## Information note—Measures of labour productivity:Quality adjusted hours worked

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Labour productivity measures the ratio of output to labour inputs and is calculated as gross domestic product per hour worked. An alternative measure published by the Australian Bureau of Statistics (ABS) adjusts the measure of hours worked to account for the *quality* of those hours, not just the quantity.

Labour productivity based on quality adjusted labour inputs (QALI) reflects a heterogenous labour force where labour input depends not only on hours worked but also on the characteristics of workers (in the market sector). QALI assign different weights to the number of hours worked of different types of workers according to their productive capacity. The weights are determined by wage rates based on gender, education and age group.

Submissions by the Australian Chamber of Commerce and Industry and the Australian Industry Group (Ai Group) to the Annual Wage Review 2021–22 made reference to this measure of labour productivity.[[1]](#footnote-2) Ai Group and the Australian Council of Trade Unions have also made reference to this measure in previous Reviews.[[2]](#footnote-3)

Table 1 shows that annual labour productivity growth using the quality adjusted hours worked basis has been lower than the unadjusted hours worked measure over the decade to the 2020–21 financial year. This difference in annual growth between each measure has been relatively consistent over the 10-year period. The Productivity Commission has stated that, with the introduction of short, highly discounted, online courses at higher education levels used to upskill or retrain workers displaced by the pandemic, QALI measures may need to be adjusted when the 2021 Census is completed.[[3]](#footnote-4)

#### Table 1: Measures of labour productivity in the market sector, growth rate over the financial year

|  |  |  |
| --- | --- | --- |
|  | **Hours worked basis** | **Quality adjusted hours worked basis** |
|  |  **(% change)** |  **(% change)** |
| 2010–11 | 0.1 | –0.4 |
| 2011–12 | 3.5 | 2.9 |
| 2012–13 | 2.4 | 1.8 |
| 2013–14 | 2.6 | 2.1 |
| 2014–15 | 2.1 | 1.5 |
| 2015–16 | 1.0 | 0.5 |
| 2016–17 | 1.4 | 0.8 |
| 2017–18 | 0.3 | –0.3 |
| 2018–19 | 0.0 | –0.6 |
| 2019–20 | 1.8 | 1.1 |
| 2020–21 | 1.1 | 0.4 |

Note: The market sector includes all industries except for Public administration and safety, Education and training and Health care and social assistance. Percentage change measures are the natural log growth multiplied by 100.

Source: ABS, *Estimates of Industry Multifactor Productivity*, 2020–21 financial year.

1. ACCI submission, 1 April 2022, at paras 108–109; Ai Group submission, 1 April 2022, at pp. 23–24. [↑](#footnote-ref-2)
2. For example, Ai Group submission to the Annual Wage Review 2020–21, 26 March 2021, at pp. 23–24; Ai Group submission to the Annual Wage Review 2019–20, 16 March 2020, at p. 24; ACTU submission to the Annual Wage Review 2019–20, 20 March 2020, at paras 222, 229. [↑](#footnote-ref-3)
3. Productivity Commission (2021), [*PC productivity insights*](https://www.pc.gov.au/research/ongoing/productivity-insights/recent-developments-2021/productivity-insights-2021-recent-developments.pdf), June, p. 7. [↑](#footnote-ref-4)