

Assessment of compliance with the Code of Practice for Official Statistics

Statistics on Poverty and Income Inequality in Scotland

(produced by the Scottish Government)

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About the UK Statistics Authority

The UK Statistics Authority is an independent body operating at arm's length from government as a non-ministerial department, directly accountable to Parliament. It was established on 1 April 2008 by the *Statistics and Registration Service Act 2007*.

The Authority's overall objective is to promote and safeguard the production and publication of official statistics that serve the public good. It is also required to promote and safeguard the quality and comprehensiveness of official statistics, and good practice in relation to official statistics.

The Statistics Authority has two main functions:

1. oversight of the Office for National Statistics (ONS) – the executive office of the Authority;
2. independent scrutiny (monitoring and assessment) of all official statistics produced in the UK.

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ASSESSMENT AND DESIGNATION

The *Statistics and Registration Service Act 2007* gives the UK Statistics Authority a statutory power to assess sets of statistics against the *Code of Practice for Official Statistics*.

Assessment will determine whether it is appropriate for the statistics to be designated as National Statistics.

Designation as National Statistics means that the statistics comply with the *Code of Practice*. The *Code* is wide-ranging. Designation can be interpreted to mean that the statistics: meet identified user needs; are produced, managed and disseminated to high standards; and are explained well.

Designation as National Statistics should not be interpreted to mean that the statistics are always correct. For example, whilst the *Code* requires statistics to be produced to a level of accuracy that meets users' needs, it also recognises that errors can occur – in which case it requires them to be corrected and publicised.

Assessment reports will not normally comment further on a set of statistics, for example on their validity as social or economic measures. However, reports may point to such questions if the Authority believes that further research would be desirable.

Assessment reports typically provide an overview of any noteworthy features of the methods used to produce the statistics, and will highlight substantial concerns about quality. Assessment reports also describe aspects of the ways in which the producer addresses the 'sound methods and assured quality' principle of the *Code*, but do not themselves constitute a review of the methods used to produce the statistics. However the *Code* requires producers to "seek to achieve continuous improvement in statistical processes by, for example, undertaking regular reviews".

The Authority may grant designation on condition that the producer body takes steps, within a stated timeframe, to fully meet the *Code's* requirements. This is to avoid public confusion and does not reduce the obligation to comply with the *Code*.

The Authority grants designation on the basis of three main sources of information:

- i. factual evidence and assurances by senior statisticians in the producer body;
- ii. the views of users who we contact, or who contact us, and;
- iii. our own review activity.

Should further information come to light subsequently which changes the Authority's analysis, it may withdraw the Assessment report and revise it as necessary.

It is a statutory requirement on the producer body to ensure that it continues to produce the set of statistics designated as National Statistics in compliance with the *Code of Practice*.

Contents

Section 1: Summary of findings

Section 2: Subject of the assessment

Section 3: Assessment findings

Annex 1: Suggestions for improvement

Annex 2: Compliance with Standards for Statistical Releases

Annex 3: Summary of assessment process and users' views

1 Summary of findings

1.1 Introduction

- 1.1.1 This is one of a series of reports¹ prepared under the provisions of the *Statistics and Registration Service Act 2007*². The Act requires all statistics currently designated as National Statistics to be assessed against the *Code of Practice for Official Statistics*³. The report covers the set of statistics reported in *Poverty and Income Inequality in Scotland*⁴ produced by the Scottish Government.
- 1.1.2 Section 3 of this report adopts an ‘exception reporting’ approach – it includes text only to support the Requirements made to strengthen compliance with the *Code* and Suggestions made to improve confidence in the production, management and dissemination of these statistics. This abbreviated style of report reflects the Head of Assessment’s consideration of aspects of risk and materiality⁵. The Assessment team nonetheless assessed compliance with all parts of the *Code of Practice* and has commented on all those in respect of which some remedial action is recommended.
- 1.1.3 This report was prepared by the Authority’s Assessment team, and approved by the Board of the Statistics Authority on the advice of the Head of Assessment.

1.2 Decision concerning designation as National Statistics

- 1.2.1 The Statistics Authority judges that the statistics covered by this report are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest, subject to any points for action in this report. The Statistics Authority confirms that the statistics published in *Poverty and Income Inequality in Scotland* are designated as National Statistics, subject to the Scottish Government implementing the enhancements listed in section 1.5 and reporting them to the Authority by July 2012.

1.3 Summary of strengths and weaknesses

- 1.3.1 The measurement of poverty is a complex activity, but the statistical release provides clear and helpful descriptions of the various concepts and makes good use of charts and bullet points to help draw out the main findings. Users appreciate the fact that most of the statistics are directly comparable with other parts of the UK and that they are released at the same time as the UK statistics.

¹ <http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html>

² http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf

³ <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

⁴ <http://www.scotland.gov.uk/Publications/2011/05/povertystats0910>

⁵ <http://www.statisticsauthority.gov.uk/assessment/assessment/guidance-about-assessment/criteria-for-deciding-upon-the-format-of-an-assessment-report.pdf>

1.3.2 The statistics are used to monitor progress towards important Scottish and UK Government targets, but the Scottish Government gives very little information about the quality and reliability of the statistics in relation to these and other uses.

1.3.3 The Scottish Government engages well with the relatively small expert audience for these statistics, but the uses and potential uses made of the statistics outside central government are not reflected in the release.

1.4 Detailed recommendations

1.4.1 The Assessment team identified some areas where it felt that the Scottish Government could strengthen its compliance with the *Code*. Those which the Assessment team considers essential to enable designation as National Statistics are listed in section 1.5. Other suggestions, which would improve the statistics and the service provided to users, but which are not formally required for their designation, are listed at annex 1.

1.5 Requirements for designation as National Statistics

Requirement 1	Investigate and document a broader range of uses, and use this information to support the development of the statistics (para 3.2).
Requirement 2	Provide information about the quality and reliability of the statistics in relation to the range of potential uses (para 3.4).
Requirement 3	Improve the commentary so that it aids user interpretation of the statistics (para 3.7).

2 Subject of the assessment

- 2.1 *Poverty and Income Inequality in Scotland* presents estimates of the numbers of children, working age adults and pensioners living in low income households, and of the distribution of household income across Scotland. The statistics have been produced annually since 2002 and were known as *Scottish Households Below Average Income* until the title was changed for the publication covering 2007/08. This change was made in response to feedback from users.
- 2.2 The statistics are used in monitoring several Scottish Government indicators and targets in relation to poverty and income inequality, and in meeting the UK-wide targets required by the *Child Poverty Act 2010*⁶. The main emphasis of the release is on presenting material that is relevant to these targets. However, the statistics are also used in academic teaching and research, and for advising on and developing policy within government.
- 2.3 The ultimate source of most of the data is the Family Resources Survey⁷ (FRS) sponsored by the Department for Work and Pensions (DWP). The Scottish Government uses the Households Below Average Income (HBAI) dataset prepared by DWP from the survey returns. The FRS and HBAI were included in a recent assessment⁸, so for this report we have not examined the methods involved in the collection and initial analysis of the data.
- 2.4 The release for 2009/10 (published in May 2011) included, for the first time, additional statistics on persistent poverty⁹ drawn from the British Household Panel Survey¹⁰ (BHPS), together with new figures on pensioner material deprivation¹¹. The BHPS has recently been incorporated into a larger longitudinal survey called Understanding Society¹². In future, the latter will become the data source for the persistent poverty statistics in *Poverty and Income Inequality in Scotland* and also for DWP's *Low Income Dynamics*¹³.
- 2.5 The publication of *Poverty and Income Inequality in Scotland* is timed to coincide with DWP's release of the HBAI statistics. DWP provide data to the Scottish Government about one month in advance in order to allow time for statisticians to prepare the Scottish release. The relatively fast turnaround means that the release is shorter than DWP's *Households Below Average Income*¹⁴ (which covers the UK) and the subsequent Northern Ireland

⁶ <http://www.legislation.gov.uk/ukpga/2010/9/contents>

⁷ <http://research.dwp.gov.uk/asd/frs/>

⁸ Assessment Report 161: *Statistics on Household Resources*

⁹ Defined as spending three or more years out of four in relative poverty

¹⁰ <http://www.iser.essex.ac.uk/bhps>

¹¹ Measures of material deprivation involve a set of goods and services that are thought to be a good indicator of living standards. The information is collected in the FRS and included in the HBAI dataset

¹² <http://www.understandingsociety.org.uk/default.aspx>

¹³ <http://research.dwp.gov.uk/asd/index.php?page=lid> Data published from BHPS and Understanding Society are not National Statistics: this is pointed out in the Scottish release. *Low Income Dynamics* was not included in Assessment Report 161 because of the impending change from BHPS to Understanding Society

¹⁴ <http://research.dwp.gov.uk/asd/index.php?page=hbai>

release¹⁵, but the statisticians told us that users prefer to have the core Scottish statistics published as soon as possible.

- 2.6 The release is published in PDF and as a web page, and the tables are additionally available as Excel files. It covers trends in poverty and material deprivation for several groups in the population, including children, pensioners and people of working age. The Scottish Government includes additional analysis¹⁶ on its website in a series of charts, tables and bullet point text. This currently compares poverty in urban and rural areas, and deprived¹⁷ areas with the rest of Scotland, and illustrates how poverty varies according to gender, disability, ethnicity and housing tenure. Further charts illustrate the savings held by individuals, and the Gini Coefficient¹⁸ which is a widely used summary measure of income inequality. The Scottish Government told us that it did not ask for this additional material to form part of this assessment because the timing and content varies in response to user demand.
- 2.7 The Scottish Government pays DWP for a boost to the FRS in order to bring the total sample in Scotland up to around 4,200 households and to ensure coverage of the area north of the Caledonian Canal¹⁹. This cost £344,000 in 2010/11. The BHPS sample was around 2,300 households in Scotland and the Understanding Society sample is around 3,700. The Scottish Government contributed £300,000 to Understanding Society over the financial years 2008/09 – 2010/11. The estimated annual staffing resource associated with analysis of the data and production of the statistical release is 0.35 full time equivalent statisticians.

¹⁵ <http://www.dsdni.gov.uk/households>

¹⁶ <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis>

¹⁷ According to the Scottish Index of Multiple Deprivation

<http://www.scotland.gov.uk/Topics/Statistics/SIMD/>

¹⁸ <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/social-and-welfare-methodology/the-gini-coefficient/index.html>

¹⁹ The Caledonian Canal connects the Scottish east coast at Inverness with the west coast at Corpach, near Fort William. Population surveys in Scotland often exclude the area north of the Canal due to its remote landscape and sparse population

3 Assessment findings

- 3.1 Scottish Government statisticians told us that they have regular discussions with policy colleagues and that following a well-attended user day in 2008 they have also instigated informal meetings with other users of the statistics. The user group meets once or twice a year and mainly comprises academics, with some representation from the charitable sector. Engagement with local authorities, who have an important role in tackling poverty, is through the ScotStat²⁰ network.
- 3.2 The release states that the estimates are used to monitor progress towards Scottish and UK Government targets to reduce poverty and income inequality, but does not describe further uses of the data. Some users told us that they would like to have access to more comprehensive information²¹ – beyond what is required for the poverty targets – although it is not clear from their comments whether they were fully aware of the additional material on the website (para 2.6). As part of the designation as National Statistics, the Scottish Government should investigate and document a broader range of uses, and use this information to support the development of the statistics²² (Requirement 1). In documenting uses, we suggest that reference is made to the types of use put forward in the Authority’s Monitoring Brief, *The Use Made of Official Statistics*²³.
- 3.3 There is strong user demand for more localised data than is practicable given the size of the FRS and BHPS samples. The Scottish Government published a set of local authority level estimates²⁴ in 2010, derived by modelling data from the FRS and the Scottish Household Survey. It has since been reviewing these estimates in the light of discrepancies with other data that are used as proxy indicators of poverty, and intends to publish its findings in the first half of 2012/13. The Scottish Government provides advice for users about alternative data sources²⁵ on its website. This includes a link to HM Revenue & Customs’ small area data on personal tax credits²⁶. We suggest that the Scottish Government also provide a link to HMRC’s data on child poverty²⁷.
- 3.4 All the figures in the release are rounded to the nearest 10,000 individuals or whole percentage point. There is a short paragraph about the reliability of the estimates, stating that they are subject to sampling variation and that care should be exercised in the interpretation of small year on year fluctuations. The commentary nevertheless draws attention to small year on year changes (for example, one percentage point) without saying whether they are statistically significant. A document²⁸ on the Scottish Government website provides confidence intervals around the main estimates of poverty, but this is not linked from the release itself and the latest information is for 2005/06. No confidence

²⁰ <http://www.scotland.gov.uk/Topics/Statistics/scotstat>

²¹ The statisticians told us that they do in fact respond to many requests for additional analysis of the data. Recurring requests are considered for inclusion in the supplementary material on the website

²² In relation to Principle 1, Practice 2 of the *Code of Practice*

²³ <http://www.statisticsauthority.gov.uk/assessment/monitoring-briefs/monitoring-brief-6-2010---the-use-made-of-official-statistics.pdf>

²⁴ <http://www.scotland.gov.uk/Publications/2010/08/26155956/0>

²⁵ <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/income-data-sources#a4>

²⁶ <http://www.hmrc.gov.uk/stats/personal-tax-credits/ctc-small-areas.htm>

²⁷ http://www.hmrc.gov.uk/stats/personal-tax-credits/child_poverty.htm

²⁸ <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Methodology>

- intervals are provided for the measures of persistent poverty derived from the BHPS. In addition there is no information about possible sources of non-sampling error or the steps taken to reduce these²⁹. As part of the designation as National Statistics, the Scottish Government should provide information about the quality and reliability of the statistics in relation to the range of potential uses³⁰. (Requirement 2).
- 3.5 DWP has provided the Scottish Government with a draft guide to household income data, prepared by the Office for National Statistics on behalf of the income statistics producers' network. The guide advises on the strengths and limitations of various data sources³¹. We suggest that the Scottish Government work with the income statistics producer network to ensure that this information is published and made widely available.
- 3.6 The statistics on poverty in Scotland are consistent with the UK figures released by DWP. However, they are not directly comparable with EU measures of poverty: this is because they take account of particular factors that are important in a UK context, such as the value of free school meals and deductions for private pensions. We suggest that the Scottish Government explain how the measurement of poverty differs from the methods used for EU purposes and provide links to the European statistics.
- 3.7 The release is generally clear and well structured, explains technical terms and summarises important findings. It would benefit from more contextual information, for example relating trends in the measures of poverty to the wider economy. As part of the designation as National Statistics, the Scottish Government should improve the commentary in *Poverty and Income Inequality in Scotland* so that it aids user interpretation of the statistics³² (Requirement 3). We suggest that in meeting this Requirement, the Scottish Government consider the points detailed in annex 2.
- 3.8 The *Pre-release Access to Official Statistics (Scotland) Order*³³ does not require the publication of a list of people who have access to official statistics in their final form, but it does say that a record must be kept, and made available on request. The Scottish Government provided us with a list of 17 individuals. We suggest that it publish records of those who have pre-release access to the statistics in their final form.

²⁹ The web page on 'Data sources and suitability' at footnote 25 describes various sources of data relevant to income and poverty, including FRS and HBAI, but mainly in relation to the availability of data at different geographical levels. Users are referred to DWP's website for further information about these two sources

³⁰ In relation to Principle 4, Practice 2 and Principle 8, Practice 1 of the *Code of Practice*

³¹ The need for such a guide was originally identified in a National Statistics Quality Review in 2004 and reiterated in Assessment Report 94: *Statistics on the Effects of Taxes and Benefits on Household Income*.

³² In relation to Principle 8, Practice 2 of the *Code of Practice*

³³ <http://www.legislation.gov.uk/ssi/2008/399/contents/made>

Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to the statistics on poverty and income inequality in Scotland, in the interest of the public good. These are not formally required for designation, but the Assessment team considers that their implementation will improve public confidence in the production, management and dissemination of official statistics.

- | | |
|---------------------|---|
| Suggestion 1 | In documenting the uses of the statistics (Requirement 1) refer to the types of use put forward in the Authority's Monitoring Brief, <i>The Use Made of Official Statistics</i> (para 3.2). |
| Suggestion 2 | Provide a link from the data sources page of the website to HMRC data on child poverty (para 3.3). |
| Suggestion 3 | Work with the income statistics producer network to ensure that the draft guide to household income data is published and made widely available (para 3.5). |
| Suggestion 4 | Explain how the measurement of poverty differs from the methods used for EU purposes and provide links to the European statistics (para 3.6). |
| Suggestion 5 | In seeking to improve the statistical release (Requirement 3), consider the points detailed in annex 2 (para 3.7). |
| Suggestion 6 | Publish records of those who have pre-release access to the statistics in their final form (para 3.8). |

Annex 2: Compliance with Standards for Statistical Releases

- A2.1 In October 2010, the Statistics Authority issued a statement on *Standards for Statistical Releases*³⁴. While this is not part of the *Code of Practice for Official Statistics*, the Authority regards it as advice that will promote both understanding and compliance with the *Code*. In relation to *Poverty and income inequality in Scotland*, this annex comments on compliance with the statement on standards.
- A2.2 In implementing any Requirements of this report (at paragraph 1.5) which relate to the content of statistical releases, we encourage the producer body to apply the standards as fully as possible.

Appropriate identification of the statistics being released

- A2.3 The title of the release clearly relates to Scotland and the population coverage (people in private households and excluding residential institutions) is described in an annex. The inclusion of the area north of the Caledonian Canal in the FRS sample is described, but no corresponding information is included about the longitudinal (BHPS) sample.
- A2.4 The frequency of the release is made clear, but no information is given about the frequency of data collection (although there are links to relevant websites). It is clear which year's statistics are being released for the first time, and new topic areas are also highlighted.
- A2.5 The release has a logical structure with clear headings and consistent formatting.
- A2.6 The Scottish Government is clearly identified as the originator of the statistics and the release includes contact details for the responsible statisticians.

Include commentary that is helpful to the non-expert and presents the main messages in plain English

- A2.7 The release includes a bullet point summary on the first page and further bullet points in each chapter bring out the main messages.
- A2.8 The commentary is well written and easy to understand. It covers a technical subject area but provides clear explanations of the concepts and definitions associated with the measurement of poverty, introducing them at the point in the text where they are needed. The most important definitions are set out in text boxes for ease of reference, which we regard as good practice.
- A2.9 The release makes extensive use of charts to compare trends in the various poverty measures from 1998/99³⁵ to the present, and to show how Scotland compares with GB, England and Wales. However, the commentary does not go

³⁴ <http://www.statisticsauthority.gov.uk/news/standards-for-statistical-releases.html>

³⁵ We were told that this year was chosen because it was originally the baseline for the measurement of UK child poverty targets. The HBAI series itself goes back to 1988 in its current form, but the Scottish sample has been boosted only since 1994/95

beyond describing rises and falls by offering possible explanations for the observed trends. The use of the statistics in monitoring progress towards Scottish and UK Government targets is referred to early in the release, but where specific target levels exist (for example, in relation to reductions in child poverty by 2020) these are not spelt out in the text or indicated on the relevant chart.

Use language that is impartial, objective and professionally sound

A2.10 The text is impartial, policy neutral and consistent with the evidence in the tables and charts.

A2.11 The description of proportions and trends is professionally sound, but small year on year changes are highlighted in the text without any mention of their statistical significance. No confidence intervals are provided in the release. Given the use of these statistics in monitoring progress towards government targets, we think it is important that more advice be provided on the interpretation of change. There is also no discussion of the sources and nature of non-sampling error and the steps taken to keep this to a minimum.

Include information about the context and likely uses

A2.12 The indicators used in relation to each government target are described at appropriate points in the release and the trends are illustrated in the charts. There is no mention of how the statistics are, or might be, used outside central government.

A2.13 The commentary does not attempt to place trends in poverty and household incomes in a wider economic context: for example, trends in employment or benefit levels. It would also be useful if the consequences of the different ways of measuring poverty (relative poverty, absolute poverty and material deprivation) were described: for example, the extent to which the same people or households are counted in each measure.

A2.14 There is little comment on the quality and reliability of the statistics in relation to the range of potential uses, either within central government or elsewhere.

Include, or link to, appropriate metadata

A2.15 Information about sources, methods and definitions is provided in the release itself or through links to the Scottish Government and other relevant websites. Some of the information currently on the Scottish Government website is out of date – for example, there is reference³⁶ to the previous Government's public service agreement targets. These have since been superseded.

A2.16 The release informs users that the FRS and longitudinal survey sources use different income definitions. It also advises on the comparability of the Scottish persistent poverty figures with those published by DWP in *Low Income Dynamics*.

³⁶ <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Methodology>

Annex 3: Summary of assessment process and users' views

A3.1 This assessment was conducted from December 2011 to March 2012.

A3.2 The Assessment team – Jill Barelli and David Duncan-Fraser – agreed the scope of and timetable for this assessment with representatives of the Scottish Government in December. The Written Evidence for Assessment was provided on 27 January. The Assessment team met the Scottish Government in February to review compliance with the *Code of Practice*, taking account of the written evidence provided and other relevant sources of evidence.

Summary of users contacted, and issues raised

A3.3 Part of the assessment process involves our consideration of the views of users of the statistics and data suppliers. We approach some known and potential users of the set of statistics, and we invite comments via an open note on the Authority's website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare assessment reports.

A3.4 The Assessment team received 8 responses from the consultation: 7 from users of the statistics and 1 from DWP in its role as data supplier and stakeholder. The users were grouped as follows:

Academic	5
Central government	1
Parliament	1

A3.5 Respondents reported using the statistics for research, briefing, teaching and consultancy purposes, and for policy advice and development within government. Users were pleased that they were able to compare Scotland with other parts of the UK, but several were also very keen to have data for local areas and one is proposing the use of a new proxy measure for this purpose. Most felt that the release itself was clear and accessible, although some would like more detailed breakdowns, particularly where their interests were wider than the poverty targets or where they did not have the time or expertise to use the UK Data Archive. Most users had had some engagement with the Scottish Government statisticians and had found them to be helpful and responsive.

A3.6 DWP was satisfied with the arrangements for providing data to the Scottish Government and pleased that much of the analysis by Scottish Government statisticians is carried out on a basis that is consistent with its own. DWP mentioned the need to continue to work together on this.

Key documents/links provided

Written Evidence for Assessment document

