



## **Nowcasting Household Income in the UK: Financial Year Ending 2015**

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# Nowcasting household income in the UK: financial year ending 2015<sup>1</sup>

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In order to properly understand changes in households' economic well-being, it is important to have measures which reflect the experience of the typical household and can also provide a description of the distribution. However, the complexities of producing such measures means they are typically only available with a significant time lag. This article therefore presents a methodology for producing early/provisional estimates of median equivalised disposable income and other measures. This methodology builds upon the initial approach set out in a July 2015 paper, taking account of the helpful feedback received from experts and potential users of these estimates.

## 1. Introduction

In measuring how living standards have changed over time, median household disposable income is widely regarded as one of the most important indicators (see e.g. OECD, 2013; ONS, 2014, Stiglitz et al., 2009). Disposable income is the amount of money that households have available for spending and saving after direct taxes (such as income tax, national insurance contribution and council tax) have been accounted for. It includes earnings from employment, private pensions and investments as well as cash benefits provided by the state. The median household income is the income of what would be the middle household, if all households in the UK were sorted in a list from poorest to richest. As it represents the middle of the income distribution, the median household income provides a good indication of the standard of living of the “typical” household in terms of income.

However, most of the time we also want to have information on the whole distribution of household income and analyse not only a typical household but also those towards the top and bottom of the income distribution. The importance of looking at the distribution of income when assessing economic well-being has been emphasized by OECD (2013), Stiglitz et al. (2009) and many others.

A variety of inequality measures are calculated based on disposable income, including the most commonly used Gini coefficient. Together these measures provide evidence on how incomes are shared across households and how this is changing over time. However, one important limitation in using such measures as proxies for changes in material living standards is their lack of timeliness. Unlike macro-economic indicators such as GDP per head or Real Household Disposable Income (RHDI), which are typically available within a few months, statistics on the distribution of income in the UK and other countries are typically produced to a much longer timetable, reflecting to the complexity involved in collecting, processing and analysing household financial survey data. For example, ONS's Effects of Taxes and Benefits on Household Income publication has historically been released in June, approximately 15 months after the end of the income reference period.

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Up-to-date measures of household incomes provide a valuable tool for evaluating the impact of tax and benefit policies and for informing wider public debate on living standards. In order to address the considerable demand for more timely data it is necessary to consider the use of alternative methods for arriving at early distributional estimates, such as nowcasting. Nowcasting is an increasingly popular approach for providing initial estimates of such indicators. Unlike forecasting, which relies heavily on projections and assumptions about the future economic situation, nowcasting uses data on the income distribution for previous years, information on current tax and benefit policies, and key macro-economic variables to estimate current indicators. This paper presents an initial methodology for nowcasting some of the main indicators from ONS's Effects of Taxes and Benefits series in order to provide users with an early insight into the latest trends.

A number of organisations, including the Institute for Fiscal Studies (IFS), Resolution Foundation and New Policy Institute (NPI) have already carried out extensive work on nowcasting various income and poverty indicators for the UK. At an international level, Holly Sutherland and colleagues at the Institute of Social and Economic Research (ISER) have produced estimates of current income, risk-of-poverty and inequality for a number of other EU countries.

In order to estimate current median income and other distributional measures, it is important to capture how changes in macro-economic conditions affect households at different points of the income distribution. Microsimulation models are appropriate tools for taking into account the complex interactions between policy and changing household circumstances (Immervoll et al., 2006). In the context of nowcasting, what these models do is replicate the structure of the tax and benefit system currently in place and simulate how any changes to the system affect the distribution of disposable income.

Beyond reflecting changes in policies and the levels of income from sources such as earnings, there are other aspects that need to be considered when producing nowcast estimates of income. One of the main challenges in nowcasting is to adequately incorporate any changes in the labour market, such as increase in part-time employment, and any shifts in the demographic structure. In the analysis below, we have tried to address both of these issues.

It is important to mention that these are experimental statistics and as such, should be treated with caution. As with any other nowcast, the accuracy of our indicators will inevitably depend on many factors. Throughout the work feeding into this bulletin, we have tested a variety of approaches in order to develop a robust methodology and in the process have sought to learn from other experts in the field. It is, of course, unrealistic to expect nowcast estimates to perfectly reflect changes in the distribution of income, particularly when examining smaller subgroup of the population.

However, while nowcasting may be subject to some limitations, it has the benefit of producing timely estimates of household income and thus the potential to aid the design of effective tax and benefit policies and to facilitate monitoring of the impact of recent changes in other economic policies.

## **2. Methodology**

In the work reported in this paper, historical income data were used to nowcast the 2013/14 and 2014/15 distribution of disposable income. The growth rate between the two nowcasts was then applied to published 2013/14 estimates from the latest Effects of Taxes & Benefits on Household release, published 29 June 2015.

In order to capture how changes in macro-economic conditions affect households at different points of the income distribution, existing microsimulation tools used by the UK Government were combined with additional adjustments needed to reflect changes in labour market and other population characteristics over time. The nowcasting methodology used can be summarised in the following steps:

- Uprating income microdata to account for changes in financial variables such as growth in average wages;
- Implementing changes to cash benefits and direct taxes resulting from changes to rates, thresholds etc. ;
- Implementing changes to cash benefits and direct taxes resulting from more structural policy reforms; and
- Adjusting for changes to labour market participation and the demographic structure of the population through calibration weighting.

## **2.1 Data sources**

The nowcast data is built upon the Intra-Governmental Tax and Benefit Model (IGOTM). This is a microsimulation model of the UK tax and benefit system which allows for explicitly simulating the entire income distribution and for estimating the impact of tax and benefit changes that directly affect household incomes. IGOTM is maintained by HM Treasury, using data provided by ONS. It applies the rules of the current system to a large sample of household data to calculate net incomes after taxes and benefits.

The input data for IGOTM comes from the Living Cost and Food Survey (LCF) and The Effects of Taxes & Benefits on Household Income (ETB), which provide information on income, expenditure and important family characteristics. In order to improve precision of the estimates, the input dataset for IGOTM combines three years worth of data (2010/11, 2011/12 and 2012/13).

## **2.2 Uprating financial variables**

The first step of the nowcasting process is to uprate the base dataset that feeds into IGOTM to values for the year for which nowcast estimates are being produced. Different income sources are uprated by different factors, using published series produced by ONS and others for periods where actual data is available. Office for Budget Responsibility (OBR) average earnings and inflation forecasts are used in IGOTM for later periods.

Earnings data are uprated forward to reflect the financial year being modelled, using historical Annual Survey of Hours and Earnings (ASHE) data on earnings growth at different points across the distribution as well as the latest average earnings estimates from National Accounts.

Other financial variables are uprated in the following way<sup>2</sup>:

- Income from self-employment, incomes from odd jobs and private sector rents are uprated in line with average earnings;
- Incomes from private pensions and annuities are uprated in line with growth in pension income at the individual level from ETB for those years where data are available;
- Incomes from other miscellaneous sources are uprated in line with the RPI;
- Incomes from the main government benefits are uprated in line with the CPI, or other values as appropriate.

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<sup>2</sup> For a full table with uprating factors see Technical Annex

## 2.3 Implementing policy changes

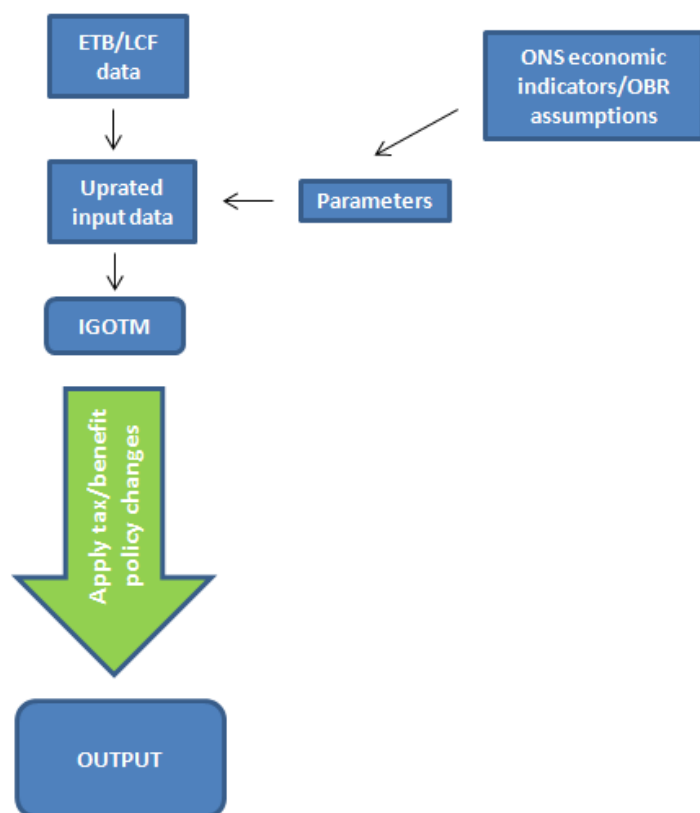
Once the relevant parameters are updated and the new input dataset is created, it is run through IGOTM where a new costing is produced. For each individual case, the rules of the current tax and benefit system for the year being nowcast for are applied. The model then calculates how much individual direct and indirect taxes are due and what level of benefits and tax credits would be received in that year. These rules are applied at either the individual, family (benefit unit) or household level as appropriate.

Some of the main tax and benefit changes occurring during 2014/15 included:

- **Child Tax and Working Tax Credits:** The basic element of Working Tax Credit (WTC) rose by £20 (around 1%) to £1,940 a year. The family element of Child Tax Credit (CTC) was frozen at £545 a year, while the child element rose by £30 (around 1%) to £2,750.
- **Benefit uprating:** Benefits for working age people, including Universal Credit, Jobseeker's Allowance and Income Support were increased by 1% in April 2014, below the rate of inflation. Benefits received by disabled people and pensioners (including Personal Independence Payments, Attendance Allowance and Incapacity Benefit) were increased in line with the Consumer Prices Index (CPI) at 2.7%. The State Pension was also increased by 2.7% due to the 'triple lock' which guarantees to increase the basic State Pension by the higher of inflation, average earnings or a minimum of 2.5% every year.
- **Personal Independence Payment:** The roll-out of Personal Independence Payment (PIP) continued during 2014/15. PIP is replacing Disability Living Allowance (DLA) for adults aged under 65 in England, Wales & Scotland. PIP is made up of 2 components and paid at a standard and enhanced rate which increased by Consumer Prices Index (CPI) at 2.7% for 2014/15. Eligibility for PIP is assessed using different criteria than for DLA. This assessment includes a review of an individual's ability to participate fully in society rather than the severity of impairment. All new claimants were assessed for PIP from June 2013. During 2014/15, existing DLA claimants were invited to be assessed for PIP in an increasing number of postcode areas.
- **Child Benefit:** The rate for a first child rose by £0.20 (around 1%) to £20.50, while the rate for second & subsequent children rose by £0.15 (around 1%) to £13.55 per week, having been frozen for the 3 previous years.
- **Income Tax:** Age related personal allowances continued to be phased out. The personal allowance for those born after 5 April 1948 increased from £9,440 to £10,000. By contrast, the personal allowances for those born between 6 April 1938 - 5 April 1948 and those born before 6 April 1938 remained at £10,500 and £10,660 respectively. In addition, there was a reduction in the starting level for the higher rate band, from £32,011 to £31,866. Combined with the personal allowance, this meant that people paid the higher rate of 40% on any taxable income above £41,865, up from £41,450 in 2013/14.
- **Council Tax:** In 2014-15, 60% of eligible local authorities in England made use of a Council Tax freeze grant. This meant that the average band D dwelling council tax set by local authorities in England for 2014-15 was £1,468, an increase of £12 or 0.9% on 2013-14. Council Tax levels were frozen in all local authorities in Scotland. However, in Wales, the average band D Council Tax increased by 4.2% compared with 2013/14.

The model assumes incomplete take-up of benefits and tax credits. Figure 1 provides a summary of the IGOTM process.

**Figure 1: IGOTM process**



Although very similar, the income measures produced through IGOTM are not conceptually identical to those used by ONS for its ETB publication. Therefore, where appropriate and possible, further adjustments are made to align the definition of income measures in IGOTM with those from ETB. (For example, including the value of employer benefits in-kind such as company cars).

## 2.4 Accounting for labour market and demographic changes

As a static micro-simulation model, IGOTM does not take account of any possible behavioural responses to policy changes or make adjustments for demographic changes. It assumes, for example, that the supply of labour is unchanged in response to changes in benefit entitlement. We have chosen to re-calibrate the original ETB weights to account for shifts in labour market participation and demographic characteristics of the UK population between the period when the LCF data were collected and the period for which nowcasts are being produced.

For the main ETB dataset and publication, each household in the microdata is initially given a design weight to account for the probability of selection in the sample. These weights are then adjusted to reduce bias from non-response and the sample distribution is calibrated to match the population distribution in terms of region, age group and sex.

In order to ensure consistency between the nowcasts and the actual data, it is desirable for the non-response adjusted design weights to be calibrated using new population totals matching those used for the original weights. Hence, the re-calibrated weights are calculated using the same calibration variables as the original ETB weights, along with an additional calibration constraint - Economic

Status. This allows the incorporation of labour market changes in the analysis. Under the version of the nowcasting methodology presented in this paper, individuals are grouped in twelve categories according to their economic status. More details are available in the Technical Annex of this publication.

Population totals for this additional calibration constraint are based on estimates coming directly from the Annual Population Survey, as opposed to the regional, age group and sex population controls, projections for which are taken from the most recent Census and updated annually by birth and death counts, as well as by immigration estimates coming from the International Passenger Survey (IPS). As the Economic Status estimates as employment/unemployment rates are drawn from a sample survey (albeit one with a very large sample) the level of precision will be lower. Nevertheless, including this additional calibration constraint is important as changes in levels and patterns of labour market participation are likely to be a key driver in changes to household incomes.

The full list of population totals used for calibration is presented in the Technical Annex. In conjunction with the uprating and simulation of policy changes, this process enables us to create a ‘synthetic’ population for the relevant year.

## **2.5 Arriving at nowcast estimates for 2014/15**

To arrive at nowcast estimates of the indicators of interest, the relevant nowcasts for 2013/14 and 2014/15 are produced separately. The growth rate between the two nowcasts is then applied to published 2013/14 estimates from the latest ETB release. The advantage of focusing on the size and direction of change rather than the level of the indicators has to do with the uncertainty around the nowcast estimates. Nowcasts of direction and scale of change are likely to be more reliable than the point estimates for a given year (Goedeme, 2010). Confidence intervals for the point estimates for 2013/14 and 2014/15 have been produced and are included in the accompanying statistical bulletin and have been used in informing the statistical commentary. ONS methodology for assessing the uncertainty associated with these estimates is still under development, and it is hoped that in future iterations, it will be possible to produce confidence intervals associated with the level of change between the two estimates.

## **3. Results**

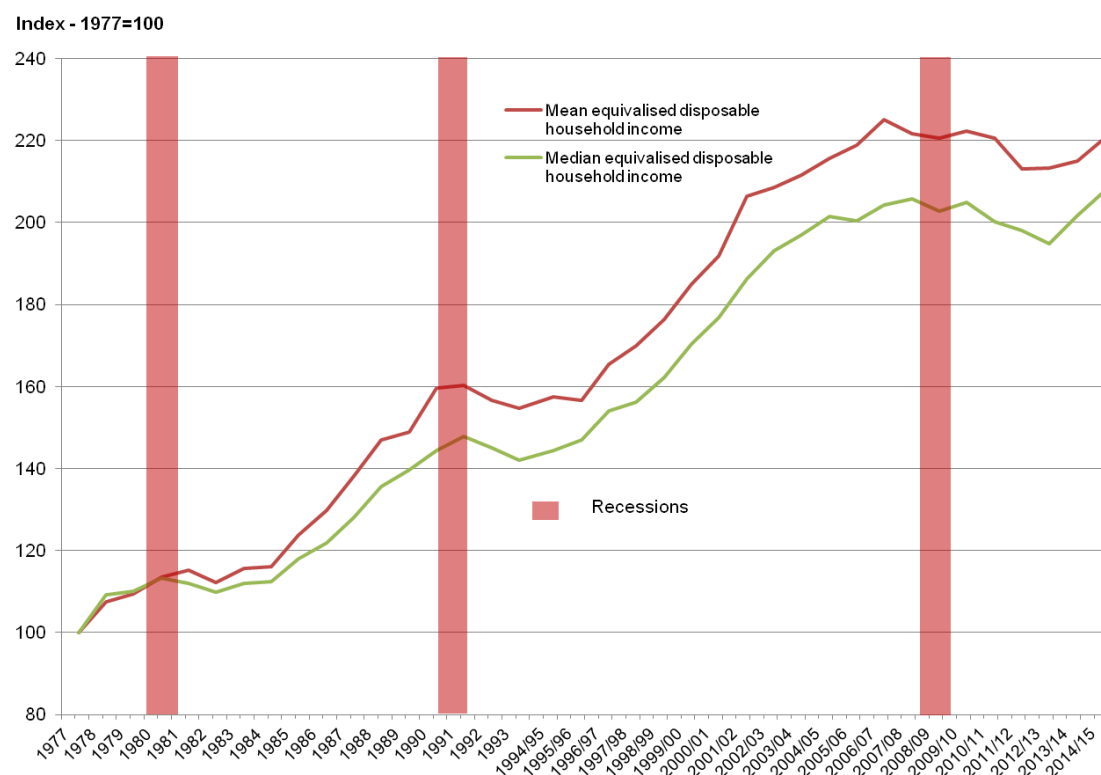
### **3.1 Disposable income**

Figure 2 presents how our nowcast estimates fit into the longer term trend of growth in mean and median disposable income. Based on the provisional estimates, the median household disposable income was £25,600 in 2014/15. After taking account of inflation<sup>3</sup> and changes in household composition over time, this figure is broadly comparable to the pre-economic downturn level observed in 2007/08 (£25,400).

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<sup>3</sup> All income measures given in this article for the UK have been deflated to 2014/15 prices using an implied deflator for the household sector in order to give a better comparison of households’ standards of living

**Figure 2: Change in mean and median equivalised disposable household income, 1977 – 2014/15**



**Notes:**

1. Indices are calculated relative to 1977 values
2. 1994/95 represents the financial year ending 1995, and similarly through to 2014/15, which represents the financial year ending 2015
3. Income figures have been deflated to 2014/15 prices using an implied deflator for the household sector
4. Income is equivalised using the modified-OECD scale

There has been a broadly similar pattern of growth in mean household income, with the provisional estimate for 2014/15 £30,700, up from £29,700 in 2012/13. An important factor contributing to the growth in average disposable incomes has been rising income from employment. Average earnings grew in real terms in 2014/15, and the continued growth in employment rates meant that this impact was felt more strongly in household incomes.

In order to evaluate the accuracy of our nowcast estimates we compare them to actual survey estimates, published in February 2016. Figure 3 shows the estimated percentage change in the value of median equivalised disposable income between 2013/14 and 2014/15 based on both the preliminary nowcasts and the final estimates. Differences between nowcast and actual estimates are larger for retired and non-retired households than for all households. Overall, the results appear promising.



**Figure 3. Growth in median disposable income from 2013/14 to 2014/15 – comparison between nowcast and survey-based estimates**

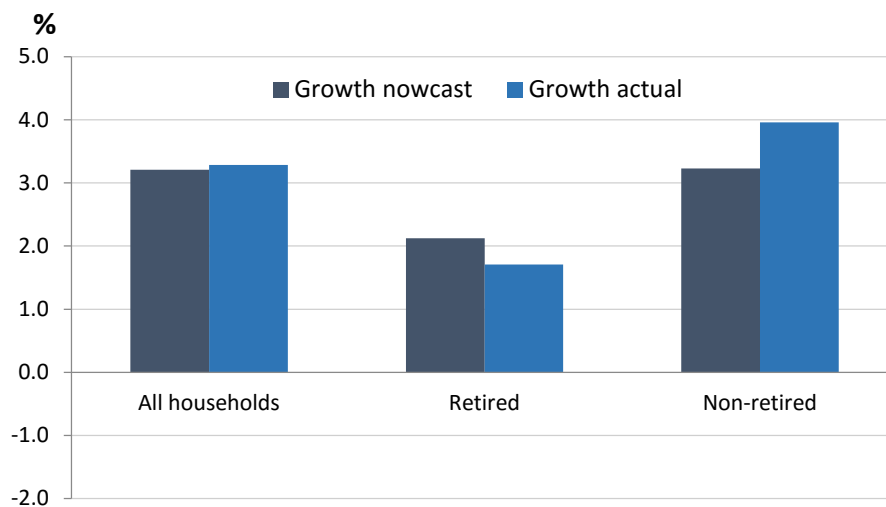
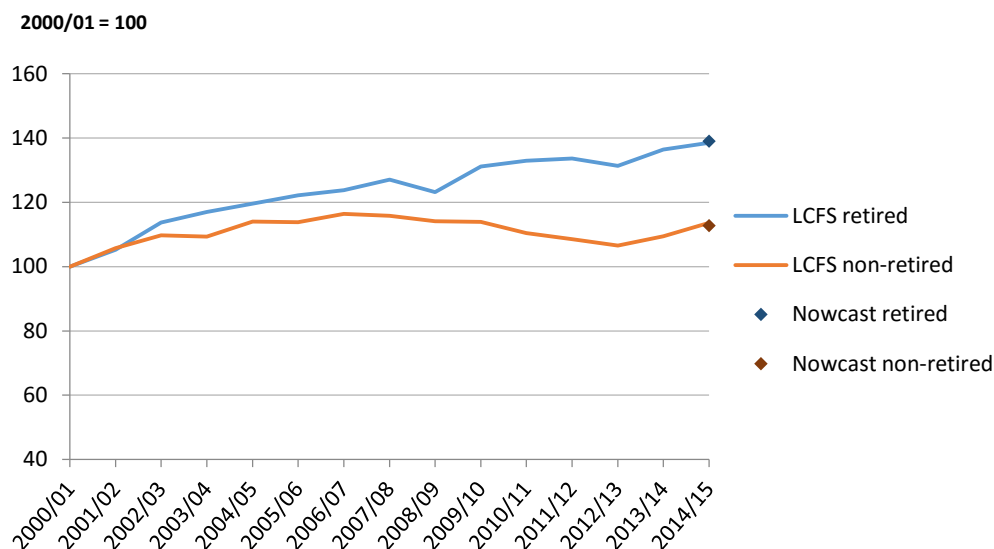


Figure 4 shows the growth of median household disposable income for retired and non-retired households. For both groups, the nowcast estimate for 2014/15 appears to be close to the actual estimate. The 2014/15 nowcasts show the same pattern of growth rates as the survey based estimates, with higher levels of growth in the incomes of non-retired households than retired households between 2013/14 and 2014/15. These same patterns for retired and non-retired households are also observed in the value of mean disposable income.

**Figure 4. Median household disposable income by household type - retired vs non-retired, indexed 2000/01 – 2014/15**



The growth in the incomes of retired households since 2007/08 has been driven by a number of factors. One is a rise in both the amounts received and the number of households reporting receipts

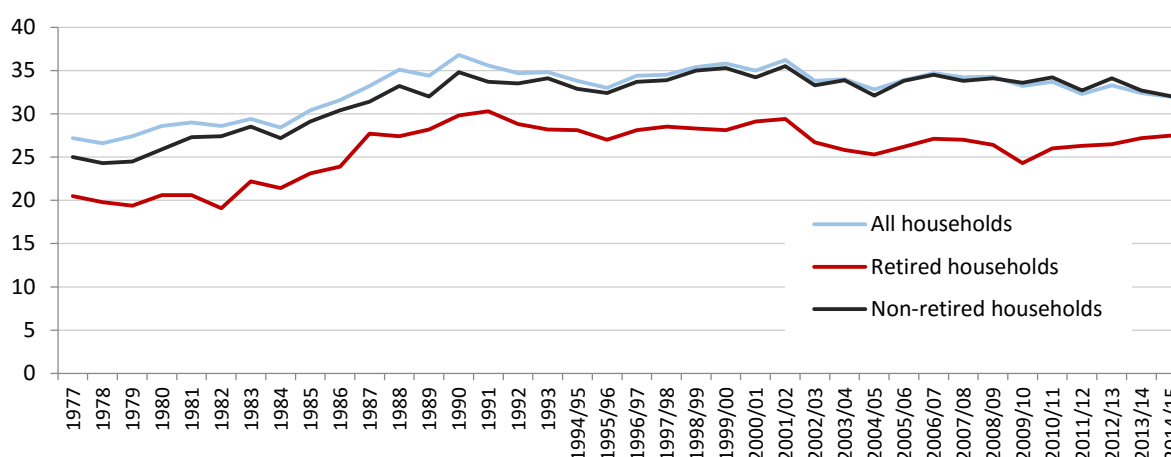
from private pensions/annuities. Another is an increase in average income from the state pension, due in part to the impact of the ‘triple lock’<sup>4</sup>. The fall in average disposable income for non-retired households after the economic downturn reflected largely a fall in income from employment (including self-employment). Similarly, it is earnings growth at the household level, in part due to rising employment levels, which has been the main driver of the most recent increases in average income for non-retired households

### 3.2 Gini coefficient

There are a number of different ways in which inequality of household income can be presented and summarised. Amongst them, the Gini coefficient is perhaps the most commonly used internationally. It ranges between 0 and 100, and the lower the value, the more equally household income is distributed.

Figure 3 shows that in recent years, there has been relatively little change in levels of income inequality for all households. Inequality of disposable income for retired households has followed a similar trend, increasing significantly during the 1980s and peaking at 30.3% in 1991. In recent years, there is evidence of a slight increase in inequality for retired households. In 2014/15, the provisional estimate of the Gini coefficient for disposable income amongst retired households was 27.5%, up from 24.3% in 2009/10.

**Figure 3: Gini coefficients, 1977 to financial year ending 2015**



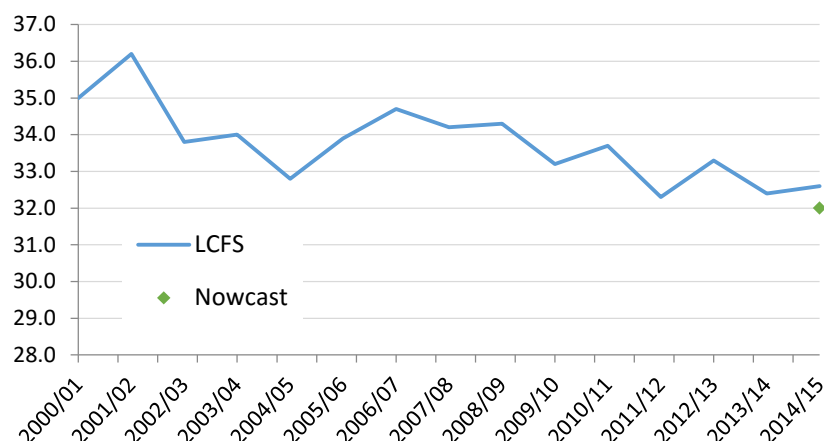
**Notes:**

1. On this figure 1994/95 represents the financial year ending 1995, and similarly through to 2014/15, which represents the financial year ending 2015

Figure 4 shows that the nowcast estimate for the Gini coefficient for disposable income in 2014/15 (32.0%) is slightly lower than the published estimate of 32.6%, but is not statistically significantly different from the 2013/14 value of 32.4%. Nevertheless, it is still in line with the longer-term trend, which is showing a very gradual decline in inequality on this measure since 2006/07.

<sup>4</sup> A mechanism currently used by the government which guarantees to increase the basic State Pension by the higher of inflation, average earnings or a minimum of 2.5% every year.

**Figure 4. Gini coefficients for equivalised disposable income - comparison between nowcast and survey-based estimates, 2000/01 – 2014/15**

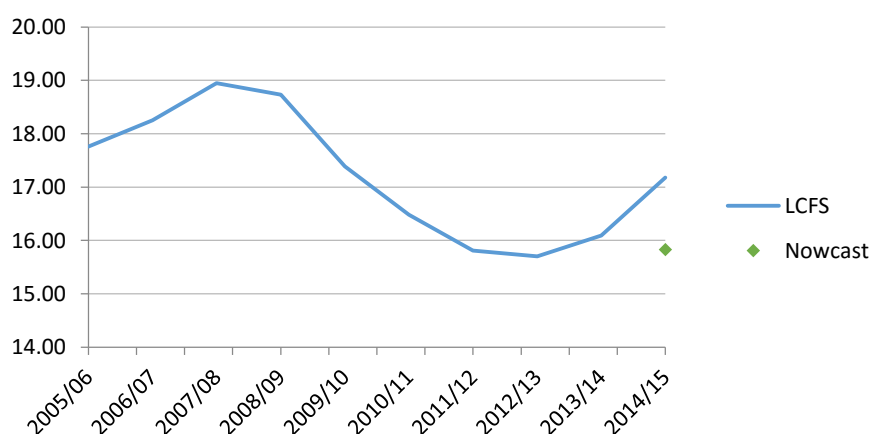


### 3.3 At-risk-of-poverty rate (AROP)

In this section, we present results on the provisional survey estimate of AROP rate. AROP rate is defined as the share of people with an equivalised disposable income below 60% of the national median equivalised disposable income.

Figure 5 shows a comparison of the nowcast AROP rate for 2014/15 with the actual survey based estimate. The 2014/15 nowcast estimate has moved in a different direction to the actual estimate. It should be noted, however, that the nowcast change from 2013/14 to 2014/15 is not statistically significant and, neither is the change between these two years in the observed survey estimate.

**Figure 5. AROP indicator - comparison between nowcast and survey-based estimates, 2000/01 – 2014/15**



This highlights a couple of important reasons to be caution in producing and using nowcasts of AROP. First of all, AROP rates are extremely sensitive to the thickness of the income distribution around the cut-off point of 60% of median income which makes them uncertain and unstable. Second, year-on-year changes AROP are typically not statistically significant and it is therefore arguably preferable to focus on the trend rather than on individual data points. Both the nowcast and survey estimates show no evidence of change in the AROP rate. However, in numerical terms, one has

increased and one has decreased, something which could potentially cause communication challenges, particularly for working with users who may not appreciate that both figures are estimates.

## **5. Conclusion**

There is considerable user demand for more timely data on the distribution of household income. While nowcasting may be subject to some limitations, ONS's view is that it has the benefit of producing timely estimates of household income and thus the potential to facilitate monitoring of the effects of recent changes in economic policies. Nowcasting is a more reliable approach than forecasting as it combines both actual data for components that are known. The evidence gathered as part of this grant action suggests that it may have the potential to be a suitable approach to producing early estimates of key income indicators while waiting for survey based estimates to become available. However, there remain considerable questions regarding the potential for nowcasting to produce reliable estimates for measures using thresholds, such as the At-Risk-of-Poverty rate.

Throughout the development work feeding into these outputs, a variety of approaches have been tested in order to develop a robust methodology, and the experience of external experts has been used in order to make use of international best practice. Despite this, it is unrealistic to expect nowcast estimates to perfectly reflect changes in the distribution of income, particularly when examining smaller subgroups of the population, so the estimates should be treated as providing an early indication of what the full survey-based data will show.

The nowcast statistics that have been produced are experimental, and have only been produced for two years (2013/14 and 2014/15). It is possible that although the nowcasts produced for these years appear robust, particularly when using the revised methodology, it is possible that in different years, and under different economic circumstances, the nowcast estimates will be less reliable.

It is therefore proposed that these statistics remain as Experimental Statistics and, subject to resource availability; ONS will continue to develop them and assess quality against other data sources. As well as continuing to revise and enhance the methodology, there is potential to expand the work to consider a broader set of indicators, including, for example, changes in income by quintile or decile.

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## Technical Annex

### Accuracy and reliability of nowcast estimates

The nowcast estimates are subject to the same degree and types of statistical error as any other analysis based on survey data. In particular, as the LCFS data is a sample survey, the estimates are subject to sampling error. Surveys gather information from a sample rather than from the whole population. The sample is designed carefully to allow for this, and to be as accurate as possible given practical limitations such as time and cost constraints, but results from sample surveys are always estimates, not precise figures. This means that they are subject to a margin of error which can have an impact on how changes in the numbers should be interpreted, especially in the short-term. In practice, this means that small, short-term movements should be treated as indicative, and considered alongside medium and long-term patterns in the series.

As well as sampling error, all statistics, including these ‘nowcast’ estimates, are also subject to non-sampling error. Non-sampling error includes all sources of data error that are not a result of the way the sample is selected. There are a wide number of different types of potential non-sampling error, including coverage error, non-response and measurement error.

Using micro-simulation and nowcasting techniques to estimate distribution of income, provides an additional source of non-sampling error in the estimates. The simulation process can introduce sources of error due to, for instance, approximations in the simulation of tax benefit rules, adjustments for non-take up, uprating of financial parameters and socio-demographic characteristics to the simulation year or ignoring behavioural responses (see for example, Sutherland et. al, 2014). On the other hand, simulation can arguably improve the consistency of results relative to survey based estimates through simulating the exact rules of the tax and benefit system.

### Variable uprating

Most of the variables are updated before IGOTM is run, with the exception of household consumption and expenditure on fuel and power, which are uprated in IGOTM itself. All the variable uprated are grouped into 12 categories, so there are 12 different sets of uprating variables as shown in Table 1 below.

**Table 1. Uprating Sources**

Variable uprated	Series used
Income from employment, self-employment, odd jobs	Average Earnings <sup>5</sup>
Income from annuities, private pensions and other income sources	RPI
Income from banks & building society interest	RDEP <sup>6</sup>
Income from dividends	NDIVHH <sup>7</sup>
Private sector rent and rental income	Average Earnings
Income from main government benefits	CPI
Income from other government benefits (including JSA)	CPI
Statutory sick pay	Statutory Sick Pay rates
Mortgage interest	LHP; RMORT; number outstanding mortgages; interest payment per mortgage per year <sup>8</sup>
Registered social landlords	RPI
Local authority rents (before rebates)	RPI
Water Rates	Average water bill <sup>9</sup>

<sup>5</sup> Average earnings = Source: ONS. Wages and salaries (ONS UK Economic Accounts, ONS identifier: DTWM-ROYK) divided by employees (ONS Labour Market Statistics, ONS identifier: MGRZ-MGRQ)

<sup>6</sup> Deposit rates ("RDEP") = Source: Bank of England. Weighted average rates for sight deposits (Bankstats code: CFMHSCV) and time deposits (Bankstats code: CFMHSCW).

<sup>7</sup> Dividend receipts of households ("NDIVHH") = Source: ONS, UK Economic Accounts ONS identifier: NRKU

<sup>8</sup> Mortgage debt ("LHP") = Source: ONS. Secured debt on dwellings (ONS UK Economic Accounts, ONS identifier: NNRP); Mortgage rates ("RMORT") – Average interest rate on mortgages (Source: Bank of England; Bankstats code: CFMHSDE)

<sup>9</sup> Average water bills are projected forward using price limits set by OfWat

### Re-weighting

As a standard procedure across the majority of ONS surveys, the LCF is calibrated to known population totals for Region and Age/Sex groups. These population totals come directly from projections taken from the most recent Census, which are constantly updated with reliable information derived from birth and death counts, migration rates and immigration counts.

The LCF data is weighted at household level where the design weights represent the inverse probability of selection of a household. The weights are then adjusted to reduce bias from non-response, using scaling factors developed from information taken from the Census Non-Response Link Study (CNRLS). These design weights are then fed into Generalized Estimation System (GES), which adjusts the weights of each household, using information on the region of the household and the age and sex of household members (the latter often gathered by proxy). This calibration process uses known information to improve representiveness of the estimates across these groups. Re-calibration of the existing weights involves using updated control totals and an additional constraint – economic status.

The new weights are calibrated to the population totals of the following Sex/Age groups:

1. Male/ female 0-15
2. Male 16-19
3. Male 20-24
4. Male 25-29
5. Male 30-44
6. Male 45-54
7. Male 55-64
8. Male 65-74
9. Male >75
10. Female 16-19
11. Female 20-24
12. Female 25-29
13. Female 30-59
14. Female 60-69
15. Female 70-79
16. Female >80



The following 12 regions:

1. North East
2. North West
3. Merseyside
4. Yorkshire & Humberside
5. East Midlands
6. West Midlands
7. Eastern London
8. South East
9. South West
10. Wales
11. Scotland
12. Northern Ireland

And the following employment groups:

1. Self-employed with children
2. Self employed without children
3. Full-time employed with children
4. Full-time employed without children
5. Part-time employed with children
6. Part-time employed without children
7. Unemployed & work related Government Training Programmes with children
8. Unemployed & work related Government Training Programmes without children
9. Retired/occupied and of the minimum NI Pension Age & Retired/occupied and below the minimum NI Pension Age with children
10. Retired/occupied and of the minimum NI Pension Age & Retired/occupied and below the minimum NI Pension Age without children
11. Women between 60 and 64 in employment
12. Under 16

**95 per cent confidence intervals for key statistics from Nowcasting household income in the UK: Financial year ending 2015 , comparison between published 2013/14 estimates and 2014/15 nowcasts**

		Published estimates 2013/14			Nowcast estimates 2014/15		
		Disposable income			Disposable income		
		Lower bound	Published estimates	Upper bound	Lower bound	Published estimates	Upper bound
All households	Gini coefficient (%)	31.4	32.4	33.4	31.4	32.0	32.5
	Median equivalised disposable income (£ per year)	24,057	24,500	24,943	25,303	25,630	25,958
Retired households	Gini coefficient (%)	25.2	27.2	29.2	26.8	27.5	28.2
	Median equivalised disposable income (£ per year)	19,827	20,388	20,949	20,776	21,108	21,439
Non-retired households	Gini coefficient (%)	31.5	32.7	33.9	31.0	32.0	33.1
	Median equivalised disposable income (£ per year)	26,154	26,853	27,552	27,673	28,092	28,512

*Source: Office for National Statistics*

**Notes:**

- 1 Households are ranked by equivalised disposable income, using the modified-OECD scale
2. Reported confidence intervals for 2014/15 published estimates based on calculated standard errors for nowcast point estimates derived from micro-simulation outputs
3. All monetary values in this table are presented in current prices

