



Royal Commission into Misconduct in the Banking,
Superannuation and Financial Services Industry

Some Features of Finance in the Agriculture, Forestry and Fishing Industry

Background Paper 16

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1. Purpose of the Paper

This paper provides a broad overview of the agriculture, forestry and fishing industry in Australia, including finance for the industry.

The paper shows the following:

- In calendar year 2017, the agriculture, forestry and fishing industry contributed around 2.7% to the economy, as measured by real industry gross value added at basic prices.
- In 2016-17, the value of Australian rural product exports totalled \$51.5 billion, making up around 17.7% of the value of Australia's merchandise trade.
- Agriculture makes up the majority of the industry's total contribution to gross value added, contributing 2.6% to total industry gross value added.
- In calendar year 2017, employment in the agriculture, forestry and fishing industry made up 2.6% of total industry employment, of which around 82.9% was in the agricultural sector.
- In 2016-17, the largest agricultural commodities produced in Australia were cattle and calves, wheat and milk.
- In 2016-17, the three regions with the largest gross value of agriculture production in Australia were Western Australia's wheat belt, Victoria's north-west and Darling Downs-Maranoa in Queensland.
- Key challenges facing the agricultural sector are climate variability, pests and diseases and market volatility.
- As at 30 June 2017, total rural debt was \$71.7 billion, of which around 96% was held by banks. Other types of rural financing include equity finance and government grants and subsidies.
- Submissions to the 2014 Financial System Inquiry did not identify significant structural issues related to rural finance.
- Farm debt mediation and financial counselling are available to the agricultural, forestry and fishing sector through either the Commonwealth or State governments (or both) and/or through voluntary schemes.

2. Introduction

The agriculture, forestry and fishing industry is an important contributor to the Australian economy, in particular to the Australian regional economy. In calendar year 2017, the agriculture, forestry and fishing industry contributed around 2.7% to the economy, as measured by real industry gross value added at basic prices. Out of the 20 sectors that make up industry gross value added at basic prices, the agriculture, forestry and fishing industry was the 16th largest contributor to gross value added.¹

In calendar year 2017, agriculture made up the majority of the agriculture, forestry and fishing industry's total contribution to gross value added, contributing 2.3% to total industry gross value added, while the forestry and fishing sectors contributed 0.4% to total industry gross value added.²

In calendar year 2017, employment in the agriculture, forestry and fishing industry made up 2.6% of total industry employment in Australia.³

In calendar year 2017, within the agriculture, forestry and fishing sector, agriculture comprised 82.9% of employment (around 263,800 persons), aquaculture and fishing, hunting and trapping comprised 4.6% in of employment (around 14,700 persons) and forestry and logging comprised 2.4% of employment (around 7,800 persons). A further 9.9% of employment in the sector related to agriculture, forestry and fishing support services.⁴

In 2016-17, the value of Australia's rural product exports totalled \$51.5 billion, making up around 17.7% of the value of Australia's merchandise trade.⁵

Since the agriculture sector is the main contributor to both industry gross value added and industry employment, this paper will mainly focus on the agricultural sector. This paper will provide a brief background on the forestry and fishing sectors.

¹ Data calculated from Australian Bureau of Statistics, *5206.0 - Australian National Accounts: National Income, Expenditure and Product, Mar 2018* (6 June 2018), <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5206.0Mar%202018?OpenDocument>> (Table 6. Gross Value Added by Industry, Chain volume measures, original data).

² Ibid.

³ Australian Bureau of Statistics, *6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, Feb 2018*, (29 March 2018). <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.003Feb%202018?OpenDocument>> (Table 04. Employed persons by Industry division of main job (ANZSIC), original).

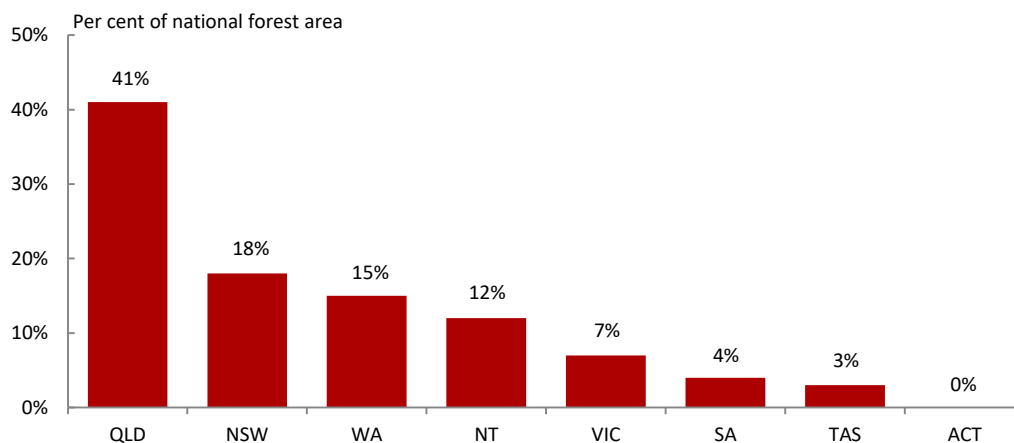
⁴ Ibid.

⁵ ABARES, *Agricultural Commodity Statistics 2017*, (December 2017), 3, <http://data.daff.gov.au/data/warehouse/agcstd9abcc002/agcstd9abcc0022017_lugZg/ACS_2017_v1.1.0.pdf> (Table 1.3 Value of Australian exports, by sector – balance of payments basis).

3. Forestry

Australia's forests cover around 124.7 million hectares, or around 16% of Australia's land mass. Queensland has the largest portion of Australia's forests (41%), followed by New South Wales (18%), Western Australia (15%), and the Northern Territory (12%).⁶

Chart 1: Forest cover by State and Territory, 2015-16



Source: Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)⁷

In 2016-17, the majority of Australia's annual log harvest originated from **commercial plantations** (87%), and the remainder was sourced from **native production forests** (13%).⁸ The logs harvested are processed into a variety of wood-based products for domestic and export markets.⁹ In 2015-16, forest product industries made up around 6.4% of total manufacturing in Australia.¹⁰

⁶ Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), *Australia's forests at a glance 2017*, (2017), 4, <http://data.daff.gov.au/data/warehouse/9aaf/9aafe003/fag17d9abfe20170822/ForestsAtGlance_2017_v1.0.0_lr.pdf>.

⁷ Ibid.

⁸ ABARES, *Australian forest and wood products statistics: September and December Quarters 2017* (May 2018), 2, <http://data.daff.gov.au/data/warehouse/9aaf/afwpsd9abfe/afwpsd9abfe20180524/AFWPSOverview_Sep-Dec_2017_v1.0.0.pdf>.

⁹ Ibid 5, 11.

¹⁰ Above n 5, 117.

3.1 States and Territories

The main source of Australia's **native production forest** wood in 2016-17 was multiple-use public forest in New South Wales, Queensland, Tasmania, Victoria and Western Australia. The Australian Bureau of Agricultural and Resource Economics and Science (ABARES) notes that under 'relevant state and territory legislation, substantial areas of multiple-use public forest are reserved or excluded from wood production'.¹¹

ABARES also notes that in 2016-17, Victoria had 'the largest total area of **commercial plantations** (421,700 hectares), followed by New South Wales (394,400 hectares) and Western Australia (367,900 hectares). Western Australia had the largest proportion of Australia's hardwood plantations (29%) and New South Wales had the largest share of softwood plantations (30%)'.¹²

3.2 Trade

Australia is a net importer of wood products in value terms, tending to import lower volumes of more processed and higher value wood products (such as printing and writing paper and finished wooden articles) and exporting higher volumes of less processed and lower value wood products (such as woodchips and roundwood).¹³

Australia's total merchandise trade in wood products (imports plus exports) was around \$8.7 billion in 2016-17, comprising around \$5.3 billion in imports and around \$3.5 billion in exports. The largest category of wood exports (by value) is woodchip, accounting for \$1.3 billion or around 36% of Australia's wood product exports in 2016-17. The largest category of wood product imports (by value) is paper and paperboard, accounting for \$2.1 billion or around 40% of the total value of Australia's wood product imports in 2016-17.¹⁴

¹¹ Above n 8, 1.

¹² Ibid.

¹³ Ibid 8.

¹⁴ Ibid 7, 8.

4. Fisheries and aquaculture

In 2015-16, the gross value of Australian fishery and aquaculture production was around \$3.0 billion. **Wild-caught products** account for around 57% of production (\$1.75 billion) and **aquaculture products** accounted for around 43% (\$1.31 billion).¹⁵

The **wild-catch sector** comprises state fisheries (generally, fisheries operating within three nautical miles of the state's coast) and Commonwealth fisheries (operating between three and 200 nautical miles of Australia's coastline). Wild-caught products include:

- finfish (including tuna, sardine, coral trout, flathead and shark);
- crustaceans (including prawns and rock lobster);
- molluscs (including abalone, scallops and squid); and
- other wild-caught species.¹⁶

In 2015-16, rock lobster made up 40% of the value of total wild-catch production.¹⁷ In 2015-16 the gross value of wild-caught products was the highest since 2006-07, driven by the increased production value of rock lobster, where higher beach prices¹⁸ increased production value. Rock lobster beach prices have increased by 131% between 2005-06 and 2015-16 in real terms. In 2015-16, rock lobster was the most valuable wild-caught species, with a production value of \$695 million.¹⁹

Aquaculture production in Australia consists of:

- finfish (including salmonids, tuna and barramundi);
- crustaceans (including prawns); and
- molluscs (including edible oysters, pearl oysters and abalone).²⁰

¹⁵ ABARES, *Australian fisheries and aquaculture statistics 2016*, (December 2017), 9, <http://data.daff.gov.au/data/warehouse/9aam/afstad9aamd003/2016/AustFishAquacStats_2016_v1.0.0_lr.pdf>.

¹⁶ Above n 15, 14-16.

¹⁷ Above n 15, 13.

¹⁸ The 'beach price' is the price paid to commercial fishers at the 'landing point' or first point of sale, not taking into account any transportation, processing or handling costs. See generally Queensland Government Department of Primary Industries and Fisheries, *Annual status report 2008: East Coast Beche-de-mer Fishery* (2008), 5, <https://www.daf.qld.gov.au/_data/assets/pdf_file/0007/68875/ASR-ECBeche-De-Mer-2008.pdf>; Government of South Australia Primary Industries and Regions SA, *Management Plan for the South Australian Commercial Abalone Fishery* (September 2012), 67, <http://www.pir.sa.gov.au/_data/assets/pdf_file/0004/12982/Abalone_Fishery_Management_Plan_-_September_2012_.pdf>; Sea Port, *Seafood Glossary*, (2018), <<http://www.cport.net/resources/seafood-glossary/>> (Definition of 'beach price').

¹⁹ Above n 15, 10.

²⁰ Above n 15, 17-19.

Aquaculture’s share of total fishery and aquaculture production value increased from 34% in 2005-06 to 43% in 2015-16, largely as a result of increased Tasmanian salmonid production volumes, which more than doubled between 2005-06 and 2015-16. The increased contribution of aquaculture in Australian seafood supply is consistent with a global trend of meeting increased demand for seafood from aquaculture.²¹

Table 1: Top five wild-catch and aquaculture species by value, 2015-16

Species	Value (\$m)	Volume (tonnes)
Salmonids	717.7	56,319
Rock lobster	694.8	10,102
Prawns	388.0	24,559
Tuna	170.7	14,221
Abalone	160.2	4,151

Source: ABARES²²

4.1 States and Territories

By State and Territory, Tasmania accounted for the largest share of fishery and aquaculture production (30%) followed by Western Australia (20%), South Australia (17%) and Queensland (10%). Commonwealth fisheries accounted for 15% of production.²³ The main fisheries and aquaculture products produced by each State and Territory are listed in the table below.

²¹ Above n 15, 10.

²² Ibid.

²³ Above n 15.

Table 2: Value of fishery and aquaculture production by State and Territory, 2015-16

State/Territory	State/Territory % of total wild-catch production	State/Territory % of total aquaculture production	Main wild-catch products produced by State/Territory	Main aquaculture products produced by State/Territory
NSW	7	5	Prawns, rock lobster, sea mullet	Oysters, prawns
VIC	4	2	Rock lobster, abalone	Abalone, salmonids
QLD	13	9	Prawns, crabs, lobster (mainly bugs), coral trout	Barramundi, prawns
SA	20	19	Rock lobster, prawns, Australian sardine, abalone	Tuna, abalone, oysters
WA	38	7	Rock lobster, prawns	Pearls, fish
TAS	14	56	Rock lobster, abalone	Salmonids, oysters
NT	3	2	Barramundi, crab, goldband snapper, mackerel	<i>Data not available</i>

Note: In addition to State and Territory production, in 2015-16, fishing in Commonwealth fisheries mainly produced prawns (wild-catch), tuna (wild-catch) and sharks (wild-catch). In 2015-16, Commonwealth production comprised around 15% of total Australian fishery and aquaculture production.²⁴

Source: ABARES²⁵

4.2 Trade

Australia produces less than 0.16% of global fishery and aquaculture supply. However the industry also exports a range of high unit value products such as rock lobster, tuna and abalone. China, Hong Kong, Vietnam and Japan are the main export destinations for Australian fisheries products. Australia's imports largely consist of lower unit value products such as frozen and canned fish and frozen prawns.²⁶

²⁴ Above n 15, 9, 41.

²⁵ Above n 15, Table S1 Gross value of fisheries and aquaculture production, Australia.

²⁶ Above n 15, 2.

Australia became a net importer of fishery and aquaculture products (by value) in 2007-08. Total value of fishery and aquaculture product exports were around \$1.5 billion in 2015-16, including \$123 million in non-edible exports (mainly pearls). Crustacean and mollusc product exports (predominantly rock lobster) were the largest contributor to Australia's total fishery and aquaculture export earnings, accounting for 69% of earnings in 2015-16.²⁷

Increases in total export earnings since 2012-13 are largely attributable to a significant rise in the value of rock lobster exports in 2013-14 and 2014-15 and salmonid exports in 2015-16.²⁸

Table 3: Top five edible and non-edible exports by value, 2015-16

Species	Value (\$m)	Volume (tonnes)
Rock lobster	693.2	7,987
Abalone	182.0	2,615
Tuna	163.3	13,752
Prawns	114.4	6,689
Pearls	96.0	N/A

Source: ABARES²⁹

The total value of fishery and aquaculture product imports into Australia was \$2.1 billion in 2015-16, with around half (approximately \$1.1 billion) being edible fish imports (mainly tuna and salmonids).³⁰

²⁷ Above n 15, 45-47.

²⁸ Above n 15, 45.

²⁹ Ibid.

³⁰ Above n 15, 55-56.

5. Agriculture

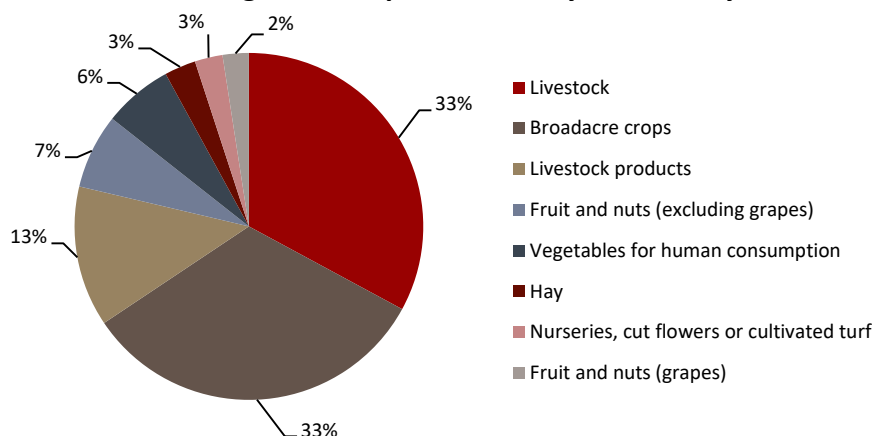
Agriculture makes up the majority of the agriculture, forestry and fishing industry's total contribution to gross value added. Agriculture alone contributed 2.3% to total industry gross value added in calendar year 2017.³¹

In 2016-17, the largest agricultural commodities produced in Australia (by gross value, as a per cent of Australia's total agriculture production) were:

- **livestock**, such as cattle, sheep, poultry and pigs (around 33%);
- **broadacre³² crops**, such as wheat, barley, canola and sugar cane (around 33%);
- **livestock products**, such as milk, wool and eggs (around 13%).³³

Australia also produces **fruit and nuts** (including grapes for wine production), **vegetables**, **hay** and **nurseries, cut flowers and cultivated turf**.³⁴

Chart 2: Australia's agricultural production, by commodity, 2016-17



Source: ABS³⁵

³¹ Data calculated from Australian Bureau of Statistics, *5206.0 - Australian National Accounts: National Income, Expenditure and Product, Mar 2018* (6 June 2018), <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5206.0Mar%202018?OpenDocument>> (Table 6. Gross Value Added by Industry, Chain volume measures, original data).

³² The Organisation for Economic Cooperation and Development (OECD) defines 'broadacre' as 'a term used, mainly in Australia, to describe farms or industries engaged in the production of grains, oilseeds and other crops (especially wheat, barley, peas, sorghum, maize, hemp, safflower, and sunflower), or the grazing of livestock for meat or wool, on a large scale (i.e. using extensive parcels of land)'. See OECD, *Agricultural Policies in OECD Countries: Monitoring and Evaluation 2000: Glossary of Agricultural Policy Terms*, (2 November 2001), <<https://stats.oecd.org/glossary/detail.asp?ID=235>>.

³³ Australian Bureau of Statistics, *7503.0 - Value of Agricultural Commodities Produced, Australia, 2016-17* (21 May 2018), <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7503.02016-17?OpenDocument>> (Data cube: All commodities by Australia, state/territory and SA4 regions).

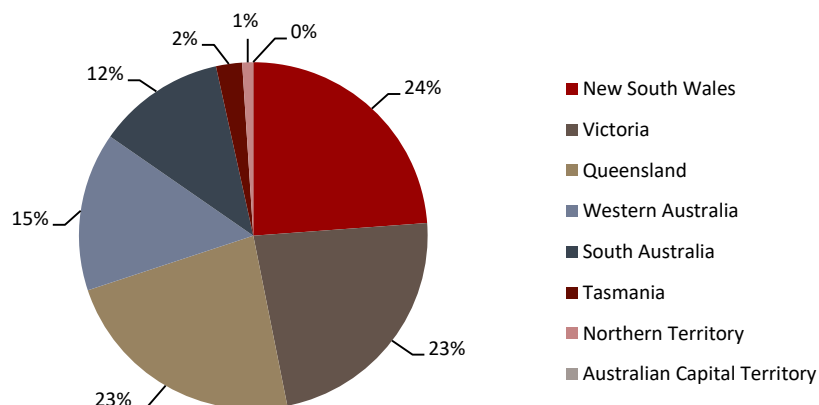
³⁴ Ibid.

³⁵ Figures calculated from above n 33.

5.1 States and Territories

In 2016-17, around 85% of Australia's agricultural production took place in New South Wales (24%), Victoria (23%), Queensland (23%) and Western Australia (15%).

Chart 3: Australia's agricultural production, by State and Territory, 2016-17



Source: ABS³⁶

The table below lists the three largest agricultural commodities produced in each State and Territory (by gross value) in 2016-17.

Table 4: Agricultural production by State and Territory, 2016-17

State	Gross value of agricultural production	Share of agricultural production	Three largest agricultural commodities produced
NSW	\$14.5 billion	24%	Cattle and calves, wheat, wool
VIC	\$14.0 billion	23%	Milk, cattle and calves, sheep and lambs
QLD	\$14.0 billion	23%	Cattle and calves, sugarcane, poultry
WA	\$9.0 billion	15%	Wheat, canola, barley
SA	\$7.2 billion	12%	Wheat, cattle and calves, sheep and lambs
TAS	\$1.5 billion	2%	Milk, cattle and calves, potatoes
NT	\$610 million	1%	Cattle and calves, mangoes, melons
ACT	\$11 million	0%	Cattle and calves, wool, sheep and lambs
AUS	\$60.8 billion	100%	Cattle and calves, wheat, milk

Source: ABS³⁷

³⁶ Figures calculated from above n 33.

³⁷ Figures calculated from above n 33.

5.2 Trade

According to statistics published by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), in 2016-17, the value of Australian agricultural exports was around \$48.7 billion, of which around \$27.7 billion (57%) were crops and around \$21.0 billion (43%) were livestock exports. In 2016-17, exports of beef and veal were the largest agricultural commodity exported by value, making up around 14.6% of total farm exports, followed by wheat, which made up around 12.5% of farm exports in 2016-17.³⁸

Table 5: Top five agricultural exports by value, 2016-17

Product	Value (\$m)	% of total agricultural exports
Beef and veal	7,115	14.6%
Wheat	6,094	12.5%
Greasy wool	3,014	6.2%
Barley	2,427	5.0%
Wine	2,366	4.9%

Source: ABARES³⁹

In 2016-17, the value of Australian agricultural imports was around \$17.1 billion, with the top five agricultural imports by value being fruit, vegetables, coffee and spices, wine and cheese.⁴⁰

5.3 Regional shares of agricultural production

The Australian Bureau of Statistics divides Australian geographical areas into Statistical Areas according to the Australian Statistical Geography Standard (ASGS) for the purposes of data collection.⁴¹ This paper uses Statistical Areas Level 4 (SA4) regions to identify the key centres of agricultural activity in Australia. These regions are used by ABARES to present an overview of the agriculture, fisheries and forestry sectors in each region.⁴²

The ten regions listed in the table below generated the largest share of Australian agricultural production (by value) in 2016-17. The table also shows the three largest agricultural commodities produced (by value) in each of these regions.

³⁸ ABARES, *Agricultural Commodity Statistics 2017*, (December 2017), 26, <http://data.daff.gov.au/data/warehouse/agcstd9abcc002/agcstd9abcc0022017_lugZg/ACS_2017_v1.1.0.pdf> (Table 3.12 Value of Australian agricultural exports (fob)).

³⁹ Ibid.

⁴⁰ Above n 38, Table 3.14 Value of Australian agricultural imports.

⁴¹ See Australian Bureau of Statistics, *1270.0.55.001 – Australian Statistical Geography Standard (ASGS): Volume 1 – Main Structure and Greater Capital City Statistical Areas, July 2016*, (12 July 2016), <[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1270.0.55.001~July%202016~Main%20Features~Statistical%20Area%20Level%204%20\(SA4\)~10016](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1270.0.55.001~July%202016~Main%20Features~Statistical%20Area%20Level%204%20(SA4)~10016)>.

⁴² See regions used by ABARES, *About my region*, (21 August 2017), <<http://www.agriculture.gov.au/abares/research-topics/aboutmyregion>> and compare to SA4 regions used in above n 33.

Table 6: Regions with the largest share of agricultural production, 2016-17

State	Region	Gross value (\$b)	% of total agricultural production	Three largest agricultural commodities produced
WA	Wheat belt	\$5.0	8.3%	Wheat, canola, wool
VIC	North West	\$4.1	6.8%	Wheat, barley, sheep and lambs
QLD	Darling Downs–Maranoa	\$3.8	6.2%	Cattle and calves, cotton, wheat
SA	South East	\$3.4	5.5%	Cattle and calves, wine grapes, sheep and lambs
NSW	New England and North West	\$3.0	5.0%	Cattle and calves, cotton, wheat
NSW	Riverina	\$2.5	4.1%	Wheat, cattle and calves, canola
VIC	Warrnambool and South West	\$2.4	4.0%	Milk, cattle and calves, sheep and lambs
WA	Outback (South)	\$2.3	3.8%	Wheat, canola, barley
QLD	Outback	\$2.2	3.6%	Cattle and calves, mangoes, wool
SA	Barossa–Yorke–Mid North	\$2.2	3.6%	Wheat, barley, hay

Source: ABS⁴³

⁴³ Figures calculated from above n 33.

6. Challenges facing the agriculture, forestry and fishing industry

The 2014 Financial System Inquiry (FSI) Interim Report identified principal challenges for the agricultural sector, noting that agricultural incomes:

‘are volatile and uncertain ... rural businesses are exposed to large and sometimes prolonged weather events, and weather and pest conditions have a marked effect on the quantity and quality of agricultural products. Prices for agricultural products can be volatile, typically reflecting conditions in international markets, and yields can vary from season to season’.⁴⁴

The FSI Interim Report noted that ‘farmers are most likely to experience difficulty meeting debt repayment obligations during periods of low revenue, such as during a drought or a period of low commodity prices’.⁴⁵ The financial impacts of climate volatility and commodity price fluctuations are discussed in the following sections, as well as the impact of pests and diseases.

6.1 Climate variability

The Australian Government Department of the Environment and Energy notes that primary industries, such as agriculture, forestry and fisheries ‘are highly sensitive to weather extremes and variations in climate’.⁴⁶ ABARES notes that ‘Australia’s climate is highly variable, with lower mean rainfall and higher rainfall variability than in most other nations’ and that as a result ‘agriculture in Australia is subject to more revenue volatility than in almost any other country in the world’.⁴⁷ ABARES also notes that variability in agricultural production ‘largely reflects changing seasonal conditions that are difficult to predict accurately beyond the current season’, which can have ‘significant implications for crop yields and livestock production cycles’.⁴⁸

⁴⁴ Financial System Inquiry, *Interim Report* (July 2014), 2-66, <<http://fsi.gov.au/publications/interim-report/03-funding/small-med-enterprises/>>.

⁴⁵ Ibid.

⁴⁶ Australian Government Department of the Environment and Energy, *Climate change impacts in Australia: Agriculture, forestry and fisheries*, <<http://www.environment.gov.au/climate-change/climate-science-data/climate-science/impacts>>.

⁴⁷ ABARES, *Farm performance and climate: Climate-adjusted productivity for broadacre cropping farms*, Research Report 17.4 (May 2017), 5, <http://data.daff.gov.au/data/warehouse/9aas/2017/FarmPerformanceClimate/FarmPerformanceClimate_v1.0.0.pdf>.

⁴⁸ ABARES, *Agricultural Commodities* (March quarter 2018), 28, <http://data.daff.gov.au/data/warehouse/agcomd9abcc004/agcomd9abcc20180306_6R2bY/AgCommodities201803_v1.0.0.pdf>.

The unpredictability of variable weather events can have flow-on effects to rural finance. As an illustrative example, in Queensland, very dry years in addition to a number of natural disasters, including cyclones and extreme floods, had a significant impact on the rural sector. The Final Report of the Queensland Rural Debt and Drought Taskforce in April 2016 noted that by 2015 ‘drought had impacted upon 85% of the State’ and that farmers ‘were exposed to further financial stress to manage their enterprises through adverse seasonal conditions’.⁴⁹

More generally, ABARES notes that ‘the ability of cropping farms to continue adapting to climate change will be crucial to the success of the industry’.⁵⁰ Types of adaptation, with varying complexity, cost and risk, include:

- incremental, such as adjusting practices and technologies;
- transitional, such as changing production systems; and
- transformative, such as relocating production.⁵¹

Examples of adaptation to climate variability include improving water efficiency, changing land management and production techniques, changing crops and varieties to better suit conditions, enterprise diversification, establishing shelter belts to increase shade for livestock and considering different sowing times.⁵²

ABARES notes that anecdotal evidence suggests the agriculture sector has adapted to climate change by implementing measures such as focusing on technologies and management practices that improve productivity during dry years, making a variety of management practice changes to better exploit summer soil moisture and shifting the location of cropping activity over time.⁵³

⁴⁹ Rural Debt and Drought Taskforce, *Addressing debt and drought problems in rural Queensland* (April 2016), viii, <<https://publications.qld.gov.au/dataset/d7a728ed-a5b0-4f19-8d59-67e4c0125142/resource/fea23ad0-e069-4484-91ce-d1d762decc48/download/addressing-debt-and-drought-problems-in-rural-queensland.pdf>>.

⁵⁰ Above n 47, 1.

⁵¹ Western Australian Government Department of Agriculture and Food, *Climate change: impacts and adaptation for agriculture in Western Australia*, Bulletin 4870 (April 2016), ix, <<https://www.agric.wa.gov.au/sites/gateway/files/Climate%20change%20-%20impacts%20and%20adaptation%20for%20agriculture%20in%20WA%20-%20Bulletin%204870%20%28PDF%204.9MB%29.pdf>>.

⁵² See e.g. Limestone Coast, *Regional Climate Change Adaptation Plan*, (April 2016), prepared by URPS as part of the consultancy led by URPS for the Limestone Coast Regional Climate Change Adaptation Plan Project, 30, <https://www.environment.sa.gov.au/files/sharedassets/south_east/corporate/160904_regional_adaptation_plan.pdf>; Queensland Department of Environment and Heritage Protection, *Climate change in the Central West Queensland region* (Draft), 4, <<https://www.qld.gov.au/environment/assets/documents/climate/central-west-qlc-climate-change-impact-summary.pdf>>.

⁵³ Above n 47, 3-4.

6.2 Pests and diseases

The Australian Government Department of Agriculture and Water Resources notes that animal pests and diseases 'are a major threat to Australia's livestock and poultry industries' and that an outbreak 'could impact on [Australia's] access to export markets and undermine livelihoods'.⁵⁴ Agriculture Victoria similarly notes that pests, diseases and weeds 'are a constant risk for primary producers, as they can have a serious impact on agricultural production and market access'.⁵⁵

Outbreaks of pests and diseases can result in losses of entire crops or yields, which can cause significant financial difficulties for farmers. A recent example was the 2016 outbreak of White Spot Disease in the Logan River region of south-east Queensland. In October 2017, the Senate Standing Committee on Rural and Regional Affairs and Transport noted that White Spot disease, harmless to humans, is a 'highly virulent disease that can spread quickly, causing 100 per cent mortality in farmed prawns within two to seven days of infection'.⁵⁶ The Committee noted that the 2016 outbreak 'resulted in seven prawn farms along the Logan River losing all their stock ... due to quarantine measures such as chlorination. These farms must remain fallow until the second half of 2018'.⁵⁷

6.3 Market variability

A significant portion of Australia's agricultural commodities are exported. As a result, global commodity prices and global demand for commodities, as well as the exchange rate, can have a significant impact on the agriculture, forestry and fishing sector. Mr Philip Lowe, Governor of the Reserve Bank of Australia, has noted that farmers 'live with uncertainty about the world prices for their outputs'.⁵⁸ The sector is affected by fluctuations in global markets, which may coincide with other domestic factors, such as drought or disease outbreaks.

⁵⁴ ABARES, *Animal pests and diseases* (22 August 2017), <<http://www.agriculture.gov.au/pests-diseases-weeds/animal>>.

⁵⁵ Agriculture Victoria, *Pests, diseases and weeds* (8 June 2017), <<http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds>>.

⁵⁶ Senate Standing Committee on Rural and Regional Affairs and Transport, *Final Report: Biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia*, (31 October 2017), 5, <https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Seafoodimportation/Final_Report>.

⁵⁷ Ibid 6.

⁵⁸ Philip Lowe, then Assistant Governor (Economic), Reserve Bank of Australia, *World Prices and the Australian Farm Sector*, Speech to Australian Farm Institution Agriculture Roundtable Conference 2001, Melbourne (10 November 2011), <<https://www.rba.gov.au/speeches/2011/sp-ag-101111.html>>.

In general, demand for agricultural commodities ‘is underpinned by rising food consumption per capita as incomes rise, particularly in Asia’, which has a positive effect on agricultural demand and on agricultural incomes in Australia. Further, ‘as average incomes increase over time, there is a tendency to consume more protein, especially meat ... this switch in diets is likely to generate strong underlying demand for a wide range of agricultural commodities’, including grain used for feed.⁵⁹

However, ‘the same forces’ that drive up global prices for agricultural commodities ‘also put upward pressure on the prices of many inputs used by the farming sector ... fuel, fertiliser and seed. For some parts of the industry, these increases in costs have been a significant constraint on profitability’.⁶⁰ Further ‘the producers of commodities whose global prices have not risen have found ... exchange rate appreciation and higher input costs have had a significant effect on their competitive position in global markets’.⁶¹ This uncertainty over the global price of inputs and outputs can result in financial uncertainty for the agricultural sector.

6.4 Other challenges

Other challenges that affect the agricultural sector include increasing competition from overseas suppliers (putting downward pressure on prices), new production technologies and consumer attitudes to their application, advances in the digital economy, increasing globalisation of supply chains, competition for prime agricultural land,⁶² as well as competition for labour with other sectors of the domestic economy.⁶³

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Australian Government, *Agricultural Competitiveness Issues Paper*, (February 2014), 2, 19, <http://agwhitepaper.agriculture.gov.au/SiteCollectionDocuments/issues_paper.pdf>.

⁶³ Ibid 18.

7. Types of agricultural finance in Australia

There are three main types of funding in the agricultural sector – debt finance, equity finance and government grants. These three sources of finance are discussed below.

7.1 Debt finance

As at 30 June 2017, total rural debt in Australia was \$71.7 billion.⁶⁴ This was equivalent to around 2.3% of net loans and advances held as assets by Authorised Deposit-Taking Institutions (ADIs), excluding other ADIs.⁶⁵ Around 96% of rural debt was held by banks. The share of rural debt held by banks has increased from around 89% in 2007. Over a longer time period, rural debt funding by banks has increased from around half of total rural debt in 1965.⁶⁶

Deloitte, in an edition of its Agribusiness Bulletin, noted that ‘the rise of the banks in the provision of rural debt has been well documented, and particularly the period leading up to the global financial crisis when total rural debt doubled between 2002 and 2007.’⁶⁷

Historically, pastoral and other finance companies, governments and life insurance companies have been a source of rural debt funding. These other sources of funding have played a much smaller role in rural debt financing over recent years, with life insurance companies no longer a source of debt financing.

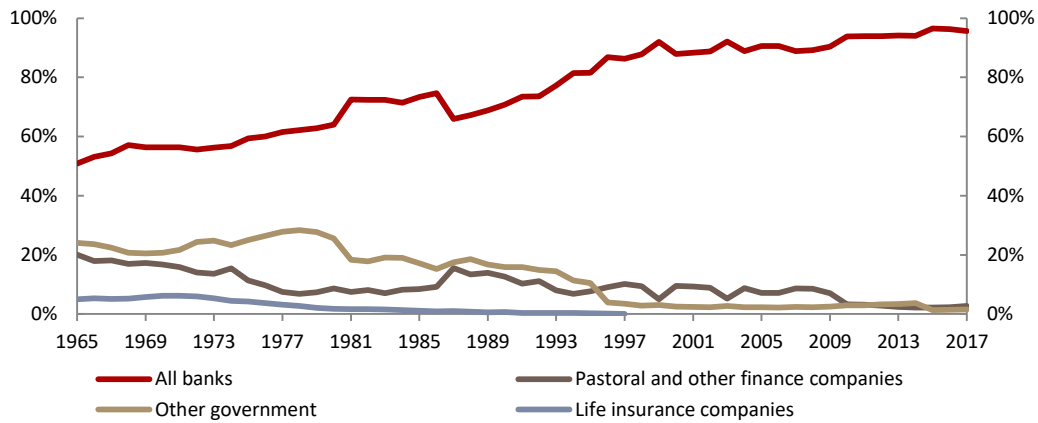
⁶⁴ Reserve Bank of Australia, *Statistical Tables*, <<http://www.rba.gov.au/statistics/tables/>> (Rural Debt by Lender – D9 <<http://www.rba.gov.au/statistics/tables/xls/d09hist.xls?v=2018-06-01-14-46-37>>).

⁶⁵ Data calculated from Reserve Bank of Australia, *Statistical Tables*, <<http://www.rba.gov.au/statistics/tables/>> (Rural Debt by Lender – D9 <<http://www.rba.gov.au/statistics/tables/xls/d09hist.xls?v=2018-06-01-14-46-37>>) as a percentage of Australian Prudential Regulation Authority (APRA), *Statistics: Quarterly ADI Performance, December 2017* (13 March 2018), <<https://www.apra.gov.au/sites/default/files/QADIP-Dec17-Excel-%2520FINAL.xlsx>>, (Table 1b. ADIs’ financial position (excludes ‘other ADIs’), net loans and advances, June 2017).

⁶⁶ Above n 64.

⁶⁷ Jackie White, Deloitte, ‘The (almost) \$70 billion investment in Australian Agribusiness’, *Agribusiness Bulletin*, <<https://www2.deloitte.com/au/en/pages/consumer-industrial-products/articles/agribusiness-rural-debt-funding.html>>.

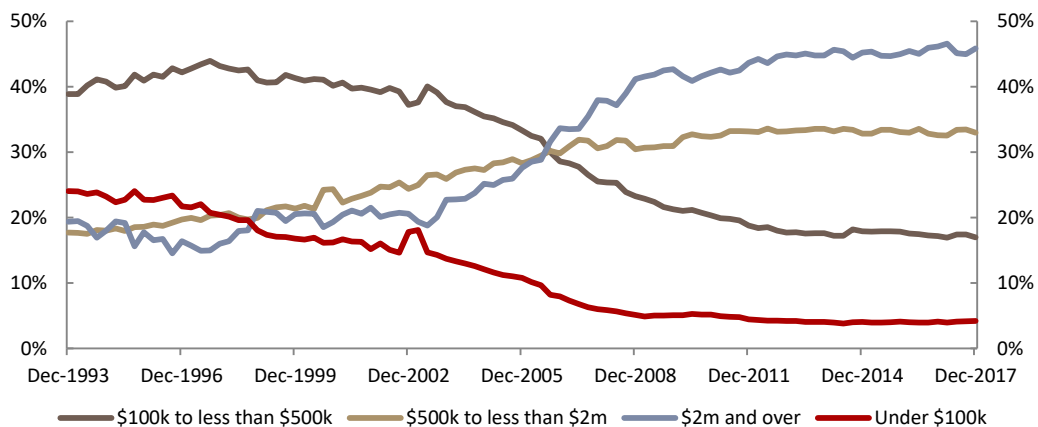
Chart 4: Shares of rural debt by lender, 1965-2017



Source: RBA⁶⁸

In the agriculture, forestry and fishing sector, there has been an increase in the share of bank-sourced debt outstanding for those businesses with larger credit facilities. In particular, debt held by businesses with a credit facility of \$2 million or over has increased from holding around 21% of debt in the sector in the December quarter 2002 to holding around 46% of debt in the sector in the December quarter 2017.

Chart 5: Shares of bank debt by size of credit facility: agriculture, forestry and fishing sector, 1993-2017



Source: RBA⁶⁹

Deloitte notes that ‘rural debt is not spread evenly across sectors or geographies, and not all farms carry large bank debts’. Quoting the April 2017 Farm Survey report published by the ABARES, Deloitte noted that as at 30 June 2016, ‘more than two thirds of aggregate broadacre debt was held by 12% of farms, with these farms producing approximately half of the value of broadacre farm production ... for the dairy industry, more than two thirds of total debt was held by one third of farms.’⁷⁰

⁶⁸ Above n 64.

⁶⁹ Reserve Bank of Australia, *Statistical Tables*, <<http://www.rba.gov.au/statistics/tables/>> (Bank Lending to Business – Total Credit Outstanding by Size and Sector – D7.3, <<http://www.rba.gov.au/statistics/tables/xls/d07dhist.xls?v=2018-06-01-14-46-37>>).

⁷⁰ Above n 67.

ABARES notes that as at 30 June 2017, broadacre farm debt stood at an average of \$616,900 per farm (an increase of 5% from the previous year) while dairy farm debt stood at an average of \$926,700 per farm (a decrease of around 2% from the previous year).

For broadacre farms, the most common reason to borrow was to fund a land purchase (43%) while for dairy farms, borrowing to cover operating expenses was the most common reason to borrow (26%) followed by to fund a land purchase (24%).⁷¹

Many banks, including the four major banks, offer financial products and services designed for those in the agriculture, forestry and fishing industry. These include agribusiness loans, leases, transaction accounts, lines of credit and overdrafts and wealth management, with some offering financial advice targeted to the specific needs of the industry and/or encouraging business innovation.⁷²

⁷¹ ABARES, *Farm debt: broadacre and dairy farms, 2014-15 to 2016-17* (18 April 2018), <<http://www.agriculture.gov.au/abares/research-topics/surveys/debt>>.

⁷² See e.g. Commonwealth Bank of Australia, *Regional and Agribusiness*, <<https://www.commbank.com.au/business/business-insights/industries/agribusiness.html>>; National Australia Bank Limited, *Agribusiness*, <<https://www.nab.com.au/business/industry/agribusiness>>; Australia and New Zealand Banking Group Limited, *Agribusiness*, <<https://www.anz.com.au/business/industries/agribusiness/>>; Westpac Banking Corporation, *Agribusiness* <<https://www.westpac.com.au/business-banking/industries/agribusiness/>>.

Some banks have business models that specifically cater to rural and regional Australia, using this business model in response to the earlier decline in the number of mainstream bank branches in rural and regional areas. According to the January 2004 Parliamentary Inquiry into the Level of Banking and Financial Services in Rural, Regional and Remote Areas of Australia, 'since 1994, there has been a steady decline in the number of bank branches in country Australia' with over 750 bank branch closures in non-metropolitan areas between 1993 and 2000.⁷³

More information on the effect of bank branch closures on rural and regional areas can be found in Background Paper 19 – Some Features of Financial Services in Regional and Remote Communities.

7.2 Equity finance

A 2014 article by the Australian Farm Institute, an independent institute which conducts research into strategic issues facing Australian agriculture,⁷⁴ notes that 'Australian farming businesses rely very strongly on debt financing, and there is not the wide variety of funding models that exist in other sectors'.⁷⁵ The article also notes that generally, farmers have principally looked to banks to obtain farm financing but 'it is uncertain ... whether this system can be relied upon so heavily in the future, with productivity growth slowing due to a lack of new investment and a shortage of young people entering farming, due to insufficient upfront equity when trying to access bank funding'.⁷⁶

The article notes that farm and agribusiness funding models in Asia, Brazil, New Zealand and the United States generally have access to funding arrangements that are different and more varied than those in Australia. For example, New Zealand dairy farms can be funded using 'sharemilking' (where one business owns the cows and the other the land) and equity partnerships. The article notes that in New Zealand, farm land does not attract capital gains tax when sold, meaning that stakeholders can buy in and sell out of equity partnerships relatively easily. The United States has 'deep and liquid leasing market for farmland' and it was estimated that in 2011, 'only 36% of farmers younger than 35 were full owners of farm land'.⁷⁷

⁷³ Parliamentary Joint Committee on Corporations and Financial Services, *Money Matters in the Bush: Inquiry in the Level of Banking and Financial Services in Rural, Regional and Remote Areas of Australia* (January 2004), xxiii, 7, 9. <https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Corporations_and_Financial_Services/Completed_inquiries/2002-04/banking/index>.

⁷⁴ See Australian Farm Institute, *The Australian Farm Institute: Australia's independent farm policy research institute*, 2, <<http://farminstitute.org.au/LiteratureRetrieve.aspx?ID=161472>>.

⁷⁵ Adam Tomlinson, 'Australian farm businesses could do better with different funding models', *Insights*, Australian Farm Institute (August 2014), <http://www.farminstitute.org.au/newsletter/2014/August_2014/August_2014_featurearticle.html>.

⁷⁶ Ibid.

⁷⁷ Ibid.

The Australian Farm Institute suggests that while debt financing ‘seems to be adequate in providing the capital needed for the growth of the agricultural sector to date, there is a growing perception that alternative sources of capital and new farm business structures will be required into the future’.⁷⁸ In particular, the Institute highlights an ANZ report which notes that ‘the additional capital required by farmers to invest in the improvements and technology needed to resuscitate Australian farm productivity growth rates through to 2050 has been estimated to be as high as \$600 billion.’⁷⁹

The Australian Farm Institute notes that institutional investments in agriculture ‘make up a very small proportion of Australian institutional investors’ portfolios’. It also notes that the most important reasons given by fund managers for not investing in agriculture included ‘a lack of investable products and a lack of fund managers with specific agricultural knowledge’. The institute also notes, however, that ‘increasing demand for capital combined with a growing willingness to invest in agriculture should see less reliance on debt funding from banks and alternative financing products becomes more prominent’.⁸⁰

Industries such as the superannuation industry have taken some interest in institutional investment in Australian agriculture, with Industry Super Australia releasing a discussion paper in June 2017 on superannuation fund investment in agriculture. The discussion paper noted that ‘well executed investment in agriculture should *in theory* be able to provide diversification benefits to portfolios’ but that a lack of detailed knowledge of the sector by trustees, executives and asset managers, lack of performance data, difficulty achieving meaningful investment scale where farming operations are fragmented and small, asset allocation issues and the variability of returns can be challenges for institutional investment.⁸¹

⁷⁸ Australian Farm Institute, *Farm Funding Models and Business Structures in Australia* (5 September 2016), <<https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2016/09/farm-funding-models-and-business-structures-in-australia>>.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Industry Super Australia, *Discussion Paper: Driving Super Fund Investment In Agriculture* (June 2017), 38, 41, <<http://www.industrysuperaustralia.com/assets/Reports/ISA-Driving-super-fund-investment-in-agriculture-13-June-2017.pdf>> [emphasis in original].

Another source of funding for the agriculture, forestry and fishing sector is crowd-sourced funding, where businesses gain funding directly from the public,⁸² although current laws around which types of companies may access crowd-sourced funding may limit its applicability to the agriculture, forestry and fishing sector, depending on how a business is structured.⁸³

7.3 Government grants and subsidies

The Australian Government and the Department of Agriculture and Water Resources provide 'grants and financial assistance programs to Australian businesses and individuals to help boost productivity and exports'⁸⁴ including through the Agricultural and Trade Market Access Cooperation Programme (ATMAC). The Australian Government also provides several types of drought and rural assistance 'to help farmers and primary producers face an increasingly variable climate',⁸⁵ as well as the Managing Farm Risk Programme, which provides rebates up to a maximum of \$2,500⁸⁶ 'for advice and assessments to help farmers prepare and apply for a new insurance policy that assists with the management of drought and other production and market risks'.⁸⁷

Various State Governments also provide grants and subsidies to the rural sector, either through government departments, specific corporations set up to provide assistance to the rural sector, or both. Many are designed to help primary producers through unexpected events such as prolonged drought.⁸⁸

⁸² For more details on crowd-sourced funding, see Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, *Financial services and Small and Medium-Sized Enterprises (SMEs): Background Paper 12*, (14 May 2018), 13,

<<https://financialservices.royalcommission.gov.au/publications/Documents/financial-services-and-small-and-medium-sized-enterprises-paper-12.pdf>>.

⁸³ See Commonwealth of Australia, *Corporations Act 2001*, s738H

<<https://www.legislation.gov.au/Details/C2018C00131/fff9cac3-0d14-4878-8230-e3574b848559>>.

⁸⁴ Department of Agriculture and Water Resources, *Assistance, grants and tenders*,

<<http://www.agriculture.gov.au/about/assistance-grants-tenders>>.

⁸⁵ Department of Agriculture and Water Resources, *Assistance measures*, <<http://www.agriculture.gov.au/ag-farm-food/drought/assistance>>.

⁸⁶ Department of Agriculture and Water Resources, *Managing Farm Risk Program*,

<<http://www.agriculture.gov.au/ag-farm-food/drought/assistance/mfrp>>.

⁸⁷ Above n 84.

⁸⁸ See e.g. Rural Assistance Authority (NSW) <<https://www.raa.nsw.gov.au/>>, Queensland Rural and Industry

Development Authority (QRIDA) <<http://www.qrida.qld.gov.au/homepage>>, Rural Finance

<<https://www.ruralfinance.com.au/>>, Primary Industries and Regions SA (PIRSA)

<http://pir.sa.gov.au/grants_and_assistance>, Western Australia Rural Business Development Corporation (RBDC)

<<https://www.agric.wa.gov.au/rural-business-development-corporation-rbdc>>.

7.4 Debt servicing by the rural sector

The 2014 Financial System Inquiry, in its Interim Report published in July 2014, noted that ‘debt levels in the agricultural sector have more than doubled over the past decade and have outpaced farm incomes’.⁸⁹ The Financial System Inquiry also noted that the increased indebtedness ‘reflects financial factors, such as lower interest rates and increased availability of credit’ as well as ‘non-financial factors, such as periods of prolonged drought’.⁹⁰

However, the Inquiry also noted that although farmers are more likely to experience difficulties meeting debt obligations during periods of low revenue, such as during a drought or during a period of low commodity prices ‘the sector has a long history of servicing debt, albeit with government support’.⁹¹ The Inquiry was of the opinion that ‘although financial issues affect the rural sector’ submissions to the Inquiry did ‘not identify significant structural issues related to rural finance’.⁹² As at the time of the Financial System Inquiry Interim Report, ‘less than 1.5 per cent of loans to the rural sector are more than 90 days in arrears and bank losses on the portfolio of rural loans are less than 0.5 per cent’.⁹³

7.5 Farm debt mediation and financial counselling

Several States and Territories run farm debt mediation schemes, with New South Wales, Victoria and Queensland operating legislated schemes⁹⁴ and other States such as Western Australia operating voluntary schemes.⁹⁵ Further information on farm debt mediation schemes in New South Wales, Victoria and Queensland can be found in *Background Paper 1: Some Features of the Australian Banking Industry*.⁹⁶

⁸⁹ Financial System Inquiry, *Interim Report* (July 2014), 2-67, <<http://fsi.gov.au/publications/interim-report/03-funding/small-med-enterprises/>>.

⁹⁰ Ibid 2-66.

⁹¹ Ibid 2-67.

⁹² Ibid 2-66 – 2-67.

⁹³ Ibid 2-67.

⁹⁴ Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, *Some Features of the Australian Banking Industry: Background Paper 1* (9 February 2018), 25-27, <<https://financialservices.royalcommission.gov.au/publications/Documents/some-features-of-the-australian-banking-industry-background-paper-1.pdf>>.

⁹⁵ See Government Western Australia Department of Primary Industries and Regional Development, *Farm Debt Mediation Scheme WA: Frequently Asked Questions*, 1, <<https://www.agric.wa.gov.au/sites/gateway/files/FDMS%20Frequently%20Asked%20Questions.pdf>>.

⁹⁶ Above n 94.

The Australian Government provides the Rural Financial Counselling Service (RFCS) to clients who are suffering, or at imminent risk of suffering financial hardship. Eligible client groups include farmers, fishing enterprises, forestry growers and harvesters and small, related businesses. The RFCS is funded by the Australian, State and Northern Territory Governments.⁹⁷

⁹⁷ Australian Government Department of Agriculture and Water Resources, *Rural Financial Counselling Service (RFCS)*, <<http://www.agriculture.gov.au/ag-farm-food/drought/assistance/rural-financial-counselling-service>>.