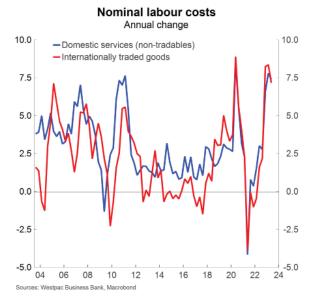


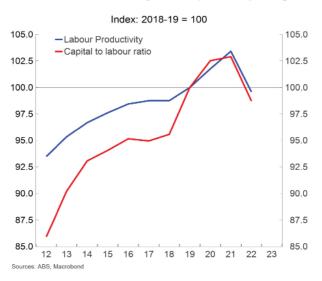


Labour and Cost Insights Careful Supply Juggle Confronting the RBA

- The costs of producing goods and services grew quickly in the aftermath of the pandemic. Labour costs spiked first in those industries that produce internationally traded goods. Higher global prices due to shortages meant businesses could afford to pay their workers more. It also means as growth in global prices slows, or even falls, labour costs in these industries will too.
- What is less well understood is the behaviour of labour costs associated with domestic services. Here, higher costs can be sticky and harder to get down. We find that these labour costs are growing strongly by around 13.8% since the December quarter 2019. This has been driven by higher earnings, but more significantly a sharp fall in labour productivity.
- The key question is will the dismal productivity performance persist? Unlikely in our view. The extraordinary rebound and subsequent growth in hours worked following the end of lockdowns has meant that the capital stock (infrastructure, equipment, new buildings) has not kept up. This has resulted in a decline in the amount of capital used by each worker, and a corresponding fall in measured productivity. As growth in the capital stock catches up, productivity will stabilise before increasing. The international experience supports this view.
- The slowdown in aggregate demand is assisting this adjustment. By limiting the ability of businesses to pass on higher costs, it will do two things first, reduce demand for labour leading to falls in hours worked and a moderation in earnings growth. Second, provide incentive for firms to boost productivity, including by increasing investment.
- There is no doubt the supply side of the economy is adjusting a dynamic the RBA needs to be aware of in setting policy, or it may risk overtightening. But if the adjustment takes too long, labour costs could remain high, and inflation may not come down as quickly as expected. This may unanchor inflation expectations a counter risk the RBA is acutely aware of.



Australia: Productivity and Capital Deepening



The Reserve Bank (RBA) is forecasting a return to the top of the 2 – 3% inflation target by the end of 2025. These forecasts assume labour productivity, which is measured by the amount of output for each hour worked, will recover back to its pre-pandemic trend over the forecast period. If it does not, current annual wages growth of 4.0% will be inconsistent with the RBA's inflation target.

We agree with this assumption: as the capital stock catches up to the extraordinary increase in hours worked, we expect to see labour productivity stabilise before increasing. The slowdown in demand will help with this adjustment. The international experience supports this view. This is a dynamic the RBA needs to be aware of when considering policy options – failure to recognise this dynamic could lead to overtightening and unnecessary job destruction.

While we know these supply side adjustments are occurring, there are risks when it comes to inflation expectations the RBA is also managing. If this adjustment takes longer to play out because demand remains resilient or there is insufficient investment to boost the amount of capital used by workers, labour costs could remain high, and inflation may not come down as quickly as expected.



Drivers of inflation

The RBA has recently underscored the importance of domestic drivers in aggregate inflation outcomes. In the words of Governor Michelle Bullock "the remaining inflation challenge we are dealing with is increasingly homegrown".

This is important because inflation underpinned by domestic factors (such as wages and demand) can be sticky and requires a policy response to bring down. Domestic inflation is heavily weighted towards services such as health services, haircuts, and accommodation.

One way to gauge the significance of domestic inflationary pressures is by looking at the evolution of labour costs associated with producing each unit of output – known as nominal unit labour costs.

Nominal unit labour costs

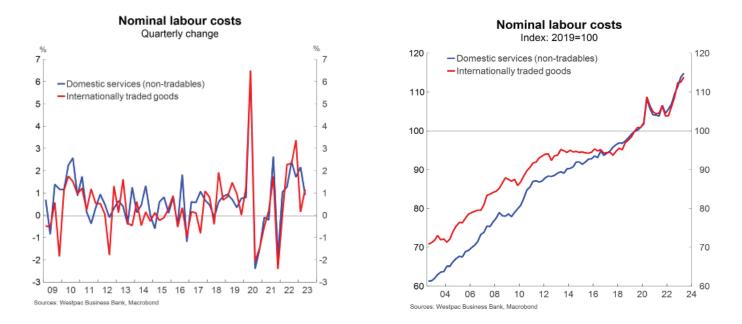
While much of the analysis to date has focused on aggregate costs, we look at different sectors of the economy allowing us to isolate where the inflationary pressures are coming from.

Based on this analysis we find that the cost of producing each unit of domestic goods and services^{*} (or non-tradables which includes mainly includes services) has increased significantly (by around 13.8% since the December quarter 2019) and remains elevated. Their growth initially lagged the cost of producing internationally traded goods, but it has now caught up.

Since 2019 the costs of producing domestic services have increased by an average annual pace of around 3.75%. This compares to around 2.5% in the decade before the pandemic. When it comes to internationally traded goods, labour costs have grown at an annual average rate of 3.5% since 2019, compared with the average annual rate of 1.6% in the pre pandemic period.

Industries that have experienced the largest increase in unit labour costs since 2019 include construction, financial services, professional services, arts and recreation, and transport and storage. Clearly, these are domestically focussed industries.

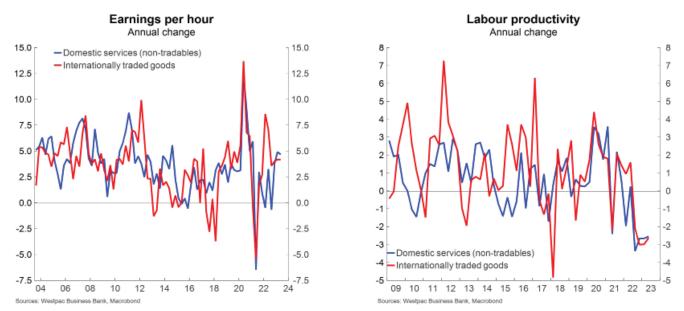
When looking at levels, unit labour costs are well above the average recorded over 2019 suggesting that the jump has not just been driven by volatility related to the pandemic.



Why has the cost of producing services increased and why has labour productivity declined?

Earnings per hour have increased, but more significantly labour productivity has fallen sharply. The key question going forward is will the dismal productivity performance persist? Unlikely in our view.

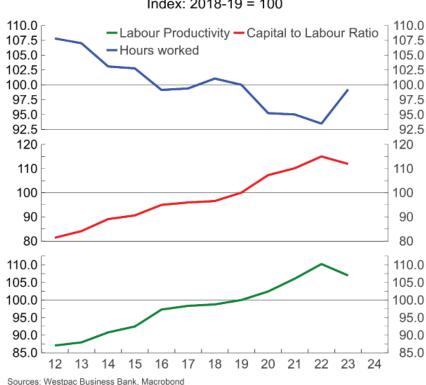




The extraordinary rebound and subsequent growth in hours worked following the end of lockdowns has meant that the capital stock (infrastructure, equipment, new buildings) has not kept up. This has resulted in a decline in the amount of capital used by each worker, and a corresponding fall in measured productivity. This has happened despite resilient private and public investment (i.e. a growing capital stock). As growth in the capital stock catches up, productivity will stabilise before increasing. This has been the experience in certain sectors in Australia and other advanced economies.

In Australia, we saw measured productivity increase in the sectors that produce internationally traded goods, as hours worked declined in the aftermath of the pandemic. This led to an increase in the amount of capital used by each unit of labour and an increase in measured productivity. In 2022-23 this turned, which resulted in a sharp fall in measured productivity.

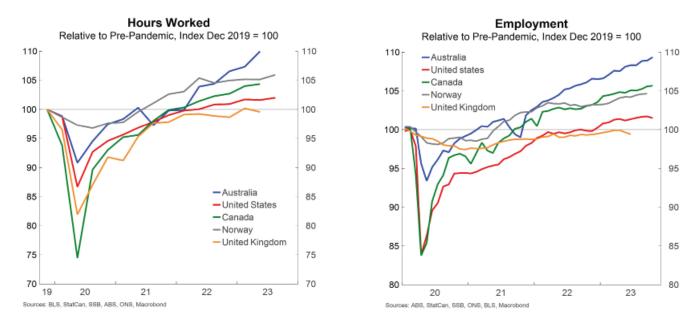
Importantly, this experience shows that the number of hours worked is driving the all-important capital to labour ratio and measured productivity performance. It therefore follows that as the sector continues to adjust, growth in hours worked slows and the capital stock catches up, we should see measured productivity stabilise before increasing.



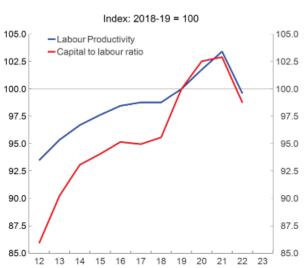
Internationally traded goods sector Index: 2018-19 = 100



The international experience is also telling – countries that have not experienced the same burst in hours worked, have recorded superior measured productivity in the post pandemic period. In the US for example, the number of hours worked only returned to pre pandemic levels in the June quarter 2022, over a year after Australia achieved this milestone.



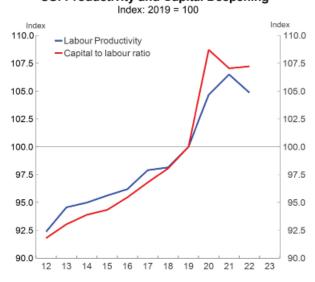
Without the big increase in hours worked, other advanced economies did not see their capital to labour ratio and measured productivity fall.



Australia: Productivity and Capital Deepening

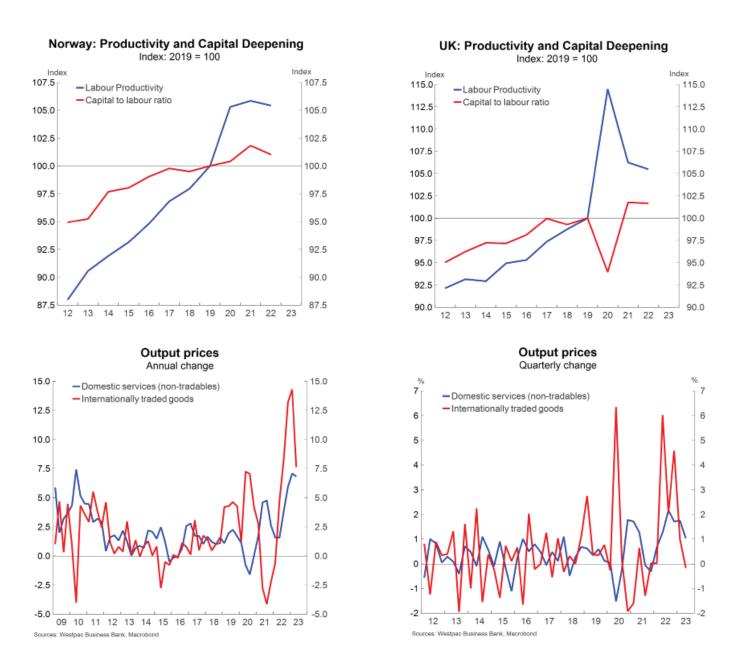
Why do firms continue to hire when labour costs are higher?





Since 2019 the growth in output prices have more than offset the increase in labour costs – leading a fall in real unit labour costs. This has given businesses a strong incentive to hire workers as additional headcount adds to profits as businesses can pass on the higher costs. This incentive has helped drive the rapid expansion of the labour market.





But this is now shifting. Growth in output prices has eased, while labour costs continue to grow. As demand continues to slow, the ability to pass on these higher costs will continue to fall, squeezing margins. We have seen this with real labour costs increasing over the past year.

This will do two things.

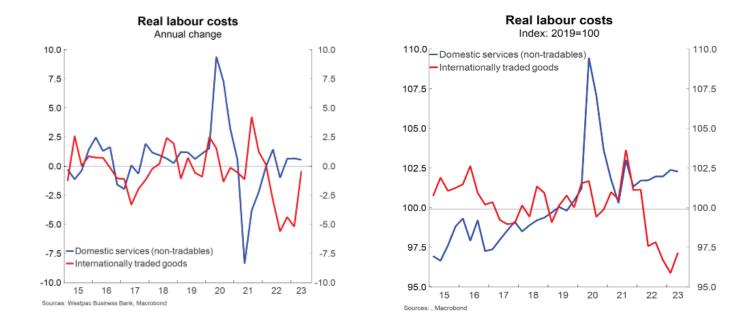
First, reduce demand for labour, driving a fall in hours worked and a moderation in earnings growth. A fall in hours worked will do some of the work required to improve the capital to labour ratio. However, without causing a more severe weakening in the labour market than the RBA would like, a large part of the improvement in the capital to labour ratio will need to come from expanding the capital stock.

Second, provide incentive for firms to boost productivity, to drive costs down. This can be achieved through business investment which will grow the capital stock. The labour supply was quick to respond to stronger demand, but the capital stock is responding with a lag. This is partly because investment is inherently slow as it takes time to explore opportunities, build a business case and then execute the planned investment. But the investment response more recently is also being incentivised by higher real unit labour costs.

What will happen going forward?

There is no doubt the supply side of the economy is adjusting. Growth in the capital stock is catching up to the increase in hours worked. This will stabilise and then increase the amount of capital used by each unit of labour.





The slowdown in aggregate demand is helping to speed up this adjustment. By limiting the ability of businesses to pass on higher costs, it will do two things – first, reduce demand for labour leading to falls in hours worked and a moderation in earnings growth. Second, provide incentive for firms to boost productivity, including by increasing investment.

The RBA needs to be aware of this dynamic in setting policy, or it may risk overtightening.

However, as we have highlighted there are counter risks. If this adjustment takes too long because demand remains resilient or there is insufficient investment to boost the amount of capital used by workers, labour costs could remain high and inflation may not come down as quickly as expected. This may lead to a de-anchoring of inflation expectations – a risk the RBA is acutely aware of.

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*Note: the internationally traded goods sector includes all industries where exports and imports account for a significant share of output – this includes manufacturing, transport, wholesale, retail, and electricity. Domestic services or non-tradable includes all other industries, most notably household services, business services and construction services. The mining and agriculture sector are excluded from the analysis.

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