Calculating Salary Thresholds: technical note

Skilled Worker Route of the Points Based System

14th July 2020

Introduction

1. The Migration Advisory Committee (MAC) have previously provided advice to the Government on the level and design of salary thresholds in the future immigration system[1]. Employers wishing to sponsor migrants to fill vacancies in eligible occupations through the points based skilled worker route must meet minimum salary requirements. With the exception for some largely public sector occupations, where salary thresholds will be set in line with national pay scales, salary requirements will be set as the higher of a general threshold and an occupation specific threshold.

2. This technical note sets out the methodology we recommend for how these thresholds are calculated and provides illustrative examples. It is the responsibility of the Home Office to set the salary thresholds.

General threshold

3. The general threshold is calculated as the 25th percentile of annual earnings across all eligible occupations[2] using the latest available Annual Survey of Hours and Earnings (ASHE) dataset[3]. If only a subset of an occupation is considered eligible for the skilled worker route it will nonetheless be included in full in this calculation. The observations over which the 25th percentile is calculated are those employees who work full-time, are on adult rates and have been in the same job for more than one year[4].

4. Rounding to the nearest £100 the 25th percentile of full-time annual earnings across eligible occupations is £25,600 using ASHE 2019.

Occupation specific thresholds

5. As with the general threshold the occupation specific threshold is set at the 25th percentile of the full-time earning distribution but this time for each eligible occupation. These are based on 4-digit Standard Occupational Classification codes.

6. Where possible these will be taken directly from the latest ASHE tables published by the Office for National Statistics (ONS), specifically Table 14.7a[5]. However, there will be a number of occupations where no estimate of the 25th percentile is published due to concerns around the robustness of the estimates given the limited sample size available within ASHE.

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[1]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf
[2]Eligible occupations are taken to be those listed as skilled to RQF level 3 and above in Appendix J of the immigration rules. The changes to the skill levels of 14 occupations recommended in the MAC's Points-based system and Salary Thresholds report are also incorporated.
[3]https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/annualsurveyofhoursandearningsashe
[4]Additionally, employees who do not have a valid work region, who are less than 16 years old or who have missing or zero annual gross salaries are also not included. This is in line with annual earnings estimates published by the ONS.
[5]https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digitsoc2010ashetable14

7. Two approaches are used to overcome this issue:

   a. <u>Historic ratio between median and 25th percentile</u>

      - Using the published tables in the three years prior to the most recent ASHE publication, the ratio of the median and 25th percentile is calculated and averaged over each of the years for the relevant occupation where enough data was published to do so.

      - This ratio is then applied to the estimate of median earnings in the latest ASHE publication in order to generate an estimate of the 25th percentile.

      - This method can only be used when there is at least one year where both a median and 25th percentile estimate is published in the previous three years and when an estimate of the median is published in the most recent data.

   b. <u>The discount/premium between minor and unit occupation groups</u>

      - Using the underlying ASHE data, the percentage difference between the 25th percentile of annual earnings for each minor occupation group (3-digit) and unit occupation group (4-digit) is calculated for each of three years – the latest available and the two previous years. The difference is then averaged across those three years to produce an estimate of the discount/premium in earnings between a unit group occupation and its associated minor group.

      - This average discount/premium is then applied to the published 25th percentile estimate for a minor group to get an estimate at the unit group level.

      - When no 25th percentile estimate for a minor group is published then the discount/premium between the sub-major group (2-digit) and the unit group is used instead.

8. It is preferable that only published data is used to form salary thresholds, as this allows users of the system to see exactly where the requirements come from. For this reason, method (a) is preferred over method (b). However, in cases where method (a) is unable to provide an estimate method (b) will have to be used.

9. Using multiple years data should help reduce any volatility in these estimates, preventing the requirements for employers shifting significantly on an annual basis. No statistical measure of accuracy is calculated for these new estimates.

Illustrative Examples

Health and safety officers (3567)

There was no estimate of the 25th percentile of annual full-time earnings published for *Health and safety officers* in the 2019 ASHE tables. An estimate for the median (50th percentile) was published – £35,816.

Using estimates from 2018, 2017 and 2016 we calculate that the average ratio between the median and 25th percentile of *Health and safety officers* earnings distribution is 0.823 – calculations shown below.

Applying this ratio to the 2019 estimate of median earnings results in a value of **£29,500** to the nearest £100. It is this value that will be used as the occupation specific salary threshold for *Health and safety officers*.

Year	25th Percentile	Median	Ratio
2018	£29,091	£35,032	0.830
2017	£28,730	£34,783	0.826
2016	£28,032	£34,477	0.813
			0.823

Source: Table 14.7a ASHE 2018, 2017, 2016

Air traffic controllers (3511)

There was no estimate of the 25th percentile of annual full-time earnings published for *Air traffic controllers* in the 2019 ASHE tables. An estimate for the median (50th percentile) was published – £94,431.

Between 2011 and 2019 the ONS only published an estimate of the 25th percentile once, in 2014. This is insufficient for us to be able to use the ratio method illustrated above for *Health and safety officers*.

We therefore turn to the unpublished data that underlies the published ASHE tables. Using this data we extract estimates of the 25th earnings percentile for *Air traffic controllers* which the ONS redacted from their publications in the years 2019, 2018 and 2017. We also extract estimates of the 25th earnings percentile of the minor occupation group *Transport Associate Professionals* (351) of which *Air traffic controllers* are a part. Calculating the difference between these three pairs of numbers and averaging across them results in an estimated earnings premium of around 49% for *Air traffic controllers* over *Transport Associate Professionals* more generally.

Applying this premium to the published 25th percentile estimate for *Transport Associate Professionals* results in a value of **£86,500** to the nearest £100.