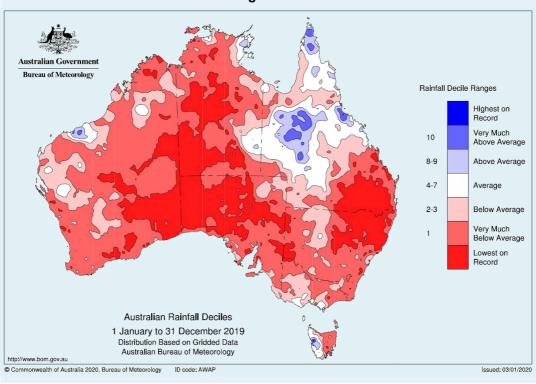
Box B

Macroeconomic Effects of the Drought and Bushfires

Most of Australia is currently being affected by a severe drought. Drought conditions began in the eastern states in early 2017 before becoming more widespread across the country. Many areas of the country have experienced high temperatures and rainfall that is well below average; 2019 was the warmest and driest year on record for Australia (Figure B.1). These conditions have contributed to one of the worst bushfire seasons on record.

Economic activity has been adversely affected by these conditions for two years or more. Farm GDP has declined by 22 per cent since early 2017, and is expected to decline by a further 7 per cent over the remainder of 2019/20. This would take the decline in farm GDP since early 2017 to around 30 per cent – comparable to the decline observed during the 2002/03 and 2005/06 episodes of the Millennium Drought. The direct effects of the recent bushfires are expected to reduce GDP growth across the December 2019 and March 2020 quarters by around

Figure B.1



0.2 percentage points, with some recovery in the June quarter and beyond. However, there is uncertainty around this estimate.

Effects of the drought on the farm sector

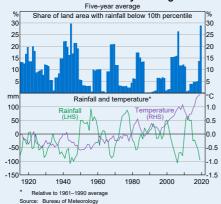
Some of Australia's most important agricultural regions have been hardest hit by the drought. The Murray–Darling Basin, which includes parts of New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory, accounts for around one-third of the total value of Australia's agricultural production. This region has experienced drought conditions since early 2017, with low levels of soil moisture and severely limited water resources (Graph B.1). This has contributed to lower rural exports in recent years and reduced the domestic supply of some food items, which has placed upward pressure on food prices.

The impact of the drought on the Murray–Darling Basin and other parts of Australia has contributed to a decline in farm production and rural exports, particularly for cereal grains. Farm production declined by around 12 per cent from 2016/17 to 2018/19.

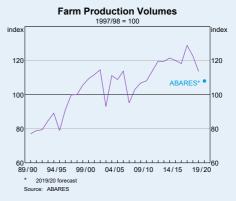
The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) expects a further decline in farm production of almost 5 per cent in 2019/20 because of the drought (Graph B.2). Production of cereal grains, such as wheat and barley, has fallen, and some crops have been used to feed livestock in response to high prices of traditional sources of feed. This has contributed to a decline in rural exports of around 18 per cent since early 2017. Imports of some grains have occurred for the first time since 2007.

Meat exports, in contrast, have increased significantly because of increased supply related to the drought and strong global demand. Australian producers have increased slaughter rates in response to poor grazing conditions and high feed costs. At the same time, the outbreak of African swine fever in Asia has increased demand for Australian meat products because elevated pork prices have encouraged Asian consumers to substitute towards alternative protein sources (Graph B.3). Over the past year, Australian beef and lamb exports to China have increased by around 70 per cent and 50 per cent, respectively.

Graph B.1
Conditions in the Murray-Darling Basin



Graph B.2



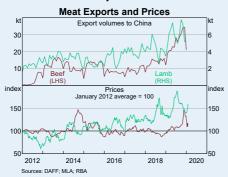
Lower rural production overall and higher input costs, particularly for water and livestock feed, have placed significant pressure on farm profits, which have declined by around 30 per cent since early 2017. This has had flow-on effects to regional and rural communities; as farmers have scaled back spending, this has reduced the income of businesses that supply goods and services to the farm sector.

Periods of drought also affect supermarket food prices, which make up around 9 per cent of the Consumer Price Index (CPI) basket. Prices for bread and cereal products have increased over the past year in response to higher grain prices (Graph B.4). Milk prices have also increased; several major supermarkets have introduced 'drought levies' of 10 cents per litre. Beef and lamb prices have increased because of the drought and strong international demand. Information from the Bank's liaison program suggests that the drought is likely to result in these consumer food prices remaining elevated for some time.

Effects of the bushfires

In recent months, bushfires have devastated many regional communities. In addition to loss of life, homes and business assets have

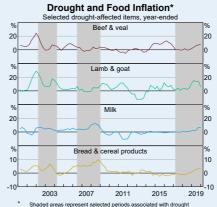
Graph B.3



been destroyed, livestock and native animals have perished, and forestry and natural assets have burned. In some cases, assets might not be replaced because of insufficient insurance coverage. Significant local infrastructure has also been destroyed, including roads, energy, telecommunications and community assets. The fires have disrupted tourism and agriculture, which account for an important share of economic activity and employment in many of the affected regions. In particular, bushfire conditions intensified during the summer holiday period, which is an important time of year for regions that rely on tourism. The combined impact has been severe for the affected areas.

In assessing the economic impact of the bushfires for Australia as a whole, the recovery also needs to be taken into account. After a period of disruption, some normal activities can resume, and insurance payouts, government payments and reconstruction activity are likely to have material effects. This might also include some additional investment that improves resilience to bushfires. By the end of 2020, it is likely that the recovery will have broadly offset the

Graph B.4



* Shaded areas represent selected periods associated with drought events; adjusted for the tax changes of 1999–2000 Sources: ABS; RBA decline in GDP due to the immediate impact of the bushfires. There is, however, likely to be a noticeable effect across the December 2019 and March 2020 quarters. In particular, the bushfires are expected to reduce consumer spending and lower rural exports. International media coverage of the fires is also likely to have an adverse effect on international tourism. In addition, domestic tourism expenditure in affected regions is likely to decline, although some of this might be diverted to unaffected areas.

The fires are expected to have an effect on the prices of some goods and services, particularly in the affected regions. Prices for domestic tourism and accommodation are likely to fall in the areas directly affected by the fires. Transport disruptions are likely to result in a temporary increase in some food prices. Bushfire damage to interstate transmission lines led to a sharp, but brief, increase in NSW wholesale electricity prices, although this is likely to have a limited impact on retail prices because most retailers hedge their exposure to wholesale price fluctuations. Overall, the effect of these price impacts on the CPI, which measures capital city prices, is anticipated to be relatively small and temporary. Further out, the likelihood of longer and increasingly extreme fires could also lead to an increase in insurance premiums.

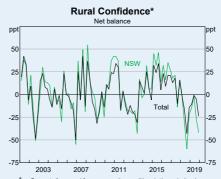
Long-term challenges

The recovery from the drought is likely to be prolonged, even if weather conditions improve in the near term. The low level of soil moisture and stored water means that significant rainfall will be required to enable crop plantings and successful harvests. In addition, herds and flocks – which have declined significantly in size over recent years

 will need to be rebuilt, which would weigh on meat exports. This outlook is partly reflected in the declining share of farmers that expect conditions to improve or be unchanged over the next year, particularly farmers in New South Wales (Graph B.5).

Over the longer term, changes in Australia's climate are likely to present a more challenging environment for many regions that rely on agriculture or are vulnerable to extreme weather. The latest State of the Climate report published by the Bureau of Meteorology and the Commonwealth Scientific and Industrial Research Organisation presented evidence that seasonal variations in rainfall and temperatures are occurring against a backdrop of a trend towards drier average conditions in south-east and south-west Australia. This includes large parts of the Murray-Darling Basin and important agricultural regions in Western Australia. The report also documented a long-term increase in extreme fire conditions and the length of the fire season. ¥

Graph B.5



Per cent of surveyed farmers expecting conditions in the agricultural economy to improve over the next year minus the per cent expecting conditions to worsen

Source: Rabobank