Dashboard panel A: Labour productivity (index, June 2014 = 100) - This figure is a line chart that depicts quarterly labour productivity indexes for the market sector, non-market sector and whole economy between June 2014 and September 2024. The figure also shows the 2015-2019 average level of productivity for the whole economy.
Panel B: Quarterly change in labour productivity - This figure is a column chart that depicts the quarterly change in output, hours worked and labour productivity for the June quarter 2024 and September quarter 2024.
Panel C: Annual change in labour productivity - This figure is a column chart that depicts the annual change in output, hours worked and labour productivity for the year to September 2023 and the year to September 2024.

a. Non-market sector labour productivity is estimated by the PC using gross-value added and hours worked from the three non-market sector industries (public administration and safety, education and training, and health care and social assistance).

Source: PC estimates based on ABS (2024b, 2024d).

**Update from Alex RobsonDeputy Chair, Productivity Commission**



Update from Alex Robson, Deputy Chair, Productivity Commission

Australia’s productivity growth remains in the doldrums.

The latest national accounts figures for the September quarter showed labour productivity fell by 0.5% in the quarter, and by 0.8% through the year. The decline was broad-based, as labour productivity dropped in both the market and non-market (or government-dominated) sectors during both the quarter and the year.

The immense disruption from COVID-19 inflated a short-lived productivity ‘bubble’ which has since burst. Labour productivity is now back to where it was during the stagnant 2015 to 2019 period leading up to the pandemic.

The data underscores the point that reinvigorating productivity is a national priority. Even small changes that make the economy more dynamic and efficient can deliver big economic dividends and add up to major improvements in real wages and living standards over time – as our recent modelling of National Competition Policy reforms showed. Over the medium to longer term, higher productivity growth also underpins fiscal sustainability.

But it’s not all doom and gloom.

Today’s economy is, in some ways, stronger than the pre-pandemic economy was. This is most evident in the jobs market, where Australia now has higher labour force participation and lower unemployment.

This dynamic is explored in a staff article by James Thiris, a Senior Research Economist at the Productivity Commission (PC), which compares Australia’s recent labour productivity performance with that of the United States.

James argues that the much discussed ‘great productivity divide’ between Australia and the United States – where productivity growth is booming – is not as wide as it first appears, and that it must be seen in the context of the very different post-pandemic labour markets in the two countries.

Regardless, policymakers need to keep productivity front-of-mind. The Treasurer has recently commissioned a series of PC inquiries into how boost productivity across five key areas of the economy.

These ‘five pillars’ are: creating a dynamic and resilient economy; building a more skilled and adaptable workforce; harnessing data and digital technology; delivering quality care more efficiently; and investing in cheaper, cleaner energy and the net zero transformation

The PC will deliver its reports to government at the end of next year, and we have recently opened up the floor to the people of Australia to give us their best ideas – we call it ‘Australia’s Productivity Pitch’. We all have a stake in our future, so I encourage you to go to [pc.gov.au](https://www.pc.gov.au) and have your say.

The great productivity divide

**By James Thiris, Senior Research Economist**

Australia’s headline labour productivity has stagnated since the COVID-19 pandemic. And our productivity performance looks even worse compared to the United States (US), where productivity has surged ahead.

The stark difference between headline labour productivity growth in Australia and the US since the COVID‑19 pandemic has been heavily discussed (Bruno et al. 2023, pp. 4–5; Ellis 2023; Kehoe 2024). But Australia is not alone – US productivity growth has also eclipsed most advanced economies.

Although differences in productivity growth are not unusual, the recent divergence between Australia and the US is sufficiently large to have implications for our relative living standards.

But the headline figures can be deceptive: when you account for differences in measurement, the great productivity divide is not as big as it seems.

What’s more, a careful cross-country comparison shows that some of this gap is likely the result of cyclical changes in the labour market, and temporary policies introduced during COVID-19 that have since been reversed. However, there may also be longer-term factors driving this gap.

So not only is the recent great productivity divide not as great as it first appears, there are reasons to believe it could shrink over time.

### Comparing apples and oranges

To start explaining the recent productivity divide it is important to recognise that the Australian and US headline measures of productivity are not directly comparable (figure 1).

**Figure 1 – Australian productivity growth has lost ground to the United States**

Quarterly real labour productivity (index, Dec 2019=100), June 2004 to June 2024**a**

Figure 1 is a line chart which depicts quarterly labour productivity growth indexes between June 2004 and June 2024. There are four lines on the chart. 
The first line depicts the United States headline labour productivity growth measure. This line includes productivity growth for the nonfarm business sector.
The second line depicts the Australian headline labour productivity growth measure. This line includes productivity growth for the whole economy.
The third line depicts the Adjusted Australian labour productivity growth measure. This line includes productivity growth for the non-agriculture market sector. This line is comparable to the United States headline measure.
The fourth line depicts the adjusted Australian labour productivity growth measure without the mining industry. 
The figure shows that there was a large divergence between the Australian and United States headline productivity growth rates after the COVID-19 pandemic. Australia returned to its stagnant pre-COVID trend, while the US surged ahead.
When the Australian headline measure is adjusted to make it more comparable to the United States, this reduces the productivity gap by about 20%.
Further, when mining is removed from the adjusted Australian labour productivity measure, this reduces the gap to the United States by about one half. 

**a.** The Australian headline measure is for the whole economy. The US headline measure is for the nonfarm business sector. The adjusted Australian measure is for all market sector industries except agriculture, forestry and fishing.

Source: PC estimates based on ABS (2024a, 2024c) and BLS (2024).

Australia’s ‘whole economy’ measure includes the non-market sector – predominantly government supplied services such as education, health care, and aged care – which is typically less productive and accounts for a growing share of the economy. Our measure also includes the more volatile agricultural industry.

In contrast, the widely reported US ‘nonfarm business sector’ measure does not include these industries, which can make Australia’s productivity appear to grow more slowly.

Adjusting for these differences to compare the aggregate productivity data on a like-for-like basis reduces the productivity divide since December 2019 by about 20% (figure 1). The productivity gap narrows mostly due to removing the Australian non‑market sector, which has performed poorly since the pandemic (PC 2024a, pp. 2–3).

Even so, a sizeable gap still remains.

#### Where did Australia lose ground?

Digging deeper, a comparison of industry-level productivity growth rates across the two countries shows that the mining industry has played the most significant role in widening the great US-Australia divide (figure 2). Removing mining – where labour productivity is typically volatile – from Australia’s labour productivity growth almost halves the gap to the US since December 2019 (figure 2).

But we can also see that Australia fell behind the US in most service industries. So even if removing the effects of mining reduces the great productivity divide, the gap still remains. For an explanation, we need to look beyond simple adjustments to productivity measurements.

**Figure 2 – Australian mining and service industries have lagged behind the USa**

Difference in the average annual real labour productivity growth between Australia and the United States, by industry between 2019-20 and 2022-23

Figure 2 is a bar chart which shows the percentage point difference in annual real labour productivity growth between Australia and the United States, by industry, between 2019-20 to 2022-23. 
Comparing industry-level productivity growth rates across countries shows that the mining industry played the most significant role in explaining the productivity gap. Australia also fell behind in almost every service industry. In contrast, Australia performed relatively well in transport, postal and warehousing. 


**a.** Australia and the US use different industry classifications. Only the most comparable industries were shown in this figure. US data is for fiscal years starting October, whereas Australian data is for financial years. Analysis is based on the most up-to-date data.

Source: PC estimates based on ABS (2023) and BLS (2024).

### Australia’s strong labour market weighed down our productivity

Following the COVID-19 lockdowns, Australia’s labour market demonstrated remarkable growth. The share of working-age Australians with jobs reached record highs (figure 3). In contrast, the US labour market has not fully recovered, as the share of people employed still sits below pre-pandemic levels.

**Figure 3 – Australia’s labour market was relatively stronger after the pandemica**

Hours worked (index = Dec 2019) (top left), employment to population ratio (top right), real investment (index = Dec 2019) (bottom left) and capital intensity (index = 2018-19) (bottom right), by country

This figure contains four line charts. 

The first line chart shows an hours worked index from 2014 to 2024 for Australia and the United States. The chart shows that growth in hours worked increased in Australia by a higher rate than the United States. 

The second line chart shows the employment-to-population ratio from 2014 to 2024 for Australia and the United States. The chart shows that Australia’s employment-to-population ratio increased dramatically following the COVID-19 pandemic. In contrast, the employment-to-population ratio is still below pre-pandemic levels in the United States.  

The third line chart shows a real investment index from 2014 to 2024 for Australia and the United States. The chart shows that growth in real investment increased at a similar rate for both Australia and the United States following the COVID-19 pandemic.   

The fourth line chart shows the capital intensity index from 2013-14 to 2022-23 for Australia and the United States. The chart shows that the capital labour ratio decreased in Australia but increased in the United States following the COVID-19 pandemic. 

**a.** Capital intensity is the ratio of capital services to hours worked. Financial year data was used for capital intensity. Australia’s financial years range from June-July, whereas the United States use fiscal years from October-September.

Source: PC estimates based on ABS (2023, 2024a, 2024c, 2024e); BLS (2024); and FRED (2024).

Australia’s strong labour market likely weighed down measured productivity growth. Many new workers joined the labour force – including younger, less experienced and less educated workers – which can act as a drag on productivity in the short-term as new entrants tend to take time to acquire new on-the-job skills and catch up to their more experienced colleagues (PC 2024b, p. 3).

Ultimately, more Australians in jobs is a good news story. And as these new workers gain experience, their effect on aggregate productivity should also improve.

Another aspect of the unprecedented growth in Australian employment was there was less capital available for every worker. The capital stock is inherently slower to move than hours worked because many forms of capital (like equipment or infrastructure) are lumpy, long-lived investments that cannot quickly be built up or scaled back in response to short-term economic changes. That meant the growth in Australia’s capital stock did not keep pace with our labour market. This led to a fall in the capital-labour ratio relative to the US (figure 3), weighing down our labour productivity growth. Although, this trend also preceded the pandemic.

### Government policies during the pandemic also played a role

Australia’s policy responses during the COVID-19 pandemic were designed to protect jobs and businesses. While this maintained incomes and employer relationships, it may have affected productivity growth by preventing the reallocation of labour away from less productive firms, and towards more productive firms.

Broadly, Australia focussed on policies designed to minimise the disruption of the COVID-19 lockdowns. This included maintaining employees’ attachment to their jobs (through the JobKeeper scheme) or helping temporarily illiquid businesses stay afloat (through changes to insolvency laws).

In the case of JobKeeper, this initially helped productivity by ensuring productive firms did not prematurely go bust during the onset of COVID‑19 (Andrews et al. 2023, p. 3). As the economy recovered, however, JobKeeper was more likely to subsidise less productive firms, reducing productivity-enhancing reallocation of workers (Andrews et al. 2023, p. 3) by keeping ‘zombie’ firms afloat. Conceptually, changes to insolvency laws could have had a similar effect.

In contrast, US policy targeted unemployment benefits instead of preserving employer attachment. This likely contributed to the fall in employment rates (figure 3). But it may also have also supported productivity as laid-off workers found new jobs at more productive firms (Harris and Sinclair 2023; Igan et al. 2024, p. 3). Indeed, the US had relatively high rates of labour churn after the COVID-19 pandemic, potentially assisting their recent productivity growth (Dao and Platzer 2024, p. 19).

In summary, Australian policies offered a safety net for workers and businesses that were likely to struggle through the COVID-19 lockdowns, while the US offered fewer protections to their workers. While there are benefits and costs to each approach, one potential cost in Australia was reduced productivity growth following the lockdowns.

### How can we improve our labour productivity?

The recent divergence in headline labour productivity growth between Australia and the US seems to be driven in part by measurement differences, cyclical changes in the labour market, and temporary policies introduced during the COVID-19 pandemic that have since been reversed. Therefore, it is possible that the gap may shrink over the short- to medium-term. Although, longer-term factors that preceded the pandemic could have also driven this productivity gap.

The apparent trade-off that was present during the pandemic – Australia prioritising job security, possibly at the expense of future productivity growth – underscores the difficult decisions policymakers faced in obtaining the ‘right’ balance.

There are some clear lessons for where Australian productivity growth could be improved. Closing the gap with the US in the midst of a strong labour market will require a stronger focus on productivity amongst policy makers. This includes:

* introducing policies to create a more dynamic and competitive economy
* improving the skills of the workforce through better education quality (both pre-job and on-the-job training)
* increasing investment in, and effective use of, data and digital technologies
* identifying ways to improve productivity performance in the growing non-market sector.

The PC has made many policy recommendations on these topics and will continue to do so through a series of five inquiries recently commissioned by the Australian Government about boosting productivity. You can find more information about these new inquiries on our website: [pc.gov.au](https://www.pc.gov.au).

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