why.
- 1.5 Our remit includes a requirement to assess the performance of our forecasts. We do this annually in our *Forecast evaluation report (FER)*, where we compare the latest outturn data for the economy and public finances to our earlier forecasts and try to explain the

<sup>&</sup>lt;sup>1</sup> More information on the costings process and costings methodology is presented in our *Briefing Paper No.6: Policy costings and our forecast*, available on our website.

differences and identify any lessons that can be applied to future forecasts. The same rationale also applies to policy costings. In this working paper, we consider the specific issue of how forestalling behaviour resulting from the pre-announcement of property tax changes has contributed to our recent stamp duty land tax (SDLT) forecast errors.

# What is forestalling?

- 1.6 When a policy change is pre-announced, it provides a window in which firms or individuals could change the timing of their behaviour to minimise the tax they will pay. When this relates to pre-announced tax rises that provide an incentive for taxpayers to bring activity forward to avoid paying tax at a higher rate it is known as 'forestalling'. The opposite may occur if a tax cut is pre-announced, providing an incentive for firms and individuals to defer paying tax to take advantage of a lower rate in the future. Forestalling changes the timing of a taxable activity and will therefore change the profile of tax receipts, typically boosting receipts temporarily during the period of forestalling. But since this forestalling occurs because of the benefit to the individual taxpayer it will lead to an overall net loss of revenue.
- 1.7 The Government often pre-announces tax measures, so forestalling is an issue that we regularly consider when scrutinising policy costings or preparing our forecasts. Indeed, in the majority of our *EFO* publications we have explicitly flagged forestalling as a source of uncertainty for at least one tax forecast. Recent examples include self-assessment income tax (due to the pre-announced rise in the rate of tax on dividends) capital gains tax (the rate increase pre-announced in June 2010) and the forthcoming introduction of a soft drinks industry levy. In this paper we consider six examples of pre-announced changes to SDLT and its equivalent in Scotland, the new land and buildings transaction tax (LBTT) and the effect they have had on the timing of residential property transactions. The most recent of these are particularly relevant to the 2015-16 forecast errors that are analysed in our 2016 *FER*.

# Methodology

- Our analysis is predominately focused on the number of transactions in the final month before the policy changes took effect, as it is unlikely that significant numbers of transactions will be brought forward more than this. To aid comparison we have attempted to quantify the impact on the housing market and the net cost of each example. We estimate the transactions effect using the proportional increase from an average month in the preceding period. Such estimates are necessarily approximate. We do not know precisely what would have happened in the absence of the forestalling, so we assume that the number of transactions that occurred in the relevant section of the housing market in the recent past provides a reasonable counterfactual. We then estimate the cost using the average price of the affected transactions and calculating the tax saved by bringing them forward.
- 1.9 Several caveats should be noted:
  - there are numerous other factors that influence the housing market other than the tax system, including changes in housing supply and demand, mortgage availability,

seasonality and expectations of house price changes. These could all cause the housing market to vary over time and could therefore explain some of the differences that we are attributing to forestalling. A full evaluation of the impact of a policy change should try to take these factors into account.<sup>2</sup> Our results should therefore be considered indicative, but we still believe they are useful. Further research in this area would be helpful when we are scrutinising any future pre-announced policy changes;

- underlying variation across time makes it difficult to compare different episodes of forestalling. Each of the examples we look at occurred in quite different contexts and affected different groups of taxpayers. This affects the degree to which we can generalise from the various episodes; and
- policy changes can affect decisions about both whether or when to purchase a property the 'extensive' and 'timing' impacts. Our focus is on the timing impacts, so we have tried to avoid the extensive impacts by comparing transaction levels to time periods prior to the policy change. It is possible that during a period of forestalling some of the extra activity was truly additional rather than simply timing effects. Again, a full evaluation would attempt to separate these effects, although we do not believe the extensive impact would be material to the results presented in the paper.

#### What we are not covering

1.10 Consistent with the remit set for us by Parliament, this paper is focused on how changing the timing of transactions impacts the public finances. When governments make decisions about pre-announcing policy changes there are numerous other considerations that they may take into account. For example, the viability of operational systems, the robustness of the legislative and legal framework as well as a desire to ensure that taxpayers and their agents have sufficient time to prepare for the new regime. Indeed in at least one of these examples the objective of the policy was to induce forestalling, as it was seen as beneficial to move activity forward into a relatively slack part of the economic cycle. This paper therefore cannot be interpreted in anyway as a comment on the overall design of the policies, whether the policy was efficiently delivered or whether it met its stated objectives.

<sup>&</sup>lt;sup>2</sup> 'Difference-in-difference' modelling is the primary analytical tool used by economists for this purpose, comparing not just 'before' and 'after' but also the relative difference to a 'control' group that was not affected by the policy changes. However, setting a reliable control counterfactual is challenging. The choice of this group comes down to the judgement of the researcher and it could significantly influence the results. In the property tax examples discussed in this paper, there is not a single reliable control group across the examples given the large differences in the affected population. For consistency we have therefore opted for the simple but transparent comparison with a preceding time period.

# 2 Property tax forestalling episodes

#### Introduction

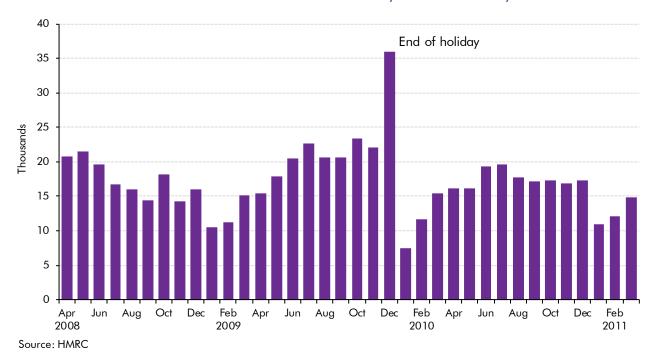
- 2.1 In this chapter we consider the evidence of forestalling in six separate episodes in the past seven years:
  - the December 2009 end of a time-limited 'stamp duty holiday' that was announced in September 2008;
  - the April 2011 window between announcement and implementation of a new 5 per cent band of stamp duty land tax (SDLT) for transactions worth more than £1 million;
  - the March 2012 end of the two-year period of relief on first-time buyer transactions between £125,000 and £250,000 that was announced in March 2010;
  - the 'on-the-day' forestalling in December 2014 when the Government announced that SDLT would change from a 'slab' to a 'slice' system, which would involve higher effective tax rates for more expensive properties;
  - the April 2015 introduction of the land and buildings transaction tax (LBTT) in Scotland, which was originally announced in October 2014 and amended in December 2014 following the UK Government's announcement of the slab/slice reform; and
  - the March 2016 forestalling of buy-to-let and other second properties ahead of the imposition of a 3 per cent surcharge that had been announced in November 2015.

#### December 2009 end of the stamp duty holiday

- 2.2 On 2 September 2008, the Government announced and implemented a stamp duty holiday that raised the lowest threshold for SDLT from £125,000 to £175,000. It was announced early in the downturn that accompanied the financial crisis and outside the usual timetable of Budgets and Pre-Budget Reports. The holiday was extended once in April 2009. The deadline was set as 31 December 2009, creating a forestalling window of at least eight months.
- 2.3 The policy had a stated intention of bringing forward activity. The policy announcement predated the OBR. We are not aware that any assumptions were made in the original costing about the volume of transactions in the final month before the pre-announced tax increase.

- 2.4 Chart 2.1 shows the number of transactions in the affected price range. There is a clear spike in transactions in the final month (December 2009) followed by a trough in following months. This suggests that transactions that would have taken place in the trough period were brought forward to take advantage of the holiday. In the 12 months prior to the spike, transactions in this price range averaged 18,000 a month; in December 2009 there were 36,000. (There were around 190,000 transactions in this price range in 2011 and 2012, which were unaffected by forestalling between calendar years, so this apparent 18,000 increase represents around 10 per cent of a year's transactions.)
- 2.5 The average house price in this range was £150,000 and the tax rate difference between December 2009 and subsequent months was 1 per cent. That would mean an average tax saving of £1,500 for the 18,000 transactions brought forward and an overall cost to the Exchequer of £27 million due to forestalling.

Chart 2.1: Number of transactions between £125,000 and £175,000



This episode has been subject to detailed external analysis that has sought to estimate both the extensive and timing impacts. Best and Kleven<sup>3</sup> use a more sophisticated counterfactual and suggest that the volume of housing transactions increased by 20 per cent during the 16 months of the holiday, which was the result of both timing and general transaction volume increases. They estimate that around a third of the impact was due to timing, which means that 8 per cent of transactions in the affected range were brought forward from the year after the holiday. While not explicitly set out in their paper, this implies a very similar number of transactions to our estimate described above.<sup>4</sup> Using a different methodology,

<sup>&</sup>lt;sup>3</sup> Best, M. C., & Kleven, H. J. (2013). Housing market responses to transaction taxes: Evidence from notches and stimulus in the UK. London School of Economics.

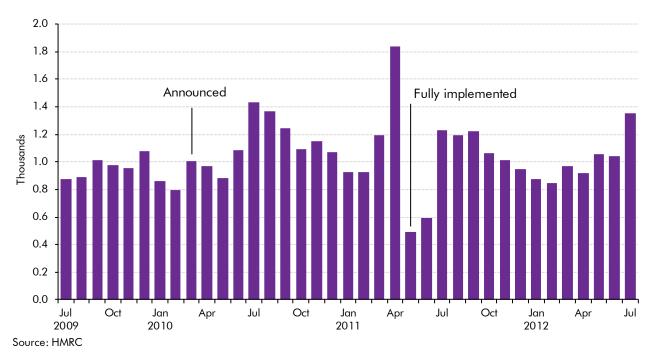
<sup>&</sup>lt;sup>4</sup> It should be noted that the Best and Kleven's estimate of forestalling impact varies substantially across their different models. It is smallest in their most naïve model, rising to as high as 50 per cent of the effect in an intermediate model.

Besley et al.<sup>5</sup> found that any stimulus beyond the timing impact was not significantly different from zero, suggesting that virtually all the impact came from forestalling.

#### April 2011 ahead of the new 5 per cent SDLT band

- 2.7 A new 5 per cent SDLT rate for transactions over £1 million was announced in Budget 2010. The Budget took place on 24 March 2010 and the new rate came into effect on 6 April 2011. The forestalling window was therefore over a year. This measure also predates the OBR, but we think it likely the original costing did allow for some forestalling.
- 2.8 Chart 2.2 sets out the number of transactions in the affected price range. Again there was a large spike in transactions in April the final month before full implementation. Around two-thirds of April's transactions took place in the first five days of the month, before the new rate took effect. There is then a trough in subsequent months. Compared to the preceding 12 months there were around 700 (65 per cent) more transactions in April 2011.
- 2.9 For transactions over £1 million, the average price in the 12 months prior to the forestalling was just over £1.8 million while the tax increase was 1 per cent of the entire value of the property. That would mean an average tax saving of £18,000 for the 700 transactions brought forward and an overall cost of around £13 million of tax due to forestalling. To put this in context, in the first year of operation over £1.1 billion was raised from residential property purchased for more than £1 million.

Chart 2.2: Number of transactions over £1 million

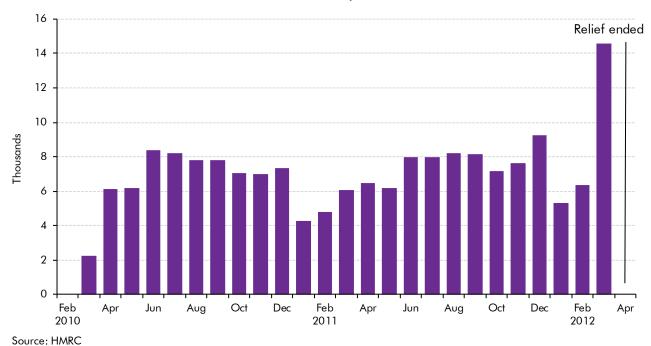


<sup>&</sup>lt;sup>5</sup> Besley, T., Meads, N., & Surico, P. (2014). The incidence of transaction taxes: Evidence from a stamp duty holiday. Journal of Public Economics, 119, 61-70.

#### March 2012 end to first-time buyers' relief

- 2.10 A temporary relief from SDLT for first-time buyers purchasing properties between £125,000 and £250,000 was also announced in the Budget on 24 March 2010. It started immediately but was limited to a two-year period ending in March 2012. That end-date was confirmed by the Coalition Government in November 2011. That gave a forestalling window of at least four months. This is another measure announced before the OBR was created. We are not aware of any forestalling assumptions being included in the original costing. We did not adjust our transactions forecast when the end-date was confirmed.
- 2.11 The number of first-time buyers' relief claims made to HMRC is shown in Chart 2.3. It shows a spike in March 2012, the final month that the relief was available. Compared to the preceding 12 months, the number of relief claims doubled in the final month of the relief with around 7,400 extra claims. The average value of a transaction in 2012 in the affected range was approximately £185,000 and the tax rate change was again 1 per cent of the entire value. That would mean a tax-saving of £1,850 for the 7,400 transactions brought forward and an overall cost of around £14 million due to forestalling. Using the same methodology, we estimate that the total cost of the relief was £330 million, with 179,000 transactions claiming it.

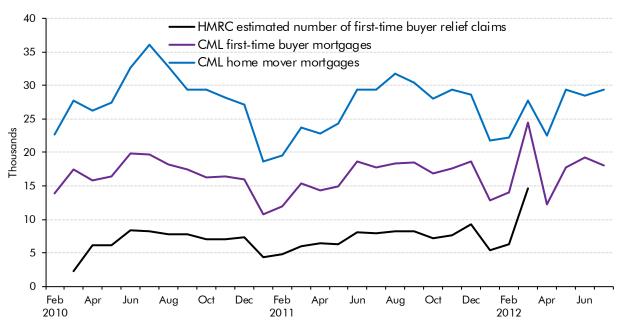
Chart 2.3: Number of claims for first-time buyer relief



2.12 HMRC does not hold information on whether a transaction would have been eligible after the end of the relief, but data on mortgage advances from the Council of Mortgage Lenders (CML) can provide an indication. The CML data do not map precisely to the policy – they report the total number of first-time buyer mortgages, whereas the relief was restricted to those who purchased a residential property between £125,000 and £250,000 and claimed it, regardless of how it was financed.

2.13 The CML data also spike before the end of the relief and then trough in the month after the relief was removed. This corroborates the evidence of forestalling. Interestingly there was a less pronounced spike in 'home mover' mortgages, despite them not being eligible for the relief. They might have been affected indirectly as part of the chain of transactions that contained a first-time buyer bringing forward their transaction to benefit form the relief. The spike is not particularly large – it is within the upper and lower bounds of normal seasonal fluctuations – so might not be related to first-time buyer forestalling. We do not attempt to quantify the effect on receipts from the indirect spillover in this episode, but it is consistent with what appears to have happened in the recent 'additional properties' forestalling discussed later in this chapter.

Chart 2.4: Number of claims for first-time buyers relief and comparable mortgages



Source: CML, HMRC

2.14 More sophisticated analysis was undertaken on the relief by Bolster,<sup>6</sup> but it was carried out while the relief was in operation so did not cover the forestalling period. It suggested that the relief had a very limited effect in stimulating additional transactions, with an upper estimate of a 2 per cent increase in transactions.

#### December 2014 'on the day' ahead of the 'slice' reform

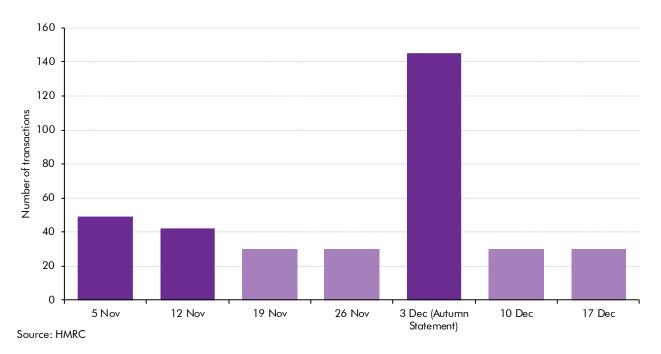
2.15 In Autumn Statement 2014, the Government changed the method for calculating residential SDLT from a 'slab' tax rate (based on the entire value of the property) to a 'slice' system (based on the value above a given threshold – a marginal system like income tax). The rates chosen in the new system meant that there was a tipping point at around £937,500, above which transactions would pay more tax and under which they would pay less.

<sup>&</sup>lt;sup>6</sup> Bolster, A. (2011). Evaluating the Impact of Stamp Duty Land Tax First Time Buyer's Relief. HM Revenue and Customs Working Paper 12

- 2.16 The policy was announced just after 1pm on 3 December. It included transitional arrangements that meant for transactions where contracts had been exchanged by midnight, the taxpayer could choose which tax regime would apply. That provided an 11-hour window for transactions over £937,500 to exchange in order to pay the lower tax rate before the new regime took effect. The policy costing included an estimate for this effect within a one-off cost of £150 million in the first year of implementation that aimed to reflect temporary effects in the transition from the old to the new regimes.
- 2.17 Estimating the effect of forestalling in this episode is less straightforward given the very small window for forestalling activity. We have done so by comparing the number of residential transactions over £937,500 that exchanged on the day of the Autumn Statement a Wednesday with other Wednesdays during late 2014 as shown in Chart 2.5. The number of transactions on some of the days was so small that presenting them would breach HMRC taxpayer confidentiality rules that prohibit the disclosure of statistical information with fewer than 30 observations. For those days (shown in a paler colour) we have assumed that there were precisely 30 transactions.
- On the basis of this approach, it appears that four times as many transactions took place on Autumn Statement day as on the preceding Wednesdays an equivalent of around 100 extra transactions, around half of which were over £1.5 million. The tax-saving from the 50 transactions between £937,500 and £1.5 million is around £4,000 with a total cost of around £200,000. For transactions over £1.5 million we use an average price of £3.5 million, which is the average of all residential transactions in that price band. The tax-saving from forestalling at this price would be around £92,000, so despite only 50 very high value transactions being brought forward, that implies a total cost of over £5 million nearly £500,000 an hour.

<sup>&</sup>lt;sup>7</sup> These data are somewhat less reliable than those used to assess the effect of other episodes as the exchange-of-contract date is normally optional information to include on the SDLT return and is therefore typically subject to less data validation than other aspects of the return.

Chart 2.5: Number of property transactions over £937,500 exchanging contracts on selected Wednesdays in late 2014



#### March 2015 ahead of LBTT's introduction in Scotland

- 2.19 On 9 October 2014, the Scottish Government announced new rates and thresholds for the land and buildings transaction tax (LBTT) that would replace SDLT in Scotland from 1 April 2015. The effects of this pre-announced change were complicated by the slice reform announced by the UK Government during the original forestalling window and the new Scottish rates and thresholds that were announced on 21 January 2015 after the UK announcement. In the end, the differences between the two tax regimes meant that those buying houses over £333,000 had an incentive to purchase before 1 April 2015 and pay SDLT, while those buying houses below this point had an incentive to delay and pay LBTT. This is our only recent property tax episode where there was any incentive to delay rather than bring forward the transaction.
- 2.20 In our March 2015 forecasts, we assumed a forestalling elasticity of 6 per cent of transactions being brought forward or delayed for every 1 percentage point change in LBTT relative to SDLT. This was slightly lower than the 8 per cent elasticity produced by Best and Kleven on the basis of the stamp duty holiday described earlier, where we felt that the severely restricted mortgage availability during the financial crisis period would have pushed up the estimated elasticity. A 6 per cent elasticity was consistent with internal HMRC analysis of the 5 per cent SDLT rate introduction in April 2011. In our forecast we calculated

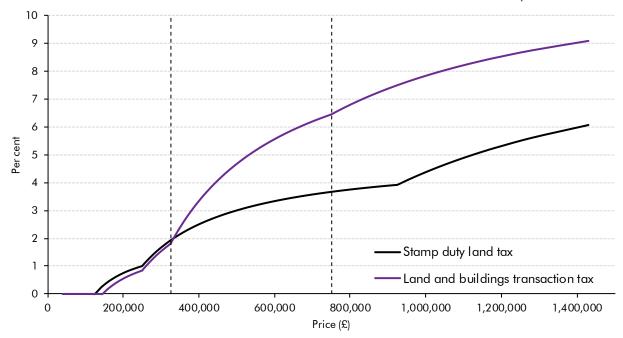
<sup>&</sup>lt;sup>8</sup> Commercial property transactions in Scotland were subject to a similar forestalling incentive, but we have focused this paper on effects in the residential property market.

<sup>&</sup>lt;sup>9</sup> SDLT is paid as part of the upfront moving costs needs to be paid from savings that could other form the deposit for a mortgage. During the financial crisis larger than usual deposits were required to secure a mortgage. Therefore taxpayers might have been expected to be more reactive to potential SDLT savings to maximise their deposits and in turn chance of obtaining a mortgage.

and pro-rated the incentive change for each period – i.e. October LBTT compared to 'slab' SDLT, then October LBTT compared to 'slice' SDLT and finally the revised January LBTT rates compared to slice SDLT. In our March 2015 forecast for LBTT we estimated that forestalling would cost £9 million (with SDLT in 2014-15 increased by £11 million, but LBTT in 2015-16 reduced by £20 million).

Our methodology is slightly different to that used for the previous episodes. Chart 2.6 sets out the effective tax rates for SDLT and LBTT that would apply from 1 April 2015. The incentive to shift the timing of transactions forward or back – as illustrated by the difference between the two lines – varied considerably with the value of the property. In order to estimate these timing effects, we divide the price range into three groups based on the LBTT thresholds: those above £750,000 with a strong incentive to bring forward their transaction; those between £325,000 and £750,000 who had moderate incentive to bring forward their transaction; and those below £325,000 who had an incentive to delay their transaction. These relatively wide bands mean that the data we use to estimate the effects are not subject to taxpayer confidentiality restrictions.

Chart 2.6: Effective tax rates for residential LBTT and SDLT from 1 April 2015

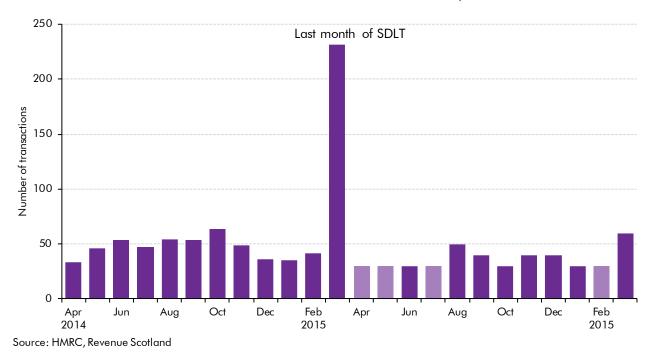


Source: OBR

- 2.22 Chart 2.7 combines information from HMRC up to March 2015 and Revenue Scotland from April 2015 onwards for the high-priced transactions with the greatest incentive to forestall. (Again, where there are fewer than 30 transactions we have assumed that there were precisely 30 transactions.) It shows a large spike in the last month before LBTT came into effect and indicates that there was a subsequent trough, with the number of transactions per month falling to below the number that can be released.
- 2.23 In the preceding 12 months, there was an average of 46 transactions a month in Scotland that were over £750,000. In March 2015, there were 231, five times as many, suggesting

about 185 transactions were brought forward. The average price of transactions over £750,000 in Scotland was £1.1 million. At that price, the transaction would have paid £53,750 under SDLT but £90,350 under LBTT, representing a tax-saving of £36,600 (3.3 per cent of the value of property) for the 185 transactions brought forward and a total cost of £7 million due to forestalling in this price band.

Chart 2.7: Number of transactions in Scotland above £750,000



2.24 Chart 2.8 shows a smaller effect for transactions between £325,000 and £750,000. The same calculations for this price band indicate around 700 transactions brought forward. At an average price of £440,000, that would mean a tax-saving of £5,350 (1.2 per cent of the value of the property) and a total cost of £4 million due to forestalling in this price band.

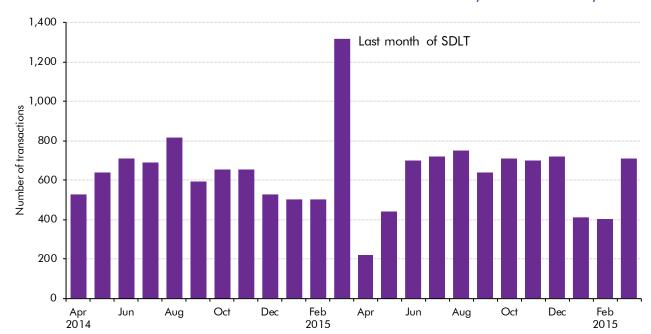


Chart 2.8: Number of transactions in Scotland between £325,000 and £750,000

Source: HMRC, Revenue Scotland

2.25 Finally, Chart 2.9 shows the effect on transactions under £325,000 where there was an incentive to delay as LBTT was slightly more generous than SDLT. The amount that would be saved was relatively small at £400 (less than 0.3 per cent of the value of the property). The chart provides some evidence that transactions were unusually subdued ahead of LBTT taking effect. Applying the same methodology suggests there were around 860 (28 per cent) fewer transactions in March 2015 than the average of the preceding 12 months. Compared to the extent of the other timing effects discussed in this paper this effect is small. Given the tax-saving is at most £400 (0.3 per cent of the value) for each transaction delayed, the overall cost is likely to have been well under £1 million. The relatively simple methodology we use in this paper is likely to be least effective when the effect being analysed is small, so this result is unlikely to represent robust evidence of forestalling in this price range. We do not include it in the summary conclusions presented in Chapter 3.

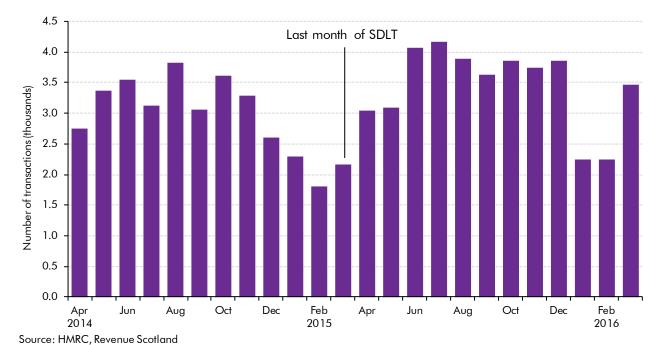


Chart 2.9: Number of transactions in Scotland below £325,000

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# March 2016 ahead of the additional properties surcharge

- 2.26 On 25 November 2015, the UK Government pre-announced a 3 per cent SDLT surcharge to be paid by purchasers of additional properties. This mainly relates to buy-to-let landlords, but also some purchasers of second homes that do not plan to rent them out. The tax rise would come into effect on 1 April 2016, providing a four-month forestalling window. On 16 December, the Scottish Government also pre-announced an additional dwelling supplement that would apply to LBTT, again with the change taking effect on 1 April 2016. Given that much of the transactions data are at the UK level, this section in effect looks at the combined impact of these policies.
- 2.27 In the SDLT costing, we used a forestalling elasticity that was equivalent to the Best and Kleven estimate of 8 per cent of the following year's transactions being brought forward for each 1 percentage point change in the tax rate, adjusted downwards for the relatively shorter forestalling window. (At this stage, it already appeared that forestalling of higher priced transactions ahead of LBTT's introduction had been greater than expected, hence basing the costing on an elasticity of 8 per cent rather than 6 per cent again.)
- 2.28 The costing assumed that the original tax base was around 145,000 transactions (around 12,000 a month or 15 per cent of total residential transactions). We estimated that forestalling would mean that approximately 10,000 purchases of additional properties would be brought forward from 2016-17 into 2015-16. Thereafter we assumed that 20,000 transactions a year would cease to take place an extensive effect. (The Scottish Government and Scottish Fiscal Commission included extensive and forestalling behavioural

- impacts in their costing of the additional dwelling supplement.)<sup>10</sup> The costing also assumed that the price of buy-to-let transactions was on average around 25 per cent lower than an average transaction, at £183,000. That would mean an average tax-saving of £5,000 for the 10,000 transactions brought forward, giving an overall cost of £50 million.
- 2.29 We assigned the additional properties SDLT surcharge measure a 'high uncertainty' ranking in our November 2015 EFO. The forestalling element of the costing was not the greatest area of concern that was data uncertainty but the latest evidence suggests it too warranted highlighting since both the number of transactions brought forward and their price appear to have been significantly underestimated, pushing up the cost due to forestalling. The rest of this section describes that evidence and what might explain the extent of the underestimate.

#### The total number of transactions brought forward

2.30 The latest evidence suggests that we significantly underestimated the number of transactions that would be brought forward. Even though the surcharge only applies to additional properties, the effect can clearly be seen in the path of total residential property transactions shown in Chart 2.10. There were around 80,000 (87 per cent) more residential transactions in March 2016 than in March 2015. Compared to the average of the preceding 12 months (the methodology used to estimate forestalling effect in the other episodes), transactions in March 2016 were 70,000 higher. For this episode, we have our pre- and post-policy-measure forecasts for residential property transactions to inform our estimate of actual forestalling. Adjusting for the year-on-year increase in transactions that we expected in the absence of the policy change suggests there were 60,000 transactions brought forward at the UK level (a 60 per cent increase on the preceding 12 months). The forestalling impact in Scotland appears to have been smaller, at 28 per cent using the same approach.

<sup>&</sup>lt;sup>10</sup>Scottish Government (2015). Draft Budget 2016-17: Devolved Taxes – Forecasting Methodology

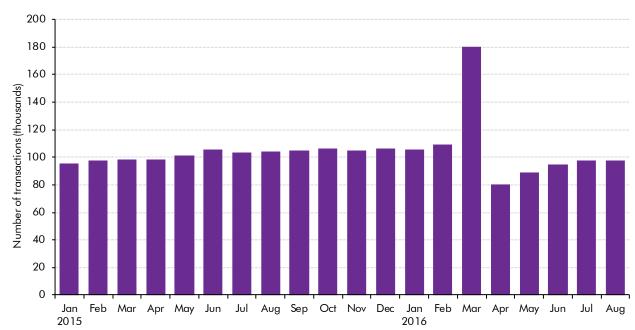


Chart 2.10: Total number of residential property transactions

Source: HMRC (seasonally adjusted)

2.31 Regional variation that was not factored into the costing is one possible explanation for the underestimate, but the evidence for that is not strong. Figure 2.1 shows the proportional increase in transactions between March 2015 and March 2016 in different English and Welsh local authorities. (We do not have reliable information at the local authority level for Northern Ireland and Scotland.) It suggests that the forestalling increase was not concentrated in particular regions. There is a positive, if weak, correlation between changes at the local authority level and the existing proportion of households in the private rented sector, although in statistical terms it explains only around 16 per cent of the variation shown in the figure. There is virtually no correlation with average house price in the area.

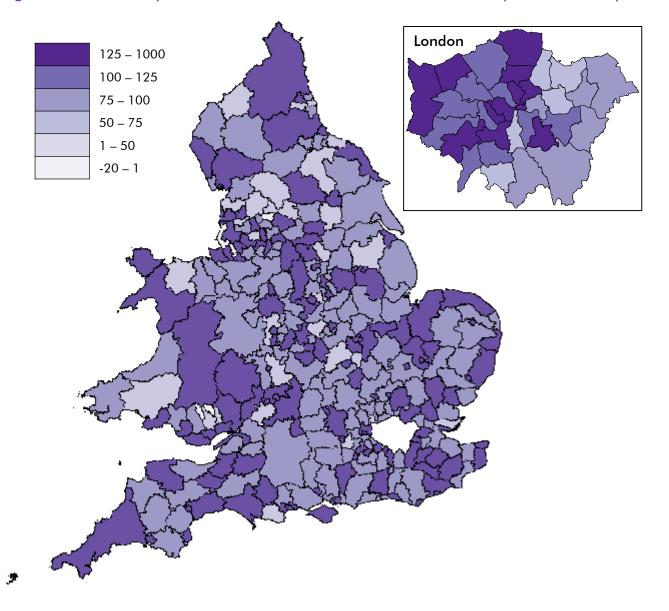


Figure 2.1: Year-on-year increase in transactions in March 2016 by local authority

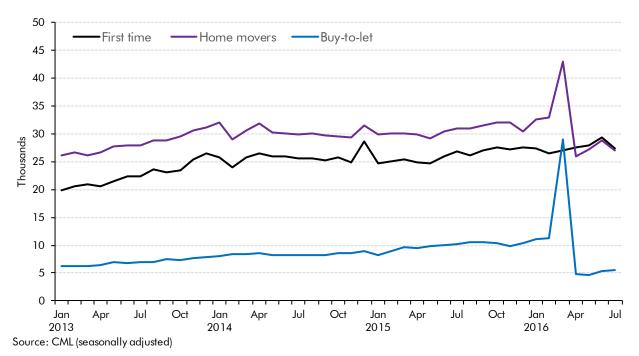
Source: HMRC

### The proportion of transactions brought forward that were additional properties

2.32 Not all the 60,000 transactions brought forward will have been additional properties, so only some will have made a tax-saving by shifting the timing of their purchase. Prior to April 2016 neither SDLT nor LBTT returns collected information on whether the transaction was for an additional property. In order to estimate the number of transactions that would have paid the surcharge if they had not been brought forward we can look at the same CML mortgage data that was used to inform the original costing. The categories published by the CML do not fully align with the definition of an additional property for tax purposes and, as mortgage data, they do not cover cash purchases. But we assume that mortgages classified as 'buy-to-let' provide a reasonably proxy for transactions that would pay the surcharge,

- while 'first-time buyers' and 'home movers' relate to transactions that would not. In reality, home-movers are likely to include some second-home purchasers.<sup>11</sup>
- 2.33 The CML data are shown in Chart 2.11. The pattern of the forestalling spike and subsequent trough matches that in the HMRC aggregate transactions series. The CML data suggest that total mortgages in March 2016 were up 30,000 compared to the average of the preceding 12 months. Buy-to-let mortgages jumped by 19,000 transactions (187 per cent), then fell back to around half their pre-March average in April 2016 and have remained subdued.
- 2.34 The chart also suggests that there was considerable spillover to other non-buy-to-let transactions. Home-mover mortgages jumped by around 10,000 (34 per cent) compared to the preceding 12 months. That suggests that many buy-to-let transactions were located within housing chains, so when they were brought forward some home-mover transactions were too. These figures suggest that around a third of the forestalling observed in the mortgage market related to transactions that would not generate a net tax loss.

Chart 2.11: Total number of mortgages by purchaser type



2.35 Chart 2.12 illustrates how the latest data on buy-to-let mortgages compare to the assumptions that underpinned the original costing.<sup>12</sup>

19

<sup>&</sup>lt;sup>11</sup> The CML definitions are based on information reported on the mortgage application with the 'home movers' being a broad residual of individuals purchasing a property who have property when they are making an application (i.e. not first time buyers) and excluding those whose purpose of buying the property is for residential letting (i.e. buy-to-let). There might of course be measurement error in the CML categories, but this is likely to be replicated in the tax returns i.e. those committing mortgage fraud by making a false declaration that they will be owner-occupiers on their mortgage application are likely to make a similar false declaration on the SDLT return to avoid paying the surcharge.

<sup>&</sup>lt;sup>12</sup> We have converted assumptions from the original additional properties costing into CML consistent numbers to illustrate the point, though this does not cover second homes and non-mortgage transactions

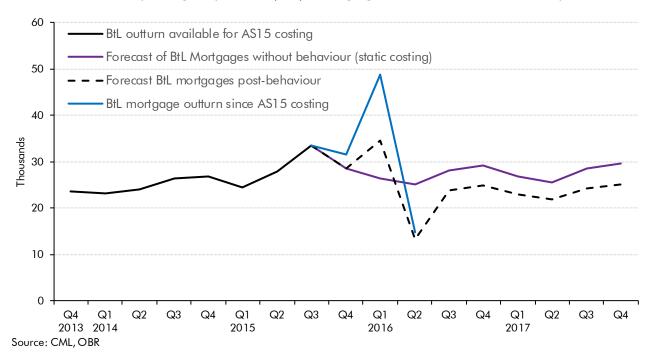


Chart 2.12: Comparing buy-to-let (BtL) mortgage outturn with the assumptions

Why might forestalling of additional properties have been underestimated?

- 2.36 The sources of the forestalling underestimate could fall within two broad types. We could have underestimated:
  - the strength of the behavioural response; and/or
  - the quantity of additional property transactions that would be affected and therefore incentivised to forestall since this had to be proxied in the absence of specific data.
- 2.37 The bigger-than-expected spike in buy-to-let mortgages suggests that the behavioural response may well have been stronger than assumed, but there is also some evidence that the latter source may have played a role too. HMRC's quarterly stamp duty data show that the total amount of SDLT collected in the first quarter of the additional property regime was £424 million from 30,200 transactions with an average price of £252,000. Similarly, Revenue Scotland has reported that revenue from the LBTT additional properties supplement has been much stronger than expected, with over £36 million of liabilities reported by August 2016, compared to the original forecast of £23 million to be raised in 2016-17 as a whole.

#### Estimated cost due to forestalling

2.38 The pattern of forestalling set out above will have two effects on the path of receipts. All the transactions brought forward will boost receipts in 2015-16 (although only to the extent that the tax is paid before 31 March) at the expense of receipts in 2016-17. Only in the case of additional properties will that also be associated with a net tax loss because transactions brought forward would otherwise have paid the surcharge.

2.39 Initial estimates suggest that the average price of additional property transactions has been higher than the average across all transactions (contrary to the costing assumption that they would average 25 per cent lower). Using the initial HMRC estimate for average additional properties price of £252,000 would mean an average tax-saving of £7,560 for the 40,000 additional properties for which transactions were brought forward, giving a total cost of £302 million due to forestalling.

# 3 Conclusions and lessons to learn

#### **Conclusions**

- 3.1 In this working paper we have analysed six episodes where pre-announced policy changes to property taxes led to transactions being brought forward. Our results are summarised in Table 3.1. It excludes the lower-priced transactions affected by the introduction of LBTT, where we do not feel our methodology is sufficiently robust to draw further conclusions from the estimated number of transactions delayed.
- One high-level conclusion is that all the pre-announcements tax increases led to forestalling. We should therefore ensure that such effects on the profile of transactions and receipts has been considered in the costing of any property tax changes that are announced for implementation at a later date.
- 3.3 Looking at the first three columns in Table 3.1 on number of transactions brought forward, the percentage increase that represented and the associated cost in foregone tax receipts it is clear that the scale of forestalling varies greatly across the episodes. In terms of the number of transactions and associated cost, the recent additional properties surcharge episode is the biggest by a considerable margin. Of course one reason for that is that the 3 per cent surcharge was a larger tax rise than most of the other episodes. The only other comparable tax increase was for Scottish LBTT transactions over £750,000 and this episode had the second largest proportional increase in transactions. This suggests a positive correlation between the amount of forestalling and the tax saving.
- 3.4 The final column of Table 3.1 controls for the size of the tax change by showing the percentage increase in transactions in the final month before the policy change for every percentage point increase in the effective tax rate. On that basis, the additional properties forestalling, while still large, was much closer to the average, which suggests that every percentage point tax increase prompts enough transactions to be brought forward to double the number occurring in the month before the tax rise comes into effect. It is possible that the effect might not be linear, with taxpayers potentially responding more than proportionately to larger tax rises.

Table 3.1: Summary of forestalling episodes

	£ million			Per cent	
	Approximate net tax loss	Estimated number of transaction accelerated	Transactions increase in final month before implementation	Effective tax rate increase	Implied increase in transactions from preannounce 1 ppt tax rate change
Stamp duty holiday (December 2009)	27	18,000	96	1.0	96.0
£1m 5 per cent band (April 2011)	13	700	65	1.0	65.0
First time buyers' relief (March 2012)	14	7,400	102	1.0	102.0
On the day slice refom (3rd December 2014)	5	100	N/A	N/A	N/A
LBTT Scotland (March 2015) of which:	11	<100	<1	N/A	N/A
high value (over £750k)	7	200	397	3.3	119.3
medium value (between £325k and £750)	4	700	112	1.2	92.1
3 per cent additional properties surcharge (March 2016)	302	60,000	521	3.0	173.7
of which:					
direct potential taxpayers	302	40,000	335	3.0	111.7
indirect spillover transactions	0	20,000	34	N/A	N/A

- 3.5 These episodes reveal a number of factors that might help to explain and therefore might also help us to predict in future cases the scale and cost of forestalling:
  - the scale of the policy change both in terms of the number of potential transactions affected and the change in the effective tax rate that will be paid. For example, policy changes restricted to first-time buyers in a limited price range would be expected to bring forward fewer transactions than a policy change affecting the whole market.
     And, as the additional properties surcharge showed, a three percentage point tax rise would be expected to bring forward more transactions than a one percentage point change, as in many of the other episodes;
  - the length of the forestalling window. This will influence both the willingness and ability of those involved in transactions to shift theirs to avoid paying more tax. In order to do so, a prospective purchaser must find a suitable property, negotiate a price, potentially obtain mortgage funding and find a buyer for their existing property, and undertake legal checks on the property. If the window is short, only those that are already working through the purchase may be able to shift it forward to benefit. There may be a non-linear element to this in that once the forestalling window exceeds a given threshold it becomes disproportionally more viable to avoid the future tax rise. Four months appears to have been sufficient in the case of the additional properties

surcharge and the introduction of LBTT. That said, even 11 hours appears to have been sufficient for some forestalling to take place when SDLT was reformed in December 2014. The 5 per cent SDLT band provides a counter-example, although it may be that with a window of a full year, forestalling would be less concentrated in the final month and therefore not show up in the methodology we have used;

- the characteristics of the affected population. In particular, it seems likely that those who are wealthier and therefore less constrained by mortgage availability will be more able to respond to tax incentives. They may also be more aware of impending tax changes and already arranging their affairs to reduce their tax payments. This may have been a factor with the additional properties surcharge, which is likely to have disproportionately affected financially motivated investment transactions undertaken by investors who are more responsive to tax changes than owner-occupiers (who are more likely to move house out of necessity than for tax reasons);
- the extent to which forestalling leads to spillover effects on the rest of the market. There is some evidence that the first-time buyers' relief led to other transactions being brought forward. The effect seems to have been substantially larger with the additional properties surcharge;
- whether the policy change is temporary and permanent. There are examples of both in the episodes we have considered. Behavioural economics has shown how individuals often respond more strongly to a perceived loss than to an equally sized but differentially perceived gain; <sup>13</sup> and
- the wider context in which a policy change is pre-announced. For example, if mortgage lending or the inventory of houses for sale are significantly constrained at the time the forestalling window is open, this might limit the amount of transactions brought forward. On the other hand, SDLT is an upfront payment and thus directly reduces a purchasers' funds available for a mortgage deposit. So if access to funding is constrained by tighter than usual deposit or loan-to-value ratios, the incentive to bring a transaction forward would be greater in order to put the tax-saving towards the deposit. Media coverage of an upcoming tax change might also influence awareness and therefore the amount of forestalling.

#### Lessons to learn

3.6 The main lesson to take away for the scrutiny of future policy costings is that forestalling seems to be ubiquitous when property tax increases are pre-announced, so we should ensure such effects are considered and that the evidence of these historic episodes is drawn upon. In doing so, we will need to consider how any differences in parameter changes being announced, the length of the forestalling window, the nature of the affected population and the wider context, might lead to different outcomes to those in previous episodes.

<sup>&</sup>lt;sup>13</sup> Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47, 263-291; Kahneman, D. & Tversky, A. (1984). Choices, Values, and Frames. American Psychologist. 39 (4): 341–350.

3.7 Our analysis of the property transactions forestalling episodes in this paper – and the academic work that we cite – will help inform the judgements we make in any future cases. But it is clear from the variation across episodes shown in Table 3.1 that even armed with this evidence there will always be considerable uncertainty. Further research would be helpful. Although this paper has only considered the effects of property transactions tax changes, some of the conclusions and lessons are likely to apply more broadly. The longer taxpayers are given to arrange the timing of their taxable activities to minimise the tax they will have to pay, the higher the likely cost of forestalling. And high-income or wealthier individuals are more likely to have the resources and flexibility to plan and act upon such tax-reducing shifting of taxable activities. We saw that when the pre-announced cut in the additional rate of income tax from 50p to 45p from 2013-14 prompted large amounts of income to be shifted between years. We expect similar income shifting to have resulted from the pre-announced rise in the dividend tax rate from 2016-17.

