Non-government uses of the Annual Survey of Hours and Earnings

1 Introduction

This paper presents the results of investigations into the uses made by non-central government users of the Annual Survey of Hours and Earnings (ASHE). These investigations were undertaken in response to an assessment of compliance with the code of practice for official statistics, which was conducted by the UK Statistics Authority. This assessment determines whether it is appropriate for the ASHE statistics to be designated as National Statistics. The Authority concluded that the ASHE statistics would retain their National Statistics designation, subject to ONS implementing a suite of enhancements and reporting them to the Authority. This paper summarises the work that ONS undertook in respect of the requirement to "take steps to develop a more complete understanding of the use made of the statistics by non-government users, and publish the information" (Requirement 1). The full assessment report can be found on the UK Statistics Authority website.

It should be noted that very significant uses of ASHE come from central government. These uses are out of scope for this paper, but the intention is to produce an expanded paper that covers both government and non-government uses which will be published on the ONS website later in 2013.

To better understand non-central government uses of ASHE statistics and the raw data, four strands of enquiry were carried out:

1. Analysis of requests for ad-hoc bespoke analyses.
2. Survey of telephone and email customers via ONS's earnings helpdesk.
3. Analysis of applications for access to ASHE data via the Virtual Microdata Laboratory and the Secure Data Service, both of which are only available to approved researchers.
4. An online survey of users of the ASHE results via the ONS website.

Please note that the information used to produce this paper was gathered over a relatively short period of time, and it only relates to users with whom ONS was able to make contact as part of this project (as well as approved researchers who are obliged to provide information as part of the application process for access to microdata). Consequently, this should be viewed as a sample of the full range of non-government uses. ONS is not able to speculate as to how representative these uses are of all non-government uses.

ONS would like to thank all those who provided feedback to inform these investigations. This feedback has provided a greater understanding of the uses made of the statistics and will help improve future ASHE outputs.
2 Uses of ASHE

The investigations outlined above revealed a wide range of uses of the ASHE statistics among non-government users. Examples of these are listed below, broken down by type of use and theme.

2.1 Use by professional bodies

Employment relations
ASHE statistics are used extensively by trade unions for various purposes, including to support pay negotiations, collective agreements on wages and research into issues such as the gender pay gap and pay distributions in the public and private sectors. In addition, ASHE figures are used by other parties in employment relations matters. Examples include:

- Estimates used to inform the work of an MOT testing company and trade associations in dialogue with the Department for Transport on issues affecting garages.
- Figures required by a non-departmental body involved in employment relations services.
- Figures used when decisions are made on pay settlements for senior managers and chief executives.

Media
ASHE statistics are covered widely in the media, particularly at the time that the statistics are released. Journalists from a variety of media organisations attend the official press release for the ASHE statistics and this is usually followed by a flurry of media coverage. Historically, ASHE statistics have been reported by news outlets on television, radio, in newspapers and online. These reports tend to cover the 'headline' statistics from the latest ASHE results as well as some time-series/historical analysis. Examples include:

- Various high-profile media organisations publishing online and newspaper articles reporting a range of headline ASHE statistics.
- Articles focusing on key stories, such as the gender pay gap, public and private sector pay or the number of people paid below the national minimum wage.
- Stories in regional news media with comparisons of earnings across UK regions.
- An online 'student finance calculator' tool, showing estimated lifetime earnings for various graduate-level occupation groups.

Regional analyses
Local government/authorities are key users of ASHE statistics with a wide range of uses, including for monitoring purposes, occupation based analyses of the local labour market, economy briefing notes, analysis of low earnings at district level and in the Local Economic Assessment to highlight variations in resident and workplace earnings across particular areas. The ASHE figures are also used by other parties when carrying out analyses in particular geographic areas. Examples include:

- Enquiry into the proportion of employees in a geographical area with annual earnings of £100,000 or more.
- Investigations of the proportions of employees above and below the London Living Wage over a period of time.
- Analysis of labour cost differences between regions supplied by different electricity distribution companies.
- Results published on a data observatory for East Sussex where they are used by county and district councils and voluntary organisations to inform strategies and funding bids.
- Local and regional news provider collating information on annual earnings to help enable the company to remain competitive in the market when advertising vacancies.

Careers, skills and teaching

- Figures used to update labour market time series for a not-for-profit company that offers advice and guidance on careers.
• Figures used by a sector skills council to compile reports and for ad hoc analyses on the IT/Telecoms labour market. Clients such as individuals, organisations and training and education providers use their reports for career planning, recruitment/HR planning and strategy development.
• Estimates are incorporated in teaching materials for post-graduate students in labour market sessions.

Legal
• Figures for home carers are used extensively in cases where judgements are made in respect of payments to people who require professional home care.
• Figures used by courts in loss of earnings and personal injury litigation cases.
• Analysis as part of a company’s work representing pensioners on medical appeals.

Finance
• A bank investigating the proportion of employees paid on weekly and fortnightly cycles as part of a project to help more customers set up direct debits to pay credit card bills.
• Information relating to trends in earnings required for articles for the financial media.

Other business uses
• Business start-up requiring information on earnings.
• Figures used as an index to uprate costs/charges in respect of staff who deliver services to a large employer.
• Global consultancy firm used ASHE estimates for modelling earnings in the service sector.

2.2 Use by academics

National minimum wage and low pay
One of the most common areas of academic research is investigations into the impact of the national minimum wage; for example the impact on job retention, job entry and firm behaviour during recessions, and also the impact of the introduction of the apprentice rate. Other research topics in this area include:
• Investigating behavioural and measurement aspects of the national minimum wage as part of a commission from the Low Pay Commission.
• Investigations into the extent of non-compliance with the national minimum wage.
• The substitution rate between low-pay workers and the national minimum wage.

Business sectors
• Estimates of inflation in the personal social services sector.
• Measuring the economic contribution of creative industries and employment to the UK economy.
• Entry into teacher training and mobility in the teacher workforce.
• Investigation into the number, type and industrial presence of designers in the UK economy, as well as their associated wage bills.

Regional
• Measuring the performance of Scottish town centres.
• Analysis of the creative industries sector in Northern Ireland.
• The impact of geography on wages.

Earnings trends
• How wages evolve during and after recessions in order to aid understanding of the cyclical behaviour of labour productivity.
• Measures of income growth and trends in earnings shares.

Other research topics
• Investigating new measures of investment in intangible assets in the UK.
• The prevalence and effects of performance related pay in Britain.
• Bonus payments and inequality in the UK.
• Using firm-level data to analyse productivity and to assess the relative contribution of aggregate and firm-specific shocks to the business cycle.

2.3 Use by the general public

The ASHE statistics also receive a significant level of interest from the general public. Sometimes this is simply general personal interest but there are also a huge variety of other more specific uses. Recent examples include:

• Information required as part of adoption application processes.
• Queries on pensions and calculations used in personal pensions.
• Figures requested in the context of wages required by prospective immigrants.
• Analysis of the proportion of jobs paid below £7 per hour by region and age for an individual's website monitoring various labour market themes.

3 Additional results from the ASHE online survey

3.1 Analysis of respondents

In conjunction with the release of the ASHE 2012 results on 22 November 2012, ONS ran a short online survey to help assess user views on the ASHE outputs. This was publicised via various channels, including the ONS website, StatsUserNet and by notifying known ASHE users. The survey closed on 10 January 2013. There were 39 responses to the survey from non-central government users out of a total of 51 responses, which was quite a healthy response rate for a voluntary survey of this type. Respondents were asked to specify the sector in which they work, their role, and provide some details about their uses of ASHE estimates. Analysis of the responses further highlighted the wide range of uses of ASHE, with the most common use of those surveyed being research and analysis by local or regional government. The results are summarised below.

• 26 respondents specified the sector in which they work:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local or regional government</td>
<td>11</td>
</tr>
<tr>
<td>School, college or university</td>
<td>4</td>
</tr>
<tr>
<td>Non-profit institution</td>
<td>4</td>
</tr>
<tr>
<td>Trade union</td>
<td>2</td>
</tr>
<tr>
<td>Non-financial corporation</td>
<td>2</td>
</tr>
<tr>
<td>Oil and gas</td>
<td>1</td>
</tr>
<tr>
<td>Legal</td>
<td>1</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
</tr>
</tbody>
</table>

• 26 respondents specified their position in the context of their use of ASHE estimates:

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>10</td>
</tr>
<tr>
<td>Analyst</td>
<td>7</td>
</tr>
<tr>
<td>Consultant</td>
<td>2</td>
</tr>
<tr>
<td>Student</td>
<td>2</td>
</tr>
<tr>
<td>Policy maker</td>
<td>1</td>
</tr>
<tr>
<td>Teacher or lecturer</td>
<td>1</td>
</tr>
<tr>
<td>Solicitor</td>
<td>1</td>
</tr>
<tr>
<td>Human resources officer - pay and reward</td>
<td>1</td>
</tr>
<tr>
<td>Member of the general public</td>
<td>1</td>
</tr>
</tbody>
</table>
Respondents were also able to select all the applicable uses from the following list:

<table>
<thead>
<tr>
<th>Type of use</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>General background information</td>
<td>23</td>
</tr>
<tr>
<td>Research</td>
<td>23</td>
</tr>
<tr>
<td>Writing reports</td>
<td>19</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>17</td>
</tr>
<tr>
<td>Writing briefs</td>
<td>15</td>
</tr>
<tr>
<td>Monitoring</td>
<td>14</td>
</tr>
<tr>
<td>Policy development</td>
<td>13</td>
</tr>
<tr>
<td>Modelling and/or forecasting</td>
<td>8</td>
</tr>
<tr>
<td>Decision making</td>
<td>6</td>
</tr>
<tr>
<td>Legal proceedings</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2 Meeting user needs

ONS regularly meets with their central government ASHE user base and so is able to listen and respond to their needs where required. However, ensuring the wide range of non-government user needs are met is a more difficult task. The enquiries outlined above have helped in this regard, particular the online survey.

Responses to the online survey reveal that the majority of non-central government users feel that the ASHE statistics meet their needs. Respondents were asked how satisfied they were with the relevance of ASHE to their needs. Of the 27 people who responded to this question, 81% said they were satisfied or very satisfied.

A number of useful comments were provided by respondents to the survey, including suggestions for improvements to ASHE. Some of the points raised were as follows:

1) Difficulties with accessing and using the ASHE tables - the large file size of some of the tables meant that some users had problems downloading or opening them on their computers. Suggestions were made to split the tables so that individual files could be downloaded rather than zip files. It was also suggested that more detailed metadata could be included within the Excel files to aid user interpretation.

2) Difficulties with finding the required tables on the ONS website - some users commented that it was difficult to find the tables they were looking for, particularly if they were searching for several years’ worth of data.

3) Appearance of the statistical bulletin - there was a comment that the bulletin looked less professional than it used to due to the new ONS content management system. It seems likely that the user was referring to the PDF version of the bulletin but this is unclear.

4) The reliability of the estimates at local authority level - some users questioned the accuracy of the estimates and suggested a boost in the sample size to improve reliability.

5) Discontinuities over time - some users expressed concerns about the frequency of discontinuities and suggested producing a consistent time series. It was also suggested that more detailed explanations could be provided for the discontinuities.

6) More public/private sector analyses - there was interest from some users in more analysis of earnings in the public and private sectors, both in the bulletin itself and a suggestion to add a table showing earnings by occupation within these sectors.

ONS is keen to further improve the ASHE statistics so the points raised above will be taken on board when developing the ASHE statistics and their dissemination in future years. Some of the issues raised, for example points 1-3, are largely due to restrictions of the ONS.
website, although improvements have and will be made in these areas where possible. Regarding point 4, benefits to the accuracy of the detailed earnings estimates have to be weighed against the extra costs incurred to achieve these benefits. The ASHE sample is already very large so it is unlikely ONS will be able to pursue the suggestion of increasing the sample size in the near future. Finally, in terms of points 5 and 6, some improvements have already been made in these areas; for example, this year's Patterns of Pay article was enhanced to include more analyses of public and private sector earnings and the background notes were expanded to include more detailed descriptions of methodological issues. The intention is to incorporate some of these changes into the next statistical bulletin when it is published in November 2013.

4 Conclusions

ONS’s investigations have revealed that there is a great diversity in the range of uses of ASHE statistics by users outside of central government. Users include trade unions, local government, the media, solicitors, financial organisations, consultants, academics and the general public. Feedback from a sample of these users indicates that, generally, users are satisfied that their needs are met by the ASHE statistics and the accompanying publication material, though there are some areas where improvements could be made. In developing ASHE and the methods of its dissemination, ONS will consider the results of this work, along with any other relevant information, to ensure that it remains fit for purpose for its broad user base.