Part 2: Economic outlook

Overview

Australia's economy continues to show resilience in the face of weak momentum in the global economy, as well as domestic challenges such as the devastating effects of drought and bushfires. While economic activity has continued to expand, these factors have resulted in slower growth than had been expected at PEFO.

GDP growth in the first three quarters of 2019 was stronger than it was in the second half of 2018. The labour market remains strong, and domestic demand is expected to pick up over the forecast period. Growth in household consumption and non-mining business investment is forecast to increase, and mining investment is forecast to grow for the first time in seven years. Public final demand is expected to continue to contribute to growth. Export growth is forecast to remain strong, reflecting a lower Australian dollar, continuing demand for services exports and the expansion of production in the mining sector.

Real GDP growth is forecast to be 2¼ per cent in 2019-20, a downgrade of ½ of a percentage point since PEFO. Growth is then expected to strengthen to 2¾ per cent in 2020-21.

The recovery in GDP growth partly reflects supportive policy settings. The personal income tax relief announced in the 2018-19 and 2019-20 budgets is supporting household disposable income, and continued investment in productive infrastructure by all levels of government is supporting economic activity and employment. Monetary policy remains accommodative, and the depreciation of the Australian dollar is benefiting the trade-exposed sectors of the economy.

The drought has severely affected rural communities — farm GDP detracted from growth in 2018-19 and is expected to detract in 2019-20. An assumed return to average seasonal conditions should contribute to growth in 2020-21 as farm production and exports recover. However, the pace of growth of rural exports and farm GDP will depend on future weather conditions.

With combined capital city housing prices rising since July 2019, a persistent recovery in the established housing market should also support activity. Falls in combined capital city housing prices between mid-late 2017 and mid-2019 have weighed on housing turnover, household consumption and building approvals. Consumption and activity associated with the transfer of property are expected to pick up as the negative effects of lower housing prices on spending and turnover dissipate, and as wage growth gradually increases. After several years of strong growth, dwelling investment has fallen over the past year from record highs, and is expected to decline further over the forecast horizon as recent weakness in building approvals continues to flow through to activity.

The drag from the unwinding of the mining investment boom has receded over the past few years, and mining investment is expected to grow in 2019-20 as mining companies invest to maintain production. This would be the first instance of positive growth in seven years and is expected to be accompanied by steady growth in non-mining business investment — particularly in non-residential construction activity, given the solid pipeline of work yet to be done.

Labour market conditions have remained strong with employment growth outpacing growth in the population, and growing above the OECD average. Employment growth will be underpinned by a pick-up in economic activity, although leading employment indicators suggest that growth is likely to moderate, keeping the unemployment rate at 5¼ per cent. Ongoing employment growth is expected to support a pick-up in wage and consumer price growth across the forward estimates, albeit more gradually than at PEFO. As has been the case in other advanced economies, wage growth in Australia has been slow to respond to improving labour market conditions.

Nominal GDP is forecast to grow by 3¼ per cent in 2019-20, the same as forecast at PEFO. Nominal GDP growth in 2020-21 has been downgraded by 1½ percentage points to 2¼ per cent, largely reflecting the assumed decline in iron ore prices.

Global economic momentum weakened in 2019. This reflects the direct impact of trade actions on global trade flows and supply chains in East Asia. But it also increasingly comes from global uncertainty, which appears to be weighing on business confidence and investment intentions. As a result, global economic growth in 2019 and 2020 is forecast to be weaker than had been expected at PEFO. This outlook assumes that all announced trade policy actions will be implemented. Global growth is expected to be 3 per cent in 2019 — the weakest growth since the global financial crisis — and 3¼ per cent in 2020. Major trading partner growth is forecast to be 3½ per cent in 2019 and 3¾ per cent in 2020. Growth is expected to pick up in 2021, supported by recent monetary policy easing in a large number of economies.

Developments in global trade policy remain the largest uncertainty for the global outlook. Any significant resolution of tensions, particularly a winding back of existing and announced trade barriers, would present an upside risk to the global outlook. The recent resumption of trade negotiations between the United States (US) and China is encouraging. Conversely, an escalation of tensions between the US and China, or a further spread of tensions to other economies, would be negative for global growth. A range of other downside risks to the global outlook remain, such as fragilities in the financial sectors of a number of economies and, to a lesser extent, a disorderly Brexit.

There are also uncertainties around the domestic forecasts. The forecasts assume that some of the recent weakness in consumption reflects timing factors and that the household saving ratio will fall as households increase their consumption in response to higher after-tax income. However, there is a risk that consumers remain cautious and the fall in the household saving ratio is slower than expected. Dwelling investment could also be weaker than forecast. And Australian businesses are not immune to the impacts

of greater global uncertainty, which could weigh further on business confidence and investment. Upside risks include a more rapid recovery in the housing market which could support stronger consumer spending, while a rebound in business conditions and confidence could contribute to a stronger-than-expected recovery in non-mining business investment.

International economic outlook

Global economic momentum has weakened since PEFO. This reflects the direct impact of trade actions on trade flows, including through supply chains in East Asia. It also reflects elevated uncertainty from trade and technology tensions, Brexit, and financial instability in Italy, Turkey, and a number of South American countries. This continued uncertainty has weighed on business confidence and investment intentions, particularly in manufacturing. Global growth is expected to be 3 per cent in 2019, a downgrade of ½ of a percentage point since PEFO. Growth is expected to pick up to 3½ per cent in 2021, supported by recent monetary policy easing in a large number of economies, including the US, the euro area, China and across South East Asia. Australia's major trading partners are forecast to grow by 3½ per cent in 2019, 3¾ per cent in 2020 and 4 per cent in 2021. These forecasts assume that all announced trade policy actions will be implemented.

Since late 2018, global trade growth has declined and there has been a marked slowing in manufacturing activity in a number of economies. This reflects a range of factors, some of which are interrelated, including trade actions, downturns in the electronics cycle and in automotive production, and slower growth in China as the authorities continue to address risks in the financial system. Trade in economies in East and South-East Asia — which play a key role in global supply chains — has been particularly weak. However, some of these economies have benefited from trade diversion as a result of tariff actions between the US and China.

Uncertainty around global trade policy, Brexit and financial fragilities have remained elevated over much of 2019. This has weighed on business confidence and investment, contributing to investment growth being below average in 2018-19 in China, the US, Korea and some ASEAN economies. It remains unclear at this point whether recent positive developments in trade policy between the US and China will endure and help to reduce some of the policy uncertainty.

On the upside, labour markets remain robust, with unemployment rates nearing record lows in the US, the euro area and Japan. While this has led to a gradual increase in wages, wage growth appears to have softened recently in the US and the euro area. Low inflation has also persisted, and remains near 2 per cent for both the United Kingdom (UK) and the US.

Developments in global trade policy remain the largest uncertainty for the global outlook. The resumption of negotiations between the US and China on a phase one deal is encouraging as any significant resolution of tensions, particularly if it removes

existing and announced trade barriers, would present an upside risk to the global outlook. However, deeper points of contention around structural policies such as intellectual property, forced transfer of technology and industrial subsidies for favoured industries would likely need to be resolved before policy and trade uncertainty subsides.

A further escalation of tensions between the US and China, or a further spread of tensions to other economies, would be negative for global growth, especially if it started to significantly affect household and business behaviour. As has been evident to date, the economic effect of any changes in trade policy are magnified by their effect on policy uncertainty and business confidence.

A range of downside risks to the global outlook remain. Fragilities in the financial sectors of a number of economies remain a concern, including in China, where the authorities are trying to balance financial deleveraging with a need to support a slowing economy. A disorderly Brexit continues to pose a downside risk to the outlook for the UK economy and Europe more broadly.

Over the longer term, unfavourable demographics and potentially slower productivity growth could constrain growth rates in some of the world's major economies. Future global productivity growth will depend on the dispersion of technology, the mobility of capital and the degree of openness and competition maintained across economies.

Table 1: International GDP growth forecasts [(a)]

	Outcomes	Forecasts		
	2018	2019	2020	2021
China	6.6	6	5 3/4	5 3/4
India	7.4	5	6	6 3/4
Japan	0.3	1	1/2	3/4
United States	2.9	2 1/4	1 3/4	1 3/4
Euro area	1.9	1 1/4	1 1/4	1 1/2
Other East Asia (b)	4.3	3 1/2	3 3/4	4
Major trading partners	4.1	3 1/2	3 3/4	4
World	3.6	3	3 1/4	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 five (ASEAN-5), comprising Indonesia, Malaysia, the Philippines, Thailand and Vietnam, along with Hong Kong, South Korea, Singapore and Taiwan.
Source: National statistical agencies, IMF World Economic Outlook October 2019, Refinitiv and Treasury.

The **United States** economy has continued to grow at a solid pace throughout 2019 despite the impact of, and uncertainty generated by, trade actions. This is primarily due to the resilience of household consumption, supported by a strong labour market. The growth forecast for 2020 has been downgraded by ¼ of a percentage point since PEFO as global uncertainties are expected to weigh on business investment and manufacturing activity. However, fiscal policy is currently expansionary, with the US deficit forecast to

increase. Monetary policy is also expected to stimulate activity following cuts of 75 basis points to the federal funds rate in 2019.

GDP growth in **China** has continued to moderate since PEFO, reflecting weaker trade and associated production and investment activity, as well as softening domestic demand as a result of the authorities' deleveraging efforts to address financial risks. As a result, growth in 2020 has been downgraded by ¼ of a percentage point since PEFO. This moderation in growth has been partially offset by policy action reducing banks' reserve requirement ratios and fiscal support through increased bond quotas for local governments. Growth is expected to continue to moderate in coming years, reflecting ongoing structural challenges, such as an ageing population and slowing productivity growth. An escalation in trade tensions with the US poses a particular risk to the outlook.

Over 2019, the **Indian** economy has recorded growth outcomes significantly below expectations. Domestic demand remains weak as subdued global demand and tight financial conditions weigh on the economy, with stress in the banking sector affecting credit growth. Consequently, the growth forecast has been downgraded by 2½ percentage points since PEFO to 5 per cent in 2019. Announced monetary and fiscal policy support is expected to improve credit conditions and spur investment-led demand. However, this will likely take some time, with growth now expected to pick up towards the economy's estimated potential rate in late 2021.

The **Japanese** economy grew strongly in the first half of 2019, following only modest growth in 2018. However, the increase in the value-added tax in October is expected to weigh on private consumption for one or two quarters. Slowing growth in China and continuing weakness in global electronics demand are also expected to weigh on growth. As such, GDP growth is expected to be ¼ of a percentage point lower in 2020 than was forecast at PEFO, before picking up again slightly in 2021.

Weakness in the **euro area** has persisted throughout 2019. The growth forecast for 2020 has been downgraded by ¼ of a percentage point compared with PEFO, reflecting the current slowdown persisting throughout 2020. Growth in Germany has been significantly affected by the weakness in global trade, structural changes seen in its car manufacturing sector, and uncertainty over Brexit. Growth in Italy and France has also been weak. However, the unemployment rate in the euro area has fallen back to levels not seen since before the financial crisis. Growth is expected to be supported by accommodative monetary policy — interest rates remain at historically low levels and the European Central Bank has recently restarted quantitative easing.

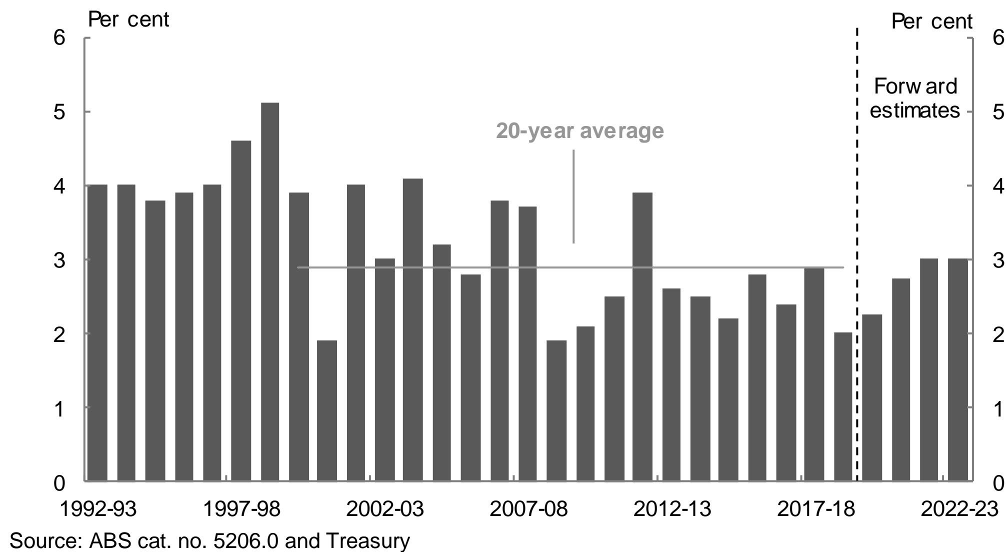
The fall in global trade and the slowdown in the electronics cycle is putting pressure on economic growth in the trade-exposed **ASEAN-5** economies. While economic growth remains solid, there has been a slowdown in trade growth in Indonesia, Malaysia, Thailand and the Philippines. However, some countries — notably Vietnam — have benefited from trade diversion away from China with exports to the US increasing markedly. Vietnam has also benefited from an increase in foreign direct investment, including from firms looking to diversify production locations.

Growth in other **East Asian** economies has also been weak during the year, with Hong Kong experiencing a recession. Because of their integration in regional electronics supply chains, Singapore and South Korea have been strongly affected by slowing global electronics demand, both experiencing falls in GDP growth during the year. Taiwan has continued to grow, but only at a modest pace.

Domestic economic outlook

Following subdued growth in the second half of 2018, growth in the Australian economy is picking up. Nonetheless, GDP growth in 2019-20 has been downgraded by ½ of a percentage point since PEFO to 2¼ per cent, reflecting recent outcomes in household consumption growth. GDP growth is forecast to return to 2¾ per cent in 2020-21 (Chart 1).

Chart 1: Real GDP growth



Source: ABS cat. no. 5206.0 and Treasury

Growth over the next couple of years will be supported by policy settings, including personal income tax relief and an increase in spending on infrastructure across all levels of government, as well as lower interest rates. It is also expected to be supported by a stabilisation in the housing market and a pick-up in mining investment.

The drought has severely affected the rural sector in parts of Australia, with the fall in farm GDP detracting from growth in 2018-19 and a further detraction forecast in 2019-20. However, a recovery in rural exports is expected to contribute to growth in 2020-21 on the basis of an assumed return to average seasonal conditions.

A persistent recovery in the established housing market should support activity in the economy in coming years. The housing price falls between mid-late 2017 and mid-2019 weighed on growth by lowering household consumption, reducing residential building construction, and lowering turnover in the housing market — activity directly

associated with the transfer of property detracted 0.3 percentage points from GDP growth in 2018-19. A pick-up in housing prices is likely to help turnover recover and provide some support to those components of consumption more affected by housing prices. A recovery in dwelling investment is unlikely in the forecast period given the lags between building approvals and construction activity (See Box 1).

As has been the case for some time, GDP growth over the past year has been affected by the winding down of the mining investment boom. But, with all major projects now in production, mining investment is expected to soon stop detracting from growth. Indeed, mining investment growth is expected to move into positive territory in 2019-20, and pick up over the forecast period as mining companies invest to maintain existing capital and begin new projects in order to sustain productive capacity.

Outside of these factors, growth is expected to be assisted by continued growth in public final demand, a pick-up in non-mining business investment and continued export growth, supported by the last of the major liquefied natural gas (LNG) projects ramping up to full production. Consumption growth is expected to gradually recover given continued growth in household disposable income.

Employment is forecast to expand over the forecast horizon, underpinned by a pick-up in economic activity. Labour force participation is expected to remain near historically high levels in 2019-20 and 2020-21 and the unemployment rate is forecast to be 5¼ per cent. Growth in wages and consumer prices is expected to increase over the forward estimates.

Table 2: Domestic economy forecasts [(a)]

	Outcomes(b)	Forecasts			
	2018-19	2019-20		2020-21	
		PEFO	MYEFO	PEFO	MYEFO
Real gross domestic product	**2.0**	**2 3/4**	**2 1/4**	**2 3/4**	**2 3/4**
Household consumption	2.0	2 3/4	1 3/4	3	2 1/2
Dwelling investment	0.0	-7	-9	-4	-3 1/2
Total business investment(c)	-1.0	5	1 1/2	4 1/2	6
By industry					
Mining investment	-9.5	4	1	4 1/2	12
Non-mining investment	1.6	5 1/2	2	4 1/2	4 1/2
Private final demand(c)	1.0	2 1/4	3/4	2 3/4	2 3/4
Public final demand(c)	4.1	3 1/4	4 3/4	3	3 1/4
Change in inventories(d)	-0.1	0	0	0	0
Gross national expenditure	1.6	2 1/2	1 3/4	2 3/4	2 3/4
Exports of goods and services	3.9	4	2 1/2	1 1/2	2 1/2
Imports of goods and services	0.2	3	1/2	2 1/2	3
Net exports(d)	0.8	1/4	1/2	- 1/4	0
Nominal gross domestic product	5.3	3 1/4	3 1/4	3 3/4	2 1/4
Prices and wages					
Consumer price index(e)	1.6	2 1/4	2	2 1/2	2 1/4
Wage price index(f)	2.3	2 3/4	2 1/2	3 1/4	2 1/2
GDP deflator	3.2	1/2	3/4	1	- 1/4
Labour market					
Participation rate (per cent)(g)	66.0	65 1/2	66	65 1/2	66
Employment(f)	2.5	1 3/4	1 3/4	1 3/4	1 3/4
Unemployment rate (per cent)(g)	5.2	5	5 1/4	5	5 1/4
Balance of payments					
Terms of trade(h)	5.6	-5 1/4	-4	-4 3/4	-8 3/4
Current account balance (per cent of GDP)	-0.6	-2 3/4	- 3/4	-3 3/4	-3 1/4

(a) Percentage change on preceding year unless otherwise indicated.
(b) Calculated using original data unless otherwise indicated.
(c) Excluding second-hand asset sales from the public sector to the private sector.
(d) Percentage point contribution to growth in GDP.
(e) Through-the-year growth rate to the June quarter.
(f) Seasonally adjusted, through-the-year growth rate to the June quarter.
(g) Seasonally adjusted rate for the June quarter.
(h) The forecasts are underpinned by price assumptions for key commodities: Iron ore spot price assumed to decline towards US$55/tonne free-on-board (FOB) by the end of the June quarter 2020; metallurgical coal spot price remaining at US$134/tonne FOB; and thermal coal spot price remaining at US$64/tonne FOB.

Note: The forecasts for the domestic economy are based on several technical assumptions. The exchange rate is assumed to remain around its recent average level — a trade-weighted index of around 59 and a $US exchange rate of around 68 US cents. Interest rates are assumed to move broadly in line with market expectations. World oil prices (Malaysian Tapis) are assumed to remain around US$64 per barrel. Population growth is assumed to average around 1.7 per cent per year over the forecast period.

Source: ABS cat. no. 5206.0, 5302.0, 6202.0, 6345.0, 6401.0, unpublished ABS data and Treasury.

Household consumption is forecast to grow by 1¾ per cent in 2019-20 and 2½ per cent in 2020-21. Growth in consumer spending was weaker than expected in 2018-19, occurring alongside falls in housing prices and continued softness in wage and non-wage income growth. A persistent recovery in housing prices should help to support household consumption over the forecast period, including from a recovery in those components of consumption related to the turnover of dwellings, such as furniture and fittings.

In addition, consumption should be supported by a pick-up in household disposable income growth, reflecting the personal income tax measures announced in the 2018-19 and 2019-20 Budgets, as well as continued growth in employment, a modest pick-up in wage growth and supportive monetary policy settings. Reflecting a reduction in tax payable, the household saving ratio rose sharply in the September quarter 2019 after declining over the past five years. The household saving ratio is expected to decrease again over the remainder of 2019-20 as consumers respond to the step-up in income, before stabilising in 2020-21. Nonetheless, forecasts for consumption growth have been downgraded since PEFO by 1 percentage point in 2019-20 and ½ of a percentage point in 2020-21.

Dwelling investment is forecast to fall by 9 per cent in 2019-20, and by a further 3½ per cent in 2020-21. Despite the recent stabilisation in the established housing market, weakness in residential building approvals has persisted and the number of approvals in October 2019 was more than 40 per cent lower than its peak in late 2017. The pipeline of residential construction work yet to be done remains elevated, although this too has softened and the downward trend in building approvals means that a continued moderation in the future level of activity is likely. Activity is expected to start recovering towards the end of the forecast period, supported by lower interest rates, continued population growth and improvements in the broader economy.

Box 1: Housing prices, consumption and dwelling investment

After a recent period of significant falls in housing prices from mid-late 2017 to mid-2019, the established housing market has stabilised. In July 2019, combined capital city housing prices rose for the first time in almost two years, and this has continued in recent months. Although increases have been largest in Sydney and Melbourne, increases have now spread to all cities except Darwin. Overall, combined capital city housing prices are now almost 6 per cent higher than their recent trough in June, although they are still around 5 per cent lower than their peak in September 2017.

This increase in housing prices is expected to support the outlook for household consumption, particularly as corresponding increases in housing turnover should see a pick-up in spending on household goods such as furnishings. More broadly, continued rises in housing prices should provide a boost to confidence and household wealth, as well as increasing borrowing capacity given changes in collateral.

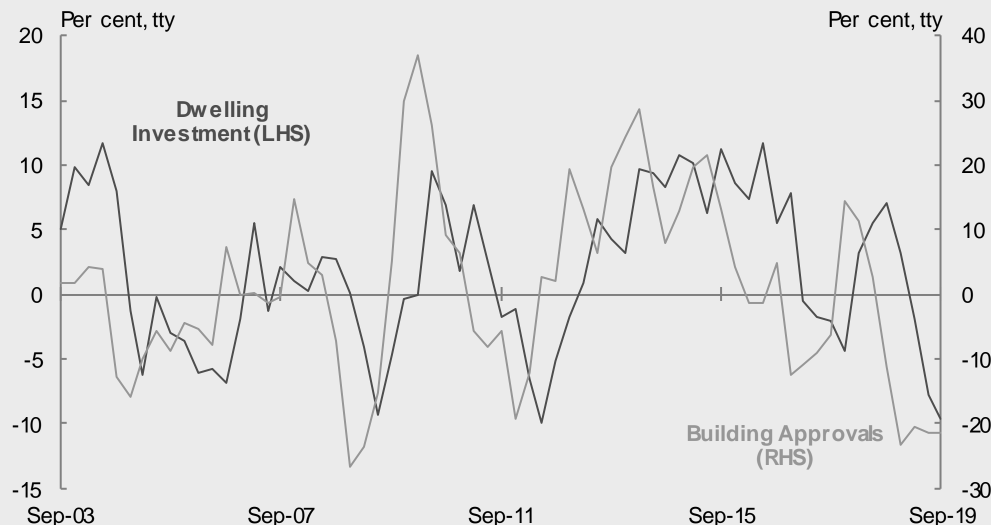
Ownership transfer costs — various fees incurred when fixed assets such as dwellings are sold (including legal and real estate agent fees, stamp duty, and other government charges) — were negatively affected by low rates of housing market turnover in 2018-19 and detracted from real GDP growth. Ownership transfer costs rose by 4.5 per cent in the September quarter 2019 and a further increase supported by stronger housing turnover and prices should contribute to economic growth over the forecast period.

Movements in housing prices impact dwelling investment activity through changes to expected returns to residential construction. However, recent price gains will affect new dwelling investment with a delay. This is because planning and approval processes take time to work their way through into new construction. On average, depending on the type of dwelling, it can take around 2 to 5 months for new dwellings to commence following approval, and a further 6 to 20 months for activity to be completed. High-density dwellings have the longest approval and construction times, and houses the shortest on average.

New dwelling approvals have trended down since late 2017, with the total number of building approvals over the year to October 2019 down by more than 20 per cent from the preceding 12 months and below the 10-year average. The falls in building approvals have been particularly stark in medium-high density dwellings, which also have the longest lag between approval and completion. This means that further moderation in dwelling investment is likely over the forecast period (Chart A). This weakness should be partly offset by a solid pipeline of housing construction work yet to be done.

Box 1: Housing prices, consumption and dwelling investment (continued)

Chart A: Residential building approvals and dwelling investment growth



Note: Building approvals reflect through-the-year growth in total private dwelling building approvals.
Source: ABS cat. no. 5206.0 and 8731.0.

Business investment is forecast to grow by 1½ per cent in 2019-20 and 6 per cent in 2020-21, reflecting continued growth in the non-mining sector and a renewed pick-up in the resources sector. **Mining investment** is forecast to grow by 1 per cent in 2019-20, and 12 per cent in 2020-21 as mining companies invest to maintain the large capital stock accumulated over the investment boom and seek to expand their operations to sustain productive capacity (See Box 2).

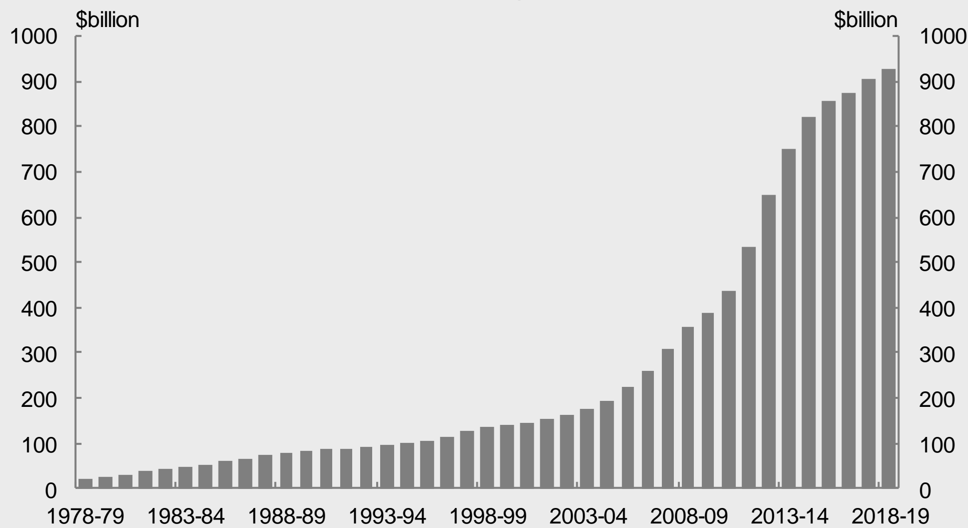
Non-mining business investment growth moderated in 2018-19. Non-mining business investment is expected to grow by 2 per cent in 2019-20, weaker than forecast in PEFO. In 2020-21, growth in non-mining business investment is forecast to pick up to 4½ per cent, supported by growth in non-dwelling construction, which is expected to benefit from an elevated pipeline of work yet to be done.

Box 2: Mining business investment

Following six years of falls, the declines in mining investment and their associated drag on economic growth are coming to an end. The last of the major LNG projects began exporting in 2019, while ABS survey measures and business liaison suggest that mining investment will increase in 2019-20.

A renewed pick-up in mining investment to maintain depreciating assets has been anticipated for some time, as a structurally higher level of investment is needed to sustain a much larger capital stock in the sector. Indeed, the mining investment boom generated a more than five-fold increase in the mining capital stock, with around $750 billion having been injected into Australia's mining capital stock over the past 15 years (Chart A).

Chart A: Nominal Mining Net Capital Stock



Source: ABS cat. no. 5204.0.

Mineral and petroleum exploration investment has increased notably in recent quarters and grew by around 15 per cent in 2018-19 after five consecutive years in decline. Further, a number of iron ore projects — such as Rio Tinto's Koodaideri iron ore mine and rail project, as well as Fortescue Metals Group's Eliwana iron ore and rail development, are being constructed to maintain productive capacity.

Capacity expansion in the LNG sector is another bright spot for mining investment in coming years, with a number of prospective projects on the horizon, such as the development of the Scarborough gas field off the coast of Western Australia.

Public final demand has contributed strongly to growth over the past four years — particularly spending on the National Disability Insurance Scheme, transport infrastructure, healthcare and the National Broadband Network — and is forecast to continue to provide support to the economy over the forecast period. New public final demand is forecast to grow by 4¾ per cent in 2019-20 and 3¼ per cent in 2020-21, reflecting the delivery of essential services and continued investment in infrastructure

from the Government's record $100 billion infrastructure rollout and additional infrastructure spending by the states and territories.

Exports are forecast to grow by 2½ per cent in 2019-20 and in 2020-21, supported by ongoing strength in mining and services exports.

Non-rural commodity exports are forecast to grow by 4 per cent in 2019-20 reflecting increases in iron ore and LNG exports. Growth in 2019-20 is expected to be slower than forecast at PEFO owing to planned and unplanned maintenance. Growth is forecast to slow to 2½ per cent in 2020-21, with the remaining LNG projects expected to have ramped up production by that time.

Services exports are forecast to grow by 5½ per cent in 2019-20 and 3½ per cent in 2020-21. Growth in services exports has remained strong over the past year, and is expected to be supported by lower oil prices and a lower exchange rate.

Drought conditions across Australia are expected to reduce farm production in 2019-20. This is expected to result in an 8½ per cent fall in rural exports. The assumption of average seasonal conditions supports a forecast return to growth in the farm sector in 2020-21. However, the pace of growth of rural exports and farm GDP will depend on how weather conditions evolve.

Imports are forecast to grow by ½ per cent in 2019-20 and 3 per cent in 2020-21, with imports of consumption and intermediate goods expected to expand. Capital and services imports are expected to contract in 2019-20, partly due to a lower exchange rate since PEFO, before returning to growth in 2020-21.

Box 3: Economic impact of extreme weather events

For nearly three years now, large parts of New South Wales, Queensland and South Australia have suffered under extreme drought conditions. Since 2017, the northern half of New South Wales and adjacent southern Queensland have experienced their lowest rainfall on record.

This is having devastating effects on the communities in these regions — not only farmers, but also the many businesses and people that rely on the agricultural sector for their living. The social and economic effects of drought are being compounded by bushfires in many of these same communities. Ongoing drought conditions have resulted in a downgrade to farm GDP forecasts in 2019-20. Based on the latest information from the Australian Bureau of Agricultural and Resource Economics and Sciences, farm GDP and rural exports are forecast to decline in 2019-20 by 3 and 8½ per cent respectively. The fall in farm GDP is expected to detract around 0.1 percentage points from real GDP growth in 2019-20, following a detraction of 0.2 percentage points in 2018-19.

The extremely dry conditions are affecting both crop and livestock production. Crop production is affected by low soil moisture and dam storage levels, with falls in both the area of crops planted and average yields. Flock and herd numbers have declined owing to high slaughter rates, which will impact the future productive capacity of the industry. In 2018-19, farm GDP was 14 per cent lower than it was in 2016-17 when Australia produced a bumper grain crop. Farm GDP is expected to fall further in 2019-20, to the lowest level seen since 2007-08 in the Millennium drought.

There has been some offsetting effects on farm incomes from higher prices for key rural commodities in global markets, owing to lower supply and a lower Australian dollar. Meat export prices are high due to the effects of African swine fever and growing demand from developing economies. Grain prices have been high but are expected to fall in 2019-20 as global supply increases.

Overall, the drought has had a negative effect on the income of Australian farmers with farm unincorporated business income around 15 per cent lower than it was a year ago. As unincorporated businesses form part of the household sector, this has dragged on household gross disposable income growth.

Ongoing drought conditions and related supply disruptions have also put upward pressure on some domestic food prices.

Box 3: Economic impact of extreme weather events (continued)

Following the usual practice, the forecasts assume a return to average seasonal conditions in 2020-21. Herd and livestock production will take longer to recover than grain production, as herds first need to be rebuilt which can take a number of years.

It is too early to tell what effect severe fire conditions around Australia have had on aggregate farming land and production. However, regional fires in New South Wales have resulted in some rerouting of livestock feed as well as possible delays to harvesting, which may lower farm production. Fires in central Queensland have reportedly affected horticultural crops.

More broadly, the fires have caused widespread damage to public infrastructure and private property in affected regions. It is causing disruptions to business, including tourism, where the full cost is not likely to be known for some time.

Labour market conditions have remained strong over the past year, with employment increasing in most states and territories and in 10 out of 19 industries. Employment growth was 2.0 per cent through the year to October, which is faster than the growth in population and above the OECD average. Consistent with improved opportunities in the labour market, as well as continued increases in participation by women and older Australians, the headline participation rate has increased to record highs over the past year.

While employment growth will be underpinned by a strengthening economic outlook, leading employment indicators suggest that employment growth is likely to moderate going forward. **Employment** growth is expected to be 1¾ per cent through the year to the June quarter 2020 and the June quarter 2021. The **labour force participation rate** is forecast to remain near historically high levels, while the **unemployment rate** is expected to be 5¼ per cent across the forecast period.

Wage growth is expected to pick up to 2½ per cent during the forecast period. Downgrades to the wage growth forecasts since PEFO are consistent with the updated economic growth forecasts. In addition, the response of wages to improving labour market conditions has been slower and more muted than in past cycles, consistent with the experience in other advanced economies. This is partly explained by lower inflation expectations, while strong employment growth has also drawn people into the labour market who were not previously looking for work, suggesting there may be more spare capacity than previously thought. A number of information sources — including data for newly negotiated Enterprise Bargaining Agreements and Treasury's business liaison discussions — suggest that a strengthening in wage growth will be more gradual than previously expected. Wage growth outcomes to date have continued to outstrip inflation.

Consumer price inflation has been broadly in line with expectations at PEFO and was 1.7 per cent through the year to the September quarter 2019. Measures of underlying inflation have fallen to historical lows, with trimmed mean inflation at 1.6 per cent

through the year to the September quarter 2019. A marked fall in housing inflation, declines in some administered prices and low growth in labour costs are all contributing to continued weakness in inflation outcomes. Prices for new dwelling purchases by owner-occupiers — the largest component of the CPI basket — have declined over recent quarters in line with the moderation in housing construction. Additionally, growth in rents has continued to be weak and electricity prices have fallen over the past year, owing to a number of policy changes. Working in the other direction, a combination of the lower Australian dollar and ongoing drought conditions have put some upward pressure on retail prices, particularly for clothing and footwear, meat, dairy, bread and cereal products. Subdued inflationary pressure overall and lower forecasts for wage growth have resulted in downgrades to forecasts for consumer price inflation over the forecast period since PEFO.

The forecasts for the terms of trade and nominal GDP are sensitive to assumptions about **commodity prices**. The assumptions regarding commodity prices are supported by market and industry consultation undertaken by Treasury.

Iron ore spot prices increased sharply in the first half of 2019, mainly due to supply issues in Australia and Brazil, and stronger-than-expected demand from China. Iron ore prices peaked in early July at almost US$120 per tonne free-on-board (FOB). Prices have since fallen, but remain above the price assumed at PEFO. The decline in the price has mainly been due to uncertainty about demand from Chinese steel mills and the recovery in supply. As such, prudent assumptions have been retained and the iron ore spot price is assumed to decline to reach US$55 per tonne FOB by the end of the June quarter 2020. This is one quarter later than was assumed at PEFO.

Coal prices have fallen since PEFO. Metallurgical coal prices have fallen faster and further than had been assumed at PEFO, with the spot price below US$150 per tonne FOB since October 2019. The fall in the spot price is due in large part to uncertainty about demand from Chinese steel mills and policy changes in China. The metallurgical coal price is assumed to remain around recent levels of US$134 per tonne FOB over the forecast period. This is lower than the PEFO assumption, which was for the price to fall to US$150 per tonne FOB by the end of the March quarter 2020.

After reaching a peak of just over US$125 per tonne FOB in mid-2018, thermal coal prices have trended lower, mainly due to increases in seaborne supply and softer global demand. The thermal coal price is assumed to remain around recent levels of US$64 per tonne FOB over the forecast period, below the PEFO assumption of US$91 per tonne FOB.

Commodity prices are volatile and the outlook for commodity prices remains a key uncertainty in the outlook for nominal GDP (Box 4).

Box 4: Sensitivity analysis — iron ore price

If the iron ore price were to fall immediately to US$55 per tonne FOB, two quarters earlier than assumed, nominal GDP could be around $7.5 billion lower than forecast in 2019-20 and $0.3 billion lower in 2020-21. This would have a negative flow-on impact to company tax receipts estimated at around $0.8 billion in 2019-20 and $1.1 billion in 2020-21 (Table A).

By contrast, if the iron ore price remained elevated for two quarters longer than currently assumed, before falling immediately to US$55 per tonne FOB, nominal GDP could be around $6.4 billion higher than forecast in 2019-20 and $1.0 billion higher in 2020-21. This would have a flow-on impact to company tax receipts estimated at around $0.5 billion in 2019-20 and $1.3 billion in 2020-21.

The actual impact on company tax receipts may vary due to timing of tax collections and the availability of tax losses.

Table A: Sensitivity analysis of an earlier and later fall in the iron ore spot price

	Earlier fall to US$55/tonne FOB[a]		Later fall to US$55/tonne FOB	
	2019-20	2020-21	2019-20	2020-21
Nominal GDP ($billion)	-7.5	-0.3	6.4	1.0
Tax receipts ($billion)	-0.8	-1.1	0.5	1.3

(a) FOB is the free-on-board price which excludes freight costs.
Source: Treasury.

The **terms of trade** are forecast to fall by 4 per cent in 2019-20 and a further 8¾ per cent in 2020-21. Stronger-than-assumed commodity prices in the period since PEFO contribute to the smaller fall in the terms of trade in 2019-20, while the larger fall in the terms of trade in 2020-21 largely reflects the assumed decline in iron ore prices.

Nominal GDP is forecast to grow by 3¼ per cent in 2019-20 and 2¼ per cent in 2020-21. The growth forecast for 2020-21 is lower than the forecast in PEFO, reflecting the downgrade to the forecasts for the terms of trade.

There are inherent uncertainties around the domestic outlook, including for household consumption, business investment and dwelling investment.

The forecasts assume that some of the recent weakness in consumption reflects timing factors, and that the household saving ratio will fall as households increase their consumption in response to higher after-tax income. If households maintain their recent preference to save rather than spend their disposable income, this would affect consumer spending.

There is also a risk that wage growth and inflation could remain subdued, and employment growth could slow more sharply than forecast. Dwelling investment could also be weaker than expected. And uncertainty around the global outlook could continue to hamper business confidence and investment plans.

Upside risks include a more rapid recovery in the housing market which could support stronger consumer spending, while a rebound in business conditions and confidence could contribute to a stronger-than-expected recovery in non-mining business investment.

The duration, severity and expected recovery from the drought is a key uncertainty for the forecasts. If drought conditions were to deteriorate further, growth outcomes could be weaker than forecast. Equally, a faster-than-expected return to average seasonal conditions could lead to stronger economic outcomes.

Commodity prices are an important source of uncertainty for the nominal GDP forecasts. **Part 5** presents information on the estimated effect on the economy of a movement in commodity prices.

Medium-term projections

The fiscal aggregates are based on detailed economic forecasts for the Budget year and the subsequent financial year. Economic projections then underpin the fiscal aggregates for the following two financial years. These projections are more stylised and, as outlined in the 2014-15 Budget, assume that any spare capacity in the economy is absorbed over the five years following the forecast period.

The growth rate of potential GDP is estimated to be 2¾ per cent over the next few years. As spare capacity is absorbed, labour productivity and labour market variables — including employment and the participation rate — are assumed to converge to their potential levels. To absorb the spare capacity in the economy, real GDP from 2021-22 is then projected to grow faster than potential at 3 per cent. By the end of 2025-26, spare capacity is absorbed and real GDP is projected to grow at its potential rate thereafter.

Potential GDP is estimated based on an analysis of underlying trends for population, productivity and participation. In the long run, estimates of participation are affected by demographic factors, including the ageing population, while labour productivity is assumed to grow at its 30-year average rate. The unemployment rate is projected to be 5 per cent consistent with estimates of the non-accelerating inflation rate of unemployment (NAIRU). Inflation is projected to be 2½ per cent, consistent with the mid-point of the RBA's medium-term target band. The terms of trade are projected to remain flat at around levels recorded in 2005-06 from 2022-23.

The medium-term economic and fiscal projections are sensitive to the assumptions that underpin Treasury's estimate of potential GDP and the pace at which the economy is assumed to return to potential. Analysis in the 2019-20 Budget presented the sensitivity of Budget projections to alternate pathways for potential growth. This information is reported in Budget Paper No. 1 Statement 7: *Forecasting Performance and Scenario Analysis*.