

# Wealth and Assets Survey (WAS) Wave 5: Validation of figures against external sources

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# 1 . Income

Income data from Wave 5 has been compared with external sources such as the Department for Work and Pensions (DWP) Households Below Average Income (HBAI) and Family Resources Survey (FRS), The ONS's Annual Survey of Hours and Earnings (ASHE) and HM Revenue and Customs' (HMRC) income statistics. These covered financial year ending (FYE) 2014 and FYE 2016

The following table displays figures from the Households Below Average Income (HBAI), covering FYE 2016, and the equivalent (or closest matching) Wealth and Assets Survey (WAS) variables for Wave 5.

**Table 1: WAS, Households Below Average Income - income, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>DWP Variable</b>	<b>WAS value</b>	<b>FRS Value</b>
Percentage of total gross regular household income from employee earnings	Percentage of income from employment as employee	0.65	0.71
Percentage of total gross regular household income from private pensions	Percentage of income from non-state pensions	0.09	0.08

Source: Wealth and Assets Survey, Office for National Statistics

The following table displays figures from the FRS, covering the financial year ending (FYE) 2016, and the equivalent (or closest matching) WAS variables for Wave 5.

**Table 2: WAS, Family Resources Survey - income, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>DWP Variable</b>	<b>WAS value</b>	<b>FRS Value</b>
Percentage of total gross regular household income from employee earnings	Percentage of income from employment as employee	0.65	0.71
Percentage of total gross regular household income from private pensions	Percentage of income from non-state pensions	0.09	0.08
Percentage of total gross regular household income from employee earnings in London	Percentage of income from employment in London	0.65	0.79
Percentage of total gross regular household income from employee earnings in the South East	Percentage of income from employment in the South East	0.62	0.75
Percentage of total gross regular household income from employee earnings in the North East	Percentage of income from employment in the North East	0.71	0.64
Percentage of total gross regular household income from employee earnings in Scotland	Percentage of income from employment in Scotland	0.7	0.71
Percentage of total gross regular household income from private pensions in the South West	Percentage of income from non-state pensions in South West	0.11	0.11

Source: Wealth and Assets Survey, Office for National Statistics

Gross and net employment and pensions income have been divided by the sum of all the income variables which are measured on a personal basis. Income is typically measured on a household basis, where the household measure includes equity release, but this is not included in the personal figure. Equity release makes up a very small proportion of household income.

Gross measures of personal income have been used where available, otherwise net measures have been used. However, the main contributors to total income (employment, self-employment, pensions and investment) are all on a gross basis. The value of elements where net figures have been used are comparatively small.

A possible contributing factor to differences between the median net equivalised household income figures in HBAI and WAS could be that "net" income in HBAI deducts council tax/domestic rate payments, student loan repayments and parental contributions to students living away from home. None of these factors are deducted from income to derive the "net" figure in the WAS. We would therefore expect the HBAI figure to be lower than the WAS figure.

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**Table 3: WAS, HM Revenue and Customs - income, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>HMRC Variable</b>	<b>WAS value</b>	<b>HMRC Value<sup>1</sup></b>
Total gross household income	Total income	£1,132.0 bn	£977.0 bn
Gross self-employment income	Self employment income	£73.7bn	£78.2 bn
Total employment income	Employment income	£721.2 bn	£672.0 bn
Total private pension income	Pension income	£99.3bn	£140.3 bn
Property, interest, dividend and other income	Property, interest, dividend and other income	£75.4bn	£86.9 bn
Gross total household income in London	Income in London	£198.5 bn	£177bn
Median gross household income	Median before tax income	32800	22400
Number of individuals with self-employment income greater than 0	Number of individuals with at least once source of self-employment income	3.6mil	5.6mil
Total gross household income of South East	Income of South East	£190.0 bn	£164.0 bn

Source: Wealth and Assets Survey, Office for National Statistics

Notes:

1. HMRC figures measure gross income that is liable to income tax. This may therefore exclude income from those with low paid jobs who are not liable to income tax.

The Annual Survey of Hours and Earnings (ASHE) 2016 release gives a point estimate of a variety of variables for April 2016. It also covers all of the UK, whereas WAS Wave 5 covers Great Britain for the period July 2014 to June 2016. A comparison of the two sources is displayed in the following table:

**Table 4: WAS, Annual Survey of Hours and Earnings - income, Great Britain, July July 2014 to June 2016**

<b>WAS variable</b>	<b>ASHE Variable</b>	<b>WAS value</b>	<b>ASHE Value</b>
Median gross annual earnings of full time employees, divided by 52	Median gross weekly earnings of full time employees	£483 pw	£528 pw
Median gross annual earnings of full time employees	Median gross annual earnings of full time employees	25200	27600
Median gross annual earnings of male full time employees, divided by 52	Median gross annual earnings of male full time employees	£531 pw	£567 pw
Median gross annual earnings of female full time employees, divided by 52	Median gross annual earnings of female full time employees	£423 pw	£471 pw
Median gross annual earnings of full time employees in London, divided by 52	Median London earnings for full time employees	£574 pw	£660 pw
Median gross annual earnings of full time employees in South East, divided by 52	Median South East earnings for full time employees	£555 pw	£552 pw

Source: Wealth and Assets Survey, Office for National Statistics

With the exception of the median earnings of full-time employees in the South East, Wave 5 of the WAS displays lower values than ASHE than all variables compared here. However, because ASHE data is based on a snapshot of earnings taken in April of the reference year, it does not include some seasonal work which may only be available in winter or summer, and may be fairly low paid. We may therefore expect that median earnings reported in ASHE would be higher than those in WAS.

#### **Notes: Income**

1. HMRC figures measure gross income that is liable to income tax. This may therefore exclude income from those with low paid jobs who are not liable to income tax.

## **2 . Property**

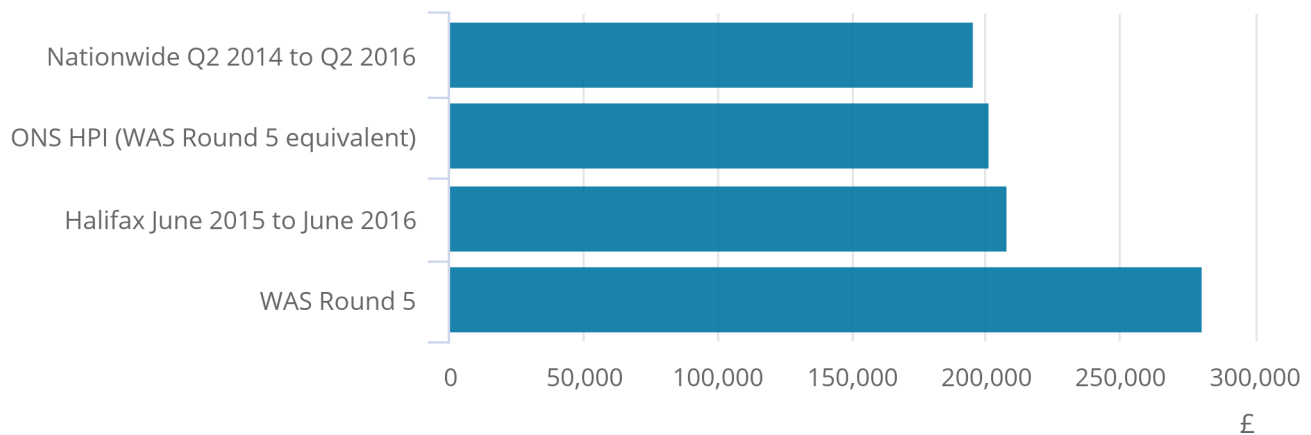
Property data from Wave 5 has been compared with several external sources. These include the housing indices from the ONS, Halifax and Nationwide, as well as other data from the English Housing Survey (EHS) and Family Resources Survey (FRS).

## Figure 1: Average house prices

Great Britain July 2014 to June 2016

### Figure 1: Average house prices

Great Britain July 2014 to June 2016



Source: Wealth and Assets Survey, Office for National Statistics

While figures from Nationwide and the Halifax are from time periods slightly different to Wave 5 of the Wealth and Assets Survey (WAS), they along with the ONS's house price index display similar values, ranging from £195,391 to £208,135 for the average price of a house in the UK. However, WAS shows this figure as being £280,405. This is far higher than the other three estimates, although it should be remembered that WAS figures are based on self-valuation, and therefore subject to the respondent's perception of the value of their property, which may be higher than the true figure. However, this is still a useful indicator as a household's perception of their property value may influence their financial behaviour.

The EHS covers England and Wales in its estimates, therefore the WAS figures listed here for comparison purposes omit Scotland. The following table shows figures which cover this area from both sources.

**Table 5: WAS, English Housing Survey - property, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>EHS variable</b>	<b>WAS</b>	<b>EHS</b>
Percentage who own home outright	Percentage of households who own home outright	0.27	0.34
Percentage of households who own home with mortgage	Percentage of households who own home with mortgage	0.4	0.29
Percentage of households privately renting	Percentage of households privately renting	0.14	0.2
Percentage of households socially renting	Percentage of households social renting	0.19	0.17
Percentage of individuals aged 65 or older who own their homes outright	Percentage of homes owned outright with HRP over the age of 65	0.7	0.61
Percentage of homes owned with a mortgage with HRP aged 35 to 54	Percentage of homes owned with a mortgage with HRP aged 35 - 54	0.54	0.62

Source: Wealth and Assets Survey, Office for National Statistics

Further figures on this subject are provided in the Family Resources Survey from the financial year (FYE) ending 2016. The following table displays figures from the FRS and WAS.

**Table 6: WAS, Family Resources Survey - property, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>FRS variable</b>	<b>WAS</b>	<b>FRS</b>
Percentage of homes owned outright	Percentage of homes owned outright	0.27	0.34
Percentage of homes bought with a mortgage	Percentage of homes bought with a mortgage	0.4	0.29
Percentage of 16 to 24 year olds buying with a mortgage	Percentage of 16 to 24 year olds buying with a mortgage	0.07	0.09
Percentage of over 65s owning property outright	Percentage of over 65s owning property outright	0.7	0.73
Percentage of 16 to 24 year olds privately renting	Percentage of 16 to 24 year olds privately renting	0.6	0.71
Percentage of homes owned with a mortgage with HRP aged 35 - 54	Percentage of homes owned with a mortgage with HRP aged 35 to 54	0.54	0.62

Source: Wealth and Assets Survey, Office for National Statistics

### 3 . Financial

SA data has been compared with statistical releases from HMRC which cover the financial year ending 2015. This can be observed in the following table.

**Table 7: WAS, HM Revenue and Customs - financial, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>HMRC Variable</b>	<b>WAS Value</b>	<b>HMRC Value</b>
Number of ISA subscription	Number of ISA subscriptions	18.0mil	12.7mil
Number of Junior ISA accounts	Number of Junior ISA accounts	995000	738000

Source: Wealth and Assets Survey, Office for National Statistics

For ISA statistics, Wave 5 of the Wealth and Assets Survey (WAS) estimates show the number of respondents who have an ISA, whereas HMRC's figures show the number of ISAs subscribed to over the financial year ending (FYE) 2015.

## 4 . Pensions

Pensions data from Wave 5 of the Wealth and Assets Survey (WAS) has been compared with variables from the Family Resources Survey covering the financial yearending (FYE) 2016.

**Table 8: Table 8 WAS, Family Resources Survey - pensions, Great Britain, July 2014 to June 2016**

<b>WAS variable</b>	<b>External variable</b>	<b>WAS value</b>	<b>FRS value</b>
Pension scheme participation of working age adults, not in full time education	Pension scheme participation	0.38	0.33
Pension scheme participation of employees	Employee pension scheme participation	0.66	0.61
Pension scheme participation of self-employed	Self - employed pension scheme participation	0.25	0.16
Working age male participation in employer - sponsored schemes	Working age male participation in employer - sponsored schemes	0.53	0.4
Working age female participation in employer - sponsored schemes	Working age female participation in employer - sponsored schemes	0.49	0.39
Working age male participation in individual pension schemes	Male participation in individual pension schemes	0.1	0.07
Working age female participation in individual pension schemes	Female participation in individual pension schemes	0.07	0.03

Source: Wealth and Assets Survey, Office for National Statistics

## 5 . Physical

We have also investigated the cause of a 19% rise in the reported value of cars, vans and motorbikes from Wave 4 to Wave 5. Data from SMMT (Society of Motor Manufacturers and Traders) indicated that there was a rise in new car registrations between 2014 and 2015, before declining slightly into 2016.



However, Wealth and Assets Survey (WAS) data indicates that the percentage of respondents who owned a car, van or motorbike only rose from 74% to 75% between the two waves. The difference has therefore been caused by an increase in the value of these vehicles, indicating the effect of price inflation.

Wave 5 is the first wave where the values of cars, vans and motorbikes have been collected as one, rather than the individual values of each vehicle type collected separately.

## 6 . Effect of outlier leaving sample

Wave 4 contained a very wealthy individual in the sample. The individual's wealth was so large that it made a noticeable impact on the aggregates of some variables, particularly within financial wealth and income.

However, this individual was no longer in the sample in Wave 5. It would appear that falls in the aggregates of some variables can be (at least in part) explained by this. For example, net investment income (WAS variable DVNIINV) decreased by 25% (from £42.3bn to £32.0bn) between Waves 4 and 5. Omission of this individual from the sample meant that the weighted sum for Wave 4 decreased to £32.2bn.

The following table demonstrates the impact this individual had on Wave 4 aggregates.

**Table 9: Effect of outlier leaving sample, Great Britain, July 2014 to June 2016**

Variable	£ Million				
	Wave 4	Wave 4 less wealth individual	Effect of removal	% of Wave 4 total	Wave 5
Total Wealth	11,113,848	11,046,392	67,456	0.61	12,778,146
Net Financial Wealth	1,607,196	1,541,184	66,012	4.11	1,635,748
Total Physical Wealth	1,152,871	1,152,724	147	0.01	1,248,092
Total Property Wealth	3,907,787	3,906,514	1,273	0.03	4,570,175
Gross Regular Household Income	1,131,374	1,112,636	18,738	1.66	1,132,000

Source: Wealth and Assets Survey, Office for National Statistics