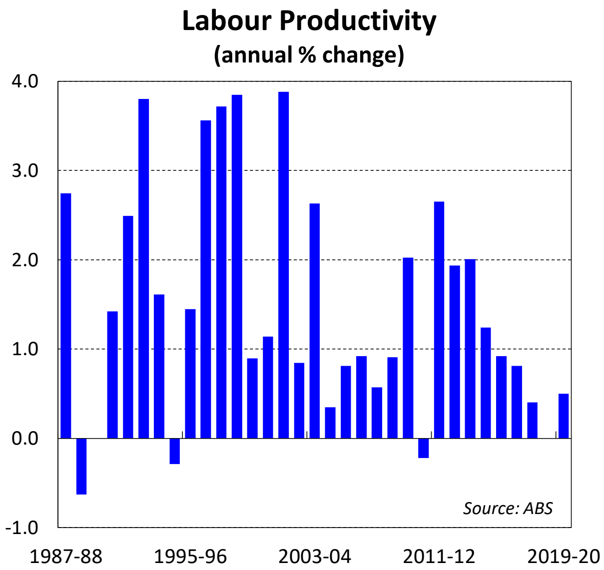
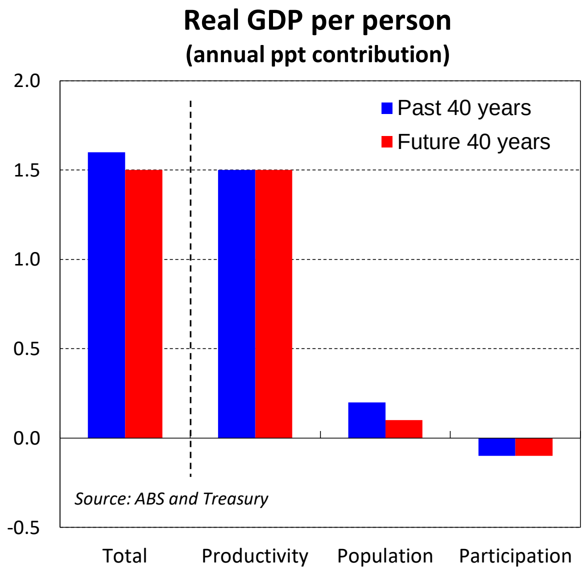
Thursday, 5 August 2021

Productivity Predicts Our Future

"Productivity isn't everything, but in the long-run it is almost everything."

- **Increasing worker productivity is by far the most important factor to reducing poverty and growing income and living standards over time in Australia. Over the past 30 years, higher labour productivity has been responsible for over 80% of the growth in real income per person.**
- **Productivity growth has been slowing. Since the mid 2000s, productivity growth in Australia and most advanced economies has been significantly lower than in preceding decades.**
- **This is driven by range of factors: including a less dynamic economy, slower technological change and adoption, growth of the services sector, and lower business investment.**
- **The COVID-19 pandemic has accelerated many trends that had been emerging in recent years. Technological adoption has increased significantly and some workers are more productive working from home.**
- **International border closures will impact the pace of skilled migration for years to come. This underscores the importance of training and educating students, the existing workforce and unemployed people to meet skills needs.**
- **A multi-part solution is needed, with input from all stakeholders. Policy options are focussed on markets, education, health, government services and infrastructure, and the environment.**
- **Productivity enhancing reform is not easy to implement. The outlook is that progress will remain slow. Concerted work is required from all stakeholders to drive productivity growth back up to what has been seen in history.**





Increasing productivity is key to improving living standards

As Nobel laureate Paul Krugman said in his 1994 book *The Age of Diminishing Expectations*: "Productivity isn't everything, but in the long-run it is almost everything."

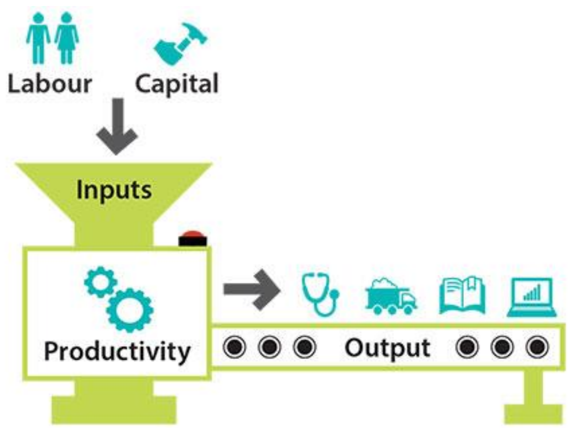
Increasing the productivity of workers is by far the most important factor to reducing poverty and increasing income and living standards over time.

Increasing the number of workers in the economy through encouraging more people to join the workforce and sustainably growing the population both increase GDP and grow the size of the economy. However, their contribution to growth is much smaller than increasing productivity.

But what is productivity?

Productivity is a measure of how efficiently an economy can turn inputs, like labour and capital, into outputs: products and services.

Labour productivity is a measure of how much labour is needed to produce given levels of output. Productivity can also be measured by looking at other inputs used in production, including labour and capital. This note will focus on labour productivity.



Source: Reserve Bank of Australia

When labour productivity rises, workers can produce more outputs for each hour of work or make the same number of outputs with fewer hours of work.

Key factors that drive labour productivity are the pace and adoption of innovative technological advances and increases in the education and skills of the workforce.

Businesses benefit from increased productivity through higher profits, which can enable greater investment in the future, generating additional profits and growth. Workers are rewarded with increases in their incomes and the economy benefits through faster economic growth.

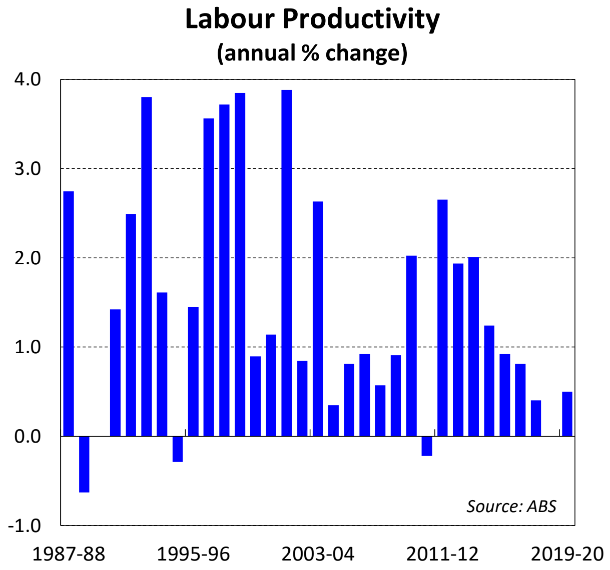
This is why productivity growth has been the most important source of income growth in Australia. In fact, over the past 30 years, increasing labour productivity has been responsible for over 80% of the growth in real income per person.

However, Australia and much of the developed world has a problem.

Productivity growth has been slowing

Since the mid 2000s, productivity growth in most advanced economies has been significantly lower than in preceding decades.

In Australia, labour productivity has grown at around 1.2% per year over the early- to late-2010s, down significantly from 2.4% during the mid- to late-1990s and below the 1.5% 30-year average.



Slowing productivity growth has many causes

Slowing productivity growth is not a new problem. But what is the cause?

Unfortunately, there is no one underlying cause. It is driven by a combination of factors. One of the main causes identified by economists is a decline in 'economic dynamism.'

A dynamic economy can change quickly and adapt to different circumstances. Innovative and new start-ups can enter markets with limited barriers, replacing old, inefficient companies. Workers can easily change jobs and move to new cities to better utilise their skills and increase their wages. New technologies are quickly implemented and processes are improved.

Other causes of slow productivity growth include:

- A reduction in the pace of technological change and lower returns from new innovations as many technologies with the biggest gains to productivity have already been invented,
- An increase in the share of people working in the services sector, where productivity is harder to generate. For example, a haircut hasn't changed much in hundreds of years,
- Lower levels of business investment,
- Lower returns from increased education as more of the population becomes educated,
- An ageing population, and
- Higher levels of income and wealth inequality.

It is tempting to pin declining productivity on one of these factors. But like many complicated problems in our society, the answer lies in the combination and interaction of factors.

COVID-19's impacts

The pandemic has fundamentally changed the way most of us have been living our lives for the past 18 months or so. Extensive measures aimed at controlling the spread of the pandemic and unprecedented government support programs have forced businesses to change the way they do businesses.

The pandemic has accelerated many trends that had been emerging in recent years. This includes the continued shift to online shopping and the move by millions of workers worldwide to working from home arrangements. The pandemic has also led to our borders slamming shut, reducing the supply of skilled labour to meet business needs.

Technological adoption

The pace of technological adoption has increased rapidly during the pandemic. Businesses have been forced to adapt to serving a customer base that is largely no longer physically there. Employer and employees have had to increase their use of technology to deal with the challenges of working remotely.

The shift to the digital provision of more goods and services has been occurring for a long time. This pandemic has greatly accelerated that shift. This will have a positive impact on productivity as businesses use technology to improve their products and services and reduce costs.

Work from home

Working from home (WFH) has been somewhat contentious. Many experts suggest that the change can drive large increases in productivity. Others suggest it is only temporary and that 'normal' arrangements will resume once the virus is behind us.

One area where WFH benefits the economy is in reducing commute times. Over recent decades as our cities have grown and become more crowded, workers have increasingly spent more time going to and from work each day. In fact, the average amount of time Australian workers spent commuting to work had risen to 4.5 hours per week in 2017. This is a 23% rise from the 2002 average of 3.7 hours per week. Workers who spend a lot of their day commuting tend to be less happy with their jobs and are likely to be less productive as a result.

Slashing these commute times for millions of workers can have significant benefits to productivity. Firstly, workers get hours back in their lives which they can use to do other activities. Considered across the economy, this frees up millions of hours per week that were previously largely unproductive. Additionally, they tend to be happier in their jobs and more productive during the hours they are working.

Research since COVID-19 hit has found that workers are largely more productive, or at least as productive, working from home as they were in the office. Worker's report being happier in their surroundings, less distracted, and able to focus on specific tasks for longer periods of time.

Fears from some bosses that workers shirk if they aren't watched have proven to be unfounded.

Research has found that businesses who succeed with WFH models do so by ensuring employees are trained in how to work collaboratively and effectively in this new world. We are not all born with the ability to effectively WFH and regular catchups by managers with their teams and collaboration sessions help smooth the transition to the new environment.

But it is not all good news.

One area which has proven more challenging is encouraging innovation. Brainstorming new ideas and developing solutions to problems tends to be more difficult in a virtual environment. This is an area where businesses must learn and adapt as these new models of working become more permanent. More virtual collaboration sessions and better use of technology can help to ensure that an innovative environment is maintained in the workplace.

International borders

A young, educated and highly skilled workforce can help to support productivity. The goal of Australia's skilled migration program is to bring in young and skilled migrants who have skills that businesses need and that may be in short supply domestically.

Since the pandemic hit, international borders have snapped shut. This reduced net overseas migration from over 200,000 per year to negative levels as temporary migrants leave but aren't replaced by new migrants.

For several months, we have heard from businesses in certain industries that they are having trouble finding the right labour and skills to fit their needs. This has particularly impacted businesses who employed a higher proportion of temporary and permanent migrants prior to the pandemic. This situation is likely to continue in the near future.

Borders should open some time in 2022 and the skilled migration program will resume. However, it is likely to be ramped up slowly and take several years before the migrant intake returns to previous levels. During this time, the demand for certain skills from businesses is likely to continue to grow.

This emphasises the importance of investing in appropriate education and training for students, existing employees and the unemployed. Education is not a band-aid solution. It will take time to see the effects. However, it will help to ensure that employees are equipped with the right skills to meet the needs of employers. Continued investment is required in education and training from all stakeholders, including businesses, government, and educational institutions.

A better educated and more highly skilled population will help support productivity in the future.

The distant future

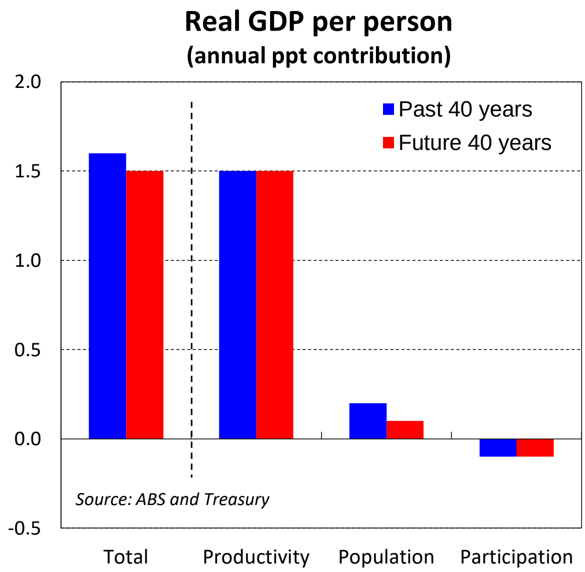
'Prediction is very difficult, especially if it's about the future' – Niels Bohr

While making predictions about the future is fraught with difficulties, forecasts and projections can be incredibly useful tools. They help economists, policy makers, businesses and consumers plan and make better decisions.

A reminder of the challenge Australia and other developed economies faces was provided on Monday, 28 June 2021, when the Federal Government published the 2021 Intergenerational Report (IGR). This was the 5th iteration of the report, published every 5 years. This latest report was delayed by the COVID-19 pandemic.

The report projects current government policy settings 40 years into the future to examine the sustainability of those polices and assesses how the economy and federal budget will be impacted by major trends in the Australian and global economy. One of the major issues the IGR highlights is the impact on the federal budget of the ageing of the population.

In the report, labour productivity is expected to be the main driver of real GDP growth per person. It contributes almost all of the projected 1.5% annual growth in real GDP per person over the next 40 years.



The devil is in the detail

The report is built on many assumptions to enable such long projections. One of those is that productivity growth will return to the 30-year average of 1.5% per year. Increasing from the 1.2% per year growth over the early- to late-2010s.

The challenge that our economy faces to return productivity growth to these levels should not be understated. This is not an easy task.

A multi-part solution is needed

Various reviews have presented a wide range of options that can be implemented by governments and businesses, these include options focussed around:

Markets:

- Encourage more innovation, competition and dynamism among firms, and
- Facilitate more investment, development and adoption of new technological innovations.

People:

- Improve health services and outcomes,
- Improve the education system to ensure students attain necessary skills and succeed in an information and technology-driven economy, and
- Make it easier for workers to move across businesses and locations to where they are most productive.

Government:

- Provide better and more cost-effective public services,
- Improve infrastructure, such as roads, and better use limited resources, such as land, and
- Reform the tax system to reduce reliance on taxes which discourage economic activity.

Environment:

- Address climate change.

The Government also outlined some of its strategies in the IGR, including bankruptcy reforms, consistent rules to recognise certain skills across states and territories, and investments in innovation. It also noted investments in education, skills and infrastructure.

While these are welcome policy initiatives, they alone will not be enough to drive productivity growth back up to what has been seen in history. Continued work is required domestically and globally by all stakeholders to return productivity growth to its heyday.

The downside can be expensive

The IGR painted a picture of what things would look like if productivity growth remained at the recent average of 1.2% per year rather than returning to 1.5% per year.

This would result in the level of GDP being around 9.5% lower and incomes per person being around $32,000 lower in the year 2060-61 than they would be if productivity growth returned to 1.5% per year.

What does this mean in practice?

It means lower living standards for our children than what they could have otherwise. It means fewer people lifted out of poverty to be able to enjoy the life that most of us take for granted.

Outlook

This is certainly sobering news and some commentors are not optimistic on the potential for significant productivity growth in advanced economies in the near future. However, at times things can change quickly at exactly the point when few people are expecting them to.

We should remember just how far human society has come in only a few short generations. Today, technological innovation and economic expansion has enabled most of us to live lives that even royalty could only have imagined a few hundred years ago.

The COVID-19 pandemic and the way it has impacted our work can lead to an unexpected increase in productivity. As workers become less physically connected to their place of work they can more easily move to where they can be most productive.

Technological innovations, such as artificial intelligence and machine learning, have the potential to drive significant productivity improvements.

Unfortunately, while these innovations will help, the outlook over the next few years is that productivity growth is unlikely to quickly accelerate to what has been seen in the past.

Productivity enhancing reform is not easy to implement and progress will continue to remain slow. It will take concerted work and effort from governments, businesses, and workers alike if we are to achieve the assumptions from the IGR over the next 40 years.

However, as history has shown, the rewards are well worth the effort.

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