



Pensioners' Incomes Series: Stat-Xplore Database

Updated 25 March 2021

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.

Please add "Source: Pensioners' Incomes Stat-Xplore" to any analysis shared or published.

1. 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:

	GOV.UK Publication	UK Data Service
Access	Unlimited	Members only
Content	Main report Tables Background and Methodology report	Rounded variables Ages of over 80s set to 80 (unless using safe room)

Read more about [PI annual reports and accompanying tables](#), [research and technical papers](#). Versions of the data set are available from the [UK Data Service](#).

2. Benefits of using the PI Stat-Xplore Database

	<p>The benefits of using the PI Stat-Xplore Database are:</p> <ul style="list-style-type: none"> • that it's free and accessible to all, with user guidance and virtual tour • the new analysis of PI data, with a user-friendly interface and quick export of tables and graphs to Excel • that the data is unrounded, so users can produce more accurate analysis (final estimates must be rounded as described below) • the open data API functionality that allows users to dynamically create their own tables and data visualisations
	<p>3. What are the constraints?</p> <p>The constraints of using the PI Stat-Xplore Database are:</p> <ul style="list-style-type: none"> • that confidence intervals around estimates cannot be produced in Stat-Xplore • that the map feature is not available, as three-year averages cannot be calculated within Stat-Xplore. These must instead be done by the user for ethnicity, country and region variables • that careful selection of row and column categories is needed, for more information see section 10
	<p>4. PI estimates rounding rules and disclosure</p> <p>Once the user has produced PI estimates using unrounded outputs, the:</p> <ul style="list-style-type: none"> • percentages must be rounded to the nearest one per cent • population numbers must be rounded to the nearest 100,000 • weekly amounts must be rounded to the nearest £1 • annual amounts must be rounded to the nearest £100 <p>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.</p>
	<p>5. PI Stat-Xplore Database: breakdowns available</p> <p>Stat-Xplore allows users to create their own analysis across all PI years and the following breakdowns:</p> <p>Time Characteristic:</p>

The time characteristics are broken down into financial year ending 1995 to the latest year.

Measures of income:

The mean, median and range are provided for:

Gross income

- benefit income, which can be broken into State Pension income, income-related benefits income and 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)

Characteristics:

The characteristics are broken down into age of head of benefit unit, gender of head of benefit unit, recently reached State Pension age and family type.

In receipt flags:

The receipt flags are broken down into:

Benefit income

- state pension income
- income-related benefits income
- disability benefit income

Occupational pension income

Personal pension income

Investment income

Earnings income

Quintile of the pensioner singles income distribution:

The quintile of the pensioner singles income distribution is broken down into before housing costs (BHC) and after housing costs (AHC).

Quintile of the pensioner couples income distribution:

The quintile of the pensioner couples income distribution is broken down into before housing costs (BHC) and after housing costs (AHC).

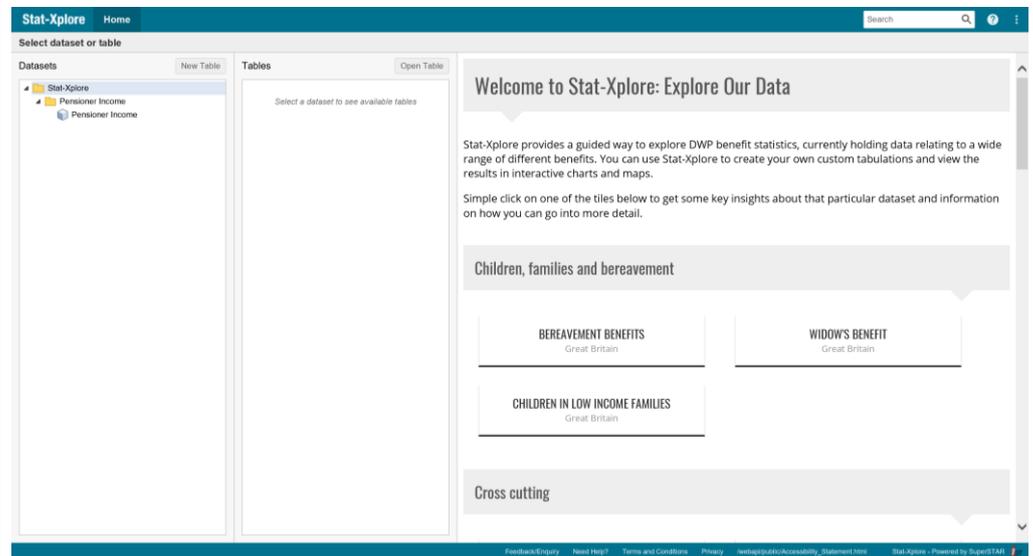
Descriptions of these breakdowns and any data issues can be found by selecting the 'i' icon next to it in the database or via the front page list.

Variations of these breakdowns are also possible using the 'Add derivation' feature. More information on this is in section 9.

6. PI Stat-Xplore Database: how it works

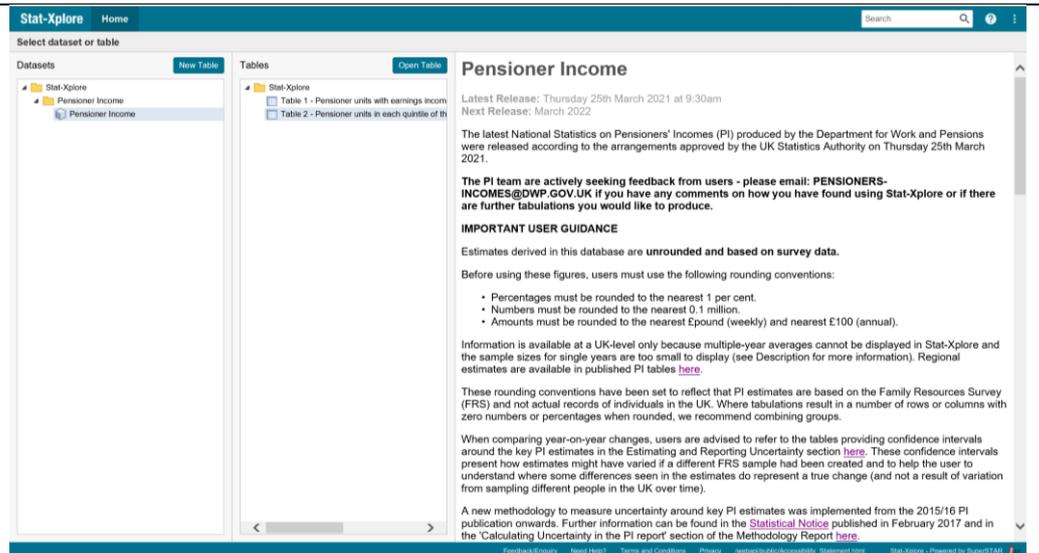
1. Once you have [logged in](#), please take the tour to learn about how to use the Stat-Xplore database. The tour can be accessed by selecting the three dots in the top right-hand corner of the page. Further useful guidance can be found by selecting the '?' icon, also in the top right-hand corner:

A screenshot of the Stat-Xplore homepage



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.

A screenshot of the Pensioner Income database front page on Stat-Xplore



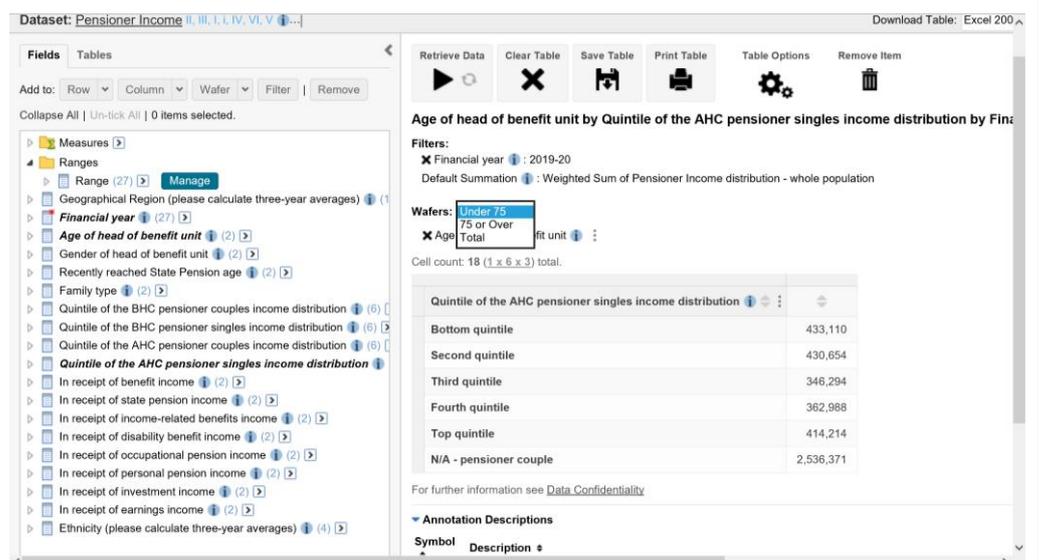
3. Double-select the database icon or a ready-made table.

7. 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.

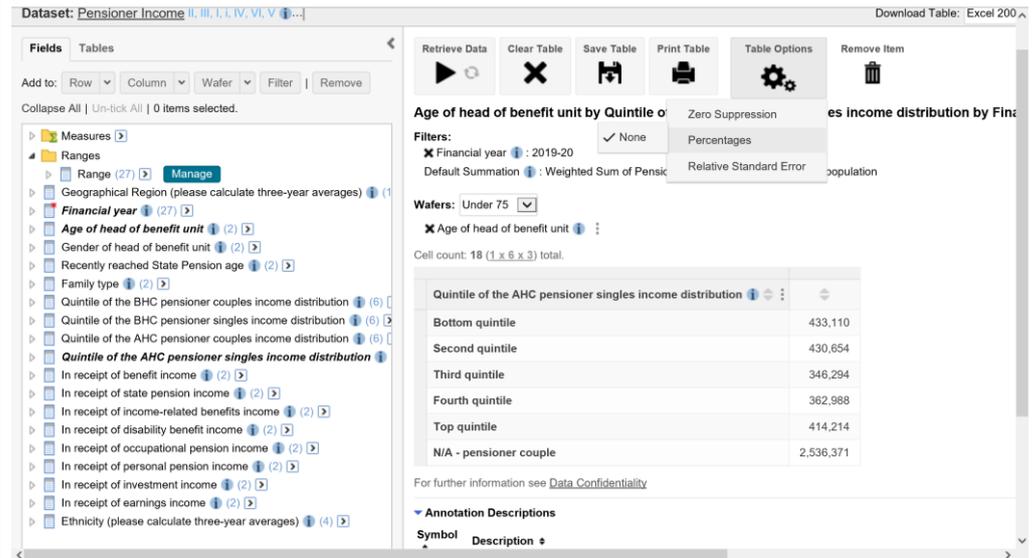
1. The user can select which age band to view in the table by selecting from the 'Wafers' list.

A screenshot of how to select the age band for a PI table on Stat-Xplore



- The user can export to Excel, which will produce tables for all age bands.
- To convert from percentages to population numbers, choose 'Table Options' then 'Percentages' and select 'None'

A screenshot to show how to convert percentages to population numbers on Stat-Xplore

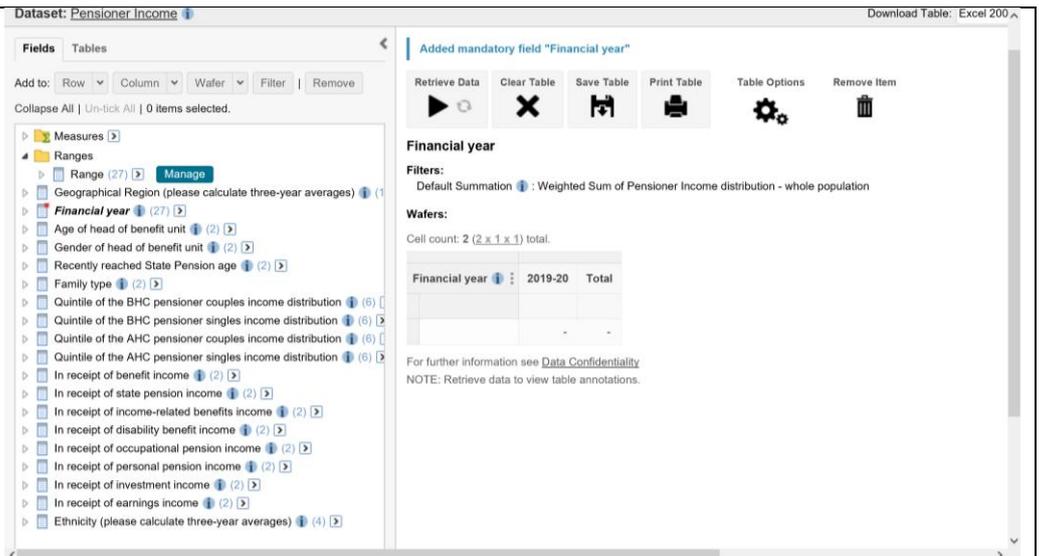


Please note: important footnotes do not currently display on percentages tables, so please refer to them when viewing numbers tables, or see important Footnotes in section 11 of this guide.

8. PI Stat-Xplore Database: user-defined analysis

- When the user double-selects the database icon (as shown in section 6 of this guide), a page containing a variable list and an empty table is displayed:

A screenshot showing how to access the variable list on Stat-Xplore



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

Analysis	Filter	Wafer	Row	Column	Numbers to Percentages
Mean income by income source by family type by financial year	Not applicable	Not applicable	Choose the 'mean' box under 'measures' for as many types of income as you're interested in. Then add family types.	Financial year (tick the boxes for the years you're interested in)	Not applicable
Percentage of pensioner units with earnings income by recently-retired status	Not applicable	Recently retired	In receipt of earnings income	Financial year (tick the boxes for the years you're interested in)	Select Table options then Percentages then Column
Percentage of pensioners in each quintile of the AHC pensioner singles income	Select Family type then single pensioner	Gender of head of benefit unit	Quintile of the AHC pensioner singles income distribution (choose all	Financial year (tick the boxes for the years you're interested in)	Select Table options then Percentages then Column

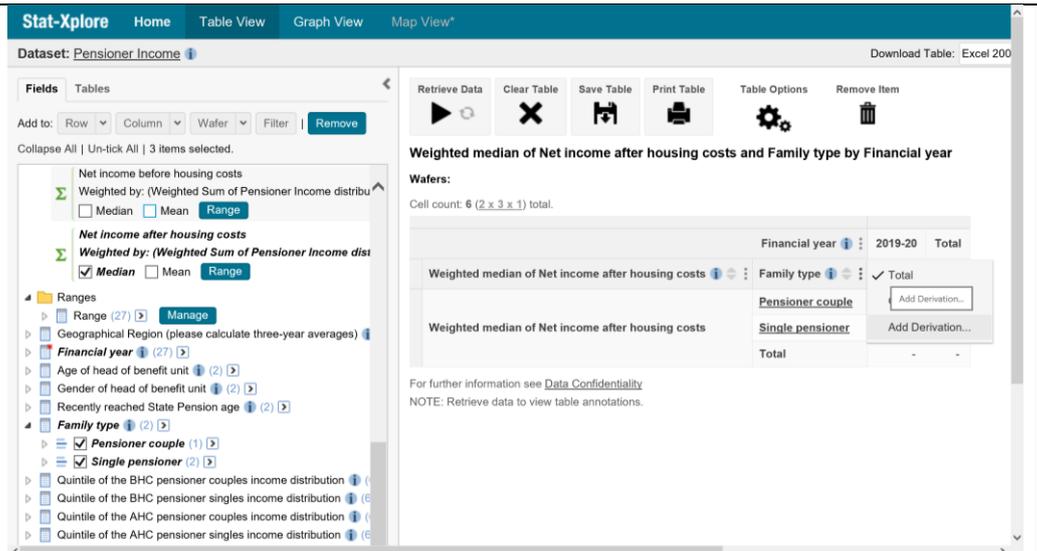
	distribution by gender			except not applicable)			
	The occupational pension income distribution for those in receipt	Not applicable	Not applicable	Under 'occupational pension income' select 'Range' and create your desired range (for example from 0 to 500, increment 20). Select this range, choosing all boxes except '0 or less'.	Financial year (tick the boxes for the years you're interested in)	Select Table options then Percentages then Column	

9. PI Stat-Xplore Database: user-defined analysis (cont.)

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.

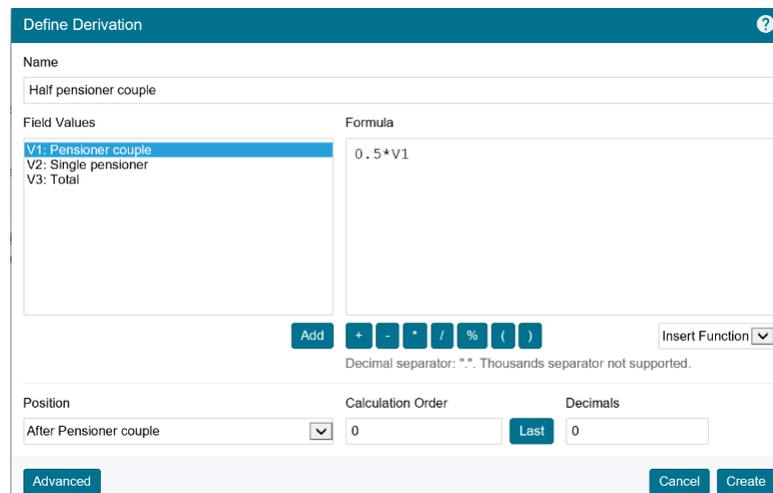
1. The median income (AHC) of pensioner couples and pensioner singles is added as a row. Note that it is necessary to choose the measure(s) first, select 'Row', and then do the same for the family types. Next, 'Add Derivation' can be used by selecting the three dots next to the label for Family type:

A screenshot showing how to add a derivation to Stat-Xplore



2. Create a name for the derivation and add the formula (in this case, $V1*0.5$). Select 'Advanced' and choose where you want the new row to display. Then press the 'Create' button.

A screenshot showing how to modify the details of the derivation on Stat-Xplore



3. Select 'Retrieve Data' and the numbers, including your new derivation, will appear.

A screenshot showing how to retrieve the data for your derivation on Stat-Xplore

Retrieve Data Clear Table Save Table Print Table Table Options Remove Item

Weighted median of Net income after housing costs and Family type by Financial year

Wafers:

Cell count: 8 (2 x 4 x 1) total.

		Financial year ⓘ	2019-20	Total
Weighted median of Net income after housing costs	Family type ⓘ			
	Pensioner couple		482	482
	Half pensioner couple		241	241
	Single pensioner		231	231
Total			331	331

10. PI Stat-Xplore Database: top tips

Stat-Xplore vs Published Tables

When deciding whether to use Stat-Xplore or Published Tables, you need to:

- check whether the breakdown you require is currently available in the published tables and use the published tables where possible.
- know that not all breakdowns are available, more information on this is in 'Exclusions' in the next section.

Build a table in the following order:

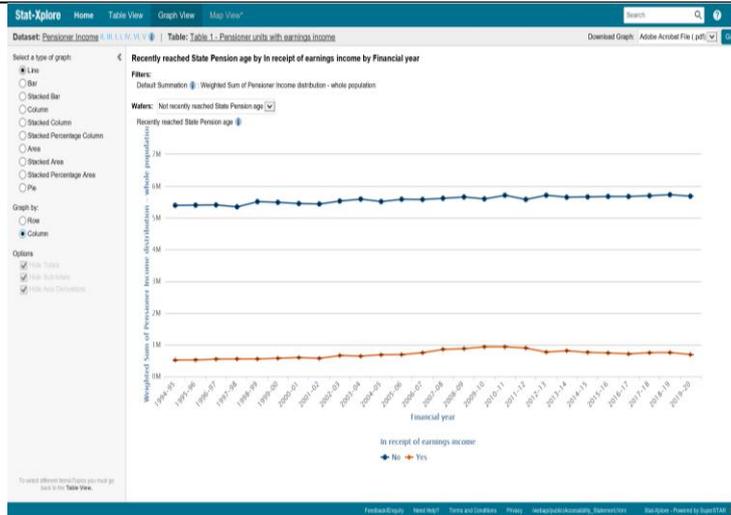
1. Filter
2. Wafer
3. Column
4. Row

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'

A screenshot of how to convert a table into a graph in Stat-Xplore



Removing total

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

A screenshot showing how to remove the total column in Stat-Xplore

Quintile of the AHC pensioner couples income distribution	Codes	Total
Bottom quintile		452,972
Second quintile		493,201
Third quintile		556,599
Fourth quintile		573,158
Top quintile		1,987,260
N/A - single pensioner		4,523,631
Total		4,523,631

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.

11. 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. They are:

- 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

Three-year average estimates are not available in Stat-Xplore. As single-year PI estimates for the breakdowns are considered too volatile, estimates based on country, region or ethnicity must be calculated using three year averages. Output at least three financial years and calculate a three-year average as follows: (yr1 estimate + yr2 estimate + yr3 estimate)/3.

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):

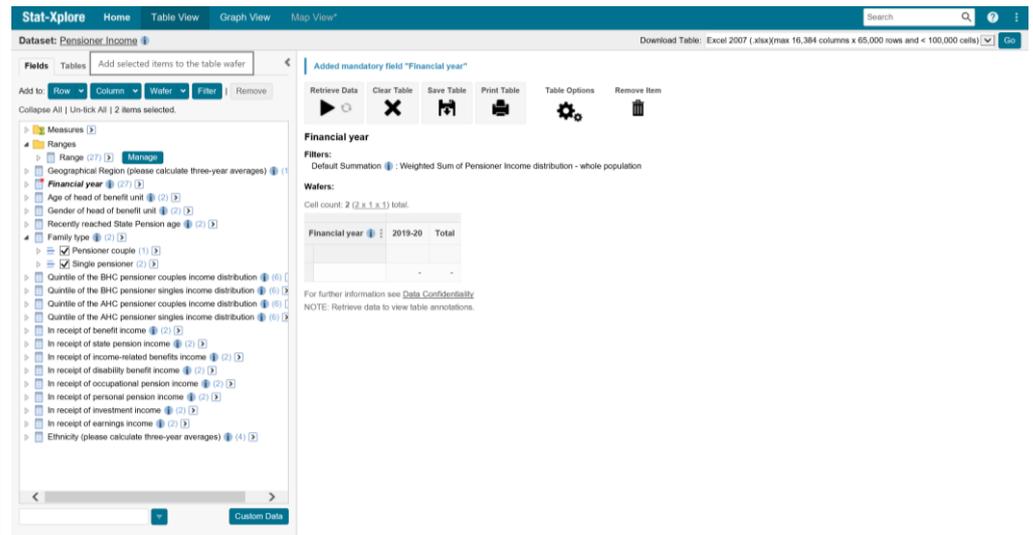
A screenshot of the PI Stat-Xplore footnotes

Annotation Descriptions	
Symbol	Description
I	Figures are for Great Britain up to 2001/02, and for the United Kingdom from 2002/03. The reference period is single financial years.
II	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 £pound (weekly) and nearest £100 (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.
III	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 & 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).
IV	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.
V	".." indicates data not being available in that year.
VI	Estimates based on country, region or ethnicity must be calculated using three year averages. Output at least three financial years and calculate a three-year average as follows: (yr1 estimate + yr2 estimate + yr3 estimate)/3.
i	Click to view information about the category and any data issues.

12. Worked example: average incomes of pensioners by income source, family type and age

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

A screenshot of a worked example of how to add wafers on Stat-Xplore



The screenshot shows the Stat-Xplore interface for the 'Pensioner Income' dataset. The 'Family type' filter is expanded, showing 'Pensioner couple' and 'Single pensioner' selected. The 'Financial year' filter is also expanded, showing '2019-20' selected. The 'Wafers' section shows a table with 2 columns and 1 row, representing the selected filters.

Financial year	Total
2019-20	-

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

A screenshot of a worked example of how to select the financial years of interest for your table on Stat-Xplore

4. Finally, select 'Retrieve data' and the table will be shown. You can also view information about the measures or classification variables such as family type by selecting the 'i' buttons.

A screenshot of a worked example of how to retrieve the data for your Stat-Xplore table and also how to view additional information about the measures or classification variables

Retrieve Data | Clear Table | Save Table | Print Table | Table Options | Remove Item

Family type by Measures by Financial year

Wafers: Pensioner couple

Family type

Cell count: 891 (27 x 11 x 3) total.

Financial year	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Measures									
Weighted mean of Gross Income	461	452	490	505	525	531	568	594	579
Weighted mean of Benefit Income	180	181	186	188	189	199	203	215	222
Weighted mean of Occupational	128	130	136	142	148	145	160	163	154

5. You can switch between pensioner couples, singles and all pensioners using the 'Wafers' dropdown menu.

A screenshot of a worked example of how to switch between wafers in Stat-Xplore

Retrieve Data | Clear Table | Save Table | Print Table | Table Options | Remove Item

Family type by Measures by Financial year

Wafers: Pensioner couple, Single pensioner, Total

Cell count: 891 (27 x 11 x 3) total.

Financial year	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Measures									
Weighted mean of Gross Income	461	452	490	505	525	531	568	594	579
Weighted mean of Benefit Income	180	181	186	188	189	199	203	215	222
Weighted mean	128	130	136	142	148	145	160	163	154

6. You can add additional breakdowns to the table, for example by selecting 'Under 75' and 'Over 75' and selecting 'Add to: Row'. This produces the data in Table 2.6 of the Pensioners' Incomes series [publication tables](#).

A screenshot of a worked example of how to add additional breakdowns to your table in Stat-Xplore

Dataset: Pensioner Income

Download Table: Excel 2007 (.xlsx)(max 16,384 columns x 65,000 rows and < 100,000 cells)

Family type by Measures and Age of head of benefit unit by Financial year

Wafers: Single pensioner

Cell count: 2673 (27 x 33 x 3) total.

Measures	Age of head of benefit unit	Financial year	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Weighted mean of Gross Income	Under 75		236	237	249	256	271	282	293	294	309	318	325	343	348	361
	75 or Over		203	205	212	218	229	240	258	261	267	273	298	296	302	300
	Total		219	221	229	236	249	260	274	276	285	293	310	317	323	327
Weighted mean of Benefit Income	Under 75		135	141	142	146	148	157	161	173	176	179	182	189	188	190
	75 or Over		140	144	148	151	157	164	166	174	183	187	199	202	200	199
	Total		138	142	145	149	153	160	164	174	180	183	192	197	194	195
Weighted mean of Occupational pension income	Under 75		56	52	62	61	63	69	67	69	74	73	75	77	75	75
	75 or Over		34	38	40	45	47	50	50	55	55	58	63	62	63	67
	Total		45	45	50	52	55	59	61	61	63	65	68	68	68	70
Weighted mean of Personal pension income	Under 75		2	2	2	3	3	3	6	3	6	8	7	8	7	9
	75 or Over		1	0	1	1	1	1	3	2	3	2	5	5	7	5
	Total		1	1	1	2	2	2	4	3	4	5	6	6	7	6
Weighted mean of Investment Income	Under 75		25	23	24	23	31	28	28	22	21	24	22	27	33	37
	75 or Over		23	20	20	19	21	23	20	24	18	19	22	19	23	24
	Total		24	21	22	21	26	25	27	23	19	21	22	23	27	30

7. To download the data into Excel, select 'Go' in the top-right corner of the page:

A screenshot of a worked example of how to download the data into Excel in Stat-Xplore

Download Table: Excel 2007 (.xlsx)(max 16,384 columns x 65,000 rows and < 100,000 cells) **Go**

Family type by Measures and Age of head of benefit unit by Financial year

Wafers: Single pensioner

Cell count: 2673 (27 x 33 x 3) total.

Measures	Age of head of benefit unit	Financial year	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Weighted mean of Gross Income	Under 75		236	237	249	256	271	282	293	294	309	318	325	343	348	361
	75 or Over		203	205	212	218	229	240	258	261	267	273	298	296	302	300
	Total		219	221	229	236	249	260	274	276	285	293	310	317	323	327
Weighted mean of Benefit Income	Under 75		135	141	142	146	148	157	161	173	176	179	182	189	188	190
	75 or Over		140	144	148	151	157	164	166	174	183	187	199	202	200	199
	Total		138	142	145	149	153	160	164	174	180	183	192	197	194	195
Weighted mean of Occupational pension income	Under 75		56	52	62	61	63	69	67	69	74	73	75	77	75	75
	75 or Over		34	38	40	45	47	50	50	55	55	58	63	62	63	67
	Total		45	45	50	52	55	59	61	61	63	65	68	68	68	70
Weighted mean of Personal pension income	Under 75		2	2	2	3	3	3	6	3	6	8	7	8	7	9
	75 or Over		1	0	1	1	1	1	3	2	3	2	5	5	7	5
	Total		1	1	1	2	2	2	4	3	4	5	6	6	7	6
Weighted mean of Investment Income	Under 75		25	23	24	23	31	28	28	22	21	24	22	27	33	37
	75 or Over		23	20	20	19	21	23	20	24	18	19	22	19	23	24
	Total		24	21	22	21	26	25	27	23	19	21	22	23	27	30

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 selecting 'Remove'. Select 'Graph view' at the top of the page and change the 'Graph by:' from 'Row' to 'Column'.

A screenshot of a worked example of how to remove measures from the Stat-Xplore data output

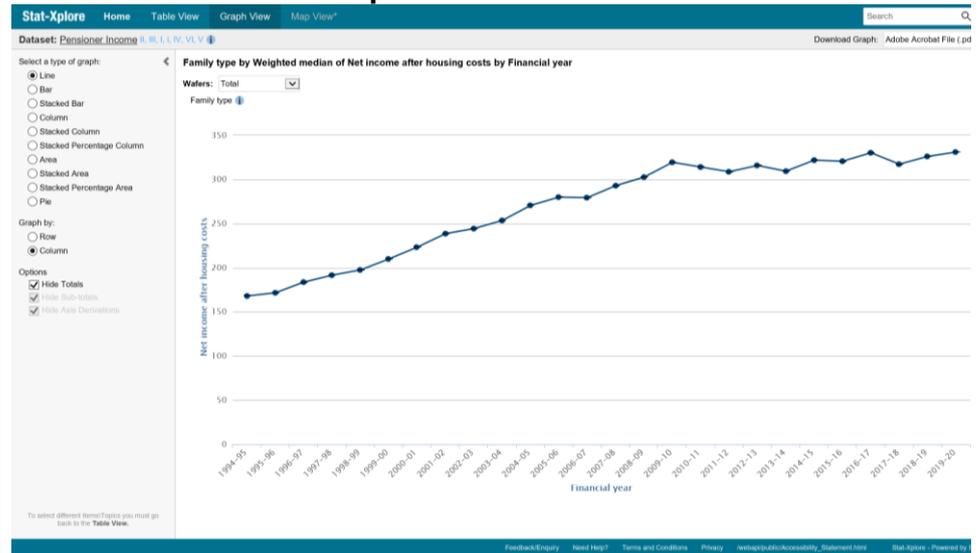
Add to: Row Column Wafer Filter **Remove**

Collapse All | Un-tick All | 9 items selected.

Measures

- Weighted Sum of Pensioner Income distribution - whole po
 - Sum
 - Median Mean **Range**
- Gross income
- Weighted by: (Weighted Sum of Pensioner Income distribu
 - Median Mean **Range**
- Benefit income
- Weighted by: (Weighted Sum of Pensioner Income distribu
 - Median Mean **Range**

A screenshot of a worked example of how to Graph by column instead of row in Stat-Xplore



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

13. Feedback

The PI team are actively seeking feedback from users.

Please email: pensioners-incomes@dwp.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.