

# How might we expect more frequent revaluations to affect business rate bills?

## A

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### Introduction

**A.1** This annex provides background on analysis carried out by the Valuation Office Agency (VOA) to understand how more frequent revaluations might affect business rate bills. In particular we aim to address two questions raised during the consultation process:

- Do more frequent revaluations make business rates more responsive to changes in rents? In other words, by revaluing more frequently, are rates more likely to increase when rents increase, and decrease when rents decrease?
- Do more frequent revaluations make business rates less volatile? In other words, do more frequent revaluations increase the stability of rate bills?

**A.2** This paper sets out the analysis carried out, which shows that:

- We can only be sure that more frequent revaluations increase stability of bills when property values **across the market** follow a stable and steady trend. When the market is cyclical (which historical data suggests is the case), more frequent revaluations are likely to come at different points in the cycle, which could lead to larger changes to bills.
- Because the Non Domestic Rates Multiplier<sup>1</sup> adjusts to achieve a given total business rates revenue, more frequent revaluations merely redistribute the burden of business rates according to **relative changes in rent**. This can mean increases in bills even though rents are falling.

**A.3** This paper provides more background and detail on the analysis carried out to answer these questions, and therefore:

- a provides more detail on how the different parts of the valuation and Rating system affect bills
- b explores how that might work in different economic circumstances
- c analyses the available data on historical trends in the market
- d simulates different options using the same historical data

### Determinants of business rates – what would potentially affect bills?

**A.4** This section provides some background on how we arrive at the rates bill for an individual property. This knowledge is important as it influences the effects of more frequent revaluations.

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<sup>1</sup> Although there are separate multipliers for small businesses, City of London and Wales, we will only focus on the one multiplier within this annex.

**A.5** A ratepayer's bill is dependent on:

- the individual rateable value (RV) of their property at revaluation
- the Non Domestic Rating Multiplier (referred to as the multiplier from here on), which is the rate applied to rateable value in order to calculate the business rates due. This will be adjusted in order to maintain overall rates revenue at a given level. This will therefore be driven by:
  - the total rateable value across all rateable properties which is the sum of all individual rateable revaluations
  - total business rate revenue: this should remain constant in real terms (i.e. after adjusting for inflation, the total revenue raised by business rates does not change over time)

**A.6** A ratepayer's bill is also influenced by reliefs and exemptions, including transitional relief and Small Business Rates Relief – although, for simplicity, we don't consider the impact of these exemptions in the analysis covered in this paper.

**A.7** Because both individual rateable value and the multiplier can change at revaluation, it is often difficult to predict the impact of a revaluation on a ratepayer's bill. We therefore use the next section to explore some hypothetical scenarios and so identify what we might expect to happen to ratepayers' bills under different circumstances.

## **Hypothetical scenarios – what could be the most likely outcomes?**

**A.8** The following two scenarios are designed to illustrate how the determinants of business rates interact under given situations, and how this changes the responsiveness and volatility of business rates under different revaluation frequencies. The first scenario addresses a "constant growth" trend in rates, whilst the second scenario explores what would happen if rental growth displayed cyclical characteristics.

**A.9** For simplicity, these hypotheses assume that only two, equally sized, sectors exist,<sup>2</sup> and that rateable values equate to rental values each year. As in real life, we have modelled scenarios where total revenue remains constant – although we have assumed that there is no inflation. This helps isolate the effects which arise from changes in rateable value over time.

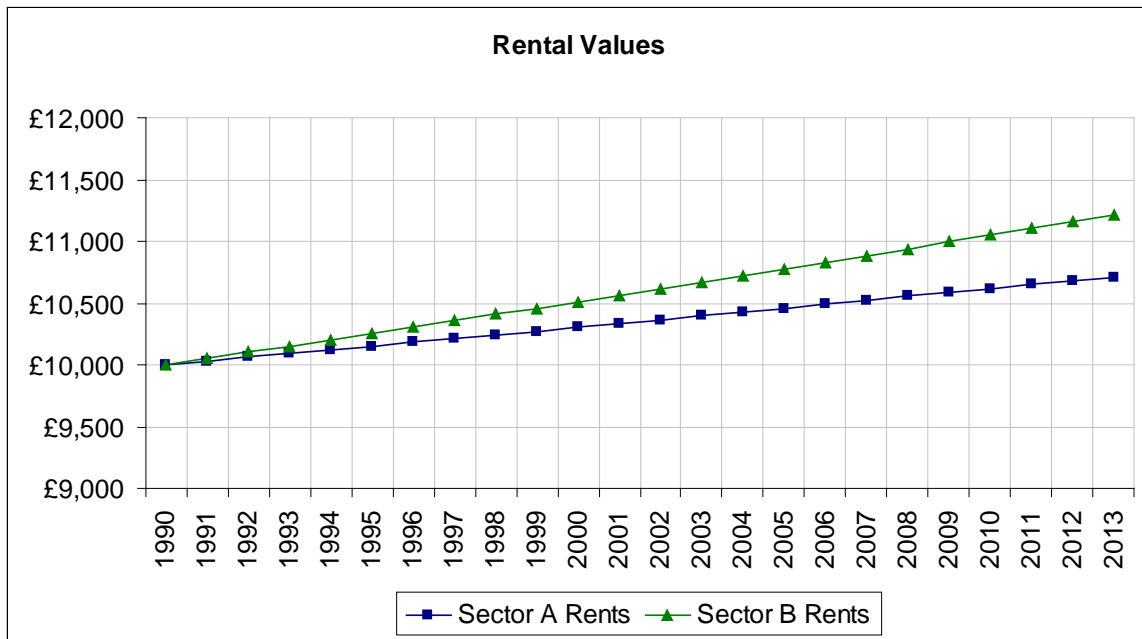
### **"Constant growth" scenario**

**A.10** In this scenario, rents for both sectors increase consistently year-on-year, with a slightly faster rate of growth in Sector B than seen in Sector A. This is shown in chart 1.

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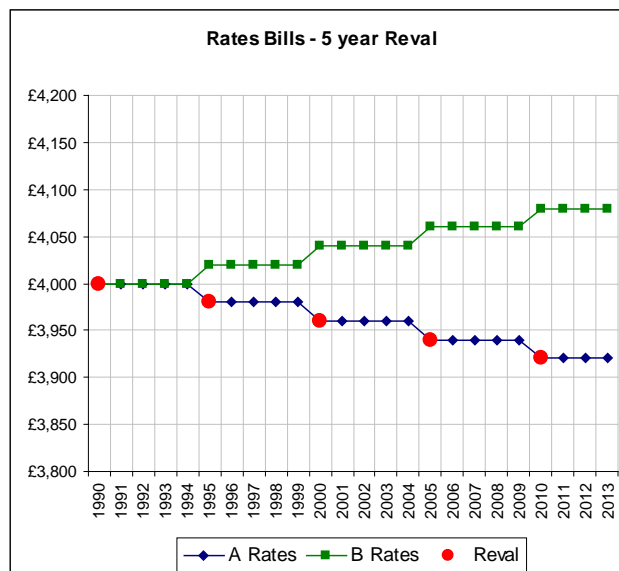
<sup>2</sup> These sectors could also represent anything from regions to individual properties and still hold true.

**Chart 1: Rental values over time**

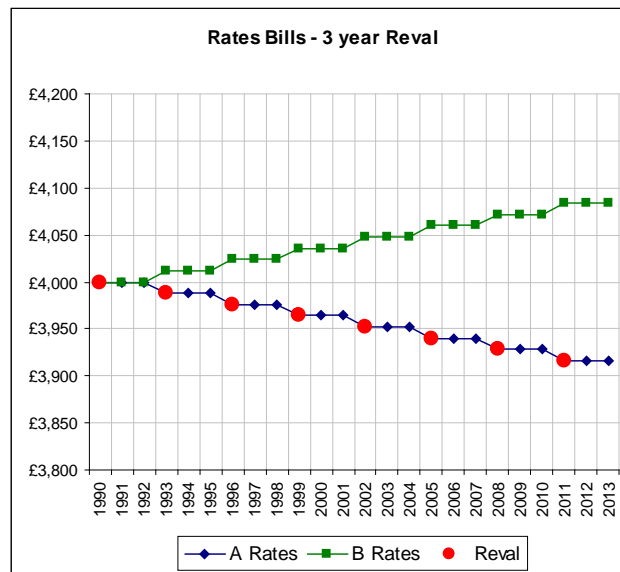


**A.11** In this scenario, when a revaluation takes place, the multiplier will fall, reflecting the fact that property values are growing. However because property values are growing faster in Sector B than Sector A, this will lead to a redistribution of the rates bills from Sector A to Sector B. When revaluations happen more frequently, this redistribution will happen more frequently. This is shown in charts 2(a) and 2(b), where three year revaluations lead to small incremental changes in bills, rather than the bigger step changes seen under a five year revaluation.

**Chart 2(a): Business rates under five year revaluation**



**Chart 2(b): Business rates under three year revaluation**



**A.12** This confirms that when there is a stable trend in rental growth, the impact on bills of each revaluation is smaller when revaluations are more frequent. It also shows that a revaluation will only redistribute the burden of rates according to relative changes in rents.

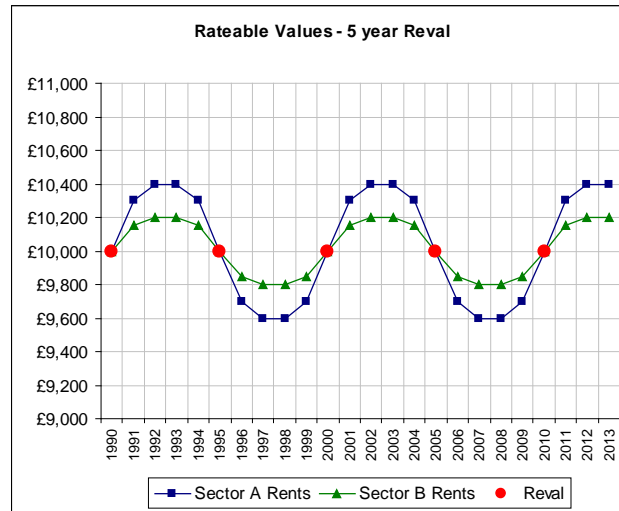
### **“Cyclical rental market” scenario**

**A.13** In this scenario, rents for both sectors follow a cyclical pattern over a five year period with the peaks and troughs more pronounced for Sector A than for Sector B.

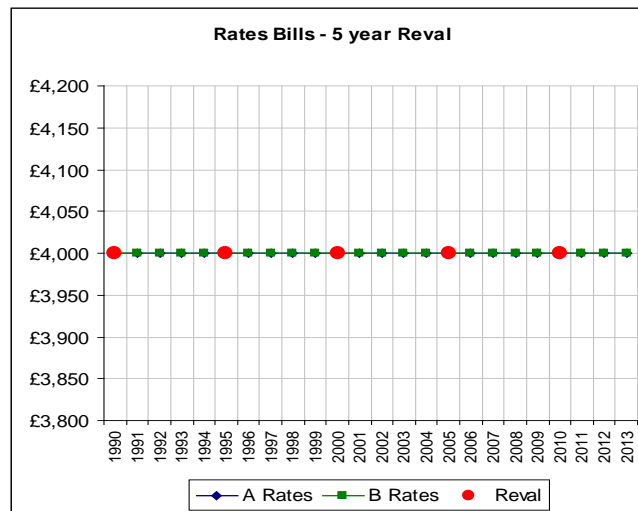
**A.14** With a cyclical rental market, the impact of a revaluation on rateable value and, ultimately, bills, depends on when in the cycle the revaluation falls. If the revaluation falls in one of the market peaks, then we will see a reduction in rates for Sector B, and an increase for Sector A (reflecting the fact that Sector A has higher levels of rent). Likewise, a revaluation in a trough in the market will lead to the opposite (an increase for Sector B, and a reduction for Sector A).

**A.15** In this scenario, a five year revaluation catches the market at the same point in the cycle (because the cycle is five years long). Because there is no long term trend in the market this means that rateable values, and so bills, are steady. This is shown in charts 3(a) and 3(b).

**Chart 3(a): Rateable Values under five year revaluation**

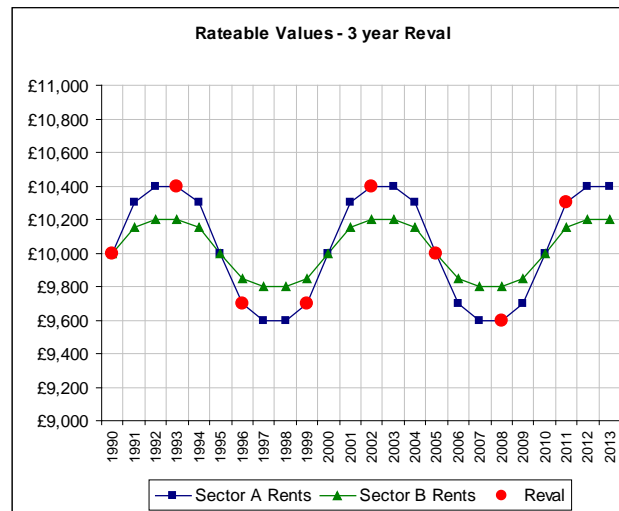


**Chart 3(b): Rates under five year revaluation**

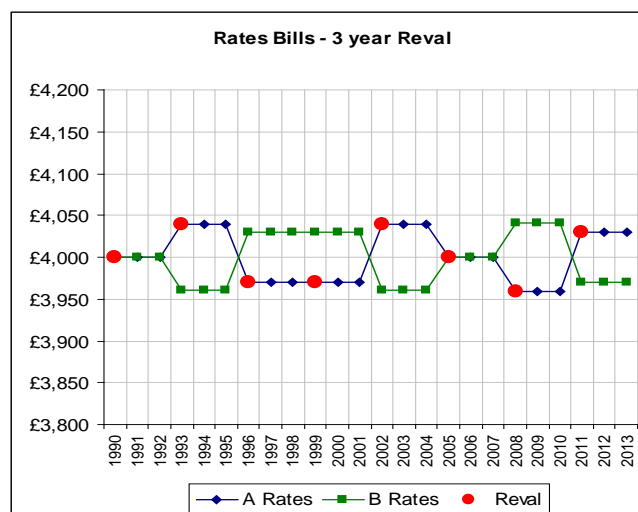


**A.16** However, in this scenario, revaluing every three years means that the revaluation hits at different points in the cycle. This results in changes to bills each time a revaluation take place.

**Chart 4(a): Rateable Values under three year revaluation**



**Chart 4(b): Rates under three year revaluation**



**A.17** This shows that if the rental market is cyclical, more frequent revaluations could result in more volatility in terms of rates paid, not less. In other scenarios tested, we have established that this finding still holds if rents in one sector are stable (or following a steady trend), while in another they follow a more cyclical pattern.

## Data and trends

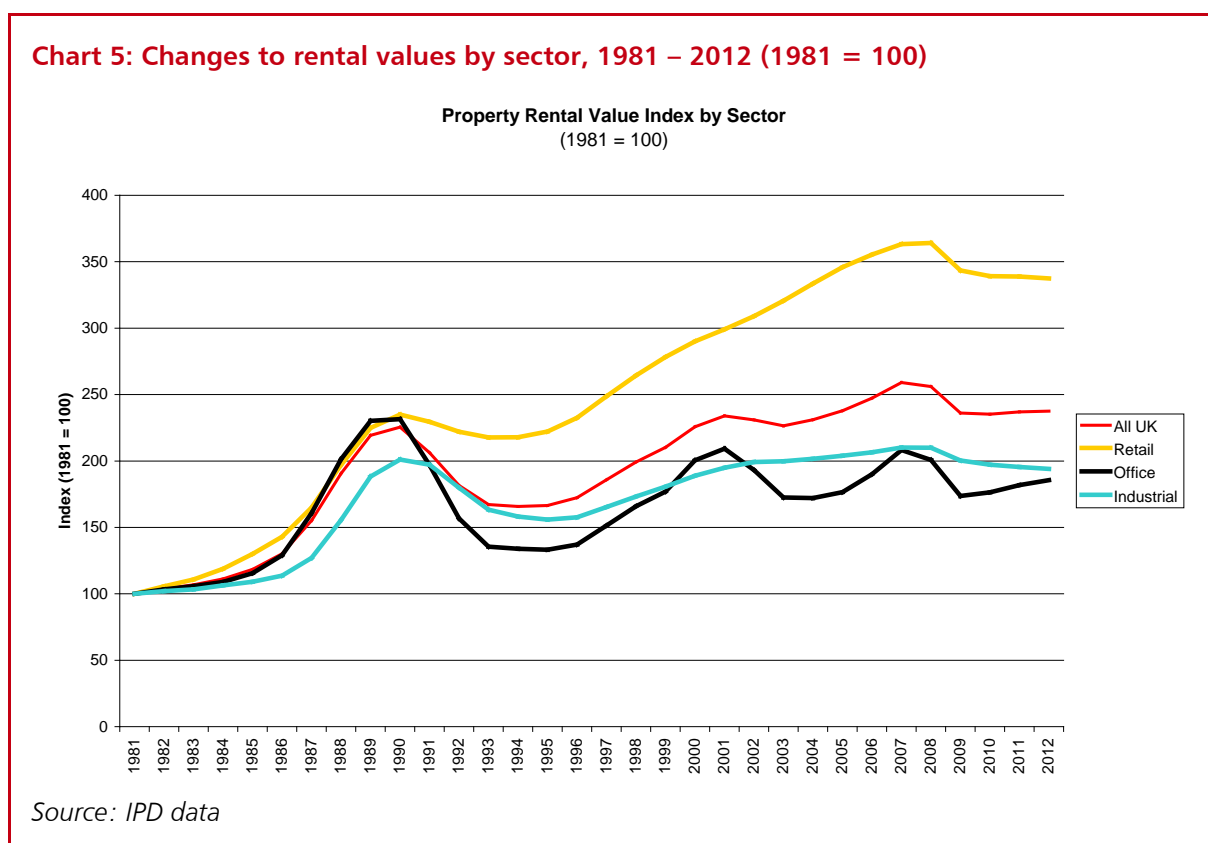
**A.18** In the next section we summarise analysis of the available data on rental trends over time which sought to identify whether there is any evidence of cyclical patterns in commercial rents.

**A.19** Because the VOA does not hold data on rental trends over time (since the VOA predominantly collects and uses rents around each revaluation), we have used rental data from the Investment Property Databank (IPD). Whilst it should be noted that IPD data is weighted towards commercial investment property (and so may exclude properties that are not typically purchased for investment purposes), the data used in this analysis covers around 60% of the

market. This data should therefore be sufficient in establishing whether there is any evidence of broad cyclical patterns in rents.

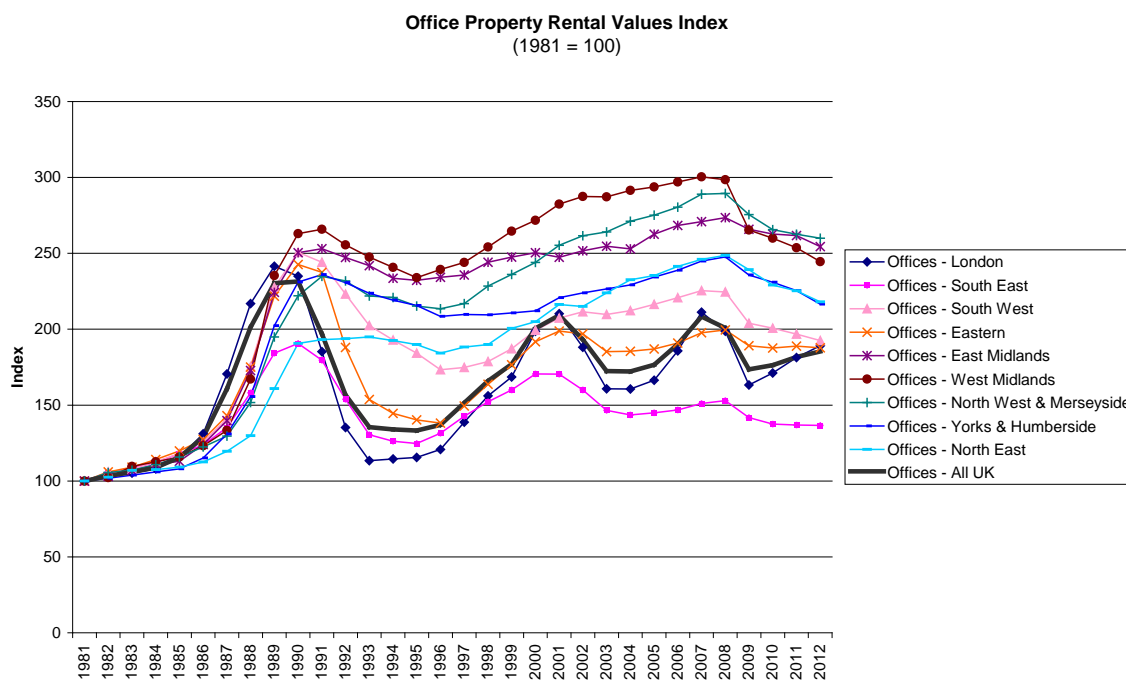
**A.20** Chart 5 shows the changes to rental values by sector between 1981 and 2012 and from it we can draw three conclusions about market trends:

- There is some cyclicity present. In other words rents do not always follow a steady upward or downward trend.
- Cycles are not necessarily the same across different sectors – the office sector appears to be more cyclical than, for example, the Industrial sector.
- The cycles are not regular – they vary in length and depth. This point is particularly important as it may not always be possible to conduct a revaluation at the same point in any property market cycle.



**A.21** Furthermore the available data shows that there is also variation in rental patterns within a given sector. This is illustrated in chart 6, which shows historical rental values for offices in different geographical regions. Rents for offices in London, in particular, seem to follow a more cyclical pattern compared with other regions in England. Furthermore, because they are likely to be a significant part of the market, they seem to drive the average rental value of offices across the UK.

**Chart 6: Changes to rental values in the office sector, by region, 1981 – 2012 (1981 = 100)**



Source: IPD data

## Simulating potential impacts of changing the frequency of revaluation

**A.22** In the preceding scenarios above, we have established that there is some cyclicity in rental values across the UK, leading to the possibility that increasing the frequency of revaluation will also increase the volatility of business rates.

**A.23** In the following sections, we present results from a simulation model developed to provide an illustrative view of the range of possible effects which could arise from changing the frequency of revaluation. This estimates the impact of revaluation at a regional level within sectors (not at the individual property level).

**A.24** The model used data from the following sources:

- VOA published statistics<sup>3</sup> providing information on the number of Retail, Office and Industrial properties<sup>4</sup>, and the rateable value of those properties, across nine geographical regions (for 2000)
- IPD data on rental trends over time which was used to estimate average rateable value for all other years between 1982 and 2013<sup>5</sup>
- The multiplier in 2000/01<sup>6</sup> which was applied to total rateable value and used to get the original Business Rate total revenue

<sup>3</sup> [http://www.voa.gov.uk/corporate/statisticalReleases/120517\\_CRLFloorspace.html](http://www.voa.gov.uk/corporate/statisticalReleases/120517_CRLFloorspace.html)

<sup>4</sup> It should be noted that these definitions differ slightly from those used in the publication. Properties not in one of these three categories have been excluded from this analysis.

<sup>5</sup> The current system of business rates was introduced in 1990. However, for the purposes of this simulation, we have explored what may have happened since 1981, reflecting the data we have available.

<sup>6</sup> [http://www.voa.gov.uk/rli/static/HelpPages/English/faqs/faq146-what\\_are\\_the\\_current\\_multipliers.html](http://www.voa.gov.uk/rli/static/HelpPages/English/faqs/faq146-what_are_the_current_multipliers.html)



- RPI data which was used to calculate the multiplier for all other years between 1982 and 2013

**A.25** In developing this model we have made three main assumptions to isolate the effects of more frequent revaluations:

- **Property stock is fixed:** we assume that there are no changes in the number of properties in any sector or region between 1981 and 2012. This allows us to isolate the impact of rental changes on bills in different scenarios.
- **Changes in rateable value match changes in rent:** rateable value should reflect rental values on the open market. In some cases reported rents may not reflect this – especially at the individual property level. However, we expect them to be close enough that trends and patterns over time should be broadly similar, at least at the aggregate level.
- **Two-year Antecedent Valuation Date:** we assume that the antecedent valuation date (the date around which we are estimating rateable values) is two years before the publication of the list. This is consistent with the current system.

**A.26** In summary, results from the simulation model show that:

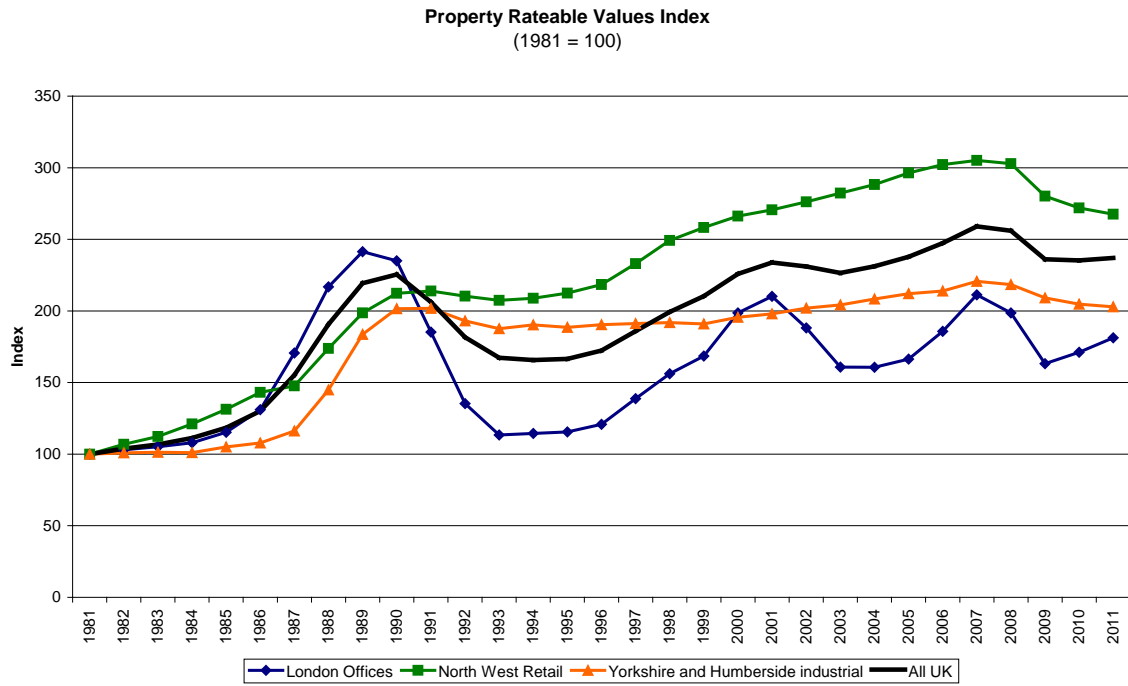
- 1 **changes to rents** (and so rateable values) do **not necessarily equate to equivalent changes in bills**. In particular:
  - a Rateable values can be very **stable**, but bills still **increase**
  - b Bills will not necessarily change in the same **direction** as rateable values
  - c A fall in rateable values doesn't necessarily lead to a fall in bills
- 2 **increasing the frequency of revaluation does not necessarily reduce the volatility of bills**

**A.27** The following sections provide more detailed outputs from our model based on three case studies, which cover:

- London offices
- retail properties in North West England
- industrial properties in Yorkshire and Humberside

**A.28** As a baseline, we have shown – in chart 7 – historical rental growth (expressed as an index) for each of these case studies, and for the UK as a whole.

**Chart 7: Relative changes to rental values for selected areas, 1981 – 2012**

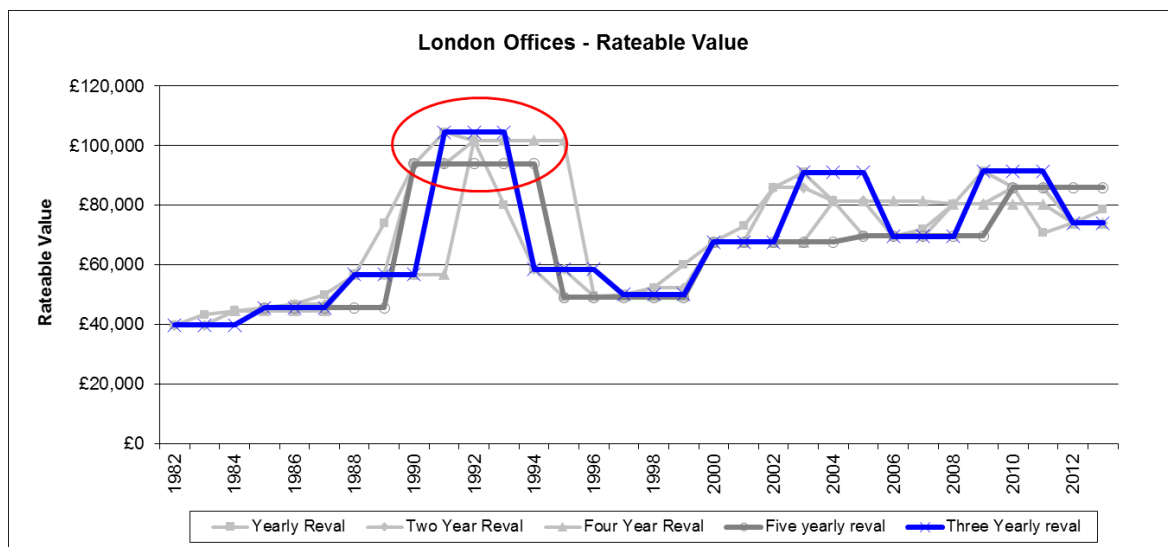


Source: IPD data

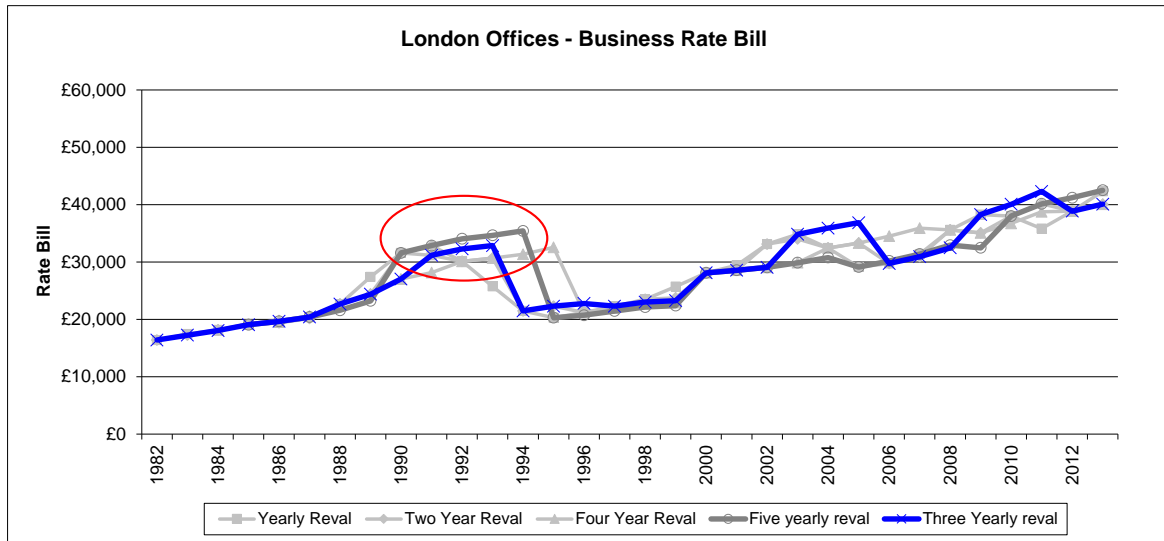
**A.29** The following section looks at each finding in turn, and provides graphical outputs from our simulation model.

**A.30 Rateable values can be stable, but rates can still increase.** This can be seen in London Offices in the early 1990s, which shows stable rateable values (chart 8), but increasing rate bills (chart 9). In this case, this is likely to have been caused by an increase in the multiplier (which would have been increased in line with RPI over that period). We have highlighted the case of a three year revaluation, but the charts show that we would see similar effects under the other revaluation scenarios.

**Chart 8: London Offices: Rateable Values under different revaluation options, 1982 – 2013**

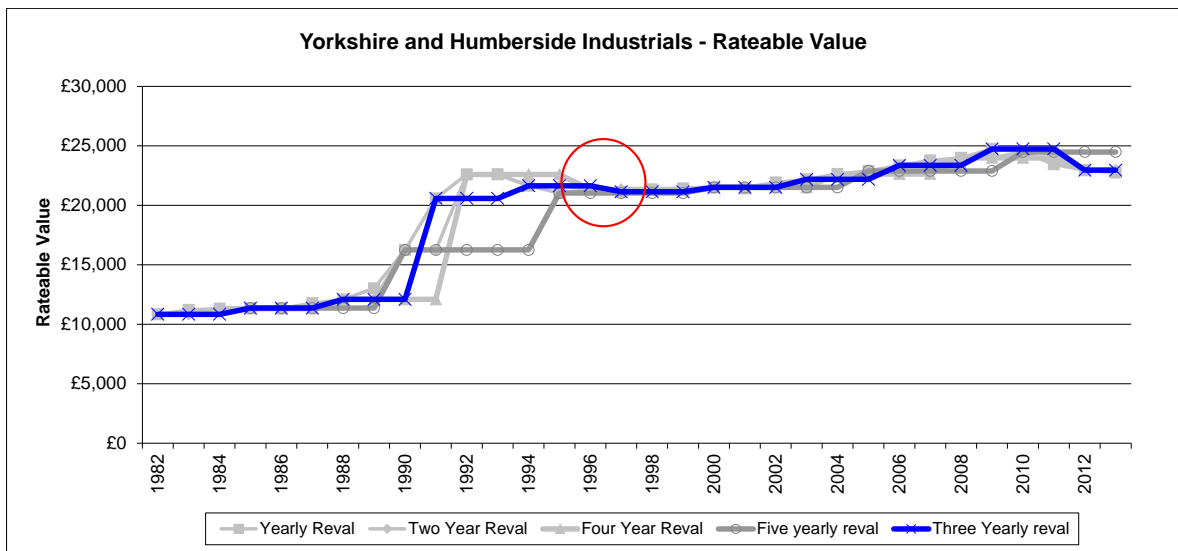


**Chart 9: London Offices: Business Rate Bill under different revaluation options 1982 – 2013**

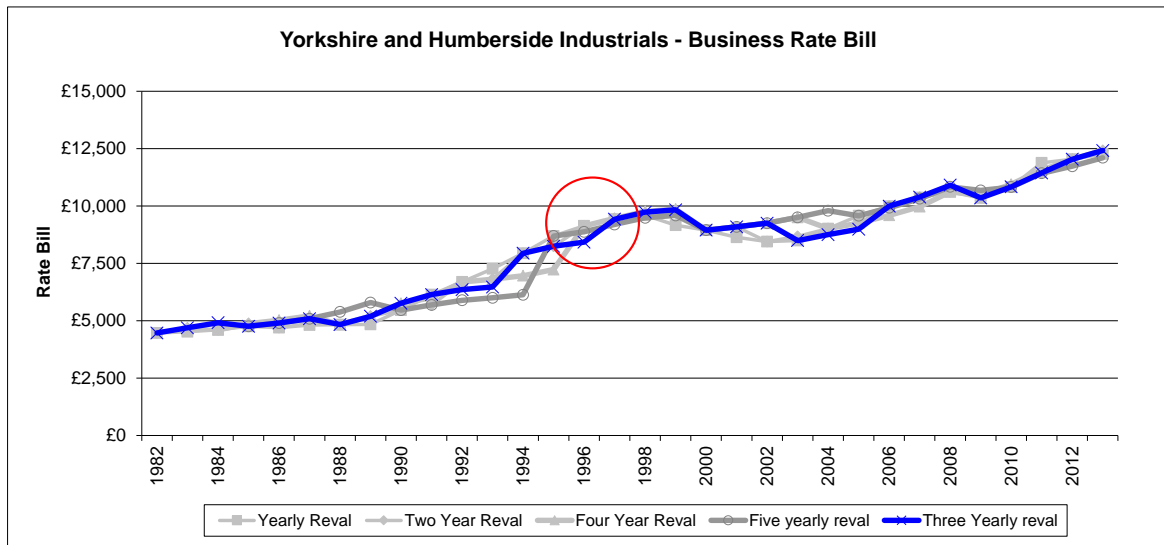


**A.31** This is also illustrated by rateable values and bills for Industrial properties in Yorkshire and Humberside in the mid-1990s (charts 10 and 11), where rateable values may have fallen slightly under a three year revaluation, yet an increase in rates could have been observed. In this case it is likely to be due to the fact that although Industrials in Yorkshire and Humberside saw a fall in rents between revaluations in the early to mid-1990s, this fall was less than the average fall in rents across the UK commercial property market during the same period, which would have therefore resulted in an increase in bills.

**Chart 10: Yorkshire and Humberside Industrial: Rateable Values under different revaluation options, 1982 – 2013**

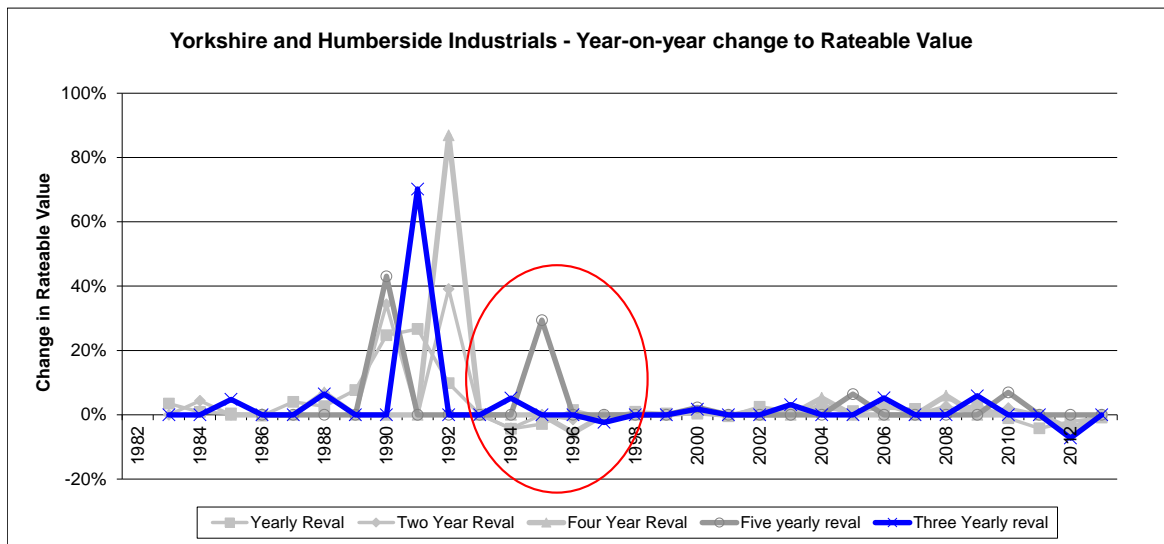


**Chart 11: Yorkshire and Humberside Industrial: Business Rate Bill under different revaluation options, 1982 – 2013**

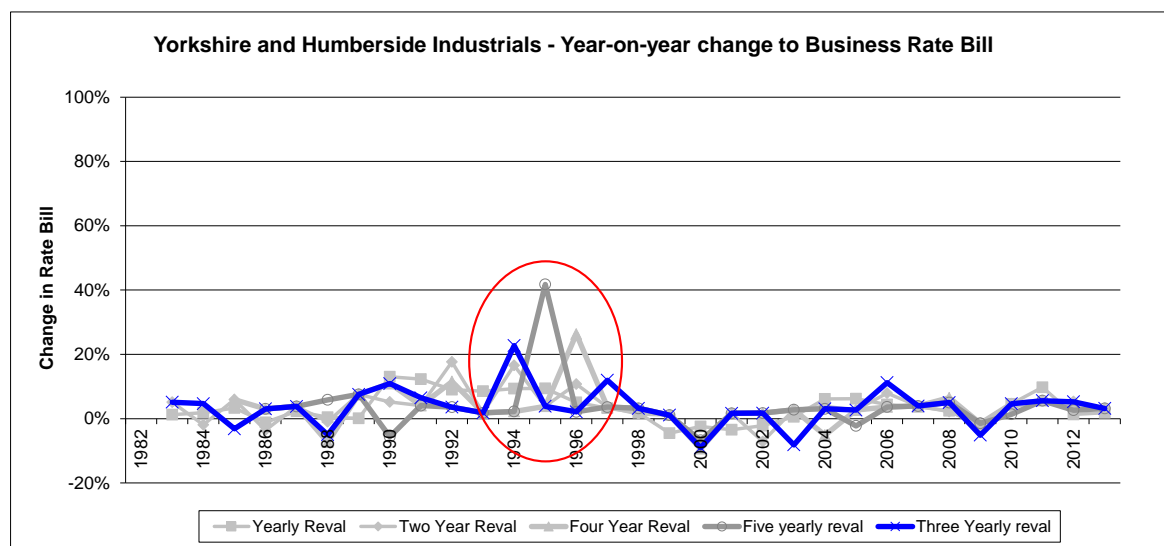


**A.32** This effect is also shown by year-on-year changes in rateable values and the business rates bill for Yorkshire and Humberside Industrials (charts 12 and 13 respectively) in the early 1990s. Between 1993 and 1997 a three year revaluation would have produced stable rateable values, and yet would have also resulted in increases in bills. We would have seen similar results with two year and four year revaluation cycles.

**Chart 12: Yorkshire and Humberside Industrial: Year-on-Year changes to Rateable Values under different revaluation options, 1982 – 2013**

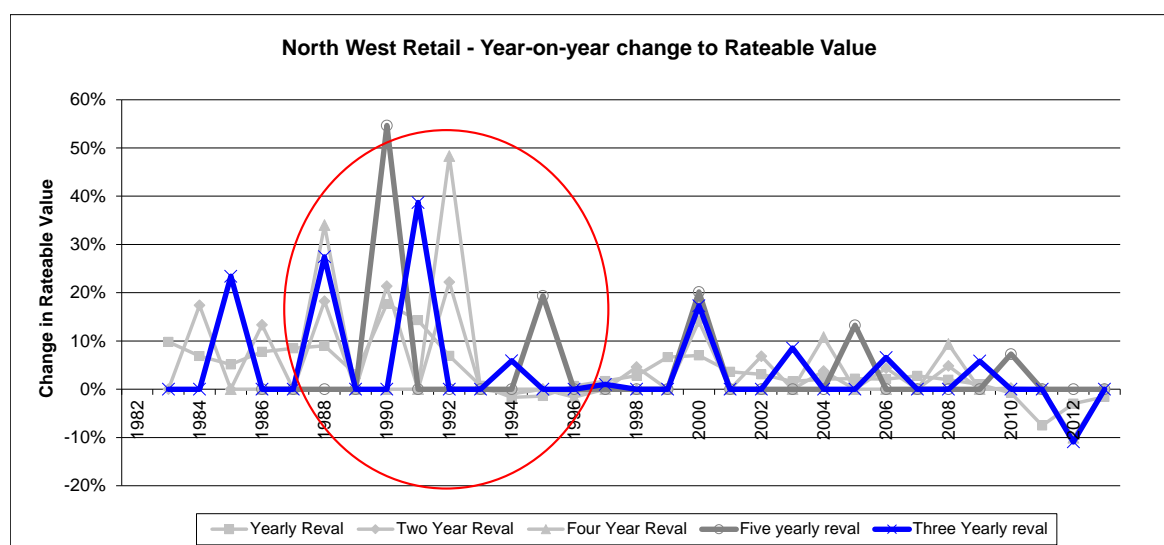


**Chart 13: Yorkshire and Humberside Industrial: Year-on-Year changes to Business Rate Bill under different revaluation options 1982 – 2013**

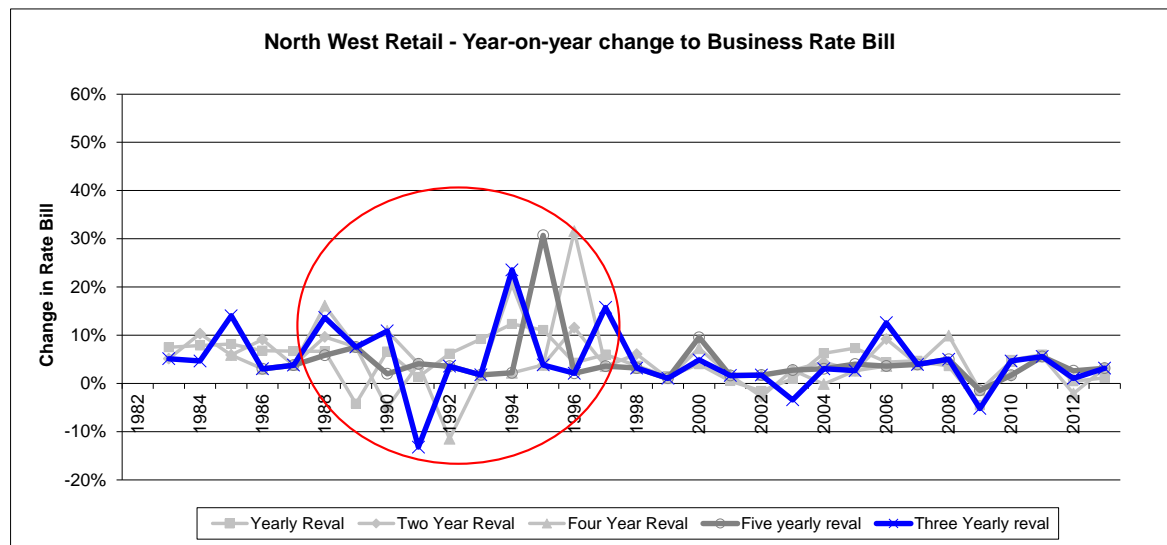


**A.33 Bills will not necessarily change in the same direction as rateable values.** For example, for retail properties in the North West in the ten years between 1986 and 1996 rental values were increasing, which means that revaluations at any point would have increased rateable values. This is shown in chart 14, which shows the year-on-year **change** in rateable values, and chart 15, which shows the equivalent year-on-year change in rates. However because rental growth for North West retail was below average between 1986 and 1991 (as shown in chart 7), bills would have fallen under more frequent revaluation scenarios. In contrast, after 1991, rental values for North West Retail had overtaken the national average, meaning that bills would have risen. This has been highlighted for the case of a three year revaluation, but it can also be seen under a four year revaluation.

**Chart 14: North West Retail: Year-on-Year changes to Rateable Value under different revaluation options, 1982 – 2013**

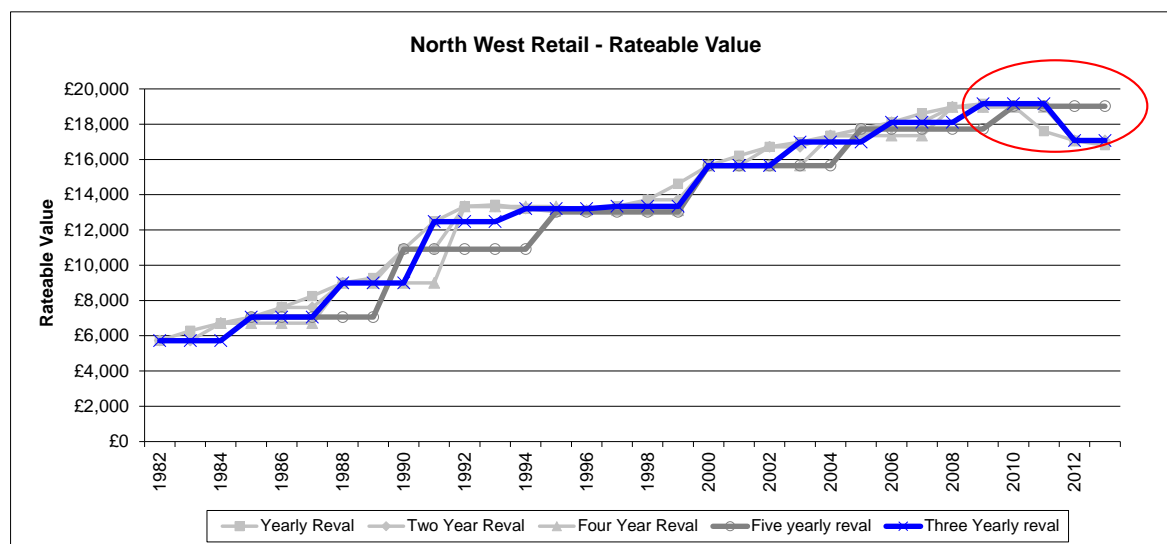


**Chart 15: North West Retail: Year-on-Year changes to Business Rate Bill under different revaluation options 1982 – 2013**

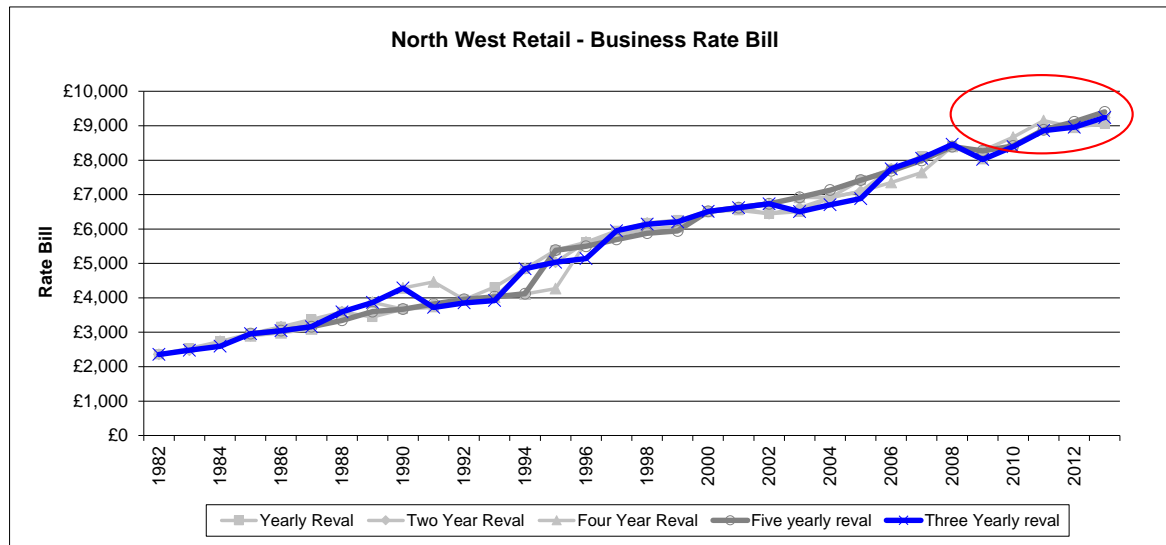


**A.34 A fall in rateable values does not necessarily lead to a fall in bills.** If the overall market has seen falling rental values, then only sectors or regions which have higher than average falls will see a reduction in bills. This can be seen in Retail properties in the North West, illustrated in charts 16 and 17, where RVs fell after 2008 but business rates continued to increase. This has been highlighted for a three year revaluation scenario, but can also be seen under the annual and four year revaluation scenarios.

**Chart 16: North West Retail: Rateable Value under different revaluation options, 1982 – 2013**

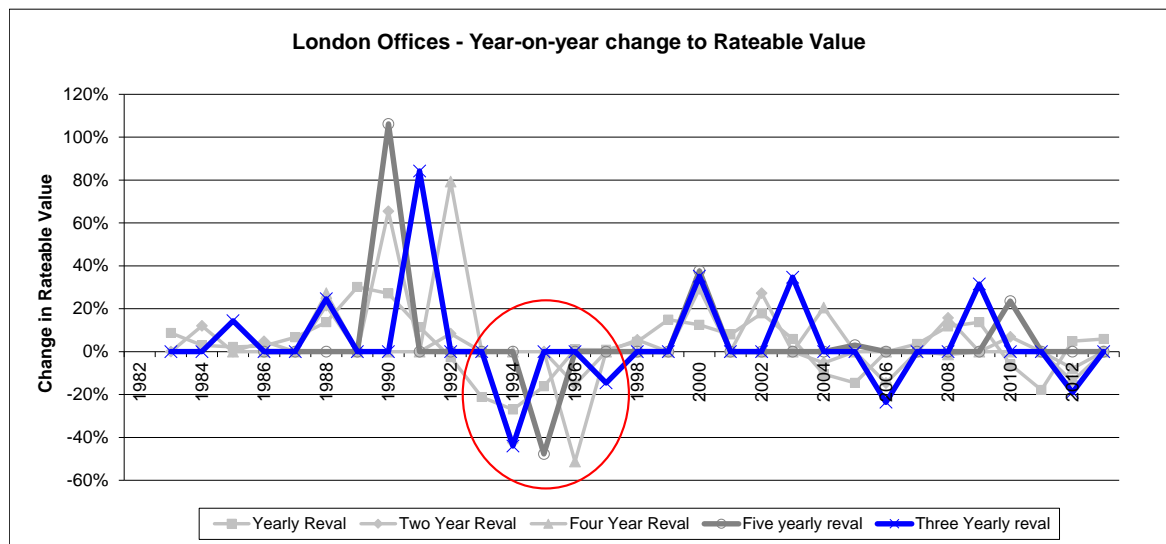


**Chart 17: North West Retail: Business Rate Bill under different revaluation options, 1982 – 2013**

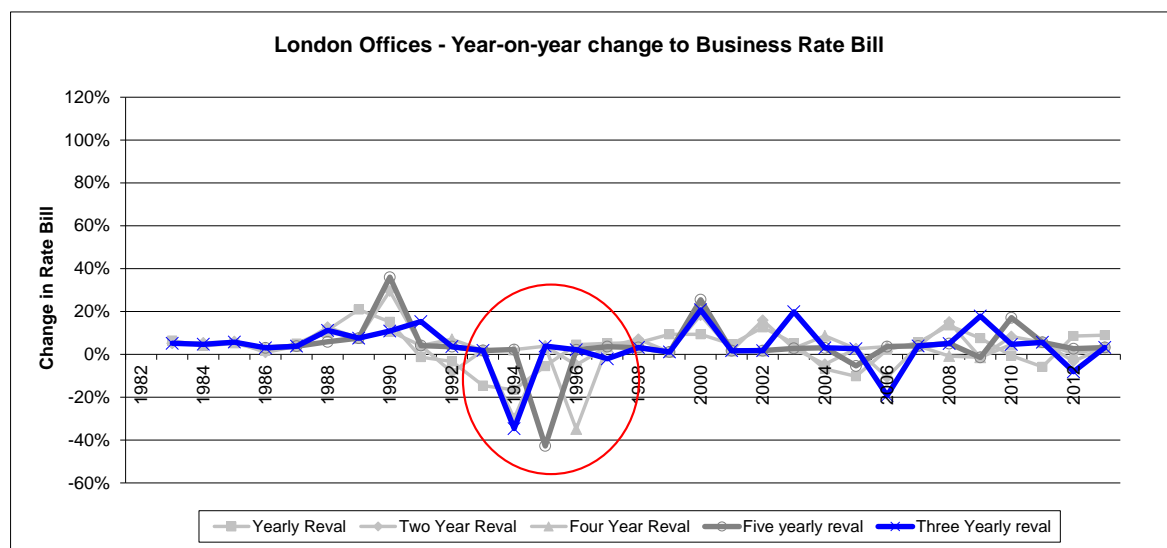


**A.35** Increasing the frequency of revaluation does not necessarily lead to a fall in the volatility of bills. This is illustrated in charts 18 and 19 which shows year-on-year changes to rateable value and bills (respectively) for London offices. In particular it shows that under all scenarios there would have been 40% drop in rateable values and bills at some point in the 1990s. Conducting revaluations at different frequencies would only change **when** this would happen, but even then not in a predictable way.

**Chart 18: London Offices: Year-on-Year changes to Rateable Value under different revaluation options, 1982 – 2013**



**Chart 19: London Offices: Year-on-Year changes to Business Rate Bill under different revaluation options, 1982 – 2013**



## Conclusion

**A.36** This annex set out to answer two questions highlighted by the consultation process:

- Do more frequent revaluations make rates more responsive to changes in rents? In other words, by revaluing more frequently, are rates more likely to increase when rents increase, and decrease when rents decrease?
- Do more frequent revaluations make rates less volatile? In other words, do more frequent revaluations increase the stability of rate bills?

**A.37** This annex has found that:

- a more frequent revaluations will increase the **responsiveness** of bills, but only to **relative** changes in rental values
- b we can only be sure that more frequent revaluations will increase stability of bills when the property values across the market follow a steady trend. **When rents are cyclical it is possible that revaluations pick up rents at a different point in the cycle**
- c simulating revaluations using historical data suggests that **significant parts of the commercial market have rents which follow a cyclical pattern**, and that these cycles don't necessarily repeat with the same frequency. This means that more frequent revaluations may come at different points in the cycle, which could increase the volatility of rates bills at revaluation. Therefore it is not possible to say whether more frequent revaluations will reduce or increase volatility