

**SENATE EMPLOYMENT, WORKPLACE RELATIONS AND EDUCATION  
LEGISLATION COMMITTEE**

**2006-2007 BUDGET SENATE ESTIMATES HEARING  
29<sup>TH</sup> AND 30<sup>TH</sup> MAY 2006  
EMPLOYMENT AND WORKPLACE RELATIONS PORTFOLIO**

**QUESTIONS ON NOTICE**

**Outcome 2: Higher productivity, higher pay workplace**

**Output Group 2.1: Workplace relations policy and analysis**

**Output 2.1.1: Workplace relations policy advice**

**Question Number: W136-07**

**Question:**

Senator Wong asked in writing:

Given the inaccuracies and complexity in answers to previous questions on real wage growth, please provide a plain English explanation of the methodology used, with step by step instructions to enable your results to be reproduced.

**Answer:**

The calculation of real wage growth between an earlier time period (A) and a later time period (B) is a two-step process.

The first step is to convert the nominal wage (average non-farm compensation per employee) value at time A into time B dollars. This is done by dividing the nominal wage value at time A by the implicit price deflator for final household consumption expenditure at time period A and then multiplying by the corresponding implicit price deflator for final household consumption expenditure at time period B.

The second step is to calculate the percentage growth of the wage value at B over the wage value at A (expressed in B dollars). The growth formula used is the wage value at B minus the wage value of A (expressed in B dollars) all divided by the wage value of A (expressed in B dollars) multiplied by 100.

The above explanation is most easily understood with a numeric example. The example below uses data from the March quarter 2006 (latest) ABS *Australian National Accounts* to show that the real wages growth between the March quarter 1996 and the March quarter 2006 was 16.8 per cent.

Data: *ABS Australian National Accounts, March quarter 2006.*

	<b>Implicit price deflator for final consumption expenditure - households</b>	<b>Average non-farm compensation per employee (\$)</b>	<b>Real average non-farm compensation per employee (\$)</b>
March quarter 1996	85.3	9,133.00	11,167.30
March quarter 2006	104.3	13,045.00	13,045.00

Source: ABS, AusStats (Cat No 5206.0, tables 12 and 41). Note: All data above are seasonally adjusted and are subject to revision in subsequent quarters. While tables 12 and 41 of the ABS *Australian National Accounts* publication provide the latest quarterly figures for household final consumption expenditure and average non-farm compensation per employee, the time-series of these data are contained in ABS AusStats time-series spreadsheets with the corresponding table numbers. These spreadsheets are only available online from the ABS website and are revised with each quarterly publication release.

### Calculations

Step 1: Convert all nominal average non-farm compensation per employee (wage) values to real values. In the example below we convert the earlier March quarter 1996 data into March 2006 dollars.

- \$9,133.00 is the nominal average non-farm compensation per employee in the March quarter 1996.
- 85.3 is the implicit price deflator for final consumption expenditure – households in the March quarter 1996.
- 104.3 is the implicit price deflator for final consumption expenditure – households in the March quarter 2006.

Real average non-farm compensation per employee for the March quarter 1996 (in March 2006 dollars) =  $(9,133.00/85.3)*104.3 = \$11,167.30$

Step 2: Calculation of the growth of real wage values between 1996 and 2006.

Real wages growth over the period =  $(13,045.00-11,167.30)/11,167.30*100 = 16.8$  per cent