

Article

Alternative measures of UK households' income and saving: April to June 2018

Experimental Statistics on the impact of removing "imputed" transactions from real household disposable income and the saving ratio to better represent the economic experience of UK households.

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Next release: To be announced

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1. Main points

- Cash-basis real household disposable income (RHDI) increased by 0.6% in Quarter 2 (April to June) 2018; this was a greater increase than national accounts RHDI which increased by 0.4%.
- The increase in RHDI in the latest quarter was driven primarily by increases in social assistance benefits in cash and wages and salaries.
- Though cash-basis RHDI has increased in successive quarters, it has remained relatively flat since the second half of 2015.
- In 2017, cash-basis RHDI fell by 0.6%; this was the second successive year of decline and is consistent with successive annual falls in national accounts RHDI.
- The cash-basis saving ratio was negative 0.6% in the latest quarter; compared with negative 0.8% in the previous quarter.
- This was the third successive quarter in which the cash-basis saving ratio has been negative, meaning that households' spending exceeded their gross disposable income, on a cash basis, in Quarter 2 (April to June) 2018.

2. Things you need to know about this release

This bulletin provides Experimental Statistics on the impact of removing "imputed" transactions from real household disposable income (RHDI) and the saving ratio to better represent the economic experience of UK households. It is an update to data for the experimental publication Alternative measures of UK households' income and saving: January to March 2018, which was published on 04 July 2018. These data estimate disposable income and the saving ratio less the transactions that are imputed and unobserved by households. The following section, as well as Section 6 explain the removal of such transactions in greater detail.

This bulletin compares experimental cash-basis measures of RHDI and the saving ratio with the internationally comparable national accounts defined methodology, as published in the <u>UK Quarterly sector accounts: April to June 2018</u> on 28 September 2018.

Today we are also releasing an article describing wider measures of economic well-being. These measures focus on per head values to highlight the household perspective of economic statistics, including real household disposable income.

While there are similarities in the presentation of these data and those in this publication, the use of different methodologies mean caution should be used when comparing data across these publications. Some of these differences include the exclusion of transactions, the use of different deflators and data presented on an aggregate and per head basis.

Why do we estimate cash measures of RHDI and the saving ratio?

Estimates of RHDI and the saving ratio published in the Quarterly sector accounts include transactions that are not directly observed by households. For example, imputed rental represents the value of housing services that owner-occupiers derive from their homes. This is the amount that they would have to pay in rental to achieve the same consumption of housing services. While this concept is important when measuring economic activity and in like-for-like international comparisons, it is not expenditure (or income) directly observed by homeowners. As a result, the national accounts measure of RHDI can differ from the perceived experience of households.

We therefore consider "cash-basis RHDI". This measure removes imputed rental and other imputed transactions resulting in a measure of RHDI that is a closer representation of disposable income as measured by social surveys. This is mainly achieved by following guidance from the <u>Organisation for Economic Co-operation and Development Framework for Statistics on the Distribution of Household Income, Consumption and Wealth and the United Nations Economic Commission for Europe (UNECE) Canberra Group Handbook on Household Income Statistics.</u>

We also consider a "cash-basis saving ratio". This measure removes imputed transactions from the use of disposable income account. For example, the adjustment for the change in pension entitlements is removed, while imputed rental and financial intermediation services indirectly measured (FISIM) are both removed from the national accounts measure of final consumption expenditure. Their removal result in a measure of gross saving that reflects households' saving (excluding pension contributions) in the respective quarter or year.

Estimates within this release

Data within this bulletin are estimated in current prices (also called nominal terms), except for cash-basis RHDI, which is estimated by deflating gross disposable income using the cash basis households' final consumption expenditure implied deflator. This cash-basis deflator excludes the effect of price changes that are not directly experienced by households, that is, imputed rentals of housing and FISIM. Cash-basis RHDI therefore better reflects the real purchasing power of households in terms of the quantity of goods and services they would be able to purchase if observed prices remained constant over time.

Current price series are expressed in terms of the prices during the time period being estimated. In other words, they describe the prices recorded at the time of production or consumption and include the effect of price inflation over time. RHDI, on the other hand, is a measure of the real purchasing power of households' income and it enables users to make comparisons of households' disposable income over time.

All data in this bulletin are adjusted for seasonality, unless otherwise stated. Seasonal adjustment removes seasonal or calendar effects from data to enable more meaningful comparisons over time.

The <u>Population estimates for UK, England and Wales, Scotland and Northern Ireland</u> used in this release are those published on 28 June 2018 and the <u>population projections</u> used are those published on 26 October 2017.

Revisions within this release

This bulletin includes new data for the latest available quarter, Quarter 2 (Apr to June) 2018. It also includes revisions from Quarter 1 (Jan to Mar) 2017 onwards in line with the <u>National Accounts Revisions Policy</u>.

3. Cash-basis RHDI increased by 0.6% in the latest quarter, but has remained relatively flat since the second half of 2015

Cash-basis real household disposable income (RHDI) increased by 0.6% in Quarter 2 (Apr to June) 2018, compared with the previous quarter. National accounts RHDI increased by 0.4% over the same period as gross disposable income increased at a faster pace than price rises. For both measures, this marked a slowdown in growth compared with Quarter 1 (Jan to Mar) 2018, when cash-basis RHDI increased by 0.8% and national accounts RHDI grew by 0.7%. Comparing on a quarter on same quarter a year ago basis, both measures of RHDI increased by 0.6% in Quarter 2 2018.

Figure 1: Quarter on previous quarter growth in cash-basis real household disposable income and national accounts real household disposable income, percent

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018

Figure 1: Quarter on previous quarter growth in cash-basis real household disposable income and national accounts real household disposable income, percent

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018



Source: Office for National Statistics

Notes:

1. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

Cash-basis gross household disposable income (GHDI) increased, quarter on quarter, by £1.8 billion in Quarter 2 2018. Much of this growth was attributable to an increase of £0.9 billion in social assistance benefits in cash (a component of social benefits other than transfers in kind) and an increase in wages and salaries of £0.7 billion. This was partially offset by a decrease in dividends received by households of £0.7 billion.

The increase in cash-basis GHDI contributed 0.7 percentage points to the quarter on previous quarter growth in cash-basis RHDI, partially offset by a 0.1 percentage point increase in inflation as measured by the cash-basis households' final consumption expenditure implied deflator. As shown in Figure 2, this quarter saw a moderation in both the increase in cash-basis gross disposable income growth and the rate of price increases compared with the previous quarter. For a further explanation of the calculation of cash-basis RHDI, please see Section 6.

National accounts GHDI contributed 0.6 percentage points to the quarterly growth in national accounts RHDI, partially offset by a 0.2 percentage point increase in inflation as measured by the households' final consumption expenditure implied deflator.

While national accounts GHDI increased by £1.9 billion in Quarter 2 2018, cash-basis GHDI increased by slightly less, £1.8 billion. The difference in the quarterly growth between the two series is explained by the exclusion of small increases in imputed transactions (£0.4 billion), partially offset by a fall of £0.2 billion in the net service charge paid by households to banks when depositing and borrowing money (known as Financial Intermediation Services Indirectly Measured (FISIM)). For a further explanation of the cash-basis GHDI methodology, see Section 6.

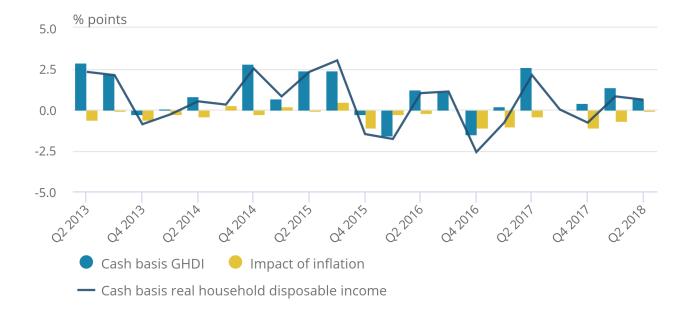
Figure 2 shows the impact of inflation (the cash-basis households' final consumption expenditure implied deflator) on cash-basis gross disposable income to calculate real household disposable income over the past five years. This chart corresponds to Figure 1 in the Quarterly Sector Accounts bulletin which shows the impact of inflation on real households' disposable income on a national accounts basis.

Figure 2: Contributions to cash-basis real household disposable income growth, quarter on previous quarter, percentage points

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018

Figure 2: Contributions to cash-basis real household disposable income growth, quarter on previous quarter, percentage points

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018



Source: Office for National Statistics

Notes:

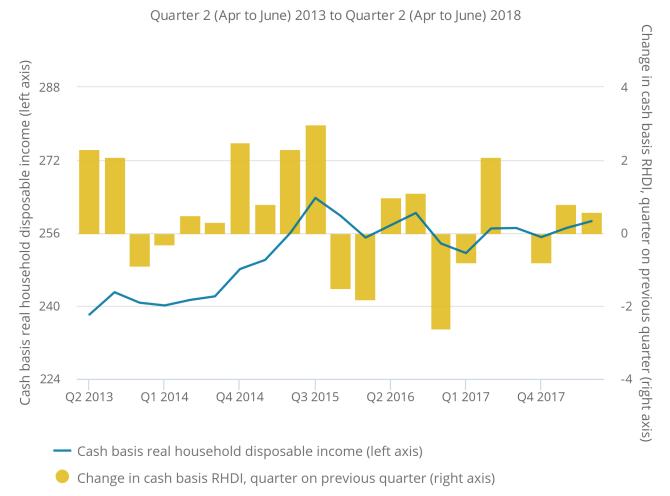
- 1. Sum of contributions to cash basis real household disposable income may not add to totals due to rounding.
- 2. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

Despite successive quarters of RHDI growth on both a cash basis and national accounts basis, the longer-term trend is of relatively flat cash-basis RHDI from the second half of 2015. Figure 3 illustrates the quarterly value of cash-basis RHDI and its quarterly growth from Quarter 2 2013 to Quarter 2 2018.

Figure 3: Cash-basis real household disposable income (RHDI), £ billion, and quarter on previous quarter growth in cash-basis real household disposable income, percentage points

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018

Figure 3: Cash-basis real household disposable income (RHDI), £ billion, and quarter on previous quarter growth in cash-basis real household disposable income, percentage points



Source: Office for National Statistics

Notes:

- 1. Sum of contributions to cash basis real household disposable income may not add to totals due to rounding.
- 2. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

Between Quarter 2 2013 to Quarter 3 (July to Sept) 2015, the average quarterly growth in cash-basis RHDI was 1.3%. However, between Quarter 4 (Oct to Dec) 2015 and Quarter 2 2018, the average quarterly growth fell to negative 0.2%. That cash-basis RHDI has been relatively flat over the past three years means that households have not experienced an increase in their purchasing power during this time.

Both cash-basis and national accounts RHDI declined for successive years in 2016 and 2017. On a cash basis, RHDI fell by 0.3% in 2016 and by 0.6% in 2017. On a national accounts basis, RHDI fell by 0.2% in 2016 and 0.1% in 2017. For both measures, this marked the first time since 2011 that RHDI declined in successive years.

Revisions to cash-basis real household disposable income (RHDI)

This bulletin includes revisions to data from Quarter 1 (Jan to Mar) 2017 in line with the <u>National Accounts</u> Revisions Policy.

In the five quarters open to revisions, cash-basis RHDI was revised up by an average of £0.9 billion. Cash-basis RHDI was revised up in four of the five quarters; there was a small downward revision of £0.1 billion to cash RHDI in Quarter 4 (Oct to Dec) 2017.

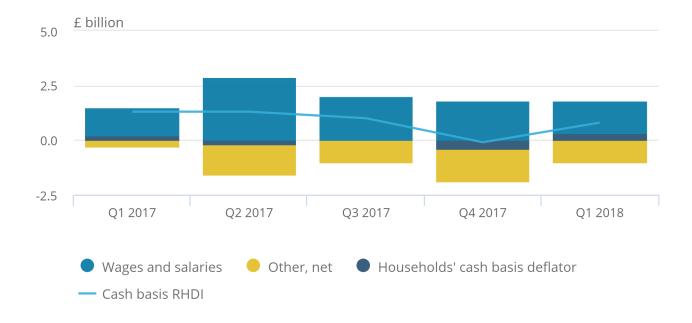
Figure 4 shows that revisions to wages and salaries were the main source of these revisions, with an average upward revision of £1.9 billion per quarter as new data for the public sector have been incorporated from Quarter 1 2017. Additionally, the alignment of private sector wages and salaries to comparable labour market data has been reviewed, also resulting in upward revisions to wages and salaries in all quarters.

Figure 4: Impact of revisions to cash-basis real household disposable income, £ billion

Quarter 1 (Jan to Mar) 2017 to Quarter 1 (Jan to Mar) 2018

Figure 4: Impact of revisions to cash-basis real household disposable income, £ billion

Quarter 1 (Jan to Mar) 2017 to Quarter 1 (Jan to Mar) 2018



Source: Office for National Statistics

Notes:

- 1. Sum of contributions to cash-basis real household disposable income may not add to totals due to rounding.
- 2. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

Revisions to the cash-basis households' final consumption expenditure implied deflator were on average negative $\mathfrak{L}0.1$ billion throughout the five quarters, while the impact of revisions to other transactions were, on average, negative $\mathfrak{L}1.0$ billion.

The largest impact of revisions on quarter on previous quarter growth rates were in Quarter 1 (Jan to Mar) 2017, from negative 1.3% to negative 0.8% and in Quarter 4 (Oct to Dec) 2017, from negative 0.3% to negative 0.8%.

The difference between revisions to national accounts RHDI and cash-basis RHDI are explained by the exclusion of upward revisions to the transactions excluded from cash-basis RHDI, the largest of which were upward revisions to gross operating surplus of £0.4 billion, on average, across the five quarters.

4. Cash-basis RHDI per head increased by 0.4% in the latest quarter but showed no growth compared with Quarter 2 (Apr to June) 2017

Real household disposable income (RHDI) per head is calculated by dividing RHDI by the population estimate and projections, which are outlined in Section 2 of this bulletin. RHDI per head increased, quarter on previous quarter, on both a cash basis and national accounts basis in Quarter 2 (Apr to June) 2018. Cash-basis RHDI per head increased by 0.4%, while RDHI per head on a national accounts basis increased by 0.2%. As is usually the case, the effect of population changes means that RHDI per head growth is slightly weaker than RHDI growth.

Cash-basis RHDI per head was flat between Quarter 2 2017 and Quarter 2 2018 while national accounts RHDI per head fell by 0.1% during the same period. For both measures, RHDI per head was about the same value as it was in Quarter 1 (Jan to Mar) 2016.

5. The cash-basis household saving ratio was negative for the third successive quarter in Quarter 2 (Apr to June) 2018

For the third successive quarter, the cash-basis household saving ratio was negative in Quarter 2 (Apr to June) 2018. The last time such a sequence occurred was between Quarter 2 2007 to Quarter 1 (Jan to Mar) 2008, when the cash-basis saving ratio was negative for four successive quarters. A negative cash-basis saving ratio indicates that when imputed transactions and pension savings are removed from households' spending and saving, households' spending continued to exceed their gross disposable income in the latest quarter.

In Quarter 2 2018, the cash-basis saving ratio was negative 0.6%. This represents an increase compared with the previous two quarters; the cash-basis saving ratio was negative 1.0% in Quarter 4 (Oct to Dec) 2017, and negative 0.8% in Quarter 1 2018. While the cash-basis saving ratio remains negative, it is not an historically low cash-basis saving ratio; it has been lower in fifteen quarters since Quarter 1 1997, and was lowest in Quarter 1 1999 when it was negative 3.3%. In comparison, the national accounts saving ratio increased to 3.9% in Quarter 2 2018 from 3.6% in Quarter 1 2018. This was the third-lowest since Quarter 1 1997, and the fourth-lowest since we first began recording the national accounts saving ratio in 1963. It should be noted that Quarter 1 1997 is the first quarter for which cash-basis saving ratio data is available.

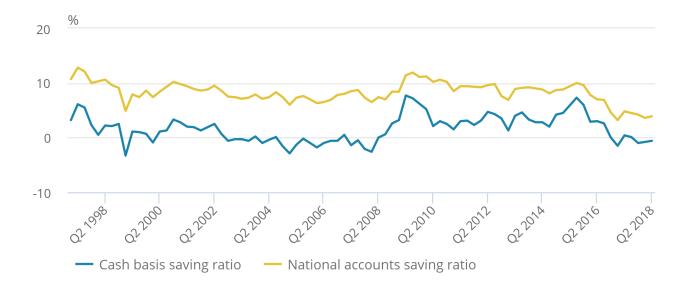
Figure 5 shows the quarterly cash-basis saving ratio and national accounts saving ratio from Quarter 1 1997 to Quarter 2 2018.

Figure 5: UK households' cash-basis saving ratio and national accounts saving ratio, quarterly, seasonally adjusted, percent

Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2018

Figure 5: UK households' cash-basis saving ratio and national accounts saving ratio, quarterly, seasonally adjusted, percent

Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2018



Source: Office for National Statistics

Notes:

1. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

The increase in the cash-basis saving ratio in the latest quarter was the result of gross disposable income increasing by more than households' spending. Cash-basis gross disposable income increased by £1.8 billion, partially offset by a £1.4 billion increase in cash-basis final consumption expenditure. This led to an increase in the money households had available to save, known as cash-basis gross saving, of £0.4 billion.

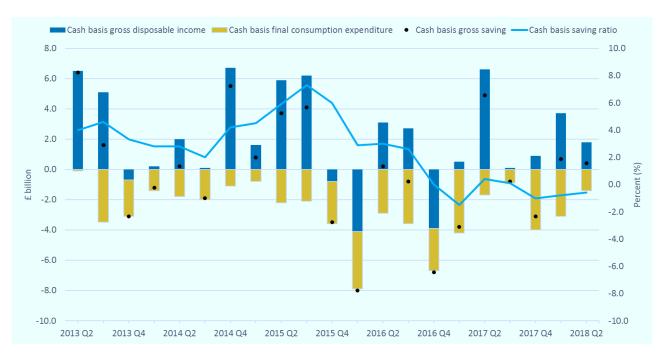
The largest upward contributions to the £1.8 billion increase in cash-basis gross disposable income came from social assistance benefits received, which increased by £0.9 billion and a £0.7 billion increase in wages and salaries paid to households. These increases were partially offset by a £0.7 billion decrease in dividends paid to households. The £1.4 billion increase in cash-basis final consumption expenditure was mainly driven by life insurance and, to a lesser extent, transport expenditure.

Figure 6 shows the quarterly changes in cash-basis gross disposable income, cash-basis final consumption expenditure and cash-basis gross saving, and how this is reflected in movements in the cash-basis saving ratio. This corresponds with Figure 5 in the <u>Quarterly Sector Accounts</u> bulletin, which shows the quarterly contributions to the national accounts saving ratio.

Increases in gross disposable income increase gross saving, and therefore the saving ratio, whereas increases in spending reduce households' gross saving and the saving ratio. These changes, quarter on quarter, are represented by the stacked bars. The dots represent the net position of these bars because gross saving is gross disposable income less final consumption expenditure.

Figure 6: Contributions to the cash-basis households' saving ratio, seasonally adjusted, £ billion, percent

Quarter 2 (Apr to June) 2013 to Quarter 2 (Apr to June) 2018



Source: Office for National Statistics

Notes:

- 1. Cash basis saving ratio calculated as cash basis gross saving divided by cash basis gross disposable income.
- 2. Cash basis gross saving calculated as cash basis gross disposable income minus cash basis final consumption expenditure.
- 3. Saving ratio (%) refers to the axis on the right-hand side (RHS). All other series refer to the axis on the left-hand side (LHS).
- 4. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

The increase in the cash-basis saving ratio of 0.2 percentage points in the latest quarter, was marginally smaller than the 0.3 percentage point increase in the national accounts saving ratio. The 0.1 percentage point difference is explained by the removal of transactions in the cash methodology compared with the national accounts methodology. See Section 6 for a fuller explanation.

The exclusion of the adjustment for the change in pension entitlements (which measures households net deferred saving into pensions) from the cash-basis saving ratio methodology was the primary reason for the smaller increase in the saving ratio on a cash basis than on a national accounts basis. The adjustment for the change in pension entitlements increased by £1.3 billion in Quarter 2 2018, which alongside small increases in other excluded transactions meant that households' total resources on a cash basis increased by £1.4 billion less than on a national accounts basis. This was partially offset by the exclusion of spending on imputed transactions from cash-basis final consumption expenditure, which grew by £0.5 billion last quarter. Therefore, cash-basis gross saving increased by £0.9 billion less on a cash basis than on a national accounts basis, leading to a smaller rise in the cash-basis saving ratio.

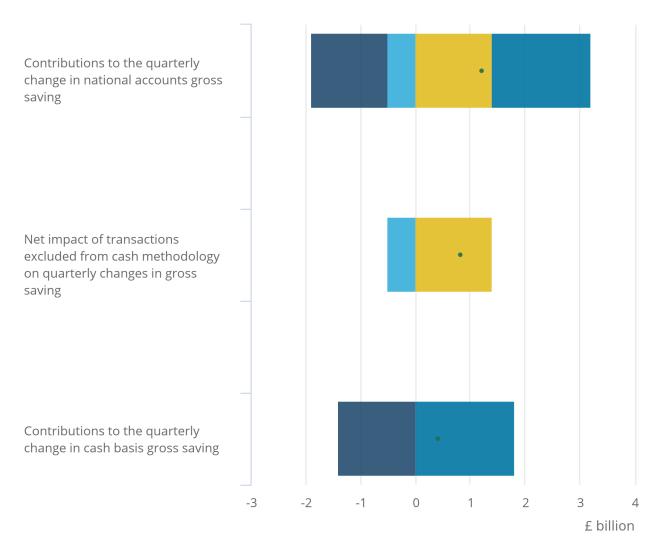
Figure 7 explains this visually. The stacked columns show the contributions to the quarterly change in gross saving, and therefore the change in the saving ratio, on a national accounts basis and a cash basis in Quarter 2 2018. A stacked column also separately shows the contributions of the transactions excluded from the cash-basis saving ratio. The quarterly change in the value of gross saving is the net value of the upward and downward contributions represented by the dots.

Figure 7: Contributions to the change, quarter on previous quarter, in gross saving on a cash basis and a national accounts basis, $\mathfrak L$ billion

Quarter 2 (Apr to June) 2018

Figure 7: Contributions to the change, quarter on previous quarter, in gross saving on a cash basis and a national accounts basis, £ billion

Quarter 2 (Apr to June) 2018



- Transactions included in cash methodology, contributing positively to quarterly change in gross
- Transactions excluded from cash methodology, contributing positively to quarterly change in gr
- Transactions included in cash methodology, contributing negatively to quarterly change in gros
- Transactions excluded from cash methodology, contributing negatively to quarterly change in g

Annually, the cash-basis saving ratio fell to negative 0.5% in 2017, its lowest level since 2007 when it was negative 0.9%. This represents the first year in a decade during which, when imputed transactions are removed from their spending and saving, households' spending exceeded their gross disposable income. Households' spending previously exceeded their disposable income, and therefore recorded a negative cash-basis saving ratio on an annual basis, in 1999 and for five consecutive years between 2003 and 2007.

Revisions to the cash-basis saving ratio

This bulletin includes revisions to data from Quarter 1 (Jan to Mar) 2017 in line with the <u>National Accounts</u> Revisions Policy.

The cash-basis saving ratio was revised upwards by an average of 0.5 percentage points in the first three quarters open to revision, and revised downwards by 0.1 percentage points in Quarter 4 (Oct to Dec) 2017 and Quarter 1 2018.

In all five quarters open to revisions, there were upward revisions to wages and salaries, which averaged £1.9 billion per quarter. Between Quarter 1 2017 and Quarter 3 (July to Sept) 2017, these revisions were the primary driver of the upward revisions to cash-basis gross saving and the cash-basis saving ratio. In the latter two quarters open to revision, upward revisions to wages and salaries were more than offset by downward revisions to net property income received and upward revisions to cash-basis final consumption expenditure, leading to a downward revision of 0.1 percentage point in the cash-basis saving ratio in these two quarters.

The upward revisions to households' expenditure in Quarter 4 (Oct to Dec) 2017 and Quarter 1 2018 were predominantly driven by the inclusion of new data on households' expenditure on motor cars. In Quarter 1 2018, new data on households' expenditure on life insurance have also added to the revision.

Figure 8: Impact of revisions to cash-basis gross saving, £ billion Quarter 1 (Jan to Mar) 2017 to Quarter 1 (Jan to Mar) 2018

Figure 8: Impact of revisions to cash-basis gross saving, £ billion Quarter 1 (Jan to Mar) 2017 to Quarter 1 (Jan to Mar) 2018



Source: Office for National Statistics

Notes:

1. Q1 refers to Jan to Mar, Q2 refers to Apr to June, Q3 refers to July to Sept, Q4 refers to Oct to Dec.

6. Quality and methodology

This is an experimental product and we are continually reviewing the methodology used to produce the cash measures of real household disposable income (RHDI) and the saving ratio as well as how we present the product. Following user feedback, we have added the time series (1997 onwards) of transactions removed from the cash-based measures of RHDI and the saving ratio in the <u>Alternative measures of RHDI and saving ratio</u>. We hope this will make it easier for users to follow through the methodology using a single dataset.

How do we estimate cash measures of RHDI?

Real household disposable income (RHDI) is a measure of the real purchasing power of household income, in terms of the physical quantity of goods and services they would be able to purchase if prices remained constant over time. It is calculated using the national accounts gross disposable household income (GHDI; calculated in current prices) and adjusting it to remove the effects of inflation.

GHDI on a national accounts basis is calculated as total income received from wages (and the self-employed), pension contributions, social benefits and net property income, less taxes on income and wealth. The income earned on financial assets, such as interest and dividends, plus the income received from allowing other institutional units to use non-produced assets (rent on land) is known as property income. It is essentially income made on investments, as opposed to income from property (for example, dwellings) as the name may suggest.

This differs from the cash-basis measure, where we remove transactions that are not directly observed by households, to better reflect the conditions they are experiencing.

There are 11 transactions, that are, or include, imputed transactions, included in the national accounts calculation of GHDI but excluded from the cash measure of GHDI. These are:

- B.2g (resource): Gross operating surplus
- D.12 (resource): Employers' social contributions
- P.119 (resource): (Plus) Financial intermediation services indirectly measured (FISIM)
- D.442 (resource): Property income payable on pension entitlements
- D.4432 (resource): Investment income attributable to collective investment fund shareholders retained earnings
- P.119 (use): (Less) Financial intermediation services indirectly measured (FISIM)
- D.612 (resource): Employers' imputed social contributions
- D.72 (resource): Non-life insurance claims
- D.611 (use): Employers' actual social contributions
- D.612 (use): Employers' imputed social contributions
- D.614 (use): Households' social contribution supplements

Within the national accounts, there are accounting identities, which mean that the values of some of the previous transactions net to zero:

- employers' social contributions (D.12r) is equal and opposite to the sum of Employers' actual social contributions (D.611u) and Employers' imputed social contributions (D.612u)
- income payable on pension entitlements (D.442r) is equal and opposite to Households' social contributions supplements (D.614u)

Therefore, only the removal of the following six transactions explains the differences between GHDI on a cash basis and a national accounts basis:

- B.2g (resource): Gross operating surplus
- P.119 (resource): (Plus) Financial intermediation services indirectly measured (FISIM)
- D.4432 (resource): Investment income attributable to collective investment fund shareholders retained earnings
- P.119 (use): (Less) Financial intermediation service indirectly measured (FISIM)
- D.612 (resource): Employers' imputed social contributions
- D.72 (resource): Non-life insurance claims

Once we have calculated GHDI on a cash basis, we use a deflator to remove the effect of price inflation and price changes observed by households to calculate real household disposable income (RHDI) on a cash basis. Previously, GHDI on a cash basis was deflated by using the national accounts households' final consumption expenditure implied deflator. The deflator used now is the national accounts household expenditure deflator less imputed rental and financial intermediation services indirectly measured (FISIM). This cash-basis deflator represents more closely price changes experienced by households.

How do we estimate cash measures of the saving ratio?

The saving ratio estimates the amount of money households have available to save (gross saving) as a percentage of their gross disposable income.

To estimate cash measures of the saving ratio, gross saving is calculated as households' total available resources (that is, GHDI) less household consumption (expenditure on goods and services for consumption). This differs from the national accounts calculations, in which pension accumulations are added to total available resources.

Household consumption (final consumption expenditure) on a cash basis is calculated by subtracting the following imputed transactions from the national accounts measure of final consumption expenditure:

- imputed rental
- financial intermediation services indirectly measured (FISIM)

The saving ratio on a cash basis is, therefore, gross saving on a cash basis expressed as a percentage of GHDI on a cash basis (which is equal to the cash measure of total available resources). The difference between the national accounts saving ratio and the cash-basis saving ratio is caused by the value of the transactions excluded from the calculation of gross disposable household income and the transactions removed from national accounts gross saving.

Table 1 presents the quarterly change in the value of the transactions that are included in the calculation of the national accounts gross disposable income and the saving ratio, but are excluded from the calculation of cashbasis gross disposable income and the cash-basis saving ratio. The values in the table explain the difference in the changes between Quarter 1 (Jan to Mar) 2018 and Quarter 2 (Apr to June) 2018.

Table 1: Change, quarter on previous quarter, in the value of transactions removed from the national accounts methodology to calculate cash-basis gross disposable income and cash-basis gross saving, £ million Quarter 2 (Apr to June) 2018

Transaction removed	CDID	Quarterly change, £ million
Gross operating surplus (B.2g)	CAEO	180
Employers' social contributions* (D.12r)	DTWP	1018
Financial Intermediation Services Indirectly Measured (FISIM) (P.119r)	CRNC	498
Investment income payable on pension entitlements* (D.442r)	KZL5	585
Retained earnings attributable to collective investment fund shareholders (D.4432r)	MN7M	15
Financial Intermediation Services Indirectly Measured (FISIM) (P.119u)	CRNB	-730
Employers' imputed social contributions (D.612r)	L8RQ	0
Non-life insurance claims (D.72r)	RNLU	165
Employers' actual social contributions* (D.611u)	L8NM	912
Employers' imputed social contributions* (D.612u)	MA4B	106
Households' social contribution supplements* (D.614u)	L8QA	585
Adjustment for the change in pension entitlements (D.8r)	RNMB	1259
Imputed rental for housing (removed from cash basis final consumption expenditure)	GBFJ	165
Financial Intermediation Services Indirectly Measured (FISIM) (removed from cash basis final consumption expenditure)	C68W	381

Source: Office for National Statistics

Notes:

- 1. Transactions marked with an asterisk (*) are those whose values, in accordance with the European System of Accounts 2010 (ESA10), net to 0.
- 2. The removal of the transactions in the table not marked with an asterisk (*) explain the difference between gross disposable income, gross saving and final consumption expenditure on a cash basis.
- 3. Codes (in brackets) used in Table 1 are European System of Accounts 2010 (ESA 2010) codes.
- 4. CDIDs are unique random identifiers for individual time series. They do not themselves have any specific meaning but enable users to reference this table with the accompanying data tables provided.

7. Acknowledgements

We continue to welcome feedback from users on the future content of this bulletin and publication tables and are particularly interested to know how you make use of these data to inform your work. Please email us at sector.gov.uk.

ANHHIS1 Alternative Measures of Households' Income and Saving Primary Allocation of Income Account

£million

					Allocatio	n of Primary	Income				
						Resources					
						D.4 Property	income				
				D.42 Dis	tributed income	of corps		Investment ome			
	Mixed income, gross	Wages and salaries	Interest before FISIM ¹ allocation	Dividends	Withdrawals from income of quasi-corps	Earnings on property inves- tment ²	Investment income attributable to insurance policy holders	Dividend income attributable to collective investment fund share-holders	Rent	Cash Basis Total	Cash Basis Total Reso- urces
	B.3g	D.11	D.41g	D.421	D.422	D.423	D.441	D.4431	D.45	D.4_X	TR_X
2014 2015 2016 2017	RNKX 114 550 119 877 124 883 125 864	DTWO 745 956 773 273 798 223 829 532	I6P9 15 398 14 000 12 397 9 027	NRKU 54 041 74 215 61 512 66 647	NBOJ 34 922 34 993 37 393 38 845	HHLI 778 751 882 911	KZL4 19 940 23 851 22 824 20 974	MN7J 995 1 078 1 151 1 330	M8MD 23 21 16 14	CSK5 126 097 148 909 136 175 137 748	CSI9 986 603 1 042 059 1 059 281 1 093 144
Seasonally a	adjusted										
2016 Q1 Q2 Q3 Q4	31 150 31 617 31 260 30 856	194 410 199 175 202 741 201 897	3 392 3 205 3 089 2 711	16 526 15 420 14 794 14 772	9 477 9 186 9 329 9 401	206 216 226 234	5 603 5 017 6 802 5 402	280 282 288 301	4 4 4 4	35 488 33 330 34 532 32 825	261 048 264 122 268 533 265 578
2017 Q1 Q2 Q3 Q4	31 166 31 395 31 606 31 697	203 398 206 697 208 106 211 331	2 395 2 251 2 244 2 137	15 447 16 208 17 008 17 984	9 767 9 666 9 583 9 829	228 226 227 230	5 427 5 515 5 145 4 887	316 329 340 345	4 4 3 3	33 584 34 199 34 550 35 415	268 148 272 291 274 262 278 443
2018 Q1 Q2	31 624 31 871	213 669 214 377	2 475 2 613	17 877 17 197	10 175 10 173	238 248	5 266 5 427	350 359	3 3	36 384 36 020	281 677 282 268
Percentage (change, lates	t year on pr	evious year								
2014 2015 2016 2017	CVP3 7.0 4.7 4.2 0.8	CSB3 3.3 3.7 3.2 3.9	CVP5 -19.6 -9.1 -11.4 -27.2	CVP7 7.1 37.3 –17.1 8.3	CVP9 2.8 0.2 6.9 3.9	CVQ3 -4.8 -3.5 17.4 3.3	CVQ5 -7.8 19.6 -4.3 -8.1	CVQ7 7.5 8.3 6.8 15.6	CVQ9 4.5 -8.7 -23.8 -12.5	CVR3 -0.7 18.1 -8.6 1.2	CVR5 3.2 5.6 1.7 3.2
Percentage of	change, lates	t quarter or	n previous qu	arter							
2016 Q1 Q2 Q3 Q4	1.0 1.5 -1.1 -1.3	CSD5 -0.7 2.5 1.8 -0.4	-0.8 -5.5 -3.6 -12.2	-11.2 -6.7 -4.1 -0.1	7.4 -3.1 1.6 0.8	5.6 4.9 4.6 3.5	-14.3 -10.5 35.6 -20.6	1.8 0.7 2.1 4.5	-20.0 - - -	-6.3 -6.1 3.6 -4.9	-1.3 1.2 1.7 -1.1
2017 Q1 Q2 Q3 Q4	1.0 0.7 0.7 0.3	0.7 1.6 0.7 1.5	-11.7 -6.0 -0.3 -4.8	4.6 4.9 4.9 5.7	3.9 -1.0 -0.9 2.6	-2.6 -0.9 0.4 1.3	0.5 1.6 -6.7 -5.0	5.0 4.1 3.3 1.5	- -25.0 -	2.3 1.8 1.0 2.5	1.0 1.5 0.7 1.5
2018 Q1 Q2	-0.2 0.8	1.1 0.3	15.8 5.6	-0.6 -3.8	3.5	3.5 4.2	7.8 3.1	1.4 2.6	_	2.7 -1.0	1.2 0.2
Percentage (change, lates	t quarter or	n correspond	ing quarter of	previous year						
2016 Q1 Q2 Q3 Q4	CVP4 8.0 6.9 2.0 0.1	CSF6 2.4 3.8 3.6 3.1	CVP6 -3.6 -8.8 -12.9 -20.8	CVP8 -2.2 -18.5 -25.2 -20.6	CVQ2 8.0 6.0 7.0 6.5	CVQ4 12.0 17.4 20.2 20.0	CVQ6 -12.8 -18.2 43.1 -17.3	CVQ8 6.9 4.4 6.3 9.5	CVR2 -33.3 -20.0 -20.0 -20.0	CVR4 -1.6 -11.6 -7.3 -13.3	CVR6 2.4 1.9 1.9 0.4
2017 Q1 Q2 Q3 Q4	0.1 -0.7 1.1 2.7	4.6 3.8 2.6 4.7	-29.4 -29.8 -27.4 -21.2	-6.5 5.1 15.0 21.7	3.1 5.2 2.7 4.6	10.7 4.6 0.4 –1.7	-3.1 9.9 -24.4 -9.5	12.9 16.7 18.1 14.6	- -25.0 -25.0	-5.4 2.6 0.1 7.9	2.7 3.1 2.1 4.8
2018 Q1 Q2	1.5 1.5	5.0 3.7	3.3 16.1	15.7 6.1	4.2 5.2	4.4 9.7	-3.0 -1.6	10.8 9.1	-25.0 -25.0	8.3 5.3	5.0 3.7

¹ Financial intermediation services indirectly measured 2 Non-seasonally adjusted

ANHHIS1 Alternative Measures of Households' Income and Saving Primary Allocation of Income Account

Allocation of Primary Income Uses CASH BASIS D.4 Property income Balance of **CASH BASIS CASH BASIS** Interest before gross primary FISIM1 allocation Rent Total uses Total income D.41g D.45 D.4_X B.5g_X TU_X I6PI RNMS CSK6 CSJ2 CSI9 59 606 57 617 926 980 986 603 2014 17 59 623 2015 57 633 1 042 059 16 984 426 2016 57 690 12 57 702 1 001 579 1 059 281 56 173 12 56 185 1 036 959 1 093 144 Seasonally adjusted 2016 Q1 14 612 14 615 246 433 261 048 3 3 Q2 14 412 249 710 264 122 14 409 Q3 268 533 14 435 3 14 438 254 095 Q4 14 234 3 14 237 251 341 265 578 3 2017 Q1 13 960 13 963 254 185 268 148 272 291 274 262 Ω 2 14 155 3 14 158 258 133 3 Q3 14 033 14 036 260 226 3 Q4 14 025 14 028 264 415 278 443 2018 Q1 14 130 3 14 133 267 544 281 677 Q2 14 168 3 14 171 268 097 282 268 Percentage change, latest year on previous year CVR7 CVR9 CVS3 CVS5 CVS7 2014 -1.8 -5.6 -1.83.5 3.2 2015 -3.3 -5.9 -3.3 6.2 5.6 2016 0.1 -25.0 0.1 1.7 1.7 2017 -2.6-2.63.5 3.2 Percentage change, latest quarter on previous quarter -25.0 1.5 -1.5 1.2 Q2 -1.4-1.41.3 Q3 0.2 0.2 1.8 Q4 -1.4-1.4-1.1-1.12017 Q1 -1.9 -1.9 1.1 1.0 Q2 1.4 1.4 1.6 1.5 Q3 -0.9 -0.9 8.0 0.7 Q4 -0.1 -0.1 1.6 1.5 2018 Q1 0.7 0.7 1.2 1.2 0.3 0.3 0.2 0.2 Percentage change, latest quarter on corresponding quarter of previous year CVR8 CVS₂ CVS4 CVS6 CVS8 2016 Q1 1.1 -25.01.1 2.5 2.4 -0.1-25.0-0.12.1 1.9 Ω 2 Q3 0.6 -25.0 2.0 1.9 0.6 Q4 -25.00.5 0.4 -1.1-1.12017 Q1 -4.5 -4.5 3.1 2.7 Q2 -1.8-1.83.4 3.1 Q3 -2.8-2.82.4 2.1 Ω4 -1.5-1.552 48 2018 Q1 1.2 1.2 5.3 5.0 0.1 0.1 3.7

Source: Office for National Statistics

£million

¹ Financial intermediation services indirectly measured

² Non-seasonally adjusted

AMHHIS2 Alternative Measures of Households' Income and Saving Secondary Distribution of Income Account

£million

					s	econdar	y distributio	n of incom	e accou	nt				
		Resc	urces		Uses									
		0			D.5 Currer on income etc	, wealth	D.61 Net s	social contri	butions	0	D.7 Othe Trans			
	CASH BASIS Balance of gross primary income	other	Miscella- neous current transfers	CASH BASIS Total resources	Taxes on income	Other current taxes	Households' actual social contributions	Social insurance scheme service charge	Cash Basis Total	Social benefits other than social transfers in kind	Net non-life insurance premiums			CASH BASIS Total Uses
	B.5g_X	D.62	D.75	TR_X	D.51	D.59	D.613	D.61SC	D.61_X	D.62	D.71	D.75	B.6g_X	TU_X
2014 2015 2016 2017	CSJ2 926 980 984 426 1 001 579 1 036 959	342 470 347 156	8 466 7 913	CSJ3 1 265 876 1 335 362 1 356 648 1 391 118	RPHC 162 609 171 392 178 961 187 819	RNND 35 997 36 724 37 989 39 943	L8PU 68 053 68 733 70 723 73 887	M92L -18 213 -19 108 -19 930 -21 775	CSK7 49 840 49 625 50 793 52 112	L8TO 198 193 190 144	RNOG 27 633 28 234 27 526 29 226	34 487	CSJ4 958 269 1 016 301 1 026 702 1 046 130	1 356 648
Seasonally	adjusted													
2016 Q1 Q2 Q3 Q4	246 433 249 710 254 095 251 341	85 715 88 298 86 561 86 582	2 250 2 059 1 875 1 729	334 398 340 067 342 531 339 652	43 916 45 084 44 787 45 174	9 255 9 584 9 627 9 523	16 961 17 736 17 897 18 129	-4 834 -4 840 -5 120 -5 136	12 127 12 896 12 777 12 993	46 48 50 46	6 702 6 786 6 804 7 234	8 411 8 588 8 689 8 799	253 941 257 081 259 797 255 883	334 398 340 067 342 531 339 652
2017 Q1 Q2 Q3 Q4	254 185 258 133 260 226 264 415	87 369 86 905 87 447 84 521	1 723 1 919 2 011 2 264	343 277 346 957 349 684 351 200	47 910 45 103 46 946 47 860	9 625 10 128 10 150 10 040	18 214 18 323 18 623 18 727	-5 226 -5 391 -5 486 -5 672	12 988 12 932 13 137 13 055	34 38 35 37	7 471 6 994 7 503 7 258	8 900 8 861 8 935 9 048	256 349 262 901 262 978 263 902	343 277 346 957 349 684 351 200
2018 Q1 Q2	267 544 268 097	85 648 87 386	2 339 2 264	355 531 357 747	47 795 47 275	10 166 10 786	19 272 19 536	-5 744 -5 883	13 528 13 653	34 34	7 134 7 299	9 253 9 269	267 621 269 431	355 531 357 747
Percentage	e change, la	atest year	on previo	ous year										
2014 2015 2016 2017	CVS5 3.5 6.2 1.7 3.5	CSB9 0.7 3.6 1.4 -0.3	CVS9 -11.4 3.0 -6.5 0.1	CVT3 2.6 5.5 1.6 2.5	CVT5 2.3 5.4 4.4 4.9	CVT7 1.9 2.0 3.4 5.1	CVT9 5.5 1.0 2.9 4.5	CVU3 3.3 4.9 4.3 9.3	CVU5 6.3 -0.4 2.4 2.6		CVU9 -13.5 2.2 -2.5 6.2	CVV3 5.6 5.0 4.8 3.6	CVV5 3.0 6.1 1.0 1.9	CVV7 2.6 5.5 1.6 2.5
Percentage	e change, la	atest qua	rter on pre	evious quar	ter									
2016 Q1 Q2 Q3 Q4	-1.5 1.3 1.8 -1.1	CSE3 -2.1 3.0 -2.0	2.9 -8.5 -8.9 -7.8	-1.6 1.7 0.7 -0.8	-1.2 2.7 -0.7 0.9	0.7 3.6 0.4 -1.1	-3.2 4.6 0.9 1.3	-0.4 0.1 5.8 0.3	-4.2 6.3 -0.9 1.7		-5.4 1.3 0.3 6.3	0.4 2.1 1.2 1.3	-1.6 1.2 1.1 -1.5	-1.6 1.7 0.7 -0.8
2017 Q1 Q2 Q3 Q4	1.1 1.6 0.8 1.6	0.9 -0.5 0.6 -3.3	-0.3 11.4 4.8 12.6	1.1 1.1 0.8 0.4	6.1 -5.9 4.1 1.9	1.1 5.2 0.2 –1.1	0.5 0.6 1.6 0.6	1.8 3.2 1.8 3.4	-0.4 1.6 -0.6		3.3 -6.4 7.3 -3.3	0.8	0.2 2.6 - 0.4	1.1 1.1 0.8 0.4
2018 Q1 Q2	1.2 0.2		3.3 -3.2	1.2 0.6	−0.1 −1.1	1.3 6.1	2.9 1.4	1.3 2.4	3.6 0.9		-1.7 2.3		1.4 0.7	1.2 0.6
Percentage	e change, la	atest qua	rter on co	rrespondin	g quarter o	f previou	ıs year							
2016 Q1 Q2 Q3 Q4	CVS6 2.5 2.1 2.0 0.5	CSG3 3.6 4.1 -0.9 -1.1	CVT2 11.6 -9.3 -5.9 -20.9	CVT4 2.8 2.5 1.2 -0.1	CVT6 4.3 7.1 4.8 1.7	CVT8 2.1 4.5 3.6 3.6	CVU2 0.6 3.1 4.4 3.5	CVU4 1.9 3.9 5.5 5.8	CVU6 - 2.8 4.0 2.6		CVV2 -3.3 -4.2 -4.7 2.1	3.1 5.4	CVV6 2.9 1.8 0.4 -0.8	CVV8 2.8 2.5 1.2 -0.1
2017 Q1 Q2 Q3 Q4	3.1 3.4 2.4 5.2	1.9 -1.6 1.0 -2.4	-23.4 -6.8 7.3 30.9	2.7 2.0 2.1 3.4	9.1 - 4.8 5.9	4.0 5.7 5.4 5.4	7.4 3.3 4.1 3.3	8.1 11.4 7.1 10.4	7.1 0.3 2.8 0.5		11.5 3.1 10.3 0.3	5.8 3.2 2.8 2.8	0.9 2.3 1.2 3.1	2.7 2.0 2.1 3.4
2018 Q1 Q2	5.3 3.9	-2.0 0.6	35.8 18.0	3.6 3.1	-0.2 4.8	5.6 6.5	5.8 6.6	9.9 9.1	4.2 5.6		-4.5 4.4		4.4 2.5	3.6 3.1

AMHHIS2 Alternative Measures of Households' Income and Saving Secondary Distribution of Income Account

	Chained Volume Measures (Reference year 2016)							
	CASH BASIS Real Households' Expenditure implied deflator: Index	CASH BASIS Real Households' disposable income £million	CASH BASIS Real Households' disposable income per head £					
2014 2015 2016 2017	CSK9 98.6 98.7 100.0 102.5	CSJ6 971 718 1 029 602 1 026 768 1 020 777	CSK2 15 027 15 797 15 631 15 444					
Seasonally adjusted								
2016 Q1 Q2 Q3 Q4	99.6 99.8 99.8 100.9	255 020 257 682 260 416 253 650	3 893 3 925 3 961 3 852					
2017 Q1 Q2 Q3 Q4	101.9 102.3 102.3 103.4	251 603 256 970 257 075 255 129	3 816 3 891 3 886 3 851					
2018 Q1 Q2	104.1 104.2	257 140 258 556	3 875 3 890					
Percentage change, latest year on previo	us year							
2014 2015 2016 2017		CSJ7 1.8 6.0 -0.3 -0.6	CSK3 1.0 5.1 -1.1 -1.2					
Percentage change, latest quarter on pre	vious quarter							
2016 Q1 Q2 Q3 Q4		-1.8 1.0 1.1 -2.6	-2.0 0.8 0.9 -2.8					
2017 Q1 Q2 Q3		-0.8 2.1 -	-0.9 2.0 -0.1					
Q4		-0.8	-0.9					
2018 Q1 Q2		0.8 0.6	0.6 0.4					
Percentage change, latest quarter on cor	responding quarter of previous year							
2016 Q1 Q2 Q3 Q4		CSK4 2.0 0.7 -1.2 -2.4	CT3K 1.1 -0.2 -2.0 -3.1					
2017 Q1 Q2 Q3 Q4		-1.3 -0.3 -1.3 0.6	-2.0 -0.9 -1.9					
2018 Q1 Q2		2.2 0.6	1.5					

AMHHIS3 Alternative Measures of Households' Income and Saving Use of Disposable Income Account

£million

		Use of disposable income account								
	Resour	rces								
	CASH BASIS Households' gross disposable income	CASH BASIS Total available households' resources	CASH BASIS Individual consumption expenditure exc FISIM ¹ and imputed rent	CASH BASIS Gross saving	CASH BASIS Total uses	CASH BASIS Households saving ratio (%)				
	B.6g_X	TR_X	P.31_X	B.8g_X	TU_X					
2014 2015 2016 2017	CSJ4 958 269 1 016 301 1 026 702 1 046 130	CSJ4 958 269 1 016 301 1 026 702 1 046 130	CSK8 929 776 955 783 1 004 704 1 051 153	CSJ5 28 493 60 518 21 998 -5 023	CSJ4 958 269 1 016 301 1 026 702 1 046 130	CSJ8 2.9 5.9 2.1 -0.5				
Seasonally adjust	ted									
2016 Q1 Q2 Q3 Q4	253 941 257 081 259 797 255 883	253 941 257 081 259 797 255 883	246 473 249 420 252 983 255 828	7 468 7 661 6 814 55	253 941 257 081 259 797 255 883	2.9 3.0 2.6				
2017 Q1 Q2 Q3 Q4	256 349 262 901 262 978 263 902	256 349 262 901 262 978 263 902	260 070 261 768 262 649 266 666	-3 721 1 133 329 -2 764	256 349 262 901 262 978 263 902	-1.5 0.4 0.1 -1.0				
2018 Q1 Q2	267 621 269 431	267 621 269 431	269 724 271 153	–2 103 –1 722	267 621 269 431	-0.8 -0.6				
Percentage chang	ge, latest year on previous yea	r								
	CVV5	CVV5	CVW3		CVV5					
2014 2015 2016 2017	3.0 6.1 1.0 1.9	3.0 6.1 1.0 1.9	3.3 2.8 5.1 4.6		3.0 6.1 1.0 1.9					
Percentage chang	ge, latest quarter on previous	quarter								
2016 Q1 Q2 Q3 Q4	-1.6 1.2 1.1 -1.5	-1.6 1.2 1.1 -1.5	1.6 1.2 1.4 1.1		-1.6 1.2 1.1 -1.5					
2017 Q1 Q2 Q3 Q4	0.2 2.6 - 0.4	0.2 2.6 - 0.4	1.7 0.7 0.3 1.5		0.2 2.6 - 0.4					
2018 Q1 Q2	1.4 0.7	1.4 0.7	1.1 0.5		1.4 0.7					
	ge, latest quarter on correspor									
	CVV6	CVV6	CVW4		CVV6					
2016 Q1 Q2 Q3 Q4	2.9 1.8 0.4 -0.8	2.9 1.8 0.4 –0.8	4.6 4.9 5.5 5.4		2.9 1.8 0.4 -0.8					
2017 Q1 Q2	0.9 2.3	0.9 2.3	5.5 5.0		0.9 2.3					
Q3 Q4	1.2 3.1	1.2 3.1	3.8 4.2		1.2 3.1					
2018 Q1 Q2	4.4 2.5	4.4 2.5	3.7 3.6		4.4 2.5					

¹ Financial intermediation services indirectly measured

Alternative Measures of Households' Income and Saving National Accounts Measures

		National Accounts Measures								
			At chained volume measu	ires (reference year 2016)		Households' saving ratio (%)				
	Households' Gross	Real Households'	Real Households'	Per h	ead £					
	disposable income £million	Expenditure implied deflator: Index	disposable income £million	Gross Households' disposable income	Real Households' disposable income					
	B.6g									
	RPHA	DG2Q	DG2R	CRXS	CRXX	DGD8				
2014	1 181 904	98.1	1 205 399	18 277	18 640	8.6				
2015	1 252 317	98.5	1 271 023	19 213	19 499	9.4				
2016	1 268 454	100.0	1 268 454	19 310	19 311	6.6				
2017	1 293 841	102.1	1 266 639	19 592	19 180	4.2				
Seasonally adj	usted									
2016 Q1	313 407	99.4	315 381	4 784	4 814	7.8				
Q2	317 298	99.8	317 972	4 833	4 844	7.0				
Q3 Q4	320 477 317 272	99.9 100.9	320 783 314 318	4 874 4 819	4 879 4 774	6.9 4.6				
2017 Q1	318 191	101.7	312 937	4 825	4 746	3.2				
Q2	324 481	102.0	318 113	4 913	4 817	4.8				
Q3 Q4	325 261 325 908	102.0 102.9	318 925 316 664	4 917 4 919	4 822 4 780	4.5 4.2				
2018 Q1 Q2	330 729 332 667	103.8 104.0	318 734 319 889	4 984 5 005	4 803 4 813	3.6 3.9				
Percentage cha	ange, latest year on previo	us year								
	CSC7	CSC8	CSC9	CRXT	CRXY					
2014	3.2	2.0	1.2	2.4	0.5					
2015	6.0	0.4	5.4	5.1	4.6					
2016 2017	1.3 2.0	1.5 2.1	−0.2 −0.1	0.5 1.5	−1.0 −0.7					
Percentage cha	ange, latest quarter on prev	vious quarter								
	CSE9	CSEZ	CSF2	CRXU	CRXZ					
2016 Q1	-1.4	0.2	-1.6	-1.6	-1.8					
Q2	1.2	0.4	0.8	1.0	0.6					
Q3	1.0	0.1	0.9	0.8	0.7					
Q4	-1.0	1.0	-2.0	-1.1	-2.2					
2017 Q1	0.3	0.8	-0.4	0.1	-0.6					
Q2	2.0	0.3	1.7	1.8	1.5					
Q3 Q4	0.2 0.2	0.9	0.3 -0.7	0.1	0.1 -0.9					
2018 Q1 Q2	1.5 0.6	0.9 0.2	0.7 0.4	1.3 0.4	0.5 0.2					
Percentage cha	ange, latest quarter on cor	responding quarter of pre	evious year							
	CSG9	CSGE	CSGH	CRXV	CRYA					
2016 Q1	2.9	1.1	1.8	2.1	1.0					
Q2	1.8	1.3	0.5	1.0	-0.3					
Q3 Q4	0.6 -0.2	1.7 1.7	–1.1 –1.9	-0.1 -0.9	−1.9 −2.6					
2017 Q1 Q2	1.5 2.3	2.3 2.2	-0.8 -	0.9 1.7	-1.4 -0.6					
Q3	1.5	2.1	-0.6	0.9	-1.2					
Q4	2.7	2.0	0.7	2.1	0.1					
2018 Q1	3.9	2.1	1.9	3.3	1.2					
Q2	2.5	2.0	0.6	1.9	-0.1					