

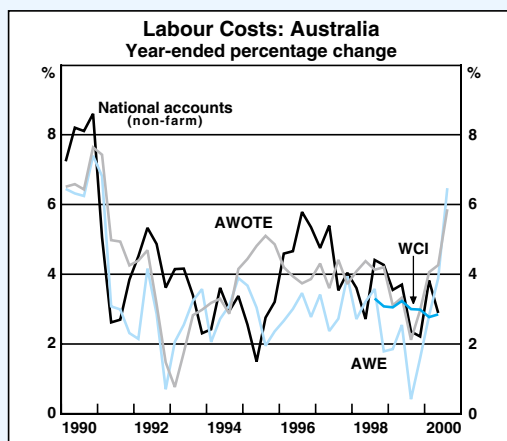
Box C: Alternative Measures of Labour Costs

The growth of labour costs is an important factor in assessing trends and prospects for inflation. In Australia there are several different measures that attempt to summarise economy-wide developments in wages or labour costs.¹ Of these, four are commonly cited:

- average weekly earnings (AWE) per non-farm wage and salary earner;
- average weekly ordinary-time earnings (AWOTE), which is derived from the AWE survey but includes only the ordinary-time earnings of adults working full-time;
- average compensation per wage and salary earner, published in the national accounts; and
- the wage cost index (WCI).

The behaviour of these four measures during the past decade is shown in Graph C1.

Graph C1



Why do the measures differ?

The first three indicators listed above are measures of the labour cost or wage *bill* per employee. At times, there can be significant divergences among them, arising partly from differences in coverage and sources; for example, the national accounts measure can differ from the other two because it is derived from a different survey, and because it includes non-wage costs.

All of the wage-bill measures are subject to variability induced by compositional change, arising because fluctuations in the relative representation of low- and high-wage employees in a survey will affect the recorded level of average wages. In the case of the AWE measure, a particularly important issue is the impact of changes in the relative shares of full-time and part-time workers – an increase in the proportion of part-time workers will reduce AWE because part-time workers earn less per week than the average. In addition to generating short-run volatility, this effect is likely to result in a longer-run understatement of wages growth by the AWE measure, due to a trend increase in the share of part-time workers in total employment. The ordinary-time earnings measure, which is based only on full-time workers, is not affected by this form of compositional change, and in this respect is conceptually closer to an hourly wage measure. Its growth is likely, however, to have been boosted on average by a tendency for ordinary-time working hours to increase, and it remains subject to the more general problems of volatility affecting all wage-bill measures.

The WCI differs from the other three indicators in that it is a measure of wage *rates* rather than the wage bill. It attempts to measure changes in the cost of purchasing a fixed quantity and quality of labour input.

¹ Some of these issues were discussed in more detail in 'Measuring Wages', Reserve Bank of Australia *Bulletin*, December 1996.

The characteristics of each selected job in the WCI are specified in detail and jobs with the same description are matched over time, allowing the index to be constructed from the change in hourly wage rate for each job. As a result of these features, the WCI might be expected to generate a lower average growth rate in the long run than would be recorded by an hourly wage-bill measure. This difference would arise if there was a tendency over time for lower-skill jobs to be replaced by higher-skill jobs, which typically attract higher earnings.

Without a longer run of historical data, it is difficult to say how large such a difference might be. The experience of New Zealand suggests that the average difference between wage-bill and wage-rate indicators could be quite significant. Statistics New Zealand publishes a labour cost index (LCI), which is similar in concept to the WCI, and an average hourly earnings (or wage bill) measure. The difference between the two series has averaged close to 1 percentage point per annum since the early 1990s (Graph C2). On the other hand, in the United States, which also publishes an employment cost index (ECI) similar to Australia's WCI, there appears to be little systematic difference between that measure of wages growth and an hourly earnings measure.

Graph C2



Which is the best indicator for assessing trends in inflation?

In order to assess developments in inflation, wages need to be compared with productivity to derive a measure of unit labour costs. In practice, none of the indicators discussed above is likely to be ideal for this purpose. Wage-bill measures, such as those derived from the AWE survey or national accounts data, are conceptually the most appropriate, since unit labour costs can be thought of as representing the overall wage bill per unit of output. However, these measures, as noted above, can be subject to significant short-run volatility driven by fluctuations in the composition of employment between surveys. This can make short-run developments in the series difficult to interpret.

The WCI, being a wage-rate measure for a fixed basket of jobs, is not fully compatible with economy-wide productivity measures for the purposes of deriving unit labour costs. For the reasons discussed above, the WCI appears likely to grow less rapidly on average than measures derived from the wage bill, and hence a unit labour cost series constructed by combining the WCI with economy-wide productivity would tend to understate the inflation trend. The extent of this effect is difficult to assess, given the short history of the series. At the same time, since the WCI is less affected by short-run compositional change, it can be expected to be less volatile than wage-bill measures in the short run. This implies that the WCI may give more reliable signals of changes in the trend in wage rates, although, given its relatively short history, its behaviour has not yet been tested over an economic cycle. ↯