

Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Treasury Portfolio

Supplementary Estimates

20-21 October 2010

Question: SBT 29

Topic: 6291.0.55.001 ABS Publication

Senator Colbeck asked:

- The following questions relate to: 6291.0.55.001 - Labour Force, Australia, Detailed - Electronic Delivery, Sep 2010 - Labour force status by Regions and Sex
- This publication provided information on the trends in employment across the three statistical regions of Tasmania. Included in this data was a suggestion there were 3700 jobs created in the Mersey-Lyell division over the past 12 months as well as 1300 jobs over the past month.
- Can ABS provide information on how they devise these figures including:
 - § Sample sizes for total, male and female data in each of the Tasmanian statistical divisions
 - § When these samples are collected and by what method
 - § Any other modelling or statistical techniques relevant to this data

Answer:

Sample sizes for total, male and female data in each of the Tasmanian statistical divisions

The number of people in the sample of the Labour Force Survey is determined by the number of households selected in the sample, however, the split by males and females is not part of the sample selection process. In September 2010, there were

approximately 1,800 responding households, equating to 3,620 persons representing Tasmania. The split by sex in each of the statistical divisions of Tasmania was:

TASMANIA	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Greater Hobart SD	770	800	1570
Southern SD	137	130	267
Northern SRS	463	500	963
Mersey-Lyell SRS	396	424	820
Total	1766	1854	3620

When these samples are collected and by what method

The ABS Labour Force Survey is a monthly household survey designed to measure the number of people in employment, unemployment and not in the labour force.

Households selected for the Labour Force Survey are interviewed each month for eight months, with one-eighth of the sample being replaced each month. The first interview is conducted face-to-face by specially trained interviewers using computer-assisted interviewing (CAI). Subsequent interviews are conducted over the telephone (if acceptable to the respondent).

Interviewing for the ABS Labour Force Survey is generally conducted during the two weeks beginning on the Sunday between the 5th and 11th of each month. The information obtained relates to the week before the interview (i.e., the "reference week"). For further details, please see the Explanatory Notes in *Labour Force Australia* (cat. no. 6202.0), available on the ABS website.

Any other statistical or modelling techniques relevant to these data

The Labour Force Survey estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are projections of the most recently released quarterly Estimated Resident Population (ERP) data. For information on the methodology used to produce the ERP see *Australian Demographic Statistics* (cat. no. 3101.0), available on the ABS website.

The estimation method used in the Labour Force Survey is Composite Estimation, which was introduced in May 2007. Composite Estimation combines data collected in the previous six months with current month's data to produce the current month's estimates, thereby exploiting the high correlation between overlapping samples across months in the Labour Force Survey. The Composite Estimator combines the previous and current month's data by applying different factors according to length of time in the survey. After these factors are applied, the seven months of data are weighted to align with current month population benchmarks. For details see *Information Paper*:

Forthcoming Changes to Labour Force Statistics, 2007 (cat. no. 6292.0), available on the ABS website .

The most commonly used measure of the reliability of estimates is their relative standard errors (RSEs). The RSE is the standard error divided by the estimate to which it refers. RSEs are useful when comparing the variability of population estimates of different sizes. They are commonly expressed as percentages. Very small estimates are subject to high RSEs which detract from their usefulness. In ABS labour-related statistical publications, estimates with an RSE greater than 25% but less than 50% have an asterisk (*) displayed beside the estimate, indicating they should be used with caution. Estimates with an RSE greater than 50% have two asterisks (**) displayed beside the estimate, indicating they are so unreliable as to detract seriously from their value for most reasonable uses.