Households Below Average Income (HBAI) Stat-Xplore Database

The Households Below Average Income (HBAI) Stat-Xplore Database provides information on living standards in the UK based on household income measures for a financial year. Variables are available at an individual level, family level (benefit unit level) or at a household level.

This first release of the HBAI Stat-Xplore database is a development version so the HBAI team are actively seeking feedback from users - please email: team.hbai@dwp.gsi.gov.uk if you have any comments on how you have found using Stat-Xplore or if there are further tabulations you would like to produce.

What is Stat-Xplore?

Stat-Xplore is a free tabulation tool available at gov.uk.

Users can access DWP data via databases to create their own analysis.

Benefits of using the HBAI Stat-Xplore Database

- Free and accessible to all with user guidance and virtual tour.
- New analysis of HBAI data with a user-friendly interface and quick export of tables and graphs to Excel.
- Data is unrounded so users can produce more accurate analysis (final estimates must be rounded as described below).
- Open data API functionality allows users to dynamically create their own tables and data visualisations.

What are the constraints?

- Confidence intervals around estimates cannot be produced in Stat-Xplore.
- Analysis based on three-year averages is not currently possible so ethnicity and region variables are excluded. As a result, the map feature is not available.
- Some analysis requires careful selection of row and column categories – see Top Tips on p7.

HBAI Estimates Rounding Rules and Disclosure

Once the user has produced HBAI estimates using unrounded outputs:
- Percentages must be rounded to the nearest 1 per cent.
- Numbers must be rounded to the nearest 0.1 million.
- Weekly amounts must be rounded to the nearest £pound.
- Annual amounts must be rounded to the nearest £100.

These rounding conventions have been set to reflect that HBAI estimates are based on the Family Resources Survey (FRS) and not actual records of individuals in the UK. Some breakdowns are provided as bands or grouped to further protect against disclosure.

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### HBAI Stat-Xplore Database: Breakdowns available

Stat-Xplore allows **users to create their own analysis** across all HBAI years and all the following breakdowns:

<table>
<thead>
<tr>
<th>Time Characteristic:</th>
<th>Type of Individual:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Year</td>
<td>All Individuals</td>
</tr>
<tr>
<td>1994/95 to latest year</td>
<td>Children</td>
</tr>
<tr>
<td></td>
<td>Working-Age</td>
</tr>
<tr>
<td></td>
<td>Pensioners</td>
</tr>
</tbody>
</table>

### Measures of Household Income

Before/After Housing Costs (BHC and AHC) in latest and in-year prices:

- Mean
- Median
- Range

In latest prices: equivalised, SPI-adjusted in CPI-adjusted real terms
In-year prices: equivalised, SPI-adjusted in nominal terms

### Household Income Thresholds

(BHC and AHC) in latest prices:

**Relative Low Income:**
- Below/At or above 50% of Median Income
- Below/At or above 60% of Median Income
- Below/At or above 70% of Median Income

**Absolute Low Income:**
- Below/At or above 60% of 2010/11 Absolute Median Income

### Material Deprivation:

- Children in Combined Low Income and Material Deprivation
- Children in Combined Severe Low Income and Material Deprivation
- Pensioners aged 65 and over in Material Deprivation

**Characteristics:**

- Disability:
  - Within the Family
  - Mix Within the Family
  - Disabled Children in the Family
- Gender of Individual
- Age-band of Individual
- Economic Status:
  - Of Adults in the Family
  - Of the Child’s Family and Family Type
  - Of the Household
- Marital Status of Adults in the Family
- Family Type
- Number of Children in the Family
- Age of Youngest Child in the Family
- Savings and Investments in the Family
- Tenure Type of the Household

**Descriptions** of these breakdowns and any data issues can be found by clicking on the ‘i’ icon next to it in the database or via the front page list.

**Variations** of these breakdowns are also possible using the ‘Add Derivation’ feature (see p6).

Please add **Source: HBAI Stat-Xplore** to any analysis shared or published.
HBAI Stat-Xplore Database: How it works
https://stat-xplore.dwp.gov.uk/webapi/jsf/login.xhtml

1. Once you have entered the website, **please take the tour** to learn about how to use a Stat-Xplore database:

   ![Stat-Xplore tour](https://stat-xplore.dwp.gov.uk/webapi/jsf/login.xhtml)

   Click on the three dots on the top right-hand corner of the page and select to find the ‘Tour’ again if you have visited the website before.

   Further really useful guidance can be found by selecting the ? icon.

2. Select the Households Below Average Income Database and **please take time to read** the front page for important information on rounding final figures and known issues.

   ![Households Below Average Income](https://stat-xplore.dwp.gov.uk/webapi/jsf/login.xhtml)

   Please add **Source: HBAI Stat-Xplore** to any analysis shared or published.

3. Click on the database icon or a ready-made table.
1. Here is a ready-made table for “Household Income Threshold: 60% of median income BHC by Type of Individual for all years”.

The user can select which ‘Type of Individual’ to view in the table by selecting from the ‘wafer’ list.

2. When you export to Excel, tables for each ‘Type of Individual’ is outputted.

3. To convert from a number to a percentage, choose ‘Table Options’ → Percentages and select row or column.

Please note: important footnotes do not currently display on percentages tables (so please refer to them when viewing numbers tables – or see Important Footnotes on p8).

Please add **Source: HBAI Stat-Xplore** to any analysis shared or published.
1. When the user double-clicks on the database icon (rather than on a ready-made table), the following page is displayed.

2. The following table provides steps for producing some common HBAI data analysis:

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Filter</th>
<th>Wafer</th>
<th>Row</th>
<th>Column</th>
<th>Number to Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk for 60% of median income BHC by Type of Individual, All Years</td>
<td>Type of Individual</td>
<td>Financial Year (All)</td>
<td>60% of median income (BHC) in latest prices</td>
<td>Table Options → Percentages → Row</td>
<td></td>
</tr>
<tr>
<td>Composition of individuals below 60% of median income (BHC) in latest prices by age, 2016/17</td>
<td>60% of median income (BHC) in latest prices: Select: ‘Below Thresold’</td>
<td>Age-band of individual</td>
<td>Financial Year 2016/17</td>
<td>Table Options → Percentages → Column</td>
<td></td>
</tr>
<tr>
<td>Children in Combined Low Income and Material Deprivation, All Years</td>
<td>Type=1 (Child)</td>
<td>Financial Year (All)</td>
<td>Children in Combined Low Income and Child Material Deprivation</td>
<td>Table Options → Percentages → Row</td>
<td></td>
</tr>
<tr>
<td>Pensioners aged 65 and over in Material Deprivation</td>
<td>Type=3 (Pensioners)</td>
<td>Financial Year (All)</td>
<td>Pensioners in Material Deprivation: select: - Not in pensioner material deprivation - In material deprivation</td>
<td>Table Options → Percentages → Row</td>
<td></td>
</tr>
</tbody>
</table>

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HBAI Stat-Xplore Database: User-Defined Analysis

3. The ‘Add Derivation’ feature allows the user to create their own variation of a category.

In this example, the ‘Median BHC in latest prices’ measure is added as a row and ‘Add Derivation’ is selected by clicking on the three dots next to the label:

Create a name for the new derivation, such as ‘60% of median income BHC in latest prices’ and add the formula: 0.6*v1 – where v1 is the original median measure – and create.

Click on ‘Retrieve Data’ and the table provides median income and the 60% threshold of median income in 2016/17.

This table can be produced for all years and for other thresholds too.

Please add Source: HBAI Stat-Xplore to any analysis shared or published.
**HBAI Stat-Xplore Database: Top Tips**

**Stat-Xplore vs Published Tables**
- Check whether the breakdown you require is currently available in the Published Tables.
- Take care when trying to replicate published tables – see Filter tip below.
- Not all breakdowns are available – see Exclusions below.

**Composition Tables**
Characteristics of a group:
- Filter by the required Type of Individual or breakdown.
- Select ‘Column’ when converting to Percentages

**Risk Tables**
Individuals falling below or at/above a threshold:
- Include all categories in breakdown.
- Select ‘Row’ when converting to Percentages.

**Build a table**
in the following order:
1. Filter
2. Wafer
3. Column
4. Row

Select ‘Types of Individual’ as a ‘wafer’ to produce the same cross-tabulations for each type.

**Convert a Table into a Graph**
Once the table has been created, select the Graph View.

**Filter for specific Types of Individual**
While some breakdowns have a ‘Not Applicable – individual is not a child/pensioner aged 65 or over’ or similar category, filtering to the specific ‘Type of Individual’ will produce more useful tables for HBAI estimates - particularly when calculating percentages.

E.g.
Filter: Children
- Children in combined low income and material deprivation
- Children in combined severe low income and material deprivation

Filter: Pensioners
- Pensioners in material deprivation

**Removing Financial Year Total**
Click on the three dots next to the label and untick ‘Total’.
(This is a necessary feature of Stat-Xplore to allow conversion of numbers to percentages for both rows and columns but users should remove the total before exporting the tables and analysing results).

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Current Database Exclusions (Available in published HBAI tables)

The following breakdowns have not been included in the development version:
- Educational Attainment
- State Support Received
- Pensions Receipt
- Direct Payment Accounts
- Bills in Arrears
- Material Deprivation Questions
- Receipt of Disability Benefits
- Disability Time-Series: Illustrative measures of living standards, excluding Disability Living Allowance, Personal Independence Payment and Attendance Allowance from income.
- Ethnicity*
- Region*

*Three-year average estimates are not currently available in Stat-Xplore. As single-year HBAI estimates for the breakdowns are considered too volatile, they are excluded from the database.

As a region breakdown is not available, the map feature is also not accessible in the database.

Important Footnotes

The following important footnotes are displayed on tables, which users must comply with*:

*Footnotes are not currently able to be displayed on percentages tables.

User Feedback

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