**Growth: appeals, revaluation and reset**

1. This paper examines some of the practical considerations of the Alternative Model for business rates retention. It focusses on Block 2, or growth. The paper looks at the problems presented by appeals, forecast errors, revaluations and resets. The paper will refer to stylised, numerical examples to aid understanding of the issues.
2. The main issues raised are as follows:

* Adjusting the business rates baseline for rateable value changes backdated to the start of the list will avoid system set-up errors being locked in
* Forecast errors, and appeals on growth, require reconciliation payments
* Changes to the ratings list may take many years to be settled, requiring reconciliation adjustments for any given year across multiple NNDR3 forms
* NNDR3 forms will need to attribute adjustments to the year which they accrue
* Revaluation requires recalculating business rates baselines and adjustment factors, and maintaining two sets of each to deal with reconciliation payments that span revaluation periods
* Resets are achieved by adjusting tariffs and top-ups rather than growth baselines
* Partial resets need not align with revaluations
* Phased resets are possible within the alternative model

1. In summary, the paper demonstrates that the alternative model can deliver the key elements of the businesses rates retention scheme through manipulation of top-ups and tariffs and changes to the growth baseline.

**Appeals**

1. There is widespread agreement from the local government sector that appeals volatility has been a significant cause of uncertainty in the current rates retention system. The difficulty in predicting appeals has made provisions subject to considerable error. Adjustments to these provisions can cause large swings in rates retention income. It is these unpredictable changes in income that the sector want the reforms to tackle.
2. By separating the calculation of redistribution (Block 1) and growth (Block 2), the alternative model ensures that only the growth element is subject to appeals uncertainty, and not the redistribution element. Block 1 allows the tariff or top-up to float so that if rates retention income is lower due to provisions then the tariff is lower or the top-up is higher. This means that Block 1 is also unaffected by changes to appeals provisions since the tariff will simply reduce or the top-up increase in response to an appeals provision.
3. The remaining uncertainty due to appeals is limited to the growth element, and can be thought of as two separate issues. The first concerns appeals against properties included in the calculation of the baseline, the second concerns repayments caused by appeals to new properties not included in the baseline.
4. Appeals against properties included in the baseline can lead to reductions in growth when rates yield reflects those appeals but the baseline does not. This was the case for some local authorities in the current system causing them to remain on the safety net for several years of the scheme. This will be resolved in the alternative model by revising the baseline each year to reflect compiled list appeals (i.e. those that are backdated to the start of the list). Therefore, both the baseline and the yield will reflect appeals meaning we have a truer measure of growth. This is demonstrated numerically in the table below, for a scenario where a new £1m development occurs in 2022-23 and a £0.5m compiled list appeal is settled in 2023-24. For simplicity, it is assumed that the multiplier is held constant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **2021-22** | **2022-23** | **2023-24** | **whole list** |
| Baseline before appeals | A | 5,000,000 | 5,000,000 | 5,000,000 | 15,000,000 |
| Baseline after appeals | B | 5,000,000 | 5,000,000 | 4,500,000 | 14,500,000 |
| Gross rates income after appeal | C | 5,000,000 | 6,000,000 | 5,500,000 | 16,500,000 |
| Growth with no baseline adjustment | D = C - A | 0 | 1,000,000 | 500,000 | **1,500,000** |
| Growth with baseline adjustment | E = C - B | 0 | 1,000,000 | 1,000,000 | **2,000,000** |

1. The baseline is reduced by £0.5m in 2023-24 to account for the compiled list appeal, so that growth remains at £1m. Without the adjustment, growth is reduced by the size of the appeal.
2. Repayments may be required when growth, i.e. new properties not included in the baseline, is appealed with retrospective effect. Unless the system accommodates these repayments, authorities will be overpaid in the years before the appeal is settled. The following table illustrates this issue numerically, for a scenario where a new £1m development occurs in 2022-23 and a £0.5m appeal on that growth is settled in 2023-24, but backdated to 2022-23. Again, the multiplier is held constant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **2021-22** | **2022-23** | **2023-24** | **whole list** |
| Baseline | A | 5,000,000 | 5,000,000 | 5,000,000 | 15,000,000 |
| Gross rates income before appeal | B | 5,000,000 | 6,000,000 | 6,000,000 | 17,000,000 |
| Gross rates income after appeal | C | 5,000,000 | 5,500,000 | 5,500,000 | 16,000,000 |
| Growth before reconciliations | D = B - A | 0 | 1,000,000 | 500,000 | **1,500,000** |
| Growth after reconciliations | E = C - A | 0 | 500,000 | 500,000 | **1,000,000** |

1. Because of the retrospective nature of the appeal, growth for 2022-23 had already been paid before the appeal was settled. This leads to an overpayment in 2022-23 of the value of the appeal, £0.5m. No adjustment to the baseline is necessary since the appeal was not backdated to the start of the list. To rectify this issue there needs to be a system of reconciliation payments such that any overpayments are refunded.
2. Appeals provisions have no effect on Block 2. Growth is measured before taking account of the provision.

**Forecast errors**

1. The following examples assume a 2 authority system, whereby the authority shown in the tables receives 60% of needs based funding, making it a top-up authority at 1st pass (before any subsequent growth). It is also assumed that all growth is retained by the sector at a reset, and either allowed to remain where it was raised or is redistributed according to need (BFLs). Authority A (shown below) and Authority B (not shown) grow the same amount. In these tables, the adjustment factor is used to convert gross rates yield to net rates. For simplicity, it is assumed that the adjustment factor is perfectly accurate.
2. If we measure growth with reference to a baseline calculated from rateable value, we will be able to pay growth on the basis of local authority forecasts on the NNDR1 forms. Authorities will not always correctly forecast their growth so, in a similar way as for appeals to growth, their will need to be a system of reconciliations using NNDR3 data. In a way, appeals to new properties are just another type of growth forecast error.
3. NNDR3 outturn data are only available 6 months after the end of the financial year, so reconciliations will be made 2 years after. Once the system has reached a steady-state (i.e. from year 3 onwards) authorities may be rewarded for in-year growth and a reconciliation payment for growth from 2 years previously. These reconciliations are demonstrated in the table below:

|  | **Est RV** | **Baseline (in NRP terms)** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Adjustment factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth (in NRP terms)** | **final tariff/top-up** | **BRR income** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B = E \* H – C \* D \* H | C | D = A \* C | E | F = D - E | G = F / E | H | I = H - G | J = D \* F - B | K = I + J | L = F + K |
| **Baseline for 1st reval** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - | - |
| **Year 1 (in year)** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | 5,700 | 950 | 0 | 950 | **5,700** |
| **Year 2 (in year)** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | 5,700 | 950 | 0 | 950 | **5,700** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 475 | - | **-** |
| **Year 3 (in year)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **1,425** | **6,650** |

1. The example above shows a case where an authority forecasts no growth in rateable value on their NNDR1s (the green rows). In year 3, their NNDR3 for year 1 (the blue row) shows that their actual growth was £1,000. Therefore the authority is due a reconciliation payment in year 3 with respect to the forecast error from year 1 (col J). In year 3, the in-year top-up (£475 in col I) is increased by the value of the reconciliation payment (£475 in col J) and the value of retained growth (£475) so that the final top-up is £1,425 (col K). The example is simplified since it assumes that the adjustment factor is correct for each year, and that there are no appeals to the compiled list affecting the business rates baseline.
2. In theory, when an authority submits its NNDR1 for year 2 they will have a better idea of their growth from year 1. Therefore, you could do a first stage reconciliation of any year 1 forecast errors on year 2’s NNDR1. However, there would still need to be a further reconciliation in year 3, when the NNDR3 data for year 1 becomes available. Such a system of two-stage reconciliations adds complexity to the scheme (both for authorities and for central government), but would not change the final resource position. The main benefit would be to improve the cash flow position of authorities that had under-estimated their growth. In a similar way, it would weaken the cash flow position of authorities that had over-estimated their growth.
3. The above example shows a simplified reconciliation where the changes are identified by the time the NNDR3 for the year in question is submitted. However, these changes may not be resolved until many years after their effective date (the point to which the revised RV is backdated). This means that authorities could be paying out, or in receipt of, multiple years’ worth of backdated refunds in any given year. As discussed earlier, a backdated appeal on a new property would lead to an overestimate of an authority’s growth without a reconciliation. Therefore, these backdated appeals will need to be addressed via future NNDR3s. To do this, we will need to separate out adjustments to the specific year they relate to (in a similar way to the NNDR option for measuring growth). The table below illustrates how this might work.

|  | **Est RV** | **Baseline (in NRP terms)** | **Cumulative compiled list RV loss** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Scaling factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth current period** | **final tariff/top-up** | **BRR income** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B = E \* H – C \* D \* H | C | D | E = A \* D | F | G = E - F | H = G / F | I | J = I - G | K = E \* H - B | L = J + K | M = G + L |
| **Baseline for 1st reval** | 10,000 | 4,750 | - | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - | - |
| **Year 1 (in year)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 950 | **6,175** |
| **Year 2 (in year)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 950 | **6,175** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | **-** |
| **Year 3 (in year)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **950** | **6,175** |
| **Baseline for 2nd reval** | 13,000 | 6,175 | 0 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | - | - | - | - | - |
| **Year 4 (recons iro year 1)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - |
| **Year 4 (recons iro year 2)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - |
| **Year 4 (in year)** | 13,000 | 6,175 | 0 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 6,128 | -48 | 0 | -48 | **-** |
| **Year 4 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-48** | **6,128** |
| **Year 5 (recons iro year 1)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - |
| **Year 5 (recons iro year 2)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - |
| **Year 5 (recons iro year 3)** | 11,000 | 4,750 | 0 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - |
| **Year 5 (in year)** | 13,000 | 6,175 | 0 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 6,128 | -48 | 0 | -48 | - |
| **Year 5 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-48** | **6,128** |
| **Year 6 (recons iro year 1)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | -238 | - | - |
| **Year 6 (recons iro year 2)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | -238 | - | - |
| **Year 6 (recons iro year 3)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | -238 | - | - |
| **Year 6 (recons iro year 4)** | 12,500 | 5,938 | 500 | 0.5 | 6,250 | -313 | 5,938 | 0.95 | - | - | 0 | - | - |
| **Year 6 (in year)** | 12,500 | 6,175 | 0 | 0.5 | 6,250 | -313 | 5,938 | 0.95 | 6,128 | 190 | -238 | -48 | - |
| **Year 6 (final)** |  | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-760** | **5,178** |
| **Baseline for 3rd reval** | 14,500 | 6,888 | 0 | 0.5 | 7,250 | -363 | 6,888 | 0.95 | - | - | - | - | - |
| **Year 7 (recons iro year 1)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | 0 | - | - |
| **Year 7 (recons iro year 2)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | 0 | - | - |
| **Year 7 (recons iro year 3)** | 10,500 | 4,750 | 0 | 0.5 | 5,250 | -263 | 4,988 | 0.95 | - | - | 0 | - | - |
| **Year 7 (recons iro year 4)** | 12,500 | 5,938 | 500 | 0.5 | 6,250 | -313 | 5,938 | 0.95 | - | - | 0 | - | - |
| **Year 7 (recons iro year 5)** | 12,500 | 5,938 | 500 | 0.5 | 6,250 | -313 | 5,938 | 0.95 | - | - | 0 | - | - |
| **Year 7 (in year)** | 14,500 | 6,888 | 0 | 0.5 | 7,250 | -363 | 6,888 | 0.95 | 5,985 | -903 | 0 | -903 | - |
| **Year 7 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-903** | **5,985** |

1. Each year’s NNDR3 has separate reconciliations for each prior year. In this example, the authority predicts growth of £1,000 in year one. This is confirmed via the NNDR3 for year 1 (published in year 3). The growth is then reduced by £500 via an appeal that is settled in year 6, but backdated to have effect from year 1. On the NNDR3 for year 4 (published in year 6) there are reductions in respect of years 1, 2 and 3 where growth was overpaid. The appeal also affects the new ratings list in year 4 and 5, but in this case it affected both the yield (in col G) and the baseline (in col B) so no reductions are necessary. In year 7, no further adjustments are necessary since we have updated our measures of growth with the reconciliations from year 6. The remaining sections simplify the tables by assuming reconciliations are solved by the NNDR3 stage, but it is important to remember that, as the table above illustrates, this will not always be the case.

**Revaluation**

1. Revaluations are moving to a 3 year cycle from 2021-22. With a 2 year lag on reconciliations this means that for the first 2 years of subsequent revaluation periods, authorities will be receiving in-year growth based on the most recent ratings list, and reconciliations based on the previous ratings list. This means that we will be required to maintain 2 sets of baselines – one for each ratings list. This is demonstrated in the example below:

|  | **Est RV** | **Baseline (in NRP terms)** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Adjustment factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth (in NRP terms)** | **final tariff/top-up** | **BRR income** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B = E \* H – C \* D \* H | C | D = A \* C | E | F = D - E | G = F / E | H | I = H - G | J = D \* F - B | K = I + J | L = F + K |
| **Baseline for 1st reval** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - | - |
| **Year 1 (in year)** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | 5,700 | 950 | 0 | 950 | **5,700** |
| **Year 2 (in year)** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | 5,700 | 950 | 0 | 950 | **5,700** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 475 | - | **-** |
| **Year 3 (in year)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **1,425** | **6,650** |
| **Baseline for 2nd reval** | 13,000 | 6,175 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | - | - | - | - | - |
| **Year 4 (recons iro year 2)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 475 | - | - |
| **Year 4 (in year)** | 13,000 | 6,175 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 6,270 | 95 | 0 | 95 | **-** |
| **Year 4 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **570** | **6,745** |

1. After revaluation, the authority’s growth baseline increases from £4,750 to £6,175 (col B). This ensures that the authority does not benefit from the revaluation as any gains (or losses) in rates due to the revaluation just increase (or decrease) the baseline. In order to calculate the reconciliation payment in year 4, NNDR3 growth must be compared to the original baseline of £4,750, rather than the in-year baseline of £6,175. The example is simplified since it assumes that the adjustment factor is correct for each year and constant over revaluation periods, and that there are no appeals to the compiled list affecting the business rates baseline. It also implicitly assumes a full reset in year 4, so that any growth in the previous period is removed. The next section considers resets in more detail.
2. If the baseline is measured using rateable values, then growth payments will need to be adjusted from gross rates payable (i.e. GRP, or rates prior to reliefs) to net rates payable (i.e. NRP, or rates after reliefs) in order that reward payments stay within the funds available. As well as calculating a baseline for each ratings list, we will probably recalculate this adjustment factor after a revaluation. A question then remains as to whether reconciliation payments from years prior to the current revaluation period should be adjusted with the new or old factor.

**Reset**

1. The first part of this section considers how partial resets would work when aligned with revaluations. In the current system, we would control the amount of rates retained at a reset by varying an authority’s business rates baseline. However, in the alternative model it is simpler to adjust the tariff or top-up. This is similar to the way we are proposing to adjust the tariff or top-up for reconciliations and growth. It is simpler to operationalise resets in this way because the growth baselines will be measured relative to different ratings list before and after the reset. This is demonstrated in the example below.

|  | **Est RV** | **Baseline (in NRP terms)** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Adjustment factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth (in NRP terms)** | **Retained growth from prior period** | **final tariff/top-up** | **BRR income** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B = E \* H – C \* D \* H | C | D = A \* C | E | F = D - E | G = F / E | H | I = H - G | J = D \* F - B | K = J \* % retained | L = I + J + K | M = F + L |
| **Baseline for 1st reval** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - | - | - |
| **Year 1 (in year)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 0 | 950 | **6,175** |
| **Year 2 (in year)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | 5,700 | 0 | 950 | 0 | 950 | **6,650** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - | **-** |
| **Year 3 (in year)** | 13,000 | 4,750 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 5,700 | -475 | 1,425 | 0 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **950** | **7,125** |
| **Baseline for 2nd reval** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | - | - | - | - | - | - |
| **Year 4 (recons iro year 2)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | - | - | 0 | - | - | - |
| **Year 4 (in year)** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | 6,555 | -570 | 0 | 713 | 143 | **-** |
| **Year 4 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **143** | **7,268** |

1. In the example above, the authority experiences £1,000 RV growth (col A) in each of the first 3 years with no forecast errors (zero reconciliation payments). This leads to a total of £1,425 retained growth by the end of the revaluation period (col J). There is then a 50% partial reset in year 4, coinciding with a revaluation. The revaluation increases the total RV in the authority by £2,000, from £13,000 to £15,000 (col A). This forms the basis of their new growth baseline in year 4 - £15,000. In order to retain the growth from the previous reset period, the authority’s 1st pass tariff is decreased by £713 (col K, or half of the £1,425 cumulative growth in col J) so that after the final calculation the authority actually receives a small top-up of £143 (col L). To simplify matters, there is no further growth forecast in year 4. Just as before, the authority does not benefit from the revaluation effect as their baseline increases accordingly. The authority’s BFL increases to £6,555 because it captures 60% of total growth when redistributed according to need (authority B generates an equal amount of growth as authority A). The authority’s income increases from £7,125 to £7,268 (col M).
2. Although it may be simpler to align resets with revaluations, the alternative model should be robust enough to deal with misaligned resets and revaluations. Revaluations are supposed to be 3 yearly from 2021-22 onwards, but they have been delayed in the past meaning we cannot guarantee resets and revaluations align without changing the reset period in response to a revaluation delay. Spending reviews may also create pressure for a change in the reset period such that resets and revaluations are misaligned. The following example demonstrates that a partial reset can be performed the year after a revaluation (or any other year).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Est RV** | **Baseline (in NRP terms)** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Adjustment factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth (in NRP terms)** | **Retained growth from prior period** | **final tariff/top-up** | **BRR income** |
|  | A | B = E \* H – C \* D \* H | C | D = A \* C | E | F = D - E | G = F / E | H | I = H - G | J = D \* F - B | K = J \* % retained | L = I + J + K | M = F + L |
| **Baseline for 1st reval** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - | - | - |
| **Year 1 (in year)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 0 | 950 | **6,175** |
| **Year 2 (in year)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | 5,700 | 0 | 950 | 0 | 950 | **6,650** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - | **-** |
| **Year 3 (in year)** | 13,000 | 4,750 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 5,700 | -475 | 1,425 | 0 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **950** | **7,125** |
| **Baseline for 2nd reval** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | - | - | - | - | - | - |
| **Year 4 (recons iro year 2)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | - | - | 0 | - | - | - |
| **Year 4 (in year)** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | 5,700 | -1,425 | 0 | 1,425 | 0 | **-** |
| **Year 4 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **0** | **7,125** |
| **Year 5 (recons iro year 3)** | 13,000 | 4,750 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | - | - | 0 | - | - | - |
| **Year 5 (in year)** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | 6,555 | -570 | 0 | 713 | 143 | - |
| **Year 5 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **143** | **7,268** |

1. In this example, there is a revaluation in year 4, and a reset in year 5. Again there is £1,000 growth in each of the first 3 years, for a total growth of £1,425 with no reconciliations. In year 4, all the growth from the first revaluation period is added to their tariff giving them a top-up such that their income before and after the revaluation is the same, at £7,125. Then in year 5 there is a reset so that the growth retained from the previous revaluation period is halved to £713. In this example the authority is a 1st pass top-up so that it actually benefits when half of the growth is redistributed according to BFLs – its income increases from £7,125 to £7,268.
2. Phased resets could be achieved in the same way – by adjusting the top-up or tariff. The table below illustrates how this might work.

|  | **Est RV** | **Baseline (in NRP terms)** | **Multiplier** | **Gross rates payable** | **Mandatory relief** | **Net rates payable** | **Adjustment factor** | **BFL** | **1st pass tariff/top-up** | **Estimated growth (in NRP terms)** | **Retained growth from prior period** | **Total retained growth** | **final tariff/top-up** | **BRR income** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B = E \* H – C \* D \* H | C | D = A \* C | E | F = D - E | G = F / E | H | I = H - G | J = D \* F - B | K = J \* % retained | L = cumulative total of K | M = I + J + K | N = F + M |
| **Baseline for 1st reval** | 10,000 | 4,750 | 0.5 | 5,000 | -250 | 4,750 | 0.95 | - | - | - | - |  | - | - |
| **Year 1 (in year)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | 5,700 | 475 | 475 | 0 | 475 | 950 | **6,175** |
| **Year 2 (in year)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | 5,700 | 0 | 950 | 0 | 950 | 950 | **6,650** |
| **Year 3 (recons iro year 1)** | 11,000 | 4,750 | 0.5 | 5,500 | -275 | 5,225 | 0.95 | - | - | 0 | - | - | - | **-** |
| **Year 3 (in year)** | 13,000 | 4,750 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | 5,700 | -475 | 1,425 | 0 | 1,425 | 950 | **-** |
| **Year 3 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **950** | **7,125** |
| **Baseline for 2nd reval** | 15,000 | 7,125 | 0.5 | 7,500 | -375 | 7,125 | 0.95 | - | - | - | - | - | - | - |
| **Year 4 (recons iro year 2)** | 12,000 | 4,750 | 0.5 | 6,000 | -300 | 5,700 | 0.95 | - | - | 0 | - | - | - | - |
| **Year 4 (in year)** | 16,000 | 7,125 | 0.5 | 8,000 | -400 | 7,600 | 0.95 | 5,700 | -1,900 | 475 | 1,425 | 1,900 | 0 | **-** |
| **Year 4 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **0** | **7,600** |
| **Year 5 (recons iro year 3)** | 13,000 | 4,750 | 0.5 | 6,500 | -325 | 6,175 | 0.95 | - | - | 0 | - | - | - | - |
| **Year 5 (in year)** | 17,000 | 7,125 | 0.5 | 8,500 | -425 | 8,075 | 0.95 | 5,700 | -2,375 | 950 | 1,425 | 2,375 | 0 | - |
| **Year 5 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **0** | **8,075** |
| **Year 6 (recons iro year 4)** | 16,000 | 7,125 | 0.5 | 8,000 | -400 | 7,600 | 0.95 | - | - | 0 | - | - | - | - |
| **Year 6 (in year)** | 18,000 | 7,125 | 0.5 | 9,000 | -450 | 8,550 | 0.95 | 6,270 | -2,280 | 1,425 | 950 | 2,375 | 95 | - |
| **Year 6 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **95** | **8,645** |
| **Baseline for 3rd reval** | 20,000 | 9,500 | 0.5 | 10,000 | -500 | 9,500 | 0.95 | - | - | - | - | - | - | - |
| **Year 7 (recons iro year 5)** | 17,000 | 7,125 | 0.5 | 8,500 | -425 | 8,075 | 0.95 | - | - | 0 | - | - | - | - |
| **Year 7 (in year)** | 21,000 | 9,500 | 0.5 | 10,500 | -525 | 9,975 | 0.95 | 6,840 | -3,135 | 475 | 1,900 | 2,375 | -760 | - |
| **Year 7 (final)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-760** | **9,215** |

1. The table shows a scenario where the authority grows by £1,000 a year throughout the 7 year period and a 5 year phased reset is in operation. The top-up (in this case) is increased by the value of growth over the previous years, up to a maximum of 5 years. Total retained growth increases by £475 a year until it reaches a maximum of £2,375 in year 5 and remains constant thereafter. After the 5th year, some growth is recycled back through BFLs. The authority’s income from the scheme continues to grow after year 5. This is because the authority (with an assumed BFL of 60%) captures some of the growth from the other authority (which is assumed to grow at the same rate) when it is redistributed according to need.
2. In the simplified example above, there are no reconciliation payments. Reconciliation payments are paid in a later year to which they accrue. These reconciliation payments should be retained for 5 years too, and not phased out when the main year’s payment is phased out.