



AUSTRALIAN  
**FOOD &  
GROCERY**  
COUNCIL



# STATE OF THE INDUSTRY 2016

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ESSENTIAL INFORMATION:  
FACTS AND FIGURES

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*Sustaining Australia*



# CHAIRMAN'S FOREWORD

This is the eighth edition of the AFGC's annual State of the Industry series, providing key data on the food and grocery sector in order to inform rational and fact-based analysis and policy.

The food and grocery sector delivers the essentials of life to every Australian every day. From bread and milk to cleaning and personal care products, salads and chocolate bars, these are the products that stock our pantries and the ingredients that go into our breakfasts, lunch boxes and dinners.

They get there via a complex and efficient supply chain taking product from paddock to plate.

The data in this year's State of the Industry report highlights the increasing importance of the food and grocery sector to Australia's economy as well as the significant challenges it faces to stay competitive. The industry now represents more than a third of total Australian manufacturing, continuing a multi-year trend.

On the positive side, strong export growth is being maintained. The value of food and grocery sector exports increased by 14%, with double digit export growth in each of the sub-sectors – food and beverage up 11%, fresh produce up 31% and grocery (non-food) exports up 50%.

The USA remains Australia's leading trading partner for food and grocery products but China continues to grow in importance. There are many opportunities in the Asian region, with Singapore, Thailand, Malaysia, Korea and Japan also featuring in our top trading partners.

Export growth is the key driver of growth in the overall food and grocery sector. Domestic trading conditions remain very tough, reflected in the fact that employment growth has stalled across the sector as companies continue to focus on reducing costs to stay competitive.

The reality is that the food and grocery sector is under intense financial pressure after six years of falling supermarket prices and no end in sight to the retail price war. Price deflation has forced food and grocery suppliers to savagely cut costs, a task made more difficult by rising labour, energy and regulatory costs.

The other area of concern is the decline in investment. Capital investment in the food and beverage sector has declined significantly for three years and is now back at levels not seen since the middle of the GFC in 2009-10.

Food and grocery processing relies heavily on patient capital investment and when there is a reluctance to re-invest regularly to keep pace with global innovation and its associated productivity benefits, a vicious circle can occur where re-investment lags and returns inch lower over time, making capital investment even harder to attract.

This is the challenge for the industry and policy-makers alike. Boosting investment requires consideration of carefully focused investment allowances or incentives within the tax system for a period that will lift the sector's capacity and provide an ongoing boost to activity, exports and jobs. A regulatory system that supports free trade and welcomes foreign investment will also play a key role in attracting the capital required to maintain the sector's importance as Australia's largest manufacturing sector.

Even with the stalling in job growth in 2015-16 the food and grocery sector continues to provide more than 300,000 direct jobs and remains crucial to many regional communities and farmers.

And while domestic trading conditions are extremely challenging, the strong export growth is a clear indicator of the growth potential for the future as the growing middle class in our key trading partners in Asia demand premium, safe and high quality food. With the Australian economy continuing its rebalancing out of the mining boom it is important that Australia captures these opportunities in food and grocery to generate new drivers of jobs and growth.

As always the AFGC welcomes your input on this report and any suggestions on how we can make it even more useful to the food and grocery sector in the future.



**Terry O'Brien**

Chairman

Australian Food and Grocery  
Council

This report ("Report") has been prepared jointly by the Australian Food and Grocery Council (AFGC) and EY. EY has prepared the analysis in relation to industry turnover, industry value-add, international trade, employment and capital investment. AFGC has provided insights in relation to each of these topics. The results of EY's analysis, including the assumptions and qualifications made in compiling the Report, are set out in the Report. In conducting its work and preparing the Report, EY has acted in accordance with the instructions of AFGC as set out in its engagement agreement dated 2 April 2015, and, in doing so, has prepared the Report for the benefit of the AFGC, and has considered only the interests of the AFGC. EY has not been engaged to act, and has not acted, as advisor to any other party in relation to this Report. Accordingly, EY makes no representations as to the appropriateness, accuracy or completeness of the Report for any other party's purposes. No reliance may be placed upon the Report or any of its contents by any party other than the AFGC ("Recipient"), for any purpose other than receiving this Report and any Recipient receiving a copy of the Report must make and rely on their own enquiries in relation to the issues to which the Report relates, the contents of the Report and all matters arising from or relating to or in any way connected with the Report or its contents.

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# AFGC

## 'Sustaining Australia'

The Australian Food and Grocery Council (AFGC) is Australia's peak national industry association, representing the nearly \$125.9 billion food, beverage and grocery manufacturing industry.

As Australia's largest manufacturing sector – accounting for one third of total manufacturing – the food and grocery manufacturing industry is a vital contributor to the wealth and health of our nation. The industry's products are consumed by 24 million Australians every day of the year.

The AFGC's aim is for the Australian food, beverage and grocery manufacturing industry to be world-class, sustainable, socially-responsible and competing profitably, both domestically and internationally. The AFGC represents one of the few manufacturing sectors in Australia that continues to grow and has significant potential for even further growth into the future.

We provide a strong, united voice from industry to government, NGOs, retailers/trading partners, industry groups and the media, as well as promoting the industry, for the benefit of members, across the wider community. The AFGC is respected for advancing scientific policies and research to support industry positions. As part of our advocacy role, we advance best practice policy, promote industry's views, and make submissions to governments on the development of policy and regulation affecting members.

With industry facing many challenges, we help members stay competitive and well-informed on important issues including retailer relations, food regulation, labelling, supply chain and sustainability issues. The AFGC has been proudly representing the interests of Australia's largest manufacturing sector since 1995. We are dedicated to keeping the industry strong, innovative and profitable.

For more information, visit [www.afgc.org.au](http://www.afgc.org.au)

# EY

At EY, we are committed to building a better working world with increased trust and confidence in business, sustainable growth, development of talent in all its forms, and greater collaboration. We want to build a better working world through our own actions and by engaging with like-minded organisations and individuals. This is our purpose — and why we exist as an organisation.

Our 28 Regions are grouped under four geographic Areas: Americas; Europe, Middle East, India and Africa (EMEA); Asia-Pacific; and Japan. This structure is streamlined allowing us to make decisions quickly, execute our strategy and provide exceptional client service wherever in the world our clients do business. We are not merely a loose collection of national practices – we are a global network of firms, unified in our approach.

## **EY's Food, Fibre, Agribusiness and Biosecurity practice**

Food companies face a challenging and volatile environment. Issues such as the need to understand changing consumer needs, innovate effectively, and put goods on the shelf at a price that works for producers, manufacturers and consumers continue to arise in today's market. Ongoing commodity price volatility, fluctuating exchange rates and uncertain tax and regulatory environments, particularly in emerging markets, makes decision-making complex. As emerging markets leaders take their place on the global stage and start challenging for share in both developed and developing markets, food manufacturers are focusing more closely than ever on the need to maximise volume to maintain growth.

The Australian food and agribusiness sector is a world leader in the provision of high quality food and fibre using innovative technologies and sustainable natural resource management. There is strong interest from both government and business for the growth of this industry. Whilst the sector's longer-term fundamentals remain strong and the prospect of rapid increases in global demand continues, there are challenges for business and government to navigate along the way.

EY's Food, Fibre, Agribusiness and Biosecurity practice brings together a worldwide team of professionals to help organisations achieve their goals. We are passionate about helping Australia create a vibrant future for the people and businesses involved in the production of food, fibre and agribusiness.

For more information, visit [www.ey.com/AU/en/Industries/Consumer-Products/EY-consumer-products-agribusiness](http://www.ey.com/AU/en/Industries/Consumer-Products/EY-consumer-products-agribusiness)



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# Summary: the essentials<sup>1</sup>

## 1.1 The industry

Australia's food and grocery sector turnover totalled \$125.9 billion in 2014-15, a rise of 3.9 per cent in real terms (after adjusting for inflation), comprising:

- Food and beverage processing \$103.2 billion (up 3.7 per cent);
- Grocery (non-food) manufacturing \$16.9 billion (up 6.1 per cent); and
- Fresh produce (minimally transformed) \$5.9 billion (up 1.3 per cent).

The defined industry represents 33.3 per cent of total Australian manufacturing by turnover with a combined value add<sup>2</sup> of approximately \$32.0 billion in 2014-15.

Labour productivity in the food, beverage and tobacco product manufacturing sector<sup>3</sup> fell by 4.9 per cent in 2014-15, which is defined by a decline in gross value add combined with the increase of hours worked.

There were an estimated 27,745 businesses in the industry in 2015-16:

- 8,221 businesses in food and beverage processing (up 78 on 2014-15);
- 1,554 businesses in grocery manufacturing (up 1); and
- 17,970 businesses in the fresh produce sector (down 510).

## 1.2 International trade

The total value of international trade (imports plus exports) for the food and grocery sector in 2015-16 was \$66.6 billion, an increase of 14.5 per cent.

- Exports valued at \$31.5 billion (growth of 14.4 per cent);
- Imports valued at \$35.2 billion (growth of 14.6 per cent); and
- Trade deficit of \$3.7 billion (up from \$3.2 billion in 2014-15).

Australia is a net exporter of processed food and beverages, and fresh produce, and a net importer of grocery (non-food) manufactured product.

Australia recorded a strongly growing trade surplus in processed food and beverage products:

- Exports of processed food and beverages increased by 10.7 per cent, or from \$23.5 billion to \$26.0 billion in 2015-16;
- Imports of processed food and beverages increased by 13.6 per cent to \$16.8 billion; and
- Trade surplus in processed food and beverages increased by 5.8 per cent to \$9.1 billion.

The fresh produce (minimally transformed) sector recorded significant growth in exports and an increase in trade surplus:

<sup>1</sup> Note that the most recent full year of data available is used for each subject area through this report, meaning some data is for the 2014-15 financial year and some for the 2015-16 financial year. Also note that all data in this summary section and in the main body of the report is presented in real terms, a summary of the nominal changes are set out in Appendix A.

<sup>2</sup> Industry value-add is a measure of the contribution of businesses within the sector to gross domestic product.

<sup>3</sup> The split between beverage and tobacco product manufacturing was not available due to ABS reporting arrangements.

- Exports of fresh produce increased by 49.4 per cent, or from \$1.0 billion to \$1.5 billion in 2015-16;
- Imports of fresh produce increased by 5.2 per cent to \$757 million; and
- Trade surplus in fresh produce increased by 161.1 per cent to \$742 million.

The grocery (non-food) manufacturing sector recorded an increase in exports and a trade deficit of \$13.6 billion.

- Grocery exports increased by 31.6 per cent, or from \$3.0 billion to \$4.0 billion in 2015-16;
- Grocery imports increased by 16.2 per cent to \$17.6 billion; and
- The grocery trade deficit increased by 12 per cent to \$13.6 billion.

### 1.3 Employment

In 2015-16 the food and grocery sector employed 307,169 people, a decrease of 142 employed since 2014-15.

- 226,727 were employed in food and beverage processing;
- 28,698 were employed in grocery (non-food) manufacturing; and
- 51,744 were employed in the fresh produce sector.

### 1.4 Capital investment

In 2014-15 capital investment (gross fixed capital formation) in the food, beverage and tobacco manufacturing sector reached just over \$2.7 billion, a decline of 14.2 per cent from the previous year.

- Food product manufacturing investment dropped from \$2.3 billion to \$2.2 billion; and
- Beverage and tobacco manufacturing investment declined from \$841 million to \$523 million.

### 1.5 What is covered by the Food and Grocery sector – the 'defined industry'?

This is the eighth annual State of the Industry Report and prior to this series the industry sectors covered by the report had not previously been described collectively by industry or government agencies. Reflecting the membership of the AFGC, the sectors included in this report share a number of common features at product and/or operational levels and consequently also in the business environment in which they operate. The definition used to determine whether industry sectors should be included was:

*Those industries that provide value-add to agriculture, food and other products for the purpose of producing everyday fresh and processed food, beverages and grocery products consumed and used by Australians.*

The products encompassed include packaged, shelf stable food from all categories, fresh foods such as fruit and vegetables and non-food grocery products used by consumers for personal and home care. These products share a number of distinguishing characteristics that enable them to be sensibly aggregated:

- They are all (generally) presented to consumers meeting strict product specifications;
- Their integrity is assured through the use of sophisticated quality systems;

- They share the same supply chains; and
- They are purchased and used daily by consumers.

Commodities (e.g. grains, live animals etc.) not purchased by consumers directly were excluded from the report. As a result, three broad groupings were identified:

- Food and beverage manufacturing;
- Grocery (non-food) manufacturing; and
- Fresh produce production.

For more detailed information on the industry definition and ANZSIC Codes, see the Appendix B Methodology.

## 1.6 Overview of the Industry during the 2014-15 period

This report provides an analysis of the most recent full year data available for the Food and Grocery sector, (2015-16 financial year data for Employment and International Trade and 2014-15 financial year data for other sections). To allow a full year comparison, this section provides a brief overview of all data available for the 2014-15 financial year.

In the 2014-15 financial year turnover increased 3.9 per cent, which was supported by a growth in the total value of international trade by 11.6 per cent (or \$6.1 billion), and an increase in employment of 1.4 per cent to 307,311 people.

The increase in the total value of international trade was driven by growth in exports valued at \$27.5 billion (real growth of 22.0 per cent) which reduced the trade deficit from \$7.1 billion in 2013-14 to \$3.2 billion in 2014-15 (a 55.0 per cent improvement).

Despite the growth in turnover, employment and international trade, labour productivity and capital investment in the food and grocery sector declined in the 2014-15 financial year. Labour productivity in the food, beverage and tobacco product manufacturing sector<sup>4</sup> fell by 4.9 per cent, and there was a reduction capital investment of 14.2 per cent. Capital investment is yet to return to pre-GFC levels, and has declined for three consecutive years.

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<sup>4</sup> The split between beverage and tobacco product manufacturing was not available due to ABS reporting arrangements.

## 2 Overview

This AFGC State of the Industry report is the eighth in the series. It consists of an extensive set of historical and updated data which collectively describes the broader food and beverage, grocery manufacturing and fresh produce sectors, as well as the important contribution it makes to the Australian economy.<sup>5</sup> Throughout this report, together the food and beverage, grocery and fresh produce sectors are classified as the 'defined industry'.

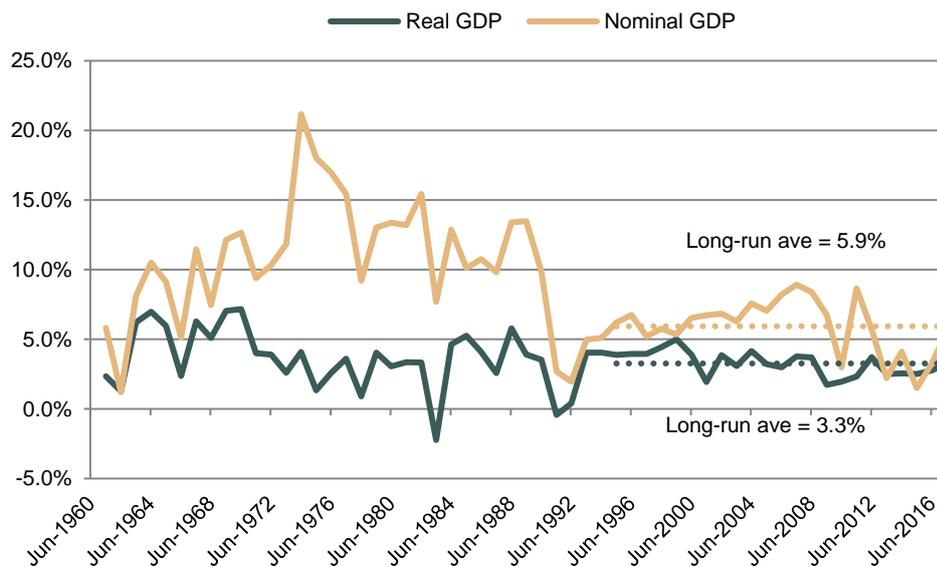
### 2.1 Summary of economic indicators

Indicator	2014-15 (+/- % change on previous year)	2015-16 (+/- % change on previous year)
<b>Turnover</b>	\$125.9 billion (+3.9%)	Not Available
<b>Value-Add</b>	\$32 billion (+2.1%)	Not Available
<b>Labour Productivity</b> (\$ Industry Value-Add per hour worked)	60.5 (-4.9%)	Not Available
<b>Capital Investment</b> (food and beverage)	\$2.7 billion (-14.2%)	Not Available
<b>Employment</b>	307,311 (+1.4%)	307,169 (0.0%)
<b>Export</b>	\$27.5 billion (+22%)	\$31.5 billion (+14%)

### 2.2 The Australian story

The Australian economy is entering its 26th consecutive year of growth. The Australian economy is slowly recovering from the impact of the Global Financial Crisis (GFC). In 2015-16, GDP has a real growth rate of 3.3 per cent up from 2.0 per cent for 2014-15, which is now in line with the long run average of 3.3 per cent real growth.

Figure 2.1: Real and nominal gross domestic product growth (%)



Source: Based on ABS, catalogue number 5204.0

<sup>5</sup> All views expressed within this Report are those of the AFGC and other named authors. The AFGC acknowledges the assistance of EY in compiling and analysing the statistical data contained within this Report.

Similar to last year, the Australian economy continues to adjust to the fall in investment in mining and resources and transition to an economy where the gap is filled, and economic growth is driven more by the non-resource industries. However, the increase in non-mining investment has been more gradual than had been expected. In these years, Australia experienced gross national product (GDP) of \$1,584 billion in 2014-15 and \$1,609 billion in 2015-16. This was an expansion of the economy of 2.4 per cent and 2.3 per cent respectively.<sup>6</sup>

The major contributors to this growth in 2014-15 were household expenditure (increasing 2.5 per cent and partially being driven by an increase in expenditure on rent and other dwellings (2.4 per cent), recreation and culture (4.2 per cent), insurance and other financial products (4.0 per cent) and hotels, cafes and restaurants (4.7 per cent)) and exports of goods and services (growing 6.5 per cent).<sup>7</sup> Similarly, in 2014-15, major contributors to GDP growth were again household expenditure (increasing 2.5 per cent), dwelling capital investment, and exports of goods and services.<sup>8</sup>

Australia's terms of trade fell by 10.3 per cent in 2014-2015 and again by 5.4 per cent in 2015-2016. This means that Australia's export prices have fallen significantly over the last two years relative to its import prices and potentially leading to the fact that exports have grown more rapidly than imports in volume terms.

Regarding employment, there were 11,869,100 people employed at the end of August 2016. This was a growth of 1.6 per cent over the year. At the same time, there was a decrease of 7 per cent in the number of unemployed persons in Australia with 707,500 Australians deemed unemployed at the end of August 2016. Over the course of the year, the unemployment rate decreased by 0.4 per cent to 5.75 per cent and is expected to decrease again in 2016-17. The participation rate also remained stable over the year, with the rate at 65.0 per cent (a slight increase of 0.2 percentage points) meaning the percentage of people either in work or looking for work remains the same at around two thirds of the population.<sup>9</sup>

From an industry perspective in 2014-2015, the largest increase in value added was experienced by the gas services industry with a growth of 11.9 per cent and the information media and telecommunications industry with a growth of 9.4 per cent (total gross industry value added of \$42.7 billion). The largest contraction in 2014-15 was experienced by the professional, scientific and technical services industry with a decline of 4.0 per cent. Looking at industry turnover, recent years have seen some key trends come to light. Namely the manufacturing industry continues to stagnate and indeed contract in some years. Whilst there is general stagnation in manufacturing in 2014-15, some sectors have experienced a significant contraction (printed and recorded media and machinery and equipment) and others have experienced significant growth (non-metallic mineral products and wood and paper). To halt the overall decline in manufacturing turnover, sub-sectors currently experiencing growth will need to build scale and increase competitiveness to ensure the overall size of the sector is maintained. Non-mining investment has been slower than forecast and presents a significant risk to real GDP if the pick-up continues to be slower than anticipated. However, non-mining investment is expected to increase with an increase in domestic demand and there has also been growth in mining export volumes, in particular, iron ore and LNG.

<sup>6</sup> ABS (2014) Catalogue 5204.0; Australian System of National Accounts, 2013-14 and ABS (2015) Catalogue 5206.0; Australian National Accounts: National Income, Expenditure and Product, June 2015.

<sup>7</sup> ABS (2014) Catalogue 5204.0; Australian System of National Accounts, 2013-14.

<sup>8</sup> ABS (2015) Catalogue 5206.0; Australian National Accounts: National Income, Expenditure and Product, June 2015.

<sup>9</sup> ABS (2015) Catalogue 6202.0; Labour Force, Australia, June 2015.

## 2.3 AFGC Insight

### The food and grocery story

Australia's food and grocery sector transforms the produce from our farms into the food and other essentials of life needed by every consumer, every day. We eat bread not wheat, steak not steers and we consume pasteurised milk and processed cheese and yoghurt not raw milk. Most of our food goes through some level of packaging and processing, from minimal to elaborate transformation.

This value-adding to transform agricultural produce into consumer packaged food is a key industry for Australia and one with tremendous growth potential. But as the data in this latest State of the Industry Report attests, it is also an industry under intense pressure from both cyclical factors and long run structural change in Australia's food production and retailing environment.

The good news is that industry turnover continues to increase with food and grocery processing now making up 33% of total Australian manufacturing. This growth is largely on the back of strong growth in exports. In 2015–16 food and beverage exports grew by 11% to \$26bn and Australia's trade surplus in processed food and beverages by 6% to \$9bn. The ability to realise premium prices in growing export markets is now a key source of growth and contrasts with the low growth, deflationary domestic trading environment.

Low domestic growth, rising costs for energy and other inputs, and six years of retail price deflation in the ongoing supermarket price war has created relentless pressure back through the supply chain to become more efficient in order to stay competitive. It is forcing food and grocery producers and processors to cut costs across every part of their business.

The biggest concern is falling capital investment at a time when a step change upwards in investment is required to fully capitalise on improved market access and growing demand from middle class consumers in the emerging economies of Asia and the Middle East. We are now in danger of drifting into a low investment trap, where uncertainty about return on investment flowing from retail price deflation and sluggish growth is seeing investment decisions deferred or dumped.

The data compiled by EY for this report shows that in 2015 - 16 employment growth stalled in the food and grocery sector despite the strong growth in exports. Given the location of much of Australia's food and beverage processing in outer suburban and regional communities, falling investment and static employment are major concerns for the future capacity of the sector to generate job growth.

The fall in the Australian dollar over the past few years has been a double edged sword - greatly assisting our exporters, but making imported ingredients more expensive. For Australian processors, with very little capacity to pass those increased costs through in a deflationary retail environment, this has increased the financial squeeze.

Stimulating investment is critical. Company tax cuts for all businesses are more important than ever as a means of sparking investment, and targeted investment allowances must also be considered to counter this drift into a low investment trap. The food and grocery sector has shown great resilience and ability to adjust to the shifting market over the past five years, but it can't be taken for granted.

**Gary Dawson**

*Chief Executive Officer*

## 3 Industry turnover

- In 2014-15, the combined turnover of the industry was \$125.9 billion and there were 28,176 enterprises in Australia involved in the industry.<sup>10</sup>
- The food and beverage sector grew by 3.7 per cent, while grocery grew by 6.1 per cent and fresh produce increased 1.3 per cent.

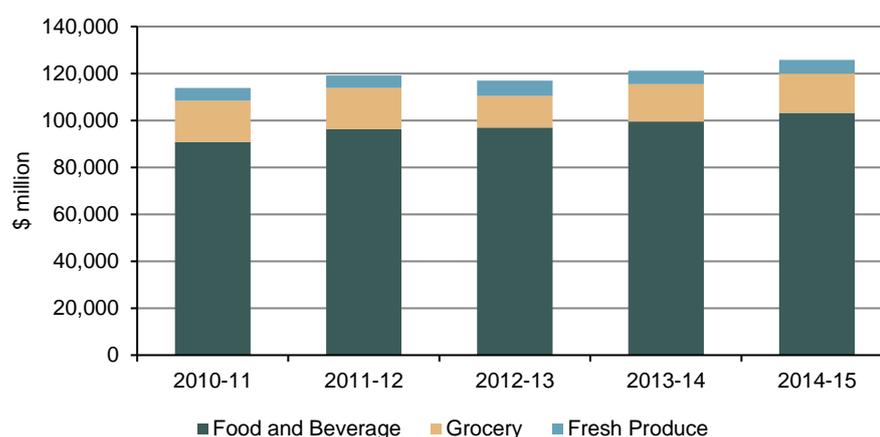
The total turnover for the Australian food and beverage, grocery and fresh produce industry was \$125.9 billion in 2014-15; a real increase of 3.9 per cent (see Figure 3.1). This means that industry turnover is continuing to increase and has steadied its path onto recovery and growth following the near 2 per cent contraction in 2012-13. All sectors experienced real growth in 2014-15, however the grocery sector experienced the most rapid growth (up 6.1 per cent).

Of the three broad industry sectors, the food and beverage sector contributes the largest proportion to total industry turnover (\$103.2 billion or 82.0 per cent), followed by the grocery sector (\$16.9 billion or 13.4 per cent), and the fresh produce sector (\$5.9 billion or 4.6 per cent). The food and beverage sector grew by 3.7 per cent, whilst the grocery sector and fresh produce sector grew by 6.1 per cent and 1.3 per cent respectively.

### Key Fact

All sectors are driving growth in the industry, experiencing an increase in turnover in 2014-15.

**Figure 3.1: Composition of the defined industry's turnover (\$2014-15)<sup>11</sup>**



Source: Based on ABS, catalogue number 8221.0, 8159.0, 8155.0, 7503.0 and IBIS Report C1212, C1213

The size of the defined industry relative to a subset of others is shown in Figure 3.2. It shows that whilst the defined industry is not an industry itself (i.e. its sectors are categorised by the ABS as falling within the Agriculture and Manufacturing industries), it is comparable to a host of other industries in terms of the size of its turnover indicating its importance to the Australian economy. Its turnover is larger than:

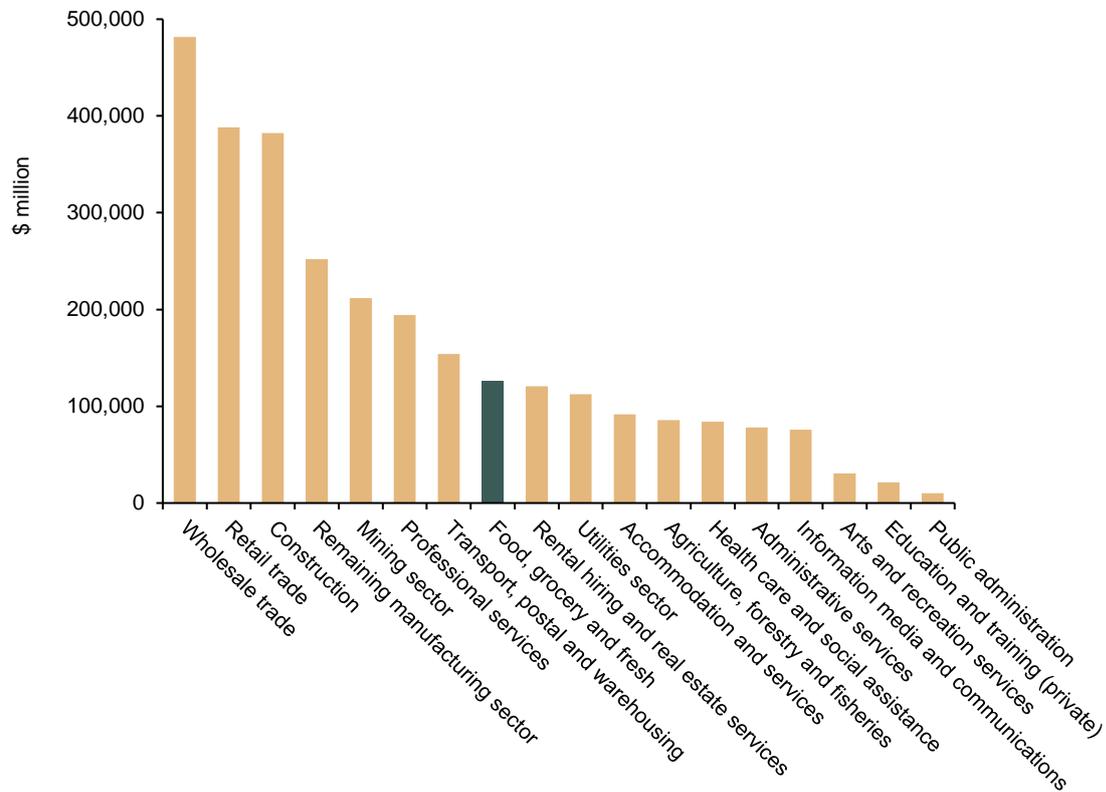
- Accommodation and services
- Administrative services
- Agriculture, fisheries and forestry
- Arts and recreation services.
- Education and training (private)
- Health care and social assistance
- Information media and communication

<sup>10</sup> This estimate is based on total 2014-15 enterprises from the most recent ABS reports. Figures are available for 2015-16 and as such, there were 27,745 enterprises in the 2015-16 financial year.

<sup>11</sup> As outlined in Appendix B, caution should be applied when comparing data before and after the 2006 ANZSIC code changes. Please consider this for all subsequent figures and tables within this report.

- Public administration
- Rental hiring and real estate services
- Utilities

Figure 3.2: Comparable sectors turnover (\$2014-15)



Source: Based on ABS, catalogue number 8155.0

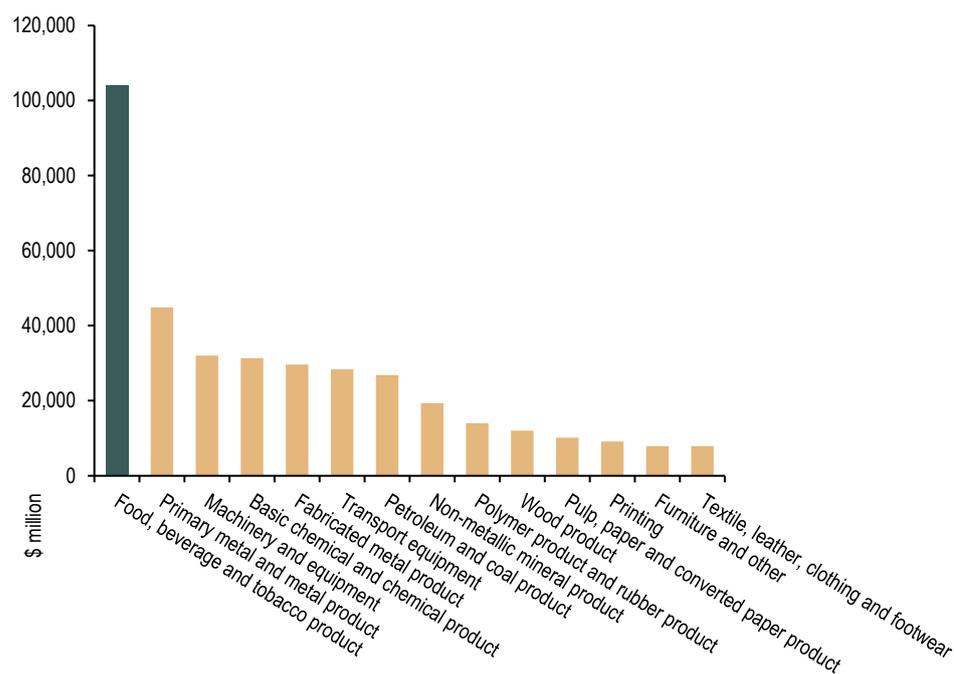
The manufacturing sector comprises a number of sub-sectors including the food, beverage and grocery sectors; the textile, leather, clothing and footwear manufacturing sector; and the wood product-manufacturing sector. The food, beverage and tobacco sector is a key sector of Australia's manufacturing industry with a share of 27.6 per cent (see Figure 3.3). When the grocery<sup>12</sup> sector is included into this analysis, the defined industry then increases its share of the manufacturing industry to 33.3 per cent.

### Key Fact

The food and grocery sector is the largest manufacturing industry in the Australian economy, comprising 33.3 per cent of all manufacturing.

<sup>12</sup> The grocery sector is comprised of a number of classes that fall within the pulp paper and converted paper product sector, the basic chemical and chemical product sector or the polymer product and rubber product sector that all fit within the manufacturing industry.

Figure 3.3: Manufacturing sector turnover analysis (\$2014-15)



Source: Based on ABS, catalogue number 8155.0

### 3.1 Food and beverage sector

The food and beverage manufacturing sector in Australia comprises a large variety of product classes, each of which consist of a number of sub-classes. In 2014-15, the turnover of the food and beverage manufacturing sector was \$103.2 billion; a real growth of 3.7 per cent.

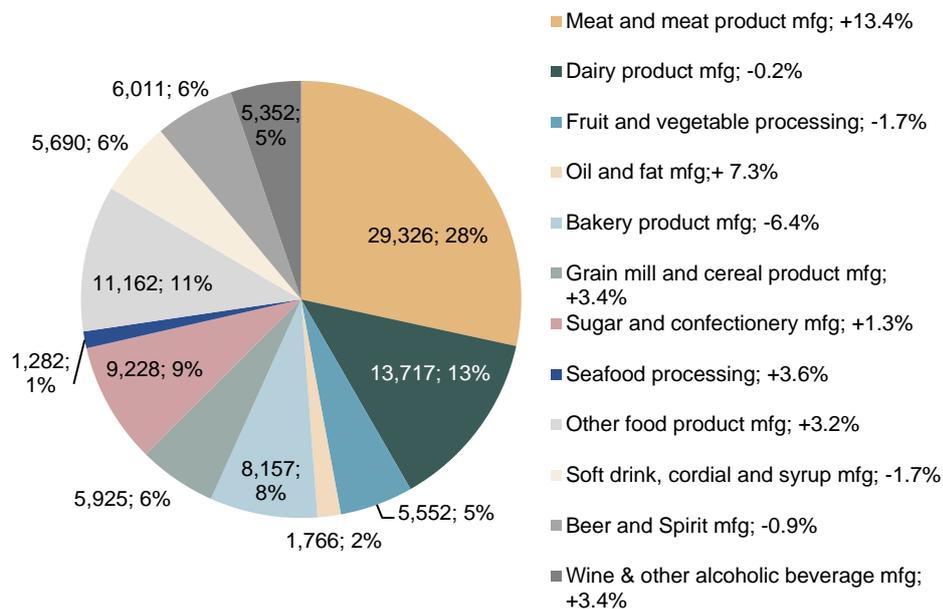
Of the 12 product classes, five classes contracted by an average 2.2 per cent with the largest decline of 6.4 per cent in the bakery product manufacturing class. This was in contrast to the 5.1 per cent average growth across the remaining seven classes including meat and meat product manufacturing which had the largest real growth, increasing 13.4 per cent, followed by the oil and fat manufacturing class which experienced real growth of 7.3 per cent. These real growth rates can be seen within the legend in Figure 3.4.

Figure 3.4 illustrates the turnover of each class in 2014-15, contribution to the overall turnover of the food and beverage sector and the real growth rate of each class (as annotated in the legend).

Meat and meat product manufacturing continues to increase and comprises the largest share (28.4 per cent) of the total sector turnover. Dairy product manufacturing was the second largest at 13.3 per cent whilst seafood processing held the smallest share (1.2 per cent).

Importantly, meat and meat product manufacturing saw both the largest turnover amount and experienced the greatest real growth driving strong results for the food and beverage manufacturing sector.

Figure 3.4: Turnover, growth rate and proportion of each product class in the food and beverage manufacturing sector (\$2014-15) (million)<sup>13</sup>



Source: Based on ABS, catalogue numbers 8155.0 and IBIS World Reports C1212 and 1213

### 3.1.1 Number of enterprises in the food and beverage sector

The food and beverage, grocery and fresh produce industry in Australia had 28,176 businesses in operation during 2014-15. This dropped by 1.5 per cent to 27,745 in 2015-16 meaning there were 431 fewer businesses at the end of the year. Of these 27,745 businesses, approximately one third, were from the food and beverage manufacturing sector. However this sector increased by 78 businesses or 1.0 per cent over the 2015-16 financial year demonstrating the drop in businesses was not driven by the food and beverage sector.

The decrease in the businesses in the industry was driven by a reduction in the number of enterprises in the fresh produce sector, which decreased by 2.8 per cent, or 510 businesses. This was driven by the decrease in grape growing enterprises, where there were 709 fewer businesses, a reduction of nearly 10 per cent. However, not all sub-sectors within the fresh produce sector experienced a decline in the number of enterprises, for example, the number of vegetable growing enterprises increasing by 75 businesses.

Table 3.1 illustrates the number of enterprises operating in a number of food and beverage classes. Other food manufacturing (i.e. food businesses not within the major categories defined by the ABS) had the largest number of enterprises in 2015-16 with 2,028 businesses and was closely followed by wine manufacturing which was the primary purpose for 1,884 or 22.6 per cent of businesses in the food and beverage sector. Meat and meat product manufacturing and bakery product manufacturing accounted for 15.3 per cent and 12.6 percent of businesses respectively.

<sup>13</sup> For all pie graphs throughout this report, please note that all dollar terms are in millions of dollars (\$'000'000s).

Table 3.1: Food and beverage manufacturing sector – number of enterprises

Sector	2011-12	2012-13	2013-14	2014-15	2015-16
Meat and meat product manufacturing	1,096	1,060	1,203	1,217	1,275
Dairy product manufacturing	463	486	524	554	556
Fruit and vegetable processing	521	502	519	546	546
Oil and fat manufacturing	218	193	191	185	183
Grain mill and cereal product manufacturing	320	308	328	322	327
Bakery product manufacturing	1,092	1,055	1,050	1,042	1,032
Other food manufacturing	1,966	1,946	2,000	2,008	2,028
Soft drink manufacturing	76	77	77	78	78
Beer and malt manufacturing	209	189	224	294	312
Wine manufacturing	1,882	1,874	1,918	1,897	1,884
<b>Total</b>	<b>7,843</b>	<b>7,690</b>	<b>8,034</b>	<b>8,143</b>	<b>8,221</b>

Source: Based on Number of Enterprises, IBIS World Reports C1111, C1112, C1113, C1131, C1132, C1133A, C1133B, C1133C, C1140, C1150, C1161, C1162, C1171, C1172, C1173, C1181, C1182, C1120, C1192, C1191, C1199, C1211A, C1211B, C1211C, C1212 and C1214.

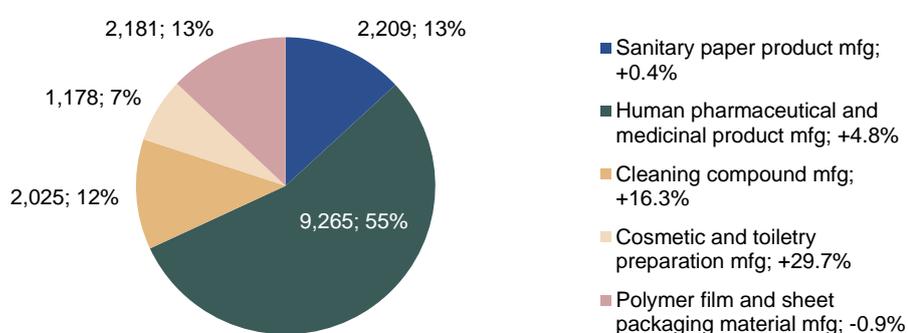
## 3.2 Grocery sector

As shown in Figure 3.5, in 2014-15 the turnover of Australia's grocery manufacturing sector was \$16.9 billion. This means the grocery sector has seen a real increase in turnover of 6.1 per cent from 2013-14 to 2014-15. The data indicates that human pharmaceutical and medicinal product manufacturing remained the largest contributor (55.0 per cent) to the total turnover for the grocery sector and experienced an increase of 4.8 per cent over the previous year.

Similar to last year, cosmetic and toiletry preparation manufacturing recorded the largest growth at 29.7 per cent or \$270 million. Cleaning compound manufacturing experienced a turnaround increasing by 16.3 per cent, compared to decreases it experienced in the previous 3 years.

Figure 3.5 shows the turnover experienced by each class, the class' share of the total grocery turnover, and the legend contains each class' real growth rate over 2014-15.

Figure 3.5: Turnover, growth rate and proportion of each product class in the grocery sector (\$2014-15) (million)



Source: Based on ABS, catalogue number 8155.0

### 3.2.1 Number of enterprises in the grocery sector

There were a total of 1,554 enterprises in the grocery sector in 2015-16; an increase of 0.1 per cent from 2014-15. The distribution of enterprises across the different product categories within the grocery sector is outlined in the table below. Proportions have remained relatively stable over previous years while the overall number has decreased slightly. The largest number of enterprises continues to be located within the cosmetic and toiletry preparation manufacturing class, which represented 33 per cent of the total number of enterprises in the grocery sector.

**Table 3.2: Grocery manufacturing sector – number of enterprises**

Sector	2011-12	2012-13	2013-14	2014-15	2015-16
Sanitary paper product manufacturing	41	45	48	46	44
Human pharmaceutical and medicinal product manufacturing	323	321	320	334	337
Cleaning compound manufacturing	421	408	388	390	387
Cosmetic and toiletry preparation manufacturing	486	467	464	506	512
Polymer film and sheet packaging material manufacturing	290	280	284	277	274
<b>Total</b>	<b>1,561</b>	<b>1,521</b>	<b>1,504</b>	<b>1,553</b>	<b>1,554</b>

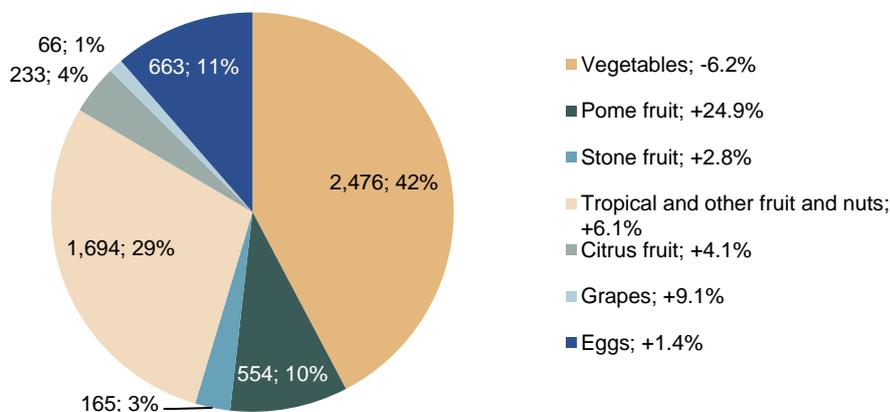
Source: Based on IBISWorld Reports C1524, C1841, C1851, C1852, C1911

### 3.3 Fresh produce sector

The fresh produce sector recorded a turnover of approximately \$5.9 billion in 2014-15. This represents an increase of 1.3 per cent on the previous year, turning around from the previous year's decrease of 11.0 per cent. All product classes with the exception of vegetables experienced growth, with the pome fruit category (including apples and pears) seeing the greatest increase, growing nearly 25 per cent. The vegetable class saw the only decrease in growth with a 6.2 per cent decline.

Figure 3.6 shows the turnover experienced by each class, the class' share of the total fresh produce turnover, and the legend has included each class' real growth rate over 2014-15.

**Figure 3.6: Turnover, growth rate and proportion of each product class in the fresh produce sector (\$2014-15) (million)**



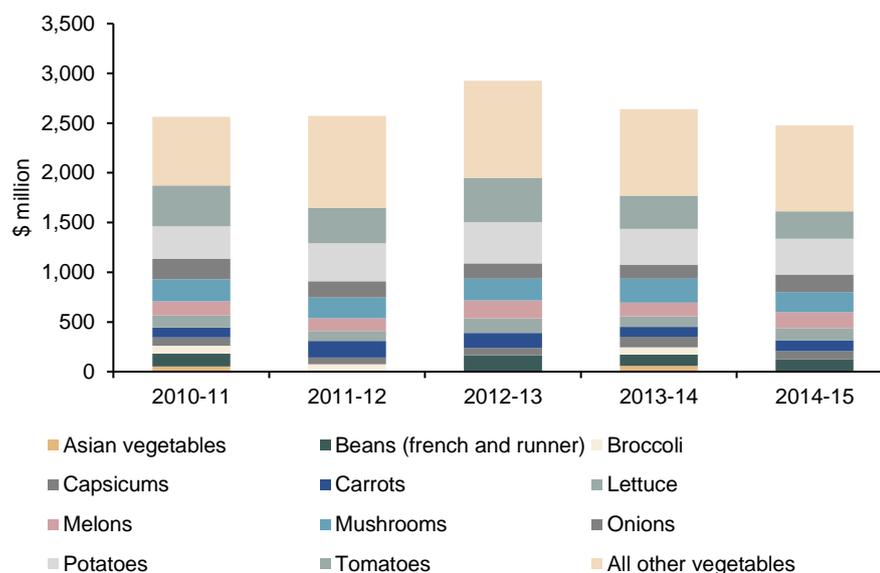
Source: Based on ABS, catalogue number 7503.0

#### Key Fact

Fresh produce turnover saw increases in all subsectors in 2014-15 with the exception of vegetables.

The largest contributor to turnover remained the vegetables product class with a turnover of \$2.5 billion, over 42 per cent of the fresh produce sector's turnover as can be seen below in Figure 3.7. The second largest group was the tropical and other fruits and nuts class, accounting for nearly 29 per cent of the sectors turnover, with almonds and macadamias experiencing growth of 49 and 43 per cent respectively.

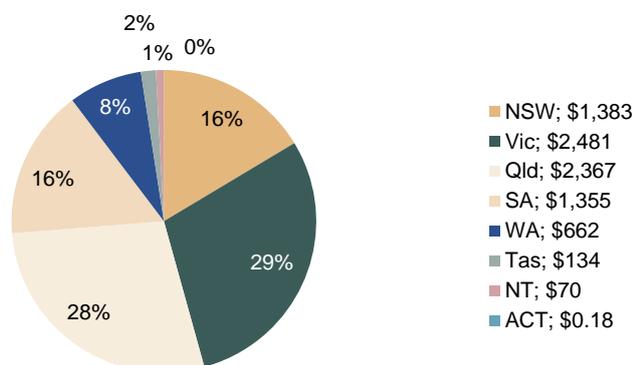
**Figure 3.7: Turnover of the fresh vegetables sector by product sub-class (\$2014-15)<sup>14</sup>**



Source: Based on ABS, catalogue number 7503.0

In 2014-15, Queensland and Victoria accounted for the largest turnover of fresh produce with market shares of 28 per cent and 29 per cent respectively. This is consistent with the previous year, with Victoria again accounting for the largest share of turnover, as represented in Figure 3.8. All other states have stayed approximately equivalent to last year.

**Figure 3.8: Value and proportion of fresh produce sector turnover by state (\$2014-15) (million)**



Source: Based on ABS, catalogue number 7503.0

**Key Fact**

Victoria continued to hold the greatest market share in the fresh produce sector.

<sup>14</sup> Due to changes in data capture for ABS catalogue number 7503.0, revenue data for Asian vegetables, beans, broccoli, capsicum, lettuce and/or melons was sometimes not collected individually/reported separately for the years 2009-10 to 2013-14. Where this was the case, the data for these vegetables was included in the "All other vegetables" category.

### 3.3.1 Number of enterprises in the fresh produce sector

Of the 27,745 enterprises operating in the food and beverage, grocery and fresh produce industry in 2015-16, nearly two-thirds (63.7 per cent) were involved in the production of fresh produce. Specifically, there were 17,970 businesses operating in the fresh produce sector; a real decline of 2.8 per cent from 2014-15 figures, with the breakdown shown in Table 3.3. This decrease was reflected across most classes, however grape growing experienced the greatest decline in growth of nearly 10 per cent.

**Table 3.3: Fresh produce sector – number of enterprises**

Sector	2011-12	2012-13	2013-14	2014-15	2015-16
Vegetable growing	6,383	6,137	6,100	5,965	6,040
Apple, pear and stone fruit growing <sup>15</sup>	2,105	2,007	1,926	1,836	2,130
Citrus, banana and other fruit growing	3,930	3,617	3,457	3,271	3,109
Grape growing	7,984	7,528	7,227	7,192	6,483
Egg farming	301	277	245	216	208
<b>Total</b>	<b>20,703</b>	<b>19,566</b>	<b>18,955</b>	<b>18,480</b>	<b>17,970</b>

Source: Based on IBISWorld Reports A0122, A0123, A0130, A0131, A0136, A0172

<sup>15</sup> IBISWorld consolidated reporting of two of its previous categories: 'Stone Fruit Growing' and 'Apple and Pear Growing' into one report called 'Apple, Pear & Stone Fruit Growing' from 2013.

### 3.4 AFGC insight

#### Policy Insight - Food and Grocery Code of Conduct – A Year On!

The Food and Grocery Code of Conduct (FGCC) enacted by the Parliament as a prescribed Code under the Competition and Consumer Act in June 2015 is one of the most significant developments for the way business is conducted in the food and grocery sector in recent years.

The Code has the support of the AFGC, representing suppliers, and the nation's three largest supermarket chains, Woolworths, Coles and Aldi, each of which have formally signed up to the Code.

The Code improves transparency and certainty for suppliers in their dealings with the major supermarket chains by imposing obligations on the retailers that are overseen by Australia's competition watchdog the Australian Competition and Consumer Commission (ACCC).

The first twelve months of the Code's application were a transition period during which the retailers had to complete a number of important tasks:

1. Ensure all of their buying teams are fully trained, compliant in their behaviours, and that policies and procedures are in adherence to the FGCC,
2. Appoint a Code Compliance Manager,
3. Act in good faith, and
4. Offer and negotiate new Grocery Supply Agreements (GSA's) with all of their suppliers.

The ACCC maintained a focus on this process, particularly the offer of code compliant GSA's, and were quick to communicate with retailers who did not undertake the negotiations in good faith.

To support suppliers' understanding of the Code obligations, legal requirements and how to get maximum benefit from it, AFGC in conjunction with NextGen developed a comprehensive training program. 1600 people from over 200 companies have attended the full day program that delivers a practical approach to all the FGCC elements and obligations, centred on real world case studies, and explores all major issues that occur in the supplier and retailer commercial relationship. This has ensured that suppliers are 'talking FGCC' with their retail contacts on a regular basis.

The signatory retailers have now trained their staff and have made internal provisions to ensure they are operating in a compliant way. Code Compliance Managers have been appointed as an internal adjudicator in regards complaints and reporting requirements.

FGCC compliant GSA's have been offered to all suppliers by signatory retailers. This is a significant process for each retailer and for all suppliers who may manage multiple accounts.

At the 1st of July 2016 irrespective of having a signed GSA or not, all suppliers dealing with signatory retailers are fully covered by the obligations within the FGCC. For those suppliers who do not yet have an approved GSA the AFGC recommends continued negotiation to a mutually acceptable position, ensuring the full benefits of the FGCC are realised by the supplier.

The last year has been a transitional period, and from July the industry began trading under the framework of the FGCC, the objective of which is to regulate standards of business conduct, to build and sustain trust and co-operation, and to support the rights of suppliers and retailers to freely negotiate terms and conditions of supply contracts and have confidence that the agreement won't be unilaterally or retrospectively altered.

If you have a specific FGCC queries, then please contact the AFGC ([codes@afgc.org.au](mailto:codes@afgc.org.au)).

**Samantha Blake**

*Director, Industry Affairs*

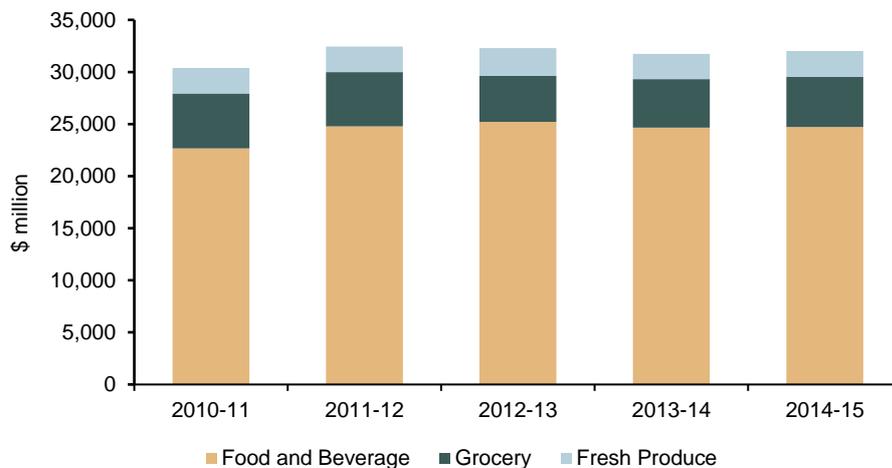
## 4 Industry value-add

- In 2014-15, the combined industry value-add for the food and beverage, grocery and fresh produce was approximately \$32.0 billion.
- Fresh Produce value add increased by 2.8 per cent while the grocery and the food and beverage sectors value-add increased by 2.4 per cent and 0.3 per cent respectively, after experiencing a decline in 2013-14.
- Labour productivity in the food, beverage and tobacco product manufacturing sector declined by almost 5 per cent, below Australia's long-term average of an increase of 0.9 per cent.

Industry value-add (IVA) is the measure of the contribution of businesses within each sector to overall gross domestic product. In 2014-15, the combined IVA from the defined industry was approximately \$32 billion; an increase of 0.8 per cent from 2013-14.<sup>16</sup> IVA has decreased marginally for the past three years, contracting on average by 0.4 per cent between 2012-13 and 2014-15, after experiencing a large increase in 2011-12 (6.7 per cent). This is in contrast to industry turnover, which has experienced increases of nearly 4 per cent during the previous two years after decreasing by 1.8 per cent in 2012-13.

This means that for every dollar in turnover, 24.5 cents (or approximately one quarter) was in IVA or was contributing to growing Australia's GDP. Food and beverage manufacturing contributed the most with \$24.7 billion, grocery \$4.8 billion and fresh produce \$2.5 billion.

Figure 4.1 Composition of the defined industry's value-add (\$2014-15)



Source: Based on ABS, catalogue numbers 8155.0, 8221.0 and 8155.0 as well as IBISWorld Industry reports A0122, A0123, A0130, A0131, A0139, A0173

<sup>16</sup> Though noting in nominal terms this was an increase of 1.3 per cent.

The IVA of the defined industry relative to other Australian industries shows that whilst the defined industry is not an industry itself (i.e. its sectors are categorised by the ABS as falling within the agriculture and manufacturing industries), its contribution to Australia's GDP is significant. Its contribution is either larger than, or equal to, that of the following industries:

- Agriculture, fisheries and forestry
- Public administration
- Education and training (private)
- Arts and recreation services.

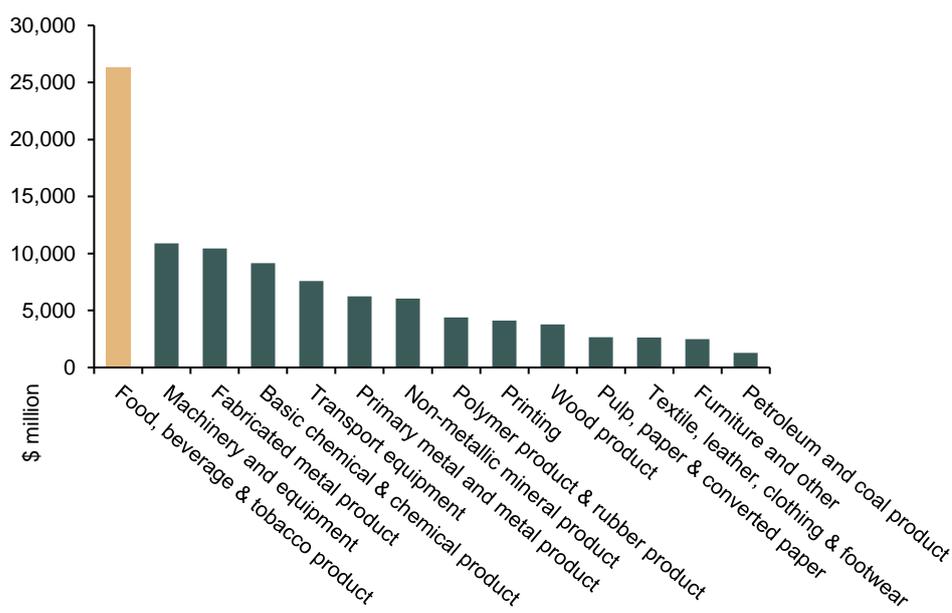
The manufacturing sector is comprised of a number of classes including the food, beverage and grocery sectors; the textile, leather, clothing and footwear manufacturing sector; and the wood product-manufacturing sector. When looking within the manufacturing sector, it is clear that the food product, beverage and tobacco sector is a key sector of this industry with a share of 26.8 per cent of IVA (see Figure 4.2).<sup>17</sup>

When the grocery<sup>18</sup> sector is included into this analysis, the defined industry then increases its share of the manufacturing industry to 30.1 per cent. The data indicates that the defined industry contributes more to the IVA of the manufacturing sector than turnover; that is, the value added to goods by the defined industry, or created, is greater than other manufactured products.

### Key Fact

The data indicates that the food and beverage sector contributes more to the value-add for manufacturing than other products in the manufacturing sector.

Figure 4.2: Manufacturing sector IVA analysis (\$2014-15)



Source: Based on ABS, catalogue number 8155.0

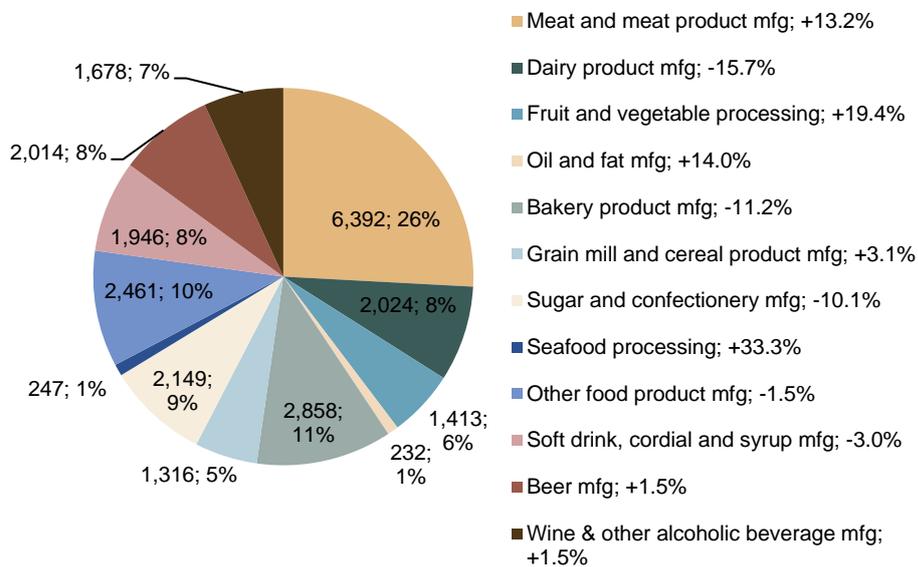
<sup>17</sup> The split between beverage and tobacco manufacturing was not available

<sup>18</sup> The grocery sector is comprised of classes that fall within the pulp paper and converted paper product sector, the basic chemical and chemical product sector or the polymer product and rubber sector that all fit within the manufacturing industry.

## 4.1 Food and beverage sector

In 2014-15, the food and beverage sector contributed \$24.7 billion (77.3 per cent) to the defined industry's total value-add. This represented a 0.3 per cent increase (or \$80.6 million) in IVA for the food and beverage sector on the previous year. Of the twelve product classes, five contracted by an average 8.3 per cent, with dairy product manufacturing experiencing the greatest decline of 15.7 per cent. The other 7 classes expanded by an average of 12.3 per cent. The primary driver of this growth was the meat and meat product manufacturing with growth of 13.2 per cent, accounting for 25.8 per cent of the sector. Seafood processing also experienced significant growth of 33.3 per cent in 2014-15. Four classes all experienced an increase over 10 per cent with these being the meat and meat product manufacturing, seafood processing, fruit and vegetable processing and oil and fat manufacturing. Figure 4.3 shows each classes IVA, its share of the total food and beverage IVA, and real growth rate over 2014-15 (shown in the legend).

**Figure 4.3 Product class IVA, growth rate and share of the food and beverage sector (\$2014-15) (million)**



Source: Based on ABS, catalogue number 8221.0, 8159.0 and 8155.0<sup>19</sup>

<sup>19</sup> IVA of the beer manufacturing sector was not available due to ABS reporting arrangements. Therefore, the value was approximated by using the historic average relative to the wine and other alcoholic beverage manufacturing sector over the preceding five periods respectively in line with prior year's reports.

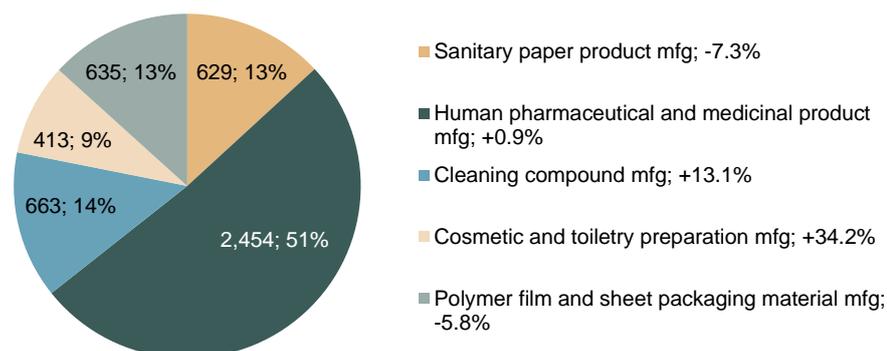
### Key Fact

The grocery sector saw another year of growth in industry value add with a real increase of 2.45 per cent, suggesting that competitive advantage is beginning to be restored in the sector.

## 4.2 Grocery sector

In 2014-15, the grocery sector had an IVA of \$4.8 billion and represented 15.0 per cent of the total defined industry's value-add. This equates to a real growth of 2.4 per cent or \$114 million. In 2014-15, 51.2 per cent of IVA for the grocery sector was from the human pharmaceutical and medicinal product manufacturing class, which recorded a growth of 0.9 per cent. Three of the five classes within the grocery sector saw IVA growth with the highest growth was experienced by the cosmetic and toiletry preparation manufacturing class with an increase of 34.2 per cent.

Figure 4.4: Product class IVA, growth rate and share of the grocery sector (\$2014-15) (million)

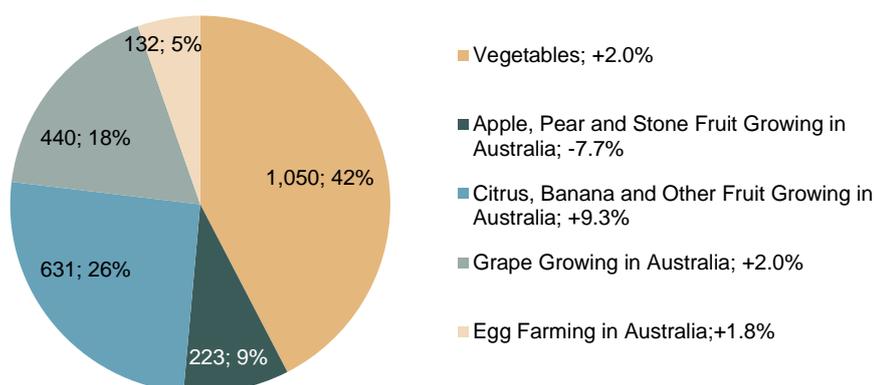


Source: Based on ABS, catalogue number 8155.0

## 4.3 Fresh produce sector

In 2014-15, the IVA for the fresh produce sector was \$2.5 billion, which was a growth of 2.8 per cent or \$67 million from 2013-14. Similar to 2013-14, growth was driven by the two largest classes being vegetable growing, experiencing growth of 2.0 per cent (42.4 per cent share), and citrus, banana and other fruit that increased by 9.3 per cent (25.5 per cent share). Apple, pear and stone fruit growing contracted for the first year by 7.7 per cent.

Figure 4.5: Product class IVA, growth rate and share of the fresh produce sector (\$2014-15) (million)



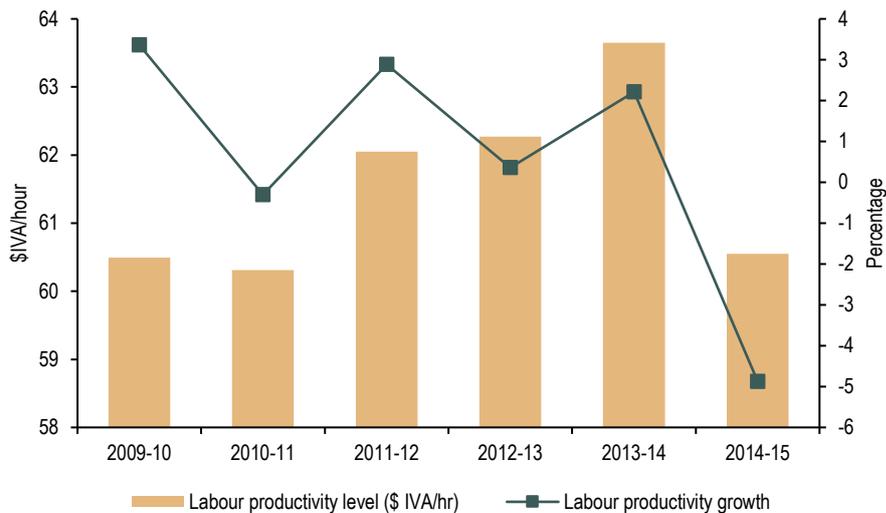
Source: Based on IBISWorld Reports A0122, A0123, A0130, A0131, A0139, and A0172.

## 4.4 Labour Productivity

Labour productivity measures the level of industry value added per hour of labour worked. In 2014-15, the food, beverage and tobacco product manufacturing sector experienced labour productivity contraction<sup>20</sup> of 4.9 per cent; well below the long term Australian industry average growth of 0.9 per cent and a turnaround from last year where the sector experienced a growth in productivity of 2.4 per cent.

Figure 4.6 illustrates the level of IVA per hour of labour worked since 2009-10 (orange bars). For every hour worked by an employee in the sector, the dollar value of output produced has been increasing each year, until 2014-15, where the dollar value of output per employee declined.

**Figure 4.6: Labour productivity of the food, beverage and tobacco manufacturing sector (\$2014-15)**

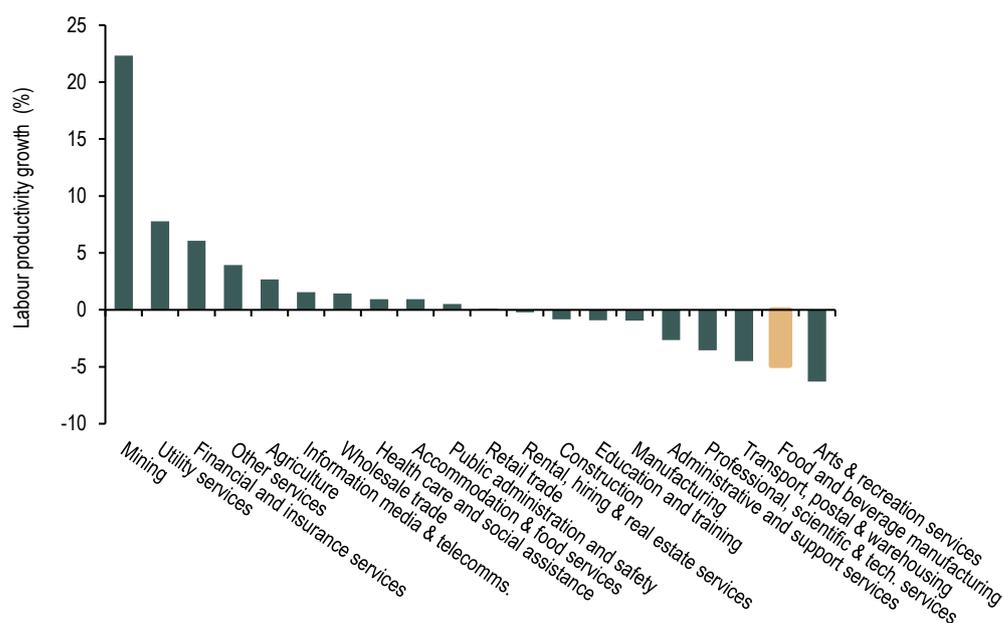


Source: Based on EY analysis and ABS national accounts data

When compared to Australia's industries, the food, beverage and tobacco manufacturing sector performed relatively poorly over 2014-15 with only arts and recreation services experiencing a greater decline in productivity growth. All other sectors experienced either an increase, or a slower rate of decline.

<sup>20</sup> An approximate labour productivity value for the food and beverage manufacturing sector has been determined using the food product manufacturing IVA data and a proxy for hours worked by the food product manufacturing sector.

Figure 4.7: Labour productivity growth of Australia's industries (2014-15)

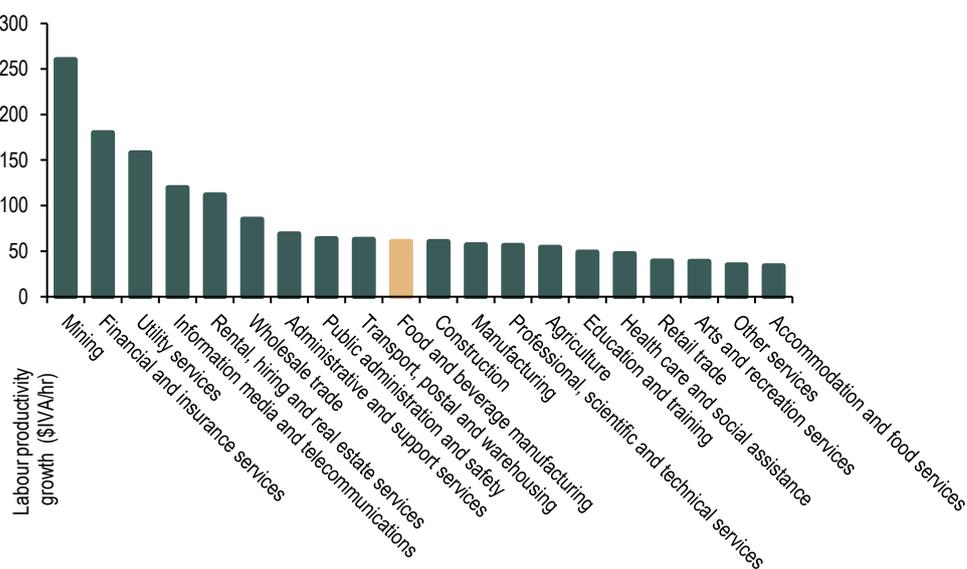


Note: Retail trade experienced near negligible growth of 0.11 per cent and thus no bar appears on the graph.

Source: Based on EY analysis and ABS national accounts data

When compared to the labor productivity of other Australian industries, the food, beverage and tobacco manufacturing sector experienced comparable levels to similar industries, and had a higher productivity level than the manufacturing industry as a whole.

Figure 4.8: Labour productivity level of Australia's industries (2014-15)



Source: Based on EY analysis and ABS national accounts data

## 4.5 AFGC insight

### Policy Insight – A National Approach to Food Safety Certification

The substantial export potential of Australian food products into the Asian region rests on the reputation, and indeed the reality, of Australian food products being of high quality, being produced in a clean environment, and above all being safe. That reputation is underpinned by a comprehensive and rigorous food regulatory system and private and proprietary food safety and quality standards.

State and Territory Food Acts and regulations require all food for sale to be safe and suitable. The regulatory provisions are the minimum required for the protection of public health and to manage adverse consequences of a breakdown in the integrity of the food supply chain. Enforcement agencies monitor the food industry's compliance with compulsory food safety regulations including through conducting periodic audits of food businesses. In recent years much has been done to reduce the number of regulatory audits through better coordination between agencies, and moving to risk-based frameworks.

In addition to compulsory food safety regulations a large number of private (proprietary and commercial) standards have been developed which incorporate requirements for safe food production as well as additional requirements which relate to other aspects of quality or methods of production. Retailers, quick service restaurants, food service companies and major manufacturers commission a large number of audits of their suppliers for compliance with these private standards. These are in addition to enforcement agencies conducting food safety audits. There is appreciable overlap with companies being audited against similar but different private standards, multiple times over short time periods representing a significant cost and resource burden on companies. The net result is an approach to food safety audit and certification across the industry which is given to replication and inefficiency.

Australia is not the only country with a reputation for quality, safe food products. Many other countries are seeking to establish greater market share for their food and agricultural products in China and other parts of Asia.

An opportunity exists for Australia to stay ahead of its competitors by:

- Streamlining and harmonising management of its food safety systems across the food industry, particularly in systems audit and reporting; and
- Promoting the harmonised national approach to food safety assurance as a distinguishing feature of Australian products in overseas markets.

Better alignment and harmonisation of commercial and proprietary standards, and auditing activities has the potential to establish a mutually supportive cross industry framework for food companies to demonstrate compliance to both regulatory and commercial food safety requirements. This, in turn, can be promoted as a National Approach to Food Safety Certification in export markets capitalising on the growing demands of consumers seeking food products which have a reputation for being safe.

Following extensive consultation with the wider food industry (retailers, quick service restaurants, food service, certification bodies and manufacturers) the AFGC has started a Food Safety Auditing Project supported by Food Innovation Australia Ltd, major retailers and state and territory jurisdictions. The objective is to streamline current auditing practices across the industry as part of establishing a National Approach to Food Safety Certification. The baked goods category is the initial focus of the project, to be followed by other categories in subsequent projects.

**Geoffrey Annison**

*Deputy Chief Executive Director*

## 5 International trade

- There was strong growth in fresh produce exports (up 49.4 per cent), grocery exports (up 31.6 per cent), and food and beverage exports (up 10.7 per cent)
- However the trade deficit increased in 2015-16 due to the large trade deficit in the grocery sector

In 2015-16, Australia's total international trade (exports plus imports) in the defined industry increased by 14.5 per cent to \$66.6 billion. Whilst both imports and exports have grown, the most significant growth in exports was within the fresh produce sector seeing real growth of 49.4 per cent. Both the food and beverage and grocery sectors have seen growth in their value traded internationally (11.8 per cent and 18.7 per cent respectively), with the fresh produce sector seeing the largest growth, with a real increase in total trade of 30.9 per cent. This was driven predominately by the increase in exports.

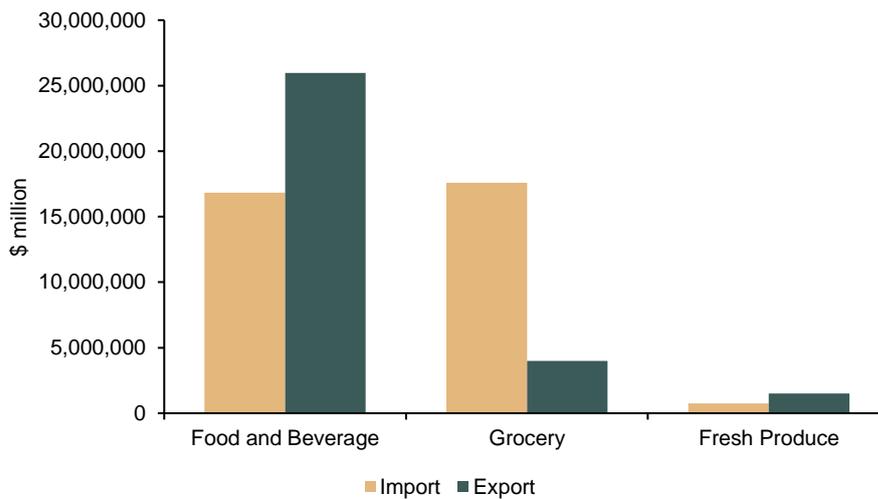
We are continuing to see export value growth driven by the devaluation of the Australian dollar. Devaluation in our currency means that export prices have been steadily dropping since 2010-11 and making Australian products cheaper – or more price competitive – relative to other countries' exports. This has enabled Australia to take advantage of market access provisions permitted under free trade agreements with our key trading partners.

The key data points of the defined industry's total trade are provided in Table 5.1. Figure 5.1 illustrates these figures and highlights that the grocery sector is driving the overall trade deficit.

**Table 5.1: Industry sector imports and exports (\$2015-16 (millions))**

Sector	Imports	Exports	Total Trade	Deficit/Surplus
Food and beverage	16,836.8	25,966.3	42,803.0	9,129.5
Grocery	17,581.6	3,992.0	21,573.6	-13,589.6
Fresh produce	757.1	1,499.4	2,256.5	742.4
<b>Total</b>	<b>35,175.4</b>	<b>31,457.7</b>	<b>66,633.2</b>	<b>- 3,717.7</b>

Figure 5.1: Industry sector imports and exports (\$2015-16)



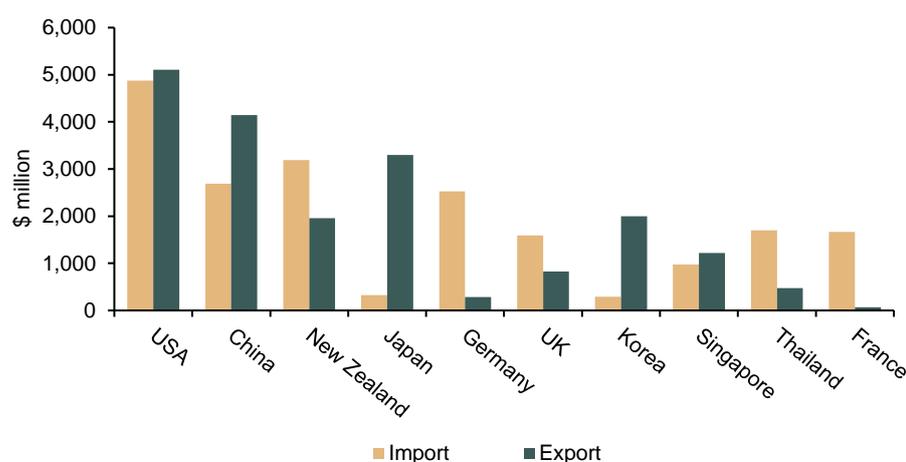
Source: Based on ABS customised report

In 2015-16, the real value of industry imports increased by 14.6 per cent to \$35.2 billion. At the same time, industry exports increased by 14.4 per cent to \$31.5 billion. This resulted in a real increase of 16.9 per cent in the overall trade deficit in the defined industry from \$3.2 billion in 2014-15 to \$3.7 billion in 2015-16. The strong increase in exports has been supported by a weaker Australian dollar and growing global demand.

In total, Australia's top 10 trading partners account for 61.6 per cent of exports and 56.4 per cent of imports of the defined industry. The USA remained Australia's largest overall trading partner having a total trade figure nearly \$10 billion.

The largest increase in exports to a single country was to China, where exports rose \$1.6 billion (or 61.4 per cent) to \$4.1 billion. This means that in 2015-16, China accounted for 13.2 per cent of total exports; behind only the USA which accounted for 16.2 per cent of exports, or \$5.1 billion. Much of this trade occurred in the meat processing industry for which exports to the USA amounted to \$3.5 billion, attributable to factors such as increasing demand and shortage in cattle herd supply in the USA, a depreciating Australian dollar and agricultural conditions (such as drought requiring the release of stock) increasing Australian supply. With the exception of the USA, the defined industry's largest import supplier was New Zealand with nearly 10 per cent of the industry's imports coming from New Zealand.

Figure 5.2: Australia's top 10 trading partners for the defined industry (\$2015-16)



Source: Based on ABS customised report

Australia's top 10 trading partners for the defined industry in 2015-16 have remained similar to the top trading partners in 2014-15. The USA has remained Australia's top trading partner, while the UK and Korea have both moved down in ranking, and France has replaced Vietnam as a top 10 trading partner.

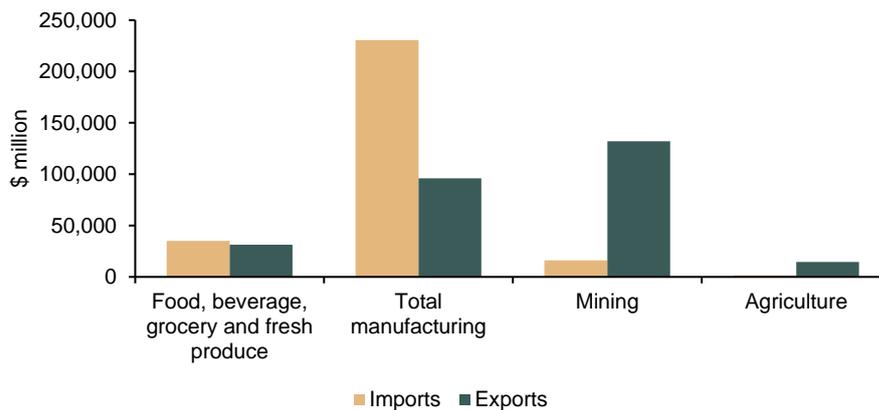
Table 5.2: Top 10 trading partner's movement

Country	2014-15	2015-16
<b>USA</b>	1	1
<b>China</b>	2	2
<b>New Zealand</b>	3	3
<b>Japan</b>	4	4
<b>Germany</b>	7	5
<b>UK</b>	5	6
<b>Korea</b>	6	7
<b>Singapore</b>	8	8
<b>Thailand</b>	9	9
<b>France</b>	-	10

Source: Based on ABS customised report

The total value of international trade in the defined sector was \$66.6 billion. When compared to total manufacturing, mining or agriculture, the sector has a fairly even balance of imports and exports, even though manufacturing overall is characterised by significant imports.

Figure 5.3: International trade, sector comparison (\$2015-16)



Source: Based on ABS catalogue 5368.0 and ABS customised report

The food and beverage and grocery<sup>21</sup> sector comprises of 19.7 per cent of the manufacturing sector's international trade. When their contribution to the manufacturing sector is broken into its components, the data indicates that the industry makes up 31.2 per cent of the manufacturing industry's exports and 14.9 per cent of the manufacturing industry's imports. This demonstrates the importance of the defined industry to manufacturing's overall level of exports.

## 5.1 Transformed food and beverage imports and exports

Food and beverage imports and exports can be classified by the degree of transformation the product undergoes prior to consumption. This distinction is reflected in the Australian data published annually by the Australian Government Department of Agriculture in Australian Food Statistics.

Australia's food exports and imports are categorised into three main categories:

- 'Minimally transformed' (such as fresh produce);
- 'Substantially transformed' (such as meat, dairy products, sugar, beverages and malt); and
- 'Elaborately transformed' (such as biscuits and confectionary).

According to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) a significant proportion of Australia's food exports consists of unprocessed or minimally transformed food products, such as wheat, coarse grains, oilseeds, live animals and fish and shell fish, which have relatively low unit values. In contrast to Australia's food exports, the substantially and elaborately transformed products with much higher unit values comprise most food imports. The substantially and elaborately transformed food products typically comprise processed meat, processed seafood, dairy, processed fruit and vegetables, oil and fat, flour mill and cereal food, bakery products, sugar and confectionary.

As discussed in Appendix B (and in previous editions), unprocessed food and fibre commodities (e.g. wheat, coarse grains, live animals, etc.) not purchased directly by consumers have not been included in industries covered by this report. Therefore, the minimally transformed category is equivalent to the fresh produce sector of the industry definition used in this report. Similarly, substantially and elaborately transformed categories are equivalent to the food and beverage sector of the industry definition. The

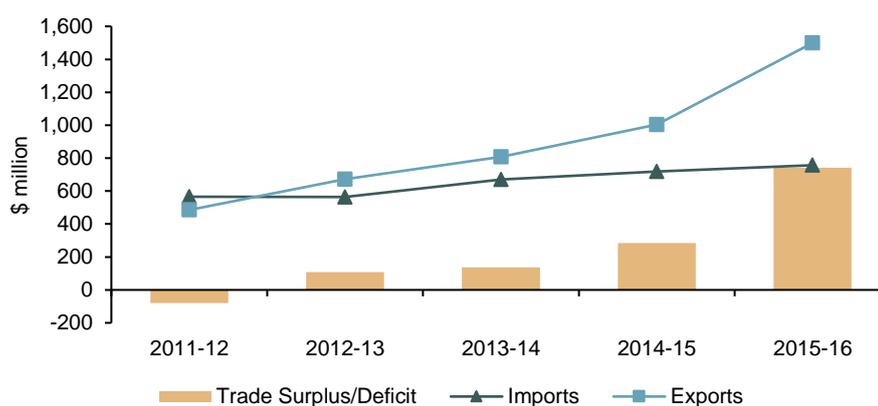
<sup>21</sup> The grocery sector is comprised of classes that fall within the pulp paper and converted paper product sector, the basic chemical and chemical product sector or the polymer product and rubber sector that all fit within the manufacturing industry.

figures below show the imports and exports of food and beverage and fresh produce products by level of transformation.<sup>22</sup>

In 2015-16, exports in minimally transformed food products increased by 49.4 per cent to \$1.5 billion. This far outpaced that of minimally transformed imports of which also saw real growth albeit at a lower rate of 5.2 per cent. These results caused a large increase of the trade surplus of which improved by 161.1 per cent, from \$284 million to \$742 million in real terms.

Figure 5.4 illustrates that since 2012-13, the growth of minimally transformed food product exports has outpaced that of minimally transformed imports in real terms. This indicates that Australia is becoming more of a global player when it comes to this type of food product and is a net contributor rather than taker globally speaking.

**Figure 5.4: Imports and exports of minimally transformed food products (\$2015-16)**



Source: Based on ABS customised report

Trade in substantially and elaborately transformed food products (essentially the food and beverage sector) is at much higher levels than those of minimally transformed food products (the fresh produce sector).

### Key Fact

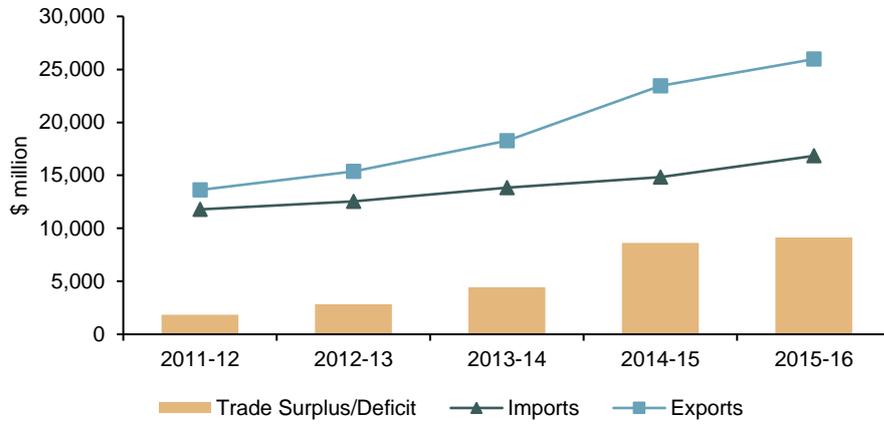
In real growth terms, the trade surplus of elaborately transformed food products has been growing at approximately 60 per cent annually since 2011-12.

Exports in substantially and elaborately transformed food products increased by 10.7 per cent during 2015-16 to \$26.0 billion, while imports increased by 13.6 per cent to \$16.8 billion. Similarly as for the minimally transformed goods, these trade balances resulted in the trade surplus increasing to \$9.1 billion (5.7 per cent real growth). This was primarily driven by growth in exports of the fruit and vegetable processing and other food product manufacturing sectors. The fruit and vegetable processing sector grew by 58.7 per cent, or \$959.8 million, and the other food product manufacturing increased by \$724.2 million, an 88.7 per cent increase on the export values in 2014-15 (as Section 5.3 further discusses).

Since 2011-12 (when the trade surplus in substantially and elaborately transformed food products was at its lowest over the last 10 years in real terms), the real value of the trade surplus has been continuing to steadily increase due to the faster pace of growth in exports relative to imports (refer Figure 5.5). In real growth terms, since 2011-12, the surplus has been growing at 59.8 per cent annually.

<sup>22</sup> i.e. the grocery sector has not been included within this analysis consistent with other and prior analyses.

Figure 5.5: Imports and exports of substantially and elaborately transformed food products (\$2015-16)



Source: Based on ABS customised report

## 5.2 AFGC insight

### Policy Insight – Regulatory Harmonisation Promotes International Trade

With increasing levels of trade in food around the Asian region a convergence of food regulatory policy and trade policy around the issue of non-tariff barriers (NTBs) is occurring. While rapidly growing trade volume is one driver, a further driver is rising concerns among consumers, and therefore Governments regarding food safety.

Governments are reviewing food safety regulations with new provisions reaching beyond their domestic borders into exporting countries. For example, registration, compliance audit and export certification of products and production facilities are being expanded. These issues can be addressed directly in government-to-government bilateral negotiations where specific matters can be raised, and resolved; and through multilateral fora.

Industry also has a role to play in garnering support from customers in export markets for the importation of safe, high quality food that supplements and complements domestic production.

One such mechanism for harmonising regulations is through the Asia Pacific Economic Cooperation (APEC) organisation. In 2007 the APEC-Food Safety Cooperation Forum (APEC-FSCF) was convened. The role of the Forum, which is co-chaired by Australia and China, is to harmonise food safety regulations among APEC members with the ultimate objective of enhancing international trade in food and agricultural products.

Initially, APEC-FSCF meetings were primarily Government to Government, but subsequently industry representation at meetings has increased as the private sector is seen more and more as critical partner in assuring the integrity of food products from production through to retail. Although common or aligned regulatory requirements are central to harmonisation, implementation of regulatory arrangements from initial proposals for regulation through to agreed enforcement protocols are also critical, particularly in the case of technical regulations addressing food safety.

During development of regulation, consultation with industry is critical to ensure regulations are practical to implement. Once gazetted, agreed enforcement approaches (ideally) eliminate the potential for different rulings on the compliance of products between exporting and importing countries' regulatory agencies.

Technical capacity building (i.e. the advanced training of scientific and technical personnel) is an additional important function of the APEC-FSCF. The food industry has been assisting in food safety capacity building across the APEC region in a number of technical areas including the development of Import Maximum Residue Limits Guidelines for Pesticides which has been led by Food Standards Australia New Zealand.

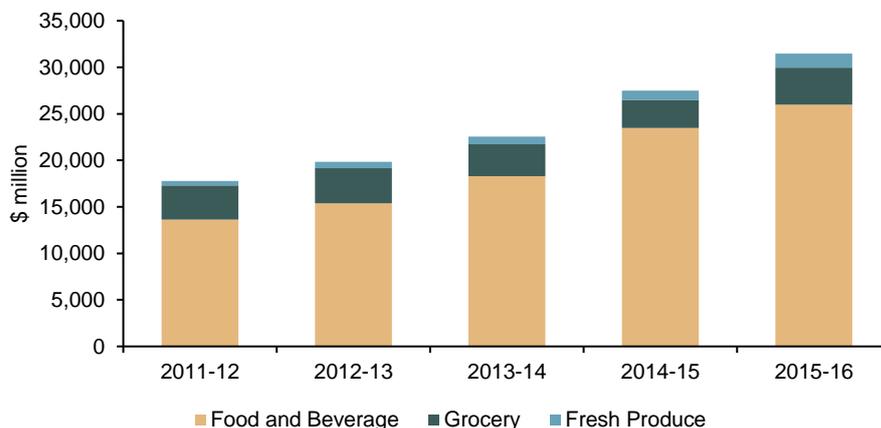
**Geoffrey Annison**

*Deputy Chief Executive Director*

### 5.3 Exports

In 2015-16, the real value of industry exports increased by 14.4 per cent to \$31.5 billion – an expansion of \$4.0 billion in real terms from the previous year. The real value of food and beverage exports increased by 10.7 per cent (\$23.5 billion to \$26.0 billion), fresh produce exports increased by 49.4 per cent (\$1.0 billion to \$1.5 billion) and grocery exports increased by 31.6 per cent following a decline in 2014-15 (\$3.0 billion to \$4.0 billion).

Figure 5.6: Australia's exports for the defined industry (\$2015-16)



Source: Based on ABS customised report

Australia's top 10 export markets for each of the food and beverage, grocery and fresh produce sectors in 2015-16 accounted for a combined 78.6 per cent of Australia's total industry exports. It can be seen that whilst the countries change ranking, the same key traders factor in all three sectors (such as USA, China, Japan and New Zealand). Further, the top 10 countries are near identical for both the food and beverage and grocery sectors with the exception of Indonesia and Malaysia. Alternatively, for the fresh produce sector, countries such as Thailand and UAE have entered the top 10 destination countries for exports (albeit at much lower levels).

Table 5.3: Australia's top 10 export markets (\$2015-16)

Food and beverage		Grocery		Fresh	
Country	\$'000	Country	\$'000	Country	\$'000
USA	4,482,316	New Zealand	738,168	China	220,298
China	3,188,574	Korea	714,245	Hong Kong	184,073
Japan	3,070,127	USA	599,737	India	116,022
Korea	1,830,196	China	255,349	Singapore	108,859
New Zealand	1,183,845	Hong Kong	180,580	Japan	108,620
Hong Kong	1,117,067	UK	147,647	UAE	103,273
Vietnam	989,366	Singapore	144,880	Indonesia	95,907
Singapore	973,130	Malaysia	135,496	Malaysia	76,660
India	784,896	Vietnam	116,585	New Zealand	61,365
Indonesia	730,354	Japan	81,916	Thailand	59,054
<b>Total</b>	<b>18,349,871</b>	<b>Total</b>	<b>3,114,602</b>	<b>Total</b>	<b>1,134,131</b>

Source: Based on ABS customised report

Table 5.4: Australia's top 10 export markets (% change from 2014-15)

Food and beverage		Grocery		Fresh	
Country	%	Country	%	Country	%
USA	-3%	New Zealand	21%	China	221%
China	43%	Korea	109%	Hong Kong	8%
Japan	2%	USA	118%	India	-27%
Korea	17%	China	-5%	Singapore	42%
New Zealand	5%	Hong Kong	36%	Japan	69%
Hong Kong	31%	UK	17%	UAE	54%
Vietnam	4%	Singapore	38%	Indonesia	63%
Singapore	14%	Malaysia	42%	Malaysia	75%
India	200%	Vietnam	44%	New Zealand	-90%
Indonesia	7%	Japan	5%	Thailand	96%
<b>Total</b>	<b>11%</b>	<b>Total</b>	<b>47%</b>	<b>Total</b>	<b>44%</b>

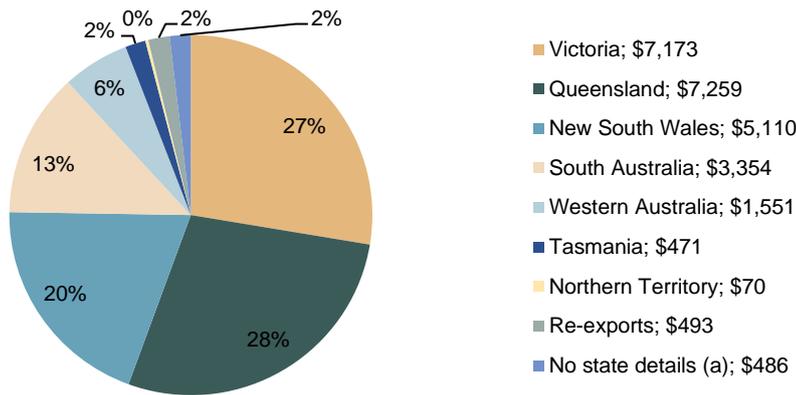
Source: Based on ABS customised report

### Key Fact

Australia has signed free trade agreements with all but 4 of our top ten export markets across the sub-sectors.

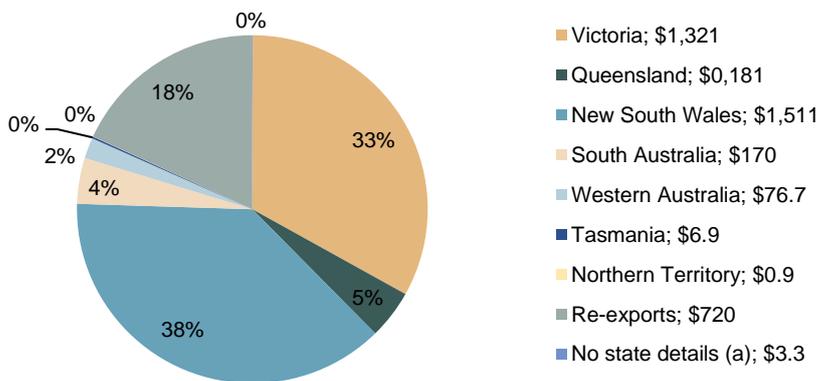
Victoria and Queensland are the defined industry's top two exporting states. Looking at each sector, these states remain dominant however the proportions widely change (excluding Queensland in relation to the grocery sector where it only contributes 4.5 per cent to exports). Of particular note is Victoria which contributes 49.4 per cent towards fresh produce exports. For the grocery sector, New South Wales plays a bigger role but with re-exports claiming the biggest proportion of a third of all grocery exports.

Figure 5.7: Value and proportion of food and beverage sector exports by state of origin (\$2015-16) (million)



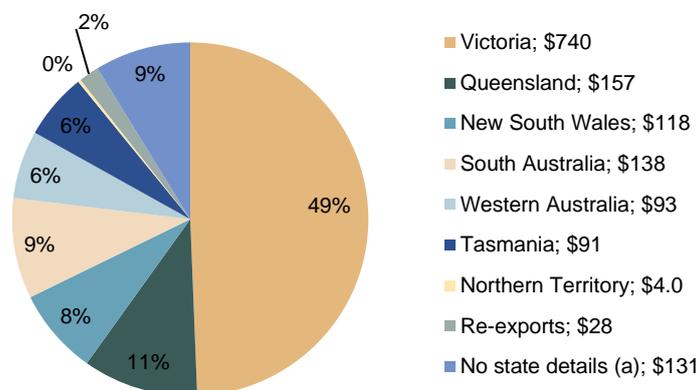
Source: Based on ABS customised report

Figure 5.8: Value and proportion of grocery sector exports by state of origin (\$2015-16) million)



Source: Based on ABS customised report

Figure 5.9: Value and proportion of fresh produce sector exports by state of origin (\$2015-16) (million)



Source: Based on ABS customised report

### Key Fact

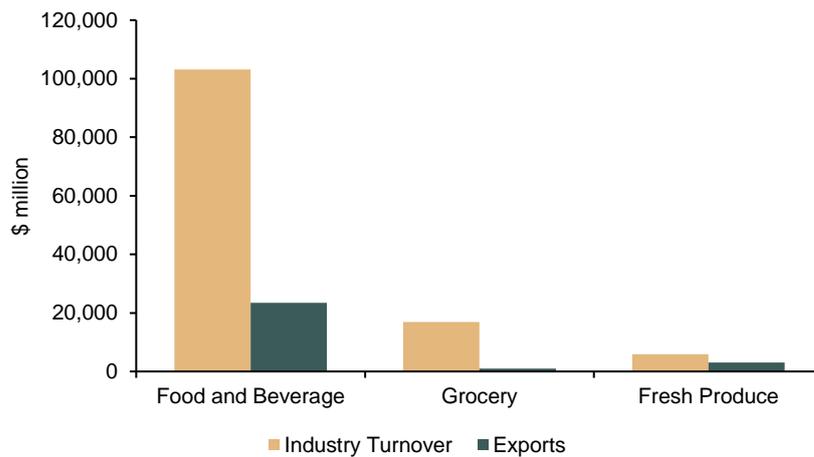
78.2 per cent of all total industry turnover is earned from sales into the domestic market

Total food and beverage, grocery and fresh produce exports for 2014-15 were 23.9 per cent of total industry turnover for the same year. During this year:

- Food and beverage sector exports represented 22.7 per cent of that sector's turnover (18.6 per cent of total turnover);
- Grocery manufacturing exports represented 6.0 per cent of that sector's turnover (0.8 per cent of total turnover); and
- Fresh produce sector exports represented 51.9 per cent of that sector's turnover (2.4 per cent of total turnover).

As a result, 78.2 per cent of total industry turnover is earned from sales into the domestic market.

Figure 5.10: Exports versus turnover for each sector (\$2014-15)



Source: Based on ABS catalogue number 8155.0 and ABS customised report

Table 5.5 and Table 5.6 show the industries with the 10 largest changes to export and import values in 2015-16, both by percentage and dollar terms. In absolute terms, fruit and vegetable processing exports expanded most significantly by almost \$1.0 billion or 58.7 per cent. The greatest absolute change regarding imports was human pharmaceutical and medicinal product manufacturing, with an increase of over \$1.6 billion, or 15.8 per cent.

Cheese and other dairy product manufacturing was the only sector to see a decline within exports, with 1.2 per cent contraction, or \$23.7 million in real terms, which is likely a result due to rapidly falling global cheese prices (global prices for most dairy products declined over the first nine months of the 2015-16 financial year), as global supplies of dairy products have exceeded global demand.

Table 5.5: Top 10 Changes in Export Value (\$2015-16)

Industry	\$'000s			
	Largest dollar value change	FY 2014-15	FY 2015-16	Change (\$)
<b>Fruit and Vegetable Processing</b>		1,635,397	2,595,182	959,785
<b>Other Food Product Manufacturing n.e.c.</b>		816,828	1,541,065	724,237
<b>Human Pharmaceutical and Medicinal Product Manufacturing</b>		2,286,684	3,013,717	727,033
<b>Wine and Other Alcoholic Beverage Manufacturing</b>		1,818,302	2,193,645	375,343
<b>Grain Mill Product Manufacturing</b>		1,395,139	1,719,713	324,573
<b>Grape Growing</b>		229,099	387,227	158,128
<b>Citrus Fruit Growing</b>		189,972	298,404	108,431
<b>Cosmetic and Toiletry Preparation Manufacturing</b>		427,690	556,856	129,166
<b>Milk and Cream Processing</b>		236,431	328,804	92,372
<b>Cleaning Compound Manufacturing</b>		150,821	232,551	81,731
Largest percentage change	FY 2014-15	FY 2015-16	Change (%)	
<b>Berry Fruit Growing</b>	1,979	5,292	167%	
<b>Apple and Pear Growing</b>	16,865	34,188	103%	
<b>Other Food Product Manufacturing n.e.c.</b>	816,828	1,541,065	89%	
<b>Grape Growing</b>	229,099	387,227	69%	
<b>Kiwifruit Growing</b>	2,464	4,152	69%	
<b>Fruit and Vegetable Processing</b>	1,635,397	2,595,182	59%	
<b>Stone Fruit Growing</b>	79,111	124,344	57%	
<b>Citrus Fruit Growing</b>	189,972	298,404	57%	
<b>Cleaning Compound Manufacturing</b>	150,821	232,551	54%	
<b>Sugar Manufacturing</b>	58,079	87,316	50%	

Source: Based on ABS customised report

Table 5.6: Top 10 Changes in Import Value (\$2015-16)

Industry	\$'000s		
	FY 2014-15	FY 2015-16	Change (\$)
<b>Largest dollar change</b>			
Human Pharmaceutical and Medicinal Product Manufacturing	10,190,774	11,800,023	1,609,249
Other Food Product Manufacturing n.e.c.	1,573,565	2,014,339	440,774
Cosmetic and Toiletry Preparation Manufacturing	1,575,106	1,942,837	367,732
Fruit and Vegetable Processing	2,403,673	2,719,295	315,622
Polymer Film and Sheet Packaging Material Manufacturing	1,771,417	2,034,321	262,904
Confectionery Manufacturing	598,511	791,687	193,176
Grain Mill Product Manufacturing	1,094,321	1,292,786	198,465
Cheese and Other Dairy Product Manufacturing	865,252	983,726	118,474
Sanitary Paper Product Manufacturing	604,546	706,175	101,629
Cleaning Compound Manufacturing	994,059	1,098,252	104,193
<b>Largest percentage change</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>	<b>Change (%)</b>
Poultry Farming (Eggs)	1,360	4,345	220%
Berry Fruit Growing	19,057	32,950	73%
Mushroom Growing	19,068	27,040	42%
Grain Mill Product Manufacturing	562,571	791,687	41%
Other Food Product Manufacturing n.e.c.	1,479,074	2,014,339	36%
Ice Cream Manufacturing	57,172	77,109	35%
Sugar Manufacturing	117,107	98,951	-16%
Cosmetic and Toiletry Preparation Manufacturing	1,480,522	1,942,837	31%
Cereal, Pasta and Baking Mix Manufacturing	342,874	435,449	27%
Cured Meat and Smallgoods Manufacturing	53,072	67,261	27%

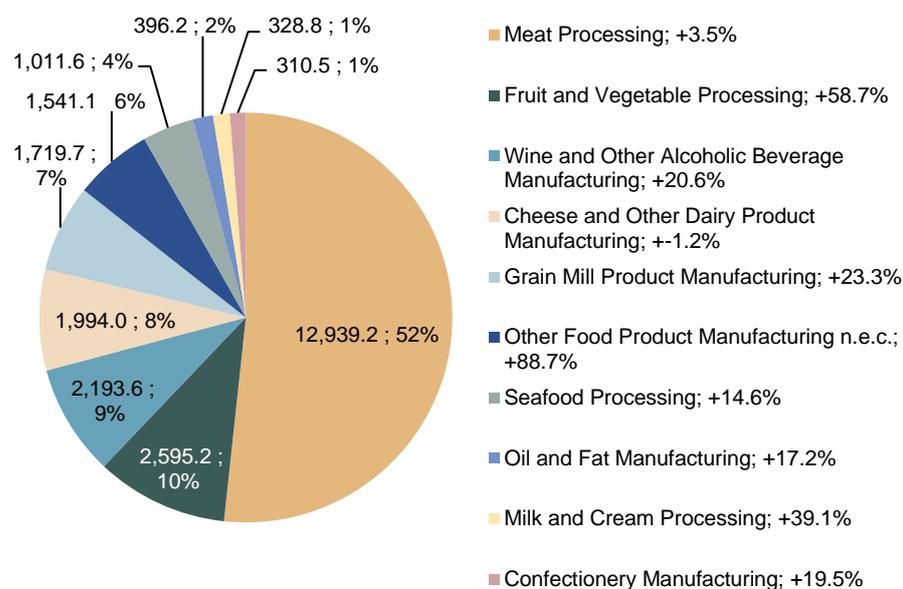
Source: Based on ABS customised report

### 5.3.1 Food and beverage exports

The majority of the defined industry exports continue to be from the food and beverage manufacturing sector, which accounted for 82.5 per cent or \$26.0 billion of the industry's total export value in 2014-15. Australia had a trade surplus of \$9.1 billion in the food and beverage manufacturing sector in 2015-16. This was a \$493.8 million increase from the real trade surplus of \$8.6 billion in 2014-15.

In 2015-16, the meat processing sector remained (for another year) the top export activity by value in the food and beverage sector, however the fruit and vegetable processing overtook the cheese and other dairy product manufacturing to become the second highest export activity by value. Meat processing exports grew 3.5 per cent to \$13.0 billion, and comprised 49.8 per cent of total food and beverage exports (note this is different to the proportions shown in the figure below as it demonstrates the proportions of the top 10 only. It is noted this differs from the figure below as the figure shows the proportion of top 10 food and beverage exports, rather than of total. However, compared to the previous year's growth of 43.1 per cent, growth this year was less significant. Fruit and vegetable processing experienced significant growth of 58.7 per cent to \$2.6 billion, and accounted for 10.0 per cent of all food and beverage exports by value.

**Figure 5.11: Growth and proportion of Australia's top 10 food and beverage exports by value (\$2015-16) (million)**

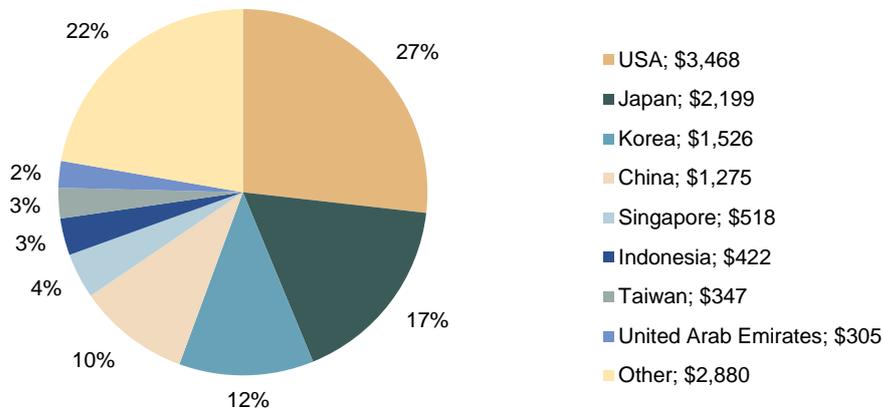


Source: Based on ABS customised report

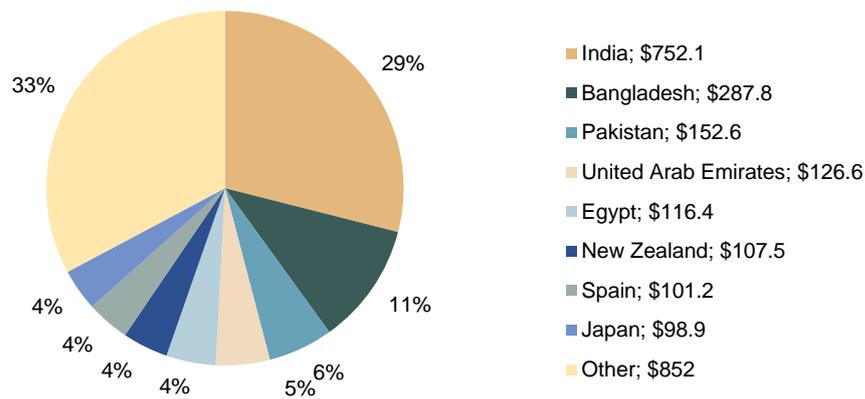
As shown in Figure 5.12, USA remained the largest importer of Australia's meat, capturing 26.8 per cent of the class' exports in 2015-16. The USA was also the largest importer of wine and other alcoholic beverage products from Australia. In the same year, India was the largest importer of Australia's processed fruit and vegetables, with their value of imports increasing 183.6 per cent when compared to 2014-15.

Figure 5.12: Australia's top three food and beverage exports and share of exports by country (\$2015-16) (million)

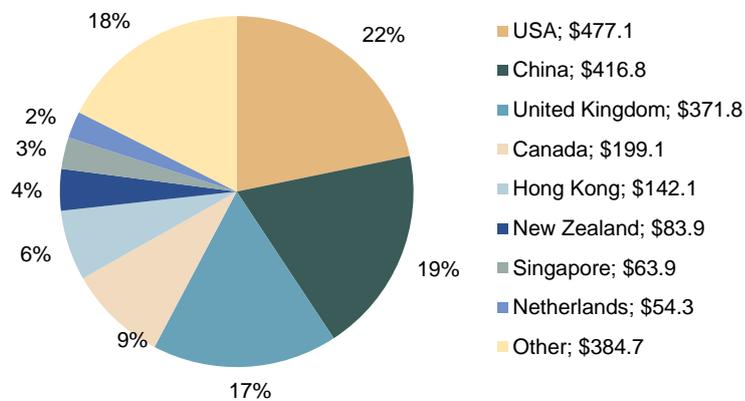
Meat processing



Fruit and Vegetable Processing



Wine and other alcoholic beverage manufacturing



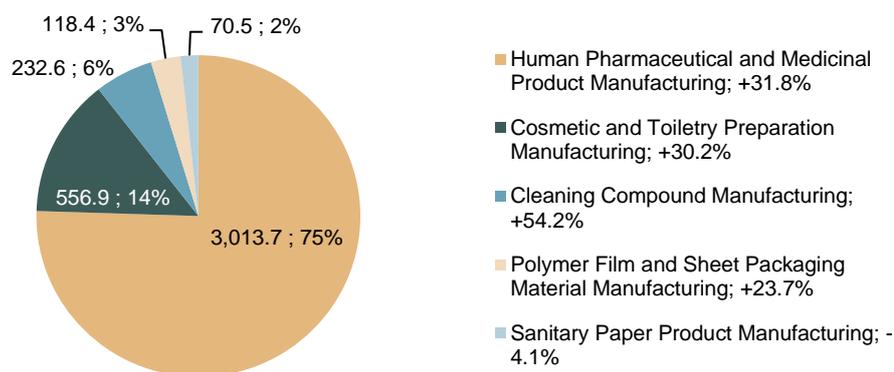
Source: Based on ABS customised report

### 5.3.2 Grocery exports

The value of Australia’s exports of goods from the grocery sector was a total of \$4.0 billion in 2015-16. This was a real increase of 31.6 per cent from the real value of grocery exports in 2014-15 of \$3.0 billion. Similarly to prior years, total grocery exports were dominated by the high value of human pharmaceutical and medicinal products which stood at \$3.0 billion, and it experienced growth of 31.8 per cent, driving growth in this sector. All other sectors experienced growth, except the sanitary paper product manufacturing sector which declined by 4.1 per cent. The trade deficit in the grocery sector increased by 12 per cent to \$13.6 billion.

Figure 5.13 shows the real growth rates experienced by each of the classes within the legend.

**Figure 5.13: Growth rate and proportion of Australia’s grocery exports by value (\$2015-16) (million)**

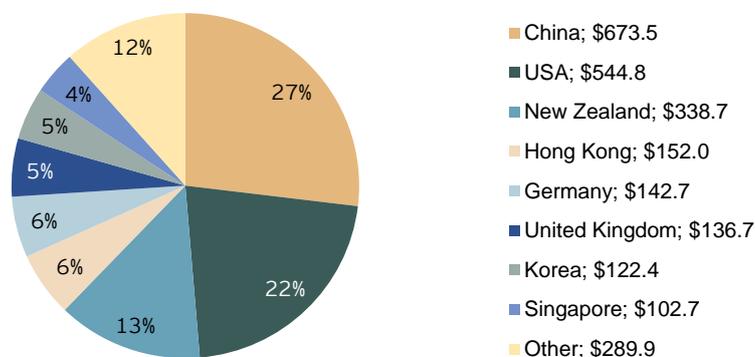


Source: Based on ABS customised report

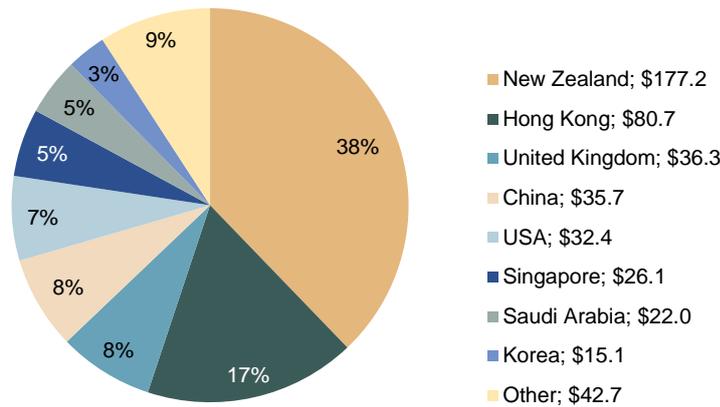
In 2015-16, New Zealand was again a key importer of Australia’s grocery exports, demanding 13.5 per cent of Australia’s human pharmaceutical and medicinal products and 37.8 per cent of cosmetic and toiletry preparation products. Compared to 2014-15, China has overtaken New Zealand and the Republic of Korea as the biggest consumer of the sector’s human pharmaceutical and medicinal products, receiving 26.9 per cent of exports.

**Figure 5.14: Australia’s top two grocery exports and share of exports by country (\$2015-16) (million)**

#### Human pharmaceutical and medicinal product manufacturing



Cosmetic and toiletry preparation manufacturing

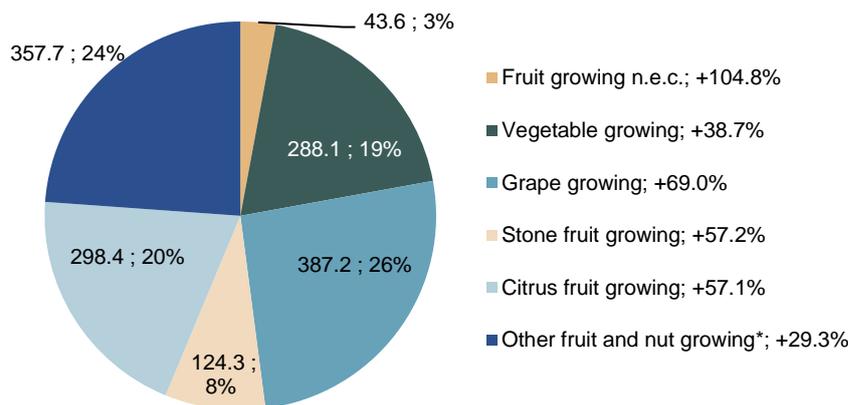


Source: Based on ABS customised report

5.3.3 Fresh produce exports

The total value of fresh produce exports increased in real terms by 49.4 per cent from 2014-15 to 2015-16 (from \$1.0 billion to \$1.5 billion). This was driven by an expansion across the board with all classes experiencing real growth well above 20 per cent (Figure 5.15 shows the real growth rates experienced by each of the classes within the legend). The largest value of fresh produce exports from Australia was from grape growing and other fruit and tree nut growing, which accounted for 25.8 per cent and 23.9 percent respectively of total fresh produce sector exports. The fruit growing sector experienced the greatest growth of 104.8 per cent, or \$22.3 million in real terms.

Figure 5.15: Growth rate and proportion of Australia's top fresh produce exports by value (\$2015-16) (million)



\*The Other fruit and nut growing category is comprised of the remainder of the exports in the fresh produce sector.

Source: Based on ABS customised report

## 5.4 AFGC insight

### Policy Insight – The Meat Processing Sector

The food and grocery sector as a whole has registered moderate turnover growth in the last five years, with export growth outperforming the overall strength of the sector. There are, however, significant fluctuations within the product classes that make up the sector. Cyclical factors in particular can cause big swings within sectors that are more sensitive to seasonal conditions or global markets.

The meat processing sector is a case in point. It constitutes 28 per cent of food and beverage processing in Australia and 52 per cent of processed food and beverage exports. It is highly sensitive to seasonal conditions that affect the numbers of livestock available for slaughter and the majority of its output is exported, making it vulnerable to global shifts in supply and demand.

Meat and meat processing manufacturing experienced 13.4 per cent in turnover growth in 2014-15, built on top of a 9.1 per cent increase the previous year. During this period of strong growth the dry conditions in Australia encouraged producers to reduce stocking levels, boosting throughput at processing plants, at the same time as the US was experiencing low beef herd numbers. Consequently, demand for beef was pushed to record levels in export markets, with Australia capturing high beef prices as well as higher export volumes.

Recent rainfall in Australia has encouraged a re-stocking, reducing the number of cattle available for processing. As a result, meat processing plants have scaled back operations leading to a sizeable drop in employment in the meat processing sub-sector in 2015-16. Export growth has slowed due to lower supply and increased competition in export markets from our major global competitors. The softening export market combined with high livestock prices is impacting returns for processors.

Given the myriad drivers of demand and supply for product classes, headline data for the sector can sometimes obscure specific challenges and opportunities within sub-sectors. However, what emerges from the data as a strong trend is Australia's need to continue building share in overseas markets. The export sector has shown the most recent growth potential and has underpinned overall turnover growth for the food and grocery sector.

**Stephen Crisp**

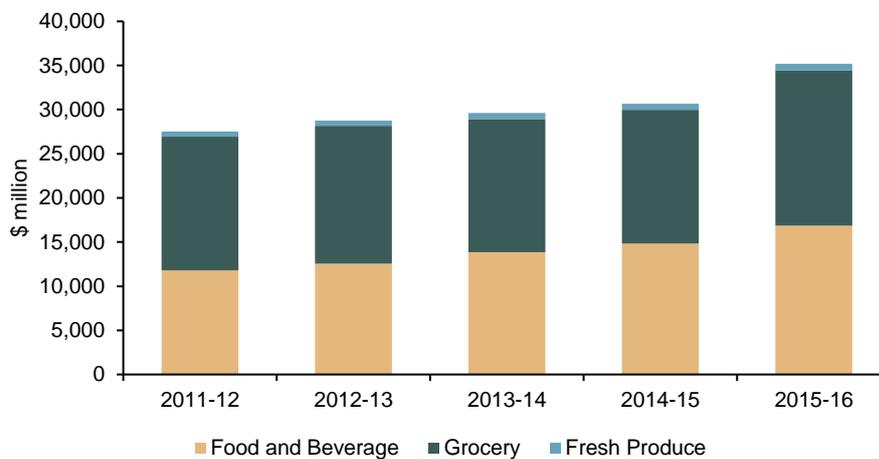
*Manager, Agribusiness Forum*

## 5.5 Imports

The total value of industry imports in 2015-16 was \$35.2 billion, an increase of 14.6 per cent from the real value of imports in 2014-15 of \$30.7 billion. The food and beverage and grocery sectors accounted for a majority of imports accounting for 47.9 and 50.0 per cent respectively with the fresh produce sector accounting for only 2.2 per cent of total imports of the defined industry. Similarly as for last year, the highest amount of imported products were grocery products; significant given its relative size when compared to the food and beverage sector.

In 2015-16, the real value of food and beverage imports increased by 13.6 per cent (\$14.8 billion to \$16.8 billion) and fresh produce imports increased by 5.2 per cent (\$719.5 million to \$757.1 million). Grocery imports increased by the greatest amount with real growth of 16.2 per cent (\$15.1 billion to \$17.6 billion) when compared to 2014-15. The growth in the grocery sector has thus been a core driver of the relatively real growth of imports overall when compared to exports of the defined industry.

Figure 5.16: Australia's imports of the defined industry (\$2015-16)



Source: Based on ABS customised report

In 2015-16, Australia's top 10 import markets for each of the food and beverage, grocery and fresh produce sectors accounted for a combined 68.9 per cent of Australia's total industry imports. Within the three sectors, the level of products imported from the top 10 countries varied widely. Specifically, the food and beverage and grocery sectors imported 64.1 and 72.8 per cent of goods from the top 10 respectively suggesting a wider range of supplier markets. Whilst in the fresh produce sector imports accounted for a significantly higher 83.5 per cent of goods from the top 10 suggesting a more condensed supplier market. This is unlike the results for exports where each of the three sectors is similar and sees around 72 per cent of their products being exported to the top 10 countries.

Further, in contrast to Australia's top 10 export markets which are predominantly based in the Asia Pacific region, the top 10 import supplier countries across all three product categories include a number of European countries and one from South America. The USA and New Zealand however, continue to dominate as the top two supplier countries for imports into Australia accounting for more than a fifth of all imports. The USA providing \$4.9 billion of the defined industry's imports (13.9 per cent) and New Zealand contributing \$3.2 billion (8.8 per cent), with a significant proportion of food and beverage imports (17.0 per cent). China however, is following closely behind accounting for 7.6 per cent of the total industry's imports.

Although the USA and New Zealand continued to be Australia's top import suppliers for fresh produce, the value of imports decreased marginally for both countries (3 per cent), whilst the value of China's imports of fresh produce grew by 32 per cent.

Table 5.7 Australia's top 10 import supplier countries (\$2015-16)

Food and beverage		Grocery		Fresh produce	
Country	\$'000	Country	\$'000	Country	\$'000
New Zealand	2,700,532	USA	2,897,174	USA	228,899
USA	1,747,463	Germany	2,083,227	New Zealand	168,998
China	1,131,172	China	1,466,324	China	89,083
Thailand	1,120,770	Ireland	1,429,029	Turkey	37,698
Singapore	864,503	Switzerland	1,174,168	Mexico	30,321
Italy	757,031	France	975,886	Thailand	17,608
France	686,754	UK	969,645	Italy	16,965
Malaysia	635,796	Sweden	626,345	Iran	16,495
UK	619,506	Italy	612,019	Peru	14,045
Vietnam	527,499	Thailand	562,938	Vietnam	12,071
<b>Total</b>	<b>10,791,026</b>	<b>Total</b>	<b>12,796,755</b>	<b>Total</b>	<b>632,182</b>

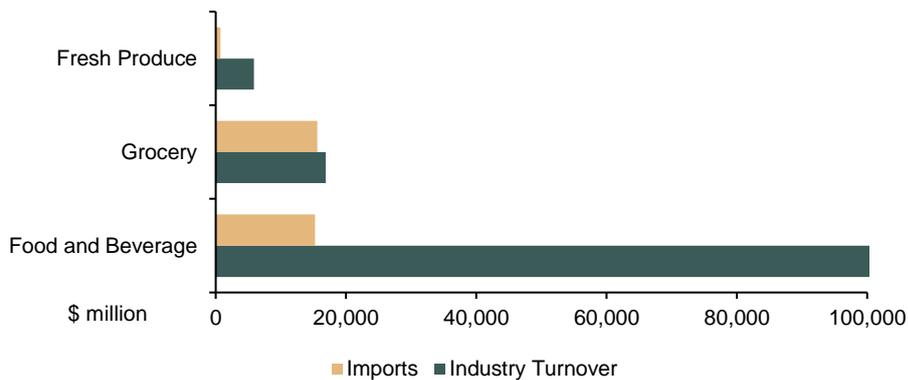
Source: Based on ABS customised report

Table 5.8 Australia's top 10 import supplier countries (% change from 2014-15)

Food and beverage		Grocery		Fresh produce	
Country	%	Country	%	Country	%
New Zealand	17%	USA	28%	USA	-3%
USA	9%	Germany	25%	New Zealand	-3%
China	14%	China	21%	China	32%
Thailand	11%	Ireland	100%	Turkey	20%
Singapore	4%	Switzerland	9%	Mexico	8%
Italy	14%	France	8%	Thailand	21%
France	23%	UK	-13%	Italy	9%
Malaysia	11%	Sweden	20%	Iran	3,481%
UK	25%	Italy	17%	Peru	12,901%
Vietnam	-48%	Thailand	3,760%	Vietnam	-86%
<b>Total</b>	<b>13%</b>	<b>Total</b>	<b>21%</b>	<b>Total</b>	<b>4%</b>

Overall, the value of the defined industry imports as a proportion of industry turnover remained constant at 25.1 per cent in 2014-15. This means, that across the combined sectors, imports stood at a quarter of the value of turnover. This was driven by the grocery sector whereby the sector's imports, as a proportion of market turnover, was over 92.4 per cent, indicating the bulk of goods sold by the sector are in fact imported rather than manufactured here in Australia. Alternatively, the food and beverage and fresh produce sectors had import to turnover ratios of 14.8 and 12.7 per cent respectively indicating that a bulk of the goods are locally grown or manufactured.

Figure 5.17: Imports versus sector turnover (\$2014-15)



Source: Based on ABS customised report

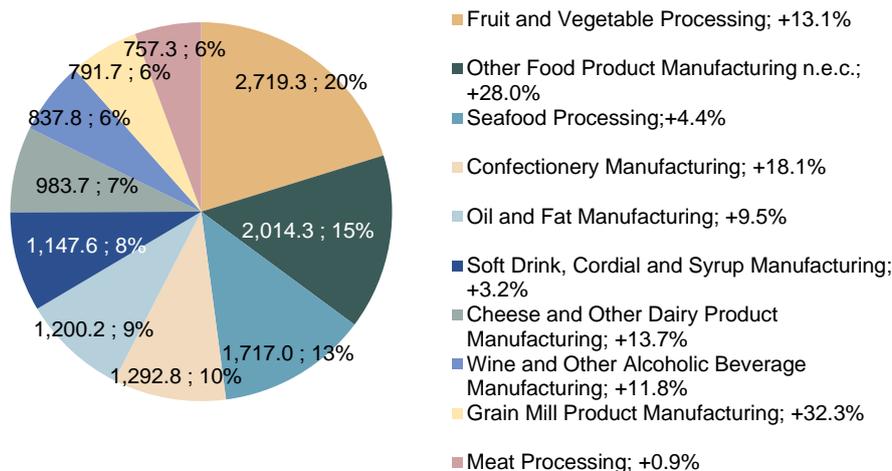
### 5.5.1 Food and beverage imports

The total value of food and beverage imports in 2015-16 was \$16.8 billion (a real growth of 13.6 per cent), accounting for over 48 per cent of the total defined industry's imports. This growth however, was outpaced by the sector's growth in exports contributing to the increase of the food and beverage sector's trade surplus.

Processed fruit and vegetable products remained the largest import category for another year and amounted to nearly \$2.7 billion in 2015-16 (16.2 per cent of total import value for this sector). Other food product manufacturing overtook the seafood processing class as the second largest importer, accounting for \$2.1 billion or 12.0 per cent of total import value for this sector.

Figure 5.18 shows the proportion of Australia's top 10 food and beverage imports with the real growth rates experienced by each of the classes within the legend. Interestingly, the biggest growth in imports was seen in the grain mill product manufacturing sector which experienced real growth of 32.3 per cent resulting in a value of total imported goods of \$791.7 million. Outside of the top 10 imports by value, sugar manufacturing was the only sector to experience a decline in growth, contracting by 20.6 per cent, or \$25.6 million.

Figure 5.18: Growth rate and proportion of Australia's top 10 food and beverage imports by value (\$2015-16) (million)

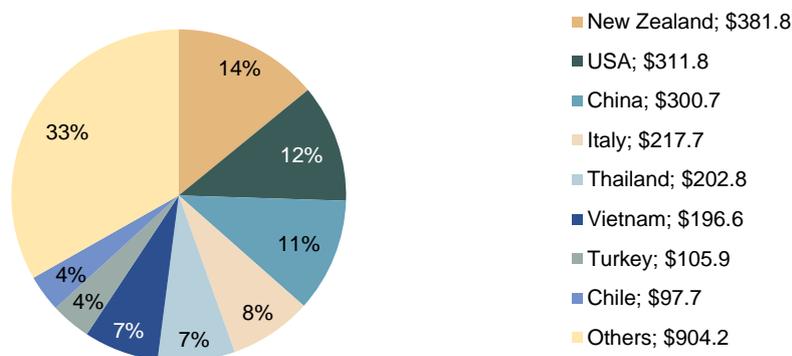


Source: Based on ABS customised report

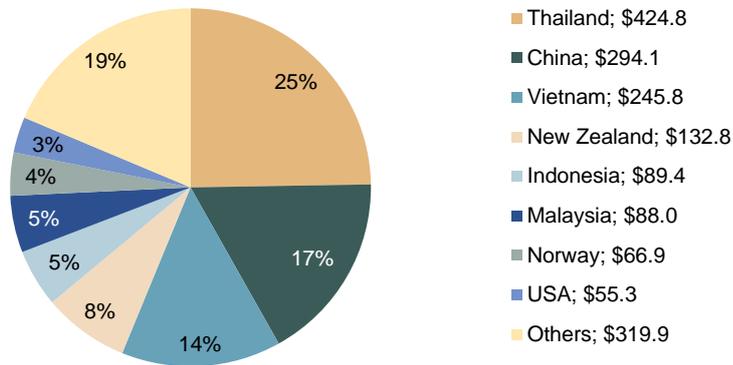
The current year (2015-16) remained relatively unchanged with regard to the top countries supplying goods to the food and beverage sector. Australia obtained its processed fruit and vegetable products and other food products primarily from New Zealand, the USA and China whilst its processed seafood imports came predominantly from Southeast Asian countries including Vietnam, China and Indonesia.

Figure 5.19: Australia's top three food and beverage imports and share of imports by country (\$2015-16) (million)

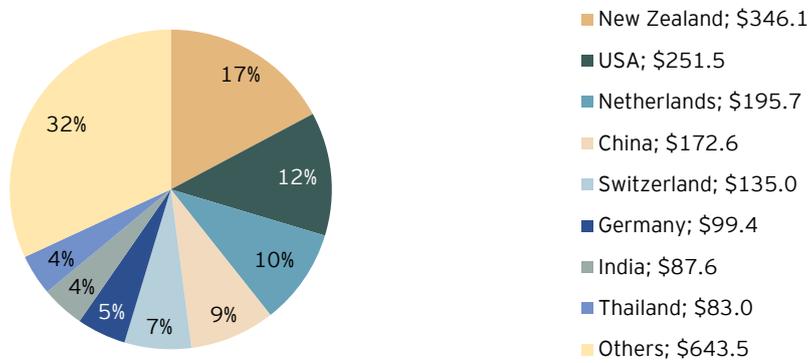
Fruit and vegetable processing



Seafood processing



Other food product manufacturing

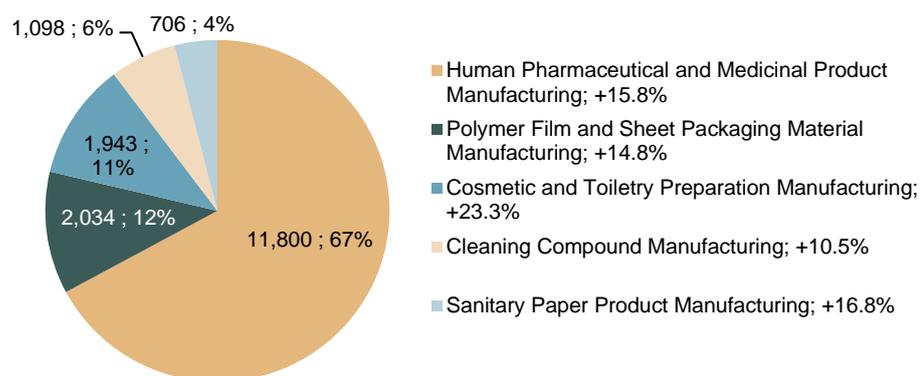


Source: Based on ABS customised report

### 5.5.2 Grocery imports

While the grocery sector only accounted for a small part of the defined industry's turnover, it was responsible for 50.0 per cent of the defined industry's imports. This highlights the high dependence on imports to meet the demand for grocery products in Australia. Overall, grocery imports grew in 2015-16, after stagnant growth in 2014-15, with 16.2 per cent real growth to a value of \$17.6 billion. Within the sector itself all classes saw real growth ranging between 10 and 24 per cent. Cosmetic and toiletry preparation manufacturing experienced the greatest growth of 23.3 per cent, or \$367.7 million.

**Figure 5.20: Growth rate and proportion of Australia's top grocery imports by value (\$2015-16) (million)**



Source: Based on ABS customised report

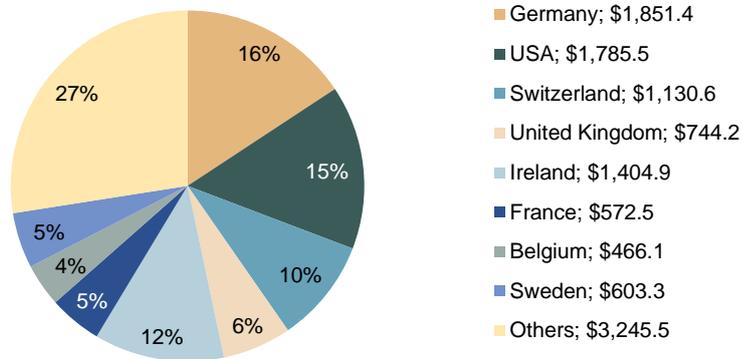
In 2015-16, Australia continued to import a higher proportion of cosmetic and toiletry preparation products and human pharmaceutical and medicinal products than it produced domestically whereby:

- Cosmetic and toiletry preparation product imports were valued at 129.7 per cent of the class' turnover; and
- Human pharmaceutical and medicinal product imports were valued at 115.2 per cent of the class' turnover.

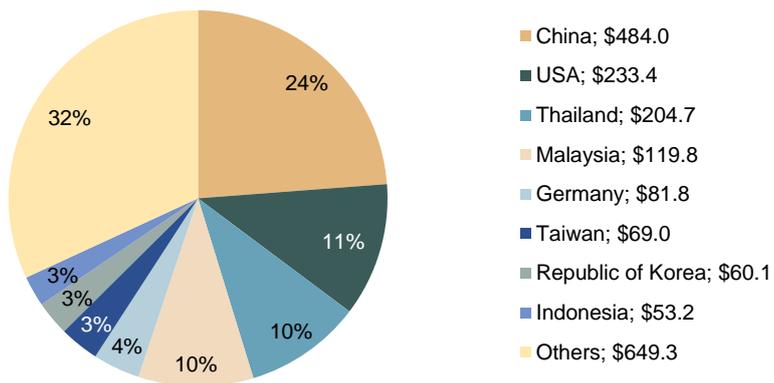
Unlike food and beverage imports, over half of the human pharmaceutical and medicinal products were imported from European countries with all top suppliers being European with the exception of the USA. Alternatively, the top suppliers for the polymer film and sheet packaging material class were (predominately) Asian countries.

Figure 5.21: Australia's top two grocery imports and share of exports by country (\$2015-16) (million)

Human pharmaceutical and medicinal product manufacturing



Polymer Film and Sheet Packaging Material Manufacturing

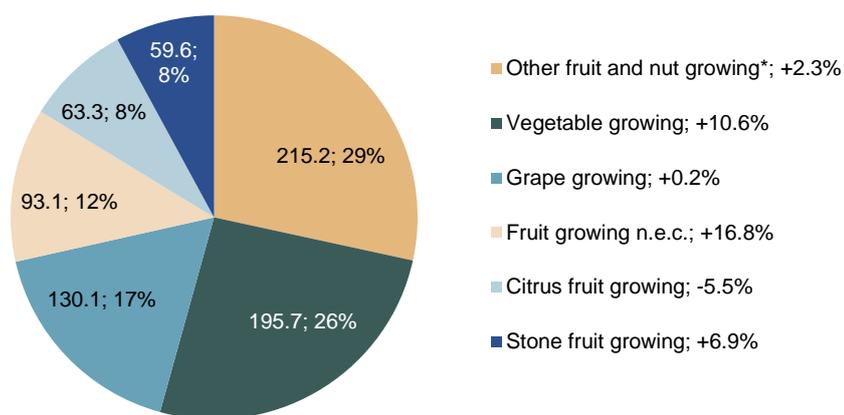


Source: Based on ABS customised report

### 5.5.3 Fresh produce imports

The total value of fresh produce imports increased in real terms by 5.2 per cent from 2014-15 to 2015-16 (from \$719.5 million to \$757.1 million). The increase in imports for the sector was spread across all categories except citrus fruit growing imports which decreased 5.5 per cent. Fruit growing imports was the leader of the sector regarding import growth with real growth of 16.8 per cent. (Figure 5.22 shows the real growth rates experienced by each of the classes within the legend). The largest value of fresh produce imports into Australia was other fruit and nut imports, which accounted for 29 per cent of total fresh produce sector imports.

**Figure 5.22: Growth rate and proportion of Australia's fresh produce imports by value (\$2015-16) (million)**



\*The Other fruit and nut growing category is comprised of the remainder of the imports in the fresh produce sector.

Source: Based on ABS customised report

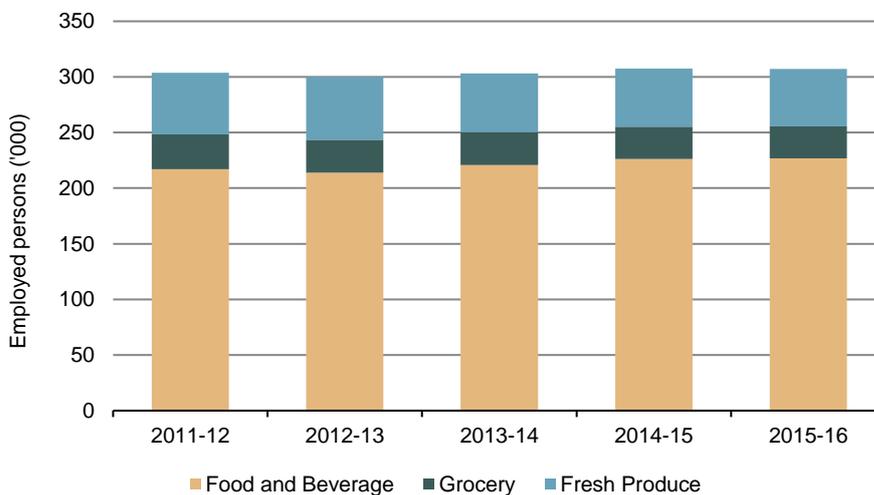
## 6 Employment

- The food and beverage, grocery and fresh produce industry in Australia employed 307,169 people in 2015-16, a decrease of 0.05 per cent or 142 employed people compared to the previous year.

Employment<sup>23</sup> in the defined industry was stable over the period (i.e. has decreased by 0.05 per cent or 142 people in 2015-16 to 307,169 people). The largest number of jobs were in the food and beverage manufacturing sector, which employed 226,727 people. This was followed by the fresh produce sector which employed 51,744 people and the grocery sector with 28,698 employees.

This report has utilised a new approach to calculating employment figures, based on the average of the four quarters annual data from the Labour Force Survey. Previously, employment figures were based on figures taken from the May Quarter only. This approach has been adopted because of the wide variability in the quarterly figures.

Figure 6.1: Employment in each of the industry sectors



Source: Based on ABS, catalogue number 6291.0, 8155.0 and IBISWorld Reports C1524, C1841, C1851, C1852, C1911, A0122, A0123, A0130, A0131, A0139, A0172.

The industries which experienced the largest decreases in employment are detailed below in Table 6.1. The decline in employment was driven by the grocery sector (net decrease of 402 jobs and the fresh produce sector (net decrease of 375 jobs). In contrast, the food and beverage sector saw a net increase of 635 jobs. The sub-sectors that influenced this increase were the fruit and vegetable processing and beverage manufacturing sectors, which increased by 4,774 and 4,174 people respectively, while other food manufacturing product and bakery product manufacturing saw employment decrease by 7,031 and 2,262 people respectively.

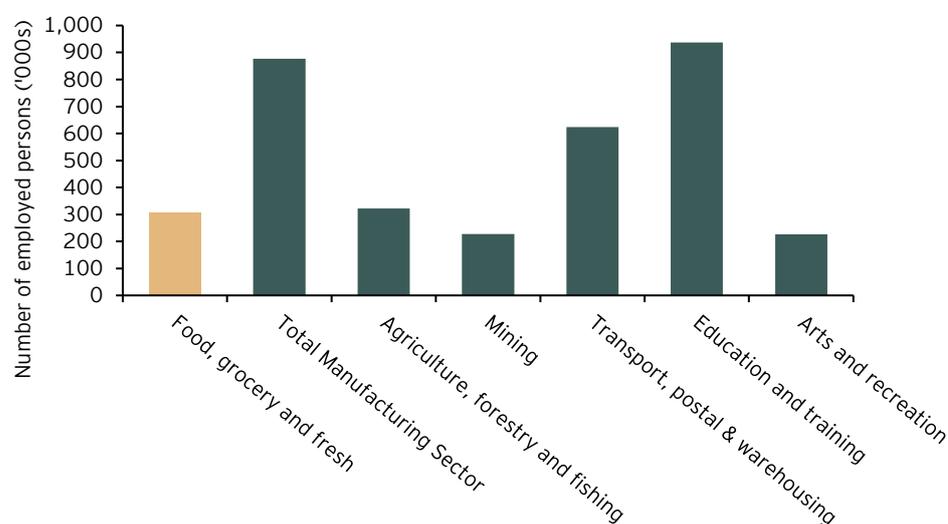
<sup>23</sup> Employment refers to the number of all persons employed irrespective of whether they are full-time, part-time or casual employees.

Table 6.1 Australia's Top changes in Employment by Sub-Sector (2015-16)<sup>24</sup>

Industry	FY 2014-15	FY 2015-16	Change
<b>Largest number change</b>			
<b>Other food product manufacturing</b>	46,878	39,848	-7,031
<b>Fruit and vegetable processing</b>	4,824	9,598	4,774
<b>Beverage manufacturing</b>	28,819	32,993	4,174
<b>Bakery product manufacturing</b>	60,541	58,279	-2,262
<b>Dairy product manufacturing</b>	12,716	13,889	1,183
<b>Meat and meat product manufacturing</b>	51,761	50,725	-1,037
<b>Oil and fat manufacturing</b>	1,320	2,207	886
<b>Sugar and confectionary manufacturing</b>	12,190	12,953	763
<b>Grain mill and cereal product manufacturing</b>	4,901	4,447	-454
<b>Seafood processing</b>	2,141	1,780	-361

The number of people employed by the defined industry relative to a sample of other Australian industries is shown in Figure 6.2. It shows that the defined industry employs a significant proportion of Australians, employing more than industries such as the mining industry, utilities and the information media and telecommunications industry.

Figure 6.2: Employment in Australian industries (Quarterly average, 2015-16)

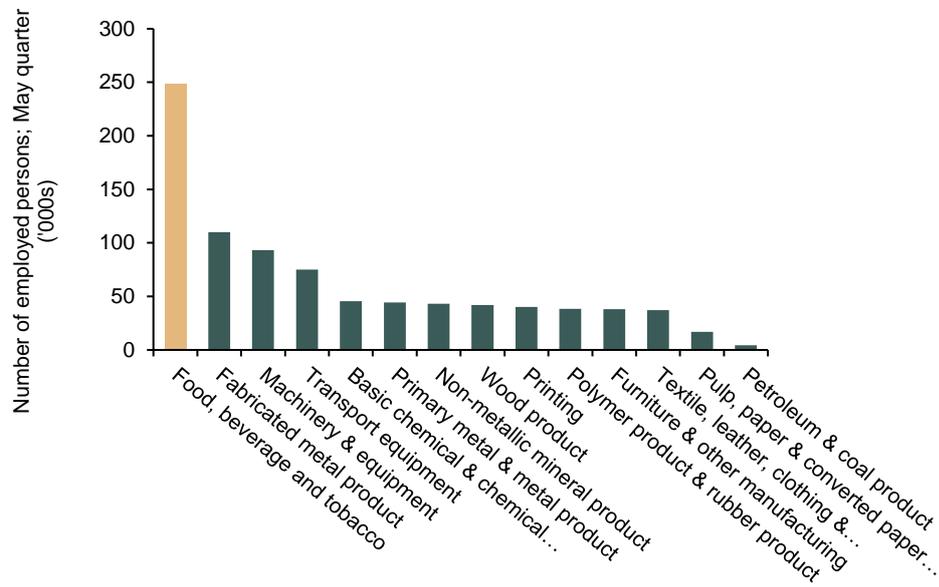


Source: Based on ABS, Catalogue number 6291.0 and IBISWorld Reports C1524, C1841, C1851, C1852, C1911, A0122, A0123, A0130, A0131, A0139, A0172

<sup>24</sup> Food and beverage employment was recorded as of May 2015.

Within the manufacturing sector, it is clear that the food, beverage and tobacco sector is a key employer, accounting for 28.4 per cent of the industry's workers (see Figure 6.3).<sup>25</sup> When the grocery<sup>26</sup> sector is included into this analysis, the defined industry then increases its share of the manufacturing industry's workers to 29.3 per cent.

Figure 6.3: Employment in the manufacturing industry (Quarterly average, 2015-16)



Source: Based on ABS, Catalogue number 6291.0, 8155.0 and IBISWorld Reports C1524, C1841, C1851, C1852, C1911, A0122, A0123, A0130, A0131, A0139, A0172

More than half of all jobs were located in New South Wales (28.9 per cent) and Victoria (28.1 per cent), followed by Queensland (21.0 per cent) and South Australia (10.8 per cent). The share of workers within New South Wales and Victoria has remained steady over the last two years at around 60 per cent. The proportions were fairly consistent across the sectors but with the food and beverage and grocery sectors having closer alignment (i.e. the spread of employees across states within each sector is near identical). For the fresh produce sector, both Victoria and NSW employed 27.4 per cent and 29.8 per cent respectively.

<sup>25</sup> The split between beverage and tobacco manufacturing was not available

<sup>26</sup> The grocery sector is comprised of a number of classes that fall within the pulp paper and converted paper product sector, the basic chemical and chemical product sector or the polymer product and rubber product sector that all fit within the manufacturing industry.

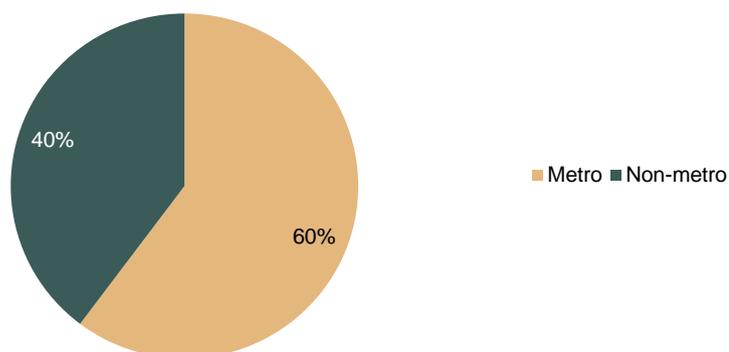
Figure 6.4: Employment by State/Territory (Quarterly average, 2015-16)



Source: Based on ABS catalogue number 6291.0 (data approximated at three digit ANZSIC06 code level)

Approximately 40 per cent of all employed persons in the defined industry worked in non-metropolitan areas in 2015-16. Victoria employed the highest proportion of people in the metropolitan area (31.6 per cent) followed by NSW (28.9 per cent). The split of employment by state and territory indicates that Queensland and Tasmania are the only states that have a higher number of food, beverage, grocery and/or fresh produce workers in non-metropolitan areas.

Figure 6.5: Employment by metro vs. non-metro area (Quarterly average, 2015-16)

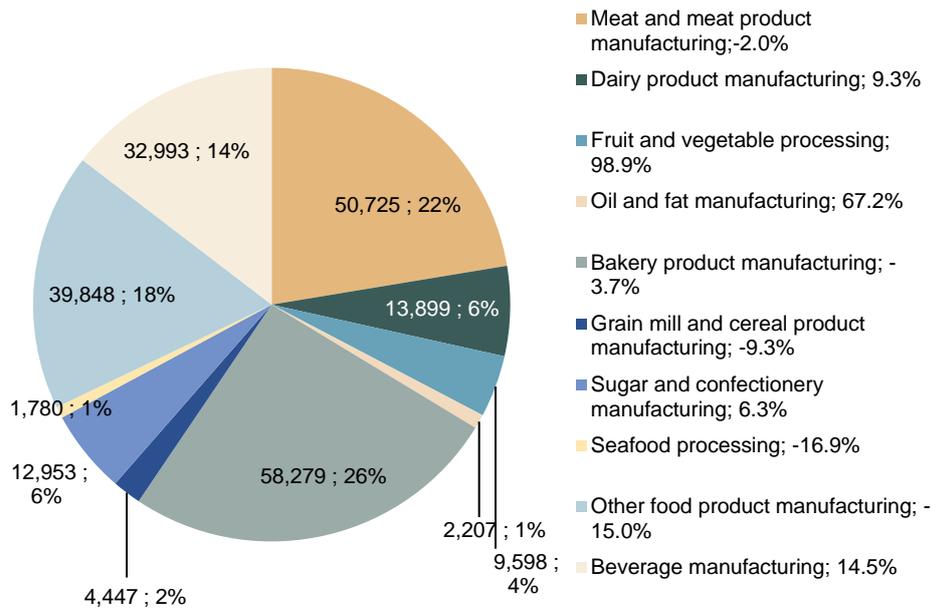


Source: Based on ABS catalogue number 6291.0 (data approximated to the one digit ANZSIC06 code level)

## 6.1 Food and beverage

The food and beverage sector employed 226,727 people across Australia in 2015-16, accounting for three-quarters of the defined industry. This constituted a 0.3 per cent increase relative to 2014-15; or 635 more workers. The largest employers in the sector were the bakery product manufacturing class (employing 25.7 per cent of workers) and the meat and meat product manufacturing class (employing 22.4 per cent of workers). Overall, the food classes saw contraction of 1.8 per cent whilst the beverage classes experienced an increase of 14.5 per cent.

**Figure 6.6: Employment in the food and beverage sector by product class (Quarterly average, 2015-16)<sup>27</sup>**



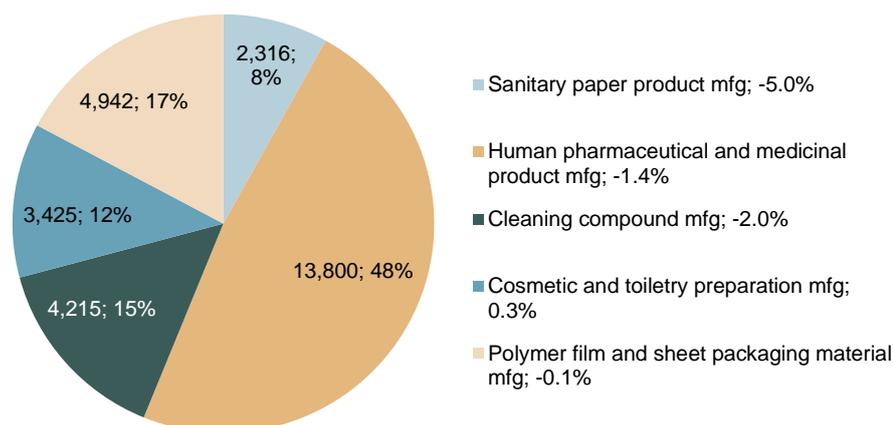
Source: Based on ABS catalogue number 6291.0 and 8155.0 (data approximated at three digit ANZSIC06 code level)

<sup>27</sup> Food and beverage employment was recorded as an average of the levels between June 2015 and May 2016.

## 6.2 Grocery

The grocery sector employed 28,698 people in 2015-16, which was a contraction of 402 people or 1.4 per cent less when compared to employment in 2014-15. Cosmetic and toiletry preparation manufacturing was the only sector to experience growth, increasing by 0.3 per cent, or 10 people. All other classes saw a decline, with sanitary paper product manufacturing decreasing by nearly 5 per cent (121 workers), and an average negative growth of 2.1 per cent across the declining sectors.

**Figure 6.7: Level, proportion and growth rate of employment in the grocery sector by product class (2015-16)**



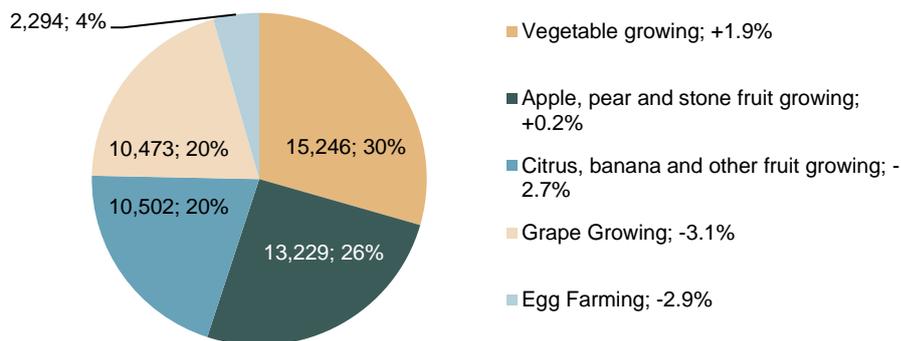
Source: Based on IBISWorld Reports C1524, C1841, C1851, C1852, C1911

## 6.3 Fresh produce

In 2015-16 51,744 people were employed within the fresh produce sector. This was 0.7 per cent less than at the end of 2014-15 (or 375 people). Although the fresh produce sector was the smallest contributor (4.6 per cent) to the total industry's turnover, it provided a significant 17.0 per cent of all jobs within the industry, which was more than the grocery sector.

All classes (with the exception of egg farming- as defined by ABS) contributed over 20 per cent of jobs each with the vegetable growing sub-sector and apple, pear and stone fruit growing sub-sector employing the most workers at 29.5 and 25.6 per cent of the sectors workers respectively. Vegetable growing also experienced the greatest growth, expanding its number of employees by a 1.9 per cent, or 290 people. Conversely, egg farming experienced the greatest drop in growth terms suffering a 2.9 per cent reduction in employees whilst citrus, banana and other fruit growing experienced the biggest loss in terms of numbers of workers, reducing its number by 290 workers to 10,502.

Figure 6.8: Level, proportion and growth rate of employment in the fresh produce sector by product class (2015-16)<sup>28</sup>



Source: Based on IBISWorld Industry Reports A0122, A0123, A0130, A0131, A0139, A0172

## 6.4 Wages and salaries

Wages and salaries paid by the defined industry to its employees were nearly \$16 billion in 2014-15. This was a real decline of 1.8 per cent or \$289.8 million when compared to 2013-14.<sup>29</sup> This decline was primarily driven by the food and beverage and grocery sectors which saw contractions of 2.5 and 0.7 per cent respectively. This represents an improvement when compared to 2013-14, where all sectors saw a decline in total wages, with the fresh produce sector experiencing the biggest decrease in total wages of 10.3 per cent, and the grocery and food and beverage sectors total wages contracting by 4.5 and 2.2 per cent respectively.

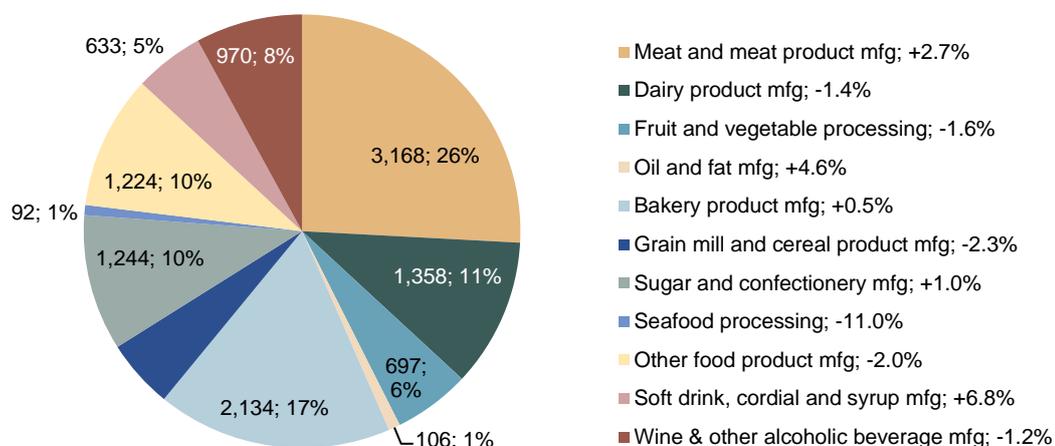
The total value of food and beverage wages and salaries in 2014-15 was \$12.3 billion, a decrease of 2.5 per cent from 2013-14. As has been the case over the last several years, the biggest contributor was the meat and meat product manufacturing segment (paying out 25.8 per cent of wages), followed by bakery product manufacturing (17.4 per cent). Whilst the meat segment aligns with the numbers of employees it had in 2014-15, the bakery product manufacturing sector appears to have a lower wage rate, as whilst it paid out 17.4 per cent of the sectors total wages, it employed nearly 26 per cent of the sectors employees. The class with the highest wage rate appears to be the dairy product manufacturing class, having paid 11.1 per cent of all wages but employing 6.1 per cent of all employees, followed by the sugar and confectionary manufacturing sector who paid 10.2 per cent of all wages, and employed 5.7 per cent of all people. All other classes appear aligned between the wages paid to employees, and the total number of people employed in 2014-15.

The largest growth in wages was experienced by the soft drink, cordial and syrup manufacturing class with real growth of 6.8 per cent whilst the largest decline was seen in the seafood manufacturing sector with a decline of 11.0 per cent. Figure 6.9 shows each class' wage level, its share of the total food and beverage wages paid, and real growth rate over 2014-15 (shown in the legend).

<sup>28</sup> IBISWorld consolidated reporting of two of its previous categories in February 2013. 'Stone Fruit Growing' and 'Apple and Pear Growing' were consolidated into one report called 'Apple, Pear & Stone Fruit Growing'.

<sup>29</sup> Wage and salary data is not yet available for the 2015-16 financial year for the food and beverage and the grocery sectors.

Figure 6.9: Growth rate, proportion and level of wages and salaries paid in the food and beverage sector by product class (\$2014-15) (million)<sup>30</sup>



Source: Based on ABS Catalogue Numbers 8155.0, 8159.0

In 2014-15, wages and salaries within the grocery sector decreased by 0.7 per cent to \$2.5 billion. This was a smaller contraction than the reduction in employees in 2014-15 (4.5 per cent). The human pharmaceutical and medicinal product manufacturing class remained the biggest contributor, responsible for 50.4 per cent of the overall total wages and salaries in the grocery sector. This class however, suffered the largest decrease in share of the spend on wages and salaries, with a real negative growth rate of 7.8 per cent (a fall of \$1.3 billion).

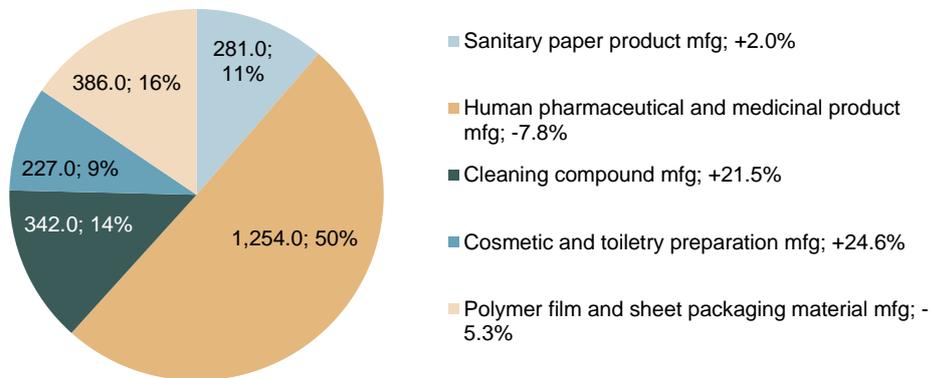
The largest increase occurred in the cosmetic and toiletry preparation manufacturing class with a 24.6 per cent increase in wages. This far outpaced growth in employment in this sector (3.7 per cent). The cleaning compound manufacturing sector also experienced similar growth, increasing by 21.5 per cent, surprisingly whilst employment declined by 1.3 per cent.<sup>31</sup>

<sup>30</sup> The Spirit Manufacturing report (C1213) was re-estimated during the last update.

New calculations resulted in significantly higher industry revenue figure, however, current figures are reported to be a more accurate representation of total revenue according to the IBISWorld definition of the industry.

<sup>31</sup> Unlike previous years, changes in employment and wages appear not to be so closely aligned, that is, where employment levels drop (increase), wages correspondingly decrease (increase).

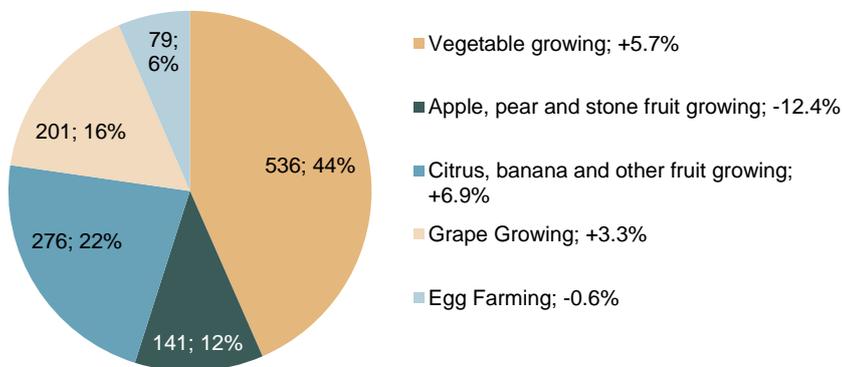
Figure 6.10: Growth rate, proportion and level of wages and salaries paid in the grocery sector by product class (\$2014-15) (million)



Source: Based on IBISWorld Reports C1524, C1841, C1851, C1852, C1911

The fresh produce sector saw its total level of wages and salaries increase by 3.2 per cent in 2014-15 to \$1.2 billion. As noted above, this is in contrast to the decrease in employment of 1.2 per cent in 2014-15. The vegetable growing class remained the largest payer of wages (43.5 per cent) and recorded an increase of 6.1 per cent (though noting that its employment level only increased by 1.9 per cent in 2014-15).

Figure 6.11: Growth rate, proportion and level of wages and salaries in the fresh produce sector by product class (\$2014-15) (million)



Source: Based on IBISWorld Industry Reports A0122, A0123, A0130, A0131, A0139, A0172

## 5.5 EY and AFGC insight

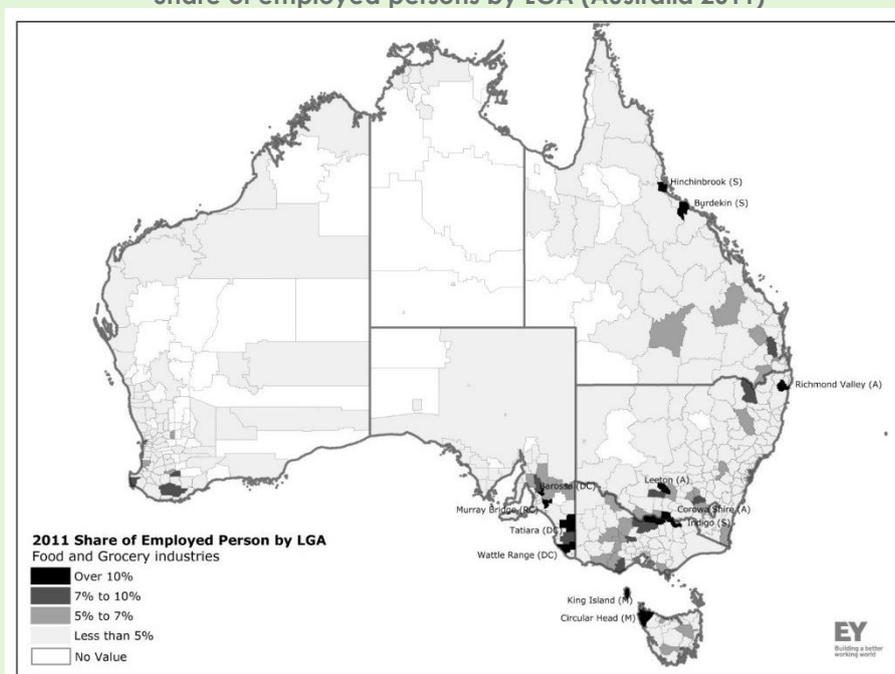
### Insight: Regional Employment

The food and grocery processing sector contributes significantly to the economic and social wellbeing of many communities around Australia. In addition to the direct employees in the sector, there are many people who are indirectly employed by the sector across its value chain. This includes suppliers of inputs (feed, chemicals, machinery), transport and distribution, and retail stores.

Using 2011 Census data the figure below shows the proportion of people directly employed in the food and grocery processing sector in Australia. There are 14 local government areas (LGAs) where 10 per cent or more of their employment is in the food and grocery processing sector. These LGAs are:

- |                         |                          |                             |
|-------------------------|--------------------------|-----------------------------|
| 1. King Island (17.6%)  | 6. Circular Head (12.8%) | 11. Richmond Valley (10.5%) |
| 2. Barossa (16.4%)      | 7. Wattle Range (12.4%)  | 12. Indigo (10.4%)          |
| 3. Leeton (15.3%)       | 8. Murray Bridge (11.1%) | 13. Tatiara (10.2%)         |
| 4. Corowa Shire (15.0%) | 9. Burdekin (10.8%)      | 14. Hinchinbrook (10.2%)    |
| 5. Griffith (13.7%)     | 10. Moira (10.6%)        |                             |

Share of employed persons by LGA (Australia 2011)



## 7 Capital investment

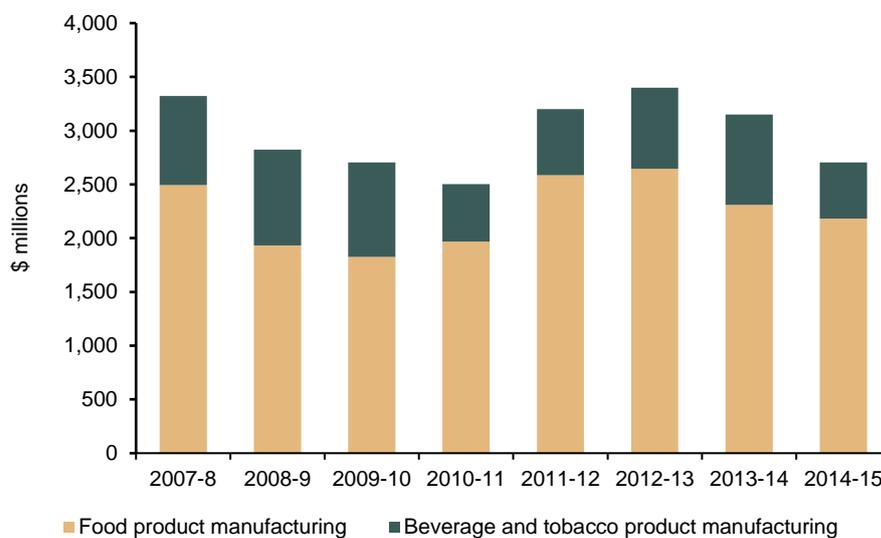
- In 2014-15, capital investment<sup>32</sup> in the food, beverage and tobacco product manufacturing industry reached just over \$2.7 billion, a real decline of 14.2 per cent.
- Capital expenditure in the food product manufacturing sector also fell by 11.6 per cent from 2013-14 levels.

While the revenue of the food production and food service sectors gives an indication of potential demand, capital investment is a direct measure of manufacturers' spending or investment on assets such as machinery and equipment and indicates potential future supply. Gross fixed capital formation - in this report called 'capital investment' - is the total level or stock of capital investment over that year on fixed assets (i.e. new and existing assets less those assets that have been disposed of).

### 7.1 Capital investment in the food and beverage sector<sup>33</sup>

Capital investment in the food, beverage and tobacco product manufacturing<sup>34</sup> was just over \$2.7 billion in 2014-15. This was a real decline of 14.2 per cent from 2013-14. This drop was driven by the beverage and tobacco product manufacturing sector<sup>35</sup> which saw a drop from nearly \$841 million in 2013-14 to \$523 million in 2014-15 (figures in real terms), or 37.8 per cent. The food product manufacturing sector saw a decrease of 5.6 per cent in 2014-15 declining from \$2.3 billion to \$2.2 billion.

Figure 7.1: Capital investment (gross fixed capital formation) (\$2014-15)



Source: Based on ABS catalogue number 8155.0

<sup>32</sup> In this report, capital investment is taken to be gross fixed capital formation. Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the reference period, plus certain additions to the value of non-produced assets realised by the productive activity of businesses. It excludes intangible assets.

<sup>33</sup> Based on gross fixed capital formation.

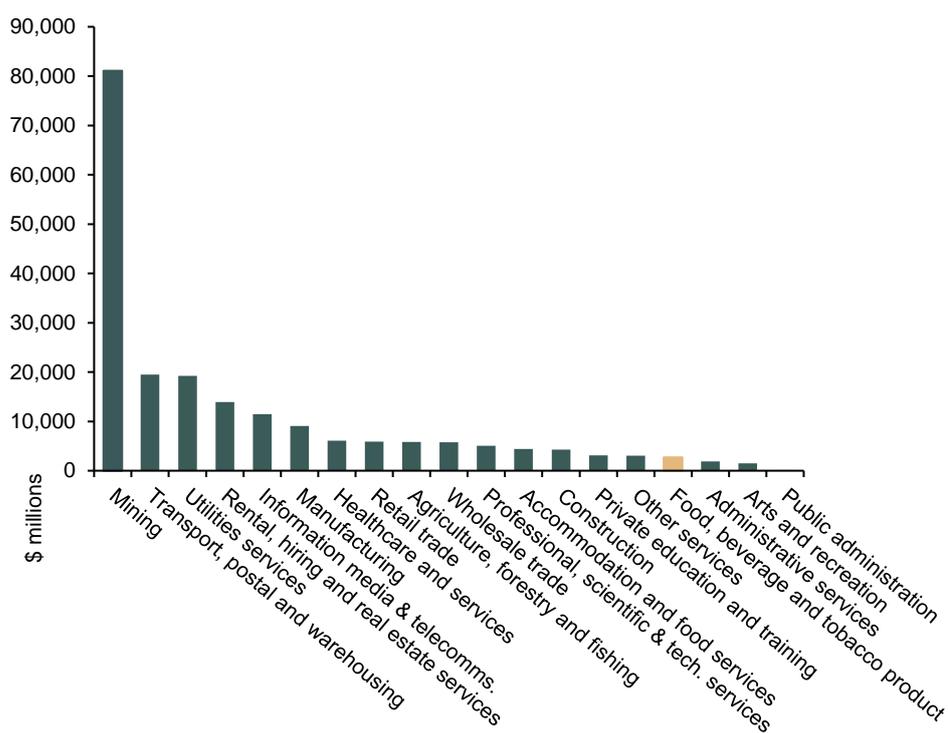
<sup>34</sup> The split between beverage and tobacco product manufacturing was not available.

<sup>35</sup> The split between beverage and tobacco manufacturing was not available.

Another measure that provides an indication of manufacturer's investment into the sector is capital expenditure which is the total expenditure on acquiring both fixed tangible and intangibles assets (so includes land, dwellings, buildings, plant, machinery, equipment, patents and licences). In the food product manufacturing sector, capital expenditure fell to just under \$2.8 billion (or a decrease of 6.0 per cent from 2013-14). The beverage and tobacco product manufacturing saw a decrease in capital expenditure by just over 27 per cent to \$770 million.<sup>36</sup> These results mean that overall, the food and beverage sector experienced a real decline of 11.6 per cent, with total capital expenditure of \$3.5 billion.

The defined industry's capital investment relative to other Australia's industries is shown in Figure 7.2. It shows that the defined industry's level of investment is similar to or greater than administrative services; education and training (private); and arts and recreation.

**Figure 7.2: Australian industry's capital investment (\$2014-15)**

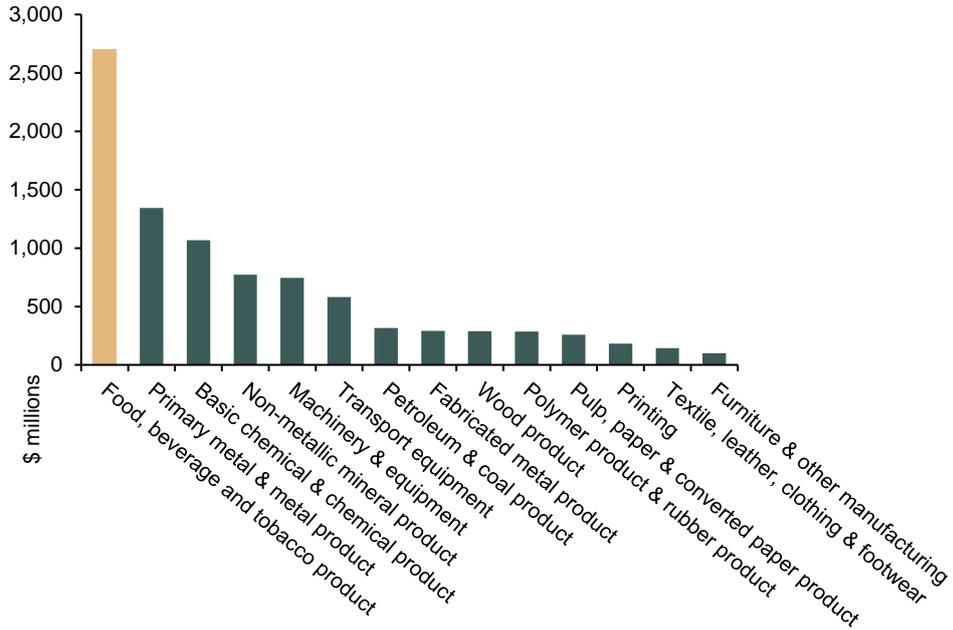


Source: Based on ABS, catalogue number 8155.0

Overall, the food, beverage and tobacco product sector accounted for 29.8 per cent of total capital investment in the manufacturing industry where total investment was \$9.1 billion. As such, the sector is a core player in the manufacturing industry when it comes to investment, and results in the food and beverage sector being the largest contributor when compared to all other manufacturing sectors (see Figure 7.3).

<sup>36</sup> The split between beverage and tobacco manufacturing was not available.

Figure 7.3: Manufacturing sector capital investment analysis (\$2014-15)



Source: Based on ABS, catalogue number 8155.0

## 7.2 EY and AFGC insight

### Insight: Capital Investment and economic contribution

Investment in the food and grocery sector provides direct and indirect impacts to the Australian economy. While investment in the food and grocery processing sector generally creates direct increases in output, employment and value-add related to the business investing, it also has significant indirect or flow-on benefits across the value-chain.

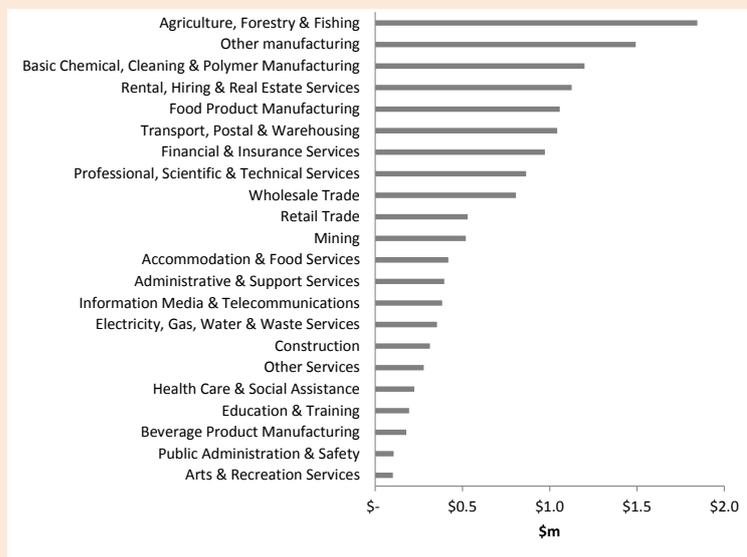
To demonstrate the impact of investment in the industry a hypothetical example of an investment of \$10 million in the food and grocery sector was used. The economic modelling shows that a \$10 million investment in the food and grocery processing sector is expected to create:

- \$14.41m in additional output, or an investment multiplier of 2.44;
- 15 new direct jobs and 45 new indirect jobs;
- \$1.16m in direct salaries and wages and a \$2.79m increase in indirect wages and salaries; and
- \$2.12m in direct value-added and a \$6.07m increase in indirect value-added.

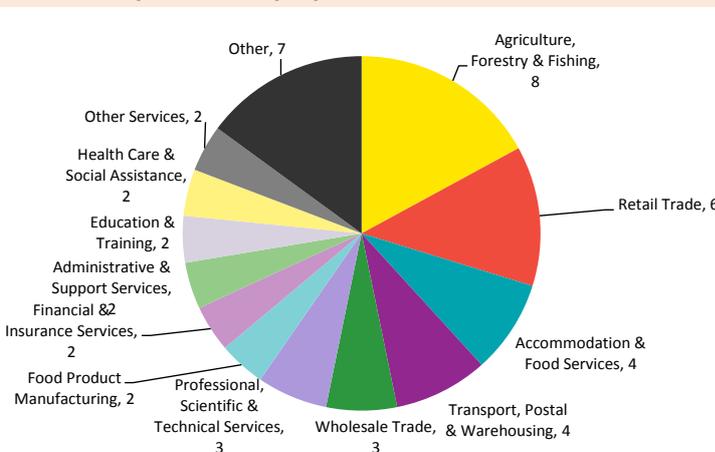
#### Indirect impact on output of a \$10 million investment in the food and grocery processing sector

A direct investment of \$10 million in the food and grocery processing sector is expected to have a flow-on effect (in terms of local purchases of goods and services). This indirect effect is expected to result in a multiplier effect of 2.44 per \$1 invested.

The major sector to benefit from an investment is the agriculture, forestry and fishing sector with an expected indirect impact of \$1.845 million in output. Other manufacturing sectors; basic chemical, cleaning and polymer manufacturing; rental, hiring and real estate services; food product manufacturing and the transport, postal and warehousing sectors are all expected to increase their output by more than \$1 million from the \$10 million investment.



#### Indirect impact on employment of a \$10m investment in the food and grocery processing sector



The sectors expected to benefit from flow-on jobs include agriculture, forestry and fishing (8 jobs); retail trade (6 jobs); accommodation and food services (4 jobs); and transport, postal & warehousing (4 jobs).

# Appendices



## A Nominal headline figures

The below sections highlight the headline figures for each of the key industry variables in nominal terms rather than in real terms as done in the body of the report. The most current year's figures for which data is available will thus be the same as stated within the body of the report. However prior year's figures and growth rates will be different as they will be in nominal terms (i.e. price factors such as CPI have not been removed from the figures).

### A.1 The industry

The defined industry had a total turnover of \$125.9 billion in 2014-15. This was an increase of 5.2 per cent when compared to the turnover in 2013-14 of \$119.7 billion.

The breakdown of this total turnover figure into the three sectors is as follows.

- Food and beverage manufacturing experienced growth of 5.0 per cent in 2014-15 to \$103.2 billion (\$98.3 billion in 2013-14).
- Grocery manufacturing experienced growth of 7.5 per cent in 2014-15 with turnover of \$16.9 billion (\$15.7 billion in 2013-14).
- Fresh produce experienced growth of 2.6 per cent in 2014-15 to \$5.9 billion (\$5.7 billion in 2013-14).

### A.2 Industry value-add<sup>37</sup>

In 2014-15, the combined industry value-add for the food and beverage, grocery and fresh produce sectors amounted to approximately \$32.0 billion; an increase of 2.1 per cent (or \$659 million) on the previous year. Food and beverage manufacturing contributed the largest to the defined industry's value-add with \$24.7 billion. This was a 1.6 per cent increase on 2013-14 results. Both the grocery and fresh produce sectors experienced growth of around 4 per cent, with value add of \$173.0 and \$97.2 million respectively.

Overall, the data indicates that for every dollar in turnover in 2014-15, 24.5 cents (or approximately one quarter) was value-add.

### A.3 International trade

The total value of international trade (imports plus exports) for the defined industry increased from 2014-15 to 2015-16 to \$66.6 billion; a nominal growth of 8.0 per cent. This can be broken down into total imports valued at \$35.2 billion (growth of 11.4 per cent) and total exports valued at \$31.5 billion (growth of 4.5 per cent). The trade activity that occurred over 2015-16 resulted in Australia's trade deficit in the defined industry increasing to \$3.7 billion (compared to \$1.5 billion in 2014-15). This is an increase of 153 per cent.

It is important to note however, that a significant driver of the large growth in exports (and thus decline in the trade deficit) has been the deterioration of Australia's terms of trade, seeing the price of Australia's export continuing to drop from its height in 2010-11. This means that on a global scale, Australia's exports are seen more attractively given relative price levels when compared to other countries.

Whilst overall Australia remains a net importer of food, beverage, grocery and fresh produce products, a different view can be seen when observing the individual sectors. The food and beverage manufacturing sector and the fresh produce sector are net exporters with the growth in the level of exports from the food and beverage manufacturing and fresh produce sectors being the driver behind the reduction of Australia's trade deficit. However, the grocery sector is a heavy net importer leading to the overall position of Australia being a net importer.

<sup>37</sup> Industry value-add is a measure of the contribution of businesses within the sector to gross domestic product.

In 2015-16:

- Exports of food and beverages increased by 1.1 per cent from \$25.7 billion to \$26.0 billion and fresh produce increased by 26.7 per cent from \$1.1 billion to \$1.5 billion. Grocery exports increased by 20.2 per cent from \$3.3 billion to \$4.0 billion.
- The food and beverage manufacturing sector and fresh produce sector imports both grew 10.4 and 12.9 per cent respectively, while grocery imports grew with a slight increase of 2.3 per cent.
- Food and beverage and grocery imports make up the bulk of total imports for the defined industry with respective proportions of 47.9 per cent and 50.0 per cent. Consequently, fresh produce comprises relatively little of the defined industry's total imports, making up a small 2.2 per cent. Given the relative turnover of each of the sectors, the data indicates that a significant proportion of the grocery sector is indeed imports.

Similar to 2014-15, high levels of imports of human pharmaceutical and medicinal products continue to be the primary contributor to the trade deficit for the defined industry with this class having an import value of nearly \$11.8 billion in 2015-16 (or a third of the total defined industry's imports). Of note, the nominal increase in exports in fruit and vegetable processing (45.0 per cent), cleaning compound manufacturing (29.0 per cent) and fruit growing (46.5 per cent) reflect growing optimism in the long term strength of the sector.

Overall, the continued stronger growth of exports in comparison to imports, particularly to China suggests improvement in the defined industry's competitiveness (though partly as a result of declining terms of trade or falling prices) and the growing global demand for Australian food and grocery products.

#### A.4 Employment<sup>38</sup>

In 2015-16 the food and grocery sector employed 307,169 people, an increase of 142 employed since 2014-15.

- 226,727 were employed in food and beverage processing;
- 28,698 were employed in grocery (non-food) manufacturing; and
- 51,744 were employed in the fresh produce sector.

#### A.5 Capital investment

While the revenue of the food production and food service sectors gives an indication of potential demand, capital investment is a direct measure of manufacturers' spending or investment on assets such as machinery and equipment and indicates potential future supply. Gross fixed capital formation - or in this report called 'capital investment' - is the total level or stock of capital investment over that year on fixed assets (i.e. new and existing assets less those assets that have been disposed of).

In 2014-15, capital investment in the food, beverage and tobacco product manufacturing industry reached just over \$2.7 billion, a decline of 13.1 per cent from the previous year. This drop was driven by the beverage and tobacco product manufacturing sector<sup>39</sup> which saw a drop from \$830 million in 2013-14 to \$523 million in 2014-15. The food product manufacturing sector also saw a decline of 5.6 per cent in 2014-15 decreasing from \$2.3 billion to \$2.2 billion.

Overall, the food, beverage and tobacco product sector accounted for 29.8 per cent of total capital investment in the manufacturing industry where total investment was just under \$9.1 billion. This results in the food and beverage sector being the largest contributor to capital investment in the manufacturing industry when compared to all other manufacturing sectors.

Another measure that provides an indication of manufacturer's investment into the sector is capital expenditure which is the total expenditure on acquiring both fixed tangible and intangibles assets (so includes land, dwellings, buildings, plant, machinery, equipment, patents and licences). In the food product manufacturing sector, capital expenditure fell to below 2013-14 values to just over \$3.5 billion (or a decrease of 10.5 per cent).

<sup>38</sup> Employment is not impacted by inflation however the key numbers have been reported here for completeness.

<sup>39</sup> The split between beverage and tobacco manufacturing was not available.

## B Methodology

Since the release of the State of the Industry 2009 publication, the Australian Bureau of Statistics (ABS), which is the primary source for the data used in this report, has discontinued some aspects of its statistical reporting. Where this is the case, a footnote in the report details the new source used to update the figure or table and the difference between the two sources. In some instances, the ABS plans to re-introduce discontinued publications in the future. In the interim, it has released experimental estimates of key variables which have been used in parts of this report.

In compiling this report, the most recent data available has been used to update the figures and tables. As a result, the data in some sections of the report are as up-to-date as 2015-16, whereas some other figures are only updated until the year 2014-15. Specifically:

- 2014-15 data: turnover, value-add, wages, and capital expenditure
- 2015-16 data: international trade and employment

Wherever possible, the figures and tables have been presented in a form comparable to the 2015 report, although given data limitations, this has not always been possible. Due to the unavailability of data, some figures have not been carried forward into the State of Industry 2016 report. A note has been made in the relevant parts of the report to alert the reader to these changes.

This report has utilised a new approach to calculating employment figures, based on the average of the four quarters annual data from the Labour Force Survey. Previously, employment figures were based on figures taken from the May Quarter only. This approach has been adopted because of the wide variability in the quarterly figures.

Readers are advised to exercise caution when comparing data in this 2016 report to that published in previous reports. This is due to four reasons:

1. Data may have been taken from an alternative source when compared to prior year's reports.
2. Caution should be applied when comparing data before and after the Australian and New Zealand Standard Industrial Classification (ANZSIC) code changes in 2006. Unless indicated otherwise, this report uses the ANZSIC 2006 terminology.
3. In some instances, IBISWorld reports did not align with the ANZSIC 2006 codes chosen for the figures and tables in this report. In such cases, the IBISWorld data was allocated to the category of 'best fit'. This means that in some cases, the data reported for a particular category or sector by ABS did not match exactly with the corresponding data reported by IBISWorld.
4. The data for prior years has been adjusted for inflation each year the report is published. Therefore, the use of real data (inflation adjusted) in the report limits direct comparability with prior years' reports. For example, in this 2015 report, figures have been adjusted to the value for the most recent year for which data is available meaning all dollar terms are either in 2014-15 or 2015-16 dollar terms.

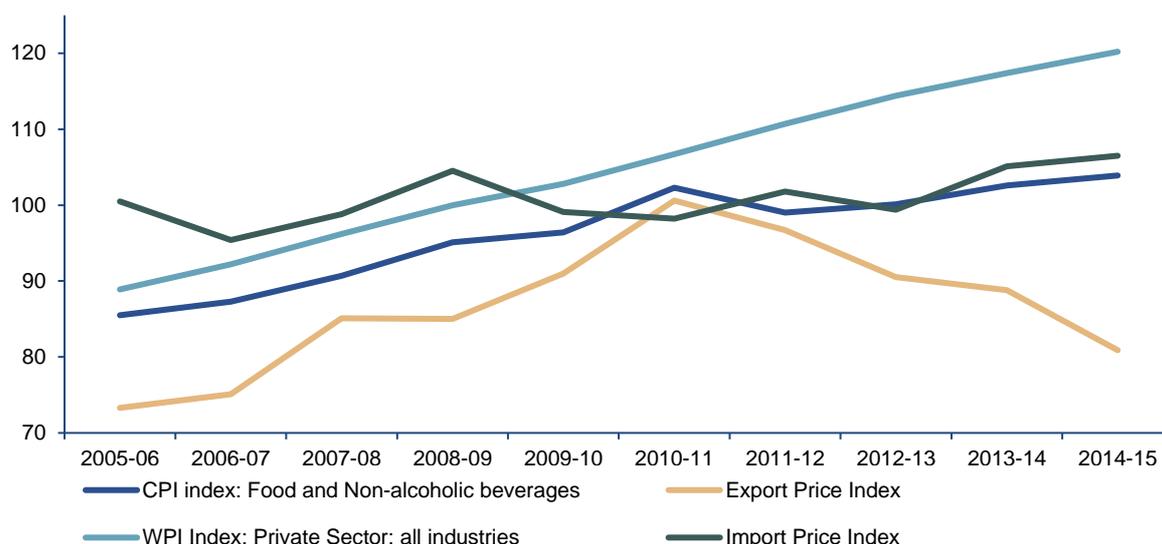
### B.1 Updating data in the charts and tables

In order to facilitate consistency with the State of the Industry publications for 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016, when compiling the charts and tables for this report re-estimates of the data have not been sought. However, it is important to note that the ABS and IBISWorld have made, in some cases, updates to historical numbers. In such cases, this report is based on the most recent estimates available. For more detail regarding these revised estimates please refer to the appropriate IBISWorld industry report or the ABS catalogue. Consult the explanatory notes within these source documents for a more detailed explanation of the methodology used in re-forecasting data.

To ensure comparability of data in the figures and tables within this report, historical data has been adjusted for inflation until the most recent year for which data is presented. The inflation-adjusted figures are referred to as real values and are used in comparisons and growth calculations. The following indices have been used to adjust figures to real terms with Figure B1 illustrating their movement since 2005-06:

- Consumer Price Index (CPI); Australia; June 2016; Food and non-alcoholic beverages index.<sup>40</sup>
- Wage Price Index (WPI); Australia; June 2016; Ordinary time hourly rates of pay excluding bonuses; Private sector; All industries.<sup>41</sup>
- Import price index; Australia; All groups<sup>42</sup>
- Export price index; Australia; All groups<sup>43</sup>

Figure B.1: Movement of indices used within this report to adjust figures



## B.2 Defining the industry to be covered by the report

Prior to commencement of this publication series, the industry sectors covered by the report had not previously been described collectively by industry or government agencies. Those selected for inclusion in the report share a number of common features at product and/or operational levels and consequently also in the business challenges they face. The definition used to determine whether industry sectors should be included was:

*Those industries that provide value-add to agriculture, food and other products for the purpose of producing everyday fresh and processed food, beverages and grocery products consumed and used by Australians.*

Products encompassed include packaged, shelf-stable food from all categories, fresh foods such as fruit and vegetables and non-food grocery products used by consumers for personal, home and pet care. These products share a number of distinguishing characteristics that enable them to be sensibly aggregated:

- they are all (generally) presented to consumers meeting strict product specifications;
- their integrity is assured through the use of sophisticated quality systems;
- they share the same supply chains; and
- they are purchased and used daily by consumers.

Commodities (e.g. grains, live animals, etc.) not purchased by consumers directly were excluded from the report.

Three broad groupings were identified consistent with this definition:

- food and beverage manufacturing;
- grocery manufacturing; and
- fresh produce production.

<sup>40</sup> ABS, catalogue number 6401.0, Tables 3 and 4, Weighted average of eight capital cities

<sup>41</sup> ABS, catalogue number 6345.0, Table 9a, Ordinary hourly rates of pay excluding bonuses

<sup>42</sup> ABS, catalogue number 6457.0, Table 1

<sup>43</sup> ABS, catalogue number 6457.0, Table 7

Food and beverage manufacturing includes processed, packaged, shelf-ready food and beverages commonly found in supermarkets and other retail outlets, and the ingredients which go into their manufacture. It includes dairy, cereal and baked products, meat and fish products, and processed fruits and vegetables. It excludes, to the extent that ABS data does not include, products produced onsite in supermarkets such as onsite baking.

Grocery manufacturing refers to non-food grocery manufacturing and it includes personal care, home care and pet care products. These products have been included because they share a common supply chain with food and beverage products and they face many of the same challenges such as high input costs.

Fresh food production includes fresh produce such as fruit, vegetables, nuts and eggs. This category was included because the delineation between processed foods is becoming blurred (e.g. many 'fresh' products are now presented to the consumer processed in some way, such as fresh-cut salads), and also because many farm - fresh products are consumed directly without the need for additional processing (e.g. milling, refining, slaughtering, etc.). Indeed, the majority of these products are available year round and supplied to retailers subject to tight product specifications with their integrity assured by advanced quality assurance systems, much in the same way that processed food is handled.

Data adjustments were made for fresh products (e.g. fruit, vegetables, etc.) to ensure there was no double counting of produce destined for downstream manufacturing processes (refer Section B.4).

Unprocessed food and fibre commodities (e.g. wheat, coarse grains, live animals, etc.) were excluded from the definition, as was the value of the restaurant and catering sector. Where possible, tobacco products were also excluded from the definition.

The ANZSIC codes were used to help define the industry as it was recognised that much of the data to be collected would be aggregated under these codes. Following a review of 62 industry sub-sectors defined in the ANZSIC codes, it was concluded that the industry is best-defined using 41 sub-sector codes. A full list of those sub-sectors considered in developing the final industry definition can be found at Appendix C.

The 40 sub-sectors included in the industry definition (as shown in Table B.1, B.2 and B.3) cover almost 300 product categories. The production activities provide a good insight into the breadth of products produced or associated with the industry. Appendix D provides a detailed table of the activities associated with the industry.

**Table B.1: Sectors included in the food and beverage industry definition**

ANZSIC Code	Sub-sector
1111	Meat processing
1112	Poultry processing
1113	Cured meat and smallgoods manufacturing
1120	Seafood processing
1131	Milk and cream processing
1132	Ice cream manufacturing
1133	Cheese and other dairy product manufacturing
1140	Fruit and vegetable processing
115	Oil & fat manufacturing
1161	Grain mill product manufacturing
1162	Cereal, pasta and baking mix manufacturing
1171	Bread manufacturing (factory based)
1172	Cake and pastry manufacturing (factory based)
1173	Biscuit manufacturing (factory based)
1174	Bakery product manufacturing (non-factory based)
1181	Sugar manufacturing
1182	Confectionery manufacturing

ANZSIC Code	Sub-sector
1191	Potato, corn and other crisp manufacturing
1192	Prepared animal and bird feed manufacturing
1199	Other food product manufacturing n.e.c.
1211	Soft drink, cordial and syrup manufacturing
1212	Beer manufacturing
1213	Spirit manufacturing
1214	Wine and other alcoholic beverage manufacturing

Table B.2: Sectors included in the grocery industry definition

ANZSIC Code	Sub-sector
1524	Sanitary paper product manufacturing
1841	Human pharmaceutical and medicinal product manufacturing
1851	Cleaning compound manufacturing
1852	Cosmetic and toiletry preparation manufacturing
1911	Polymer film and sheet packaging material manufacturing

Table B.3: Sectors included in the fresh food industry definition

ANZSIC Code	Sub-sector
0121	Mushroom growing
0122	Vegetable growing (under covers)
0123	Vegetable growing (outdoors)
0131	Grape growing
0132	Kiwifruit growing
0133	Berry fruit growing
0134	Apple and pear growing
0135	Stone fruit growing
0136	Citrus fruit growing
0139	Other fruit and nut growing
0172	Poultry farming (eggs)

### B.3 Data collection

The data presented in this report has been collected from multiple sources, which have been referenced as appropriate. The primary source of data used was the Australian Bureau of Statistics (ABS). ABS data provided a comprehensive assessment of the majority of the ANZSIC codes used to define the broader industry. Where publications were discontinued, appropriate replacements were selected and referenced where possible.

The secondary source of information used (predominately where ABS data wasn't available) was IBISWorld Industry reports. Other sources for prior years reports and thus implicitly this report includes:

- Australian Bureau of Agricultural and Resource Economics and Sciences;
- AUSVEG; and
- Department of Agriculture, Price Determination in the Australian Food Industry.

## B.4 Data analysis

A key issue during the collection and collation of the data, particularly when considering the financial value of the industry and its segments, was determining which activities to include and exclude, particularly when it came to fresh food products. This report applies a relatively simple rule based on whether the product was able to be considered a 'consumer product' – that is one which consumers could readily buy, take home and utilise. As such, the definition excludes farm products which require processing (i.e. milling, refining, slaughtering, etc.) prior to sale and use by consumers.

For food manufacturing, total turnover includes pre-farm gate value (i.e. it is essentially an aggregate measure of the value of the goods up until the point of sale by the food manufacturer) but value-add only measures the value of the transformation that occurs during a defined stage of a product's life cycle (e.g. the canning of fruit). No attempt was made to disaggregate pre- and post-farm gate value due to the difficulty in identifying standardised data sources.

In presenting data for the fresh food sector, pre-farm gate value, included as total turnover, figures are used. In prior years, a detailed analysis was undertaken to determine the value of fresh produce that enters the food-processing sector versus the value that enters the fresh market, either through the wholesale, supermarket or greengrocer channel, to ensure that, as far as possible, the report avoids double counting. Throughout this report, adjustments are made in the fresh produce sector to maintain consistency with the 2014 report and to reflect that, at the national level, around 74 per cent of all vegetables produced go fresh to market, with the exception of beans (98 per cent), green peas (39 per cent), potatoes (58 per cent), sweet corn (92 per cent) and tomatoes (97 per cent). Similarly, adjustments are made in the fresh produce sector to reflect that 81 per cent of all pome fruit and stone fruit, 46 per cent of all citrus fruit, 6 per cent of all grapes, 80 per cent of all tropical and other fruit and 91 per cent of all eggs go fresh to market.<sup>44</sup>

Aggregated and summarised data are presented as a series of graphs, pie charts and tables in a manner to facilitate comparison between industry sectors and between time periods, adjusted to the dollar value of the most recent year for which data was available.

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<sup>44</sup> These estimates are based on multiple data sources and latest available from ABARES Australian Vegetable Growing Farms: An economic survey, and AUSVEG Domestic Markets Statistics.

## C Detailed industry definition

Appropriately defining the scope of the industry for the State of the Industry report series is critical in securing its value. Therefore, for prior year's reports, thorough research of relevant sources was conducted to obtain the different perspectives on which industries should be included in the definition. The different sources of information used to construct the final industry definition included:

**Table C.1: Sources of information**

Source	Information used
1 Department of Agriculture	Fresh produce sector was defined by using the value add supply chain map for fresh fruit and vegetables in the DAFF publication: <i>Price Determination in the Australia Food Industry, 2004</i>
2 Australian Bureau of Agricultural and Resource Economics	Definition of the food processing industry used in the ABARE publication: <i>Food Statistics, 2007</i>
3 Australian Competition and Consumer Commission	Definition of groceries used in the ACCC inquiry into the competitiveness of retail prices for standard groceries
4 The U.S Grocery Manufacturers Association	Core manufacturing activities
5 The Australian Food and Grocery Council	Primary activities of each member firm of AFGC
6 A Leading Food and Grocery Retailer	Product categories for goods stocked in Australian supermarkets

For the State of the Industry 2016 report, the primary objective was to ensure comparability between years and therefore the retention of the final industry definition as used in prior year's reports. However, to ensure it remained relevant and accurate desktop research was conducted to ensure that ABS had not significantly changed its definitions of industries nor any significant amendments made to the sources of information outlined in Table C.1. It was found that no major amendments had been made over the 2015/16 year.

Given the above, all industries included for each sector for this 2016 report when constructing the final industry definition, are shown in the tables below. As mentioned above, the series were chosen to ensure alignment with the prior year's report (State of the Industry 2014).

**Table C.2: Fresh produce sector (industries included)**

ANZSIC Code	Description
0121	Mushroom growing
0122	Vegetable growing (under covers)
0123	Vegetable growing (outdoors)
0131	Grape growing
0132	Kiwifruit growing
0133	Berry fruit growing
0134	Apple and pear growing
0135	Stone fruit growing
0136	Citrus fruit growing
0139	Other fruit and nut growing
0172	Poultry farming (eggs)

Table C.3: Food and beverage sector (industries included)

ANZSIC Code	Description
1111	Meat processing
1112	Poultry processing
1113	Cured meat and smallgoods manufacturing
1120	Seafood processing
1131	Milk and cream processing
1132	Ice cream manufacturing
1133	Cheese and other dairy product manufacturing
1140	Fruit and vegetable processing
1150	Oil and fat manufacturing
1161	Grain mill product manufacturing
1162	Cereal, pasta and baking mix manufacturing
1171	Bread manufacturing (factory based)
1172	Cake and pastry manufacturing (factory based)
1173	Biscuit manufacturing (factory based)
1174	Bakery product manufacturing (non-factory based)
1181	Sugar manufacturing
1182	Confectionery manufacturing
1191	Potato, corn and other crisp manufacturing
1192	Prepared animal and bird feed manufacturing
1199	Other food product manufacturing n.e.c.
1211	Soft drink, cordial and syrup manufacturing
1212	Beer manufacturing
1213	Spirit manufacturing
1214	Wine and other alcoholic beverage manufacturing
<b>Industries considered but excluded</b>	
1220	Cigarette and tobacco product manufacturing

Table C.4: Grocery sector (industries included)

ANZSIC Code	Description
1524	Sanitary paper product manufacturing
1841	Human pharmaceutical and medicinal product manufacturing
1851	Cleaning compound manufacturing
1852	Cosmetic and toiletry preparation manufacturing
1911	Polymer film and sheet packaging material manufacturing
<b>Industries considered but excluded</b>	
1340	Knitted product manufacturing
1351	Clothing manufacturing
1352	Footwear manufacturing
1510	Pulp, paper and paperboard manufacturing
1522	Paper bag manufacturing
1523	Paper stationery manufacturing
1709	Other petroleum and coal product manufacturing
1831	Fertiliser manufacturing
1891	Photographic chemical product manufacturing
1912	Rigid and semi-rigid polymer product manufacturing
1920	Natural rubber product manufacturing
2010	Glass and glass container manufacturing
2029	Other ceramic product manufacturing
2132	Aluminium smelting
2299	Other fabricated metal product manufacturing n.e.c.
2439	Other electrical equipment manufacturing
2449	Other domestic appliance manufacturing
2592	Toy, sporting and recreational product manufacturing
5411	Newspaper publishing
5412	Magazine and other periodical publishing
1832	Pesticide manufacturing

## D Full list of products

The table below outlines the primary activities included within each ANZSIC class that has been included within the Defined Industry.<sup>45</sup> Further information regarding the ANZSIC classification and inclusions/exclusions can be found within the ABS report “*Australian and New Zealand Standard Industrial Classification 2006*”.

Differing from prior years, the 2015 and 2016 reports do not provide the ANZSIC code 1993 to ANZSIC code 2006 mapping. This is due to this report no longer detailing data prior to 2006.

ANZSIC	Description	Primary activities include:
0121	Mushroom Growing	<ul style="list-style-type: none"> <li>▸ Cultivated mushroom growing</li> <li>▸ Mushroom spawn growing</li> </ul>
0122	Vegetable Growing (Under Covers)	<ul style="list-style-type: none"> <li>▸ Capsicum growing (under cover)</li> <li>▸ Cucumber growing (under cover)</li> <li>▸ Herb growing (under cover)</li> <li>▸ Lettuce growing (under cover)</li> <li>▸ Sprout growing (under cover)</li> <li>▸ Tomato growing (under cover)</li> <li>▸ Vegetable growing n.e.c. (under cover)</li> </ul>
0123	Vegetable Growing (Outdoors)	<ul style="list-style-type: none"> <li>▸ Asparagus growing (outdoors)</li> <li>▸ Bean growing (outdoors)</li> <li>▸ Carrot growing (outdoors)</li> <li>▸ Garlic growing (outdoors)</li> <li>▸ Herb growing (outdoors)</li> <li>▸ Kumara growing (outdoors)</li> <li>▸ Melon growing (outdoors)</li> <li>▸ Onion growing (outdoors)</li> <li>▸ Pea growing (outdoors)</li> <li>▸ Potato growing (outdoors)</li> <li>▸ Sugar beet growing (outdoors)</li> <li>▸ Sweetcorn growing (outdoors)</li> <li>▸ Tomato growing (outdoors)</li> <li>▸ Truffle growing (outdoors)</li> <li>▸ Vegetable growing n.e.c. (outdoors)</li> <li>▸ Vegetable seed growing (outdoors)</li> </ul>
0131	Grape Growing	<ul style="list-style-type: none"> <li>▸ Grape growing</li> <li>▸ Grape sundrying</li> <li>▸ Table grape growing</li> <li>▸ Vineyard operation</li> <li>▸ Wine grape growing</li> </ul>
0132	Kiwifruit Growing	<ul style="list-style-type: none"> <li>▸ Kiwifruit growing</li> </ul>

<sup>45</sup> ABS (2006) *Australian and New Zealand Standard Industrial Classification 2006*, pages 76 - 199.

ANZSIC	Description	Primary activities include:
0133	Berry Fruit Growing	<ul style="list-style-type: none"> <li>▸ Berry fruit growing</li> <li>▸ Blackberry growing</li> <li>▸ Blackcurrant growing</li> <li>▸ Blueberry growing</li> <li>▸ Boysenberry growing</li> <li>▸ Cranberry growing</li> <li>▸ Gooseberry growing</li> <li>▸ Loganberry growing</li> <li>▸ Raspberry growing</li> <li>▸ Redcurrant growing</li> <li>▸ Strawberry growing</li> </ul>
0134	Apple and Pear Growing	<ul style="list-style-type: none"> <li>▸ Apple growing</li> <li>▸ Nashi pear growing</li> <li>▸ Pear growing</li> <li>▸ Quince growing</li> </ul>
0135	Stone Fruit Growing	<ul style="list-style-type: none"> <li>▸ Apricot growing</li> <li>▸ Cherry growing</li> <li>▸ Nectarine growing</li> <li>▸ Peach growing</li> <li>▸ Plum or prune growing</li> </ul>
0136	Citrus Fruit Growing	<ul style="list-style-type: none"> <li>▸ Citrus fruit growing</li> <li>▸ Citrus orchard operation</li> <li>▸ Grapefruit growing</li> <li>▸ Lemon growing</li> <li>▸ Mandarin growing</li> <li>▸ Orange growing</li> <li>▸ Tangelo growing</li> </ul>
0137	Olive Growing	<ul style="list-style-type: none"> <li>▸ Olive growing</li> </ul>

ANZSIC	Description	Primary activities include:
0139	Other Fruit and Nut Growing	<ul style="list-style-type: none"> <li>▸ Almond growing</li> <li>▸ Brazil nut growing</li> <li>▸ Cashew nut growing</li> <li>▸ Chestnut growing</li> <li>▸ Coconut growing</li> <li>▸ Macadamia nut growing</li> <li>▸ Pecan nut growing</li> <li>▸ Walnut growing</li> <li>▸ Avocado growing</li> <li>▸ Banana growing</li> <li>▸ Coconut growing</li> <li>▸ Custard apple growing</li> <li>▸ Feijoa growing</li> <li>▸ Fig growing</li> <li>▸ Loquat growing</li> <li>▸ Mango growing</li> <li>▸ Passionfruit growing</li> <li>▸ Pawpaw growing</li> <li>▸ Persimmon growing</li> <li>▸ Pineapple growing</li> <li>▸ Tamarillo growing</li> </ul>
0172	Poultry Farming (Eggs)	<ul style="list-style-type: none"> <li>▸ Egg farm operations</li> <li>▸ Poultry farming (for eggs)</li> <li>▸ Poultry hatching operation (egg breeds)</li> </ul>
1111	Meat Processing	<ul style="list-style-type: none"> <li>▸ Abattoir operation (except poultry)</li> <li>▸ Animal meat packing and freezing</li> <li>▸ Animal oil or fat, unrefined, manufacturing</li> <li>▸ Lard or tallow rendering</li> <li>▸ Meat extract or essence manufacturing</li> <li>▸ Meat manufacturing (except bacon, ham and poultry)</li> <li>▸ Meat or bone meal manufacturing (except fish or poultry meal)</li> <li>▸ Meat packing (except poultry)</li> <li>▸ Meat, canned, manufacturing (except poultry, bacon, ham and corned meat)</li> <li>▸ Meat, dehydrated, manufacturing (except poultry)</li> <li>▸ Meat, frozen, manufacturing (except poultry)</li> </ul>
1112	Poultry Processing	<ul style="list-style-type: none"> <li>▸ Frozen poultry manufacturing</li> <li>▸ Game bird slaughtering</li> <li>▸ Poultry abattoir operation</li> <li>▸ Poultry croquette manufacturing</li> <li>▸ Poultry meat or bone meal manufacturing</li> <li>▸ Poultry meat packing</li> <li>▸ Poultry meat processing (including canning)</li> </ul>

ANZSIC	Description	Primary activities include:
1113	Cured Meat and Smallgoods Manufacturing	<ul style="list-style-type: none"> <li>▶ Bacon manufacturing</li> <li>▶ Corned meat manufacturing (including canned)</li> <li>▶ Croquette manufacturing n.e.c.</li> <li>▶ Ham, canned, manufacturing</li> <li>▶ Meat speciality manufacturing</li> <li>▶ Pate manufacturing</li> <li>▶ Poultry smallgoods manufacturing</li> <li>▶ Smallgoods manufacturing</li> </ul>
1120	Seafood Processing	<ul style="list-style-type: none"> <li>▶ Crustacean, processed, manufacturing (including cooked and/or frozen) n.e.c.</li> <li>▶ Fish cleaning or filleting</li> <li>▶ Fish fillet manufacturing</li> <li>▶ Fish loaf or cake manufacturing</li> <li>▶ Fish paste manufacturing</li> <li>▶ Fish pate manufacturing</li> <li>▶ Fish, canned, manufacturing</li> <li>▶ Fish, dried or smoked, manufacturing</li> <li>▶ Mollusc, processed, manufacturing (including shelled)</li> <li>▶ Oyster, shelling, freezing or bottling in brine</li> <li>▶ Scallop, preserved, manufacturing</li> <li>▶ Seafood, canned, manufacturing</li> <li>▶ Seafood, preserved, manufacturing</li> <li>▶ Whole fin fish freezing</li> </ul>
1131	Milk and Cream Processing	<ul style="list-style-type: none"> <li>▶ Cream, pasteurised, manufacturing (except canned)</li> <li>▶ Milk, low fat, manufacturing</li> <li>▶ Milk, pasteurised, manufacturing</li> <li>▶ Skim milk manufacturing</li> <li>▶ Standard milk manufacturing</li> <li>▶ Ultra heat treatment milk manufacturing</li> </ul>
1132	Ice Cream Manufacturing	<ul style="list-style-type: none"> <li>▶ Confections, frozen manufacturing</li> <li>▶ Fruit ice, frozen, manufacturing</li> <li>▶ Gelato manufacturing</li> <li>▶ Ice cream manufacturing</li> <li>▶ Sorbet manufacturing</li> </ul>

ANZSIC	Description	Primary activities include:
1133	Cheese and Other Dairy Product Manufacturing	<ul style="list-style-type: none"> <li>▶ Anhydrous milk fat (butter oil) manufacturing</li> <li>▶ Butter manufacturing</li> <li>▶ Buttermilk manufacturing</li> <li>▶ Casein manufacturing</li> <li>▶ Cheese manufacturing</li> <li>▶ Condensed milk manufacturing</li> <li>▶ Cream, canned, manufacturing</li> <li>▶ Dairy product manufacturing n.e.c.</li> <li>▶ Dried ice cream, soft serve or milk shake mix manufacturing</li> <li>▶ Evaporated milk manufacturing</li> <li>▶ Flavoured milk manufacturing</li> <li>▶ Infants' milk-based formula and food manufacturing</li> <li>▶ Lactose manufacturing</li> <li>▶ Liquid ice cream, soft serve or milk shake mix manufacturing</li> <li>▶ Malted milk powder manufacturing</li> <li>▶ Milk and coffee mixtures, condensed or concentrated, manufacturing</li> <li>▶ Milk powder manufacturing</li> <li>▶ Sour cream manufacturing</li> <li>▶ Whey or whey powder manufacturing</li> <li>▶ Yoghurt manufacturing</li> </ul>
1140	Fruit and Vegetable Processing	<ul style="list-style-type: none"> <li>▶ Baby food, canned or bottled, manufacturing (except milk based)</li> <li>▶ Baked bean manufacturing</li> <li>▶ Bean/legume, dried or canned, manufacturing</li> <li>▶ Chutney or relish manufacturing</li> <li>▶ Coconut, desiccated, manufacturing</li> <li>▶ Fruit dehydrating or drying (except sun drying) manufacturing</li> <li>▶ Fruit juice, 100 per cent pure or concentrated, manufacturing</li> <li>▶ Fruit pulp, puree or spread manufacturing</li> <li>▶ Fruit salad manufacturing</li> <li>▶ Fruit, frozen, manufacturing</li> <li>▶ Fruit, preserved, manufacturing (including canned or bottled)</li> <li>▶ Grape crushing</li> <li>▶ Jam manufacturing (including preserves, jellies or fruit spreads)</li> <li>▶ Mixed meat and vegetable manufacturing</li> <li>▶ Rice preparation, canned, manufacturing</li> <li>▶ Sauce manufacturing (except Worcestershire sauce)</li> <li>▶ Spaghetti, canned, manufacturing</li> <li>▶ Vegetable juice or soup manufacturing</li> <li>▶ Vegetable salad manufacturing</li> <li>▶ Vegetable soup manufacturing</li> <li>▶ Vegetable, frozen, manufacturing</li> <li>▶ Vegetable, preserved, manufacturing (including canned, dehydrated, dried or quick frozen)</li> <li>▶ Vinegar manufacturing (except wine vinegar)</li> </ul>

ANZSIC	Description	Primary activities include:
1150	Oil and Fat Manufacturing	<ul style="list-style-type: none"> <li>▶ Animal oil, refined, manufacturing</li> <li>▶ Cotton seed oil manufacturing</li> <li>▶ Deodorised vegetable oil manufacturing</li> <li>▶ Edible oil or fat, blended, manufacturing</li> <li>▶ Fish or other marine animal oil or meal manufacturing</li> <li>▶ Lard, refined, manufacturing</li> <li>▶ Margarine manufacturing</li> <li>▶ Olive oil manufacturing</li> <li>▶ Tallow, refined, manufacturing</li> <li>▶ Vegetable oil, meal or cake manufacturing</li> </ul>
1161	Grain Mill Product Manufacturing	<ul style="list-style-type: none"> <li>▶ Arrowroot manufacturing</li> <li>▶ Baking powder manufacturing</li> <li>▶ Barley malt manufacturing</li> <li>▶ Barley meal or flour manufacturing</li> <li>▶ Cornflour manufacturing</li> <li>▶ Cornmeal manufacturing</li> <li>▶ Dextrin manufacturing</li> <li>▶ Dextrose manufacturing (except prepared)</li> <li>▶ Glucose manufacturing</li> <li>▶ Gluten manufacturing</li> <li>▶ Malt extract manufacturing</li> <li>▶ Malt manufacturing</li> <li>▶ Pollard manufacturing (from wheat, barley or rye)</li> <li>▶ Rice flour, meal or offal manufacturing</li> <li>▶ Rice manufacturing (including parboiled)</li> <li>▶ Rice starch manufacturing</li> <li>▶ Rye flour, meal or offal manufacturing</li> <li>▶ Sago manufacturing</li> <li>▶ Self-raising flour manufacturing</li> <li>▶ Semolina manufacturing</li> <li>▶ Starch manufacturing</li> <li>▶ Tapioca manufacturing</li> <li>▶ Unpopped corn manufacturing (for popcorn)</li> <li>▶ Wheat germ manufacturing</li> <li>▶ Wheaten bran manufacturing</li> <li>▶ Wheaten flour manufacturing</li> <li>▶ Wheaten malt manufacturing</li> <li>▶ Wheatmeal manufacturing</li> </ul>

ANZSIC	Description	Primary activities include:
1162	Cereal, Pasta and Baking Mix Manufacturing	<ul style="list-style-type: none"> <li>▶ Baking mix (prepared) manufacturing</li> <li>▶ Bread mix (dry) manufacturing</li> <li>▶ Cake mix manufacturing</li> <li>▶ Cereal food manufacturing n.e.c.</li> <li>▶ Coatings made from cereal food (except biscuit or breadcrumb) manufacturing</li> <li>▶ Custard powder manufacturing</li> <li>▶ Dessert, dried prepared, manufacturing</li> <li>▶ Noodle manufacturing</li> <li>▶ Oatmeal manufacturing</li> <li>▶ Oats, hulled or shelled, manufacturing</li> <li>▶ Oats, kilned or unkilned manufacturing</li> <li>▶ Pasta, fresh or dried, manufacturing</li> <li>▶ Pastry mix manufacturing</li> <li>▶ Prepared breakfast cereal manufacturing</li> </ul>
1171	Bread Manufacturing (Factory Based)	<ul style="list-style-type: none"> <li>▶ Bagel manufacturing (factory based)</li> <li>▶ Bread bakery operation (factory based)</li> <li>▶ Bread dough, frozen, manufacturing (factory based)</li> <li>▶ Bread roll manufacturing (factory based)</li> <li>▶ Bread, leavened or unleavened, manufacturing (factory based)</li> <li>▶ Breadcrumb manufacturing (factory based)</li> <li>▶ English muffin manufacturing (factory based)</li> <li>▶ Fruit loaf manufacturing (factory based)</li> <li>▶ Panini manufacturing (factory based)</li> <li>▶ Pita bread manufacturing (factory based)</li> </ul>
1172	Cake and Pastry Manufacturing	<ul style="list-style-type: none"> <li>▶ Cake icing or decorating (factory based)</li> <li>▶ Cake or pastry-based pudding and dessert manufacturing (factory based)</li> <li>▶ Cake or pastry-based slice manufacturing (factory based)</li> <li>▶ Cake or pastry manufacturing (factory based)</li> <li>▶ Cake or pastry, frozen, manufacturing (factory based)</li> <li>▶ Crumpet manufacturing (factory based)</li> <li>▶ Doughnut manufacturing (factory based)</li> <li>▶ Pastry manufacturing (includes frozen dough; factory based)</li> <li>▶ Pie manufacturing (including meat, fruit or vegetable pies; factory based)</li> </ul>
1173	Biscuit Manufacturing (Factory Based)	<ul style="list-style-type: none"> <li>▶ Biscuit dough manufacturing (factory based)</li> <li>▶ Biscuit manufacturing (except pet food biscuits; factory based)</li> <li>▶ Ice cream cone or wafer manufacturing (factory based)</li> </ul>
1174	Bakery Product Manufacturing (Non-Factory Based)	<ul style="list-style-type: none"> <li>▶ Manufacturing and selling bread from the same premises (non-factory based)</li> <li>▶ Manufacturing and selling other bakery products from the same premises (non-factory based)</li> </ul>

ANZSIC	Description	Primary activities include:
1181	Sugar Manufacturing	<ul style="list-style-type: none"> <li>▶ Brown sugar manufacturing</li> <li>▶ Cane syrup manufacturing</li> <li>▶ Caster sugar manufacturing</li> <li>▶ Icing sugar manufacturing</li> <li>▶ Molasses manufacturing</li> <li>▶ Sugar manufacturing</li> <li>▶ Treacle manufacturing</li> </ul>
1182	Confectionery Manufacturing	<ul style="list-style-type: none"> <li>▶ Chewing gum manufacturing</li> <li>▶ Chocolate manufacturing</li> <li>▶ Cocoa product manufacturing</li> <li>▶ Confectionery manufacturing</li> <li>▶ Crystallised or glace fruit manufacturing</li> <li>▶ Drinking chocolate manufacturing</li> <li>▶ Licorice manufacturing</li> <li>▶ Marshmallow manufacturing</li> <li>▶ Marzipan manufacturing</li> <li>▶ Nut, candied, manufacturing</li> <li>▶ Popcorn, candied, manufacturing</li> </ul>
1191	Potato, Corn and Other Crisp Manufacturing	<ul style="list-style-type: none"> <li>▶ Corn chip manufacturing</li> <li>▶ Crisp manufacturing</li> <li>▶ Potato crisp manufacturing</li> <li>▶ Taco, tortilla or tostada shell manufacturing</li> </ul>
1192	Prepared Animal and Bird Feed Manufacturing	<ul style="list-style-type: none"> <li>▶ Animal feed, prepared, manufacturing (except uncanned meat or bone meal or protein-enriched skim milk powder)</li> <li>▶ Animal food, canned, manufacturing</li> <li>▶ Bird feed manufacturing</li> <li>▶ Cattle lick manufacturing</li> <li>▶ Cereal meal manufacturing (for fodder, except from rice or rye)</li> <li>▶ Chaff manufacturing</li> <li>▶ Crushed grain manufacturing (including mixed; for fodder)</li> <li>▶ Dehydrated lucerne manufacturing</li> <li>▶ Dog and cat biscuit manufacturing</li> <li>▶ Fodder, prepared, manufacturing</li> <li>▶ Grain offal manufacturing (for fodder; except from rice or rye)</li> <li>▶ Lucerne cube, manufacturing</li> <li>▶ Lucerne meal, manufacturing</li> <li>▶ Pet food, canned, manufacturing</li> <li>▶ Poultry feed, prepared, manufacturing</li> <li>▶ Sheep lick manufacturing</li> </ul>

ANZSIC	Description	Primary activities include:
1199	Other Food Product Manufacturing N.e.c	<ul style="list-style-type: none"> <li>▶ Coffee manufacturing</li> <li>▶ Colouring, food, manufacturing</li> <li>▶ Dessert mix, liquid, manufacturing</li> <li>▶ Egg pulping or drying</li> <li>▶ Flavoured water pack manufacturing (for freezing into flavoured ice)</li> <li>▶ Food dressing manufacturing</li> <li>▶ Food flavouring manufacturing</li> <li>▶ Food manufacturing n.e.c.</li> <li>▶ Gelatine manufacturing</li> <li>▶ Ginger product manufacturing (except confectionery)</li> <li>▶ Health supplement manufacturing</li> <li>▶ Herb, processed, manufacturing</li> <li>▶ Honey, blended, manufacturing</li> <li>▶ Hop extract, concentrated, manufacturing</li> <li>▶ Jelly crystal manufacturing</li> <li>▶ Pre-prepared meal, frozen, manufacturing</li> <li>▶ Rice preparation manufacturing n.e.c.</li> <li>▶ Salt, cooking or table, manufacturing</li> <li>▶ Savoury speciality manufacturing</li> <li>▶ Seasoning, food, manufacturing</li> <li>▶ Soya bean concentrate, isolate or textured protein manufacturing</li> <li>▶ Spice manufacturing</li> <li>▶ Tea blending manufacturing</li> <li>▶ Tea manufacturing</li> <li>▶ Worcestershire sauce manufacturing</li> <li>▶ Yeast or yeast extract manufacturing</li> </ul>
1211	Soft Drink, Cordial and Syrup Manufacturing	<ul style="list-style-type: none"> <li>▶ Carbonated water or cordial manufacturing</li> <li>▶ Cider, non-alcoholic, manufacturing</li> <li>▶ Cordial manufacturing</li> <li>▶ Energy drink manufacturing</li> <li>▶ Fruit drink, less than 100 per cent pure juice, manufacturing</li> <li>▶ Ginger beer, non-alcoholic, manufacturing</li> <li>▶ Ice manufacturing (except dry ice)</li> <li>▶ Mineral water manufacturing</li> <li>▶ Powder flavour manufacturing (for soft drinks)</li> <li>▶ Purified water manufacturing</li> <li>▶ Soda water manufacturing</li> <li>▶ Soft drink manufacturing</li> <li>▶ Syrup, chocolate, caramel or vanilla, manufacturing</li> <li>▶ Syrup, fruit, manufacturing</li> <li>▶ Tonic water manufacturing</li> </ul>
1212	Beer Manufacturing	<ul style="list-style-type: none"> <li>▶ Beer manufacturing (except non-alcoholic beer)</li> </ul>
1213	Spirit Manufacturing	<ul style="list-style-type: none"> <li>▶ Brandy manufacturing</li> <li>▶ Fortified spirit manufacturing</li> <li>▶ Liqueur manufacturing</li> <li>▶ Spirit-based mixed drink manufacturing</li> <li>▶ Potable spirit manufacturing</li> </ul>

ANZSIC	Description	Primary activities include:
1214	Wine and Other Alcoholic Beverage Manufacturing	<ul style="list-style-type: none"> <li>▶ Beverage n.e.c., alcoholic, manufacturing</li> <li>▶ Carbonated wine manufacturing</li> <li>▶ Cider, alcoholic, manufacturing</li> <li>▶ Fortified wine manufacturing</li> <li>▶ Mead manufacturing</li> <li>▶ Perry, alcoholic, manufacturing</li> <li>▶ Sherry manufacturing</li> <li>▶ Sparkling wine manufacturing</li> <li>▶ Wine-based fruit drink 'cooler' manufacturing</li> <li>▶ Wine manufacturing</li> <li>▶ Wine vinegar manufacturing</li> <li>▶ Unfortified wine manufacturing</li> </ul>
1524	Sanitary Paper Product Manufacturing	<ul style="list-style-type: none"> <li>▶ Disposable paper nappy (cellulose-based) manufacturing</li> <li>▶ Facial tissue manufacturing</li> <li>▶ Paper napkin manufacturing</li> <li>▶ Paper towel manufacturing</li> <li>▶ Sanitary napkin (cellulose-based) manufacturing</li> <li>▶ Sanitary paper product manufacturing n.e.c.</li> <li>▶ Tampon (cellulose-based) manufacturing</li> <li>▶ Toilet tissue manufacturing</li> </ul>
1841	Human Pharmaceutical Manufacturing	<ul style="list-style-type: none"> <li>▶ Ampoule manufacturing</li> <li>▶ Analgesic manufacturing</li> <li>▶ Anthelmintic manufacturing</li> <li>▶ Antibacterial manufacturing</li> <li>▶ Antibiotic manufacturing</li> <li>▶ Antibody manufacturing</li> <li>▶ Antigen manufacturing</li> <li>▶ Antitoxin manufacturing</li> <li>▶ Biotechnological manufacture of pharmaceutical and medicinal products</li> <li>▶ Blood serum manufacturing</li> <li>▶ Contraceptive, medicinal, manufacturing (except rubber contraceptives)</li> <li>▶ Diagnostic substance manufacturing</li> <li>▶ Drug manufacturing (except veterinary)</li> <li>▶ Herbal drug manufacturing</li> <li>▶ Hormone manufacturing (except veterinary)</li> <li>▶ Medicinal capsule manufacturing</li> <li>▶ Medicinal chemical manufacturing</li> <li>▶ Medicinal ointment manufacturing</li> <li>▶ Medicine manufacturing (except veterinary)</li> <li>▶ Morphine manufacturing</li> <li>▶ Saccharin manufacturing</li> <li>▶ Serum manufacturing</li> <li>▶ Vaccine manufacturing (except veterinary)</li> <li>▶ Vial manufacturing</li> <li>▶ Vitamin product manufacturing</li> </ul>

ANZSIC	Description	Primary activities include:
1851	Cleaning Compound Manufacturing	<ul style="list-style-type: none"> <li>▶ Candle manufacturing</li> <li>▶ Denture cleaner manufacturing</li> <li>▶ Detergent manufacturing</li> <li>▶ Dishwashing detergent manufacturing</li> <li>▶ Disinfectant manufacturing</li> <li>▶ Emulsifier manufacturing</li> <li>▶ Glycerine manufacturing</li> <li>▶ Hypochlorite-based bleach manufacturing</li> <li>▶ Laundry detergent manufacturing</li> <li>▶ Penetrant manufacturing</li> <li>▶ Peroxide preparation manufacturing</li> <li>▶ Polish manufacturing</li> <li>▶ Scouring compound manufacturing</li> <li>▶ Soap manufacturing</li> <li>▶ Toothpaste manufacturing</li> </ul>
1852	Cosmetic and Toiletry Preparation Manufacturing	<ul style="list-style-type: none"> <li>▶ After-shave lotion manufacturing</li> <li>▶ Barrier cream manufacturing</li> <li>▶ Cosmetic deodorant manufacturing</li> <li>▶ Depilatory manufacturing</li> <li>▶ Eye shadow manufacturing</li> <li>▶ Face cream and lotion manufacturing</li> <li>▶ Hair preparation manufacturing</li> <li>▶ Lip balm manufacturing</li> <li>▶ Lipstick manufacturing</li> <li>▶ Mascara manufacturing</li> <li>▶ Nail polish preparation manufacturing</li> <li>▶ Perfume manufacturing</li> <li>▶ Shaving preparation manufacturing</li> <li>▶ Sunscreen preparation manufacturing</li> <li>▶ Talcum powder manufacturing</li> <li>▶ Toilet lanolin manufacturing</li> </ul>
1911	Polymer Film and Sheet Packaging Material Manufacturing	<ul style="list-style-type: none"> <li>▶ Bag, plastic, manufacturing</li> <li>▶ Bag, sack or packet (plastic film or sheeting), manufacturing</li> <li>▶ Bubble packaging manufacturing</li> <li>▶ Film, plastic, manufacturing</li> <li>▶ Food wrapping, plastic, manufacturing</li> <li>▶ Garbage bag, plastic, manufacturing</li> <li>▶ Plastic lamination with paper</li> </ul>

## E Glossary

Abbreviation	Description
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABS	Australian Bureau of Statistics
AFGC	Australian Food and Grocery Council
ANZSIC	Australian and New Zealand Standard Industrial Classification
Appreciation	An increase in the value of the Australian dollar in comparison to foreign currency
CAGR	Compound Annual Growth Rate
Capital expenditure	Money spent to acquire or upgrade physical assets such as plants and machinery, buildings, land etc.
CB	Certification bodies
CGE	Computable General Equilibrium
CPI	Consumer Price Index
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Department of Agriculture
Depreciation	A decrease in the value of the Australian dollar in comparison to foreign currency
Downstream industry	An industry that uses an output from the food and grocery industry as in input. An example of a downstream industry for the milk and cream processing industry is the cafes and restaurants industry
Employment	The number of workers employed in the industry or sector at the end of June for the current year, excluding working proprietors
EY	Ernst & Young
FTA	Free Trade Agreement
GCFC	Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the reference period, plus certain additions to the value of non-produced assets realised by the productive activity of businesses. It excludes intangible assets.
GDP	Gross Domestic Product
Industry turnover	Income generated by businesses within the industry from the sales of goods and services. Industry turnover includes the income generated from rent, leasing and hiring income
IVA	Industry value-add. IVA represents the value-added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by manufacturing businesses to gross domestic product. IVA is the total value of goods and services produced by an industry, after deducting the cost of goods and services used in the process of production.
Mfg	Manufacturing
n.e.c.	Not elsewhere classified
n.f.d.	No further details
PBS	Pharmaceutical Benefits Scheme

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Abbreviation	Description
R&D	Research and development
Real growth	The growth rate of the variable when the effect of inflation (increase in prices) has been removed
Re-exports	Goods which are imported into Australia and then exported with no additional value-added
Sales of goods and services	Income generated by businesses within the industry or sector from the sales of goods and services
Trade surplus	A positive balance of trade (i.e. the value of exports exceeds the value of imports)
Trade deficit	A negative balance of trade (i.e. the value of imports exceeds the value of exports)
Upstream industry	An industry that is part of or pertaining to the early stages in the production of a product. The food and grocery industry utilizes the output from an upstream industry as an input. An example of the upstream industry for the milk and cream processing industry is the dairy cattle farming industry
USA	United States of America

# Key contacts

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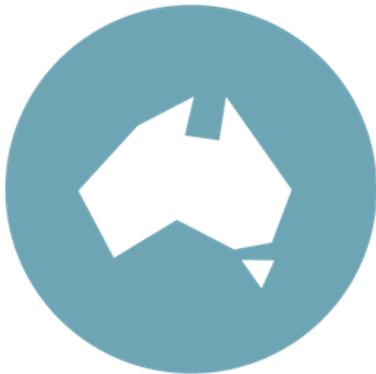
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