

Budget Statement 2: Economic Outlook

This Statement presents the economic forecasts that underlie the Budget estimates.

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Statement 2: Economic Outlook

Overview

The Australian economy has proved remarkably resilient to the ongoing impacts of the pandemic, consistently outperforming expectations and all major advanced economies. Forecasts for economic activity have been revised up significantly, reflecting stronger-than-expected momentum in the labour market and consumer spending.

A strong economic recovery is well underway with a record proportion of Australians in work. The recovery is forecast to continue and to drive further employment growth. The unemployment rate is now forecast to reach 3¾ per cent in the September quarter of 2022, nearly 3 percentage points below the Budget forecast from 2 years ago and the lowest rate in close to 50 years. The strong labour market is expected to see wages growth accelerate to its fastest pace in almost a decade.

Real GDP is forecast to grow by 4¼ per cent in 2021-22. Stronger-than-expected consumer spending and employment outcomes have led to an upgrade to growth since the 2021-22 MYEFO, laying the foundations for further strong growth over the forecast period. Real GDP is forecast to grow by 3½ per cent in 2022-23 and 2½ per cent in 2023-24, with broad based growth in consumption, business investment and exports. Real GDP is forecast to remain above the 2021-22 MYEFO profile over the forecast period, growing by 2½ per cent in 2024-25 and 2025-26.

The ongoing pandemic, Russian invasion of Ukraine, strained supply chains and rising inflationary pressures all present risks to the global and domestic outlooks. Nonetheless, the resilience of the Australian economy throughout the pandemic demonstrates that the economy is well placed to adapt to these new developments.

The economy rebounded swiftly following the Delta outbreaks, demonstrating its resilience by achieving the equal best quarter of growth in 46 years in the December quarter. More recent indicators suggest the Omicron outbreak in early 2022 has not derailed this strong momentum, despite considerable disruption to activity because of high case numbers and worker absenteeism.

The strong recovery has been underpinned by the Government's economic plan which has seen household disposable income increase by around 11 per cent since the start of the pandemic. The cost of living package announced at this Budget builds on the \$314 billion in direct economic support provided throughout the pandemic that has effectively supported household and small business incomes, and sustained labour market connections. Business and household cash savings are now \$182 billion and \$251 billion higher than at the start of the pandemic.

Now that pandemic-related activity restrictions have been wound back and vaccination, along with improved treatment options, are the primary tools for managing the virus, the conditions are in place for a sustained economic recovery. While COVID-19 remains a risk to the outlook, the economic impact of outbreaks has continued to moderate over time due to Australia's high vaccination rates, more effective treatment options and the adaptation of consumers and businesses to ongoing community transmission.

As pandemic-related policy support continues to taper, the private sector is expected to be the main driver of growth. Strong labour market conditions combined with personal income tax relief, totalling \$40 billion since the start of the pandemic, will underpin robust growth in household disposable incomes and strengthen consumer spending as the savings rate returns to more normal levels. The record pipeline of work in the residential construction sector will support strong dwelling investment. Business investment has been boosted by temporary business tax incentives and investment intentions remain strong.

The Government's targeted policy support will help address the economic impacts of the floods in Queensland and New South Wales. While the floods have had a devastating impact on affected communities, the direct impact on the national economy in the March quarter of 2022 is expected to be small. Over the next few years, the recovery and rebuilding process is expected to contribute to growth. The economic impacts of the floods are discussed in Box 2.3.

The reopening of international borders will see the return of migrants and international students, supporting growth in consumption and education exports and assisting in filling skill gaps. As international tourism returns, a recovery in spending from foreign tourists will be more than offset by tourism imports as Australians return to travelling overseas.

Commodity prices are near record high levels, in part due to the Russian invasion of Ukraine. Metallurgical and thermal coal spot prices have recently reached highs that are 62 per cent and 53 per cent above previous peaks. In line with past practice, elevated coal, iron ore and metals prices are assumed to return to levels consistent with long-run market fundamentals by the end of the September quarter of 2022. Nonetheless, the recent strength in export prices will still see Australia's terms of trade reach a record high in 2021-22. This will support strong profitability in the mining and agricultural sectors, with some positive flow through to the broader economy and to revenue.

The labour market has shown remarkable strength and resilience, with conditions bouncing back swiftly from the Delta and Omicron outbreaks. In February, the unemployment rate reached 4.0 per cent and the participation rate reached a record high of 66.4 per cent. The continued recovery in economic activity is expected to see the unemployment rate fall to 3¾ per cent in the September quarter of 2022 and remain at that level until the end of 2024-25. From that point, the unemployment rate is assumed

to steadily transition to the assumed non-accelerating inflation rate of unemployment (NAIRU) of 4¼ per cent.

The strong outlook for the labour market is expected to result in strengthening wage growth. The Wage Price Index (WPI) is forecast to increase from 2¾ per cent through the year to the June quarter of 2022 to 3¼ per cent through the year to the June quarter of 2023. The national accounts measure of wages and labour income is expected to grow faster than the WPI measure, as it captures broader wage pressures resulting from a tight labour market. These broader factors include bonuses and the effect of workers gaining promotions or changing jobs as they take advantage of tight labour market conditions. Growth in the national accounts wage measure on an hourly basis has already picked up, reaching 3.5 per cent through the year to the December quarter of 2021. It is expected to grow by 5 per cent through the year to the June quarter of 2022, 3½ per cent to June quarter of 2023 and 3¾ per cent to June quarter of 2024.

There is, however, significant uncertainty around the pace at which wages growth will accelerate, given the unemployment rate is at a historically low level. Box 2.5 explores the sensitivity of wage forecasts to alternative NAIRU assumptions.

A range of factors are driving up global inflationary pressures. Elevated demand for goods, particularly in the United States, has strained international supply chains and put upwards pressure on goods prices. At the same time, there has been a sustained period of near-record global energy and agricultural prices. As a result, inflation in many advanced economies has increased rapidly and there is some evidence of inflation pressures broadening from goods to services. Annual inflation in the United States reached 7.9 per cent in February, the fastest pace of price growth since the early 1980s, and the rate in the euro area was 5.9 per cent. The Russian invasion of Ukraine, which is not yet fully reflected in inflation data but is evident in energy and agricultural prices, will add further to global inflationary pressures.

Australia has been affected by these global factors, but domestic inflationary pressures are more moderate. Headline inflation in Australia picked up in 2021 to be 3.5 per cent over the year to the December quarter, with underlying inflation now 2.6 per cent over the year to the December quarter of 2021.

The outlook remains for Australian inflation to peak well below that in most other advanced economies, with inflation expected to rise to 4¼ per cent through the year to the June quarter of 2022. This reflects higher global oil prices and ongoing supply chain pressures as well as price pressures in the housing construction sector. In the near term the recent rise in oil prices to above US\$125 per barrel will quickly flow through to higher fuel prices for consumers. The average pump price for petrol in Australia has already risen from \$1.79 per litre in early February to \$2.13 per litre in mid-March. The fuel excise reduction is expected to reduce headline inflation by ¼ of a percentage

point in the June quarter of 2022, before being withdrawn in late 2022 as oil prices are expected to moderate.

Given that inflation pressures in Australia are less than in many other countries, financial markets expect the RBA's monetary policy normalisation to lag behind other central banks such as the Federal Reserve, Bank of England and Reserve Bank of New Zealand, who have already started to raise policy interest rates. Nonetheless, monetary policy is expected to begin to normalise from historically low levels in Australia, with the market pricing in a tightening cycle from mid-2022 until 2024.

The Australian economy is forecast to experience a sustained period of strong economic growth, low unemployment, and rising wages growth. However, there are a range of domestic and international factors that pose risks to the outlook.

On the health front, the pandemic will continue to pose a risk to the outlook for some time. The potential emergence of new, more virulent or vaccine-resistant variants of COVID-19 is still a substantial downside risk to the domestic economy. Conversely, high vaccination rates and increased immunity do provide substantial protection. This could add to consumer confidence and see the household savings rate return to pre-pandemic levels more quickly than expected, boosting consumption growth. These risks are discussed further in Box 2.4.

Global supply and demand are also vulnerable to health developments in China. While most countries have adapted to living with the virus, China has not yet experienced widespread community transmission. Recent COVID-19 outbreaks in China's port cities and manufacturing regions have demonstrated these risks associated with more widespread transmission, which would also add further pressure to already strained global supply chains.

The combination of higher global inflation and a historically tight labour market suggests that domestic inflation risks are tilted to the upside. Higher-than-expected inflation would likely see monetary policy tighten further, with the potential to slow economic activity.

The Russian invasion of Ukraine poses significant risks for global prices and activity. The invasion is already having devastating social and economic impacts in Ukraine and sanctions will cause a sharp economic contraction in Russia. There will be significant spillover effects globally, with risks to commodity trade generating sharply higher energy and agricultural prices and further strain on global supply chains. This will add to existing global inflationary pressures on households, dampen investor and business sentiment, interrupt supply chains and production and ultimately drag on global growth.

As an energy and food exporter with very limited direct trade exposure to Russia, Australia is better placed than most countries to absorb the economic effects of the conflict and associated disruptions. Higher fuel and other prices will negatively affect consumers and dampen consumption growth, but higher commodity prices will provide a positive boost to national income through higher export earnings. Nonetheless, an extended conflict or an escalation that more significantly impacts global energy supply and global growth, is a downside risk to Australia. Box 2.2 and 2.6 further explores the potential impacts of the conflict and associated sanctions on the global and Australian economies including the risk of a protracted disruption to the supply of oil.

Russia's actions have also exacerbated existing risk factors around global inflation. This increases the possibility that inflation expectations become unanchored, making it difficult for central banks to contain inflation while avoiding a policy induced 'hard landing'. More rapid monetary policy normalisation or a higher peak in policy rates could also trigger other vulnerabilities in the global economy, especially among emerging market economies with elevated debt levels and those exposed to rising and volatile commodity prices.

Box 2.1: Key COVID-19-related assumptions underpinning the economic forecasts

The key COVID-19-related assumptions that underpin the economic forecasts are set out below.

- Community transmission of COVID-19 will continue to occur.
- A further Omicron wave is assumed to occur over winter 2022, which may again see elevated rates of absenteeism and pressure on supply chains.
- Beyond winter, it is assumed that Australia will continue to experience intermittent, localised waves of Omicron, or other new COVID-19 variants. However, it is assumed that high vaccination rates and improved medical treatments, together with continued community adaptation to COVID-19, will see the economic impact of future outbreaks continue to moderate. Box 2.4 considers a scenario where a new COVID-19 variant of concern poses greater downside risks to the economic forecasts.
- It is assumed that public health measures such as physical distancing and density restrictions are phased down, but reimposed in a targeted way in response to future COVID-19 outbreaks. These public health measures are not expected to materially affect the economic forecasts.
- Australia’s international borders are assumed to be open to migrants and fully vaccinated tourists.

Table 2.1: Domestic economy – detailed forecasts^(a)

	Outcomes	Forecasts		
	2020-21	2021-22	2022-23	2023-24
Real gross domestic product	1.5	4 1/4	3 1/2	2 1/2
Household consumption	1.0	3 1/2	5 3/4	3 3/4
Dwelling investment	3.2	5	3 1/2	- 1/2
Total business investment ^(b)	-1.5	5 1/2	9	1
<i>By industry</i>				
Mining investment	-1.4	1/2	9 1/2	1 1/2
Non-mining investment	-1.5	7	9	1
Private final demand ^(b)	1.2	4 1/4	5 3/4	2 3/4
Public final demand ^(b)	5.8	7 1/4	1 1/4	1 1/2
Change in inventories ^(c)	0.7	- 1/2	1/2	1/4
Gross national expenditure	3.2	4 1/2	5	2 3/4
Exports of goods and services	-8.3	2	5	6
Imports of goods and services	-2.8	4 1/2	12 1/2	7
Net exports ^(c)	-1.4	- 1/2	-1 1/2	- 1/4
Nominal gross domestic product	4.4	10 3/4	1/2	3
Prices and wages				
Consumer price index ^(d)	3.8	4 1/4	3	2 3/4
Wage price index ^(d)	1.7	2 3/4	3 1/4	3 1/4
GDP deflator	2.9	6 1/2	-3	1/2
Labour market				
Participation rate (per cent) ^(e)	66.2	66 1/2	66 1/2	66 1/2
Employment ^(d)	6.5	2 3/4	1 1/2	1 1/2
Unemployment rate (per cent) ^(e)	5.1	4	3 3/4	3 3/4
Balance of payments				
Terms of trade ^(f)	10.4	11	-21 1/4	-8 3/4
Current account balance (per cent of GDP)	3.3	3 3/4	-3 1/4	-6
Net Overseas Migration ^(g)	-89,900	41,000	180,000	213,000

(a) Percentage change on preceding year unless otherwise indicated.

(b) Excluding second-hand asset sales between the public and private sector.

(c) Percentage point contribution to growth in GDP.

(d) Through-the-year growth rate to the June quarter.

(e) Seasonally adjusted rate for the June quarter.

(f) Key commodity prices are assumed to decline from current elevated levels by the end of the September quarter 2022: the iron ore spot price is assumed to decline from US\$134/tonne to US\$55/tonne free on board (FOB); the metallurgical coal spot price is assumed to decline from US\$512/tonne to US\$130/tonne FOB; the thermal coal spot price is assumed to decline from US\$320/tonne to US\$60/tonne FOB; and oil prices (TAPIS) are assumed to decline from US\$114/barrel to around US\$100/barrel.

(g) The figure for 2020-21 is a preliminary outcome.

Note: The exchange rate is assumed to remain around its recent average level – a trade-weighted index of around 60 and a \$US exchange rate of around 72 US cents. Interest rates are assumed to move broadly in line with market expectations. Population growth is forecast to be 0.7 per cent in 2021-22, 1.2 per cent in 2022-23 and 1.3 per cent in 2023-24.

Source: ABS Australian National Accounts: National Income, Expenditure and Product; Balance of Payments and International Investment Position, Australia; National State and Territory Population; Labour Force, Australia; Wage Price Index, Australia; Consumer Price Index, Australia; unpublished ABS data and Treasury.

Outlook for the international economy

The global recovery gained traction through 2021 and into the early part of 2022, despite significant COVID-19 outbreaks, as most economies continued to adapt to the pandemic. This momentum is expected to drive continued growth through 2022 and 2023. At this stage, headwinds from the spillover effects of Russia's invasion of Ukraine are expected to weigh on global growth but not derail the recovery. However, this impact is highly uncertain and will depend on a range of factors including the duration of the conflict and the extent of energy, commodity and trade disruptions.

Sound private sector fundamentals are expected to drive robust growth in advanced economies through 2022. As at the end of 2021, many major advanced economies were still below their pre-pandemic level of production and are expected to experience above trend growth in 2022 as they continue to recover, although higher energy prices will create some drag.

Emerging market economies are expected to grow more rapidly than advanced economies as they recover closer to trend growth rates, but their outlook is at greater risk from the effects of an extended conflict in Ukraine given typically high exposure to rising fuel and agricultural prices, as well as being more vulnerable to any tightening in global financial conditions.

Most economies are increasingly resilient to pandemic-related disruptions as rising access to vaccination has allowed governments to rely less on widespread lockdowns and other restrictions to manage COVID-19 outbreaks. China remains a potential outlier given that it has not yet transitioned to living with the virus. Recent outbreaks suggests that economic activity in China could be more affected by the pandemic in 2022 than in 2021.

The Russian invasion of Ukraine is expected to generate around $\frac{3}{4}$ of a percentage point drag on global growth in 2022 and increase global inflation by around $1\frac{1}{2}$ percentage points, primarily through higher oil, gas and wheat prices. Impacts will vary by country, depending on their reliance on energy imports and exposure to trade with Russia. Europe is expected to be more exposed, while net commodity exporters such as Australia relatively less so. The potential for an extended or escalated conflict to generate more significant disruptions is a key downside risk for the global economy. Box 2.2 further explores the global economic impacts of the conflict.

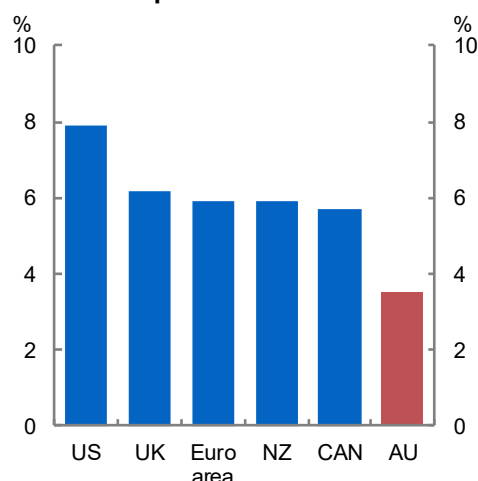
Global growth is expected to be $3\frac{3}{4}$ per cent in 2022, $3\frac{3}{4}$ per cent in 2023, and $3\frac{1}{2}$ per cent in 2024. Growth in Australia's major trading partners is forecast to be slightly higher than global growth, at $4\frac{1}{4}$ per cent in 2022, 4 per cent in 2023 and $3\frac{3}{4}$ per cent in 2024.

Many advanced economies have experienced more significant inflationary pressures than seen in Australia, including the United States where inflation reached a 40-year

high of 7.9 per cent in February (Chart 2.1). The impact of the Ukraine conflict is not yet fully reflected in official data but will further add to global inflationary pressures this year. Higher global energy prices will weigh on real incomes and dampen private demand. Even before the conflict, higher energy prices directly accounted for more than half of headline inflation in some advanced economies, even though energy typically accounts for less than 10 per cent of the consumption basket.

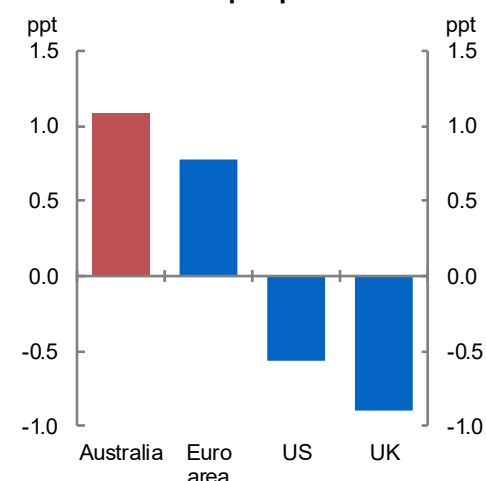
A significant tightening in labour markets is also contributing to inflationary wage pressure in some advanced economies. In the UK and US, employment remains below pre-pandemic levels and participation rates have fallen despite strong demand. This suggests a degree of labour market scarring from the pandemic is constraining labour supply (Chart 2.2). In contrast, in Australia, employment has fully recovered with a record proportion of people in work and the participation rate at a record high of 66.4 per cent.

Chart 2.1 Annual headline consumer price inflation



Source: Refinitiv, national statistical agencies.

Chart 2.2 Change in participation rate relative to pre-pandemic



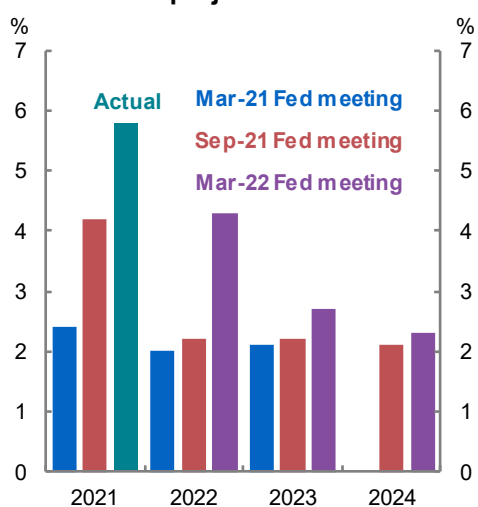
Source: Refinitiv, national statistical agencies.

Financial markets and policy makers have revised up near term inflation projections in response to higher-than-expected inflation and the sharp increase in commodity prices. Inflation last year overshoot the Federal Reserve's projection and, at its March meeting, the Federal Reserve significantly increased its inflation projections for 2022 and 2023 (Chart 2.3). Market implied inflation expectations are broadly in line with the Federal Reserve's projection that inflation will return to target around the end of 2024. This suggests longer-term inflation expectations remain anchored.

The Federal Reserve and other central banks have responded to higher inflation and tighter labour markets by bringing forward monetary policy normalisation. The Federal Reserve raised its policy interest rate by 25 basis points in March and has signalled

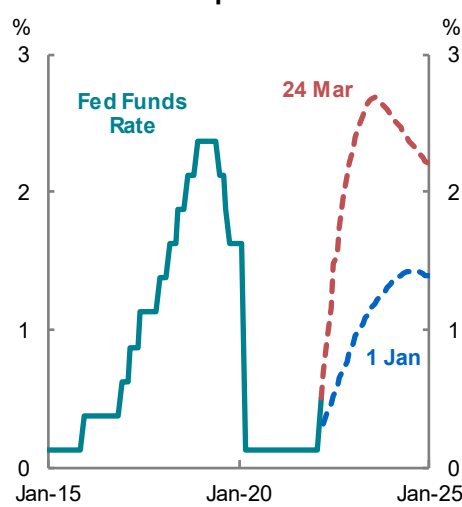
additional increases over the course of 2022. Markets expect a faster pace of US monetary policy normalisation than in the previous tightening cycle (Chart 2.4). Other central banks, including the Bank of England and the Reserve Bank of New Zealand, have also started to raise policy rates.

Chart 2.3 US Federal Reserve inflation projections



Source: US Federal Reserve.
Note: Projection of annual inflation for December of the given year.

Chart 2.4 Market-implied US policy rate expectations



Source: Bloomberg.

Intensifying inflationary risks increase the possibility that central banks will need to tighten policy more aggressively to manage inflation. This could potentially see policy rates rise higher than currently expected by markets, with a delayed policy action increasing the risk that higher inflation becomes embedded in expectations. Tighter financial conditions associated with monetary policy normalisation may also increase the already-high levels of volatility in commodity and financial markets. A larger-than-expected tightening of monetary policy could generate pockets of stress in the financial and corporate sectors, especially among emerging market economies, and act to slow global growth.

China's economy is forecast to grow by 4¾ per cent in 2022, 5¼ per cent in 2023 and 5 per cent in 2024. Chinese growth is expected to be hampered this year by challenges managing the pandemic, higher prices for energy imports and an already slowing property sector. China is likely to experience more frequent and severe COVID-19 outbreaks this year than in 2021, with a continuation of its aggressive suppression approach to managing the virus likely to lead to more frequent lockdowns and disruptions to industrial production and normal consumption patterns. These headwinds will be partly offset by more supportive macroeconomic policy settings as

central authorities have signalled an increasing willingness to act to support their ambitious growth target over other policy objectives in the near term.

The **United States'** economy rebounded strongly in 2021 and is forecast to grow by 3½ per cent in 2022, 2½ per cent in 2023 and 2 per cent in 2024. Growth is expected to moderate as private demand slows due to energy and other price pressures, declining levels of fiscal support and the normalisation of monetary policy. A very tight labour market will support stronger nominal wage increases, but high inflation will limit real wage growth in the near term. Upside risks to inflation from higher energy prices pose a further downside risk to real wages and consumption, but as the world's largest oil producer with capacity to expand production, the US economy will be partially insulated the impact of from higher oil prices.

The **euro area** economy is forecast to grow by 3½ per cent in 2022, 2¼ per cent in 2023 and 1½ per cent in 2024. This represents a downgrade to 2022 growth of ¾ of a percentage point mainly due to the conflict in Ukraine. Growth had already moderated significantly at the end of 2021 due to supply constraints and significant energy price inflation. The Ukraine invasion will exacerbate these inflationary pressures, as Europe is a large importer of Russian energy exports, and persistent high prices will significantly dampen the underlying momentum in private demand. More severe disruptions to the supply of Russian energy or other raw materials would further constrain growth.

Japan's economy is forecast to grow by 2½ per cent in 2022 and 1½ per cent in 2023. Japan is expected to recover to its pre-pandemic level of GDP towards the end of 2022, with some growth catch up spilling into 2023. Growth is then expected to slow to its long-term trend of ½ per cent in 2024, much lower than other advanced economies due to Japan's declining working age population. The economy also remains vulnerable to further COVID-19 outbreaks as evident by their precautionary health response.

Growth in **Other East Asia** is forecast to be 4¼ per cent in 2022, 4½ per cent in 2023 and 4 per cent in 2024. Growth is expected to remain solid in 2022, supported by a strong rebound in manufacturing production and commodity exports. Easing restrictions and higher vaccine coverage across the region should help bolster private consumption and service industries, though the extent of the recovery will vary by country. Global agricultural and energy price shocks will have varied impacts, with some countries more reliant on imports and exposed to inflationary pressures, whilst commodity and energy exporters will see some benefits from higher export prices.

India's economy is forecast to grow by 8¼ per cent in 2022, followed by 6½ per cent in 2023 and 7¼ per cent in 2024. A strong rebound in private consumption underpinned by a recovery in domestic confidence is expected to drive growth. However, India's high exposure to oil and other commodities imports presents a key risk to growth.

Table 2.2: International GDP growth forecasts^(a)

	Outcome	Forecasts (Calendar Years)		
	2021	2022	2023	2024
Australia	4.2	4 3/4	2	2 1/2
China	8.5	4 3/4	5 1/4	5
India	8.2	8 1/4	6 1/2	7 1/4
Japan	1.7	2 1/2	1 1/2	1/2
United States	5.7	3 1/2	2 1/2	2
Euro area	5.3	3 1/2	2 1/4	1 1/2
Other East Asia (b)	3.9	4 1/4	4 1/2	4
Major trading partners	6.1	4 1/4	4	3 3/4
World	6.0	3 3/4	3 3/4	3 1/2

(a) World and other East Asia growth rates are calculated using GDP weights based on purchasing power parity (PPP), while growth rates for major trading partners are calculated using goods and services export trade weights.

(b) Other East Asia comprises the Association of Southeast Asian Nations group of 5 (ASEAN-5), comprising Indonesia, Malaysia, the Philippines, Thailand and Singapore, along with Hong Kong, South Korea, Vietnam and Taiwan.

Source: National statistical agencies, Refinitiv and Treasury.

Box 2.2: Economic implications of the Russian invasion of Ukraine

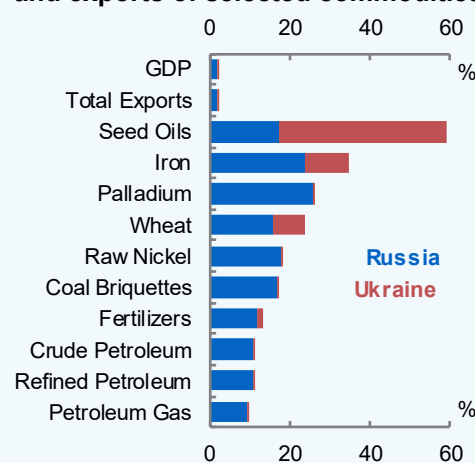
The Russian invasion of Ukraine, and the swift international response, has significantly affected the global economic outlook. The invasion has caused substantial disruption in global commodity markets and has the potential to significantly raise inflation and lower global growth.

The Russian and Ukrainian economies combined comprise less than 3 per cent of global GDP and less than 2½ per cent of global trade. Foreign financial exposures to Russia are small, and the IMF has assessed that a sovereign or bank default is not a systemic risk to global financial stability.

Russia is, however, an important global commodity supplier. Russia produces 18 per cent of the world’s gas and 12 per cent of world’s oil supply and, together with Ukraine, accounts for around 25 per cent of world wheat exports (Chart 2.5). The invasion has increased the risk of supply disruptions, pushing up energy, agricultural and metals prices. Global supply chains are also reliant on Russian metals exports, especially palladium, so significant supply disruption could have flow-on effects for global manufacturing supply chains.

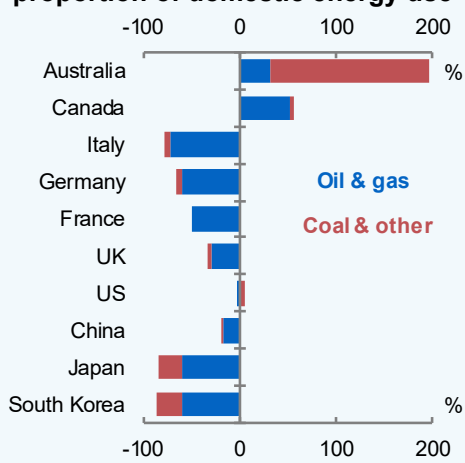
All economies will be affected by the spillover impact on global commodity prices, but the extent of the impact will depend on each economy’s reliance on energy and food imports. Among developed economies, European and North Asian economies are highly dependent on energy imports (Chart 2.6). Among large emerging market economies, China and India are dependent on energy imports and many countries in the Middle East and North Africa are major food importers. These countries will suffer a negative terms of trade shock because of the increase in commodity prices.

Chart 2.5 Contribution to global GDP and exports of selected commodities



Source: UN Comtrade, Treasury.

Chart 2.6 Net energy exports as a proportion of domestic energy use



Source: International Energy Agency

**Box 2.2: Economic Implications of the Russian invasion of Ukraine
(continued)**

A smaller set of net commodity-exporting countries, like Australia and Canada, will be somewhat protected from the inflation impacts of higher energy prices, and will potentially benefit from a positive terms of trade shock as export prices rise.

It is estimated that the conflict will cause a $\frac{3}{4}$ of a percentage point drag on global growth and increase global inflation by around $1\frac{1}{2}$ percentage points. The economic impacts of the conflict are highly uncertain and will depend on the extent of the disruption to global commodity and energy supply. If the conflict has a larger-than-expected impact on global energy supply, such as a cessation of gas supplies to Europe, this would weigh more heavily on global growth and inflation.

Outlook for the domestic economy

Outlook for real GDP growth

The Australian economy has proved remarkably resilient to the ongoing impacts of the pandemic, outperforming all major advanced economies.

The economy grew by 3.4 per cent in the December quarter of 2021, the equal highest growth rate in 46 years, as consumer demand for discretionary goods and services rebounded following the easing of Delta restrictions.

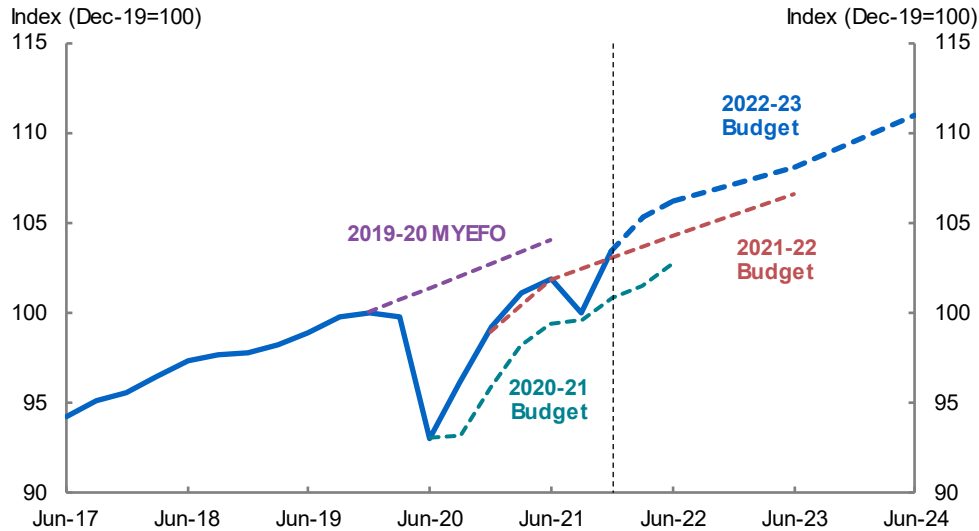
As has been the case throughout the pandemic, this swift recovery in consumption was due in part to the effectiveness of Government support in sustaining household incomes and labour market connections. Going forward, the private sector recovery is expected to become self-sustaining and drive growth as the need for activity restrictions and related policy support lessens.

The labour market has continued to exceed expectations. Employment has recovered to pre-pandemic levels faster than in any major advanced economy and the unemployment rate reached the equal lowest rate in almost 50 years in February 2022. Strong demand for labour is expected to continue to absorb spare capacity, supporting solid growth in employment and wages. This will underpin robust growth in household disposable income and consumer spending.

The outlook for real GDP has strengthened in the near term, with growth forecast to be 4¼ per cent in 2021-22 and 3½ per cent in 2022-23, before moderating to 2½ per cent in 2023-24. The economic recovery has been stronger than expected. Activity levels have been revised up over successive Budgets since the onset of COVID-19 as the effect of policy support, ongoing adaptation to COVID-19 and the resilience of the labour market became apparent (Chart 2.7). This Budget predicts real GDP per capita over the forecast period to be higher than was forecast prior to the pandemic in the 2019-20 MYEFO.

Over the remainder of 2021-22, strength in real GDP is expected to be broad-based but particularly driven by household consumption. Both business and dwelling investment are expected to pick up, following lockdowns and temporary supply chain disruptions weighing on activity in late 2021. Public consumption is also expected to support activity, primarily driven by elevated COVID-19-related health expenditures.

Chart 2.7: Real GDP



Source: ABS Australian National Accounts: National Income, Expenditure and Product, and Treasury.

Household consumption growth is expected to remain strong in 2022-23 and 2023-24, supported by higher household incomes as employment increases and wage growth strengthens. Companies are expected to rebuild inventories that have been run down through the pandemic, contributing to growth. In contrast, net exports are expected to weigh on growth, particularly in 2022-23 as outbound tourism more than offsets inbound tourism and goods imports grow faster than goods exports.

The reopening of international borders is expected to generate a return to positive net overseas migration and higher population growth, which will support higher consumption growth. Net overseas migration is forecast to increase from -89,900 persons in 2020-21 to 41,000 persons in 2021-22, before increasing to 235,000 persons in 2024-25 and 2025-26.

Beyond 2023-24, activity is assumed to transition to its potential level while the unemployment rate gradually returns to the NAIRU. These assumptions lead to stable real GDP growth of 2½ per cent in 2024-25 and 2025-26.

Box 2.3: Economic impact of the February 2022 floods

In late February and early March, severe flooding affected many parts of South-East Queensland and New South Wales. Many individuals and communities affected by the floods face temporary displacement, uninsured losses and a long road to recovery. The physical damage has not yet been fully assessed and uncertainty remains about the full extent and timing of the impact on economic activity.

The direct economic cost of the floods is expected to generate a drag on real GDP growth of around ½ a percentage point in the March quarter, largely due to reduced activity in the mining, agriculture, accommodation and food services, retail trade and construction industries. This overstates the net impact of the floods on real GDP over the longer term as this direct cost will be partially offset by increased investment to replace and rebuild damaged housing, infrastructure and household goods. Federal government support will assist in funding the recovery through direct financial support to affected households, as well as contributing to local and state governments' recovery efforts (see also Budget Paper No. 1, Statement 3).

Subdued coal exports are expected in the March quarter, with weather-related disruptions weighing on production. However, the impact of the floods on coal mining is expected to be smaller than previous major weather events, such as the floods and Tropical Cyclone Yasi in 2010-11, which caused coal exports to fall by around 7 per cent in 2011. There will likely be significant localised impacts in the agriculture sector, but the impact on national production quantities and aggregate exports is likely to be limited.

While Treasury analysis of bank data showed that the floods had a negative impact on spending in parts of Queensland and New South Wales in late February and early March, spending has since recovered. Labour market impacts will also be largely seen through an initial reduction in hours worked, with employers expected to retain workers through a temporary period of disruption.

Rebuilding activity following the floods is expected to add to real GDP growth over the next few years, consistent with the experiences following previous natural disasters. However, the scale and timing of this is uncertain, and the rebuilding efforts will place additional pressure on the already strained supply of building materials and labour in the construction sector.

Box 2.4: COVID-19-related uncertainty about the economic outlook

The economic forecasts assume that further waves of COVID-19 occur, but that public health measures imposed to manage future outbreaks do not have material impacts on economic activity (Box 2.1). Nonetheless, as there is uncertainty around the health outlook, Treasury has considered 2 alternative COVID-19 scenarios. The first captures the downside risk to the economic outlook associated with a more challenging-than-expected health environment due to the arrival of a new variant of concern. The second scenario captures the upside risk to the economic forecasts from a faster improvement in the health environment compared with the COVID-19 Budget assumptions (Box 2.1).

Scenario 1: A new COVID-19 variant of concern poses a more challenging health environment

In this scenario, a more virulent variant of concern emerges in the middle of 2022. This outbreak coincides with the winter flu season and is assumed to lead to higher numbers of cases for a longer duration and more severe illness than the initial Omicron wave. As a result, at the peak of the outbreak, workforce absenteeism returns to levels similar to those experienced in January 2022.

It is assumed that baseline public health measures such as physical distancing and density limits are imposed nationally to manage the increased health risks for the duration of the outbreak. Precautionary behaviour, such as reduced social mixing, and the direct impact of activity restrictions would result in weaker consumption and higher household savings than in the forecasts. However, consumption rebounds quickly once the outbreak passes, consistent with strong recoveries seen after previous outbreaks when spending activity typically increased sharply following the easing of restrictions.

In this scenario, economic activity is around \$11 billion lower in 2022-23 than in the forecasts, a detraction of $\frac{1}{2}$ of a percentage point (Chart 2.8). Unemployment would be up to $\frac{1}{4}$ of a percentage point higher in 2022-23 compared with the forecasts. As the health situation improves, economic activity rebounds, returning to levels close to those assumed in the forecasts by the first quarter of 2023. Economic activity remains slightly lower than forecast through to the end of 2023-24.

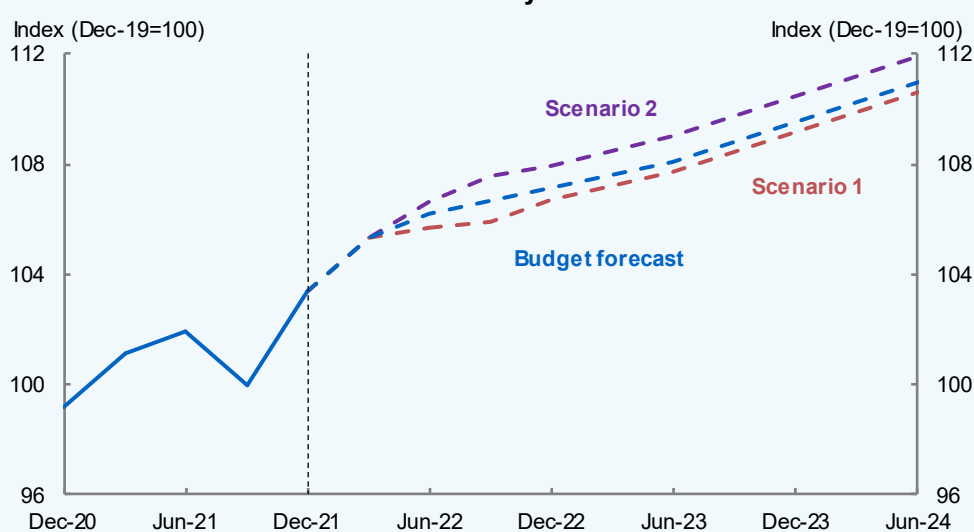
Scenario 2: An improved health situation delivers a boost to confidence

In this scenario, it is assumed that vaccines, new treatments and rising levels of immunity result in fewer cases and a more stable health environment than assumed in the forecasts. A more benign health outlook increases consumer confidence, and the household savings rate returns to pre-pandemic levels around 3 months earlier than in the forecasts. Slightly higher spending is sustained through to 2023-24, reflecting the continued impacts of improved confidence.

Box 2.4: COVID-19-related uncertainty about the economic outlook (continued)

Under this scenario, economic activity will be around \$16 billion higher in 2022-23, an increase of around $\frac{3}{4}$ of a percentage point compared to the forecasts. The impact on the unemployment rate is likely to be small in this scenario. While employment is stronger, putting downward pressure on the unemployment rate, it would also encourage stronger participation.

Chart 2.8: Real GDP stylised scenarios



Source: ABS National Accounts: National Income, Expenditure and Product, and Treasury.

Households

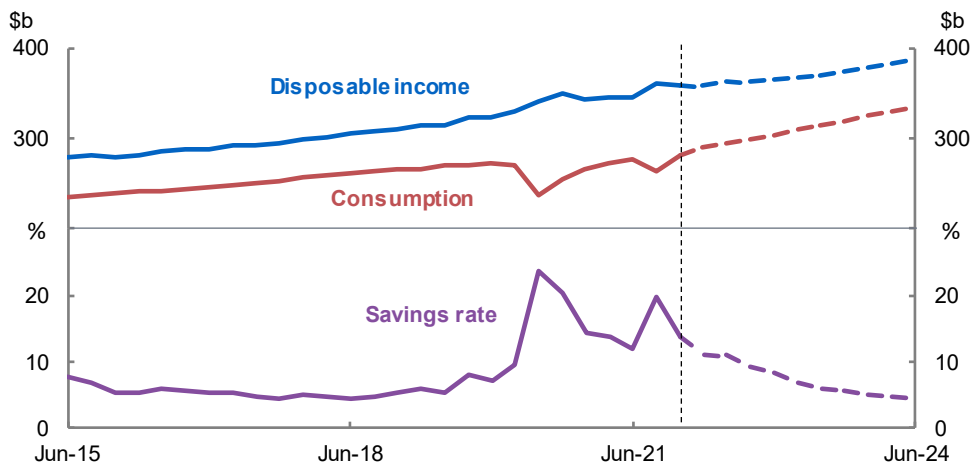
Household consumption rebounded by 6.3 per cent in the December quarter of 2021 to exceed pre-pandemic levels for the first time. This result reflects pent-up demand for discretionary goods and services following the easing of Delta restrictions.

Household consumption is forecast to grow by $3\frac{1}{2}$ per cent in 2021-22, $5\frac{3}{4}$ per cent in 2022-23 and a further $3\frac{3}{4}$ per cent in 2023-24. Consumption growth will be driven by increased services demand as household spending behaviour normalises and the savings rate declines. Household balance sheets are in a strong position relative to the pre-pandemic period because of economic support measures and restricted consumption options during lockdowns. This strong financial position is expected to allow households to comfortably normalise the household savings rate towards the lower end of the range experienced over the previous 10 years (Chart 2.9).

In the March quarter of 2022, the Omicron wave, the recent floods in Queensland and New South Wales and the recent large increase in fuel prices will dampen consumption, but these effects are expected to recede. Real-time indicators suggest that the impact of the Omicron wave on consumption has been temporary and muted compared to previous waves.

In 2022-23 and 2023-24, the key driver of the consumption outlook is robust growth in disposable income due to strong labour market conditions and wages growth (Chart 2.9). Rising interest rates and weaker housing price growth are expected to temper consumption growth slightly in these years, and there is a risk that the normalisation of monetary policy has a more material negative impact on consumption. However, government support and the increase in savings during the pandemic are helping ensure household balance sheets remain in a strong position.

Chart 2.9: Household consumption, disposable income and savings rate



Note: Data are nominal.

Source: ABS National Accounts: National Income, Expenditure and Product and Treasury.

Dwelling investment is forecast to grow by 5 per cent in 2021-22 and a further 3½ per cent in 2022-23. Low interest rates, rising housing prices and government incentives, such as the HomeBuilder program, have contributed to a record pipeline of work yet to be done in the sector (Chart 2.10).

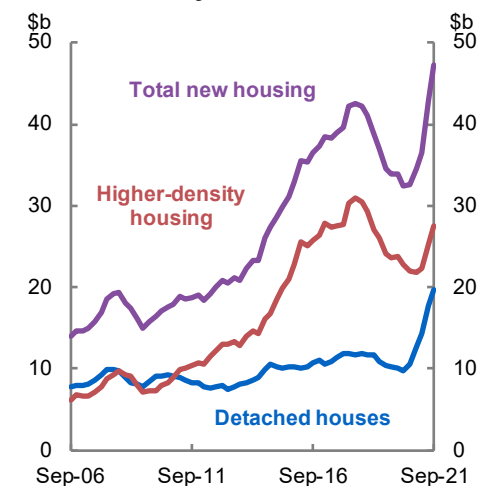
Building material and labour shortages, along with COVID-19 outbreaks and related restrictions on activity, have increased construction costs and completion times for new dwellings. These supply-side pressures have constrained dwelling investment in recent quarters, particularly for detached houses, despite a record number of detached houses under construction (Chart 2.11). Additional risks have emerged which may further exacerbate capacity constraints in the near term. This includes the recent floods in Queensland and New South Wales, as well as the Russian invasion of Ukraine

disrupting global building material supply chains. Nevertheless, capacity constraints are expected to slowly alleviate and support growth in dwelling investment in 2022-23.

Rising interest rates will increase the cost of borrowing, placing downward pressure on housing prices and softening demand for investment in new housing. While this is expected to weigh on dwelling investment and contribute to a ½ per cent fall in 2023-24, the existing pipeline of work will support investment to remain at elevated levels. Moreover, the expected pick up in net overseas migration following the reopening of international borders will provide ongoing support for dwelling investment.

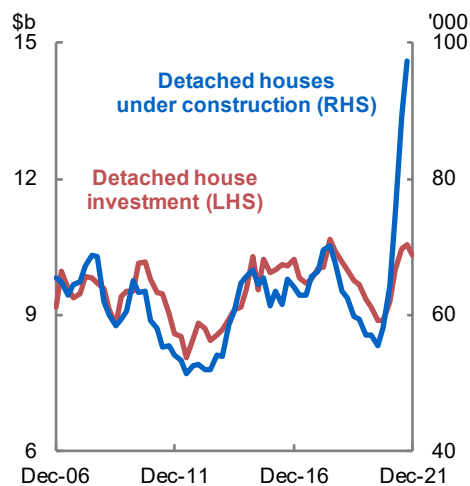
Households remain well placed to service existing debt, assisted by increased savings and mortgage prepayments made during the pandemic. Serviceability buffers should ensure that most existing borrowers are in a position to handle mortgage repayments as interest rates rise.

Chart 2.10: Pipeline of private work yet to be done



Note: Data are in original terms.
Source: ABS Building Activity.

Chart 2.11: Private detached house construction



Note: Detached houses under construction data are in original terms.
Source: Unpublished ABS data; ABS Building Activity.

Business investment

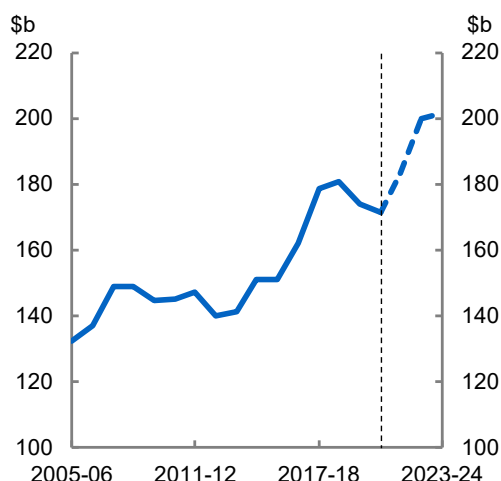
The outlook for **business investment** is strong. In 2021-22 and 2022-23, investment will be supported by further recovery in the domestic economy, temporary business tax incentives and strong business balance sheets. New business investment is forecast to grow by 5½ per cent in 2021-22, 9 per cent in 2022-23 and one per cent in 2023-24.

Non-mining business investment is expected to drive growth in overall business investment over the next 2 years. Non-mining business investment is forecast to rise by

7 per cent in 2021-22 and 9 per cent in 2022-23, to reach its highest quarterly share of the economy since 2011 in the June quarter of 2023. Growth is then expected to slow to around one per cent in 2023-24 with investment activity remaining at elevated levels (Chart 2.12).

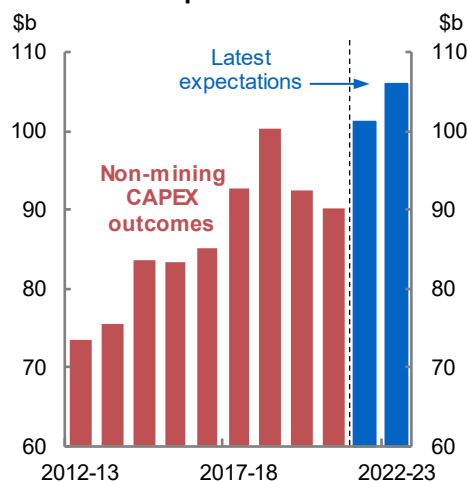
The Delta lockdowns and ongoing supply disruptions for capital goods such as motor vehicles have weighed on growth of non-mining business investment in recent quarters. However, leading indicators suggest that these factors have begun to ease. The Omicron wave is not anticipated to have a significant impact on investment, with business confidence returning quickly after case numbers peaked. ABS investment expectations from January and February suggest record high investment intentions for both 2021-22 and 2022-23 (Chart 2.13). The invasion of Ukraine poses a downside risk to investment intentions, as increasing producer prices could reduce profit margins and weigh on investment.

Chart 2.12: Non-mining business investment



Source: ABS National Accounts: National Income, Expenditure and Product and Treasury.

Chart 2.13: Non-mining CAPEX expectations



Note: Data are nominal. Expectations data have been adjusted using long-run realisation ratios.

Source: ABS Private New Capital Expenditure, Expected Expenditure and Treasury.

Mining investment is forecast to rise by ½ per cent in 2021-22, 9½ per cent in 2022-23 and by 1½ per cent in 2023-24. Iron ore investment is continuing, largely reflecting investments to maintain production capacity. Liquefied Natural Gas (LNG) investment is expected to lift over coming quarters as construction work on recently announced projects commences. More broadly, ABS investment expectations for the mining sector indicate robust growth in mining investment in 2021-22 and 2022-23 and the highest level of investment since 2015-16. This outlook reflects a limited investment response to

the recent rise in commodity prices following Russia’s invasion of Ukraine, as elevated prices are expected to be temporary.

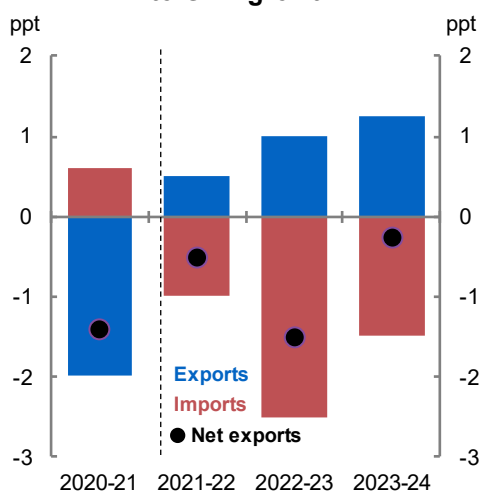
Public final demand

New public final demand is forecast to rise by 7¼ per cent in 2021-22, 1¼ per cent in 2022-23 and by a further 1½ per cent in 2023-24. The strong increase in 2021-22 is primarily driven by elevated COVID-19-related expenditures on public health including treatment of COVID-19 positive patients, the provision of vaccines, as well as the purchase of personal protective equipment (PPE) and rapid antigen tests (RATs). Growth is expected to slow in 2022-23 and 2023-24 as COVID-19-related expenditures fall as immunity increases and the virus becomes endemic in the community.

Net exports

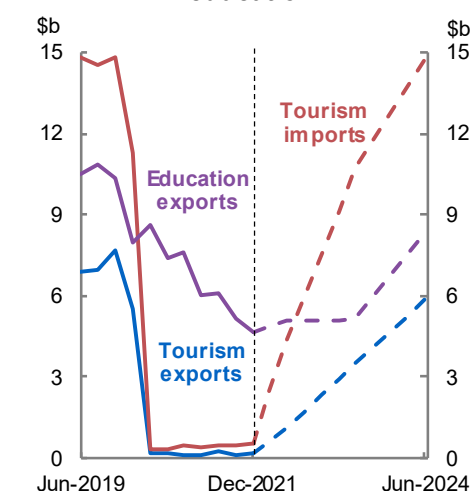
Net exports are expected to detract ½ of a percentage point from GDP growth in 2021-22 as growth in goods and tourism exports is more than offset by strong goods imports, while education exports remain depressed (Chart 2.14). The drag on growth is expected to increase to 1½ percentage points in 2022-23 as outbound tourism more than offsets inbound tourism, consistent with pre-pandemic travel patterns, and as goods imports grow faster than goods exports. The drag on growth moderates in 2023-24 to ¼ of a percentage point, as continued strength in goods and services imports is partially offset by strengthening services exports, as the recovery in tourism and education gathers pace.

Chart 2.14: Net exports contribution to GDP growth



Source: ABS Balance of Payments and International Investment Position, Australia and Treasury.

Chart 2.15: International tourism and education



Note: Tourism imports includes education imports (i.e. Australians studying overseas).

Source: ABS Balance of Payments and International Investment Position, Australia and Treasury.

Exports are forecast to grow by 2 per cent in 2021-22, 5 per cent in 2022-23 and 6 per cent in 2023-24. Strong rural production, owing to good seasonal conditions, is expected to drive growth in exports in 2021-22. A strong increase in tourism exports, as well as a rebound in mining production is expected to drive growth in 2022-23 and 2023-24.

Mining exports are expected to increase by one per cent in 2021-22, weighed down by temporary production disruptions, including from wet weather, operational disruptions and maintenance. Mining exports growth is expected to pick up in 2022-23 to 5 per cent as production disruptions ease and production increases at new iron ore mines, such as BHP's South Flank, Rio Tinto's Gudai Darri and Fortescue Metals Group's Eliwana projects. Mining exports growth is then expected to slow to 2½ per cent in 2023-24 consistent with the slow-down in productive capacity growth.

Service exports are expected to fall in 2021-22 before growing strongly in 2022-23 and 2023-24. The movements in services exports reflect changes to Australia's international borders, which began a progressive reopening in November 2021 and are now open to all vaccinated persons. The reopening of international borders has supported a strong pick up in international travel, with more than 130,000 student arrivals and 190,000 tourist arrivals since November 2021.

The pace of the recovery for both international education and tourism is uncertain, and it is expected to take multiple years for both sectors to return to pre-pandemic levels (Chart 2.15). Consumer hesitancy, from COVID-related health risks, and a slow reopening of China's international borders will constrain international travel in the near term.

Outbound tourism (imports) is expected to recover to pre-pandemic levels faster than inbound tourism (exports) due to China's delayed reopening and the likely strong demand from Australians to travel overseas following the extended closure of Australia's borders. This faster recovery in outbound tourism, along with outbound tourism exceeding inbound tourism pre-pandemic, means international tourism will drag on the growth of net exports in the near term.

Even though student arrivals have picked up significantly, education exports are still expected to fall in 2021-22 as the number of students completing their studies exceeds new student commencements. This will drive a 5½ per cent fall in services exports in 2021-22. By 2022-23 a continued recovery in the number of foreign tourist and international student arrivals is expected to see a strong turnaround with services exports expected to increase by 12 per cent. This recovery is expected to strengthen in 2023-24, with services exports expected to grow by 29 per cent.

Rural exports are forecast to increase by 23½ per cent in 2021-22 largely due to 2 consecutive years of very large grain harvests. The recent floods in Queensland and New South Wales have destroyed crops and impacted herds, posing some downside

risk to exports in the short term. In 2022-23 exports are forecast to fall slightly by one per cent and again by 1½ per cent in 2023-24. Nevertheless, this would see exports remain at elevated levels and above the long-run average over 2022-23 and 2023-24 due to replenished grain stocks and greater sheep and cattle availability from 2 years of herd rebuilding.

Imports are forecast to grow strongly in coming years, by 4½ per cent in 2021-22, 12½ per cent in 2022-23 and 7 per cent in 2023-24. The strong growth is driven by the easing of travel restrictions supporting a recovery in tourism imports and the continued recovery of the domestic economy generating robust goods imports growth.

The labour market

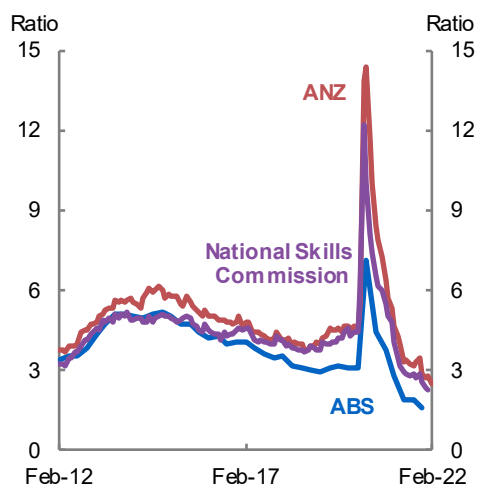
The labour market has displayed resilience through the pandemic and has again recovered strongly in recent months. Employment reached a then-record high in November 2021 and continued employment growth since then has seen the unemployment rate fall to just 4.0 per cent – the equal lowest outcome since 1974. The employment-to-population ratio reached a new record high of 63.8 per cent in February 2022, with the participation rate also at a record high of 66.4 per cent.

Hours worked fell sharply in January reflecting unseasonably high levels of annual leave, as well as the Omicron outbreak leading to around 3 times as many people as usual having worked less hours due to illness or sick leave. During the peak of the Omicron outbreak, absenteeism rates from COVID-19 are estimated to have reached around 6 per cent nationally.

The Omicron wave had a short-lived impact on the labour market compared with previous outbreaks, with hours worked returning to just 0.5 per cent below their December level in February. However, there remained around 50 per cent more people than usual working reduced hours because of illness or sick leave.

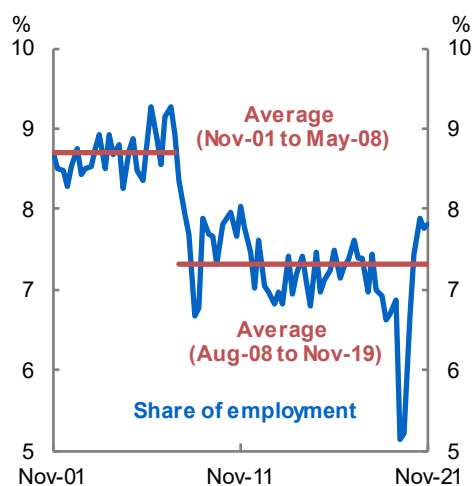
The recovery in the labour market in recent months reflects growth in private consumption supporting strong labour demand. The number of unemployed people per vacancy, a key measure of labour market tightness, fell to just 1.6 in November. This is the lowest value on record and around half the pre-pandemic level (Chart 2.16). The underemployment rate has also fallen sharply to 6.6 per cent in recent months, 2.2 percentage points lower than it was in March 2020. Strong labour demand has allowed more than one million workers to start a new job in the 3 months to November 2021, an increase of 65 per cent from the low experienced in 2020. As a share of employment, the rate at which people are taking up new jobs is around its highest level in nearly a decade (Chart 2.17).

Chart 2.16: Ratio of unemployed to vacancies and advertisements



Source: ABS Labour Force, ABS Job Vacancies, National Skills Commission Internet Vacancy Index and ANZ Job Ads.

Chart 2.17: Workers with a new job

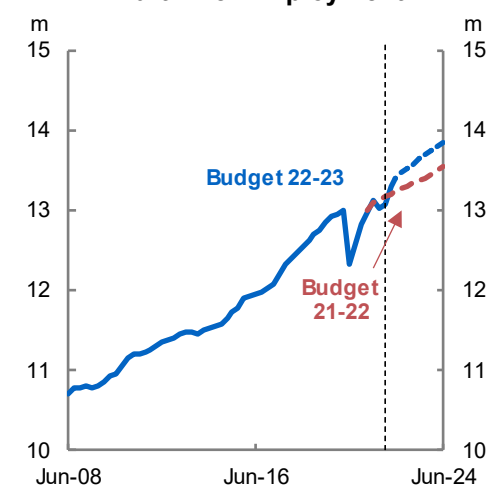


Source: Treasury analysis of ABS Labour Force microdata.

The continued recovery in the domestic economy is expected to see **employment** increase by $2\frac{3}{4}$ per cent through the year to the June quarter of 2022, before growing by $1\frac{1}{2}$ per cent through the year to the June quarters of 2023 and 2024 (Chart 2.18). This would see the employment-to-population ratio at an unprecedented high across this period, indicating that there has been no long-term scarring impacts from the pandemic.

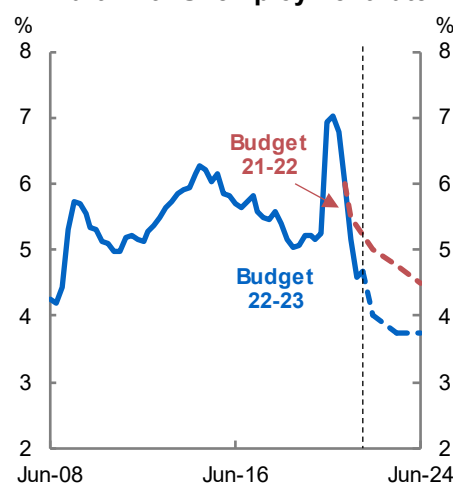
The **unemployment rate** is expected to continue to fall over the next few quarters, reflecting strong growth in the domestic economy. Unemployment is forecast to fall to $3\frac{3}{4}$ per cent in the September quarter of 2022 (Chart 2.19) and remain there until 2024-25. This would be the first time since the early 1970s the unemployment rate has averaged below 4 per cent and would see the unemployment rate lie below the NAIRU assumption (as discussed in Box 2.5).

Chart 2.18: Employment



Source: ABS Labour Force and Treasury.

Chart 2.19: Unemployment rate



Source: ABS Labour Force and Treasury.

The strength in the labour market is expected to continue to encourage participation as employment growth and higher wages draw people into the labour market, providing more labour supply in response to strong demand. The **participation rate** reached a new record high of 66.4 per cent in February 2022, recovering more quickly than was expected in late 2021. The participation rate is forecast to be at a record high of 66½ per cent by the June quarter of 2022 and remain there through 2023-24, with population ageing dragging against the strength in the labour market and limiting further increases.

Wage growth is expected to build across the forecast period as the labour market remains tight and the unemployment rate remains below the NAIRU. Wage growth, as measured by the Wage Price Index (WPI), increased to 2.3 per cent through the year to the December quarter of 2021 and is forecast to rise to 2¾ per cent through the year to the June quarter of 2022 and 3¼ per cent through the year to the June quarters of 2023 and 2024, which would be the fastest pace in almost a decade.

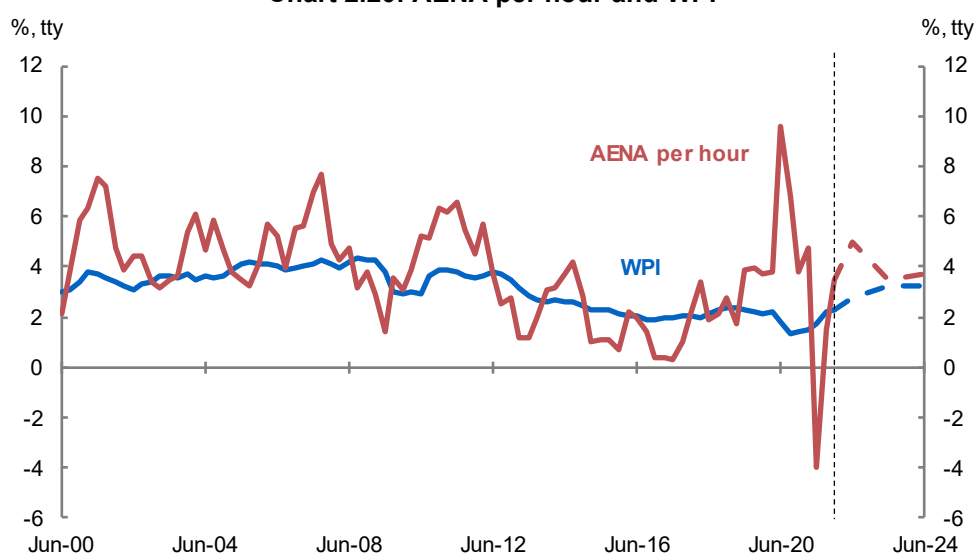
The outlook is even stronger based on the broader National Accounts measure of average earnings (AENA), which captures total remuneration including bonuses, overtime and allowances, as well as the effect of workers gaining promotions or changing jobs as they take advantage of tight labour market conditions. At a time of high mobility and tightness in the labour market, AENA presents a more representative measure of wages. Wages including bonuses have picked up in recent quarters and Single Touch Payroll data shows that workers who moved jobs in mid-2021 typically experienced pay increases of between 8-10 per cent.

AENA on an hourly basis has grown much faster than the WPI, at 3.5 per cent through the year to the December quarter of 2021, which aligns with business liaison reports that many firms are paying non-wage benefits to attract and retain staff. The difference between these 2 measures of wages is expected to persist over the forecast period. Historical evidence shows that AENA is much more responsive to economic fluctuations, and the gap between AENA and WPI is often sustained for several years (Chart 2.20).

AENA per hour is forecast to grow by 5 per cent through the year to the June quarter of 2022, 3½ per cent through the year to June quarter of 2023 and 3¾ per cent through the year to the June quarter of 2024.

Real wages, based on the broader measure of wages, AENA per hour, are forecast to increase across every year of the forecast period.

Chart 2.20: AENA per hour and WPI



Source: ABS National Accounts: National Income, Expenditure and Product, ABS Labour Force and Wage Price Index, and Treasury.

Box 2.5: Sensitivity of the economic forecasts to the NAIRU

The NAIRU represents the level of the unemployment rate associated with stable growth in wages and prices. The difference between the NAIRU and the unemployment rate is one measure of how much spare capacity there is in the labour market and economy. The NAIRU assumption underpinning the economic forecasts in this Budget is 4¼ per cent.

Treasury has previously assumed the NAIRU to be 4¾ per cent, based on historical economic data and econometric analysis.¹ However, the unemployment rate has fallen faster and lower than previously expected, without generating substantial wage increases.

The underlying level of spare capacity and underemployment present in the economy may not have been captured in the previous NAIRU assumption. Additionally, structural changes may have altered the wage and price setting dynamics in a way which was not fully reflected in earlier estimates.

Australia's experience of low unemployment and wage growth is not unique. Many major economies including the United States, Japan and the United Kingdom experienced decade low unemployment rates prior to COVID-19 with little wage pressure.

One way to understand the influence of the NAIRU on the forecasts is through a concept known as the Phillips curve. It explains the trade-off between the unemployment rate and stable wages or inflation. An unemployment rate below the NAIRU is associated with higher wage and price growth, while an unemployment rate above the NAIRU is associated with lower wage and price growth.

This box presents scenarios to illustrate the impact the NAIRU assumption has on the forecasts. One scenario has a higher NAIRU of 4¾ per cent and the other a lower NAIRU of 3¾ per cent (Chart 2.21). The scenarios hold the unemployment rate at the Budget forecast to illustrate the impact on wages and prices. As illustrative scenarios, these results assume there is no change in monetary policy that would offset some of these price changes.

With the lower NAIRU assumption of 3¾ per cent, there is more spare capacity in the labour market compared to the Budget forecast. This reduces annual wages growth to be ½ of a percentage point lower in 2022-23 and ¾ of a percentage point lower in 2023-24.

1 Ruberl H, Ball M, Lucas L and Williamson T (2021), 'Estimating the NAIRU in Australia', Treasury Working Paper 2021-01, 29 April 2021.

Box 2.5: Sensitivity of the economic forecasts to the NAIRU (continued)

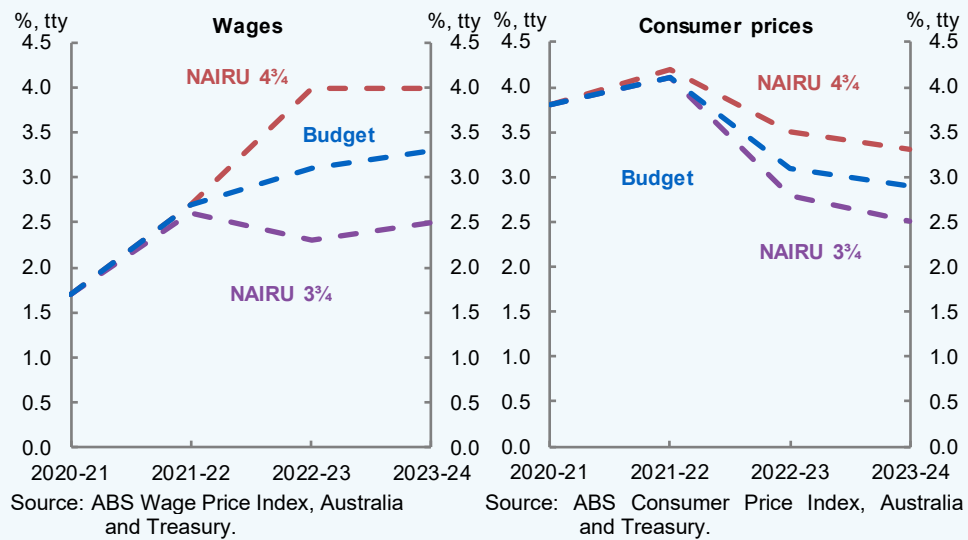
Over time lower wages growth leads to lower consumer price inflation, as firm costs are passed on to consumer prices. CPI growth in the scenario is $\frac{1}{4}$ of a percentage point lower in 2022-23 and $\frac{1}{2}$ of a percentage point lower in 2023-24. In the June quarter of 2024, through the year growth in both wages and CPI is $2\frac{1}{2}$ per cent.

A higher NAIRU of $4\frac{3}{4}$ per cent results in an opposite impact, with through the year wages growth of 4 per cent in the June quarters of 2023 and 2024, and through the year CPI growth of $3\frac{1}{4}$ per cent in the June quarter 2024.

There is limited recent experience in Australia with an unemployment rate below 5 per cent, adding to uncertainty around how wages respond in such an environment. Regardless of the NAIRU assumption, it will take time for tightening labour market conditions to become a key driver of inflation.

The large degree of uncertainty around technical estimates of the NAIRU suggests a degree of caution is required in framing fiscal and monetary policy. Overestimating the NAIRU could see policy tighten prematurely and prevent Australia from attaining the goal of full employment. Treasury will continue to review and assess the NAIRU assumption as more information comes to light.

Chart 2.21: Implications of the NAIRU assumption



Consumer price inflation is expected to remain elevated in the near-term reflecting price pressures from automotive fuel as a result of higher global oil prices, new dwelling purchases and tradeable goods. Beyond the near term, inflation is expected to moderate, with inflation largely reflecting domestic labour market conditions.

Underlying inflation has increased in recent quarters. The trimmed mean measure rose 2.6 per cent through the year to the December quarter of 2021, its largest annual rise since 2014. The pick-up in underlying inflation signalled broadening price pressures in the economy, particularly for goods.

Petrol prices have increased further in 2022 and business liaison indicates businesses face ongoing cost pressures from supply chain disruptions, particularly in the construction, goods retailing and hospitality sectors. The fuel excise reduction is expected to reduce headline inflation by $\frac{1}{4}$ of a percentage point in the June quarter of 2022, before being withdrawn in late 2022 as oil prices are expected to moderate.

These factors inform a stronger price outlook in the near term, albeit lower than what has been observed in other countries. CPI is expected to grow by $4\frac{1}{4}$ per cent through the year to the June quarter of 2022. Headline inflation is then expected to moderate to 3 per cent through the year to the June quarter of 2023, reflecting some continued inflationary pressure from global supply chain issues. Towards the end of the detailed forecast period, the tight labour market and resulting wage growth will generate inflation of $2\frac{3}{4}$ per cent through the year to the June quarter of 2024.

Russia's invasion of Ukraine presents a risk to the near-term outlook for inflation, given its potential to further increase energy prices, especially for automotive fuel (Box 2.6). Prolonged supply chain issues, associated with the current or future widespread COVID-19 outbreaks in China, present risks to inflation that may persist through 2022 and 2023. The recent floods in Queensland and New South Wales may also impact food prices and add to existing challenges on the supply of construction materials and labour.

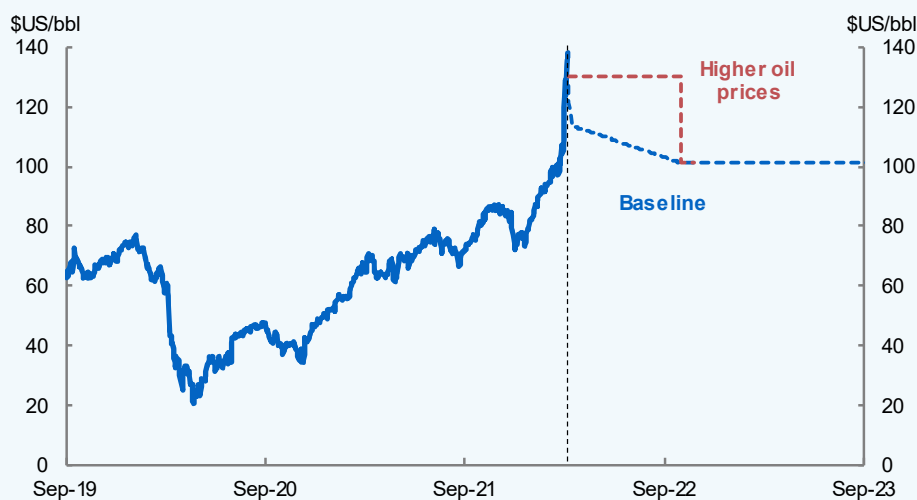
Box 2.6 Inflation impact of a higher global oil price

Oil prices rose strongly in late 2021 and have been volatile in early 2022, spiking to over US\$125 per barrel. Continued volatility in the oil price is a key risk to the domestic outlook. Higher global oil prices feed through to Australian automotive fuel prices within around 3 weeks and, over a more protracted period, indirectly feed through to higher costs for producers and other CPI components.

The economic forecasts assume that the global oil price subsides from the recent spike but remains above pre-invasion levels at around US\$100 per barrel (Chart 2.22). This is consistent with a scenario in which ongoing uncertainty keeps prices elevated but there is minimal disruption to Russian oil supplies. Of the 4¼ per cent inflation forecast through the year to June 2022, around one percentage point is due to the direct effect of higher oil prices on fuel, offset by ¼ of a percentage point by the temporary reduction in excise taxes.

Treasury has also assessed the impact of a more acute shock to global oil markets on domestic inflation. In this scenario, disruptions to Russian oil exports lead to global shortages and prices remain around US\$130 per barrel until alternative sources of supply come online. In this scenario, higher oil prices would add a further ¼ of a percentage point to annual inflation to June 2022.

Chart 2.22 Global oil price scenarios



Source: Bloomberg and Treasury.

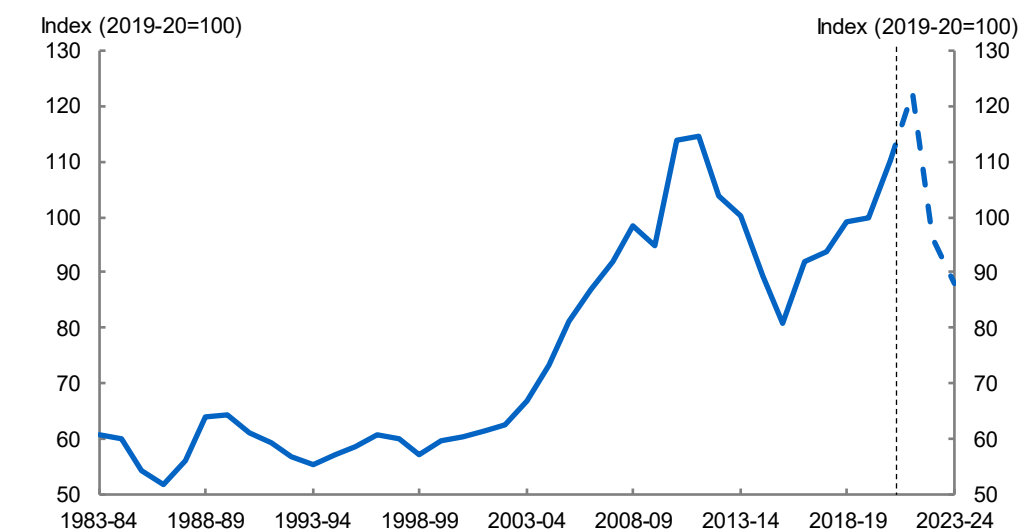
Outlook for nominal GDP growth and the terms of trade

Nominal GDP is forecast to grow by 10¾ per cent in 2021-22 compared to 6½ per cent at 2021-22 MYEFO. The upgrade to nominal GDP growth in 2021-22 is largely driven by higher commodity prices, with non-rural commodity export values \$5.6 billion higher in the December quarter of 2021 than forecast at the 2021-22 MYEFO. The higher-than-expected export values are expected to provide additional support to the Australian economy through higher profits and government revenue.

Nominal GDP is expected to grow by ½ of a per cent in 2022-23 and by 3 per cent in 2023-24. The subdued growth across these years reflects a sharply falling terms of trade due to an assumed decrease in commodity prices to levels more consistent with long-term fundamentals (Chart 2.23). This will be partly offset by a tight labour market that increases output and generates robust income and consumption growth. Additionally, rising wage growth is expected to lead to a permanent increase in the labour share of income.

Overall, the level of nominal GDP is around \$300 billion higher over the 5 years to 2025-26 compared with the 2021-22 MYEFO. In 2021-22, this largely reflects stronger non-rural commodity prices and in subsequent years it reflects stronger output and a higher domestic price level.

Chart 2.23: Australia's terms of trade



Source: ABS Australian National Accounts: National Income, Expenditure and Product and Treasury.

The near-term forecasts capture much of the recent increases in commodity prices but, given the current high-level of volatility and uncertainty, conservative export commodity price assumptions have been adopted. Elevated coal, iron ore, metals and other ores prices are unwound over 2 quarters (that is, by the end of the September quarter of 2022) to levels consistent with long-term fundamentals. For iron

ore and coal, this is one quarter later than was assumed in the 2021-22 MYEFO. This approach ensures that economic and fiscal parameters are grounded in long-term economic fundamentals and are not unduly influenced by short-term volatility.

The price assumptions for key commodities are:

- The iron ore price is assumed to decline from US\$134 to US\$55 per tonne free on board (FOB).
- Metallurgical and thermal coal prices are assumed to decline from US\$512 to US\$130 per tonne FOB and US\$320 to US\$60 per tonne FOB, respectively.
- Given the substantial increase in metals and ores (excluding iron ore) prices since the 2021-22 MYEFO, the prices for these commodities, such as gold, aluminium and nickel, are assumed to decline to their long-term levels by the end of the September quarter of 2022.
- Tapis oil prices are assumed to decline from US\$114 to around US\$100 per barrel. The end-point is based on the average price over February rather than assessments of long-term fundamentals, reflecting the increased risks around oil supply and the possibility that a large risk premium sees oil prices remain elevated for some time.

The potential for further disruptions to commodity supply from Russia poses an upside risk to the terms of trade forecasts. This would see the prices of some of Australia's key commodity exports remaining elevated for longer than under the 2022-23 Budget assumptions. These disruptions could also support higher-than-expected energy commodity prices, as well as other key commodities exported by Russia, such as metallurgical coal and wheat.

This would have a material impact on tax receipts over the forecast period. For example, if iron ore, thermal coal and metallurgical coal prices remained at elevated levels until the end of the September quarter of 2022, before declining to their long-run levels by the end of the March quarter of 2023 (Chart 2.24 and 2.25), the value of nominal GDP would be \$135.2 billion higher over 2021-22 to 2024-25, and tax receipts would be \$29.5 billion higher over the same period (Table 2.3). Unlike the analysis in *Budget Statement 7: Forecasting Performance and Sensitivity Analysis*, these estimates do not account for the second-round effects of permanently higher commodity export prices, such as a higher exchange rate. This is consistent with prices being temporarily, not permanently, higher.

The Chinese economy poses another key uncertainty for the terms of trade. Strength in fixed asset investment in China, spurred by loosening fiscal and monetary policy may mean iron ore prices stay higher for longer than expected. On the other hand, a faster-than-expected slowdown in the Chinese economy, such as due to economic disruptions from a widespread COVID-19 outbreak, could push the prices of Australia's

key exports lower than assumed. Further information on the sensitivity of the economy to permanent changes in the iron ore price can be found in *Budget Statement 7: Forecasting Performance and Sensitivity Analysis*.

Chart 2.24: Iron ore spot price

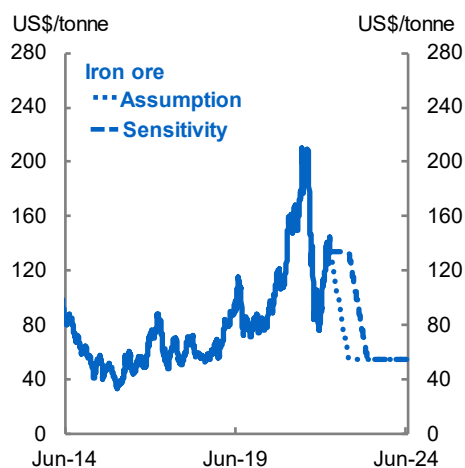
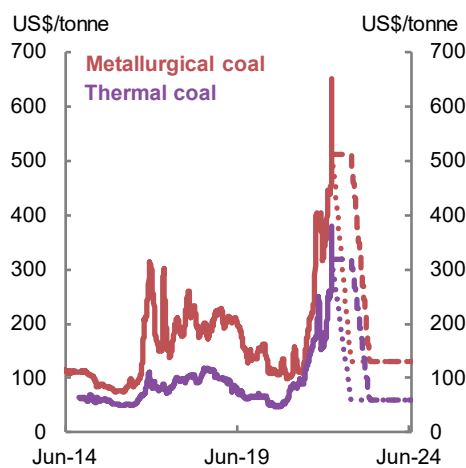


Chart 2.25: Coal spot price



Source: Argus Media and Treasury.

Source: Argus Media and Treasury.

Note: Spot price data are presented as a 5-day moving average and are expressed in Free on Board (FOB) terms, which exclude the cost of freight. Iron ore and coal spot price assumptions were finalised on 14 March 2022. Calculations made by Treasury are based on confidential proprietary data from Argus Media under licence. Argus Media shall not be liable for any loss or damage arising from any party's reliance on, or use of, the data provided or the Treasury's calculations.

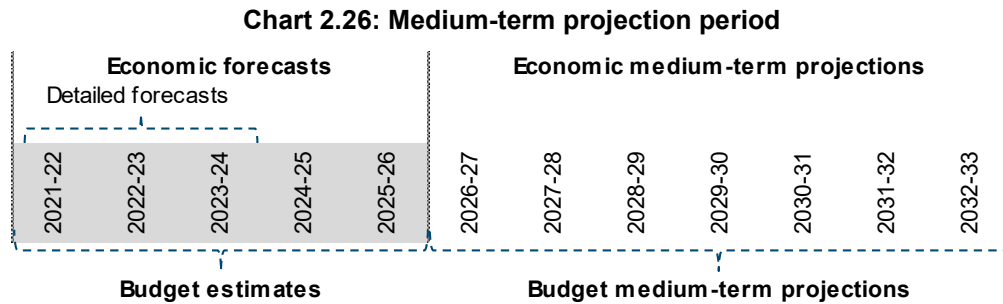
Table 2.3 Sensitivity analysis of a later fall in coal and iron ore spot prices

	2021-22	2022-23	2023-24	2024-25	Total
Nominal GDP (\$billion)	9.9	123.7	1.6	0.0	135.2
Tax receipts (\$billion)	0.7	17.7	10.8	0.2	29.5

Source: Treasury.

Medium-term projections

The fiscal aggregates in the Budget are underpinned by forecasts of economic activity over the Budget estimates period and projections over the medium term (Chart 2.26).



Source: Treasury.

In the current financial year (2021-22), the Budget year (2022-23) and the subsequent financial year (2023-24), emphasis is placed on detailed forecasts of the expenditure components of economic activity. Beyond this period, estimates are based on expectations for the level of potential output and modelling of the path by which output converges back to this potential level. An output gap exists if actual output is not equal to potential.

A macroeconomic model of the Australian economy is used to inform the path that the economy takes to close the output gap. This model accounts for factors such as the nature and level of spare capacity in the economy, the drivers of potential output growth, and the expected path of international trade prices. The model allows for a considered assessment of the path of output beyond 2023-24.

Potential GDP is estimated based on an analysis of trends for population, productivity, and participation. As excess activity in the economy moderates and the output gap closes, real GDP is assumed to converge towards its potential level and the unemployment rate converges towards the NAIRU assumption. On the nominal side, key non-rural commodity export prices are projected based on cost curve analysis. Domestic prices return over time to the midpoint of the RBA's inflation target band.

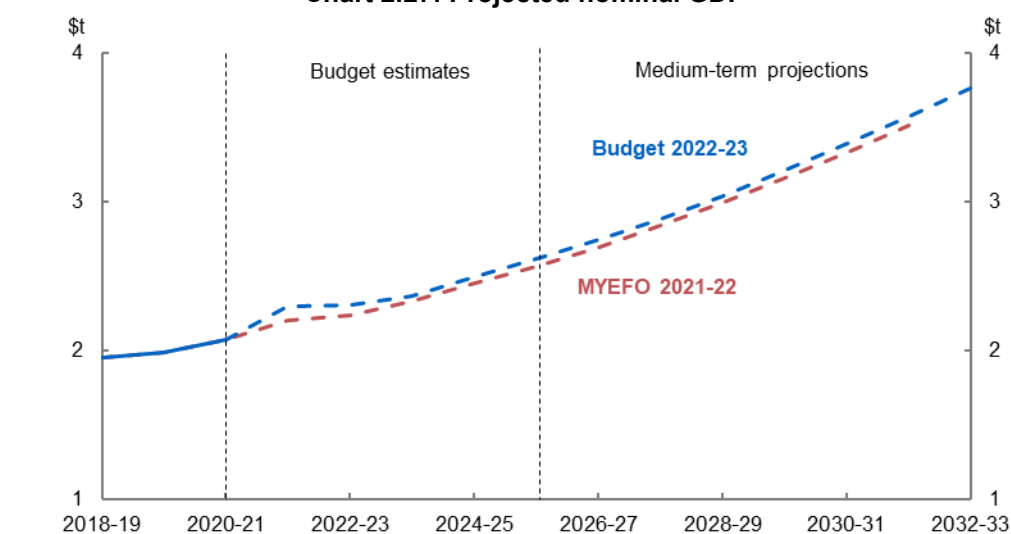
Potential GDP grows at an annual average of around 2½ per cent per annum to 2025-26 before increasing to an annual average of around 2¾ per cent per annum over the medium term to 2032-33. The terms of trade are projected to return to around their 2006-07 level from 2023-24 and remain around this level over the medium term.

Overall, the level of nominal GDP over the medium-term projection period is permanently higher compared to the 2021-22 MYEFO (Chart 2.27). In 2021-22 this largely reflects stronger non-rural commodity prices and in later years it reflects stronger output and a higher domestic price level. The tight labour market is expected to lead to rising

wage growth and a permanent increase in the labour share of income. It also leads to an increase in domestic price pressures. While inflation returns to the midpoint of the RBA target band by the June quarter of 2026, this increase in the domestic price level is expected to be sustained. Nominal GDP over the medium term is also supported by higher potential output. Higher potential output largely reflects an increase in the size of the productive workforce associated with a permanently lower unemployment rate.

Since the 2021-22 MYEFO, the NAIRU assumption has been revised down to 4¼ per cent resulting in a higher level of potential GDP by the end of the medium term (Box 2.5). Trend projections for the population level and average hours are slightly higher while the trend participation rate is unchanged. The changes to the NAIRU, population and average hours, imply that there is a larger workforce available to produce goods and services over the medium term. The medium-term outlook for underlying labour productivity growth is unchanged. Consistent with the 2021-22 MYEFO, underlying labour productivity is assumed to converge over a 10-year period to the average growth rate in labour productivity over the 30 years to 2018-19 of 1.5 per cent per annum.

Chart 2.27: Projected nominal GDP



Source: ABS Australian National Accounts: National Income, Expenditure and Product and Treasury.