IPART cost indices - productivity factor

October 2014

IPART regulates a number of industries using an index, including rural and regional buses and local council rates. We make an adjustment to the indices to account for expected productivity growth.

We have recently considered what would be the most appropriate adjustment factor to use in conjunction with the cost indices.

1.1 What productivity measure we have decided to use

We have decided to use a 15-year average of the Australian Bureau of Statistics (ABS) market sector value-added multifactor productivity (MFP) based on quality adjusted hours worked. We will use this measure in decisions made after September 2014.

1.2 Why we changed

We previously used a 15-year average of the ABS’s market-sector gross output measure of MFP. However, the ABS discontinued this series in 2011. Our current estimate is based on the last market-sector gross output MFP index published by the ABS in 2009/10.

1.3 How we chose our measure

We examined which MFP estimate would best measure productivity for industries that we regulate. We have a preference, where possible, to rely on publicly available and transparent data sources.

The ABS provides robust measures of MFP that is publicly available.

We conducted an investigation to explore which MFP measure provided by the ABS most accurately reflects changes in productivity and is consistent with the index we use to inflate the labour component of our cost indices.
In principle, an industry-specific productivity factor would be ideal. However, the ABS industry groupings do not adequately reflect the industries that we regulate using an index. This leaves a choice between a market sector value-added measure and market sector gross output measure as the best available proxy.

We concluded that the ABS market sector value-added MFP based on quality adjusted hours worked is preferred to the market sector gross output measure of MFP based on hours worked because it:

- avoids double counting intermediate inputs and outputs at the market sector level
- more accurately reflects actual productivity changes at the market sector level than the gross output measure of MFP
- is consistent with applying the wage price index (WPI) to the labour component of our cost indices.

The ABS releases the market sector value-added MFP based on quality-adjusted hours worked in December each year. Currently, it has a time-series of 19 years (1994/95 to 2012/13). On balance, we have decided to continue to use a 15-year average of the value-added MFP measure based on quality adjusted hours worked. A long-term (15-year) average smooths out short-term volatility in the index and therefore allow for a more consistent estimation of productivity over time.

If the calculated productivity adjustment is negative we will apply a productivity adjustment of zero. Productivity adjustments will be made using unrounded values.