

THE CALCULATION OF NON-QUOTA FUNDED CREDIT VALUES

INTRODUCTION

- 1 These notes have been prepared to accompany the EXCEL spreadsheet which parallels the processes used to calculate the 2011/12 non-quota funded credit values. It is intended to allow institutions to see how the most complex part of the funding method operates and to enable institutions to carry out their own modelling.

THE TEACHING FUNDING METHOD

- 2 Information on the funding methodology to be used to allocate funding for teaching is set out in HEFCW circular W99/71HE. Updates to the funding methodology were published in circular W10/10HE which announced the removal of the recovery element from 2011/12 and circular W11/07HE which announced changes to premium allocations. Details of the outcomes for 2011/12 are provided in circular W11/12HE, along with information on GDP, efficiency gain and units of funding. The notes should be read in conjunction with those circulars.
- 3 There are several strands to the formula funding including:
 - core and addition (margin);
 - per capita allocations; and
 - premiums (Welsh Medium, Disability Widening Access and Part-time).
- 4 These notes describe the core and addition funding process and relate only to non-quota subjects. These allocations are determined in three stages within a single model. They are:
 - 1 Determining the core
 - 2 Allocating the addition (margin)
 - 3 Calculation of funding allocations (not included in the spreadsheet)
- 5 The credit value allocations are calculated in a SAS program where credit values are weighted to enable a common currency (weighted credit values) to be used. The weighted credit values (WCVs) can be moved between cells in a financially neutral way. This is an essential part of the methodology.
- 6 It should be noted that the exchanges are financially neutral in terms of funding. The final stage (Stage 3) simply multiplies the weighted credit values by the standard unit of funding.
- 7 In the circulars, the term additional numbers is used exclusively to refer to addition (margin) numbers. However, the program allocates additional (in

the wider sense) numbers at several stages. Therefore, “addition (margin)” is used to describe the stage 2 additions.

- 8 The method of allocation of funded credit values is entirely formula driven within the model but a final stage, redistribution of funded credit values, may be available to enable institutions to move funded credit values to funding cells in a way which reflects their intended patterns of provision for the forthcoming year.

FURTHER INFORMATION

- 9 The three formula driven stages are explained in more detail in the sections which follow. Detailed notes within the EXCEL spreadsheet also describe the processes.

- 10 Further information is available from:

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STAGE 1: DETERMINING THE CORE

- 11 The aim is to allocate funded credit values for the forthcoming year in a way that:
 - i) reflects the current enrolment patterns;
 - ii) provides as much of the current year’s (model-based) funding, after adjustment for GDP and efficiency gain, as is justified by the current year’s enrolled credit values; and
 - iii) ensures funded credit values are not moved to lower priority areas.
- 12 This is done by:
 1. calculating an initial core by taking the lower of funded credit values and enrolled credit values in each cell; and
 2. undertaking a reallocation process to move spare funded credit values (ie unfilled funded credit values) to cells where there are more enrolled credit values than funded credit values.
- 13 Calculating the initial core is straightforward. The reallocation process is more complex. In order to ensure that any spare funded credit values are not reallocated to lower priority cells, each cell has to be assigned to a priority level. Unfilled funded credit values are first reassigned to unfunded credit values at their own priority level, then any spare funded credit values are moved successively up the levels. The priority levels for 2011/12 are (lowest priority first):

Priority Level 1: All (to exclude Part-time Undergraduate Franchised Out)
Priority Level 2: Part-time Undergraduate Franchised Out

- 14 The reallocation of funded credit values is subject to a capping process which prevents the reallocated core funded credit values for the forthcoming year exceeding the current year's enrolled credit values in that cell.
- 15 Because the aim is to move funded credit values with different monetary values while maintaining financial neutrality, it is necessary to convert funded credit values to a common currency. The process therefore works in terms of weighted credit values (WCVs).
- 16 The spreadsheet model carries out the reallocation process in a number of steps.

Conversion to common currency

Step 1: Funded and enrolled credit values are converted to WCVs. Funded credit values are multiplied by the cell weight.

Within priority level virement of funded WCVs

Step 2: The numbers of unfilled credit values (spare WCVs) and fees only (WCVs in excess of current funded WCVs) are calculated.

Step 3: The number of spare WCVs and fees only WCVs for each priority level are accumulated.

Step 4: Within each priority level, all the spare WCVs are allocated across the cells with fees only WCVs (pro-rata to fees only).

Capping to ensure new funded credit values do not exceed enrolled credit values

Step 5: The numbers of WCVs reallocated are capped to ensure the new funded credit values do not exceed enrolled credit values in each cell; and any WCVs released by the capping are accumulated by priority level. A preliminary core showing the total numbers of funded WCVs in each cell is calculated.

Allocation of remaining WCVs to higher level priority levels

Steps 6 to 8: Any WCVs which have not been allocated to cells at their own priority level are moved up a level to fund any fees only credit values with any surplus being moved up again to the next level.

Completion of calculation of core

Step 9: The additional WCVs assigned at steps 6 to 8 are added to the preliminary core to give the reallocated core in WCVs.

Conversion back to funded credit values

Step 10: The WCVs of the reallocated core are converted back (rounding as necessary) to whole funded credit values by dividing by the cell weight to form the new core credit values for the forthcoming year.

STAGE 2: ALLOCATING THE ADDITION (MARGIN)

17 The purpose of this stage is to allocate additional funded credit values for the following year. Different growth in funded credit values may be allocated to different groups of cells to reflect priorities.

18 There are two elements to the addition (margin): a simple percentage increase (X%) in the core funded credit values; and a percentage growth (Y%) that depends on the numbers of fees only credits remaining after reallocation of the core. The latter allows some or all of the fees only credits to be funded to reflect policy imperatives or other requirements. For 2011/12, both X and Y are set to zero.

i.e. addition = X% of reallocated core + Y% of fees only

Different values of X% and Y% can be allocated to each cell (if necessary) but, in general, the same percentage is applied to groups of cells.

19 The addition (margin) does not need to be calculated in terms of WCVs because no movement or exchange is involved. The addition (margin) credit values are rounded to whole numbers.

20 The funded core + addition credit values are shown in the spreadsheet in the table on page 12. Note that only whole funded credit values are allocated.

21 For 2011/12, these final allocations (in non-quota and non-ringfenced cells) have been reduced by 5% to provide credits for regional bids and reward for regional redistribution. Therefore, the credit values shown as core and addition in Annex B of circular W11/12HE are those calculated in the Excel workbook with this 5% reduction. In addition, the credit values shown in Annex B also have regional redistribution taken into account. These different aspects of the total number of funded credits allocated to an institution for 2011/12 are described in paragraphs 23 to 31 of circular W11/12HE.

STAGE 3: CALCULATION OF FUNDING ALLOCATIONS

(not shown on spreadsheet)

- 22 The funded credit values at each stage (core and addition) are multiplied by the appropriate unit of funding (UoF) for the cell to give the allocations.

Funding = unit of funding x credit values

- 23 The UoFs are derived from the previous year's UoF. For 2011/12 the 2010/11 UoFs (after the in-year cut of 4%) have been reduced by 8.5%.