Pensioners’ Incomes Series (PI) Stat-Xplore Database

The Pensioners' Incomes Series (PI) Stat-Xplore Database provides information regarding the amounts and sources of the incomes of pensioners in the United Kingdom. Variables are available at a family (benefit unit) level.

This first release of the PI Stat-Xplore Database is a development version so the PI team are actively seeking feedback from users – please email: pensioners-incomes@dwp.gov.uk if you have any comments on your experience of 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. PI data is also available via:

<table>
<thead>
<tr>
<th>Publication</th>
<th>UK Data Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Content</td>
<td>• Main report</td>
</tr>
<tr>
<td></td>
<td>• Excel Tables</td>
</tr>
</tbody>
</table>

Benefits of using the PI Stat-Xplore Database

- **Free and accessible to all**, with user guidance and virtual tour.
- **New analysis of PI 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 possible so **ethnicity and region variables are excluded**. As a result, the map feature is not available.
- Careful selection of **row and column categories** is needed – (see page 7).

PI Estimates Rounding Rules and Disclosure

Once the user has produced PI estimates using unrounded outputs:

- **Percentages** must be rounded to the **nearest 1 per cent**.
- **Population 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**.

This reflects that PI estimates are based on the Family Resources Survey (FRS) and are not actual records of individuals in the UK. Some breakdowns are provided as bands or grouped to further protect against disclosure.
Stat-Xplore allows users to create their own analysis across all PI years and the following breakdowns:

**Time Characteristic:**
Financial year 1994/95 to latest year

**Measures of income:**
Mean, median and range of:
- Gross income
  - Benefit income
    - State Pension income
    - Income-related benefits
    - income
    - Disability benefit income
  - Occupational pension income
  - Personal pension income
  - Investment income
  - Earnings income
  - Other income
- Net income before housing costs (BHC)
- Net income after housing costs (AHC)

**In receipt flags:**
Benefit income
- State Pension income
- Income-related benefits income
- Disability benefit income
- Occupational pension income
- Personal pension income
- Investment income
- Earnings income

**Characteristics:**
- Age of head of benefit unit
- Gender of head of benefit unit
- Recently retired
- Family type

Net income before housing costs (BHC)
Net income after housing costs (AHC)

**Quintile of the pensioner singles income distribution:**
- Before housing costs (BHC)
- After housing costs (AHC)

**Quintile of the pensioner couples income distribution:**
- Before housing costs (BHC)
- After housing costs (AHC)

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 page 6).

Please add **Source: Pensioners' Incomes Stat-Xplore** to any analysis shared or published.
1. Once you have logged in, please take the tour to learn about how to use the Stat-Xplore database. The tour can be accessed by clicking the three dots in the top right-hand corner of the page. Further useful guidance can be found by selecting the ? icon, also in the top right-hand corner.

2. Select the Pensioner Income database and take the time to read the front page for important information on rounding final figures and known issues.

3. Double-click on the database icon or a ready-made table.

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PI Stat-Xplore Database: Ready-made tables

This example demonstrates the ready-made table for the percentage of pensioner couples in each quintile of the AHC pensioner couples income distribution by age.

1. The user can select which age band to view in the table by selecting from the ‘Wafers’ list.

2. The user can export to Excel, which will produce tables for all age bands.

3. To convert from percentages to population numbers, choose ‘Table Options’ → ‘Percentages’ and click on ‘None’

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 Page 8 of this guide.

Please add Source: Pensioners’ Incomes Stat-Xplore to any analysis shared or published.
1. When the user double-clicks on the database icon (as shown on Page 3 of this guide), a page containing a variable list and an empty table is displayed:

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

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Filter</th>
<th>Wafer</th>
<th>Row</th>
<th>Column</th>
<th>Numbers to Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean income by income source by family type by financial year</td>
<td>N/A</td>
<td>N/A</td>
<td>Choose the ‘mean’ box under ‘measures’ for as many types of income as you’re interested in. Then add family types.</td>
<td>Financial year (tick the boxes for the years you’re interested in)</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of pensioner units with earnings income by recently-retired status</td>
<td>N/A</td>
<td>Recently retired</td>
<td>In receipt of earnings income</td>
<td>Financial year (tick the boxes for the years you’re interested in)</td>
<td>Table options ➔ Percentages ➔ Column</td>
</tr>
<tr>
<td>Percentage of pensioners in each quintile of the AHC pensioner singles income distribution by gender</td>
<td>Family type ➔ single pensioner</td>
<td>Gender of head of benefit unit</td>
<td>Quintile of the AHC pensioner singles income distribution (choose all except N/A)</td>
<td>Financial year (tick the boxes for the years you’re interested in)</td>
<td>Table options ➔ Percentages ➔ Column</td>
</tr>
<tr>
<td>The occupational pension income distribution for those in receipt</td>
<td>N/A</td>
<td>N/A</td>
<td>Under ‘occupational pension income’ click on ‘Range’ and create your desired range (e.g. from 0 to 500, increment 20). Select this range, choosing all boxes except ‘0 or less’.</td>
<td>Financial year (tick the boxes for the years you’re interested in)</td>
<td>Table options ➔ Percentages ➔ Column</td>
</tr>
</tbody>
</table>

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The user can use the ‘Add Derivation’ feature allows the user to create their own variation of a category. Here we add a simple derivation to compare half the median income (AHC) of pensioner couples to the median income for pensioner singles.

1. The median income (AHC) of pensioner couples and pensioner singles is added as a row. Note that it is necessary to choose the measure(s) first, click on ‘Row’, and then do the same for the family types. Next, ‘Add Derivation’ is selected by clicking on the three dots next to the label for Family type:

2. Create a name for the derivation and add the formula (in this case, $V1 \times 0.5$). Click on ‘Advanced’ and choose where you want the new row to display. Then press the ‘Create’ button.

3. Click on ‘Retrieve Data’ and the numbers, including your new derivation, will appear.

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PI Stat-Xplore Database: Top Tips

Stat-Xplore vs Published Tables

- Check whether the breakdown you require is currently available in the published tables and use the published tables where possible.
- Not all breakdowns are available – see ‘Exclusions’ on the next page.

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

Select ‘Family Type’ or another classification variable 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 at the top of the page. You may need to change the ‘Graph by’ to ‘Column’

Removing Total

For some tables, the ‘Total’ column does not add useful information. In these cases, click on the three dots next to the variable label and untick ‘Total’.

Unless you are averaging across multiple years, this should be done for ‘Financial year’ for all tables. There may also be other tables you create where the ‘Total’ column or row is not relevant.

Please add Source: Pensioners’ Incomes Stat-Xplore to any analysis shared or published.
PI Stat-Xplore Database: Exclusions, important footnotes and user feedback

Current Database Exclusions (available in published PI tables)
The following breakdowns are not included in this version, due to either small sample sizes or complexities involved with displaying them in Stat-Xplore:

- Survey sample sizes
- The percentage of pensioner units with more than 50% of gross income from private sources
- Income from annual payments such as Winter Fuel Payments and free TV licences
- The position of pensioners in the overall UK income distribution (including non-pensioners)
- Both members over State Pension age (SPa) vs one over SPa and one under SPa
- Average incomes of single retired benefit units under SPa
- Average incomes of pensioner units where at least one member is aged over 65
- Married vs cohabiting couples
- Ethnicity*
- Region*

*Three-year average estimates are not available in Stat-Xplore. As single-year PI estimates for the breakdowns are considered to volatile, they are excluded from the database. As regional breakdowns are not available, the map feature is not accessible.

Important footnotes

These important footnotes are displayed on tables, which users must comply with (while displaying footnotes on percentages tables is not possible, they still apply):

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Figures are for Great Britain up to 2001/02, and for the United Kingdom from 2002/03. The reference period is single financial years.</td>
</tr>
<tr>
<td>II</td>
<td>Figures derived are unrounded. Before use of these figures, users must use the following rounding conventions: a) Percentages must be rounded to the nearest 1 per cent. b) Numbers must be rounded to the nearest 0.1 million. c) Amounts must be rounded to the nearest £100 (weekly) and nearest £1000 (annual). These rounding conventions have been set to reflect that PI estimates are based on survey data and not actual records of individuals in the UK.</td>
</tr>
<tr>
<td>III</td>
<td>When comparing year-on-year changes, users are advised to refer to the suite of tables providing confidence intervals around the key PI estimates in the Estimating and reporting uncertainty section of the PI Background Information &amp; Methodology. These confidence intervals present how estimates might have varied if a different FRS sample had been created and to help the user to understand where some differences seen in the estimates do represent a true change (and not a result of variation from sampling different people in the UK over time).</td>
</tr>
<tr>
<td>IV</td>
<td>The tables use grossing factors based on 2011 Census data, so caution should be exercised when making comparisons with published reports and tables prior to 2012/13.</td>
</tr>
<tr>
<td>V</td>
<td>&quot;...&quot; indicates data not being available in that year.</td>
</tr>
<tr>
<td>cpi</td>
<td>All tables created here apply CPI-adjusted inflation and so will not be consistent with published reports and tables prior to 2014/15.</td>
</tr>
<tr>
<td>i</td>
<td>Click to view information about the category and any data issues.</td>
</tr>
</tbody>
</table>

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Worked example: Average incomes of pensioners by income source, family type and age

1. Start with an empty table (click on ‘Clear Table’ if necessary). Tick the boxes for ‘Pensioner couple’ and ‘Single pensioner’ and then click on ‘Add to: Wafer’.

2. Select the financial years you are interested in. For this example, we choose all years, so click on the arrow next to Financial year, then on ‘Financial year’ in the dropdown menu, then ‘Add to: Column’.

Please add Source: Pensioners’ Incomes Stat-Xplore to any analysis shared or published.
3. Choose the measures you are interested in. Here, we select the means of each different source of income, as well as the medians of net income BHC and AHC. This is to replicate Table 2.1 of the Pensioners’ Incomes series publication tables. Then click on ‘Add to: Row’.

4. Finally, click on ‘Retrieve data’ and the table will be shown. You can also view information about the Measures or classification variables such as family type by clicking on the ‘i’ buttons.

Please add Source: Pensioners’ Incomes Stat-Xplore to any analysis shared or published.
5. You can switch between pensioner couples, singles and all pensioners using the ‘Wafers’ dropdown menu.

6. You can add additional breakdowns to the table, for example by selecting ‘Under 75’ and ‘Over 75’ and clicking on ‘Add to: Row’. This produces the data in Table 2.6 of the Pensioners’ Incomes series publication tables.

Please add Source: Pensioners’ Incomes Stat-Xplore to any analysis shared or published.
7. To download the data into Excel, click on ‘Go’ in the top-right corner of the page:

8. Producing a graph: For clarity of presentation, the measures except for ‘Median net income after housing costs’ have been removed by selecting all other measures and clicking on ‘Remove’. Click on ‘Graph view’ at the top of the page and change the ‘Graph by:’ from ‘Row’ to ‘Column’.

9. You can export the graph in the same way as for the table – by clicking the ‘Go’ button in the top-right corner of the page.

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