

Northern Ireland Labour Market Data Quality Report

1 Introduction

This report relates to NI Labour Market Statistics and aims to provide users with information on the usability and fitness for purpose of these estimates.

Additional information on each of the NI labour market data sources can be found on the 'surveys, inquiries' page of the Department of Enterprise, Trade & Investment (DETI) website <http://www.detini.gov.uk/deti-stats-index.htm>.

2 Summary of Quality

2.1 Relevance

The degree to which the statistical product meets user needs for both coverage and content.

Labour Market statistics are designed to reflect the various aspects of labour market activity in NI and throughout the UK. They cover employment, unemployment and the claimant count, economic inactivity, redundancies, earnings, jobs and vacancies. Data for employment, economic inactivity, unemployment and the claimant count are also available for the countries and regions of the UK. The key users of Labour Market data within Government and the Bank of England use the data to make and monitor government policies. There are a wide variety of users of Labour Market data, including businesses, national and local government, academia, and the general public. Much of the data is produced using concepts and definitions set out by the International Labour Organisation (ILO) (see <http://www.ilo.org>).

The monthly NI Labour Market Report (LMR) (<http://www.detini.gov.uk/labour-market-report-lmr>), and other website outputs, provide a comprehensive overview of the NI labour market and also provide comparisons with the UK/UK regions. There are periodic meetings with users (both in NI and the UK) to ensure the data are still relevant to the needs of customers.

2.2 Accuracy

The closeness between an estimated result and the (unknown) true value.

One aspect of measuring accuracy is reliability, which can be measured using evidence from the analysis of revisions to assess the closeness of early estimates to subsequently estimated values. The impact of revisions to key series is presented in the background notes of the main labour market bulletins and the DETI revisions policy is available at http://www.detini.gov.uk/deti_revisions_policy.pdf. In addition, the Quarterly Employment Survey has published a series of revisions triangles for employee jobs estimates, these are summary tables which indicate the size and direction of revisions and apply a statistical test to the average revision to determine its significance. These are available at http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-qes/revisions_to_qes_estimates.htm

DETI labour market survey samples are selected using random probability methods and are constructed to maximise accuracy by the elimination of bias or non-random effects in line with best practice.

Another way of indicating the precision of the data is to measure sampling variability. Many of the Labour Market data published in the LMR are based on statistical samples and, as such, are subject to sampling variability. If many samples were drawn, each would give a slightly different result. For any Labour Force Survey (LFS) data, 95 per cent confidence intervals are routinely published. It is expected that in 95 per cent of samples the range would contain the true value

(see link to LMR above, for details). A work programme for developing confidence Intervals around quarterly employee jobs estimates is underway and the first confidence intervals are scheduled to be published in 2010.

Details of the sample sizes and response rates for the LFS, a major component of NI labour market statistics, are available in the LFS Performance and Quality Monitoring Report (<http://www.detini.gov.uk/stats-pubs-35>).

Other forms of non-sampling error are difficult to measure. These include coverage in surveys, processing and measurement errors and non-response.

2.3 Timeliness and Punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.

The DETI publication schedule is available on the website at http://www.detini.gov.uk/publication_schedule_09-16.pdf and provides twelve months advanced notice of releases. Every effort is made to meet the publication deadline and it is extremely rare for the publication of data to be postponed. In the unlikely event of a change to the pre-announced release schedule, public attention would be drawn to the change and the reasons for the change should be explained fully at the same time, as set out in the Code of Practice for Official Statistics (<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>). The following list shows, for each of the main sources of labour market data, the time between publication and the period to which the data refer.

LFS (employment, unemployment, inactivity, redundancies) - approx 44 days.
Employee jobs - approx 103 days.
Claimant count - 34 days.
Redundancies – approx 30 days.
Earnings – 204 days.

2.4 Accessibility and Clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format(s) 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.

NI Labour Market data are published every month and include tables, text and charts. The data are widely available, free of charge, through a range of media. The Labour Market Report contains links within the report to data tables, which are available to download, free of charge, from the DETI website. The other labour market publications (see <http://www.detini.gov.uk/deti-stats-index.htm>) contain additional textual analysis and charts that supplement the data in the tables. A highly disaggregated dataset, which covers a wealth of data for the UK and UK local areas, is also available free of charge from NOMIS (see <https://www.nomisweb.co.uk/Default.asp>).

The DETI Statistics Helpline can be contacted either by phone (02890 529311) or e-mail (statistics@detini.gov.uk).

2.5 Comparability

The degree to which data can be compared over time and domain

Labour Market data come from a wide variety of sources. These different series were introduced at different times and therefore have differing start dates. However, when methodological changes or other effects such as benchmarking, are made to the latest data, every effort is made to ensure that all previous data are amended to make them directly comparable.

Employee jobs estimates are available annually from 1971 and then quarterly from June 1978 onwards using the Quarterly Employment Survey (QES). The estimates have been revised in line with updates to the Standard Industrial Classification codes. When these revisions are made every effort is made to ensure that a consistent historical time series is still available to users. This has been done using a conversion matrix methodology which maps the relationship between the old industry classification and the new one. There have been three significant revisions to the industry classifications across business surveys, SIC (1992), SIC (2003) and SIC (2007). The Quarterly Employment Survey has revised estimates in line with each of these changes. This has ensured that employee jobs estimates are comparable by industry over time and can be used to feed into the main UK employee jobs series.

Estimates for the Claimant Count, which go back to 1971, are estimated on a basis consistent with the current coverage. This recasting approach is based on actual historical information about people previously included in former counts. It is not practical to adopt the reverse approach and construct a series which estimates what the figures would now be on some former basis. There would be no sound basis for the required assumptions about how people would currently behave under a previous administrative system which no longer exists.

The claimant count, derived from an administrative source, is subject to distortions as a result of changes to benefit rules, etc. There have been ten such changes significant enough to have warranted a recast of the claimant count series (i.e. they are taken into account in the consistent, seasonally adjusted series which goes back to 1971) as well many additional changes which have either not caused a discontinuity in the definition or have not been significant enough to warrant a recast of the series (22 such changes were listed in an article in the November 1995 edition of *Labour Market Trends*). An article was published in the April 1998 edition of *Labour Market Trends* on the effect of Jobseeker's Allowance (JSA) on the claimant count.

Although the LFS is carried out using ILO guidelines in many countries, not all interpret or apply those guidelines in exactly the same way. For example, a common term is 'working age'.

Countries have different statutory school leaving and retirement ages. Eurostat

(<http://epp.eurostat.ec.europa.eu>), the Statistical Office of the European Community, and the Organisation for Economic Co-operation and Development (OECD) (<http://www.oecd.org>)

both gather data from their members and adjust them to publish comparable estimates.

2.6 Coherence

The degree to which data that are derived from different sources or methods, but which refer to the same phenomenon, are similar.

Estimates for employment and for jobs could be expected to behave in a similar fashion.

Similarly, it could be expected that unemployment and the claimant count would match one another's movements. However, in the short term at least, these two pairs can move in opposite directions. Although both measure like phenomena, each are derived from separate sources and have a number of basic differences.

Employment and jobs

Data for employment are taken from the LFS and reflect the number of people in employment. Jobs data are sourced from the Quarterly Employment Survey (QES) series and measure the number of jobs there are in the economy. Both are sample surveys and therefore subject to sampling variability. They also have other fundamental differences. For example, those people with more than one job would appear once in the LFS, but their jobs would appear more than once in the QES. The LFS does not cover those living in most types of communal establishments, whilst the QES excludes unpaid family workers. However, the two series do move broadly in line with each other.

Overview

In NI, the preferred source of estimates of employment by Industry and for the public sector is the QES. While the LFS provides the UK's primary measure of the number of people in employment

as a whole, it does not provide a fully reliable measure of the total number of employees in the public sector; neither does it provide a fully reliable measure of employment by industrial sector. This is because the LFS is a household survey, with sector classifications based on responses from individuals. We know that when interviewed for the LFS, some people incorrectly classify themselves as working in the public sector. An example is employees of bodies such as universities who tend to incorrectly classify themselves as being in the public sector. Universities are, in fact, part of the private sector in the National Accounts. Similarly employees of private sector companies providing contracted out services to the public sector can also incorrectly classify themselves as public sector employees. The LFS thus overestimates public sector employment and the difference tends to change over time. The long-term movement in the two series are similar although the short-term changes can, however, show relatively large differences in movement, for example because the LFS is subject to sampling variability. The classification problem of the LFS relating to Public Sector Employment also applies to the LFS classification of the industries in which respondents work. The problem has been identified in Quality Reviews of the LFS and of Employment and Jobs Statistics. The QES on the other hand, is consistent with these National Accounts definitions and covers all public sector organisations (as categorised by the Inter-departmental Business Register) along with more accurate industry breakdowns on a quarterly basis.

Unemployment and Claimant Count

The figures for unemployment are collected using the LFS and reflect the number of people who, in accordance with the guidelines set out by the ILO, are unemployed. This means they are out of a job, have actively sought work in the four weeks prior to their interview and are available to start work in the following two weeks. The LFS is a sample survey and therefore subject to sampling variability. The Claimant Count reflects the number of people claiming unemployment related benefits. There are also more fundamental differences between the two sources. For example, not everyone who is unemployed is eligible to receive benefits, whilst others choose not to make a claim. Both series follow similar paths, although they can behave differently in the short term. Different movements can easily occur for example when unemployed people who are not claiming benefits find jobs or move into education or retirement or cease looking for work, tending to reduce unemployment but not the claimant count and thus causing the two series to converge. See link below for the difference between ILO unemployment and the claimant count.

<http://www.detini.gov.uk/deti-stats-index/stats-labour-market/stats-labour-market-unemployment/stats-labour-market-ilo-claimant-count.htm>

3 Summary of Methods Used to Compile the Output

DETI produces and publishes a comprehensive and integrated set of Labour Market data each month, using a variety of sources. The LFS is a household survey covering approximately 2,500 households each quarter in NI. It provides estimates of employment, unemployment, economic activity and inactivity, hours worked and qualifications. Business surveys are used to compile data for Employee Jobs, Earnings and Redundancies, whilst Administrative data provide the source for the Claimant Count.

More specific information about each of the respective labour market sources can be found on the respective survey web page.

Labour Force Survey - <http://www.detini.gov.uk/deti-stats-index/stats-surveys.htm>

Census of Employment - <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-census-of-employment.htm>

Quarterly Employment Survey - <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-ges.htm>

Claimant Count - <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-claimant-count.htm>

Annual Survey of Hours & Earnings - <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-hours-and-earnings.htm>

Redundancies - <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-redundancies.htm>

Labour Costs Survey- <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-labour-costs.htm>

Seasonal Adjustment

Key aggregate NI labour market data are seasonally adjusted (non-seasonally adjusted versions are available). Seasonal adjustment is the process of removing the variations associated with the time of year, or the arrangement of the calendar, from a time series.

For more detailed disaggregated data, only non-seasonally adjusted data are available.

Statistical Disclosure Control

Statistical disclosure control methodology is also applied to data. This ensures that information attributable to an individual organisation is not disclosed in any publication. The Code of Practice for Official Statistics, and specifically Principle 5: Confidentiality, set out practices for how we protect data from being disclosed. The Principle includes a guarantee to survey respondents to "ensure that official statistics do not reveal the identity of an individual or organisation, or any private information relating to them". More information can be found on the DETI Statement of Confidentiality (<http://www.detini.gov.uk/deti-stats-index/stats-national-statistics/data-security.htm>).