

Statistical standard for hours worked in employment

Rationale

The hours worked in employment variable is used to produce information on the nature of employment, the relationship between labour supply and income and to analyse changes in employment characteristics over time.

Definition

Hours worked in employment is the total number of hours worked in employment per week by all people meeting the definition of employment given in the standard for labour force status, that is, all people aged 15 and over who during the survey reference period:

- worked for one hour or more for pay, profit or payment in kind in a job, business, farm or professional practice
- worked without pay for one hour or more in work which contributed directly to the operation of a farm, business or professional practice operated by a relative
- had a job or business they were temporarily absent from.

Employed and labour force status are supporting concepts for hours worked in employment and are defined in the Glossary.

Operational Issues

The standard definition for hours worked in employment is best suited to household surveys such the Census of Population and Dwellings, the Household Labour Force Survey (HLFS) and the Household Economic Survey (HES) conducted by Statistics New Zealand (Statistics NZ). These household surveys obtain their data on hours worked in employment by surveying employed people aged 15 and over as defined in the labour force status statistical standard.

Business surveys may not strictly conform to the standard definition for hours worked in employment, because of varying data collection methods and because they survey a different statistical unit to household surveys. Because of the way in which they are conducted, business surveys may (a) collect paid hours only, and (b) obtain data by surveying 'business locations' or 'enterprises' rather than the statistical unit 'person'.

For example, Statistics NZ business surveys such as the Quarterly Employment Survey (QES) and the Quarterly Economic Survey of Manufacturing (QMS) by necessity collect paid hours only and survey a population which differs to that defined in the labour force status statistical standard.

The QES obtains its data by surveying business locations in surveyed industries employing more than two full-time equivalent employees, and the QMS by surveying all enterprises in the manufacturing industry. In the QES and QMS there is no age limit; jobs filled by people under 15 are included in the survey population while those who work unpaid in a family business are excluded. By definition, in the QES, the self-employed are excluded from the calculation of earnings and hours statistics although they are included in the calculation of filled jobs.

Though not consistent with the standard, both the concept of paid hours and the use of a distinct population to collect the hours worked in employment variable are necessary components of each survey.

Explanatory notes

Coverage and purpose in social and economic collections

The manner in which individual surveys collect hours worked in employment depends largely on the coverage and overall purpose of each collection. The concepts used to collect hours worked in business surveys such as the QES and the QMS, where the questionnaire is completed by respondents on behalf of their labour force as a whole, differ from those used in household surveys such as the Census, the HLFS and the HES where the people respond as, or on behalf of, an individual member of the labour force.

Statistical units

The statistical unit for Hours Worked in Employment in social collections is generally a person. In economic collections the statistical unit for hours worked in employment can be an enterprise or a business location.

Actual and usual hours worked in employment

The standard encompasses both actual and usual hours worked in employment. In general, either or both may be used as the output variable, according to user requirements. The International Labour Organisation (ILO) does not give specific guidance on this.

Data on usual hours worked in employment forms the basis for assigning respondents to the part-time or full-time components of the labour force. If actual hours were used to assign people to a part-time or full-time status, the number of part-timers could be underestimated or overestimated depending on seasonal patterns. People who usually work full-time but who missed part of the reference period through sick leave or annual leave would be designated part-time if actual hours were used.

Data on total actual hours worked in employment however, is usually the preferred variable for calculating total labour input as it excludes time (paid or unpaid) which is not worked.

Paid hours

Some business surveys (such as the QES and QMS) differ, from household surveys collecting the hours worked variable, in that they collect *paid* hours (including ordinary time and paid overtime). The collection of paid hours (whether actually worked or not) is a different concept again from that of actual or usual hours, which can be paid or unpaid.

Full-time and part-time employment

The full-time employed are defined as those who usually work 30 hours or more per week, while the part-time employed usually work fewer than 30 hours per week.

Full-time equivalency

The definition of full-time equivalency is not standardised at present and definitions vary between surveys and organisations. At SNZ, the QES presently calculates full-time equivalency on the basis that two part-time employed people are equivalent to

one full-time employed person.

Reference period

The reference period used for calculating actual and usual hours worked in employment may vary between surveys. Regardless of the reference period used in collection, hours worked in employment *per week* should be derived in order to use the hours worked in employment classification.

Main and other job(s)

Total hours worked in employment may be split into hours worked in main job and hours worked in other jobs, although technically this split is not part of the standard.

Some business surveys cannot draw a distinction between main job and other job in their collections. The respondents for business surveys are most frequently *employers* who cannot be expected to record the hours their employees work in other jobs. If a person has more than one job, employers at each place of work should record their hours.

Terminology

The term hours worked in employment is preferred to hours of work, because some respondents may confuse the latter with the times they start and finish work. Hours worked in employment is preferred to hours worked as some respondents may include time spent performing voluntary work and include this in their answers, and to hours employed because some respondents may argue that they are employed all the time, but work however many hours per week.

Classification criteria

A whole number of hours (ie 0, 1, 2, etc.) should be collected and available in output.

Classification

The standard classification of hours worked in employment is a flat classification of hour categories from 1 hour to 168 hours and residual categories.

The residual categories are defined in the Glossary.

Classification	Hours Worked in Employment Per Week – Standard Classification (3 Numeric)
Abbreviation	HRSWORK3N
Version	V1.0
Effective date	13/05/1998

Coding process

If a response is a fraction of an hour, the rules for rounding numbers are round to the nearest whole hour, but if the part hour is thirty minutes, then select the closest even numbered hour as the rounded number.

Questionnaire module

Requirements

Mandatory

The following instructions are mandatory in order to collect satisfactory data for the hours worked in employment variable. The question text should contain instructions which clearly state:

- whether the respondent should respond with actual hours or with their usual hours worked in employment per week
- whether hours in main job or other job(s) (or both) are required
- how to calculate the main job if a respondent has more than one job (ie the job the respondent usually works the most hours in)
- that whole hours are required (instructions on rounding fractions of hours are discretionary)
- the reference period for calculating hours worked in employment. For example, a reference period of a fortnight may be used in the survey question, but should be converted to hours worked in employment per week for input and output.

Three blank boxes are required for recording the hours worked in employment because the classification for hours worked in employment extends to the theoretical maximum number of 168 hours per week.

Discretionary

The following instructions are discretionary. Ideally they should be included in the question text, however if space on the questionnaire is limited the provision of these instructions in attached help notes is beneficial. The question text or help notes *may* include instructions which state:

- that regular overtime should be included in the calculation of usual hours worked in employment
- that unpaid work in a family business or family farm should be included in the calculation of hours worked in employment
- that unpaid work (apart from that in a family business or farm) should not be included in the calculation of hours worked in employment
- how to calculate usual hours if different hours are worked from one week to the next, (ie average hours over the last four weeks should be calculated).

Response to a question on hours worked in employment can be assisted by referring to another question or questions. For example "How many hours to the nearest hour, do you usually work each week in the job you gave details about in questions...". This can be especially beneficial in self-completion survey questionnaires. Reference to a separate question ensures respondents can readily refer to the correct job (main or other) for which they are to give their hours of employment.

Example

The questionnaire module below consists of three separate questions which, as an entity, collect the hours worked in employment variable. It is an example of a questionnaire module which meet the requirements documented in this statistical standard. Other questionnaire modules may vary in format but should conform to the requirements contained in this statistical standard.

How many hours did Actually work on each of the following days last week? Include overtime, but exclude time-off.

Starting with	Hours in MAIN Job	Hours in OTHER Jobs
Monday?	□ □ □	□ □ □
Tuesday?	□ □ □	□ □ □
Wednesday?	□ □ □	□ □ □
Thursday?	□ □ □	□ □ □
Friday?	□ □ □	□ □ □
Saturday?	□ □ □	□ □ □
Sunday?	□ □ □	□ □ □
TOTAL	□ □ □	□ □ □

Then Worked:

□ □ □ HOURS IN(MAIN) job, AND
□ □ □ HOURS IN OTHER JOBS, THAT IS A TOTAL OF
□ □ □ HOURS IN ALL JOBS

Was the total number of hours....worked last
week....usual number of hours?

YES
 NO

How many hours does....usually work each week,
including overtime, in (ALL)....job(s)

□ □ □ HOURS IN MAIN JOB
□ □ □ HOURS IN OTHER JOBS
□ □ □ HOURS IN ALL JOBS

Standard output

The following standard output sets are for use in tables published by Statistics New Zealand (Statistics NZ). Note: this does not include customised output requested by clients or descriptive information in Statistics NZ publications. Totals and sub-totals may be included in tables as output divisions see fit.

Full-time/part-time hours per week – total response

The total response standard output variable categories are the same as the classification categories.

Part-time hours per week

1–4 Hours Worked
5–9 Hours Worked
10–14 Hours Worked
15–19 Hours Worked
20–24 Hours Worked
25–29 Hours Worked
Not Elsewhere Included

Full-time hours per week

30–34 Hours Worked
35–39 Hours Worked
40–44 Hours Worked
45–49 Hours Worked
50–54 Hours Worked
55–59 Hours Worked
60–64 Hours Worked
65–69 Hours Worked
70–74 Hours Worked
75–79 Hours Worked
80–84 Hours Worked
85–89 Hours Worked
90 Hours and Over Worked
Not Elsewhere Included

Hours Worked in Employment should be output per week.

The residual categories may be output separately or combined. Where a combination item of residuals is to be used in output, this item should be labelled 'not elsewhere included' and should have a footnote indicating its composition.

The residual categories are defined in the Glossary.

Related classifications and standards

New Zealand

Labour force status and age are prerequisites for determining which people are employed and should respond to the hours

worked in employment question. Any change to the definition of labour force status will impact on the definition of hours worked in employment.

For more details see:

- age
- labour force status.

Derived variables

Usual hours worked in employment can be used to derive full-time/part-time employment status and multiple job holder status.

When both actual and usual hours are collected, and the actual hours worked in the reference period do not equal the usual hours worked, a variable categorising the reason for the difference may be created. For example the following categories are currently used in the Household Labour Force Survey conducted by Statistics New Zealand (Statistics NZ):

- Holidays
- Own Injury or Illness
- Personal or Family Responsibilities
- Overtime
- Industrial Dispute
- Not Enough Work/Short Time/Temporary Layoff - Expect to Return
- Bad Weather/Mechanical Breakdown
- Glide Time/Flexi Time/Shift Work/Demands of Job
- Casual Work/On Call/Seasonal/Relieving
- Changed/Terminated Job
- Other Specify.....

Users of the standard

Users of the standard for hours worked in employment include, the Treasury, the Department of Labour, economic research institutions, local government and employers.

International

The hours worked in employment standard is subject to International Labour Organisation (ILO) determinations.

Glossary

Actual hours worked in employment

The number of hours a respondent actually works in employment during a particular reference period.

Employed

The definition of employed is given in the statistical standard for labour force status that is, all people aged 15 and over who during the reference period:

- worked for one hour or more for pay, profit or payment in kind in a job, business, farm or professional practice
- worked without pay for one hour or more in work which contributed directly to the operation of a farm, business or professional practice operated by a relative
- had a job or business they were temporarily absent from.

Full-time/part-time status

The full-time employed are those who usually work 30 hours or more per week, while the part-time employed usually work fewer than 30 hours per week.

Labour force status

Labour force status is the position of all people aged 15 and over in relation to the labour market.

Multiple job-holder status

Multiple job-holders are those who indicate that they work in a job other than their main job. The HLFS further defines multiple-job holders as those whose hours worked in their other job are greater than zero.

Ordinary time earnings

The gross total payout to all employees, less any overtime payments. All shift, penal and other allowances are included, as are bonuses, paid leave, and commissions earned in a specified pay period. Payments not earned in the specified pay period (eg backpay, redundancy, severance pay) and non-taxable payments, such as tool money, are excluded. Where a payment is for a period of longer than the survey pay period, only the proportion that relates to the survey pay period is counted.

Ordinary time hours

The number of hours represented by ordinary time earnings. Paid travelling time and hours represented by holiday pay and sick pay are included.

Other job(s)

Any job(s) in which the respondent works fewer, or no more, hours than the main job.

Overtime earnings

The gross total payout for overtime hours worked by all employees in the survey pay period.

Overtime hours

The actual number of hours worked in excess of the standard working hours for a particular period. Overtime can be paid or unpaid. Paid overtime means only working time paid for at overtime rates.

Paid hours (hours paid for)

The number of ordinary and overtime hours for which an employee is paid. Paid hours excludes unpaid overtime but may include some hours which are not actually worked, such as paid leave and statutory holidays.

Statistical unit

A statistical unit is the population being surveyed in order to collect information for an output variable. For example the most common statistical units for social, labour and demographic data collections are people, families, household and dwellings. Economic statistical units include enterprises, kind-of-activity units and geographic units.

The statistical unit for hours worked in employment in social collections is generally 'a person'. In economic collections the statistical unit for hours worked in employment can be an enterprise or a business.

Usual hours worked in employment

The number of hours the respondent usually works in employment during a particular reference period, even if they did not in fact do so during the survey reference period because of temporary absences due to sickness or holidays etc.

Residual categories

Don't know

Use of this category is discretionary. The use of a category capturing don't know responses is most applicable to household surveys where don't know may be a legitimate response to certain questions.

Refused to answer

This category is only used when it is known that the respondent has purposefully chosen not to respond to the question. Use of this residual category in processing is optional. Its use is most applicable in face-to-face or telephone interviews, but may be used in self-completed questionnaires if the respondent has clearly indicated they refuse or object to answering the question.

Response unidentifiable

This category is used when there is a response given, but:

1. the response is illegible, or
2. it is unclear what the meaning or intent of the response is – this most commonly occurs when the response being classified contains insufficient detail, is ambiguous or is vague, or
3. the response is contradictory eg, both the yes and no tick boxes have been ticked, or
4. the response is clear and seemingly within the scope of the classification but can not be coded because no suitable option (particularly other residual category options such as 'not elsewhere classified' or 'not further defined') exists in the classification or codefile.

Response outside scope

This category is used for responses that are positively identified (ie the meaning and the intent are clear) but which clearly fall outside the scope of the classification/topic as defined in the standard.

Not stated

This category is only used where a respondent has not given any response to the question asked, ie it is solely for non-response.

References

International Labour Organisation (1998). *Current International Recommendations on Labour Statistics (1998 Edition)*, Geneva.

Statistics New Zealand (1993). *1996 Census of Population and Dwellings: Preliminary Views on Content*, Wellington.