

Background Quality Report: Personal Incomes Statistics release 2010-11

Dimension	Assessment by the author
Introduction	<i>Context for the quality report.</i>
	<p>The statistics tables provide detailed information on individuals liable to UK income tax and their incomes, including gender, age, income and tax distribution, income source and geographical breakdowns. These tables are restricted to taxpayers only.</p> <p>The statistics are produced from the Survey of Personal Incomes (SPI), an annual sample survey carried out by HMRC that covers income assessable to income tax for each tax year and is based on information held by HMRC on individuals who could be liable to UK income tax.</p> <p>The SPI is derived from three administrative data sources: National Insurance & PAYE Service (NPS), Computerised Environment for Self Assessment (CESA) system and the Claims system.</p> <p>The SPI is compiled to provide a quantified evidence base from which to cost proposed changes to tax rates, personal allowances and other tax reliefs for Treasury Ministers. It is used to inform policy decisions within HMRC and the Treasury, as well as for tax modelling and forecasting purposes. In addition, it is used to provide summary information for the National Accounts that are prepared by the Office for National Statistics. Finally, it is used to provide information to Members of Parliament, other Government Departments, companies, organisations and individuals.</p> <p>For more information, please refer to section 1: Introduction and Background and Annex B: Data sources and Methodology in the Personal Incomes Statistics release 2010-11.</p>
Relevance	<i>The degree to which the statistical product meets user needs in both coverage and content.</i>
	<p>A recent user consultation held in spring 2012 for these statistics identified that some users would like more percentile points included in Table 3.1. A new table 3.1a, which included all percentile points, was published alongside the 2011-12 results in December 2012. With this exception, other users who responded to the consultation appear to be content with both the coverage and content of the statistics.</p> <p>The results from this consultation and HMRC's response are available at the link below.</p> <p>Results of User Survey of Personal Income Statistics</p> <p>Requests received for further analysis also tend to be specific and quite varied such that few common themes have emerged that would merit the introduction of new or the redesign of existing tables.</p>
Accuracy and Reliability	<i>The proximity between an estimate and the unknown true value.</i>
	<p><u>Sample response bias</u></p> <p>The sample is drawn from records held on HMRC transactional systems and the available information reflects what is known about the cases approximately one</p>

	<p>year after the tax year to which the survey relates. Allowance is made for Self Assessment cases yet to file a return and the overlap between the Self Assessment and PAYE systems when estimating the likely final mature population for the tax year. The SPI data reflects the information held on HMRC systems at the time the sample was drawn, therefore values associated with some cases, particularly in Self Assessment could continue to evolve after the survey is completed.</p> <p><u>Sampling error and bias</u> A stratified random sample is drawn across the three transactional systems. Cases are categorised by income band and other characteristics. Categories involving higher incomes tend to be sampled more intensively to improve the precision in estimates of total income. Confidence Intervals are published for sub-UK estimates. The methods for estimating the structure of the final mature population and dealing with item level non-response by imputation are designed to address the most significant sources of potential bias.</p> <p><u>Case and item level non-response</u> Case level non-response arises primarily because of late filing of tax returns. This is dealt with by estimating the likely size of the final mature population. Item level non-response refers to when a sample record has incomplete information for some characteristic. Age, gender and postcode are key variables for published statistics and if these items are missing from sample records, others sources are examined.</p> <p>For most cases in the PAYE system, it is not necessary to know about taxed interest, dividends, gift aid etc as an additional charge or relief is only due for higher rate cases. To create a complete estimate of total income for such cases, an imputation process allocates amounts randomly to cases so that population estimates follow pre-determined distributions.</p> <p><u>Non sample response bias</u> Accuracy of SPI survey responses is based on information from HMRC systems that are used to administer the income tax system, which ensures that the most accurate picture of declared personal incomes is used for the production of these statistics.</p> <p>Once the initial SPI dataset is completed, values of bank and building society interest and dividends are imputed to some sample cases due to the coverage of investment income for the sample drawn from NPS being incomplete. It is incomplete because HMRC does not need information on interest from which tax has been deducted at source nor dividends and associated tax credit to operate the PAYE system for most individuals. Also superannuation contributions are imputed to all earnings records in order to derive a figure for total income. This is necessary because these pension amounts are already deducted from the reported taxable pay.</p>
<p>Timeliness and Punctuality</p>	<p><i>Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.</i></p> <p><u>Timeliness</u> The reference period for the national statistics is the income tax year ending on 5 April. Statistics for the income tax year will normally be published 20 months</p>

	<p>(national) and 21 months (sub UK) after the end of the tax year. The information is drawn from the transactional systems approximately a year after the reference period and it takes about 8-9 months to turn the raw dataset into information and commentary ready for publication.</p> <p><u>Punctuality</u> National Statistics for 2010-11 were published on time in December 2012 (national) and are scheduled to be published in January 2013 (sub UK). For 2009-10 statistics were published in February 2012 (national) and March 2012 (sub UK), two months later than the normal publication schedule. Users were notified of the delay in two separate announcements in February and December 2011.</p> <p>National statistics for 2008-09 are not yet available because it was not possible to obtain a full set of the data required to update the SPI with comprehensive information on individuals' income and tax liabilities in time to process the 2008-09 data before starting on the 2009-10 SPI. Therefore a decision was made to prioritise the 2009-10 SPI over the 2008-09 SPI so as to provide more up to date information earlier. HMRC has yet to announce the publication date but is committed to producing the 2008-09 SPI and National Statistics tables 3.1 to 3.15 for 2008-09.</p>
<p>Accessibility and Clarity</p>	<p><i>Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.</i></p> <p>The Personal Incomes Statistics releases (national and sub UK levels) can be found at the Personal Incomes page within the HMRC website. The personal incomes page is within "Income tax and personal incomes" that is contained within "Personal Taxes, which is contained within the "National and official statistics" page on the HMRC website</p> <p>The full release is made available in a PDF format, which includes all commentaries, notes, tables, charts and glossary of terms. This can be viewed using free software. The tables themselves are available in both PDF and excel formats.</p> <p>The tables also contain multiple footnotes and commentaries which help to clarify the information provided as fully as possible. If the user is still unsure or further analysis is required then the contact details of both the SPI team and leading statisticians are contained in the release and on the individual tables. There is also a HMRC User engagement form available for all users.</p> <p>SPI 2010-11 release can be found at:</p> <p>Personal Income Statistics</p> <p>The SPI user survey can be found at:</p> <p>SPI User Survey</p>
<p>Coherence and Comparability</p>	<p><i>Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability</i></p>

	<p><i>is the degree to which data can be compared over time and domain.</i></p> <p><u>Coherence</u> Estimates from the Personal Incomes statistics tables may be compared with some higher level figures from the Tax Liability statistics tables for 2009-10 published here:</p> <p>Income Tax Statistics and Distributions</p> <p>However, the estimates in the Tax Liability Statistics section should be treated as indicative because they are forecasts that were produced by the Personal Tax Model which used the 2009-10 SPI data as its base data.</p> <p>It is also possible to compare these statistics to those on tax receipts for the relevant years which are available here;</p> <p>Income Tax Receipts</p> <p><u>Comparability</u></p> <p>Standard Industrial Classifications (SIC 2007) have been used in the latest statistics to allow comparison with other published sources. Similarly standard Income range bands, age bands and Geographies are used.</p> <p>Comparability is to some extent determined by the scope of income tax and allowable reliefs which drives the information available from HMRC administrative systems.</p> <p>The Personal Incomes statistics release highlights any changes made in methodologies such as the calculation of figures that are presented in the data or data issues (if any).</p> <p>Data quality assurance checks involve checking the number of taxpayers, total income and amount of tax throughout the National Statistics tables. Values to be published are also compared with the projected figures from the Personal Tax Model.</p>
<p>Trade-offs between Output Quality Components</p>	<p><i>Trade-offs are the extent to which different aspects of quality are balanced against each other.</i></p> <p>The Personal Incomes statistics release and the tables contain notes and statements showing the imputed figures and explaining the risks of them.</p> <p>Sample size – this is big enough to provide acceptable level of precision for most of the detailed analyses required.</p> <p>Limitations on size of sample include the amount of effort that would be required to cleanse/impute information to sample cases for item non response and the additional processing time that would be required if a much larger SPI were to form the base for simulations undertaken by the Personal tax model.</p>

Assessment of User Needs and Perceptions	<p><i>The processes for finding out about users and uses, and their views on the statistical products.</i></p> <p>Contact details for the responsible statisticians are available on the website and in the release for users to provide feedback, comments or queries on our National Statistics tables. There is also a specific email address for queries relating to these statistics as well as a general HMRC National Statistics email address.</p> <p>A user survey asking a range of questions about our publication was concluded and the results published here.</p> <p>Results of User Survey of Personal Income Statistics</p> <p>This was implemented to raise user engagement and to allow us to update our process to reflect what customers want from our publication.</p> <p>A query log of SPI enquiries is also held which is used to identify any recurring trends.</p>
Performance, Cost and Respondent Burden	<p><i>The effectiveness, efficiency and economy of the statistical output.</i></p> <p>The Personal Incomes release requires approximately two months turnaround time (one month for table 3.1 to 3.11 and one month for 3.12 to 3.15a). It involves extracting data, data quality, formatting table, commentary, footnote and charts.</p>
Confidentiality, Transparency and Security	<p><i>The procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></p> <p>The standard HMRC data security and confidentiality policies have been applied in the production of these statistics.</p> <p>Rounding conventions are applied to all published results and suppression is applied where necessary.</p>