



Australian Government

Department of Agriculture, Fisheries and Forestry

FOODmap

An analysis of the Australian food supply chain

Updated July 2012



© Commonwealth of Australia

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. A summary of the licence terms is available from creativecommons.org/licenses/by/3.0/au/deed.en. The full licence terms are available from creativecommons.org/licenses/by/3.0/au/legalcode.

This publication (and any material sourced from it) should be attributed as: Spencer, S & Kneebone, M (2012), *FOODmap: An analysis of the Australian food supply chain*. CC BY 3.0.

Cataloguing data

Spencer, S & Kneebone, M (2012), *FOODmap: An analysis of the Australian food supply chain*, Department of Agriculture, Fisheries and Forestry, Canberra.

ISBN 978-1-921575-45-7 (printed)

ISBN 978-1-921575-46-4 (online)

Internet

FOODmap: An analysis of the Australian food supply chain is available at: daff.gov.au/foodmap

Contact

Department of Agriculture, Fisheries and Forestry

Postal address GPO Box 858 Canberra ACT 2601

Switchboard +61 2 6272 3933

Facsimile +61 2 6272 5161

Email info@daff.gov.au

Web daff.gov.au

Inquiries regarding the licence and any use of this document should be sent to: copyright@daff.gov.au.

The Australian Government acting through the Department of Agriculture, Fisheries and Forestry has exercised due care and skill in the preparation and compilation of the information and data in this publication. Notwithstanding, the Department of Agriculture, Fisheries and Forestry, its employees and advisers disclaim all liability, including liability for negligence, for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying upon any of the information or data in this publication to the maximum extent permitted by law.

Acknowledgments

This document was first published in February 2012. It was revised in July 2012 to include corrections and to reflect more accurate data.

FOODmap: An analysis of the Australian food supply chain was commissioned by the Australian Government Department of Agriculture, Fisheries and Forestry and prepared by Steve Spencer and Martin Kneebone, directors of specialist food market analysis and consulting firm, Freshlogic. Visit freshlogic.com.au for more information.

This document was first published in February 2012. It was revised in July 2012 to include corrections and to reflect more accurate data.



Contents

Minister's foreword	ii	Poultry	50
Summary	iii	Seafood	54
1. Introduction	1	Horticulture	59
Project background	2	Eggs	63
Major findings	4	Grains—wheat flour products	67
		Beverages	71
2. The Food-Industry Environment	9	Dry groceries	77
Size and composition of the food market	10	5. Channels to the Consumer	79
Long-term trends	13	Grocery	80
The food market climate in recent years	14	Speciality retail	82
The opportunities and challenges going forward	15	Focus on foodservice	83
Trade	16	Takeaway food	85
Food security	18	Quick serve restaurants	86
Volatility	21	Eating out	87
		Events, leisure and travel	88
3. The Consumer	23	Institutional healthcare	89
Consumer behaviour	24	Other institutional food	90
High-level consumer trends	27	6. Food Processing	91
4. Mapping Food Categories	29	Processed foods sector	92
Approach	30	Processed foods retail market	93
Key to charts	31	Ownership	94
Dairy	32	Processed fruit and vegetables	97
Beef	39	Sources of fruit and vegetables	98
Lamb and sheepmeat	43	Glossary	100
Pork	46		



Minister's foreword

Welcome to *FOODmap: An analysis of the Australian food supply chain*.

This report considers the whole food supply chain, from production to processing, imports to exports, to the retail and food service sectors.

One of its major aims was to identify scope for improved performance of the food industry in light of changing consumer preferences, pressures from the global food market and input of major food sector participants.

FOODmap examines the way our food supply chain is evolving—including the way consumer demands have changed since the global economic situation of 2008—and will help the Australian Government to continue to support the competitiveness and productivity of the wider food industry.

FOODmap identifies in detail major factors affecting supply chains at the food category level, as well as the associated challenges and opportunities for the industry including stability of supply.

This report builds on 2007's *FOODmap: A comparative analysis of Australian food distribution channels* by taking a deeper look into product flows, the effects of international trade, consumer behaviour, supply chain pressure points, food security, and the issues facing the food processing sector.

Presenting a clear picture of the supply chain is important to ensure our food industry has a strong, sustainable future.

The Australian food industry plays an important role in delivering safe, nutritious and reliable food products to the Australian people. The industry is a significant employer, supporting employment for 1.68 million people, particularly in rural and regional areas. It contributed \$130.4 billion in food and beverage retail turnover in 2010–11 alone.

The updated information contained in this study will help businesses plan for success, and will be a valuable tool for industry and government as we work to support the food industry's prosperity.

FOODmap: An analysis of the Australian food supply chain provides the information we need today to effectively plan for tomorrow.

Senator the Hon. Joe Ludwig
Minister for Agriculture, Fisheries and Forestry

Summary

Purpose of this study

The Department of Agriculture, Fisheries and Forestry (DAFF) has commissioned this study to provide a comparative analysis of Australian food distribution channels.

Approach

Against a background of change along the food value chain, this comparative analysis seeks to explain the structures of a number of important product flows relevant to agrifood categories and distribution channels. The work respects that each category and channel has its own peculiarities that are driven by the nature of the product and its sources, the nature of the competitive environment within the supply chain and marketplace, and the ownership and integration arrangements that operate.

As part of this mapping and analysis process, the study has provided a relative assessment of the features of the value chains and exposure to issues such as food security and volatility.

A major aim of the study is to identify the scope for improved performance of the food industry in the face of changes in consumer preference, pressures from the global food market and the strategic responses of major food sector participants. This update also places a greater focus on the food processing sector and the market channels into foodservice.

This update

There have been significant additions to the depth of analysis that was previously undertaken in FOODmap 2007, including:

- more detailed mapping of volumes of product flows through value chains
- more detailed analysis of the effects of international trade
- deeper insight into the effects of consumer behaviour on the retail food market
- identification of supply chain pressure points at a food category level
- identification of issues relevant to Australia's food security
- exploration of issues pertinent to the food processing sector.

Major findings

- This report summarises the key features of a food industry that continues to undergo significant change, yet experiences varying conditions, opportunities and challenges at a category level.
- The Australian food market is highly competitive. Food retailers and foodservice providers continue to respond to long-term shifts in consumer trends influenced by changing household demographics, lifestyle preferences, personal aspirations and technology.
- While the retail food market is concentrated in the grocery retail channel, a significant share of food spending is won by independent fresh food specialists and the large number of takeaway, eating-out and other foodservice establishments.
- The operating conditions in the Australian food market since late 2008 reflect the strong influence of greater caution in consumer spending—due to uncertainty in global and domestic economic outlooks, and the need to increase household savings.
- The analysis indicates that Australia's food security—defined in terms of a wide physical, economic and social definition applied by the Food and Agriculture Organization of the United Nations—is high. While this report has not attempted to measure all aspects of food security, it identifies issues that may contribute to a better understanding of Australia's overall food security. It provides a relative assessment of the self-sufficiency and stability of food supply across the major food categories.
- While there have been increasing input costs along with a growing reliance on processed food imports to meet consumer demands and preferences in certain categories, the analysis of available information indicates limited overall risk to the ongoing stability of supply to consumers.

The way forward

Individual food category supply chains are affected by a number of dynamics which are, in many cases, particular to each sector of the food industry. This report expresses those dynamics as 'pressure points'—which may reflect positive or negative influences on future prospects for growth in volume and value for industry.

These dynamics are summarised in the table on pages 5 to 7 in Section 1, in terms of opportunities and areas of potential risk. While opportunities may exist to capitalise on emerging trends, opportunities may also exist to avoid major risks. A number of these issues are common across food categories.

Areas of opportunity

The food market grows in complexity over time, as consumer preferences and aspirations evolve. This presents opportunities to address greater requirements for convenience, more diverse social aspirations and a desire to take advantage of emerging alternative sales channels outside of the traditional retail and eating-out options. Technology will play an increasing role in these opportunities.

Other opportunities include:

- expanding the offering of ready-meal products and ingredients to consumers through retail and to foodservice providers
- capitalising on tailored marketing of local products and providers
- meeting the increasing needs of the institutional food market serving the ageing, health-conscious population with an expanded range of convenient, nutritious and functional food.
- However, the ability to adequately address the opportunities and challenges identified will only be possible with a far greater investment in information and intelligence to better understand how to scope, develop and deliver solutions that an evolving market offers. There has been limited improvement in information systems in major food categories since FOODmap 2007 was published.
- While certain industry development initiatives are making progress, fresh food categories such as meat, fruit and vegetables, and the non-grocery segments of the food market, continue to provide limited visibility to suppliers and other downstream supply chain participants. A significant opportunity exists to better meet demands through developing better information systems and tailoring service provision.

Ongoing challenges

The structure of the food market has been altered by the effects of cautious spending and the impact of global economic forces on exchange rates, placing greater competitive pressure on supply chains in a number of categories. While consumers have changed their purchasing behaviour—and in many cases have reduced their spending—they have maintained strong preferences for solutions that save time in meal preparation and eating out, and continue to express concern for the environment and the integrity of food production systems.

Consumer behaviour indicates that shoppers continue to look for ways to exercise these preferences where there is a clear value proposition.

The slow growth in the overall food market since 2008 has intensified the competition between food retailers and foodservice operators, as tighter consumer spending has seen more meals eaten at home and a greater share of food sales made by major grocery retailers.

This may change when improved consumer sentiment results in greater spending on meals; however, value for money will remain a strong priority.

The pressures of performance and increasing competition will continue to compel all food retailers and their suppliers to streamline costs; improve the effectiveness of investment in innovation; and optimise the performance of their categories by responding to consumer preferences for value, aspirations and convenience.

The exposure to volatility in prices and supply has increased in the food industry, due to climatic and economic conditions. Volatility is expected to increase in the future as a result of the high visibility and interdependency of commodity markets, and the expected increased impact of climate change on the stability of global food supplies and the operating environment for food producers.

Section 1

Introduction



Project background

The Australian food value chain continues to undergo significant change. Significant rationalisation and integration of food supply chains continues as large food retailers pursue efficiencies through cost savings and greater scale. Ongoing changes in lifestyles, demographics and food habits of Australian consumers are driving the evolution of food distribution and retail formats.

However, information on non-supermarket distribution channels is often limited and fragmented, which means that it is difficult for many suppliers to the food industry to understand the evolving industry structure, to take advantage of emerging opportunities and to minimise significant risks.

The department

The role of the Australian Department of Agriculture, Fisheries and Forestry ('the department') is to develop and implement policies and programs that make sure Australia's agricultural, fisheries, food and forestry industries remain competitive, profitable and sustainable. It helps build and promote the whole food and fibre chain 'from paddock to plate' for domestic and international markets.

Terms of reference

And providing updated information and knowledge on food distribution channels, the study includes the following elements:

- analysis of food security risks including trade trends, production risks and vulnerability
- identification of key pressure points in agrifood value chains, including imports of fresh and processed food.
- examination of trends and opportunities in the processed food sector, particularly in horticulture
- examination of the role and contribution of the food service sector in the agrifood value chain
- analysis of consumer behaviour and preferences, including profiling segments of the consumer market, and their characteristics and spending habits.

Methodology

This study describes the structure of food and beverage distribution in the Australian retail market. It includes:

- an outline of the major changes affecting retail food markets and their supply chains
- a mapping of the structure of food distribution chains in the Australian food industry
- identification of drivers of volume and value for major food groups within each of the channels in terms of specific factors for each major channel and sub-channel, and general economic and other market influences that affect business activity
- identification, within major channels and categories, of:
 - opportunities for increasing the returns to food industry participants
 - scope for greater innovation
 - scope for reduction in key risk areas
 - knowledge and information gaps
 - opportunities to develop capacity
 - opportunities to improve competitiveness of supply chains
- assessment of each food sector's exposure to food security and volatility risk.

The key component of the comparative analysis in this study has been to illustrate the significance of a number of important distribution flows, categories and channels using graphs and charts that can be easily read and compared.

Sections 4 and 5 of the report map supply chains from two aspects—the supply of major categories of food to the market, and the servicing of major food distribution channels—based on the channel structure set out on page 10.

Each category and channel has its own peculiarities that are driven by the nature of the product and its sources, the nature of the competitive environment within the supply chain and marketplace, and the ownership structures.

Section 6 addresses specific issues associated with the foodservice sector and food processing.

This update

There have been significant additions to the depth of analysis that was previously undertaken in FOODmap 2007, including:

- more detailed mapping of volumes of products flows through value chains at a food category level, reconciled using Freshlogic's THRUchain™ analysis models
- detailed analysis of trade data to identify issues associated with the effects of trade on the food industry situation and outlook
- deeper insight into the effects of consumer behaviour on the structure of the retail food market
- identification of supply chain pressure points at a food category level
- exploration of general issues relevant to the food processing sector, with emphasis on processed fruit and vegetables, and further analysis of the foodservice sector of the retail food market.

We have assessed self-sufficiency and stability in food supply and identified exposure to volatility for the major food and beverage categories.

This report is based on whole-of-supply-chain-assessments and reflect an attempt to encompass general conditions experienced by the food categories relevant in each case.

There will be exceptions to these assessments, where different conditions or reliability of supply may exist at a product or sub-category level.

Work done

To compile this report, we have:

- collated relevant industry data from industry associations, industry contacts and government agencies (including the Australian Bureau of Statistics [ABS])
- updated Freshlogic's FOODmap analysis model with recently available production, trade and market sales volume information, and key yield and market share indicators and benchmarks affecting the movement of volumes from farm to consumers
- reviewed and analysed trade data provided by the Australian Bureau of Agricultural and Resource Economics and Sciences
- spoken with the executives of a number of food processors, distributors, retailers and other specialists engaged in sectors of the food industry.

Major findings

The study has identified a number of pressure points along the supply chain, which in turn represent areas of opportunity and/or challenge for consideration by food industry participants. These are outlined on pages 5 to 7.

These have been drawn from parts of the overall report including comparative assessments of food security and volatility risks, the state of the information in use across the food industry and the examination of the dynamics within channels and sub-channels of the consumer market.

The Australian food sector is being significantly influenced by:

- increasing globalisation of food production and retail markets
- the effects of the economic situation and outlook on consumer sentiment and spending
- trends in consumer preferences
- application of supply chain and category management strategies by major retail groups.

Section 2 outlines the nature of these forces and how they are affecting Australian food and beverage industries.

Opportunities	Direction	Direct implication	Opportunity or challenge
1. Consumers showing a preference for 'local', and other personal and social aspirations	Emerging	Despite fluctuations in sentiment, there is evidence that consumers continue to hold positive attitudes towards local products and local providers.	<ul style="list-style-type: none"> Opportunities exist where there is an ability to capitalise on tailored marketing of local products and providers. A 'local' supply chain can offer the benefit of increased flexibility and tailoring to meet local demand, and potentially shorter lead times. This trend may also be a way to galvanise the advantages held by local or domestic processing supply chains against competitive threats from greater volumes of imported products.
2. Optimise convenience	Mature but evolving	Demand for convenience remains a strong consumer preference, despite the fluctuations in sentiment and discretionary spending on food.	<ul style="list-style-type: none"> There is an opportunity to expand the offering of ready-meal products, across a range of price points, to meet the consistent demand for convenience. This particularly true where it helps manage portion size and reduces waste.
3. Capitalise on alternative distribution channels	Emerging	The development and growth in emerging alternative distribution channels (including meals, fresh produce and eating-out options) makes this an increasingly viable option for many suppliers and marketers.	<ul style="list-style-type: none"> These alternative channels have evolved to a level that warrant consideration by suppliers and marketers, and can offer a cost-effective alternative to some traditional channels. These emerging channels will be stronger if suppliers capitalise on available and emerging technologies to improve consumer convenience in access, ordering and delivery.
4. Improve institutional foodservice arrangements	Mature	Greater consistency in meal specifications within the institutional sector would reduce the administrative burden and associated costs for suppliers, and potentially improve the variety and quality of products currently available.	<ul style="list-style-type: none"> There is an opportunity for suppliers of 'meal solutions' who operate with sufficient scale to work with stakeholders to improve the efficiency of meal options to meet nutritional and logistical challenges into the institutional healthcare sector. This may provide scope for suppliers to access alternative channels and markets for low-value, but nutritious, ingredients and otherwise reduce waste or downgrade.
5. Improved industry intelligence	Mature	There is significant scope for improved industry intelligence that will help participants to better understand demand opportunities in food retail channels, and help supply to more closely meet those timing, volume and quality requirements.	<ul style="list-style-type: none"> Improved intelligence through investment and collaboration will enable industry participants to identify and take opportunities, and reduce price volatility which presently discourages innovation.
6. Ageing, health-conscious population	Developing	The general ageing of the population results in an increase in the size of the 'mature aged' consumer segment who continue to demand convenient, healthy and functional food.	<ul style="list-style-type: none"> There are opportunities to meet the demands of the ageing, health-conscious population through an expanded range of convenient, nutritious and functional food. Further, through the institutional sector, there is demand for tasty, nutritious food, including part-prepared food.

Introduction

Major findings

Opportunities	Direction	Direct implication	Opportunity or challenge
7. Foodservice convenience	Mature but evolving	Building on practices already in use in many outlets and chains, there is potential for expansion of foodservice convenience, further reducing some of the in-house preparation requirements and costs for providers.	<ul style="list-style-type: none"> Labour remains a significant cost component for many foodservice providers. There is potential to reduce this cost, improve energy efficiency, and make operators more competitive and responsive through products that enable reduced in-house preparation.
8. Role for fresh food specialists	Mature	Despite strong retail competition, there is an ongoing opportunity for specialist providers where they can provide high-quality specialty products supported by strong customer service.	<ul style="list-style-type: none"> The strong patronage by value- and quality-conscious shoppers means there is an opportunity for specialist providers who are able to improve the shopping experience and widen the appeal to retain and grow their customer base.
Areas of potential risk	Direction	Direct implication	Opportunity or challenge
1. Value-sensitivity	Mature	Consumer sensitivity to value remains strong, and is supported by ongoing consumer caution, together with a persistent focus on price by major retailers and quick service restaurant chains.	<ul style="list-style-type: none"> To compete in a market where sensitivity to value is strong, retailers, foodservice operators and marketers must clearly define the benefits to consumers—be it price, convenience, quality, specialty or something else. Consumers have shown a reluctance to trade convenience for value in many instances where there are tangible time savings aimed at appropriate segments of the market.
2. Export markets affected by a strong A\$ and uncertainty in major export markets	Developing	The high value of the A\$ is placing some exporters in a weaker competitive position, decreasing export returns. Weak conditions in major developed economies are creating uncertainty.	<ul style="list-style-type: none"> Those with an exposure to commodity or staple products will be most exposed. These factors may force more product to remain in domestic markets, risking returns. Local producers continue to be challenged by increasing import substitution and must continue to innovate and clearly communicate their value proposition. Conversely, importers of food ingredients and food products continue to enjoy cost advantages and high local market returns.
3. Import markets affected by high A\$ and currency fluctuations	Mature	Increasing substitution pressure from imported products creates pressure on domestic producers and processors, where imported products enjoy high local market return.	
4. Ongoing industry consolidation (affecting processed food, meat and dairy sectors)	Mature	Consolidation is changing market dynamics, reducing the number of producers, processors and retailers, often placing smaller operators in an inferior bargaining position.	<ul style="list-style-type: none"> This may increase cost pressures and cause dislocation for certain suppliers. Rationalisation can enhance overall supply chain competitiveness. Greater collaboration between processors to efficiently use existing assets will mitigate risks. While consolidation of facilities and brands may reduce choices, suppliers should consider emerging, alternative market channels.
5. Under-utilisation of processing facilities (including meat processing and dairy products)	Mature	Poor use results in higher costs and, in some instances, threatens enterprise viability.	

Areas of potential risk	Direction	Direct implication	Opportunity or challenge
6. Input costs and availability (including feed and energy)	Developing	Volatile and rising input costs are placing pressure on intensive primary producers and early-stage processors, particularly those competing against lower cost imports.	<ul style="list-style-type: none"> This challenge of rising costs will require ongoing innovation in processing and waste reduction to remain competitive.
7. Supply chain integration	Mature	Increased occurrence of contract growing and greater influence of input providers (e.g. seed suppliers and marketing program owners) in production technology, product development and innovation delivery.	<ul style="list-style-type: none"> Supply chain integration presents increased opportunities for input providers and producers, including greater influence over product development. However, if growers ignore these forces, they may find challenges such as a weaker bargaining position, less certainty or reduced incentive for innovation.
8. Variability and uncertainty around climate and water	Developing	Climate conditions and uncertainty of water supplies causes variability in production levels in several industries (including dairy, fresh produce, grains and wine grapes). This is placing pressure on investment, and impacting innovation and product development.	<ul style="list-style-type: none"> A continuing focus on risk management, and flexible technologies and production systems can mitigate the impact of these pressures and improve resilience over time.

Section 2

The food industry environment



Size and composition of the food market

The food industry is affected by a number of macro-trends, which are partly derived from global sources, but are also a product of our consumer base and how the food retail market has evolved. This section provides an overview of the structure of the food retail market in Australia and provides insight into the evolving trends and pressures on food industry value chains.

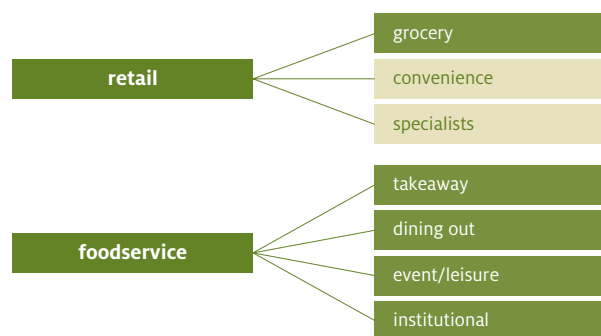
This section also outlines the food industry environment as the settings for the food distribution channels that are described in Sections 4 and 5.

Retail food

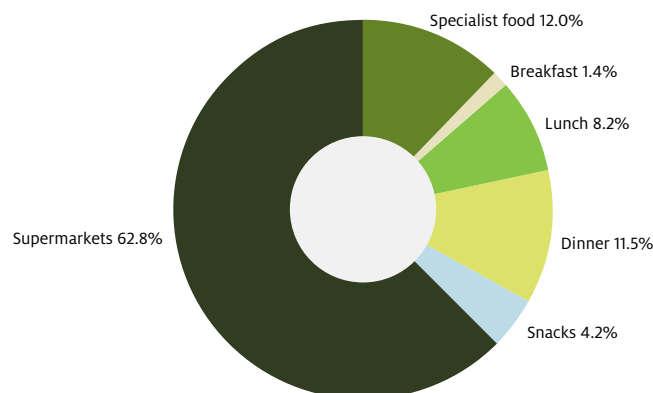
- The Australian domestic food and beverage market can be broadly categorised into two segments: retail and foodservice (see Figure 1). The 'grocery' sub-segment of retail is the dominant distribution channel for the domestic retail food and beverage market. The grocery channel consists of full-service supermarket chains and independent grocery stores.
- According to ABS data (which encompasses retail and foodservice, by our definitions), total turnover from food and liquor retail sales was \$130.2 billion in 2010–11. Excluding liquor, ABS data suggests the supermarket channel represented 67 per cent of total food and beverage sales.
- In ABS data, the broad segment known as foodservice consists of takeaway food, cafés and restaurants—and represented 25 per cent of 2010–11 retail food and beverage spending. The actual market for food consumed outside the home is likely to be larger than the ABS analysis suggests, because of:
 - the important roles played by full-service supermarkets (FSS) and specialty retailers (included in 'Other Retail' sales in ABS data) in supplying food and beverages to takeaway and eating-out outlets
 - the fact that ABS data expressly excludes sales of food and liquor by hotels and clubs
 - the size of the institutional food market, where much of the sales value of food consumed in health care, defence and other channels is not recorded as a retail food sale; rather, the food industry records this as wholesale trade
- Freshlogic uses Mealpulse™, a consumer panel, to track household spending on food, which classifies food spending between sectors of the food retail market. This survey collects data using different techniques from the food sales data accumulated by ABS, so does not arrive at the same split of spending by sales channel.

- Mealpulse™ data indicates a share of total food spending by consumers of approximately 63 per cent through supermarkets—which incorporates major grocery chains and independent stores, including discount retailers such as ALDI.

01. Channels to the consumer



02. Shares of household spending in the year to June 2011



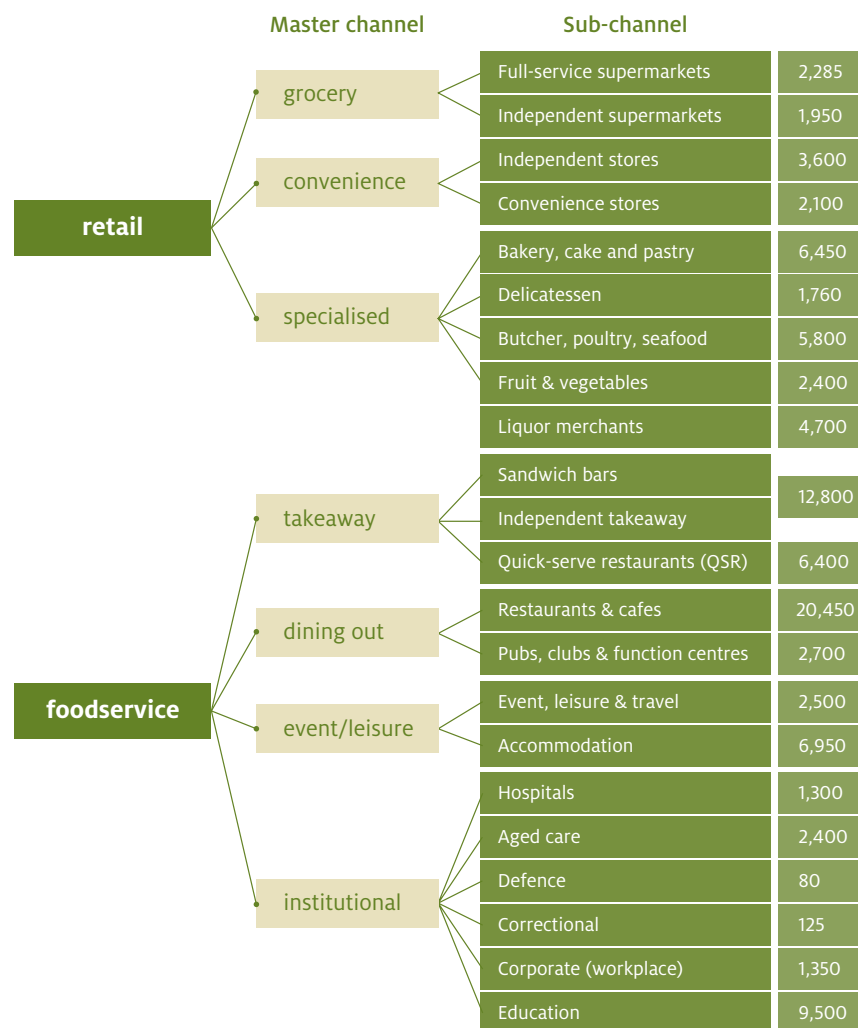
Major grocery chains

- Major full-service supermarkets dominate the grocery channel.
- Food and liquor sales of the two major chain retailers (Woolworths and Coles) totalled \$61.4 billion in 2010–11, which amounts to approximately 68 per cent of the reported ABS total of supermarkets and liquor retail sales. These enterprises retail through about 2300 supermarket outlets and a further 2040 liquor outlets.
- As food retail groups adjust their business models and group structures to take advantage of growth opportunities, the clarity of distinct food and beverage sales is less apparent from the published data from major corporations, because each of the two major grocery chains and the major independent distributor, Metcash, now own significant liquor distribution and retailing operations, and major fuel retailing operations.
- Each of the major chains present their financial results in different formats, making 'like-for-like' comparisons of food and beverage sales difficult.

Diversity of food retail and foodservice outlets

- There are a large and diverse number of food retail outlets outside the concentrated sales channels of grocery stores (Figure 3). The comparison is stark—about 62 per cent (from Freshlogic's Mealpulse data) of spending occurs in just 4500 outlets, while the remaining 38 per cent is spread across approximately 77 000 food outlets, which are used for various meal occasions.
- The outlet numbers are based on latest available information in 2011, and are compiled using a variety of sources. Further detail is provided in Section 5.

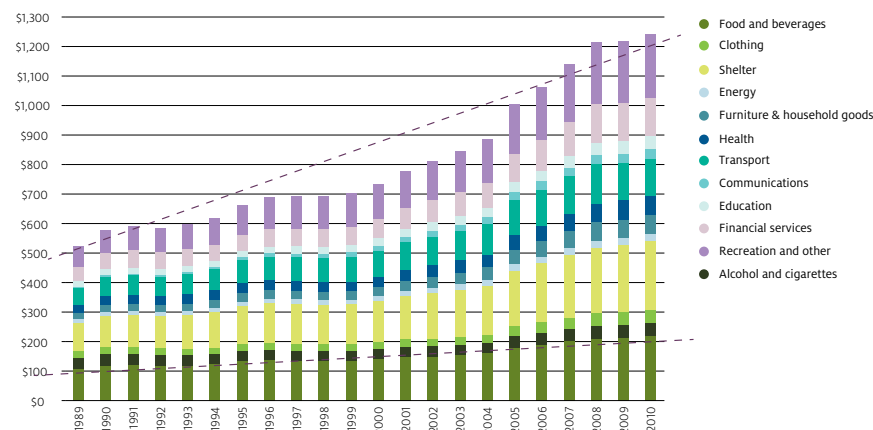
03: Outlet types and numbers



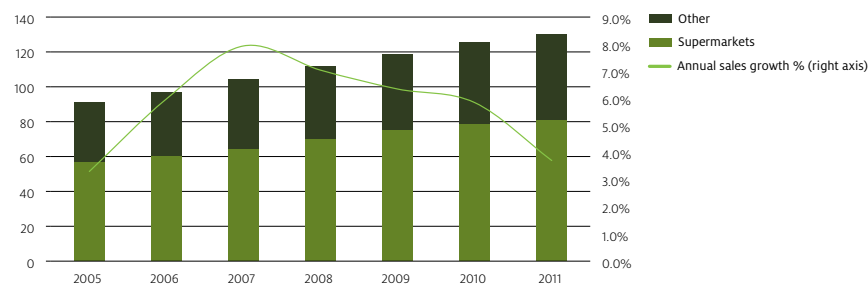
Long-term trends

- Analysis of household expenditure over the past 20 years shows there have been rising nominal amounts spent on food. When expressed as a percentage of total household spending; however, food has represented a steadily declining portion of total household spending.
- In real terms, spending on food has increased 13 per cent, while incomes have risen 36 per cent.
- Retail food sales have grown steadily in the past seven years (Figure 4), but the rate of growth has slowed since 2008, due to the effects of the global financial crisis and the subsequent economic slowdown, which saw trading down in food spending as consumers looked for cheaper eating options.
- Faster growth in sales in non-grocery food channels was experienced early in this period, as the increasing affluence of Australian households resulted in greater growth in eating meals out.
- The general trends supporting the greater diversity of the way in which households shopped and consumed meals are outlined on page 13.

04. Household weekly expenditure analysis in current dollars, 1990–2008 (green bars = food and beverages) (source: ABS)



05. Changes in food sales, \$bn (source: ABS retail trade data)

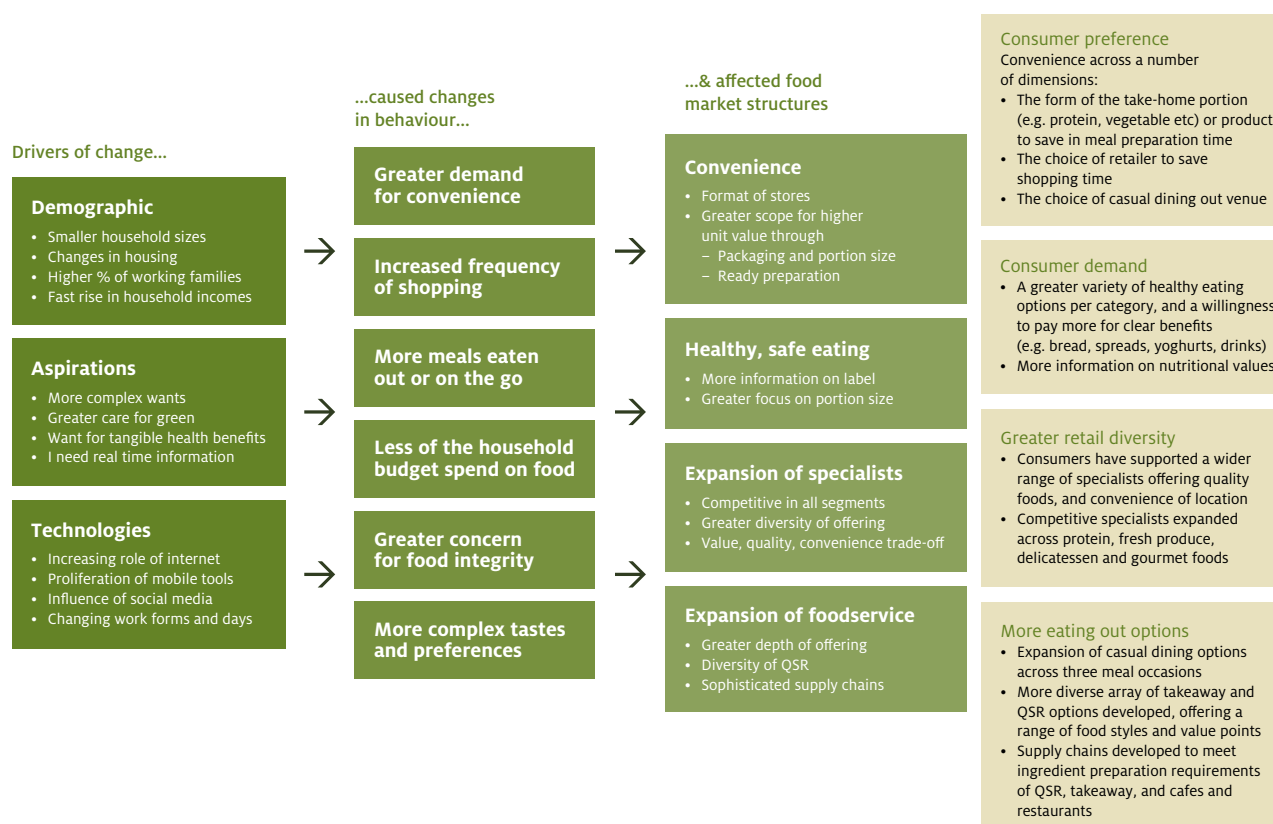


Long-term trends

A number of major, undeniable trends affecting how consumers shop and eat have created significant but steady change in the food industry environment. These have been observed over the past decade. They have supported the

evolution of a more diverse range of food outlets and meal options for consumers, and greater diversity in market opportunities for producers and suppliers.

06. Long-term trends affecting food markets



The food market climate in recent years

Pressure on households

The economic pressure on households has seen significant change in the composition of food spending, with more meals eaten at home. The global financial crisis and its effects on the availability of credit, the value of consumer savings (including superannuation) and employment security dampened consumer sentiment in late 2008 and 2009, and weakened discretionary spending by households.

While economic prospects have improved, the ongoing uncertainty regarding the global economic outlook continues to create caution from consumers.

Since mid-2008, the food market has been affected by a reduction in discretionary spending by consumers. This has led to more meals eaten in the home, because of a general perception that buying food from a supermarket or other grocery outlet is cheaper than eating out.

Grocery retailers have capitalised on this 'value-sensitivity' and focused their promotional campaigns on the promise of lower prices, intensifying the competition for meals. The major grocery chains have also expanded their ranges of lower priced private-label products to improve their value-for-money appeal to consumers.

Freshlogic's quarterly analysis of household food spending from 2008–11 shows that a shift to lower priced food and a reduction in the frequency of eating out has increased the proportion of household food expenditure spent at supermarkets.

The higher share of meals being consumed at home has not led to a strong absolute revenue growth in the share of spending at supermarkets, because intense competition between grocery retailers has been based on price leadership. Therefore low food inflation has occurred.

While published food consumer price index data suggests rising unit costs, the inflation measures tracked and reported to the Australian Stock Exchange by major grocery chains suggests otherwise, because the effect of promotional discounts has reduced average prices of the basket of products typically purchased in greatest volumes.

Consumer aspirations remain important

A number of personal and social aspirations have continued to develop into important influencers of brand and product development by suppliers and retailers, and are also influencing shopping choices.

Issue	Implication
Sustainability	Supporting products and brands that address concerns for better environmental outcomes. These aspirations have met with considerable investments by food producers and retailers into sustainability platforms to anticipate and respond to these issues.
Waste reduction	This is a need to reduce household food waste, partly to meet sustainability but also to save money.
Integrity of food production systems	Consumers have supported products positioned to resonate with them (such as free-range poultry meat and egg products).
Healthy eating	The higher profile given to obesity has increased the awareness of managing portion sizes.

A number of new factors have increased in their influence in recent years, together with a desire to save money and cook more meals at home. The effect of these aspirational factors vary by food categories and products. The 'desire to cook' was given a significant boost by high-rating lifestyle reality TV shows that championed 'everybody chefs' (chiefly Masterchef).

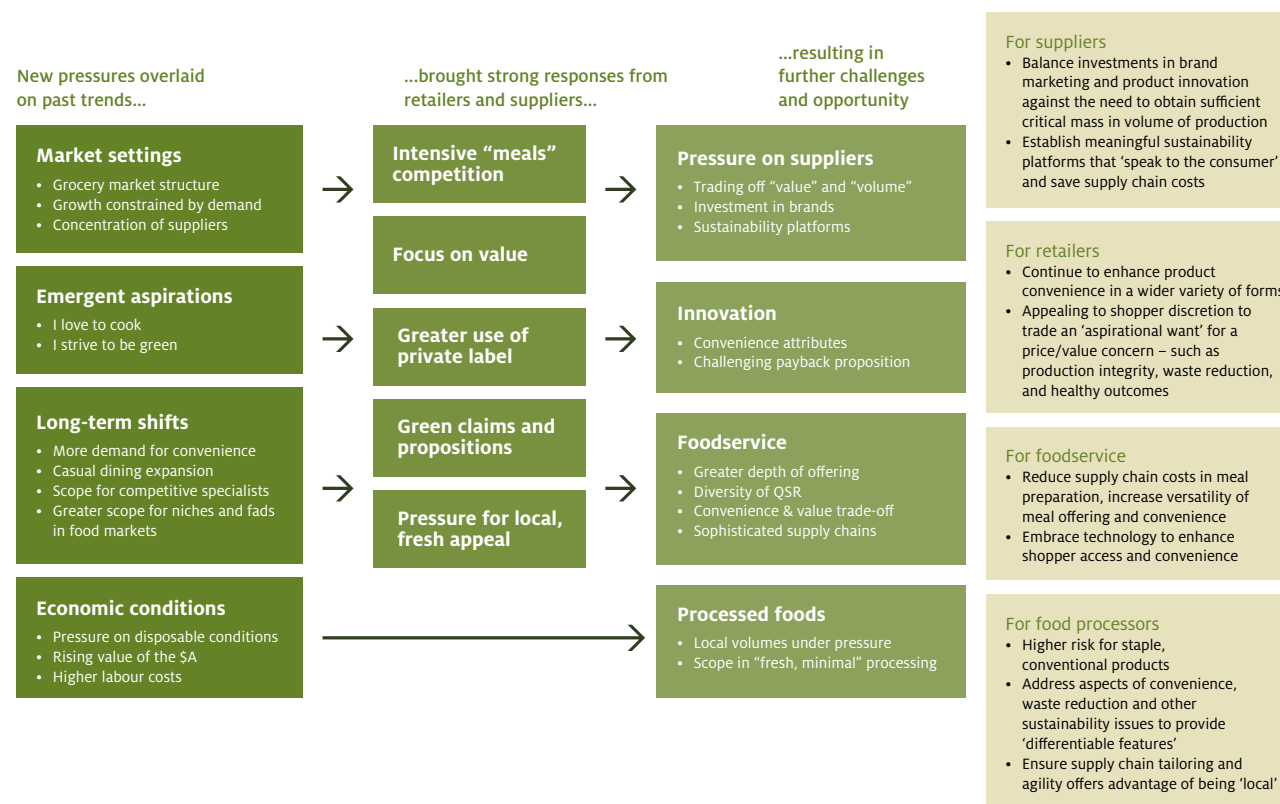
Technology has increased convenience, with a wider range of tools allowing online browsing, comparison and ordering.

The increasing importance of consumer aspirations does not weaken the relevance of the long-term trends outlined earlier, because consumer preferences for convenience, environmental concerns, food integrity and healthy eating remain strong and ensure a diversity of demand.

The opportunities and challenges going forward

Changes in global and Australian economic conditions have been a major catalyst for adjustment within the Australian food industry. These recent forces have provided an overlay on the long-term influences outlined on page 13.

07. Recent changes presenting future opportunities and challenges



Trade

International trade in food products for human consumption has a significant influence on most domestic food supply chains.

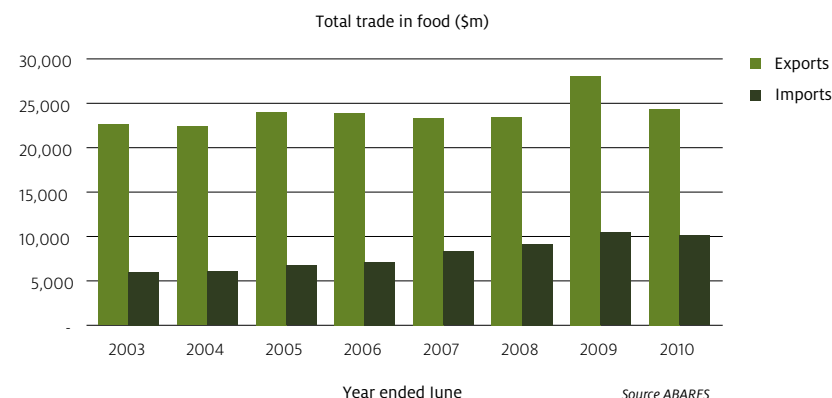
- Domestic food buyers compete with overseas exporters and/or import buyers for commodities in several sectors, including dairy products (cheese and butterfats), beef, lamb and grains. Accordingly, export market prices tend to strongly influence domestic wholesale prices paid over time for commodities in these food sectors.
- Suppliers of imported food products compete with local food producers and processors for sales to domestic customers in several processed food sectors, including cheese, butter, smallgoods and processed fruit and vegetables. A large number of food processors located in Australia use a mix of locally sourced and imported products (either raw materials or ingredients) in their product formulations for sale within the Australian market. Over time, this has led to increasing complexity of product formulation.
- Imported products are often used to fill temporary or structural local supply gaps or seasonal windows.

Over time, Australia has developed a large trade surplus in food products. The value of the trade surplus; however, tends to fluctuate year to year depending on the value of major commodities; the value of the A\$ against other currencies; and weather, which either limits or expands grain crops, livestock numbers and supply volumes available for export.

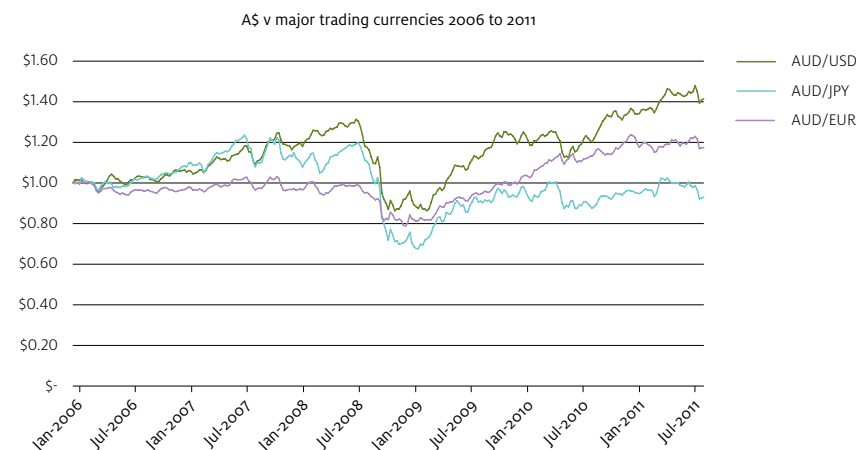
According to the most recent data on the value of food trade, the key features of Australia's current trade in food are as follows:

- A high proportion (an average of 31 per cent over the three years to the end of the 2010 calendar year) of exports are shipped unprocessed—either in live form (e.g. livestock), fresh/chilled form (e.g. seafood and horticulture) or as bulk raw exports (e.g. grain).
- Much of the growth in food imports has been in processed foods, with unprocessed foods accounting for less than \$300 million, or eight per cent of the total growth in the value of food imports.
- Australia's trade surplus in processed food products has declined from \$10.6 billion in 2005 to \$7.4 billion in 2010. Over this period, total food exports have fluctuated but not grown significantly, while processed food imports have steadily increased by about \$3.4 billion.

08. Total food trade, 2003–10



09. Currency movements in A\$ versus other currencies since 2006



- The largest food categories in processed exports are meat (39 per cent on average in the three years to 2010), dominated by beef and lamb shipments; dairy (14 per cent) and drinks (17 per cent; mostly wine).
- Imports of fresh or raw products represented just seven per cent of total food imports in 2010; and over the three years to 2010, represented six per cent on average.

A number of major factors have affected Australia's net trade in food in recent years. These include:

- the growing strength in the value of the A\$ against the currencies of major trading partners, making it more attractive for food manufacturers and marketers to import food ingredients, while also curbing the A\$ value of exports
- limitations on production of some key commodity products due to drought conditions. This has contributed to the reduction in dairy, wine grape and grain production, and created volatility in the available numbers of beef cattle for processing and sale to the export trade
- the increasing attraction of low-cost labour in developing countries, which is resulting in less food being processed onshore before export, and Australian fresh and processed products being less competitive in some export markets. Fresh exports of fruit, vegetables and seafood have been steady over the past five years, while imports of fresh and processed products in these categories have grown, resulting in increasing net trade deficits
- a preference for the use of global supplies of certain food ingredients by Australian food and drink manufacturers, many of whom are subsidiaries of multinational corporations. As a result, the food industry now imports a larger volume of food ingredients across a wide range of food processing requirements, including ingredients used to manufacture drinks.

Food security

Consideration of food security has grown in prominence and is now a significant issue for the global food industry. Food security, as a concept, originated in the mid-1970s in discussions at the time of a global food crisis. It has been elevated again in recent years with chronic food shortages which became apparent in 2007, and have remained a priority concern for global food agencies such as the Food and Agriculture Organization of the United Nations (FAO).

What it means

To undertake a meaningful evaluation of food security considerations and possible risks facing the Australian population, it is important to identify an appropriate definition of food security.

The FAO definition of food security is consistent with the view used and ultimately reflected in the trade policies supported by successive governments in Australia. This definition is not limited to the availability of domestic production. The definition is:

Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
(FAO 2001)

This definition takes a broad view and covers the need for physical, social and economic access. This takes into account issues such as remoteness, social disadvantage and affordability. Further, it considers the need for safe and nutritious food that meets both needs and preferences.

This definition takes a wide view of food security when applied to a country such as Australia. The inclusion of food imports is an important distinction in this definition and differs from narrower definitions which might equate food security to Australia's self-sufficiency in food—relying on domestic production to provide sufficient food for the Australian population. Imports can provide greater diversity in products than might otherwise be available and may also provide more cost-effective products or ingredients than is possible from domestic sources.

While imports offer many benefits, consideration should be given to diversification of sources and origin of supply. In particular, this may include likely security and stability of supply, and food safety and nutrition.

Food security can be considered overall and at deeper levels. While overall food security may present little risk, it is important to assess considerations that may apply to individual food categories which may comprise important components of a nutritional national diet or provide sufficient choice and variety. This can be extended to associated products and services (such as packaging) which are a critical component of food delivery to consumers.

Australia's position

The scope of this report cannot fully assess food security to the extent required by FAO's definition. The available data can give a strong indication about Australia's ability to source and supply consumers with food products, but cannot address social issues that affect the ability of all segments of the population to access and afford nutritious food supplies.

Our analysis underindicates that Australia has a relatively high level of overall food security due to the abundance of its trade surplus in food and the reliability of sources of food imports in the categories that rely on overseas supply.

In several sectors where there is relatively low trade in food due to commercial or technical restrictions on trade, Australian production systems are resilient, with adequate capacity to meet rising consumer demand. This is relevant for poultry, and fresh horticulture and dairy products.

Food imports within the categories of meat, horticulture and seafood does not in itself pose a threat to food security. Where imports are critical to meet demand by Australian consumers, food is sourced from a range of country suppliers with whom favourable and stable trading relations exist.

A profile of relative self-sufficiency and stability

A profile of the relative self-sufficiency and stability in the supply of food has been developed by Freshlogic for this report, based on a set of criteria. This assessment is shown as a matrix (Figure 10) which reflects the relative position of food sectors. In no way does it seek to measure relative food security risk—it is simply an assessment of the relative profile of the main food categories based on self-sufficiency and overall stability of supply.

Most categories are in the top right hand corner, indicating self-sufficiency of domestic food supply and overall stability of supply for market requirements (including imports). Product categories in this segment include red meat, poultry, cold beverages, fresh dairy and eggs.

Food categories with lower self-sufficiency (in the lower half of the matrix) do not indicate a higher risk, but may need to be considered based on the diversification and reliability of import sources. These product categories include processed seafood, fresh seafood, pork, and processed fruit and vegetables. Currently, these categories are relatively stable in terms of overall supply, are characterised by reliable supplies of imported food to meet local market requirements, and do not represent high risk.

The criteria used to develop this profile take a number of factors into account. The assessment methodology has involved applying scores for each criterion to each of the food categories. The criteria were weighted according to Freshlogic's assessment of the relative importance of each factor in influencing stability of supply and self-sufficiency.

Factors affecting the relative stability of food supply

The factors Freshlogic used to assess the relative stability of food supply are the:

1. relative cost competitiveness of Australian food production by sector (where less competitive sectors represent potentially lower stability)
2. consolidation of import suppliers (reflecting the relative dependence on limited numbers of product sources—where fewer product sources represent potentially lower stability)
3. geographic consolidation within Australia's domestic food production sectors (reflecting the relative dependence on the location of product sources, where fewer product sources represent potentially lower stability)
4. exposure of production systems to natural resource limitations (e.g. water; where a higher exposure may represent lower stability)
5. volatility of prices and supply (reflecting the influence of volatility on availability and affordability). Volatility is considered in more detail on page 21, including an assessment of short-term volatility across major food categories.

Measures of relative self-sufficiency

The factors Freshlogic used to assess relative self-sufficiency are the:

1. proportion of exports to total food production (where a higher proportion indicates a greater available surplus of product for domestic consumption)
2. exposure to import competition (which may threaten local production over time through cost pressure)
3. resilience of food production systems (reflecting the ability to withstand changes in economic and climatic pressures over time)
4. scope to influence production response (that is, the proven ability for industry production systems to respond to market opportunities and expand to fill demand gaps that may emerge from time to time).

10. Assessment summary of relative food self-sufficiency and supply stability according to Freshlogic's criteria

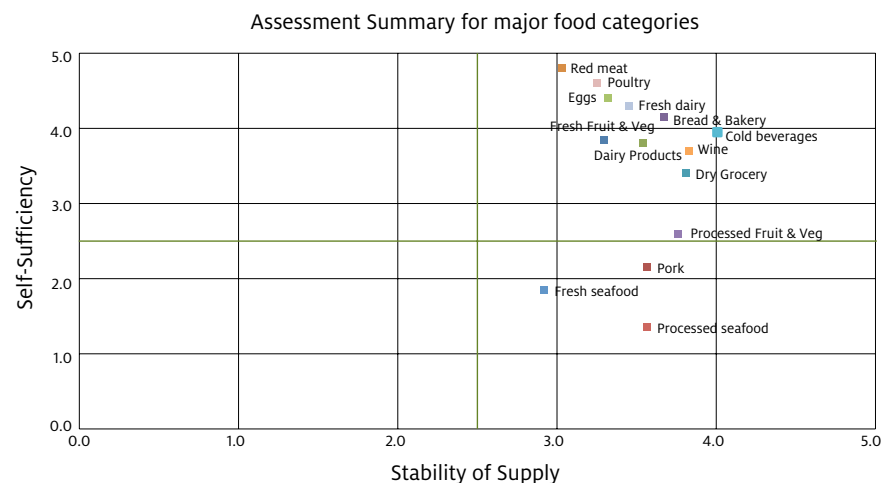
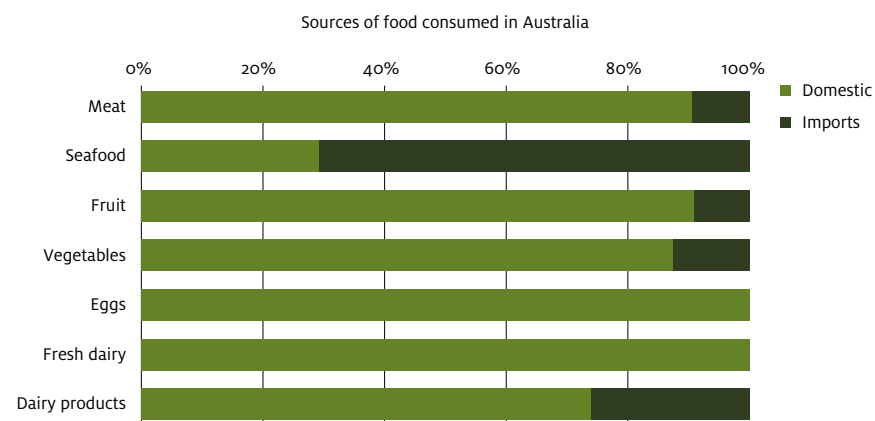


Figure 10 gives a summary assessment of the relative food self-sufficiency and supply stability of each of the major food categories. The positioning of each category depends on the result of assessments made against the criteria outlined above. As mentioned, this chart profiles the relative positioning of food categories. In no way does it attempt to make an assessment of food security risk.

Sources of food supplies

There is varying dependence on imported food products across categories. The chart on this page shows the respective sources of food as a proportion of total food volumes consumed in Australia. These have been derived from Freshlogic's THRUchain™ model.

11. Sources of food consumed in Australia based on Freshlogic analysis of value chain volumes



Volatility

Volatility of prices and supply of food to the Australian food market is one consideration within the wider issue of food security. Volatility of food prices and supplies is relevant when considering the influences on food supply chains over time, because greater volatility may threaten the stability of supply or affect the capabilities of production systems to sustainably meet market demands. It should be noted; however, that high volatility does not automatically imply higher food-security risk.

Significant volatility in either prices or supply volumes can create uncertainty and may influence affordability and availability. It can also create a disincentive for investment, and make planning difficult for food manufacturers and primary producers. Volatility can be both short-term (due to an external or internal shock) or may simply be ongoing and a reflection of the dynamics of the market for that product.

Volatility of food prices and supplies has increased in recent years due to the convergence of a number of climate and economic factors, and the increasing globalisation and interdependency of commodity markets.

Volatility should not always be considered negatively, because some people are able to gain from it. However, it is worth assessing because there are impacts and associated considerations that should be taken into account.

We assessed the relative short-term volatility across a number of food categories at various pricing points along supply chains. The factors Freshlogic used to assess relative volatility are the:

- exposure of export sales to currency fluctuations (which can affect short-term product returns)
- relative exposure of production systems to changes in climate (reflecting the extent to which production volumes and costs are sensitive to changing weather)
- propensity to experience short-term price fluctuations within or between production seasons
- adoption and/or use of risk management tools (where a greater use of tools, such as supply contracts and price-risk protection measures, can reduce volatility)
- vulnerability to import replacements (which may provide short-term uncertainty or displacement of domestically produced goods, causing some price volatility for local producers)
- visibility of supply chain positions/stocks (where a lack of visibility tends to make sure that commodity pricing conditions prevail, which results in price fluctuations and may reduce certainty for suppliers and discourage longer term investment in resilient production systems)
- relative complexity of variables affecting production (such that production may be affected in the short-term by the effect).

12. Weighted assessment of short-term volatility (a higher score indicates greater volatility)

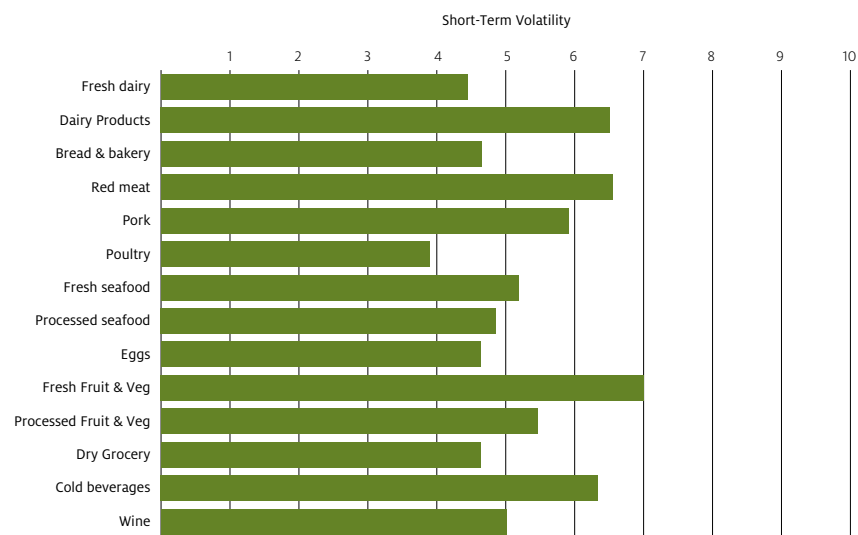


Figure 12 gives a relative assessment of the short-term volatility of each major food category. Its scale of 1 to 10 (where 10 represents the highest level of volatility) weights the individual components of volatility to provide an overall rating. High volatility implies a high level of fluctuation in prices and supply of food to the Australian food market. It does not imply a high food security risk, but may be an issue for decision-makers to consider as it can create uncertainty and may influence affordability and availability.

Section 4 provides further detail, outlining the individual components of volatility for each food category. The charts in Section 4 are not weighted, and therefore cannot be directly compared to the summary assessment in Figure 12.

Section 3

The consumer



Consumer behaviour

The analysis of consumer trends affecting the purchase and consumption of food is critical to understanding changes affecting the retail sales channels within the Australian food market.

The diversity of households has increased in the past 20 years with, for example: changes in family structures and intergenerational values, decreasing housing affordability, and more flexible careers and working practices.

Freshlogic's analysis of trends is based on spending and purchasing patterns exhibited by five demographic segments (Figure 16). These segments capture the diversity of incomes and household structure. Each segment contains similar numbers of households within the overall population. The relative affluence and family size of each segment drives their overall share of food expenditure.

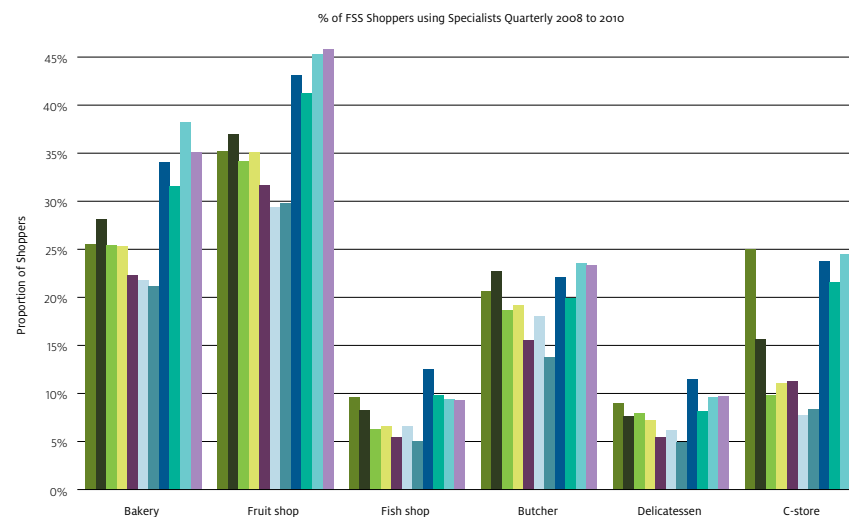
These segments were developed from the Mealpulse™ consumer food panel so panel results could be extrapolated to the national population. Major traits provide valuable insights that help explain the influences on the structure of food markets over time, and the response to external economic and internal household pressures.

The affordability of food spending and attitudes of each segment towards shopping for home cooking and eating out varies, as does the frequency with which they eat out.

Across household groups there is considerable variation in traits that influence total spending in the various food retail channels, such as:

- shopping trip frequency and purpose
- personal preferences for using grocery, specialist and discount food outlets
- weekly routines that drive the need to eat one or more meals out of the home
- sensitivity to changes in economic conditions.

13. Shoppers using specialist retailers



14. Shopping trips by household group

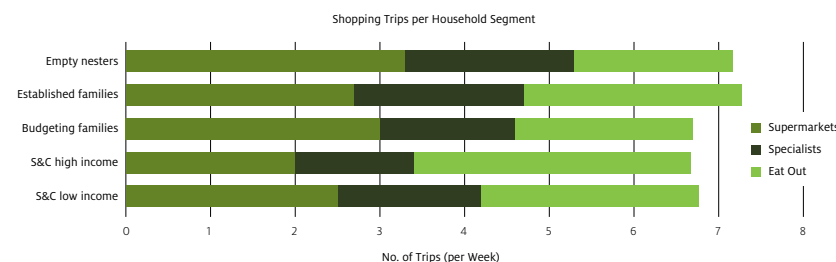
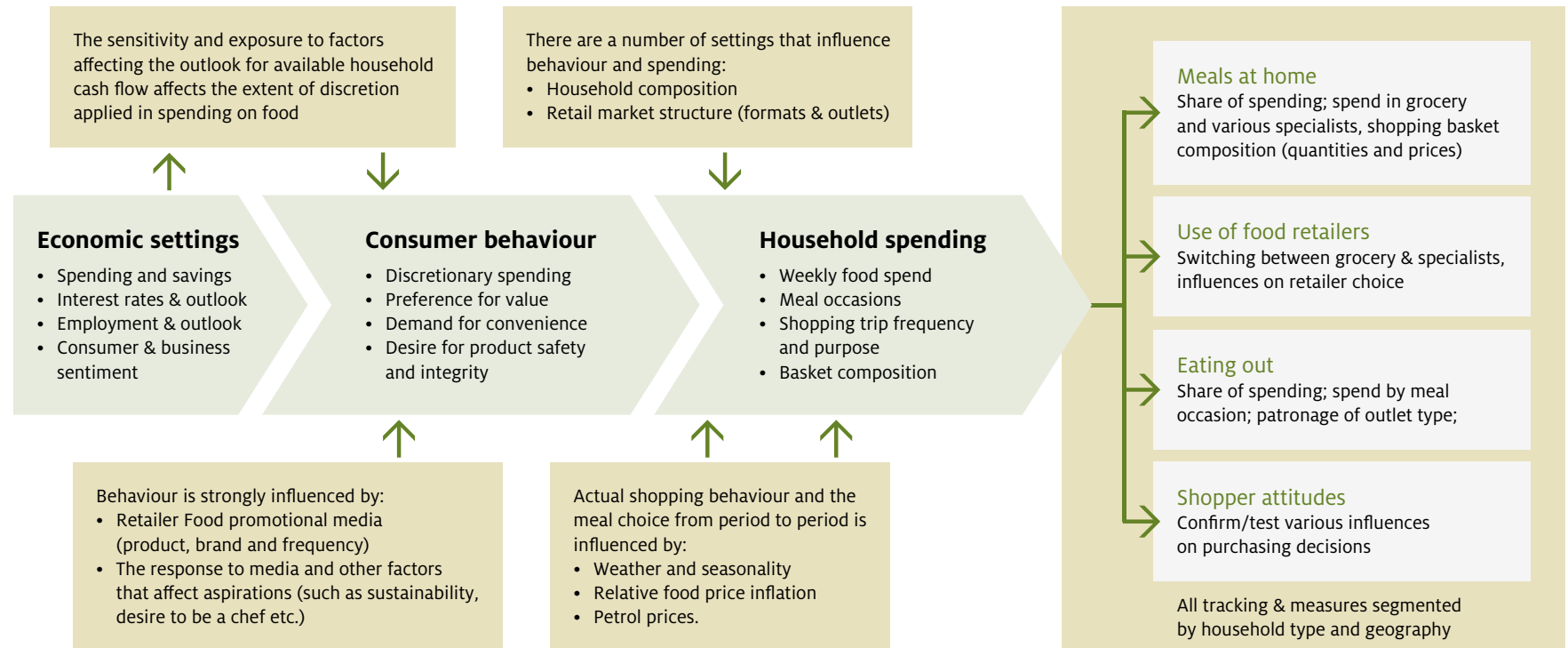







Figure 15 outlines the various economic influences which influence consumer behaviour around household spending on food purchases, and the indicators used to measure this impact.




15. The impacts on food spending



The household sector has continued to exhibit considerable caution in both its spending and borrowing behaviour. With recent income growth significantly outstripping consumption growth, the household saving ratio has increased substantially—now at late-1980s levels of about 10 per cent.

16. Freshlogic's household segments

Household Segment <i>(the segment descriptions are those used by Freshlogic in its analysis of consumer behaviour)</i>	Description	% of food outlays spent on take-home food	Overall or typical budget conscious	Shops on convenience	Use of specialists	Level of planning	Farmers markets, ethical food	Importance of taste	Health considerations
'Singles & couples with lower income'	<ul style="list-style-type: none"> No children Lower income Eating out restricted by income 	65–75%	✓✓	✓	✓ \$\$\$	✓✓	✓ \$\$\$	✓	✓
'Singles & couples with higher income'	<ul style="list-style-type: none"> No children Higher income and available discretionary dollars Eats out often 	56%–60%	✓	✓✓✓ 	✓✓ 	✓	✓✓✓	✓✓✓	✓✓
'Budgeting families'	<ul style="list-style-type: none"> Single and dual parent families with children Financially stretched and time pressured 	77%–82%	✓✓✓	✓✓ 	✓✓ \$\$\$ 	✓✓	✓	✓	✓
'Established families'	<ul style="list-style-type: none"> Single or couples with children Above average income At least one adult eats out regularly 	76%–80%	✓	✓✓✓ 	✓✓	✓	✓✓✓	✓✓	✓✓✓
'Empty nesters'	<ul style="list-style-type: none"> 60 years plus No children living at home Generally have income to eat out often but prepare and eat most meals at home 	75%–82%	✓✓✓	✓✓ 	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓

Key to symbol:  = frequent 'top up' shopping;  = some top-up shopping;  = time pressured; \$\$\$ = sensitive to price/value when using relevant channels; ✓ = low; ✓✓✓ = high

High-level consumer trends

The key issues relevant to this FOODmap document are how trends affect the level of food spending, and the changes to the share of sales through each respective food sales channel.

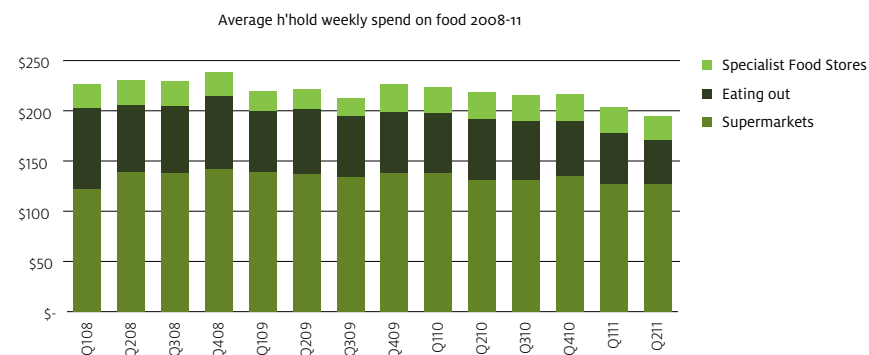
Figure 17 shows the average spending per household on the three main channels—grocery, specialists and foodservice (referred to as ‘eating out’). Increased consumer caution has curbed the overall outlays in the three years to mid-2011, due to concerns about the impact of the economy on household cashflows and savings, especially on discretionary eating out.

Consumer spending on food has been significantly decreased by weaker overall discretionary spending as a response to uncertainty of the economic outlook and the desire to rebuild household savings after the effects of the global financial crisis on household wealth.

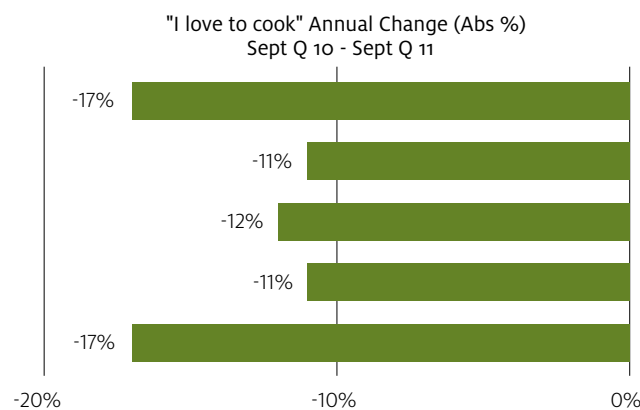
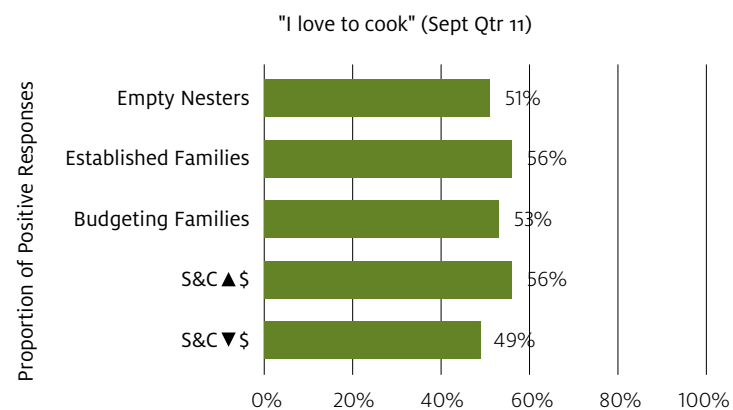
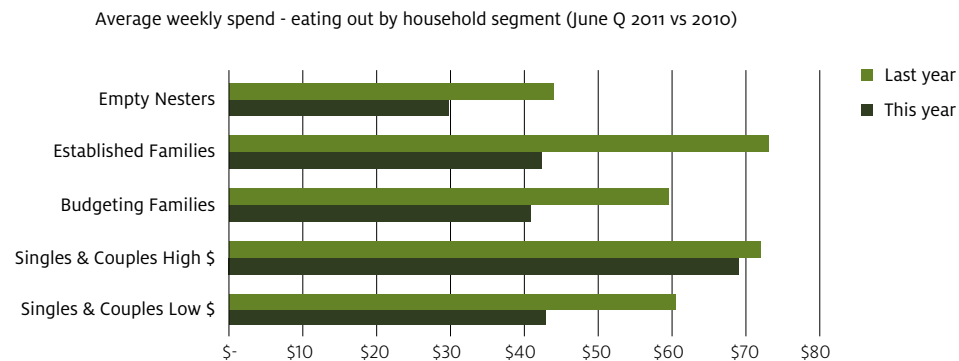
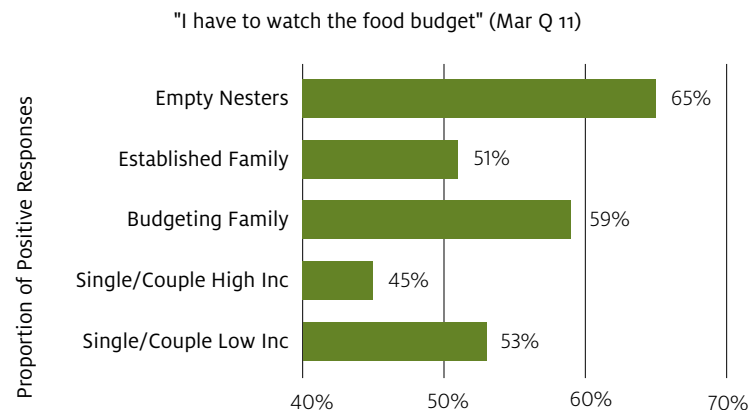
This has manifested in a number of ways:

- Households chose to eat more meals at home—eating out was perceived as being more expensive.
- A greater share of food for meals eaten at home was purchased at major supermarkets, which increased the focus and intensity of their promotional campaigns around sensitivity to ‘meal value’ and extended their use of private-label lines in staple products in response to greater frugality. These actions have increased the intensity of competition between grocery retailers.
- Uneven trading conditions for foodservice providers—some quick service restaurant (QSR) outlets that capitalised on combining convenience and meal value have outperformed others, while more expensive fine dining has fared well because their patrons have been less sensitive to income pressures.
- There has been an overall decline in spending by households on eating out, between 2008 and mid-2011.
- However, consumers have retained preferences for convenience and aspirations that have a clear value proposition. Products that focused on convenience of portion sizes, reduced meal preparation and supported strong product integrity and welfare values (such as free-range eggs and poultry meat) have enjoyed growth.

17. Average household food spending



18. Aspirational attitudes and their effect on spending—changes in behaviour and attitudes between 2010 and 2011.



Section 4

Mapping food categories



Approach

This section describes the distribution *structures* for the supply of major food and beverage categories to the Australian domestic retail market, spanning dairy, animal protein, horticulture, drinks and other major grocery food lines. This section outlines the most significant product flows and major drivers of volume and value.

Section 5 maps the structures of the *supply* of major food groups into the various food distribution channels—or where the food goes. This includes, where available, an analysis of the share of total food supply that is sold by each major retail sales channel.

Assessments of relative food security and supply chain volatility have been made for each supply chain based on criteria outlined in Section 2.

Volumes in supply chains

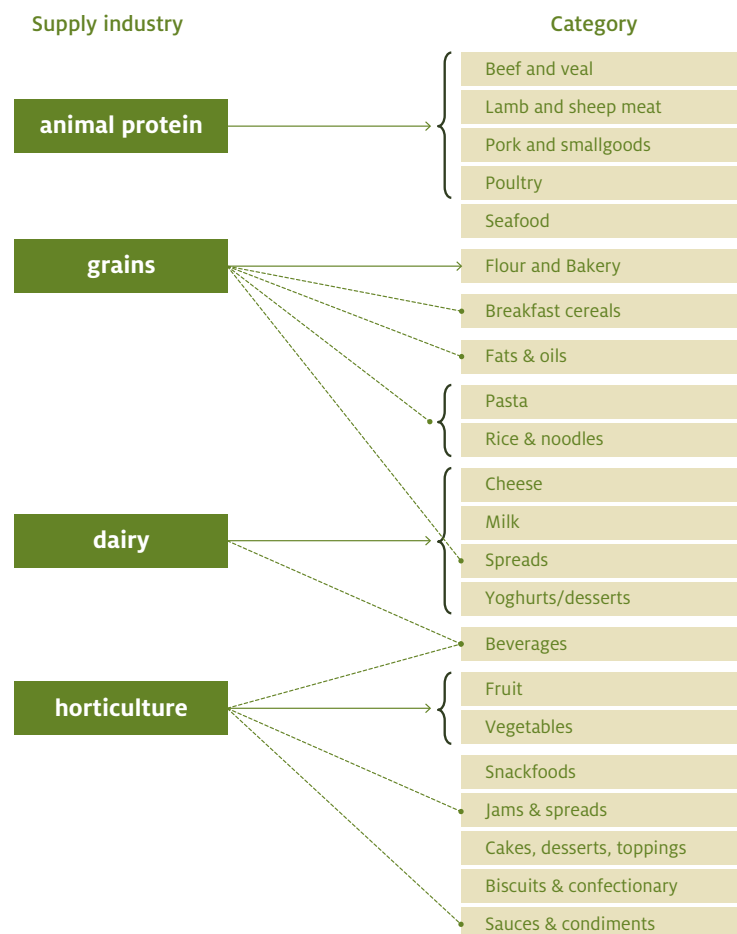
This section contains supply chain maps indicating volumes of products moving from producer to consumer, showing the significance of international trade. Sources of data used in these maps have been provided in notes for each case.

The timeframe for data shown in each case varies to make sure the most relevant picture of the industry structure is given. Where volumes are volatile over time, longer term averages have been used; where there is steady growth or significant change in the industry structure, more recent or shorter periods have been used.

Pressure point analysis

Pressure points in supply chains have been identified where they are appropriate to illustrate major forces—representing opportunity for growth and improved demand, challenges to industry returns, and changes in concentration of supply chain activity.

19. The relationships between food supply industries and food categories



Key to charts

Explanation of terminology in charts

- 'Production' refers to farm production. For example, producing beef, lamb, pork for slaughter, growing fruit and vegetables, producing milk from dairy cows, and so on.
- The use of the terms 'processing' and 'manufacturing' varies according to industry. For dairy, processing refers to processes used to make fresh milk or fresh dairy products (such as cream or yoghurts), while manufacturing refers to more the complex, or secondary, transformation of primary product into milk powders, cheese, butter and other ingredients.
- In the case of meat industries, processing refers to a first-stage transformation or abattoir (for example, basic cuts), whereas manufacturing refers to the production of smallgoods and cooked products.
- In most other cases, the terms processing and manufacturing are interchangeable.

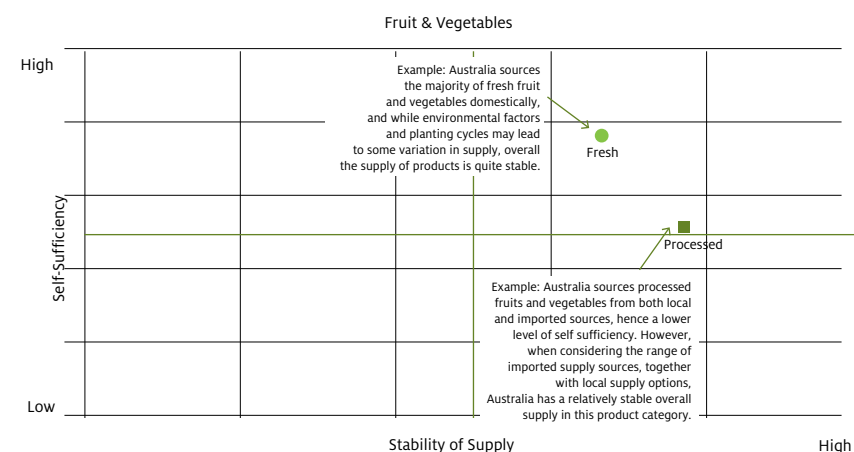
Assessment of self-sufficiency and stability

- Charts profile the relative level of self-sufficiency and stability of supply for the product category in question (see example to the upper-right).
- Self-sufficiency is measured on a scale of low to high, where 'high' implies that domestic supply is more than sufficient to support local consumption, and there is little, if any, reliance on imports. Where 'high' self-sufficiency occurs, Australia is also likely to be engaged in exports of this category, and could divert these products to local consumption if needed.
- Stability of supply is measured on a scale of low to high, where 'high' implies a highly stable supply with little exposure to fluctuations.

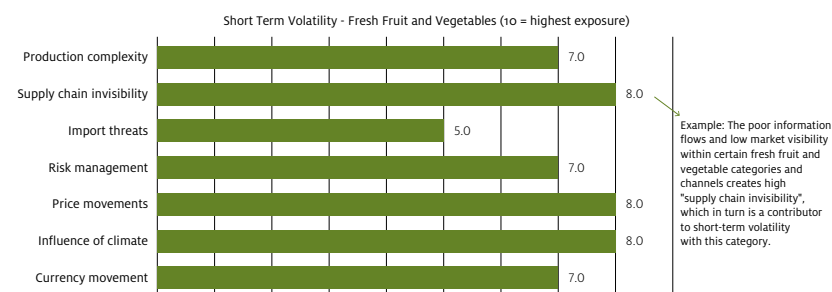
Assessment of the exposure to short-term volatility

- Charts outline the relative exposure to short-term volatility in prices and supply for individual product categories. Volatility can be influenced by factors occurring throughout the entire supply chain, from production through to retail channels (see example to the lower-right).
- Exposure to short-term volatility is measured on a scale of 1 to 10, where 10 is the highest. High volatility does not imply a risk to food security; it simply implies exposure to changes in supply and/or prices which need to be understood and managed.

20. Example assessment chart for self-sufficiency and stability



21. Example assessment chart for short-term volatility



Dairy

Overview of fresh dairy

The dairy industry processes and markets about 55 per cent of national milk production into domestic food and beverage markets.

Milk and other fresh dairy products, such as yoghurts and cream, used on average 2.47 billion litres over 2009–10 and 2010–11, or 27 per cent of total milk production. Manufactured dairy products (including cheese, butter and milk powders), analysed on the next page, used the remainder.

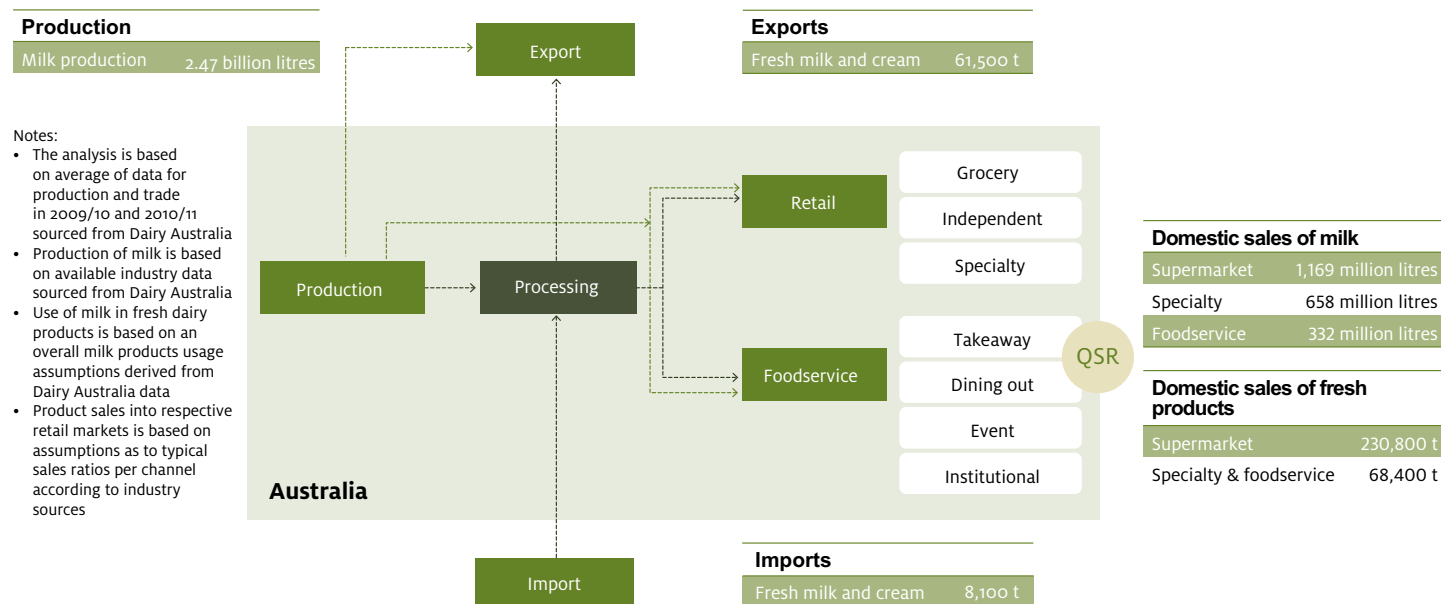
Milk is the dominant product in the fresh dairy sector, using about 93 per cent of milk production, with yoghurt and other lines using the remainder. Milk products include

fresh white milk (which is sold in a range of full-cream, reduced-fat and modified products), UHT (ultra heat treated) products, and flavoured milks (a combination of fresh and UHT products).

Dominant drivers of value

- Milk products compete in a complex beverage market—prices have evolved from a cost-plus pricing to a commercial basis influenced by a balance of demand and supply considerations.
- Private-label pricing in supermarkets for commodity milk product lines strongly influences overall returns in the fresh milk category.

22. Fresh dairy supply chain volume map



- There is strong consumer demand for the availability of nutritional milk and yoghurt products in a variety of highly accessible outlets, including convenience outlets.
- Demand for product diversity for dietary and health benefits, and a wide range of flavoured milk drinks.

Major trends and dynamics

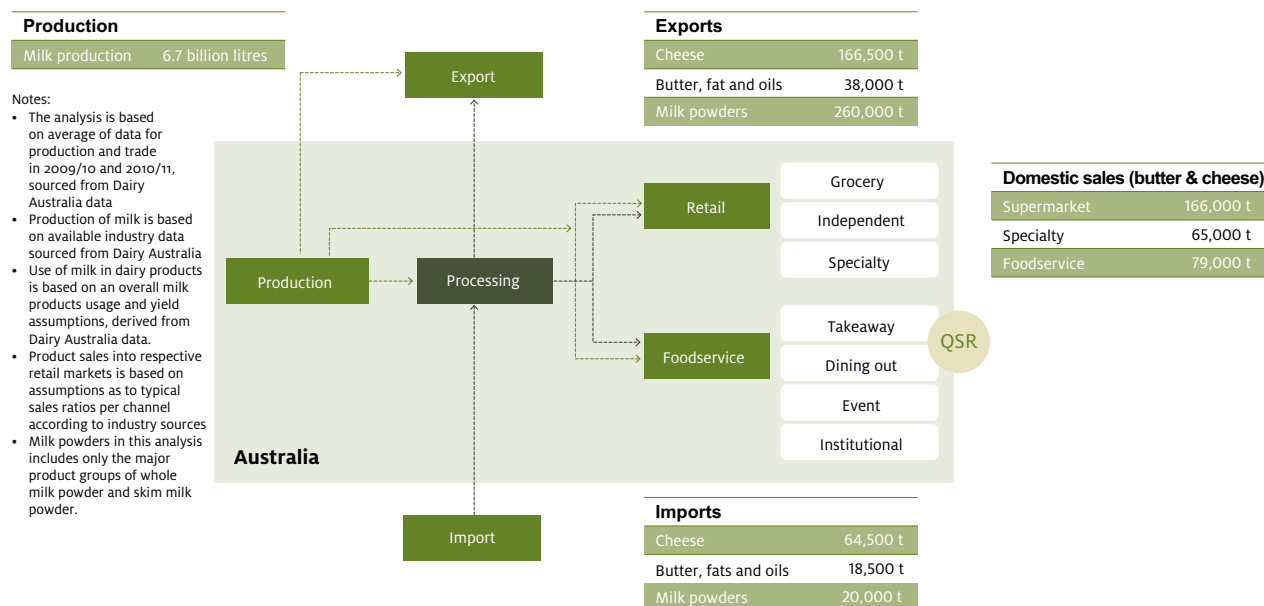
- The overall market growth in the milk category has typically tracked close to the rate of population growth.
- Over the past several years, there has been steady unit price growth across the category.
- The strong price-based retail competition for milk reflects the importance of the products to consumers as fresh, nutritional staple foods.

Overview of manufactured dairy products

Manufactured dairy products include cheese, butter, milk powder and related by-products which are produced for domestic and export customers. It is estimated that these products used, on average, 73 per cent of total milk production in the two years to June 2011. Manufactured products can be stored—fresh dairy lines (with the exception of UHT milks) have limited shelf lives.

Imports of dairy products are relatively low because Australia is a relatively low-cost dairy products manufacturer. This is because of mostly pasture-based systems in major export production regions of Victoria and Tasmania.

23. Manufactured dairy products supply chain volume map



Dominant drivers of value

- There is diverse pricing of cheese products across cheddar and specialty ranges because of diverse end use, cheese style and pack size.
- The wholesale value of cheddar cheese is strongly influenced by the world market, where the product trades as a commodity. Significant movements in this value flow down into retail prices.

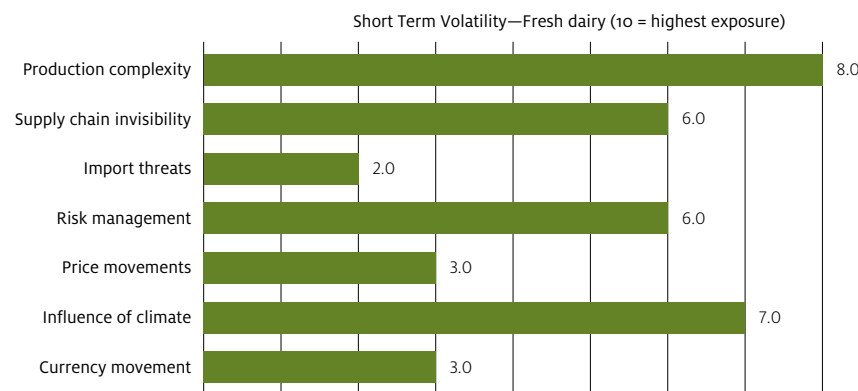
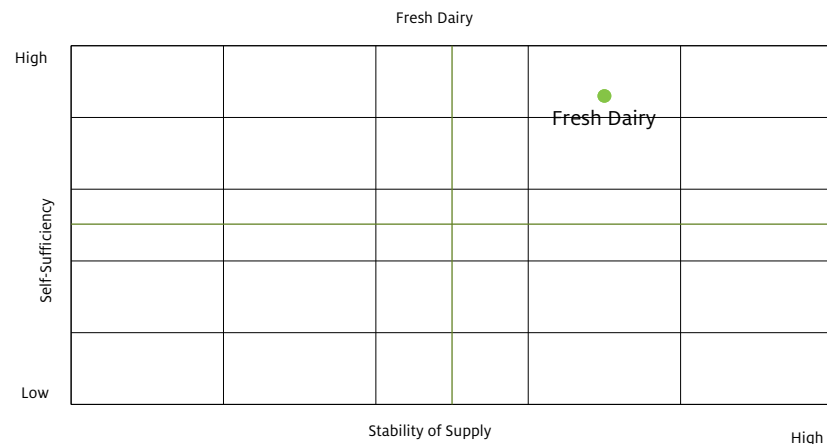
Major trends and dynamics

- There is a diverse range of end uses based on a range of meal and product options and occasions based on taste, indulgence and health platforms.
- Retail and wholesale prices vary over time with changes in world prices.
- Co-products from manufacturing processes, which are generally sold as specialised ingredients, influence the overall profitability of product categories.

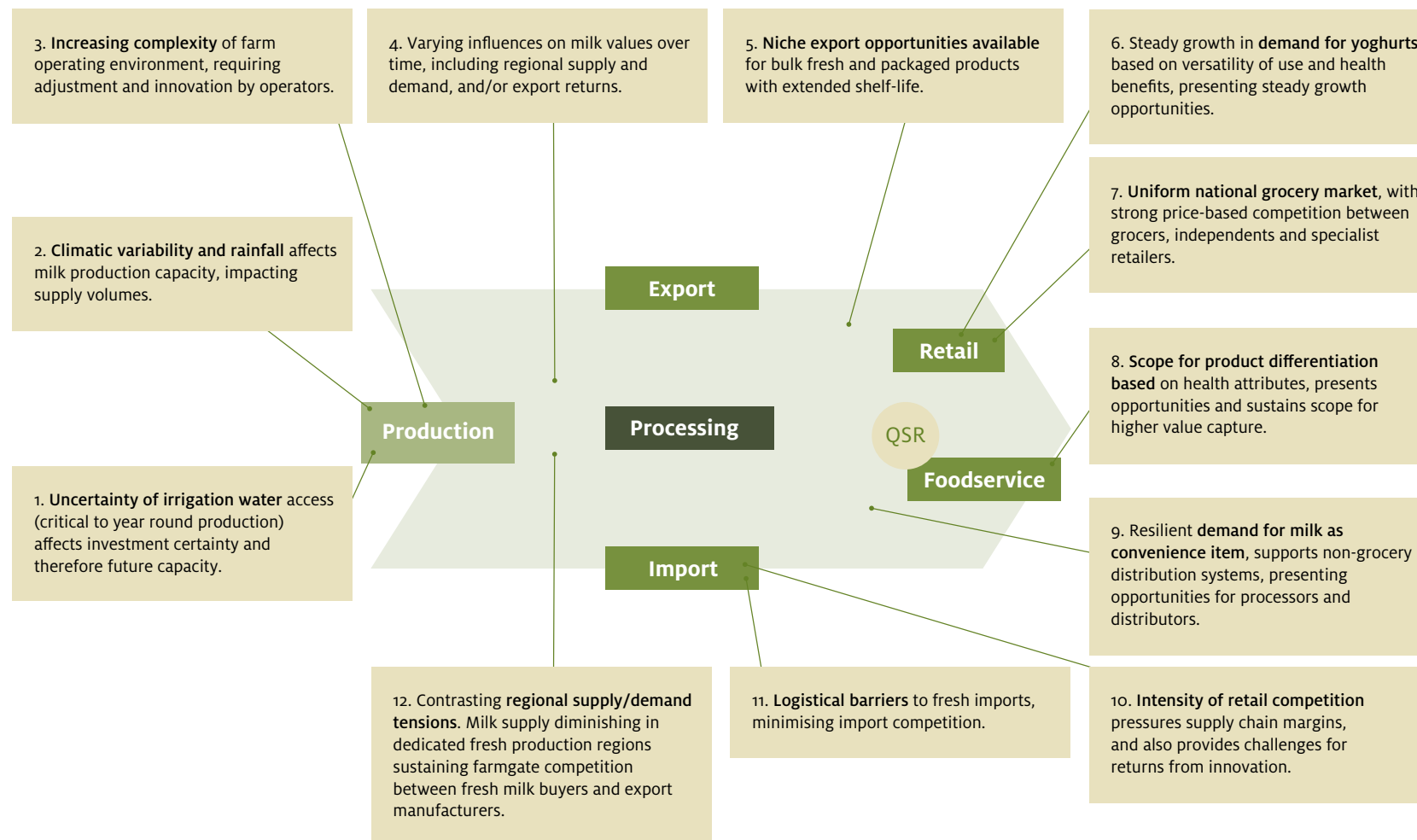
Pressure points in the value chain—fresh dairy products

- Fresh dairy value chains are inherently different from those for manufactured products, because of production systems used on farms, processing technologies, cold supply chain requirements and market dynamics.
- The issues shown in the supply chain reflect some diversity in conditions across the Australian industry that services the processing of fresh packaged milk and other fresh products.
- Overall, Australia is relatively self-sufficient in fresh dairy and has a relatively stable supply. Significant factors contributing to volatility of prices and supply within the industry include production complexity and the influence of climate.

24. Fresh dairy self-sufficiency, stability and volatility



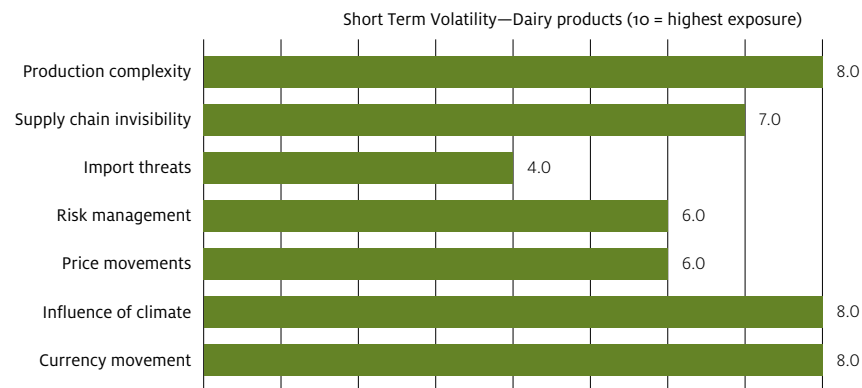
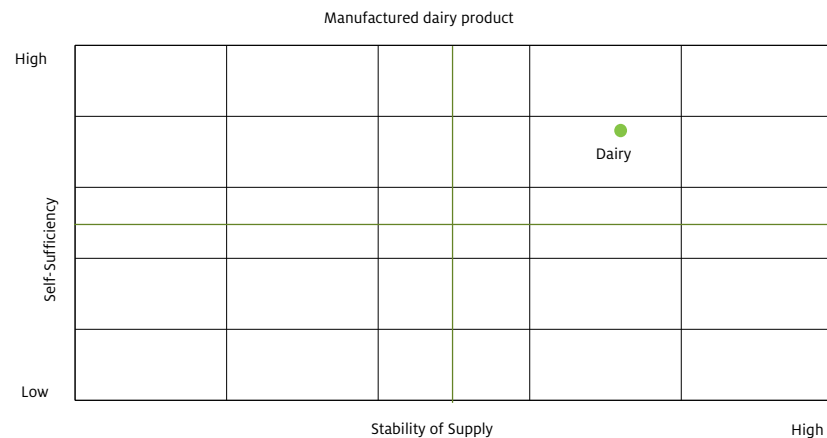
25. Fresh dairy supply chain pressure points



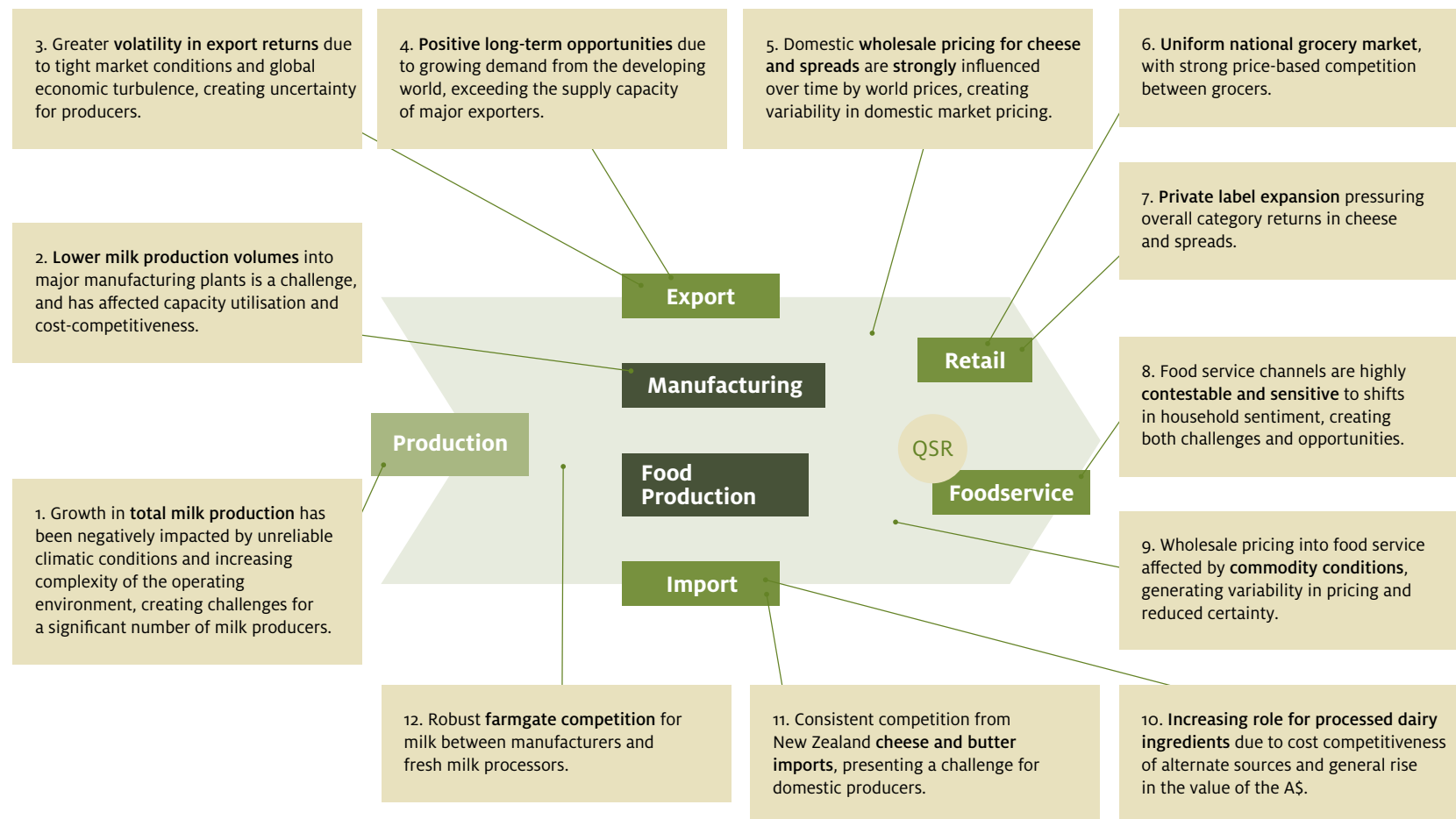
Pressure points in the value chain—manufactured dairy products

- The pressure points in the dairy products supply chain reflect the fact that about 45 per cent of Australian milk production is processed into exported dairy products, which accordingly creates a strong influence of international dairy prices and currency fluctuations on milk prices for raw milk. The increasing complexity of the factors affecting farm production compound the pressures on the farm sector. However, short-term price movements are mitigated by the nature of farm gate pricing arrangements within a production year.
- Overall, Australia is relatively self-sufficient in manufactured dairy product, and has a relatively stable supply. The significant factors contributing to short-term volatility of prices and supply include the influence of climate, currency movements and production complexity.

26. Manufactured dairy product self-sufficiency, stability and volatility



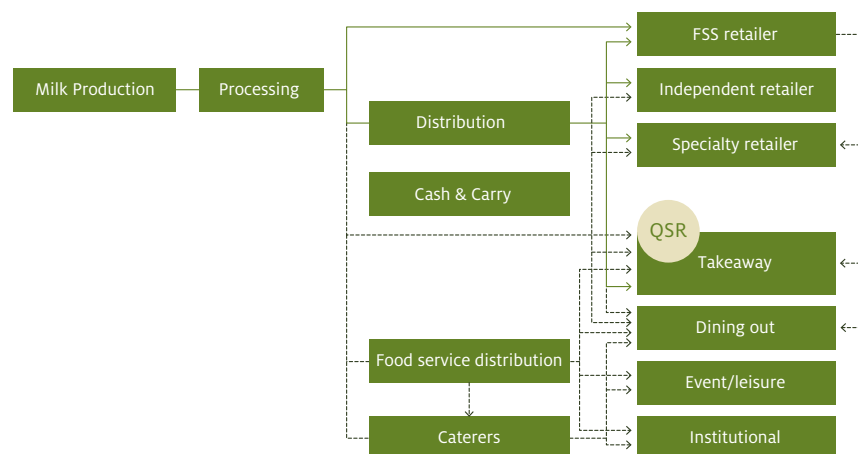
27. Manufactured dairy product supply chain pressure points



Channels to the consumer—fresh dairy products

- The milk processing sector of the dairy industry is dominated by two major national dairy companies, with a number of other regional and niche processors accounting for total output.
- It is estimated that the grocery retailers represent 55 per cent of the retail market for milk.
- Outside the grocery channel, due to the demand patterns and chilled product form, milk processors service the market through owned or franchised distributors which offer direct delivery to independent retail and foodservice establishments.
- Because of the nature of these distribution activities, it is not possible to accurately quantify the proportion of the market represented by foodservice outlets.
- The supply chain for fresh products, such as yoghurts and dairy desserts, is dominated by the supply to supermarkets which sell more than 90 per cent of total sales volumes.

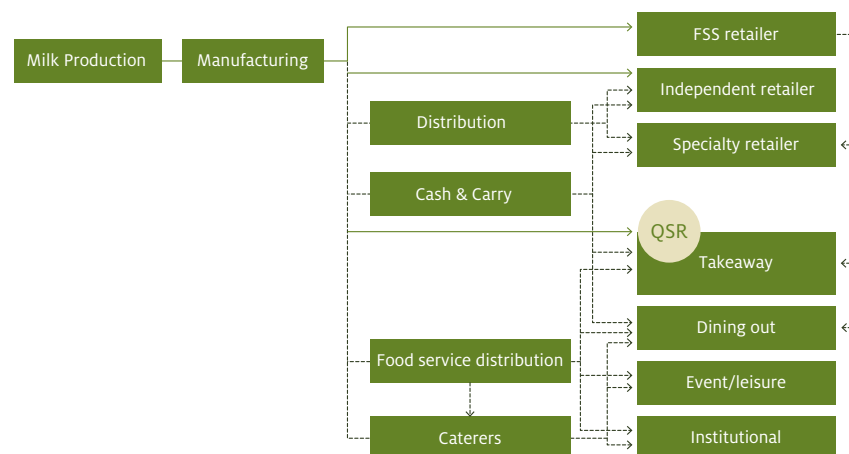
28. Fresh dairy product channels to the consumer



Channels to the consumer—manufactured dairy products

- This sector is dominated by a number of major dairy companies, with a number of smaller regional and niche processors accounting for total output. There is limited crossover of activities between fresh-milk processors and dairy-product manufacturers, because the processing systems are completely different.
- It is estimated that major supermarket retailers represent about 60 per cent of the retail market for butter-based spreads, while foodservice accounts for 25 per cent.
- FSS retailers represent 57 per cent, and foodservice 34 per cent, of the sales of cheese.
- Distribution channels across these categories are broadly similar; however, there is greater fragmentation of the cheese distribution channel, given the wide range of varieties, specialty types, diverse outlets and occasions for the sale and consumption of cheeses.
- The product category includes a significant specialty-cheese segment which increases the diversity of the overall cheese offering. In view of this greater diversity, foodservice distributors have a greater role to play in supplying products into the specialty segment.

29. Manufactured dairy product channels to the consumer



Beef

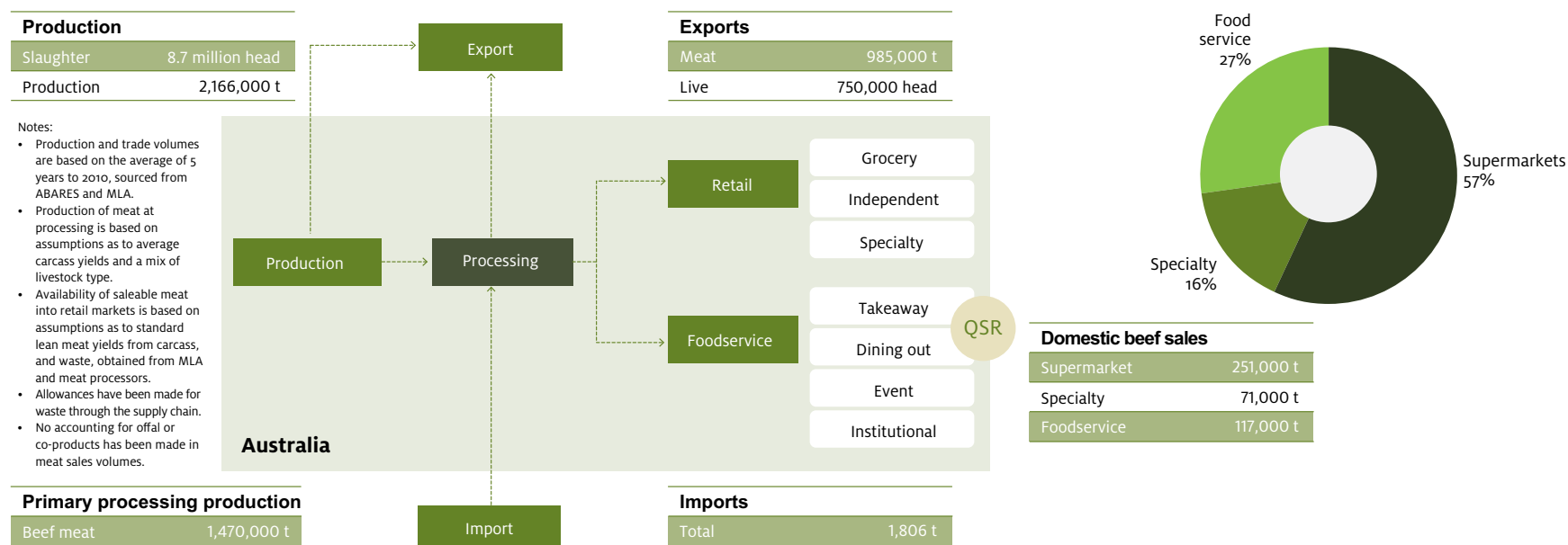
The beef industry is dominated by major production and processing facilities which have developed to service export markets. Beef has the largest share of per-capita fresh meat consumption sold in retail channels (that is, excluding foodservice). However, in terms of total per-capita intake of meat protein, beef has been overtaken by poultry because of the growth in size and diversity of foodservice markets for chicken.

Despite the ongoing, strong influence from export market conditions on pricing and available livestock supply, the beef industry has seen greater development of specialist producers and contract production facilities committed to supply into domestic retail and foodservice markets.

Dominant drivers of value

- Movements in export returns have a major influence on wholesale values.
- Export values are driven by the range of premium and commodity markets supplied, and the overall balance of world supply and demand, which has been affected from time to time by trade barriers caused by diseases such as bovine spongiform encephalopathy ('mad cow disease') and foot and mouth disease.
- Livestock prices vary from time to time with the shortage or abundance of supply, which is affected by weather, feed availability and cost, and export demand.

30. Beef product supply chain volume map



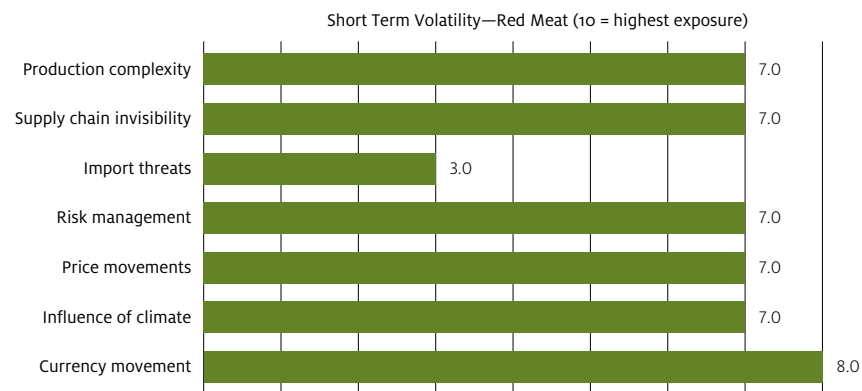
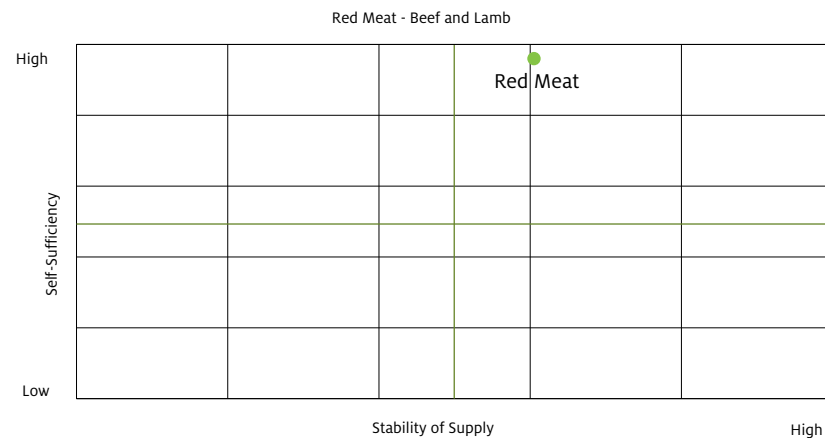
Major trends and dynamics

- Increased direct sourcing by FSS chains.
- Increased value-adding and integration featuring wholesalers and specialty retailers

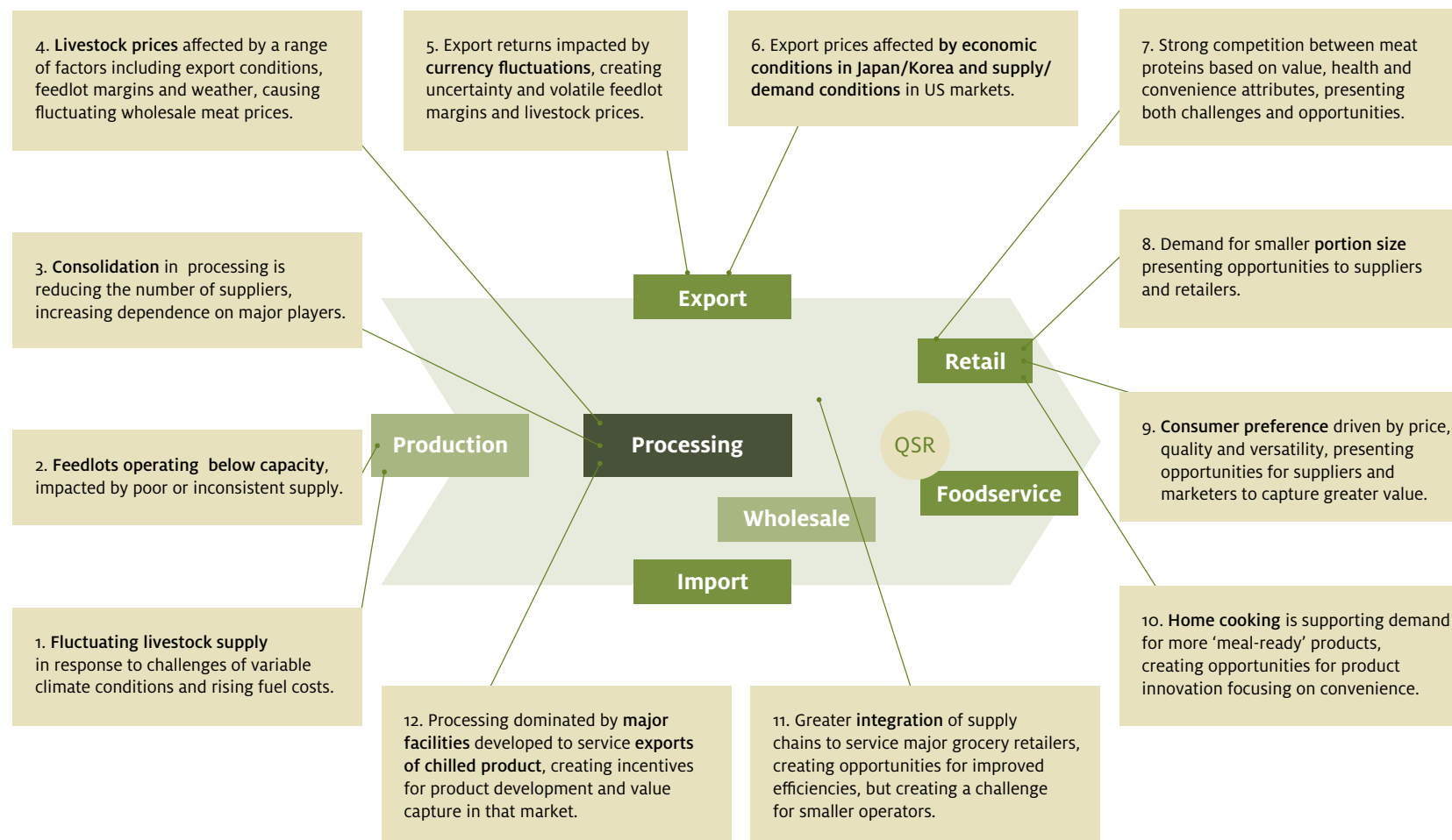
Pressure points in the beef value chain

- The pressure points identified in this diagram reflect the influence of a strong export focus of the industry, and the effects of markets and weather on the value of beef meat entering domestic retail value chains.
- While security of food supply of beef is strong, the industry supply chain is exposed to significant short-term volatility due to the effects of weather on available livestock for processing, the impact of export markets and currency on meat values and the complexity of factors affecting feedlot operations.

31. Beef self-sufficiency, stability and volatility



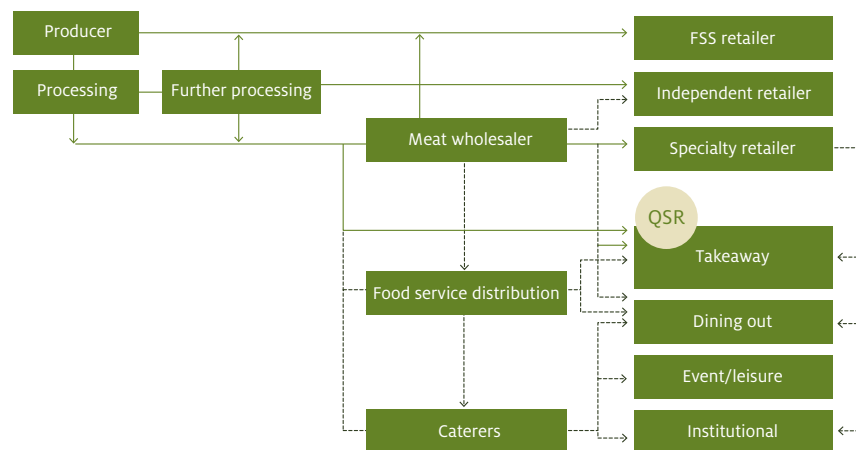
32. Beef supply chain pressure points



Channels to the consumer

- Distribution channels for beef and lamb are very similar and have been combined for this analysis.
- The retail red-meat market is dominated by share of sales volumes made through FSS chains. FSS chains have been increasingly using contract growing-out of cattle and contract processing of meat through abattoirs to make sure cost is stable and quality is consistent.
- It is estimated by meat industry market research that FSS retailers hold about 66 per cent of the retail market for beef (lamb: 66 per cent), butchers account for 28 per cent (lamb: 29 per cent), and sales direct into the independent retail and foodservice channels account for the remainder.
- A significant volume of meat is on-sold from specialist butchers to foodservice operators in takeaway and eating-out segments, and some supply to local institutional healthcare establishments.
- Distribution flows for these meat categories are dominated by the direct supply from processors to retailers. For supply outside the FSS channels, meat wholesalers play a central role, supplying the diverse range of independent retailers, butchers and foodservice outlets.

33. Beef, lamb and sheepmeat product channels to the consumer



Lamb and sheepmeat

The lamb and sheepmeat industry has undergone sustained growth in production from 2000 to 2010 in response to good export and domestic demand. The industry has enjoyed the benefits of a tightening in world supply of sheepmeat, which has improved the per-kilogram meat value over time.

There is no import of sheepmeat.

Dominant drivers of value

- global shortage of sheepmeat
- movements in export returns, which have major influences on wholesale values
- livestock price variance from time to time with the shortage or abundance of supply (which is affected by weather, feed availability and cost, and export demand)
- at retail, the diversity of cuts, quality and meal occasion compared with major competing meats such as chicken.

34. Lamb and sheepmeat products supply chain volume map

Production

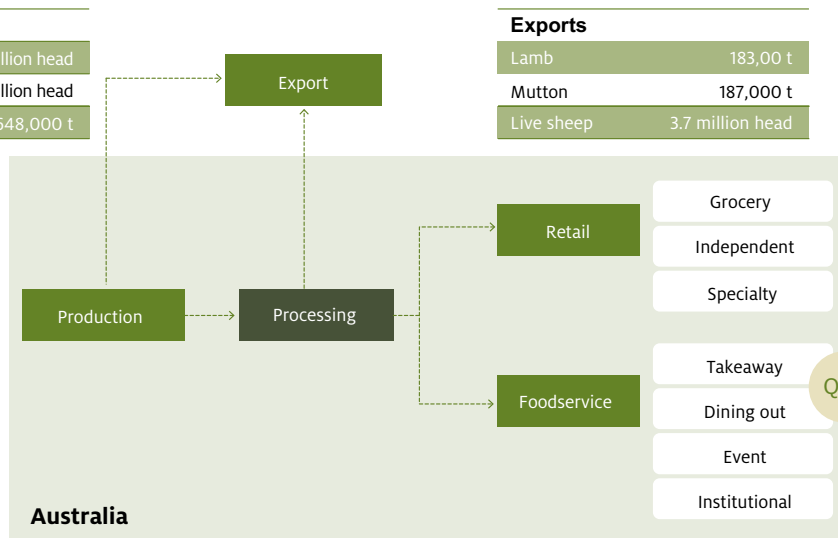
Slaughter (lambs)	19.8 million head
Slaughter (mutton)	11.4 million head
Total carcass weight	648,000 t

Notes:

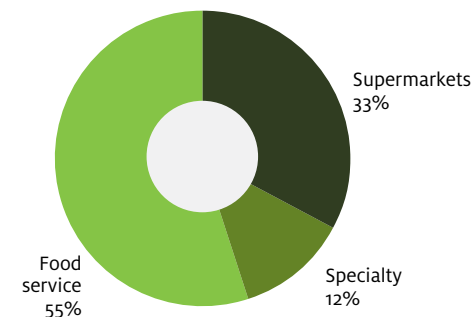
- Production and trade volumes are based on the average of 5 years to 2010, sourced from ABARES and MLA.
- Production of meat at processing is based on assumptions as to average carcass yields and a mix of livestock type.
- Availability of saleable meat into the local market is based on industry standard lean meat yields from carcass
- No accounting for offal or co-products has been made in meat sales volumes.
- Exports include full and part carcasses.

Primary processing yield

Lamb	347,000 t
Mutton	209,000 t



Domestic lamb market share



Domestic sales of lamb and mutton

Supermarket	92,000 t
Specialty	36,000 t
Foodservice	52,000 t

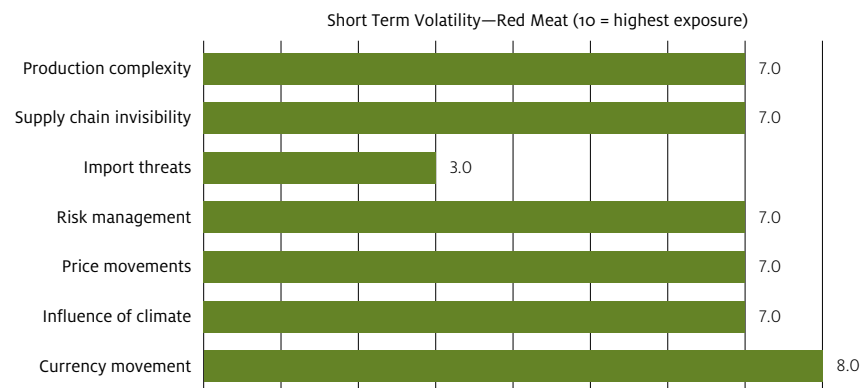
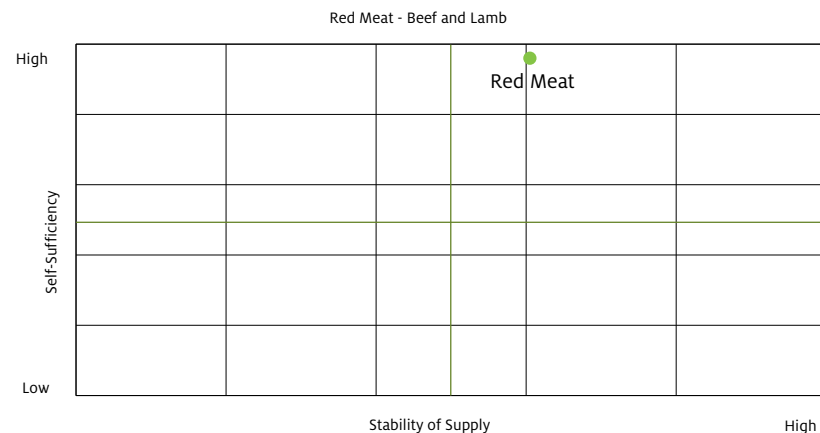
Major trends and dynamics

- increased direct sourcing of red meat supplies by FSS chains, using third-party contract processors.
- increased value-adding and integration featuring wholesalers and specialty retailers

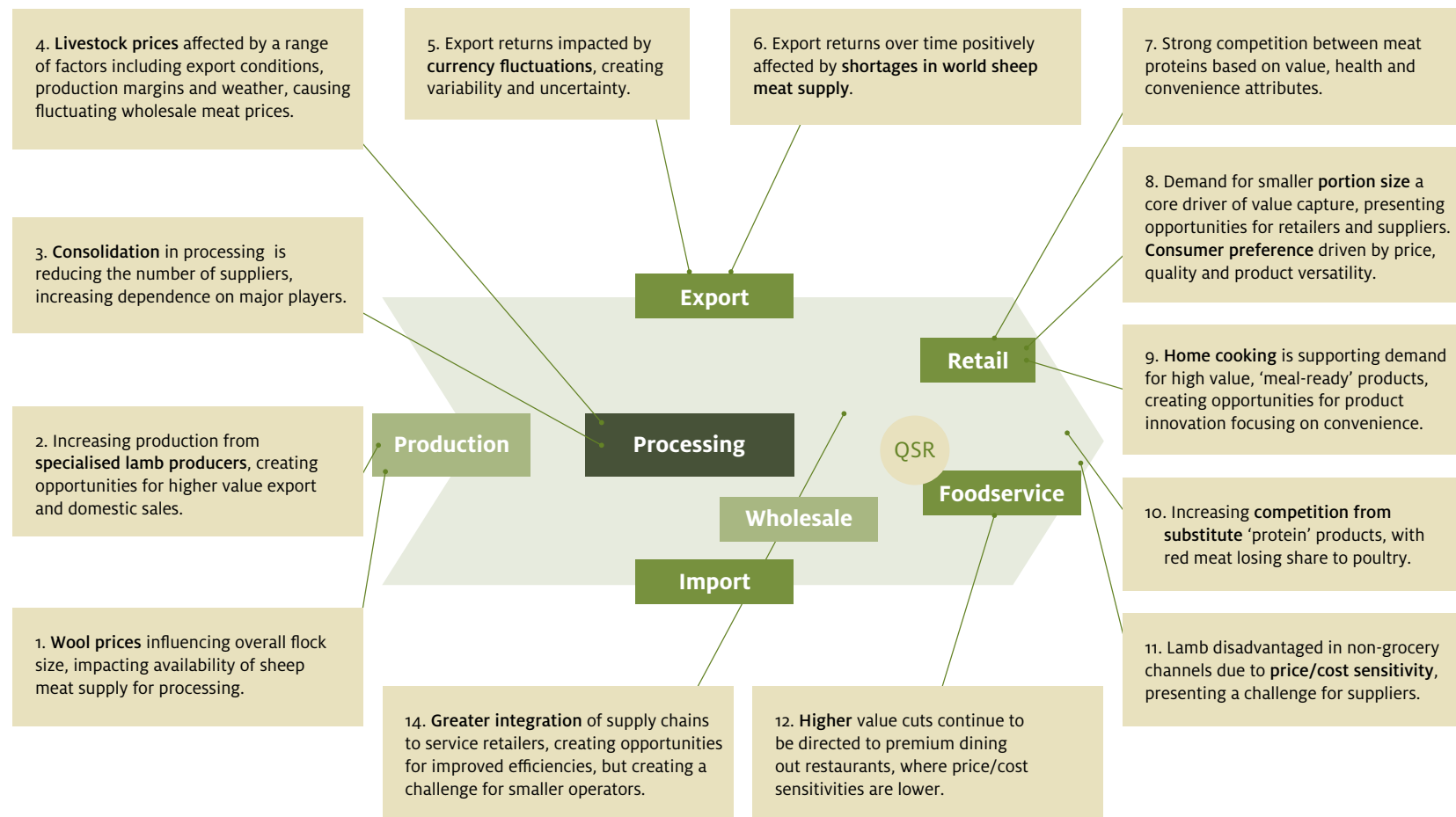
Pressure points in the value chain

- The pressure points identified in this diagram reflect the influence of a strong export focus of the industry and the effects on the domestic retail value chains.
- Overall Australia has a high level of self-sufficiency of lamb and sheepmeat, and a relatively stable supply. However, as with beef, there are a number of factors that influence supply stability, and create a level of short-term volatility in prices and supply within the industry, including the influence of international markets and production complexity.

35. Lamb and sheepmeat self-sufficiency, stability and volatility



36. Lamb and sheepmeat supply chain pressure points



Pork

The pork industry has undergone significant restructuring in recent years with the increased exposure to imported fresh/chilled pork, which enters the manufactured-meat (smallgoods) sector and is processed into ham and bacon products.

The fresh-pork segment of the domestic market consumes less than a third of total carcass weight, as the majority of pig meat is used in the production of manufactured meat.

Dominant drivers of value

- carcass return based on fresh and manufactured yields
- for fresh retail product, the diversity of cuts, quality and meal occasion compared with major competing meats such as beef and chicken
- increasing consumer demand for products from free-range production systems.

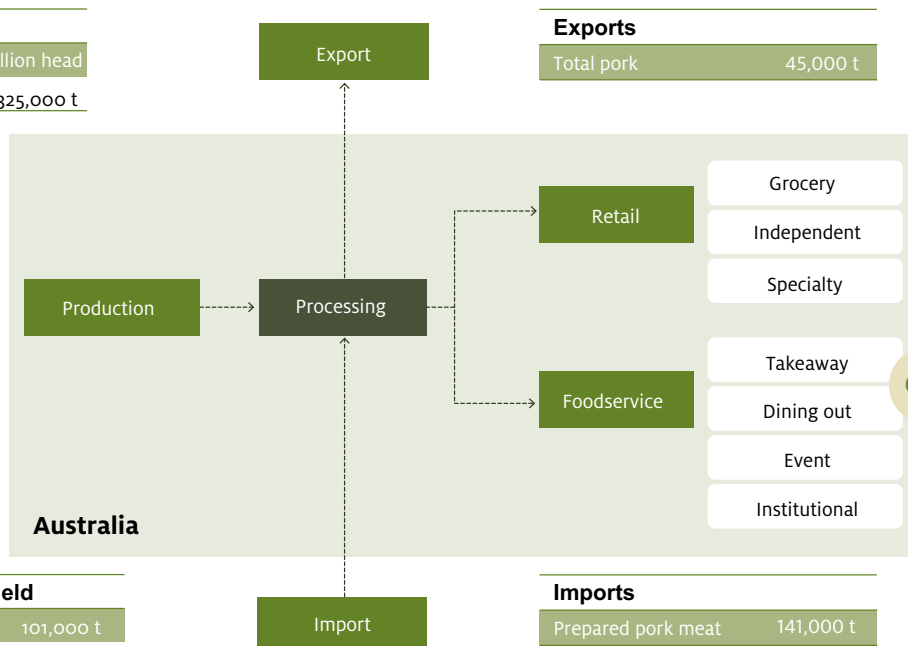
37. Pork products supply chain volume map

Production

Slaughter	4.53 million head
Total carcass weight	325,000 t

Notes:

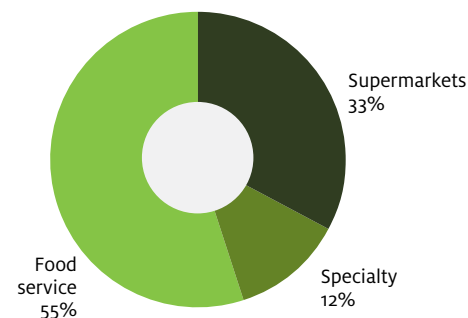
- Most recent production year has been used for production and trade.
- Production of meat at processing is based on assumptions as to average carcass yield.
- Availability of saleable meat into retail markets is based on assumptions as to standard meat yields, usages from carcass, and waste.
- Availability of meat used in the processing of smallgoods and as ingredients on other food products based on inquiries with industry participants.



Primary processing yield

Fresh pork	101,000 t
Used in manufacturing	89,000 t

Domestic fresh pork and smallgoods market share



Domestic sales of fresh pork and smallgoods

Supermarket	94,000 t
Specialty	35,000 t
Foodservice	154,000 t

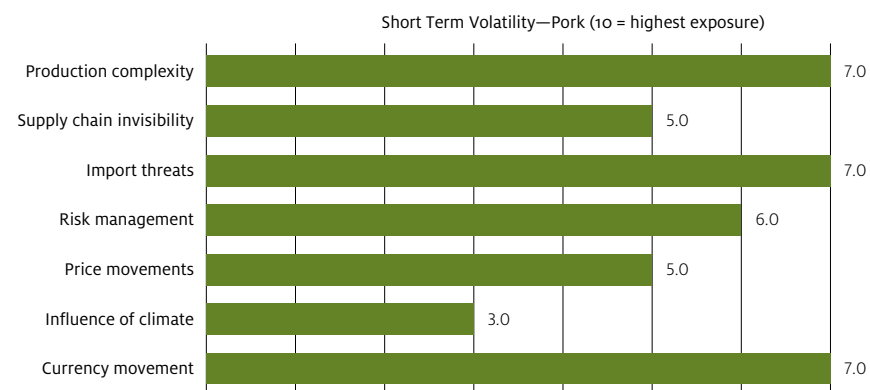
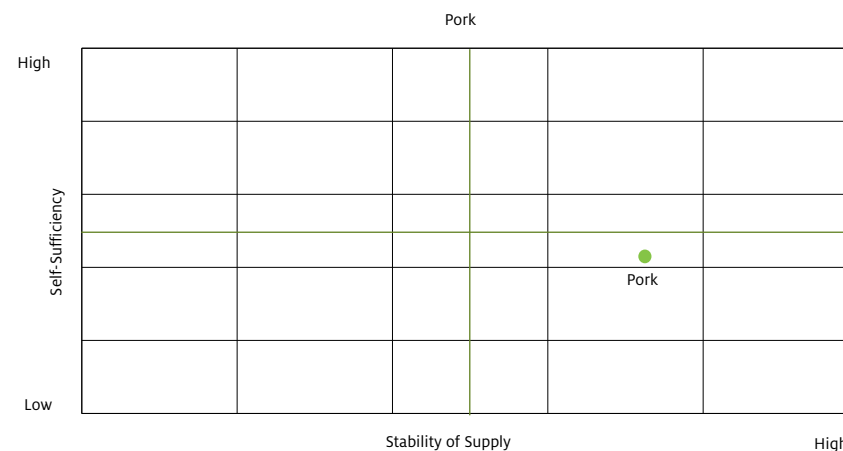
Major trends and dynamics

- increased import of ham and bacon products over time
- reduction in export cost-competitiveness against large-scale producers.

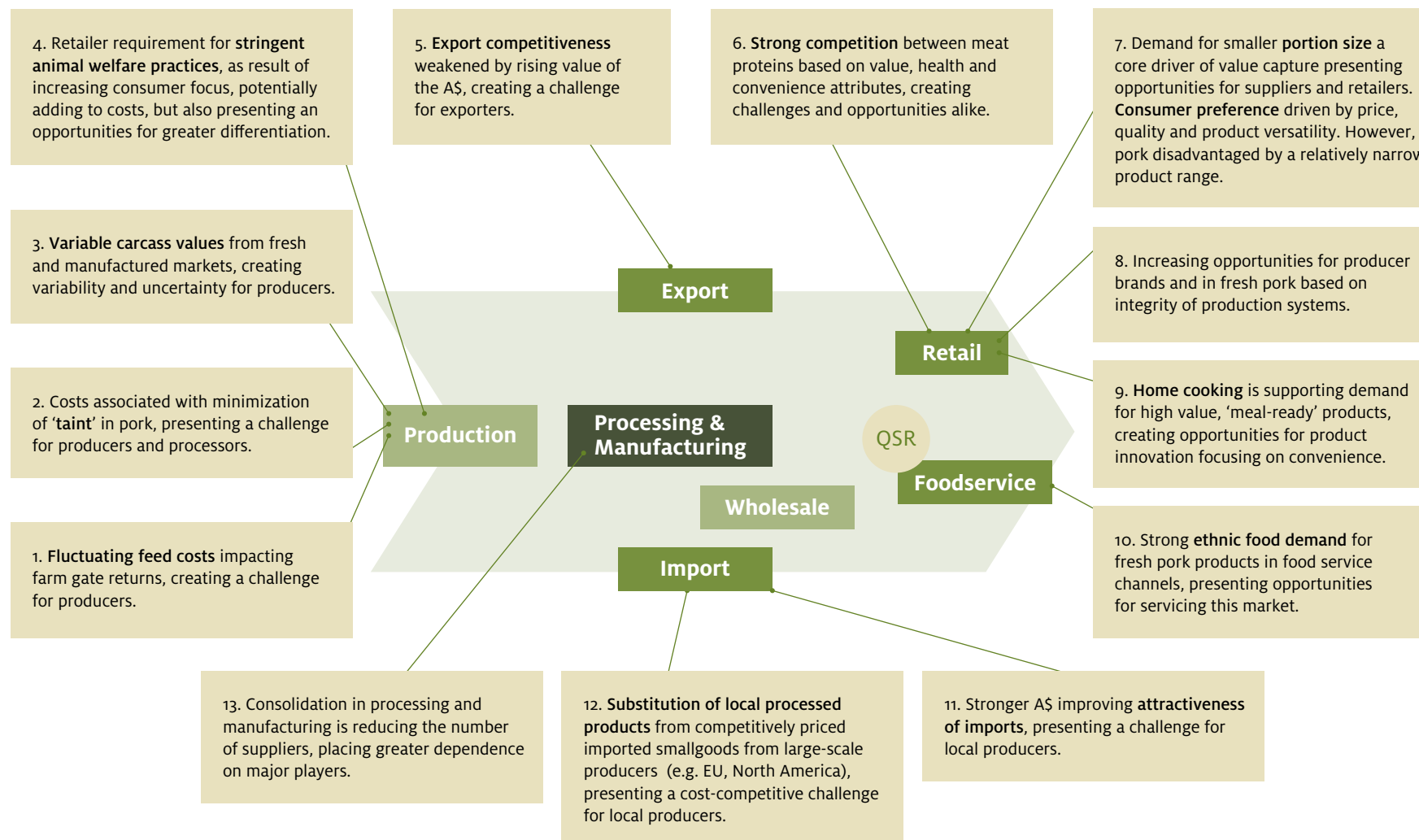
Pressure points in the pork value chain

- The pork value chain reflects the pressure of balancing returns from fresh pork products and the growing import competition from processed smallgoods products, which are assuming a larger role in overall products mix.
- Australia relies on a certain level of pork imports and, therefore, overall self-sufficiency is relatively low; however, stability of supply remains strong. Factors influencing short-term volatility of prices and supply include the impact of currency movements, import competition, and complexities within the production system.

38. Pork self-sufficiency, stability and volatility



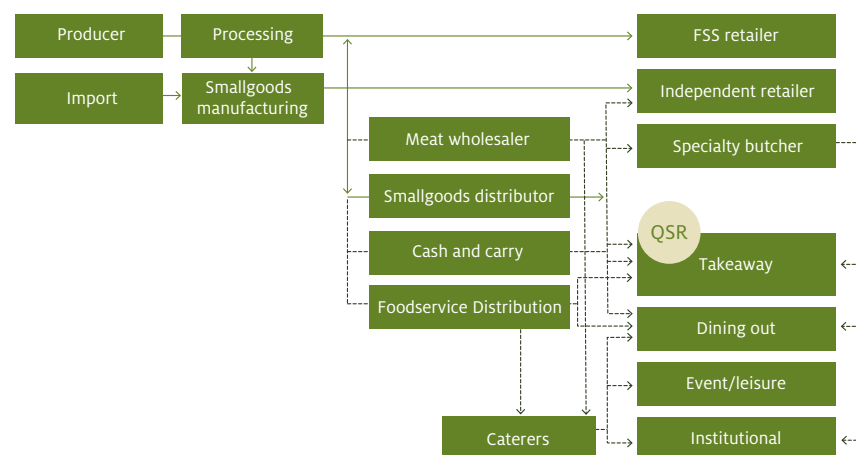
39. Pork supply chain pressure points



Channels to the consumer

- The retail pork distribution channels are more complex than red meat sectors due to the proportion of the carcass which is consumed in the manufactured meat sector. Of domestic pig meat production, about 56 per cent of carcass output is processed into fresh pork cuts.
- It is estimated by meat industry sources that FSS retailers hold about 66 per cent of the fresh pork market, butchers account for 26 per cent, and sales direct into the independent retail and foodservice channels account for the remainder.
- Distribution flows for these categories are dominated by the direct supply from processors to retailers. For supply outside the FSS channels, meat wholesalers and specialist smallgoods distributors play a central role, supplying the requirements of a diverse range of independent retailers, butchers and foodservice outlets.

40. Pork product channels to the consumer

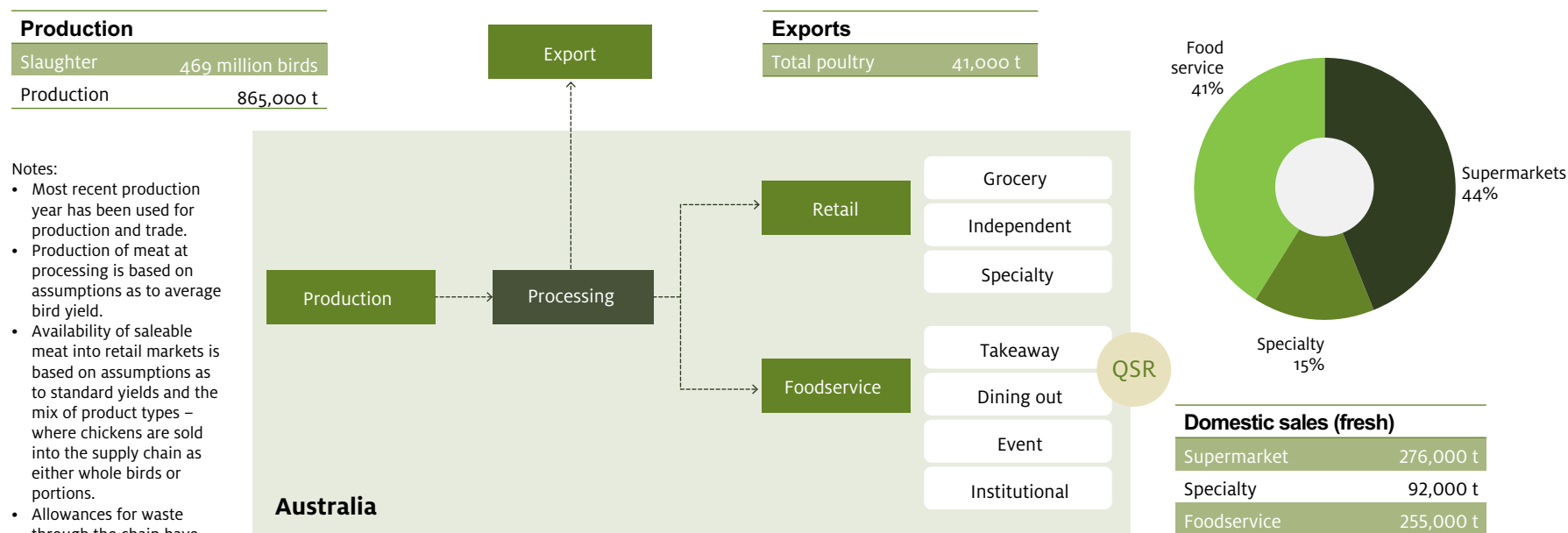


Poultry

The poultry meat industry has experienced steady market and production growth. The industry features two major elements—fresh poultry meat, which is primarily sold through the retail channels, and processed poultry, which has a large market share in foodservice channels.

The sector has benefited from improvement in the cost-competitiveness and consistent quality of meat retailed as fresh meat, and from the expansion in the role of chicken meat in takeaway markets—especially through the QSR channel. Industry data is scant due to the concentration of ownership of integrated processing activities and the highly competitive nature of the sector.

Figure 41. Poultry products supply chain volume map



Dominant drivers of value

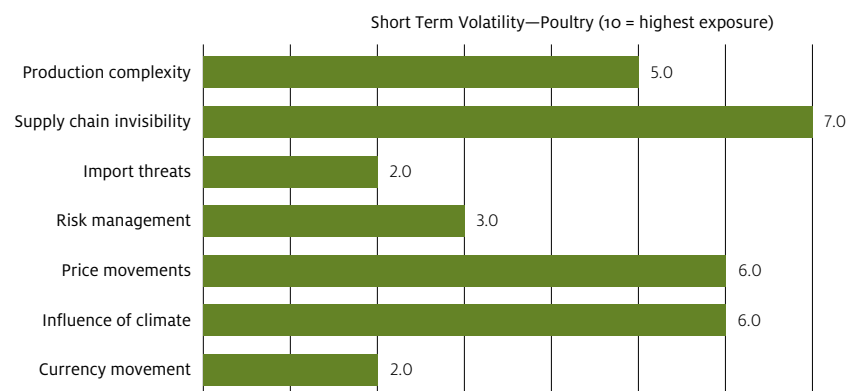
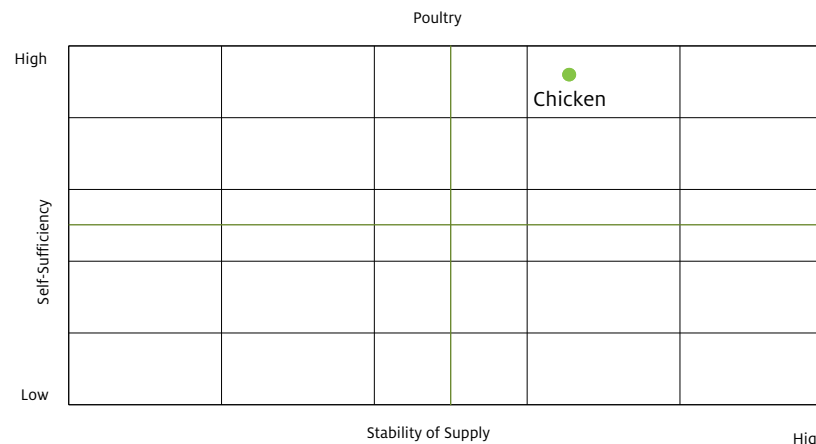
- the uniformity and consistency of product quality
- the range of primary meal occasions and cut/portion types compared with major competing meats such as beef and pork
- increasing consumer demand for products from free-range production systems
- meal value in the primary takeaway/fast-food market.

Major trends and dynamics

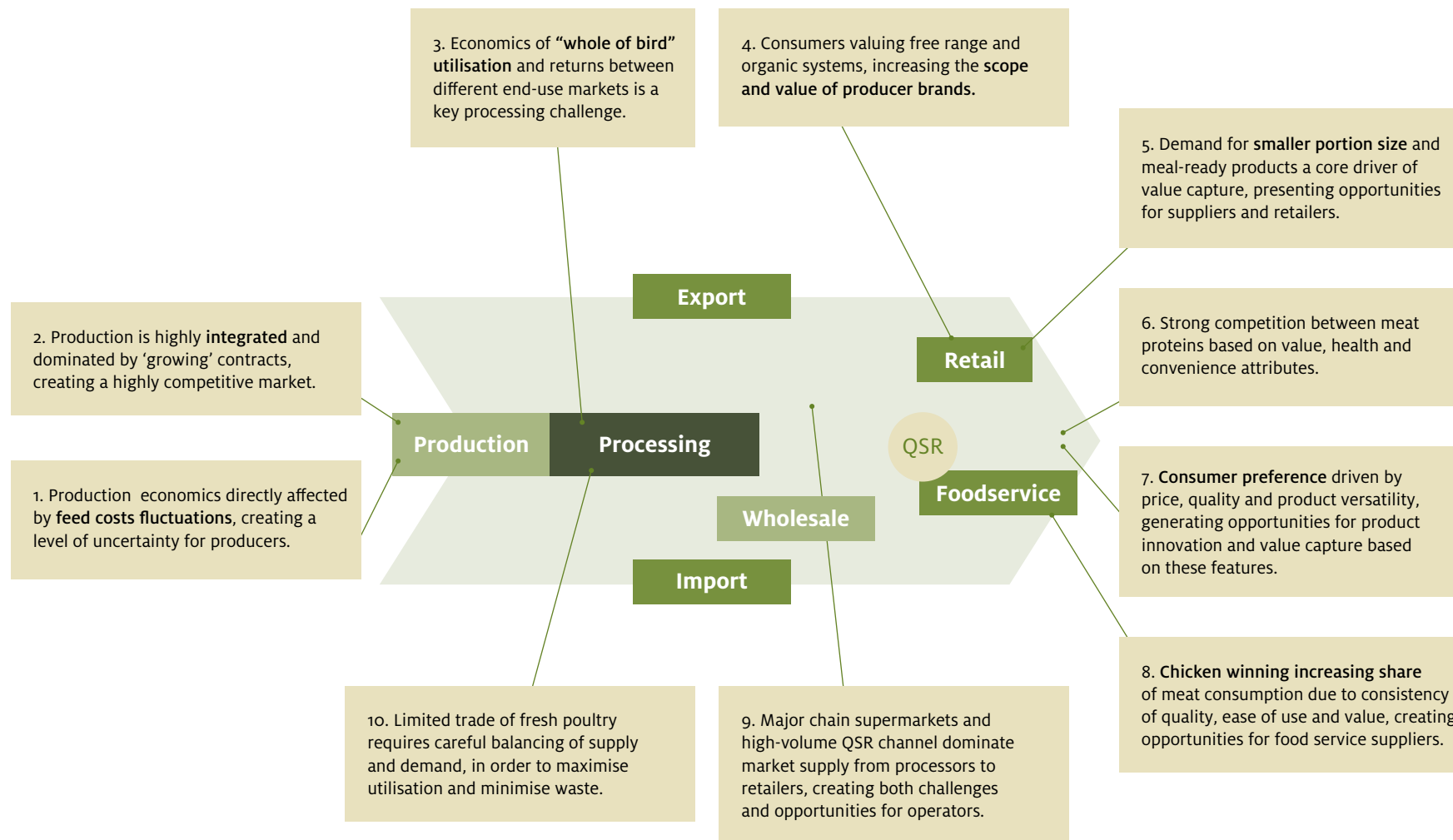
- improved competitiveness of poultry meat
- increased size of foodservice markets, mostly through the takeaway channels, is increasing the total poultry demand.

Pressure points in the poultry value chain

- The pressure points in the chain reflect the highly integrated and concentrated nature of the production and processing sectors, and the importance of balancing recovery of meat from birds through the various market channels for fresh and processed poultry meat.
- The poultry sector has a high level of self-sufficiency, and a relatively high level of supply stability. Factors contributing to short-term volatility of supply and prices include the lack of visibility across the supply chain, and the influence of climate and price movements.

42. Poultry self-sufficiency, stability and volatility

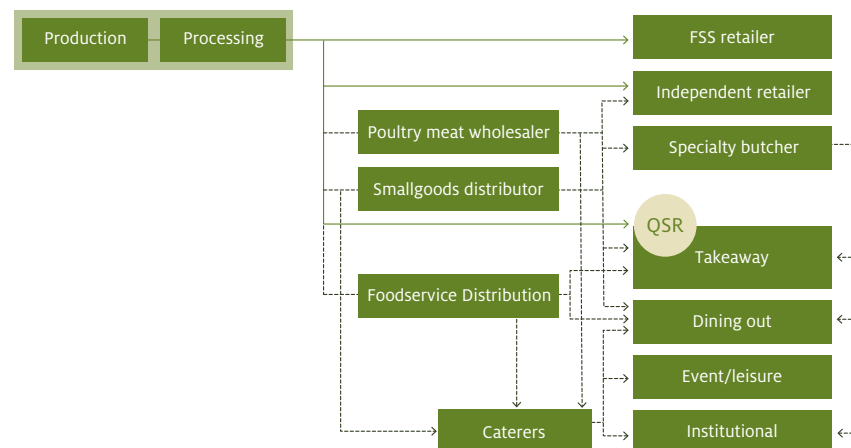
43. Poultry supply chain pressure points



Channels to the consumer

- The distribution channels relevant to poultry meat encompass fresh poultry and further processed products which are largely sold through the foodservice sector. The structures are more complex than other meat sectors due to the proportion of chicken meat which is used in the manufactured meat sector.
- The other major difference between other meat sectors and the poultry sector is the strong concentration of ownership in chicken processing, which features a small number of vertically integrated processors which are engaged in growing, and first-stage and further processing of poultry meat.
- Distribution flows for these categories are dominated by the direct supply from processors to retailers and to QSR chains. For supply to markets outside FSS and QSR channels, foodservice wholesalers and specialist chilled and frozen food distributors play major roles in the supply to independent retailers and foodservice outlets.

4.4. Poultry product channels to the consumer



Seafood

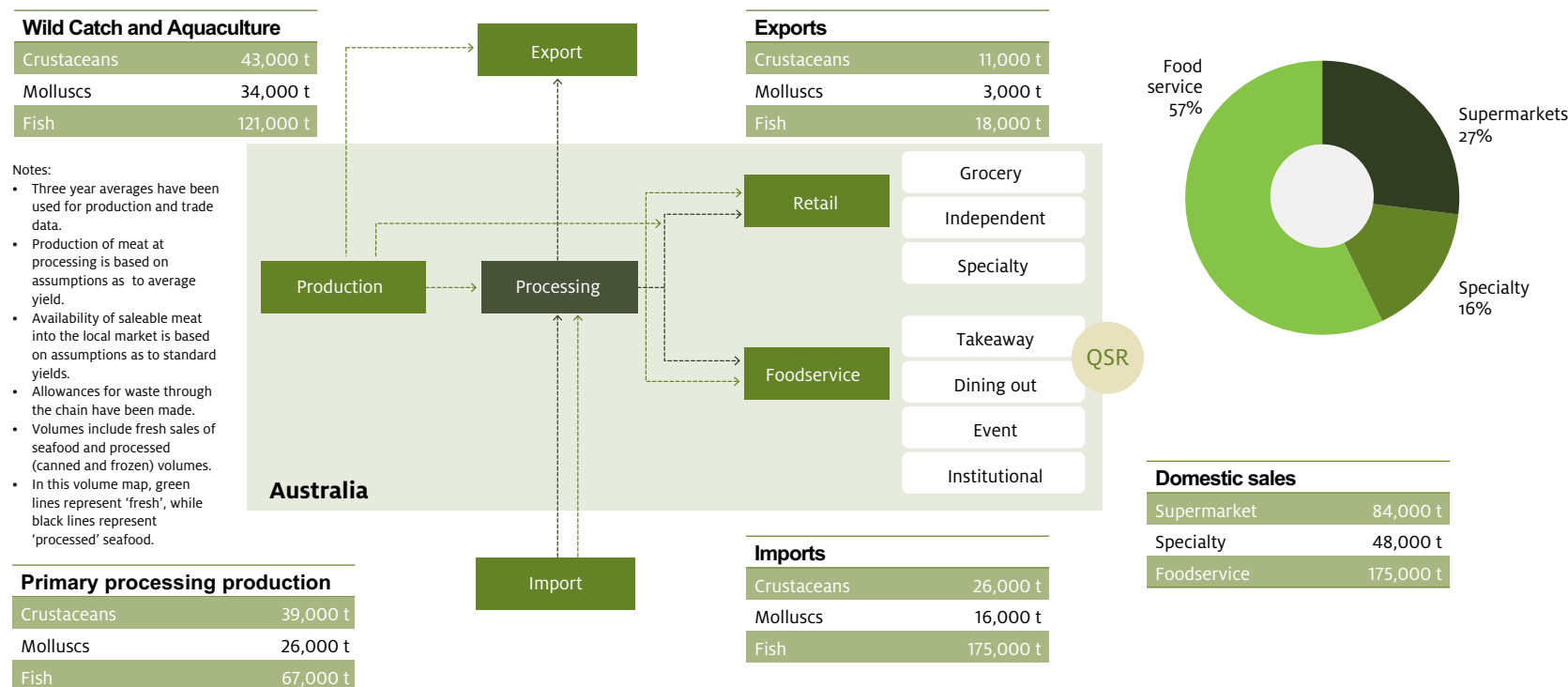
In overall terms, the seafood industry is highly reliant on imported product—which generally lands in frozen or further processed form—to supply a large portion of the domestic market requirement.

A significant portion of seafood volumes are sold in processed form (canned or in frozen meal portions), and a large component of imported frozen fish volumes are sold into the domestic market as fresh product.

Dominant drivers of value

- balance of supply and demand in the chain and the price gained from wild-catch product
- increased demand for portion-prepared products.

45. Seafood products supply chain volume map



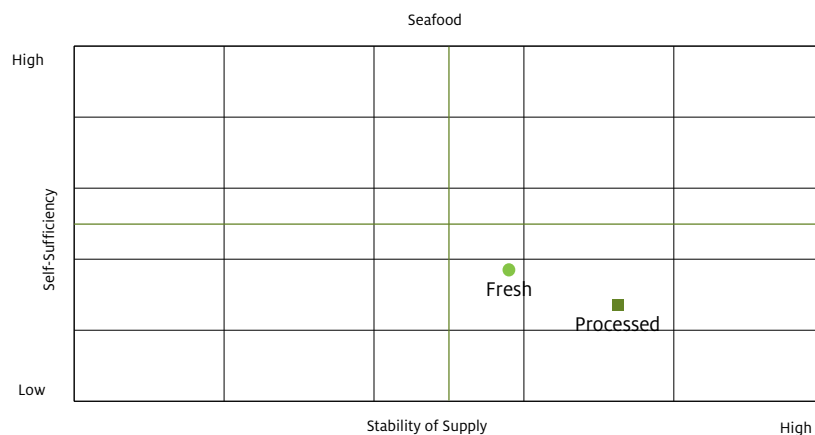
Major trends and dynamics

- opportunity for increased sales not materialising
- wild-catch decreasing because of resource limits, with dependence on fresh and processed imports increasing
- increasing volumes sourced from domestic farmed fish
- increasing volumes of imported, processed volumes at decreasing unit prices
- increased involvement of FSS retailers with branded, portion-packed product and larger fresh delicatessen seafood offerings.

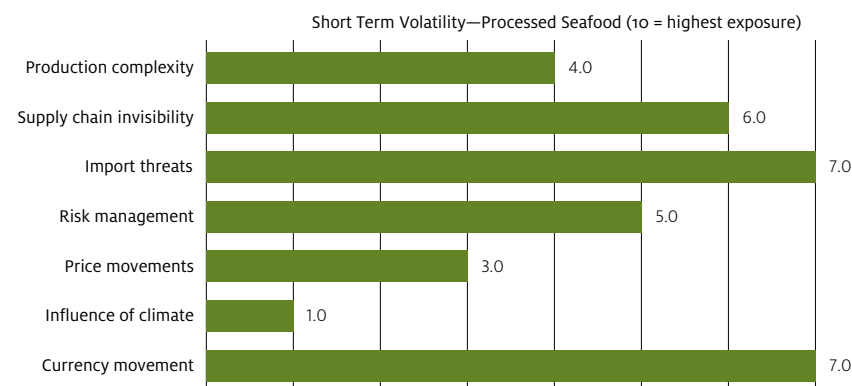
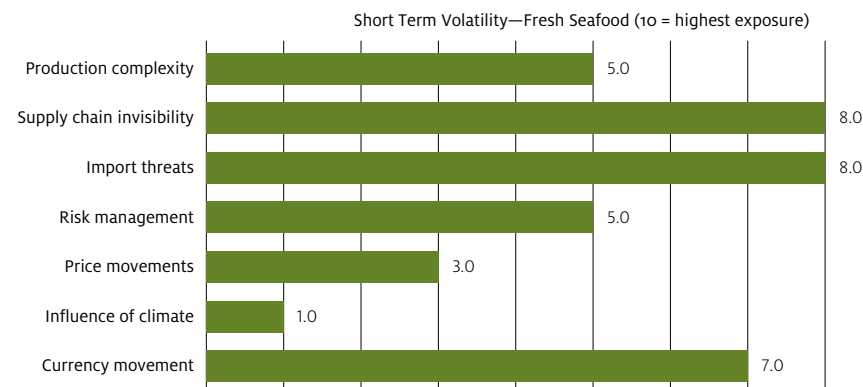
Pressure points in the seafood value chain

- The pressure points in the supply chain reflect the fact that the seafood market in Australia places a heavy reliance on imported fresh and processed product because of limitations on local seafood resources and the small size of the domestic processing sector. This is reflected in Figure 46, indicating a lower level of self-sufficiency and supply stability than other food categories. Factors influencing short-term volatility vary for fresh and processed seafood, but include supply chain invisibility, import competition and currency movements.

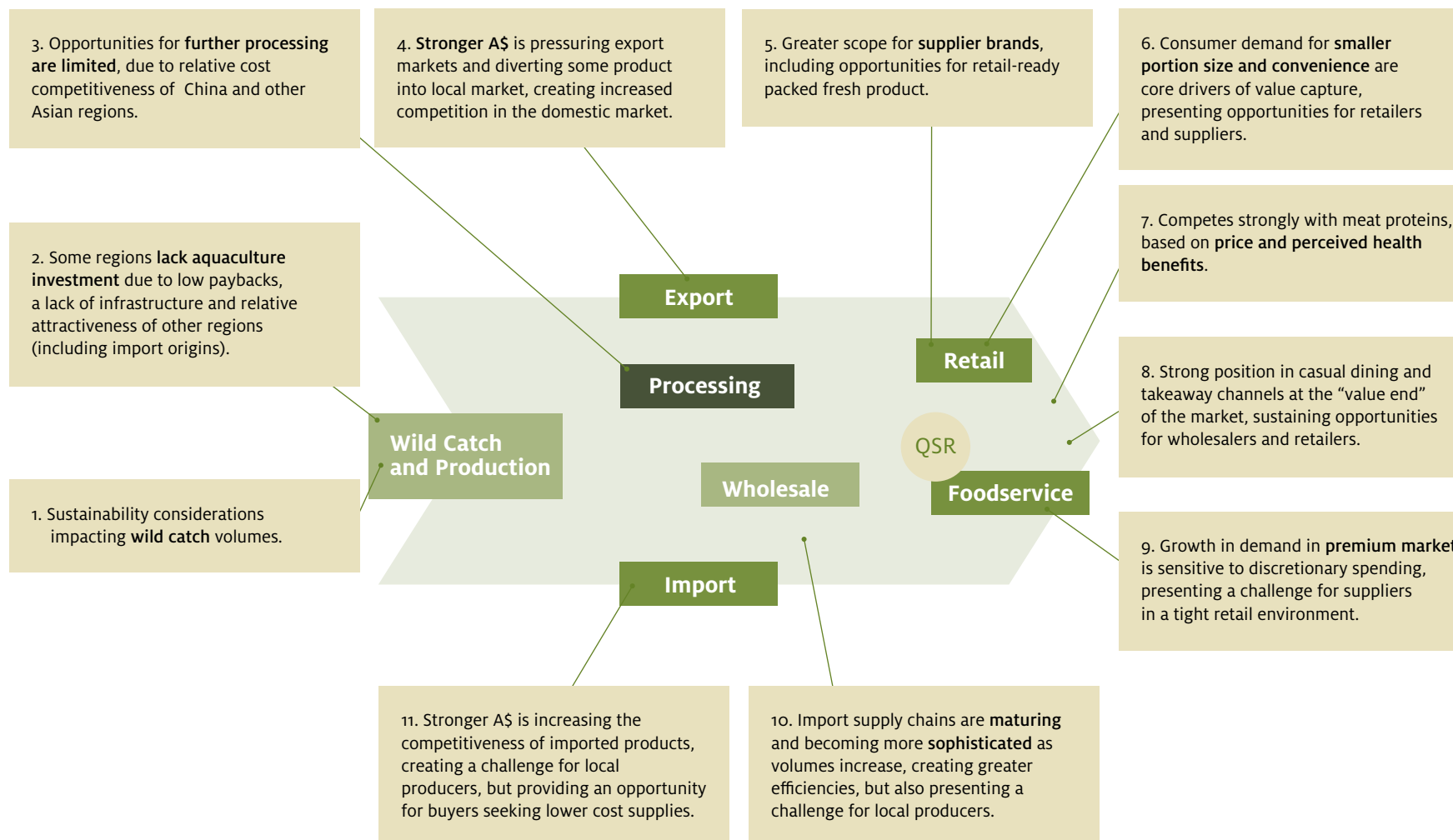
46. Seafood self-sufficiency, stability and volatility



46. Seafood self-sufficiency, stability and volatility (continued)

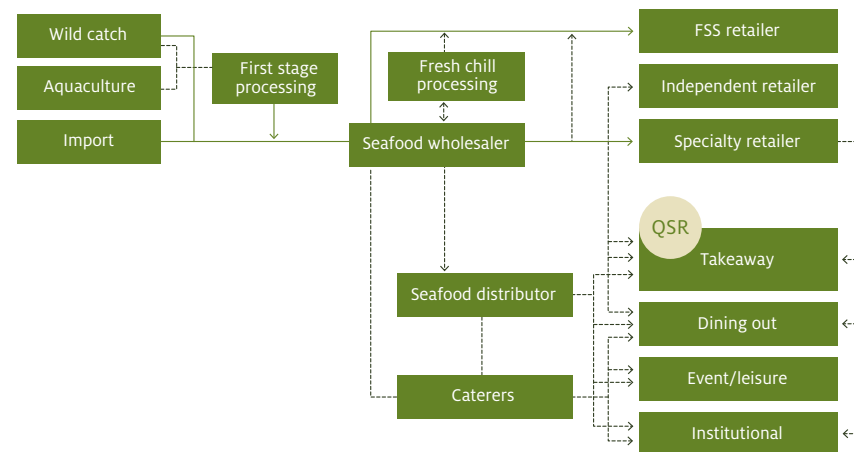


47. Seafood supply chain pressure points



Channels to the consumer—fresh seafood

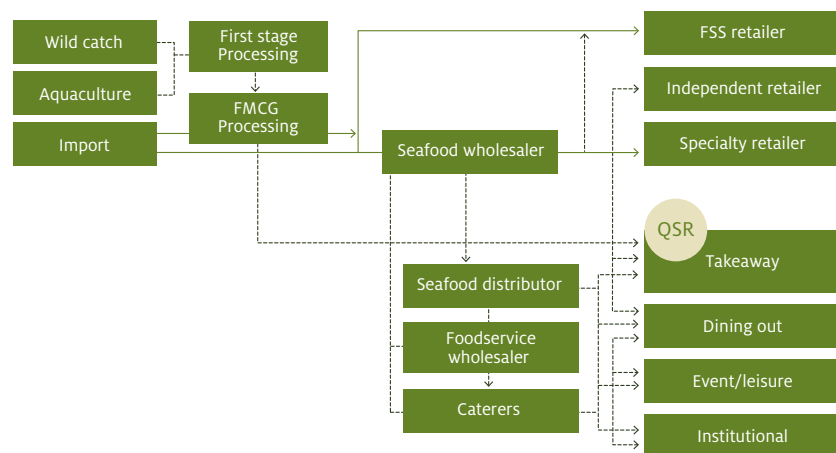
- This category includes fresh and frozen seafood lines. The distribution channel structures for fresh seafood are highly complex and often lengthy due to the diversity of species (of fish, crustaceans and molluscs), the diversity of catch and geographic production sources, the different requirements for early-stage cold-chain handling, and a wide range of market outlets for fresh seafood products.
- Seafood catch either flows direct to wholesalers or passes through early-stage ‘clean and gut’ processing. The fragmented supply is from diverse sources across a large number of species.
- In the case of crustaceans (prawns and lobsters), first-stage processing includes cooking upon catch (either on the vessel or on landing at port).
- Wholesalers play an important role as a supply conduit for remote supply to reach major markets, which includes the sourcing of imports of fresh and frozen fish and fillets.
- There is little retail concentration in the fresh seafood market. About 17 per cent of domestic, fresh seafood sales volumes are made in supermarkets, while around 40 per cent of sales are through independent fishmongers (the largest volume channel).
- Takeaway seafood outlets and dining venues account for the remainder of the sales volumes. Distribution flow into the diverse retail and end-use markets is done by seafood wholesalers and specialist distributors.

48. Fresh seafood product channels to the consumer

Channels to the consumer—processed seafood

- This category includes processed seafood products and portions which are in the form of canned and frozen packaging.
- The distribution channel structures for processed seafood are far less complex than fresh and frozen seafood lines because of the large involvement of imported frozen and canned products.
- There is much higher retail market concentration in processed products because FSS retailers have a dominant market share of the sales of consumer pack products. About 87 per cent of canned product volumes are sold in supermarkets, while 25 per cent of frozen portion products are sold through this channel.
- A portion of the remainder of these lines is distributed by manufacturers and seafood wholesalers to the foodservice sector.

49. Processed seafood product channels to the consumer



Horticulture

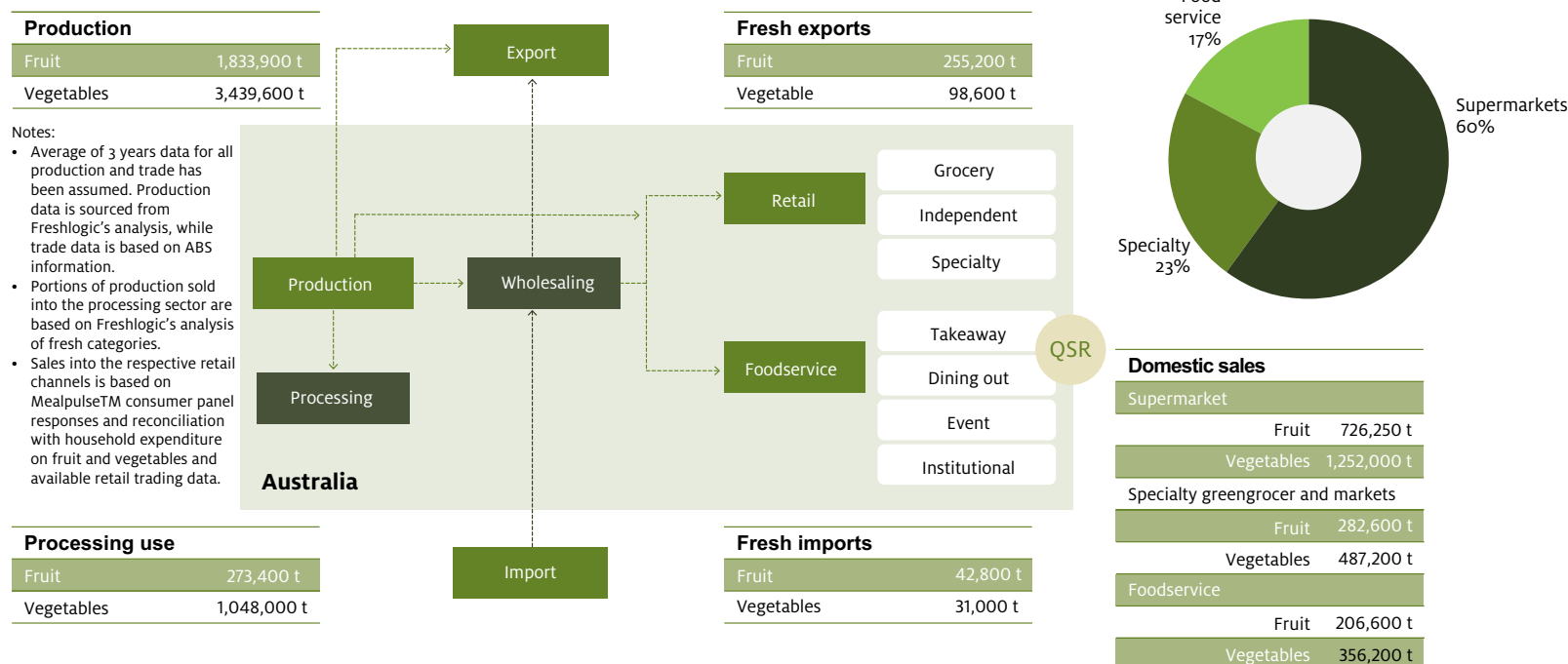
This section refers to fruit and vegetables which is a market predominantly supplied with locally produced product. This has led to local producers being oriented to supplying the fresh domestic markets with about 25 per cent of production volume made available for processing into frozen, shelf stable, juices or ingredient product forms.

Import and export trade volume in fresh fruit and vegetables product is low, with exports equating to 7 per cent of the local production volumes and imports less than 2 per cent. The chart below maps the all fresh fruit and vegetable category volumes through the chain.

The retail channel dominates fresh product distribution with 77 per cent volume market share. Supermarkets hold 60 per cent of the total market and are the dominant retail channel with the balance of retail serviced by greengrocers or fresh markets.

Processed vegetables, which are dominated by potatoes and tomatoes and under pressure from the lower cost imported processed product, are profiled in more detail in the analysis in Section 6.

50. Fruit and vegetable supply chain volume map



Key features of channels to market

- Major supermarkets lead with convenience and have a dominant role with 72 per cent of retail share, but are exposed to challenges associated with maintaining a consistent supply of quality, fresh product to stores with extended trading hours.
- 'Category managers' to FSS have major gatekeeper roles in the chain.
- Specialist retailers, which include greengrocers, fruiterers and fresh markets, compete on the basis of higher quality, wider range and better value. This is enabled through higher retail operating skills and an ability to range more than one grade of product.

Dominant drivers of value

- balance of supply and demand throughout seasons
- primary volume lines of staple fruit and vegetables.

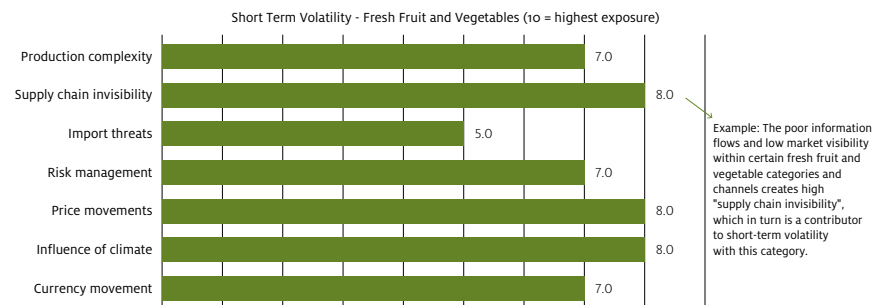
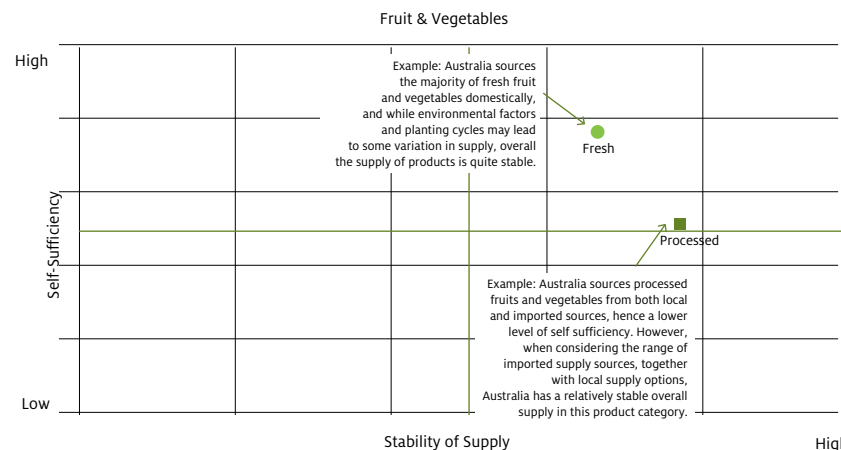
Major trends and dynamics

- cost-competition from imported produce
- competition from nutritious snack foods
- climatic change affecting supply.

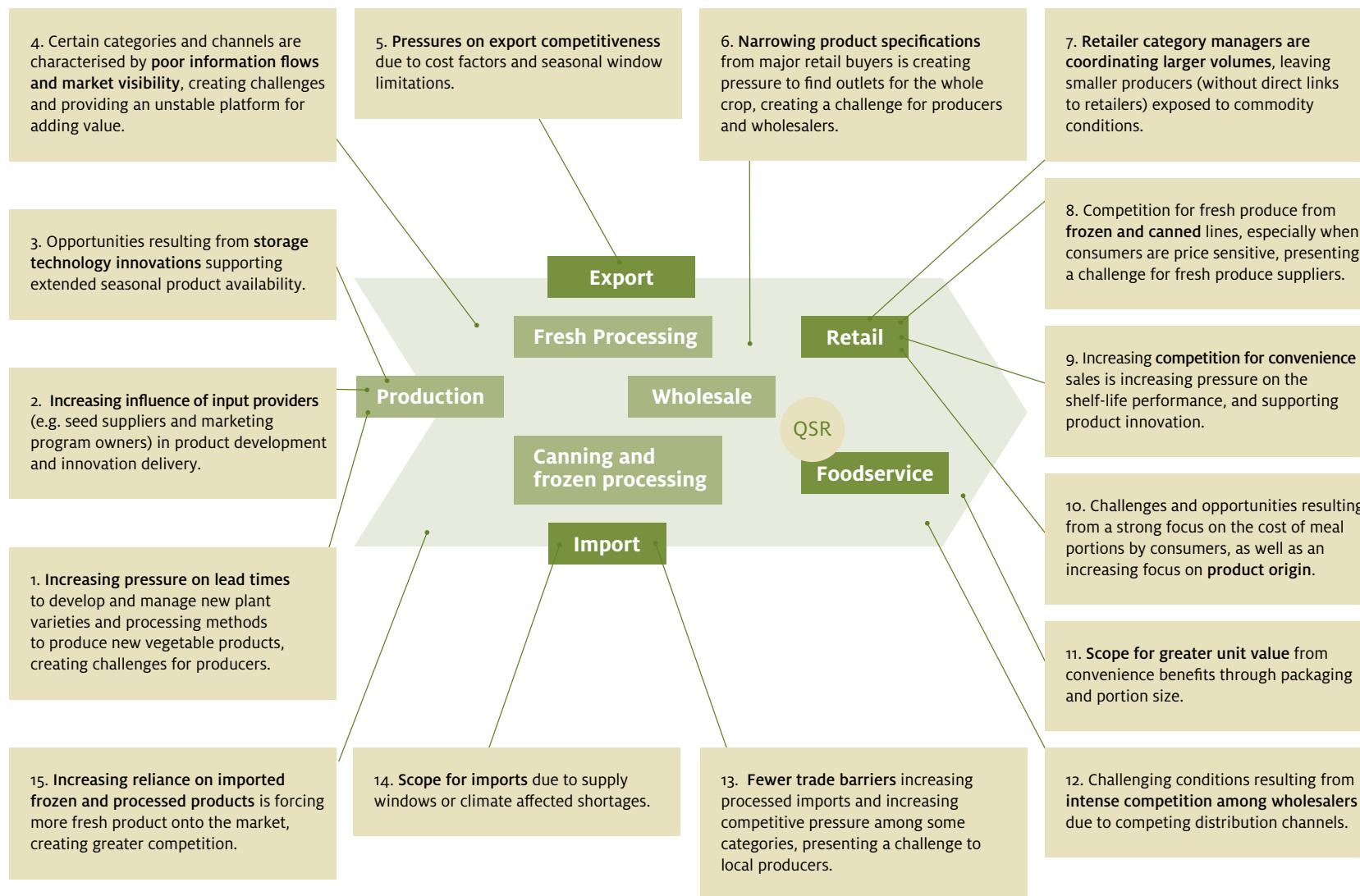
Pressure points in the value chain

- This analysis relates to fresh fruit and vegetable products. Analysis of processed fruit and vegetable products is in Section 6.
- Australia is relatively self-sufficient in fresh fruit and vegetables, with the majority of products grown locally, and the supply is relatively stable. However, there are a number of factors that influence short-term volatility, including a lack of visibility across the supply chain, price movements and climate.

51. Fresh fruit and vegetable self-sufficiency, stability and volatility



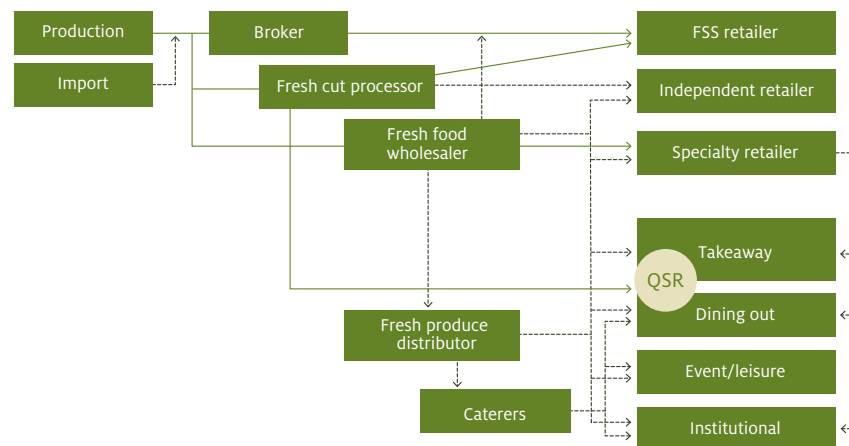
52. Fresh fruit and vegetable supply chain pressure points



Channels to the consumer—fresh fruit and vegetables

- This category includes fruit and vegetables which are sold to consumers in fresh form at retail, or sold fresh to foodservice establishments for use in meal preparation.
- There is concentration at retail with supermarket retailers commanding an estimated 72 per cent share of total retail sales. However, there is considerable strength in specialty fresh food retail which has retained a significant share of the retail market—despite the expansion of supermarket networks and the strong focus on the fresh food offering by major grocery chains.
- Fresh food wholesalers in central market facilities play a significant role in the pricing and distribution of product into the various retail and foodservice channels. Direct sourcing arrangements for supermarket retailers account for a significant share of the intake into that channel. In most fresh produce sub-categories, a broker is appointed to coordinate the sourcing and supply requirements of the retailer, which may include coordinating individual grower supply volumes to meet expected retail demand, and managing quality and packaging requirements. They typically do not handle the physical stock, and therefore no logistics and warehousing are required.
- Over time, the tightening of quality specifications into this FSS channel has left a substantial volume of quality product available to specialty fresh food retailers. The availability of this product has aided specialist retailers to capture market share from the FSS channel.

53. Fresh fruit and vegetable product channels to the consumer



Eggs

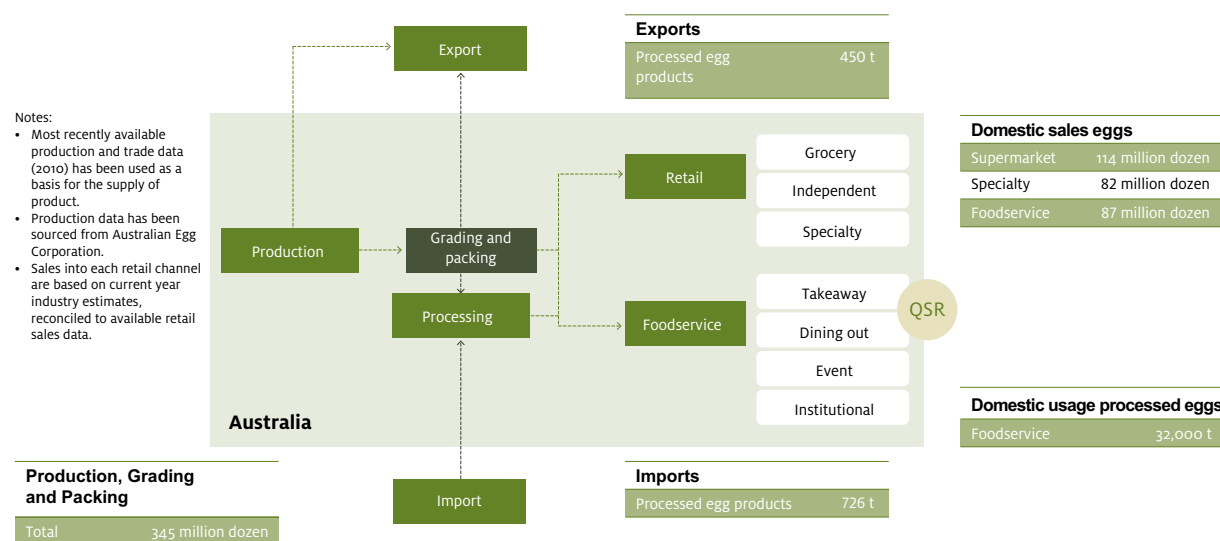
Eggs are a significant fresh food category. The vast majority of eggs produced are sold as fresh eggs through grocery and specialist outlets, although a portion are processed into powdered and pulp products.

There are three major systems used in the production of eggs—cage, free-range and barn. Industry-level data is not available to provide a total dissection of sales; however, grocery sales for products from each system type are shown below.

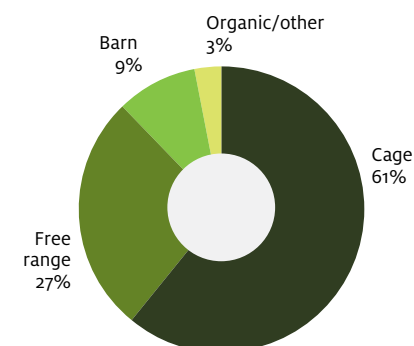
Dominant drivers of value

- increasing consumer demand for products from perceived welfare-based production systems (free-range and barn)
- balance of demand and supply in the chain, which fluctuates based on timing of placement of layers
- relationship between private-label and discount retail price offerings (which is the key price point driving value).

54. Eggs supply chain volume map



Share of grocery sales in 2010



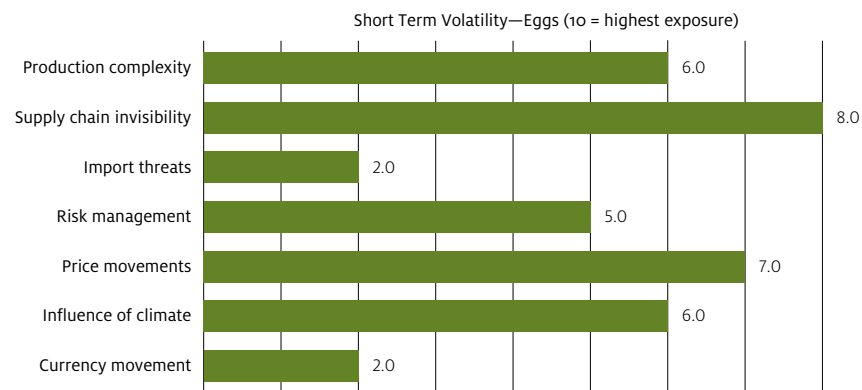
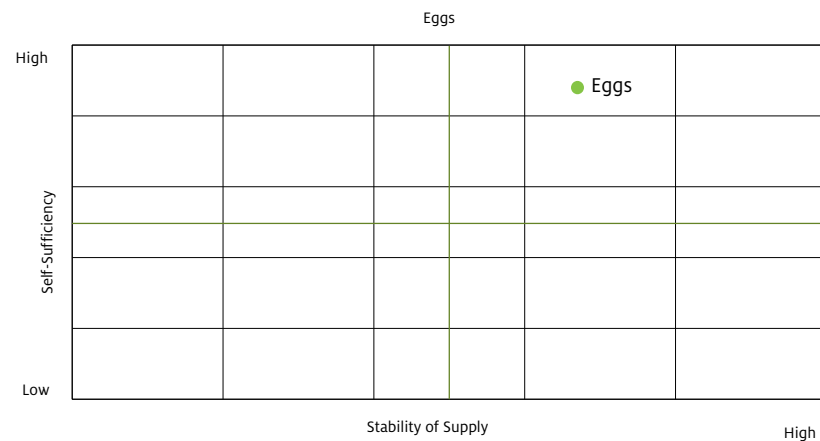
Major trends and dynamics

- strong growth in consumption in recent years stemming from the clarity of health benefits
- significant differentials in price between private-label and branded lines.

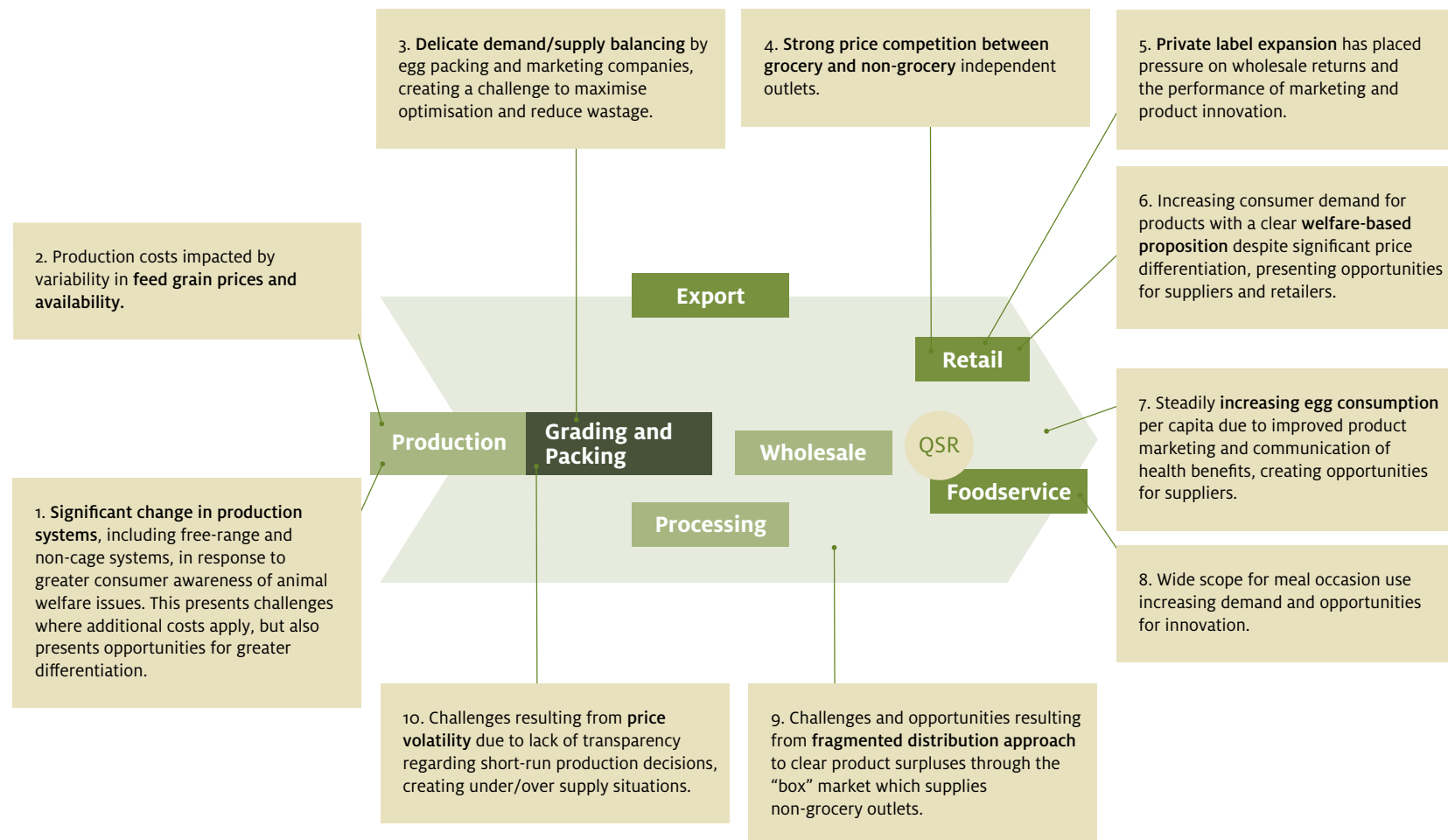
Pressure points in the egg value chain

- The domestic egg supply chain has benefited from growth in per-capita consumption in recent years, but remains finely balanced in terms of short-term demand and supply of shell eggs.
- Australia is largely self-sufficient in the production of eggs, and has a relatively stable supply. However, the lack of supply chain visibility and the associated delicate balance between supply and demand contributes to a level of short-term volatility of supply and prices.

55. Eggs self-sufficiency, stability and volatility



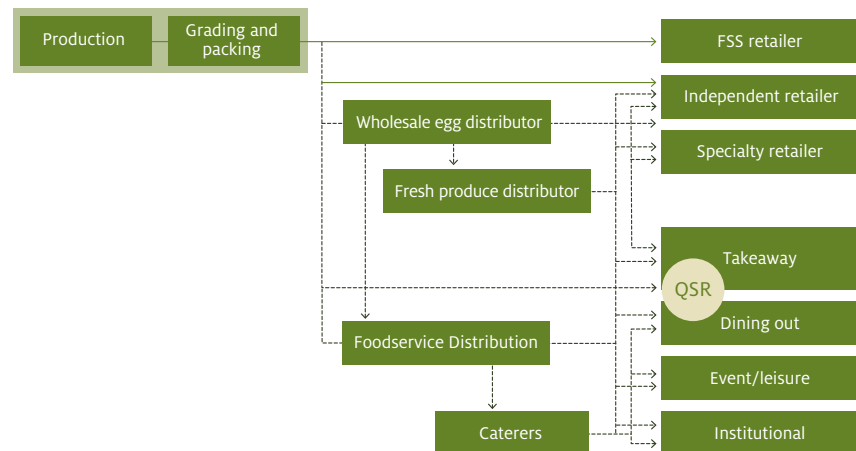
56. Eggs supply chain pressure points



Channels to the consumer

- The channels to the consumer shown in Figure 57 deal only with the sale of shell eggs to domestic consumers.
- The egg category is dominated by sales through FSS chains. It is estimated by industry sources that FSS retailers hold about 57 per cent of the retail market for eggs, with other significant retail sales of packaged eggs made through independent food stores and specialty fresh food stores (such as greengrocers).
- The dominant distribution flow is direct supply from egg companies to FSS retailers, independent and specialty retailers, and QSR chains which centrally procure meal components and food ingredients.
- Specialist egg distributors ('box' marketers) and foodservice distributors supply the diverse end-use markets where eggs are used as food ingredients and meal components. This channel is often used as a sales outlet to clear the build-up of any surplus production in the supply chain, and as a result there is some volatility in wholesale prices as part of that clearance activity.

57. Egg product channels to the consumer



Grains—wheat flour products

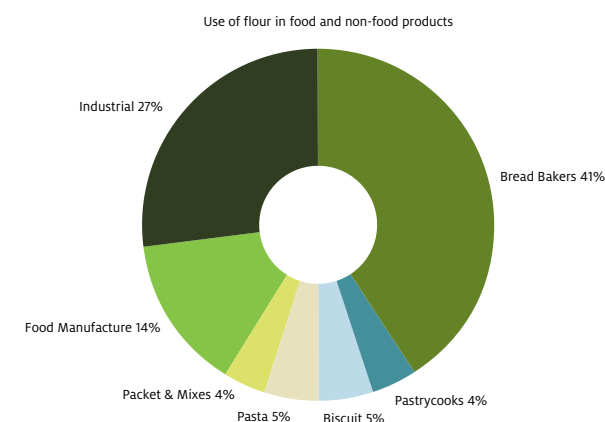
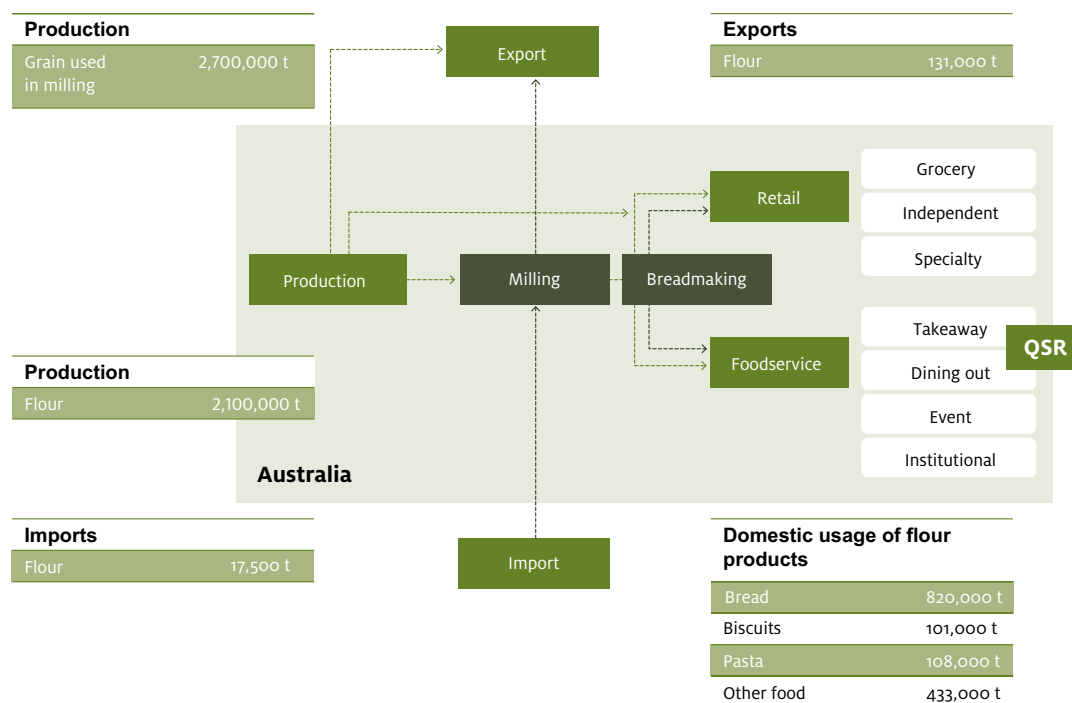
In overall terms, depending on the annual wheat crop size, the grains industry processes and markets about 10–15 per cent of national grains production into domestic consumer markets in a variety of product forms.

For the purposes of this analysis, the focus is on wheat flour products which include bread and pastry products, and consumer and foodservice flour products. These products represent the majority of food uses.

Flour is also used for a number of non-food industrial applications.

The analysis below is based on industry estimates of the use of flour across different product groups, using five-year average grain consumption (derived from data from the Australian Bureau of Agricultural and Resource Economics and Sciences).

58. Grain and flour supply chain volume map



Dominant drivers of value

- There is a complex set of drivers—mostly associated with a base value set in volume lines of product.
- Differentiation through bread style and feature has increased choice and unit value.

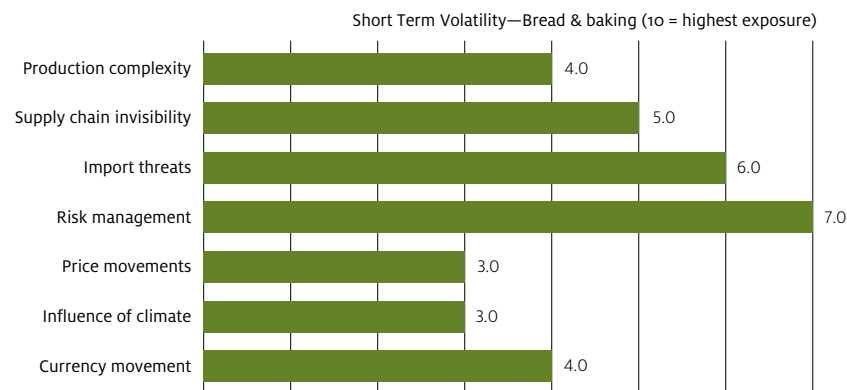
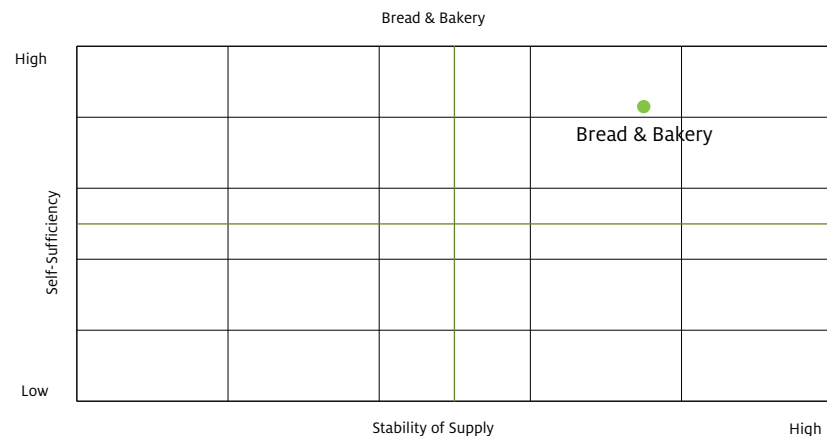
Major trends and dynamics

- healthy eating trends, which have supported the trend towards high-fibre products
- strong growth in the franchise model in recent years, which has depleted sales of independent bakeries, depending upon convenience location
- significant expansion of FSS bakeries offering low-priced, private-label lines
- significant expansion of product variety, style and functionality, which has added value.

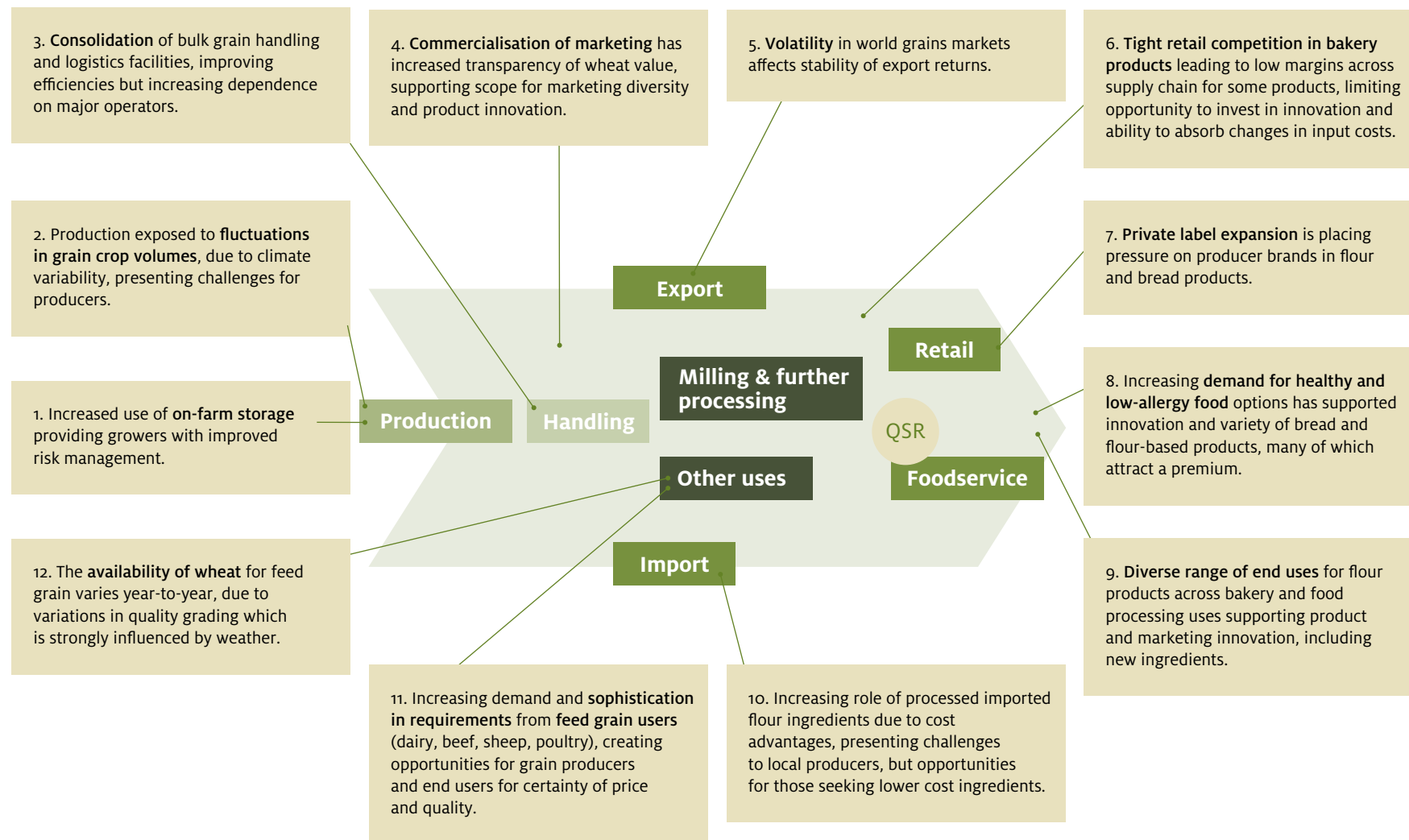
Pressure points in the grains value chain

- The pressure points chart on page 69 reflects the issues in the value chain from Australian grains production through to the domestic bread and baking market.
- Australia has a relatively high level of supply stability, and is relatively self-sufficient in terms of grains, bread and bakery products. Factors influencing the short-term volatility of price and volumes within the industry include limited use of risk management strategies and the threat of competition from imported ingredients and finished products.

59. Bread and bakery self-sufficiency, stability and volatility



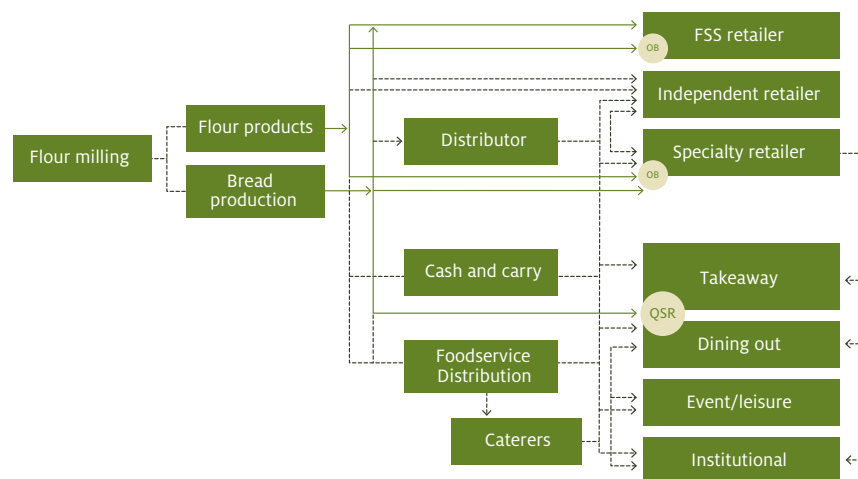
60. Grain and bakery supply chain pressure points



Channels to the consumer—bread and bakery

- The relevant total market in this regard is the retail sale of bread and bakery products. This category covers the supply of both packet bread products (produced by major bread manufacturers) and flour products (which are supplied to retail bakeries).
- Retail bakeries include in-house bakeries (own-bakeries or 'OB' in the chart below) operated by FSS retailers, franchised bakery chains and independent bread shops and bakeries. The supply of flour products is dominated by two major companies, who are also leaders in the packet bread market.
- It is estimated that the FSS retailers hold about 59 per cent of the retail market for bread (of which in-house production accounts for about 23 per cent), specialty bakeries for 30 per cent, and independent retail the remainder.
- Distribution flows for these categories are dominated by the direct supply from breadmakers to retailers, and supply of flour products from flour millers to the diverse range of franchised and independent bakeries.
- There is greater fragmentation of pastry and other bakery products in foodservice outlets, in view of the wide range of specialty products and the diverse outlets and occasions for their sale and consumption.

61. Bread and bakery product channels to the consumer



Beverages

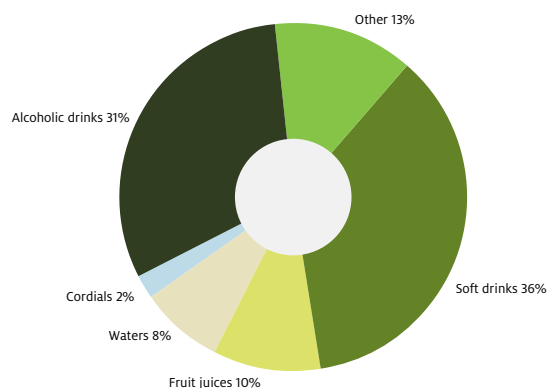
Beverages represent a significant portion of the food industry, comprising the following major sub-categories (excludes milk, which is covered in the dairy section of this report):

- beer
- spirits
- wine
- soft drinks and juice
- hot beverages (coffee and tea).

Annual domestic consumption of alcoholic beverages, which reached 2.4 billion litres in 2009–10, has remained steady for several years (from ABS data). This has been because of the effects of the economic climate on consumer spending on drinks, and the impact that different climatic conditions have on the demand for beer—cooler summers result in lower beer consumption.

It is estimated that the annual consumption of non-alcoholic, cold beverages is approximately 5.3 billion litres (from Australian Competition and Consumer Commission [ACCC] data).

62. Estimated shares of retail drink sales (source: ACCC 2011)



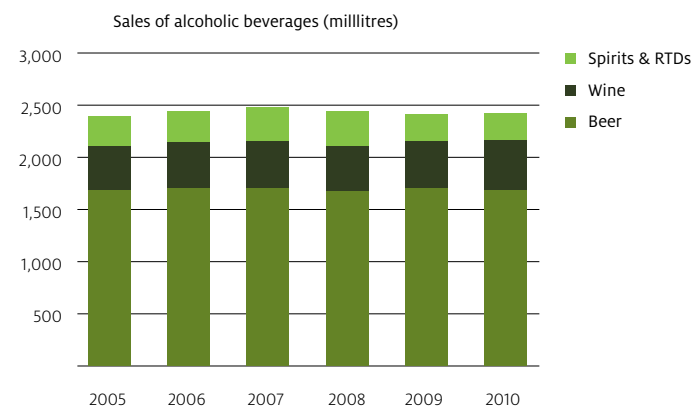
Dominant drivers of value

- FSS role in retail sector, increasing influence of price promotion as a competitive weapon, affecting all drinks segments
- product image marketing relevant to all drinks sub-categories
- product (including varietal and quality) differentiation within beer and wine categories
- strong unit value premiums for impulse purchases of soft drinks and juices.

Major trends and dynamics

- weather and the levels of discretionary spending by consumers
- diversification of beer products towards more crafted taste and style variations
- slow growth in alcoholic consumption volumes overall (with beer sales flat), but moderate increases in value
- steady growth towards premium product in spirits and beer segments
- growth of larger scale liquor (barn) outlets, causing consolidation in liquor markets
- steady growth in soft drink and juice consumption.

63. Sales of alcoholic beverages (in millions of litres), 2005–10



Overview—wine and wine grapes

- Due to the significant agricultural production involved in the production of wine, further analysis is provided below on the volumes through the wine supply chain.

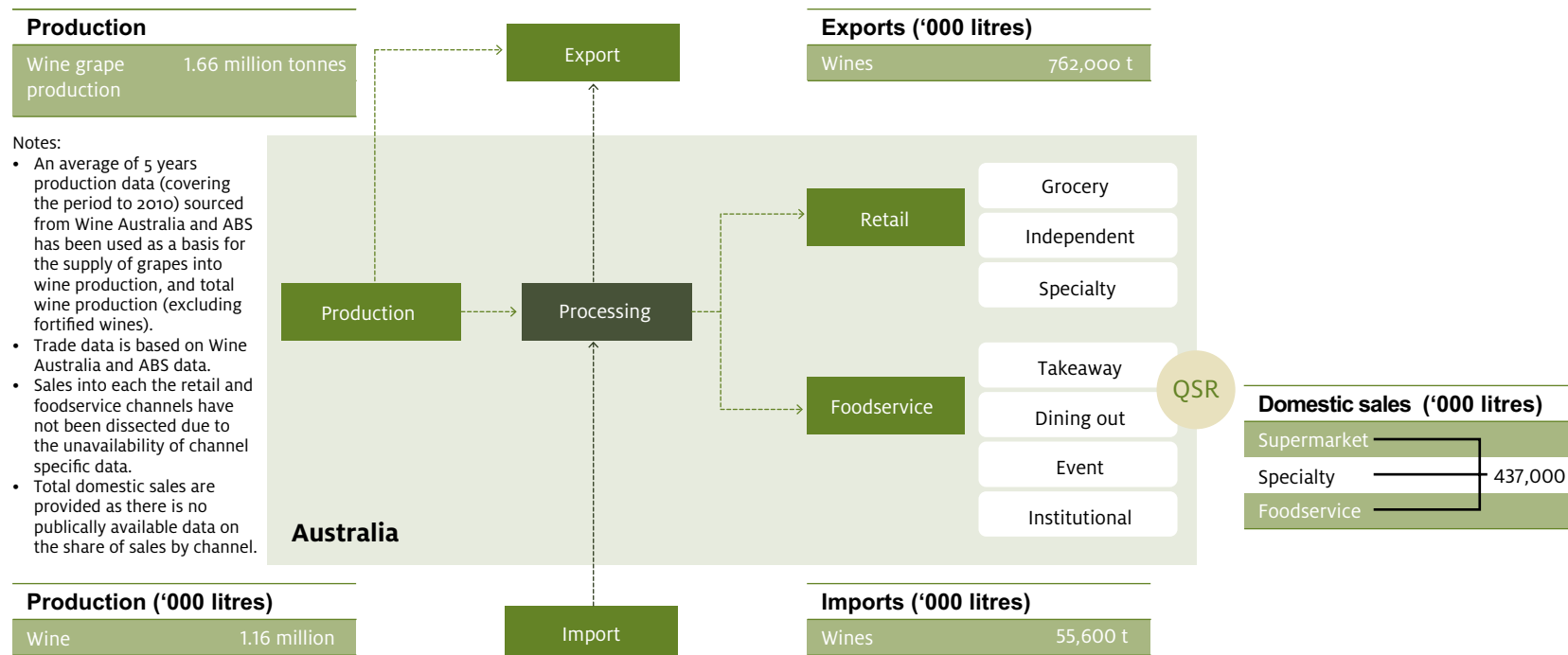
Dominant drivers of value

- FSS role in retail sector, increasing influence of price promotion as a competitive weapon
- product image marketing.

Major trends and dynamics

- oversupply of wine capacity in channel and increasing low-cost export competition (from new world producers), reducing unit value
- slow growth in consumption volumes overall (with beer sales flat), but moderate increases in value
- growth towards premium product in spirits and beer segments
- growth of larger scale liquor (barn) outlet
- consolidation of liquor wholesalers into major groups to resist FSS expansion and influence.

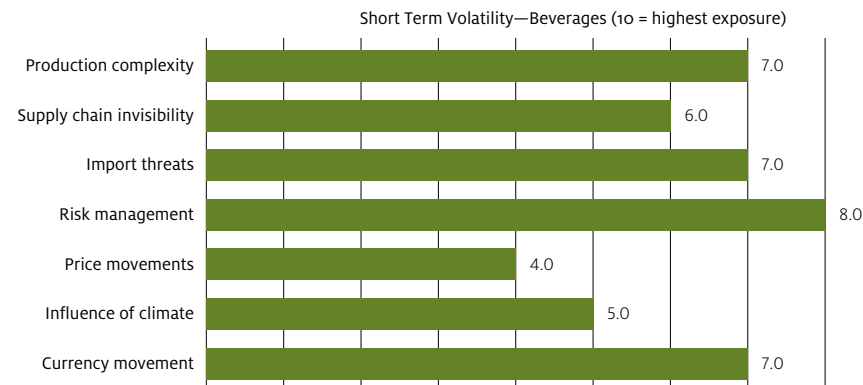
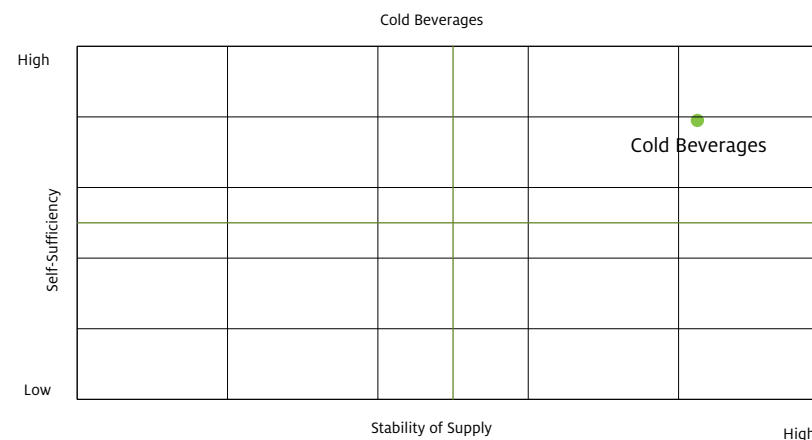
64. Wine supply chain volume map



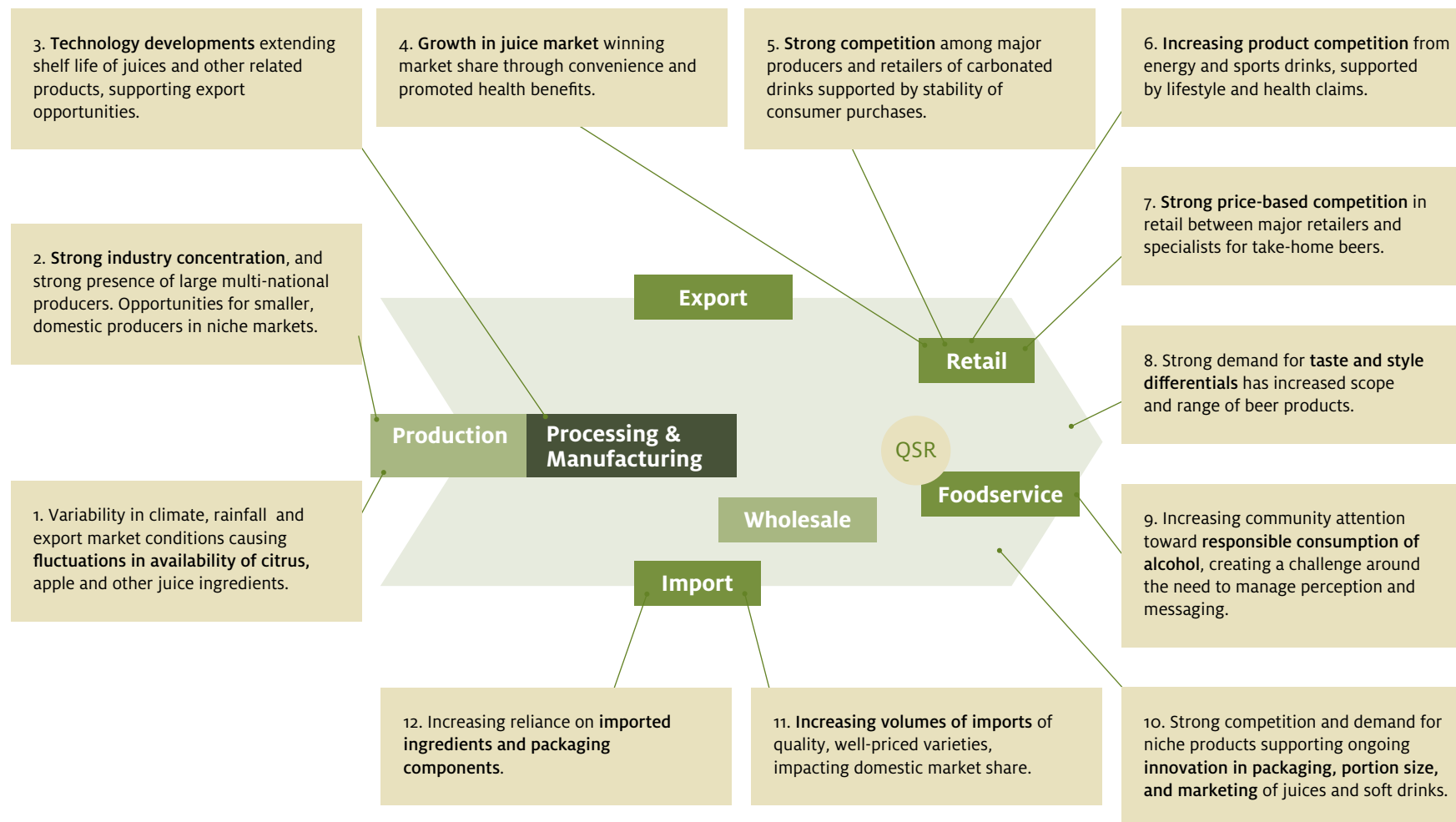
Pressure points in the beer, soft drinks and juice value chain

- There are significant similarities between production of beer, soft drinks and juices. Several major enterprises own business units engaged in each of these categories.
- Australia has a high level of self-sufficiency in cold beverages, and has a relatively stable supply. Factors contributing to volatility in prices and supply include a lack of risk management strategies, import competition (relevant to juices, beer and drink ingredients), production complexities and currency movements (including those related to ingredients).

65. Cold drinks self-sufficiency, stability and volatility



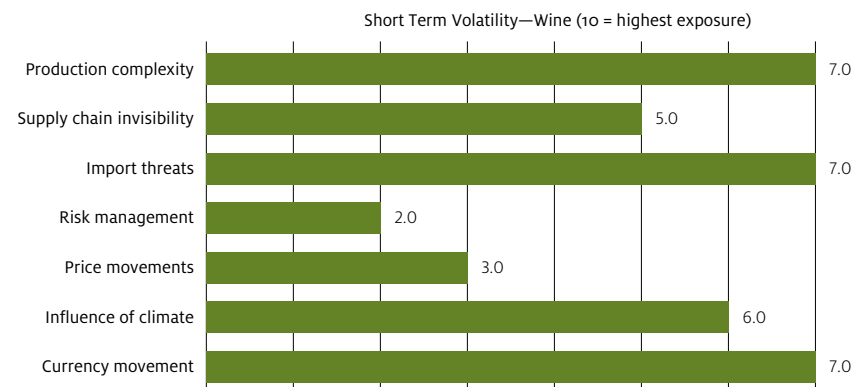
66. Cold drinks supply chain pressure points



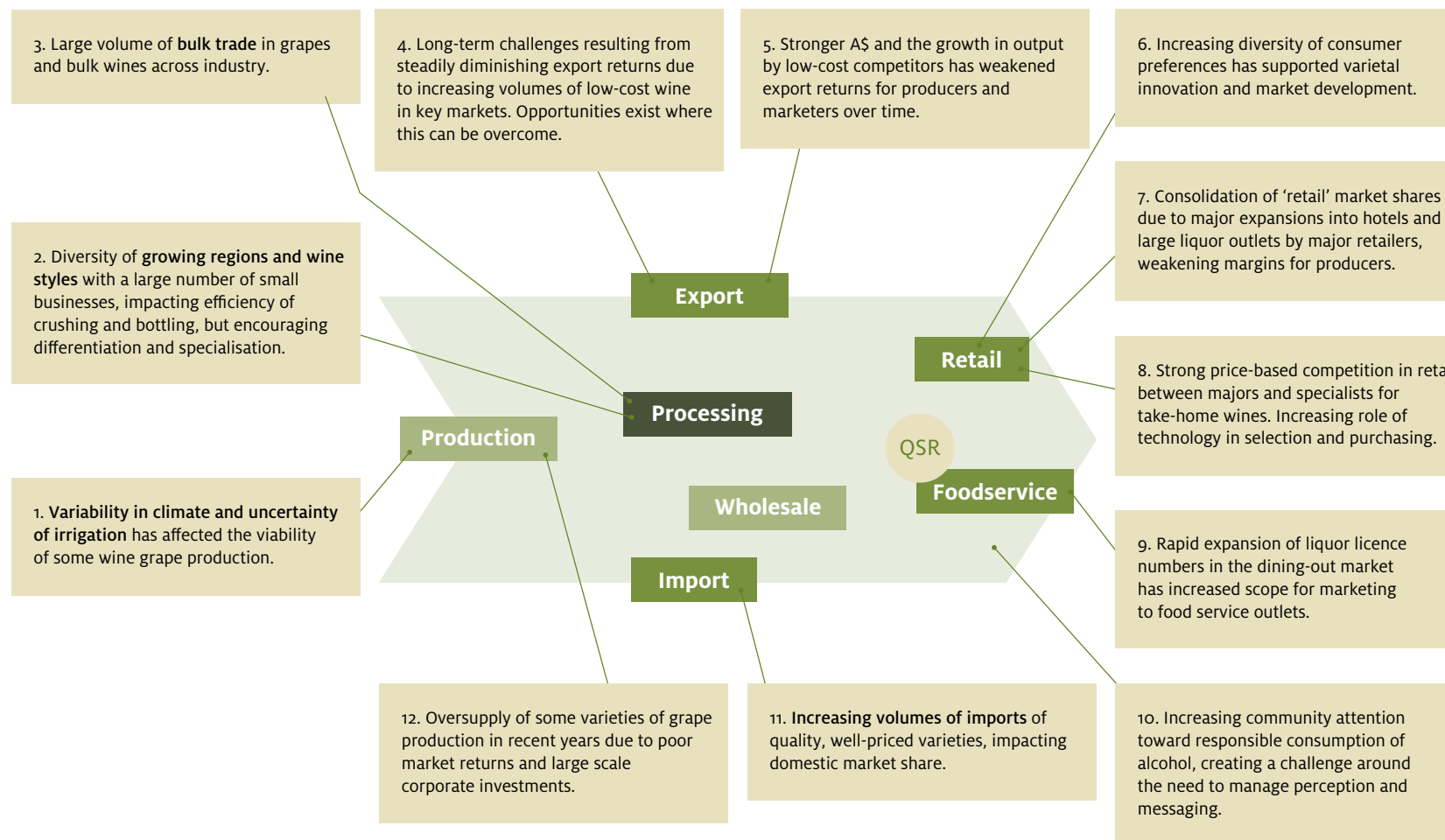
Pressure points in the wine value chain

- The wine value chain has been analysed in greater detail due to the fact that there is a significant agricultural production sector producing raw materials used in these products.
- There is a relatively high level of self-sufficiency and stability of supply within the wine industry in Australia, with a large range of diverse styles and price ranges on offer. Factors influencing the short-term volatility of price and supply include import competition and currency movements, and the influences of climate and water availability on wine grape production.

67. Wine self-sufficiency, stability and volatility



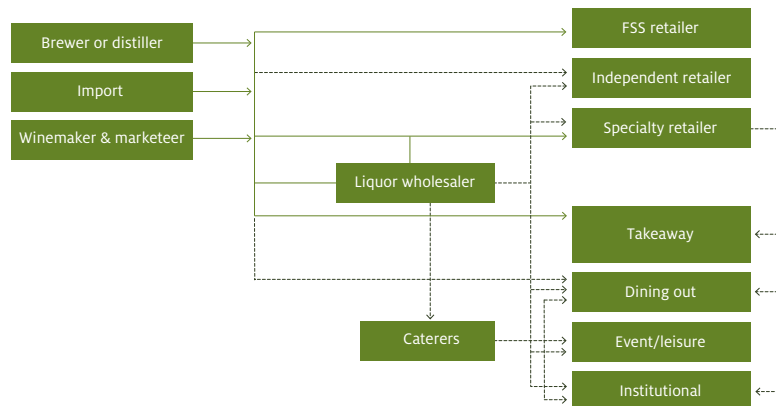
68. Wine supply chain pressure points



Channels to the consumer

- This category includes beer, wines and spirits. It features sales of packaged products and sales of alcoholic beverages through hotels, restaurants, cafés and catered venues.
- There is increasing concentration of the retail market for packaged beer, wines and spirits. Major grocery retailers are expanding their networks of liquor stores, which compete with a large number of independent liquor stores and hotel bottle shops. Major liquor retailers are directly supplied by brewers, wineries and importers.
- There are a large number of independent liquor stores, hotels and clubs, and licensed dining and catered venues which are directly serviced by a number of liquor wholesalers. A large percentage of independent liquor stores operate under banner marketing and promotional activities which are managed by wholesalers as part of their supply relationships.
- The channel map for non-alcoholic beverages is encompassed within dry groceries.

69. Alcoholic beverage channels to the consumer



Dry groceries

Dry groceries refers to food products which are sold in packaged form, without needing to be chilled or frozen. This includes tinned, bottled and paper packaging. It excludes products sold fresh, either in loose or bagged product form.

Dominant drivers of value

- private-label presence/share and use of 'everyday low pricing' practices to ensure competitiveness of offering
- scope for product extension through additives, such as nutrient enrichment, and other differentiators
- incidence/opportunity for imported processed product to fill a role in the category, including private-label lines.

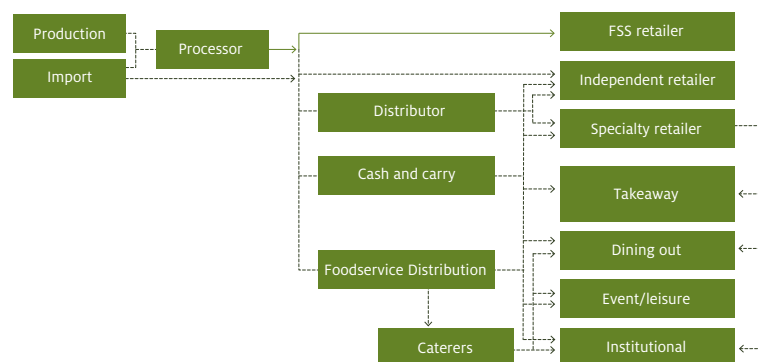
Major trends and dynamics

- FSS stores still commanding growth in dry grocery categories which are less susceptible to pressure from convenience preferences of consumers
- decreasing volumes in ingredients for 'scratch-preparation' meals.

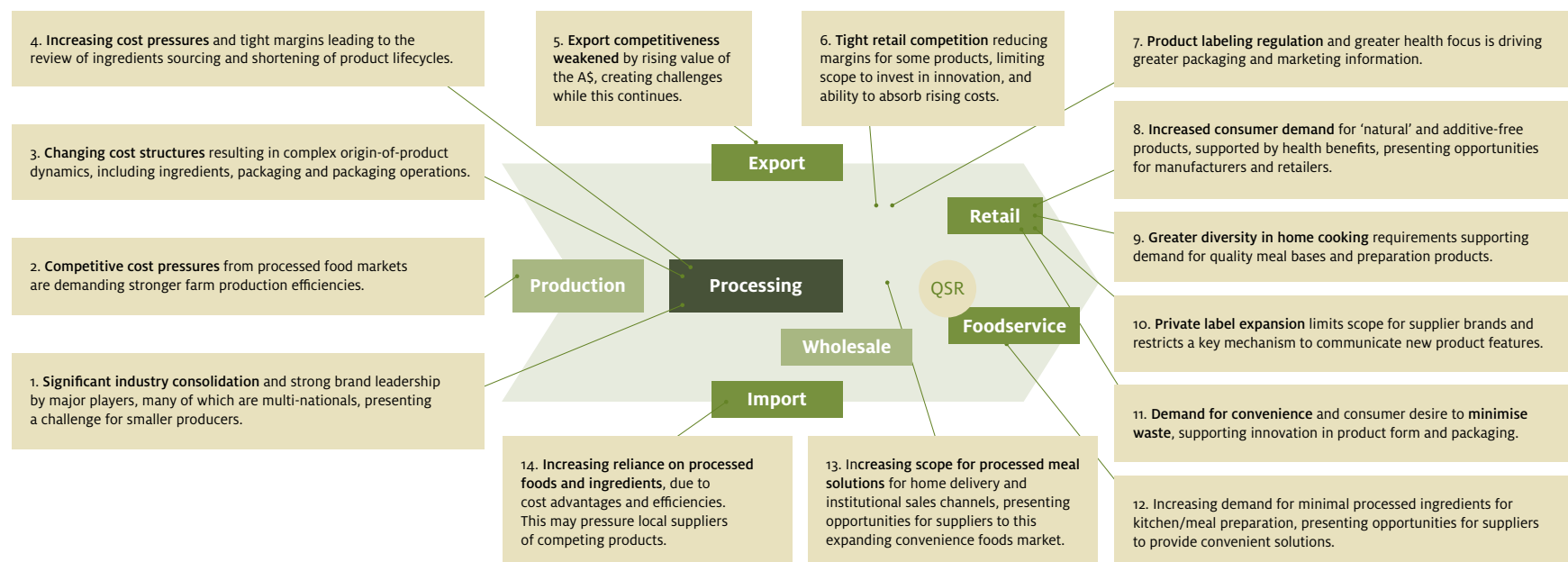
Channels to the consumer

- This distribution channel structure covers a wide variety of dry grocery food products, which include hot beverages, biscuits, shelf-stable desserts, packaged flour products, cooking ingredients (such as sauces, herbs, spices and condiments), fats and oils, non-alcoholic drinks and confectionery. The distribution structures are relatively generic for each of the product lines.
- There is significant concentration in the retail market for such goods, with FSS retailers commanding a dominant share of sales in each case, although case-by-case, the share of the retail market will vary. Direct sourcing arrangements of products account for a high proportion of the supply into that channel.
- FSS chains have increased the precision in management of supply chains for dry grocery products to reduce costs.
- There are a number of wholesale businesses supplying the independent retail and foodservice markets, including foodservice distributors.

70. Dry grocery channels to the consumer



71. Dry grocery supply chain pressure points



Section 5

Channels to the consumer



Grocery

The grocery supermarket retail channel has a dominant share of the retail sales of most food and beverages categories. Major chain retailers have large national store networks covering all inner city, suburban and regional centres. Smaller chains or independent banner groups have a less comprehensive coverage of the market.

A key feature of the channel structure is the means by which direct supply logistics are managed by the retailers on national or regional bases, through national or regional distribution centres. Products supplied through each of these centres will depend upon their nature and the availability of or dependence on regional supply sources. Regional distribution centres will tend to be used for fresh product lines, whereas dry groceries (for example) are more likely to be supplied to a national distribution centre.

In some cases, supplier or franchised direct-store delivery services will service certain parts of the retailer networks, especially those in regional centres.

Drivers of volume and value in this channel

General factors

- general level of consumer confidence and spending
- consumer preference for greater convenience
- drift of business towards FSS and banner independent groups from non-aligned grocery and convenience outlets, and more recent increase in share of supermarket sales by the two largest grocery chains as a result of heavier promotion of discount prices on staple food lines
- increased size of ALDI discount store networks, increasing the intensity of price-based competition
- increased centralisation of supply chain management by major groups to reduce costs.

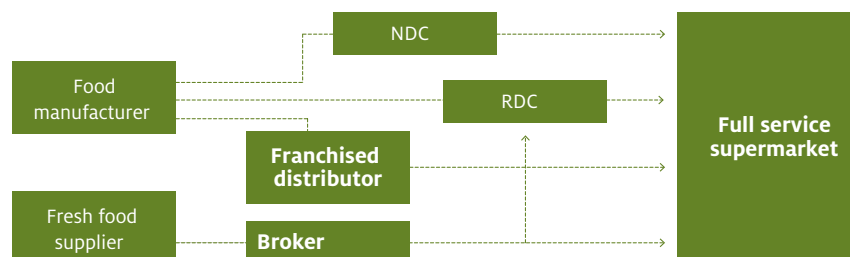
Volume

- number and geographical location of outlets
- mix of size and type of outlet
- service and convenience offering
- promotional activities to drive specific category volumes
- nature and extent of specialist store competition in proximity to supermarkets.

Value

- price points of major competing lines
- price sensitivity of consumers across the full range of food lines
- promotional practices.

72. Full-service and other supermarkets



Chain	Numbers	Notes
Woolworths/Safeway	840	These include FSS and limited range supermarkets, but excludes liquor outlets and convenience/fuel stores.
Coles Group	741	
Supa-IGA	312	Number of Supa-IGA stores which offer a FSS proposition equivalent to major chains
ALDI	260	Limited-range discount stores
Franklins	80	This group is subject to a sale and purchase transaction at the time of publication.
Costco	3	Stores have a significantly larger floor space than a conventional FSS. Further stores are to be added.

Independent food retailers

- Independent grocery and convenience store channels have a minority share of the retail sales in most food and beverages categories, offering a limited range of food and beverage products addressing the convenience needs of passing consumers.
- A significant percentage of convenience stores are located within petrol stations, or within suburban strips or village shopping centres. Chains or banner groups of independent and convenience stores are serviced by regional distribution centres.

Drivers of volume and value in this channel

General factors

- general level of consumer confidence and spending
- gradual drift of the share of consumer spending in food stores towards FSS and banner independent groups from non-aligned grocery and convenience outlets
- consumer preference for greater convenience
- expansion of FSS-allied or branded fuel outlets gaining greater share of convenience market
- expansion of independent banner group networks through store acquisition/opening.

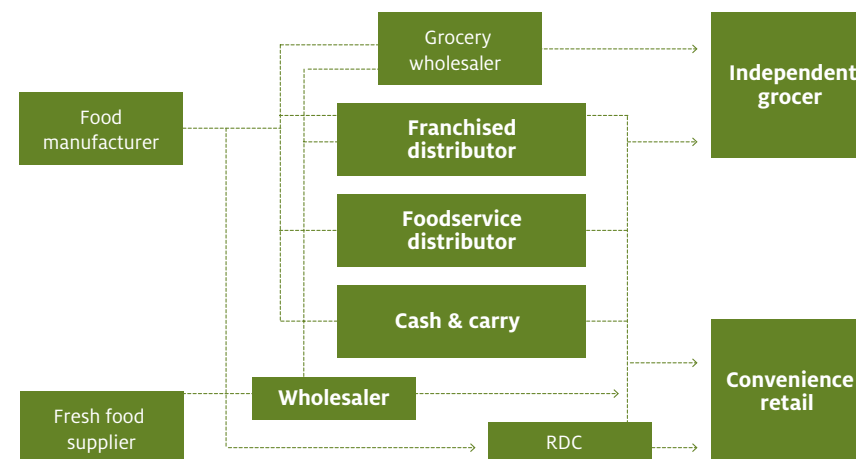
Volume

- number and location of outlets (including co-location with other specialist outlets)
- mix of size and type of outlet
- service offering or composition (including co-location with fuel)
- promotional activities (including cross-promotion between FSS chains and discount fuel offers).

Value

- price points of major volume lines, to reflect more convenience value than competition pricing.

73. Independent and convenience channels



Chain	Numbers	Examples of offering
Convenience		
Woolworths	581	Includes convenience stores as part of petrol stations (some aligned to a fuel partner), and small convenience stores in city locations.
Coles	620	
7-Eleven	600	
Other groups	300	
Independent supermarkets and food stores		
IGA	1300	Limited-range supermarkets
FoodWorks	700	
SPAR	260	
Other stores	3300	

Speciality retail

This channel encompasses a range of specialist food retailers that focus on fresh produce, meat or otherwise single or a limited number of food categories (such as delicatessen). They include liquor merchants.

These outlets are typically independently owned and, accordingly, are not able to avail themselves of group buying or distribution arrangements. They are therefore serviced by a number of specialist fresh-product wholesalers and distributors, servicing the frequency, cold-chain and specification requirements of such retailers. Independent retailers command a dominant portion in the seafood market, and significant portions of the retail market shares in fruit and vegetable, bread/bakery and red meat categories.

Drivers of volume and value in this channel

General factors

- general level of consumer confidence and household spending preferences
- consumer preference for greater convenience
- expansion of liquor chains owned by FSS groups
- tightening of quality and volume specifications for fruit and vegetables into this FSS channel, which has left a substantial volume of quality product available to specialty fresh food retailers.

Volume

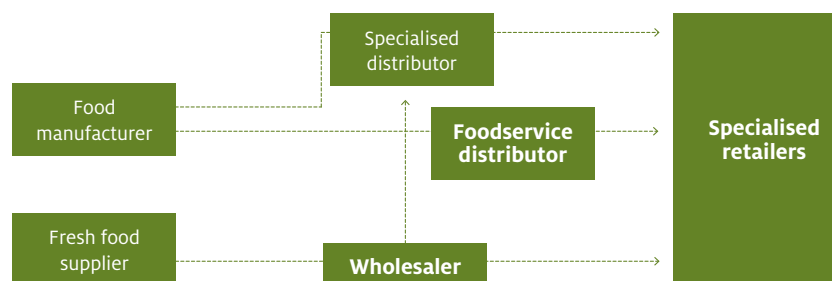
- number and location of outlets (including the expansion of franchised outlets in bakery, delicatessen, chicken)
- product range (including co-location with other specialty retail)
- promotional activities of major liquor retail chains affecting share of business
- promotional activities of franchise bakery groups.

Value

- promotional pricing offered in FSS channel for volume lines in fresh produce and liquor
- increasing trend towards value-adding in the product offering of meat retailers to reduce meal preparation

- price points of major volume/service lines, to reflect more convenience value than competition pricing.

74. Speciality retail channels



Category	Types of outlets
Fruit and vegetable	<ul style="list-style-type: none"> • independent fruit and vegetable grocers
Butcher, poultry and seafood	<ul style="list-style-type: none"> • independent butchers • specialist poultry retailers • fishmongers
Delicatessen	<ul style="list-style-type: none"> • independent outlets
Bakery: cake and pastry	<ul style="list-style-type: none"> • specialty stores under franchise structure • independent hot-bread shops/kitchens • cake and pastry specialists
Liquor	<ul style="list-style-type: none"> • chain stores under FSS chain ownership • independent outlets under common banner marketing • stand-alone independent outlets
Other	<ul style="list-style-type: none"> • independent outlets or participants in small retail chains specialising in a wide range of fresh and packaged organic foods

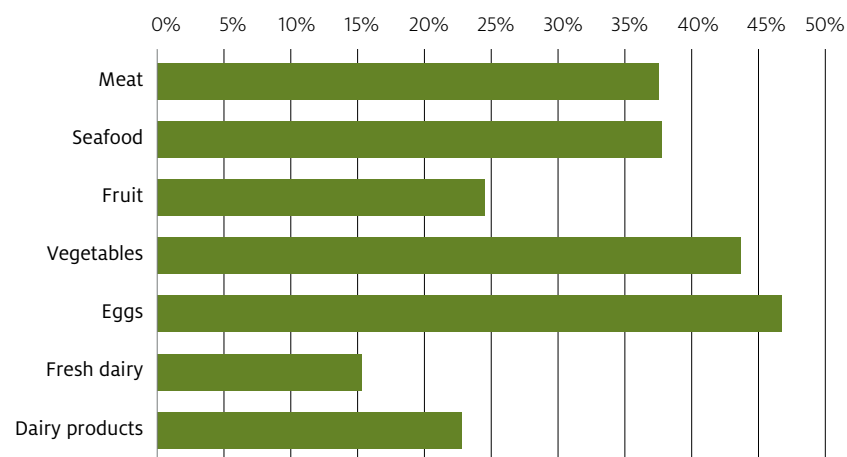
Focus on foodservice

The foodservice market—which includes the channels on the following pages in this section—remains a substantial segment of the retail food market. The chart below provides Freshlogic's estimate of the share of volumes sold into foodservice channels of major food categories, drawn from the THRUchain™ analysis. Freshlogic's analysis of household spending indicates that eating out represented about 27 per cent of total household food spending in 2009 and 2010; however, this excludes food produced and consumed in the institutional channels of foodservice.

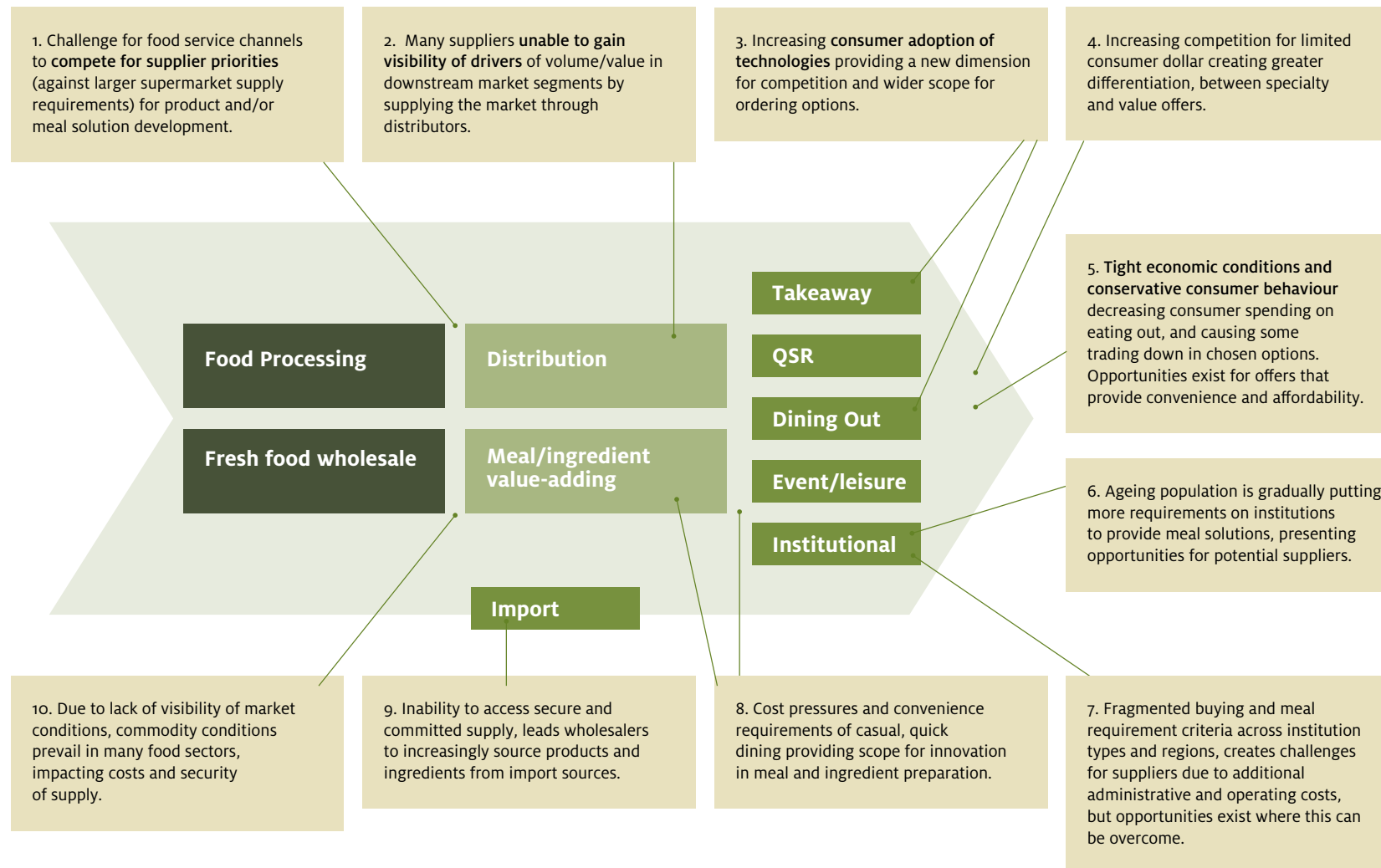
Other food categories, including processed food products and ingredients, are sold into the foodservice segment but are not so readily measured because of the complexity of the supply chains involved.

Common pressure points faced by foodservice supply chains are identified below.

75. Relative size of foodservice markets (per cent of total sales by volume through food service channels)



76. Food service sector pressure points



Takeaway food

This channel encompasses a large number of QSR chains and outlets (which are covered in more detail on the following page), a diverse range of small chains or groups of takeaway outlets, and a large number of independent or non-franchised takeaway food outlets which cover a number of different food groups and/or offerings. Such outlets are typically independently owned as distinct from QSR chains and, accordingly, are not able to avail themselves of group buying or distribution arrangements.

Independent takeaway outlets are serviced by a number of specialist fresh product and foodservice wholesalers and distributors who have developed business models based on the frequency, cold-chain and specification requirements of such retailers.

Drivers of volume and value in this channel

General factors

- growth in consumer preference for takeaway as a casual dining option
- increased range, number and network scale of QSR chains, often competing with independent takeaway
- consumer trend towards healthier eating has changed menu offerings towards fresher, salad-based products
- growth in sandwich bar business where coffee is offered.

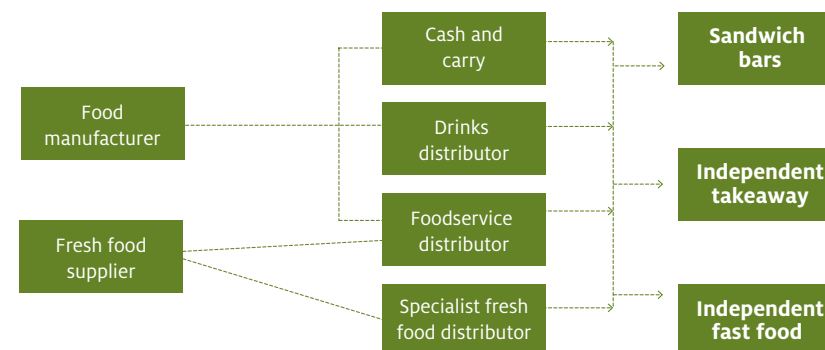
Volume

- number and location of outlets (with respect to traffic/catchment configuration for customer numbers)
- parts of the day or meal/social occasions serviced
- days of the week of operation.

Value

- level of service offered
- specialisation or quality positioning of the offering ('gourmet' or 'indulgence' versus 'standard' fare)
- price points of major competing lines and/or meal options
- location—affecting relative price-sensitivity.

77. Takeaway channel (excluding QSR)



The nature of the outlet types included in the takeaway channel that exclude QSR are:

- cuisine-themed takeaway food outlets—specialised Chinese/Asian, Italian, noodle bars, sushi chains and so on. In addition to specific takeaway offerings, there are a large number of restaurants that offer a takeaway option. The outlet numbers (shown on page 11) for restaurants and cafés are assessed as primarily offering a dine-in service.
- hot-chicken stores
- pizza (excluding QSR chains)
- sandwich bars
- burgers and wraps
- kebabs
- fish and chip shops
- ice-cream stores
- snack-based takeaway.

Quick serve restaurants

This channel encompasses a number of large integrated chains of QSR or takeaway food outlets which serve meals. These outlets represent a significant share in the takeaway retail food market, across several meal types.

QSR outlets are typically franchised, while meal ingredients are centrally purchased and supplied according to tight specifications through sophisticated logistics management practices.

These supply arrangements generally encompass either outsourced or in-house component processing and preparation, which will include pre-cooking, shredding and cutting, and pre-packaging of certain fast-moving meal items.

Drivers of volume and value in this channel

General factors

- growing numbers of outlets of major chains, along with increased diversity of meal styles available through QSR chains
- consumer preference for greater convenience
- consumers trading down in recent years to cheaper eating-out options
- consumer trend towards healthier eating, which has changed menu offerings towards fresher, salad-based products—this trend has been led by salad chain Subway and followed by many others, and has offset potential loss of business due to dietary concerns.

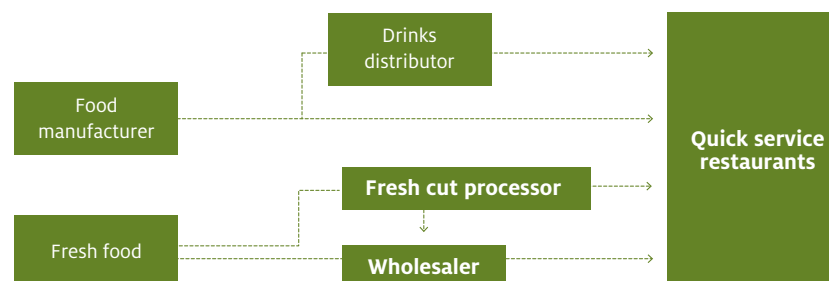
Volume

- number of outlets (most major chains are undergoing an ongoing expansion of outlet numbers)
- the increasing diversity of menu offering or composition within certain chains, and across the entire channel
- growth in breakfast as a meal occasion through this channel
- promotional activities based on menu features, packages or value points.

Value

- price points of major competing meal package or components lines.

78. QSR channel



The outlet numbers for chains that serve meals (with more than 100 outlets) are:

	Numbers	Burgers	Salads	Chicken	Pizza	Other
Boost	189					
Domino's	470					
Donut King	320					
Eagle Boys	335					
Hungry Jack's/Burger King	308					
KFC	600					
McDonald's	780					
Nando's	250					
Oporto	140					
Pizza Hut	350					
Pizza Capers	100					
Red Rooster	360					
Subway	1254					
Wendys	300					

Eating out

This channel encompasses a large number of independent dining and function venues. Such outlets are typically independently owned and accordingly serviced by a number of specialist fresh product and foodservice wholesalers and distributors, who offer services to meet the frequency, meal and ingredients preparation cold-chain and specification requirements of such enterprises.

A significant portion of the fresh product needs of such establishments are serviced by specialist retailers of meat, fruit and vegetables and seafood.

Drivers of volume and value in this channel

General factors

- growth in consumer preference for casual dining, reflected in the general increase over time in retail spending in the channel
- expansion of coffee as a focus of casual meeting and snacking occasions, driving increased business into the café channel
- increasing consumer consciousness of cuisine
- improved variety of restaurant offering and variety
- relaxation of licensing laws
- growth in breakfast as a meal occasion through this channel
- growth in the numbers of outlets of coffee franchises/groups.

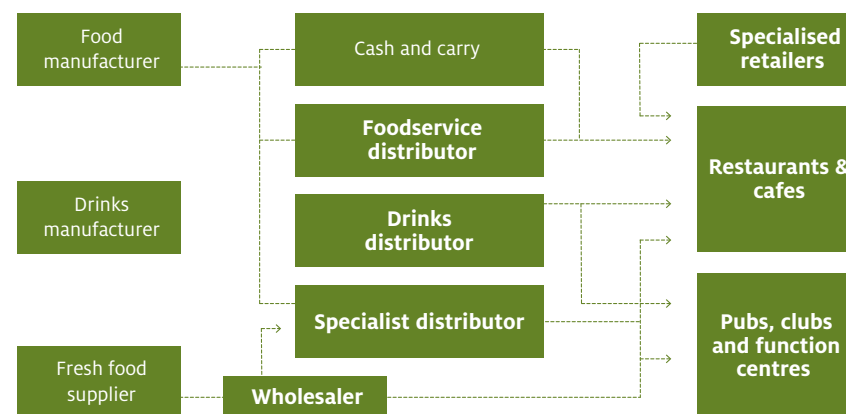
Volume

- number of outlets
- seatings per night
- breadth of menu offering
- parts of the day or meal/social occasions or events serviced.

Value

- discretionary spending on eating out
- percentage of beverage in the mix of sales
- outlet location and convenience
- service levels
- cuisine.

79. Eating out



It is estimated that in June 2011 there were approximately 23 500 eating-out venues, which included 4030 pubs, clubs and function centres. Restaurants and cafés include a wide range of cuisine styles and formats.

The following issues are to be noted in the composition of this segment of the food market:

- Many now provide a takeaway option. In the past five years, the number of restaurants with a takeaway option has grown from 1390 to about 3000 as outlets respond to pressure from more conservative consumer spending and the increasing desire for convenience (especially where a home delivery option is provided).
- There is an increasing blurring between casual café-themed outlets, which have traditionally been based on a coffee offering, and more formal restaurants. Similarly, there is also an increasing blurring in naming conventions. This group includes expanding chains of café-styled outlets such as Gloria Jean's, Hudsons Coffee and Coffee Club, which have swelled numbers of outlets offering casual dining meals.
- For the purposes of this analysis, this channel excludes caterers offering meal preparation services. It also excludes restaurants located in hotels, which have also grown in number in recent years.

Events, leisure and travel

This channel encompasses a large number of sporting, leisure and other major event venues which involve a large range of meal formats and price/value ranges. Travel catering includes the supply of food and drinks to airline companies and supply to a large percentage of the food outlets located in airport terminals.

Event and travel food and drink catering is generally managed and serviced by major catering companies. This includes the full management of multi-outlet venues which offer a range of QSR-style facilities through to formal meal sittings. The supply to airlines is typically from in-house and dedicated outsourced kitchens.

Drivers of volume and value in this channel

General factors

- increased preference for time spent on leisure activities out of the home
- improved marketing of sports as entertainment, leading to growth in crowd attendances at major sporting events
- expansion of meal and snack options available at venues
- improvement in sophistication of service offerings by commercial/contract catering providers.

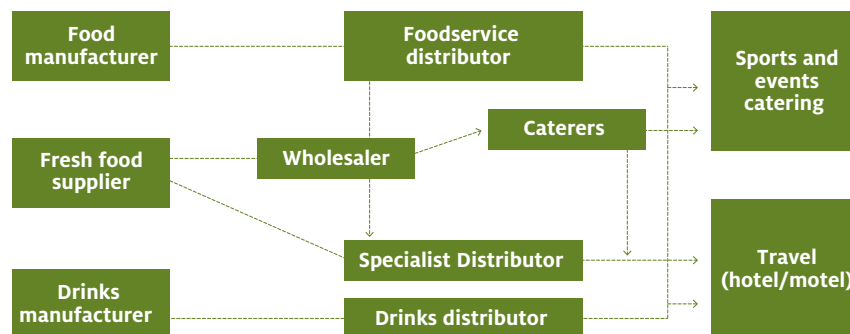
Volume

- attendances at entertainment events, and travelling passenger numbers
- level of discretionary spending available for leisure activities
- number of major events and their prominence
- number and accessibility of food outlets provided at major venues
- type of outlet and the range of foods available.

Value

- service offering, range of meal and snack types, and quality
- value range catered for by each event
- price points of competing food lines.

80. Events, leisure and travel channel



This market includes providing meal and food services at venues for:

- major sporting events, either at fixed venues with regular season attendances (football codes, cricket, horse racing)
- one-off or limited season events such as car racing and tennis
- business events such as conferences, conventions and meetings
- airport and rail terminals
- major leisure attractions such as zoos and amusement parks/centres
- cinemas.

Accommodation venues include those with facilities for meals:

- hotels and motels
- resorts
- bed and breakfasts
- hostels.

Institutional healthcare

This channel encompasses the supply of meals to a large number of government and private healthcare institutions which provide meals to residents and in-patients.

These facilities are generally serviced through either in-house kitchens or outsourced catering services. Commercial caterers are the largest provider of meal solutions to this segment of the food market, with the service package varying according to the industrial practices, budgetary constraints, and institution size and location. Caterers arrange the sourcing of meals and meal components according to the requirements of their establishment/venue logistics and facilities, and underpin these with supply arrangements from manufacturers and fresh food suppliers.

Drivers of volume and value in this channel

General factors

- ageing population, with increased numbers of infirm patients and aged people in managed care
- trend towards the consolidation of kitchens and providing 'cook-chill' facilities in individual establishments
- trend towards outsourcing of kitchens to contract caterers
- greater complexity in the nutritional requirements for meals.

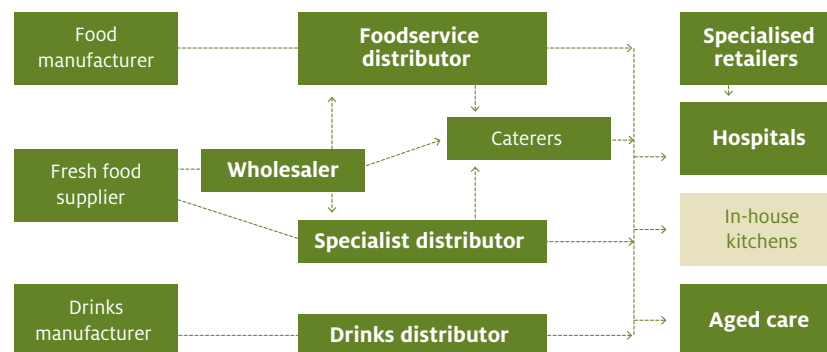
Volume

- number of beds in institutions offering care
- occupancy levels
- nature of service offered by aged care establishments (provided meals versus own-preparation).

Value

- cost constraints on meals and service labour, countered with nutritional requirements/solutions.

81. Institutional healthcare channel



Nature	Meal-serving institutions	Approx. bed numbers	
Hospitals includes:	1326	84 900	Public and private hospitals
Public	753	56 900	
Private	573	28 000	
Aged care includes:	2400		Diverse range of institutions in terms of their size, levels of care and treatment options/services.
Retirement villages	1100		
Nursing homes	1050		
Hostels	200		

Other institutional food

This channel generally encompasses contract catering service arrangements to a number of managed kitchen and dining venues. Commercial caterers are the largest provider of meal- and kitchen-management solutions to this segment of the food market, with the service package varying according to the industrial practices, cost constraints and institution size and location.

Caterers of this nature arrange the sourcing of meals and meal components according to the requirements of their establishment/venue logistics and facilities and underpin these with supply arrangements from manufacturers and fresh food suppliers.

Drivers of volume and value in this channel

General factors

- government policy on defence and education spending
- consolidation of corporation/organisational facilities into sites warranting service by an internal canteen
- household trends affecting portion of lunches taken in lunch box versus bought at a school tuckshop
- community pressure for greater control over the range and quality of food offered in school canteens.

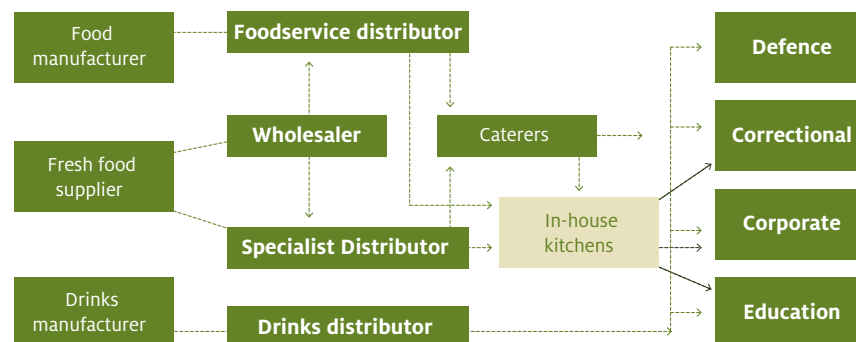
Volume

- number of staff employed
- number of educational institutions offering meals through dining halls and canteens, and their student numbers
- meal occasions served.

Value

- budgetary limits on food spending
- price points of major competing lines.

82. Other institutional channels



	Volume indicators	Comments
Defence	59 000 full-time force	Provide meals served across major field sites where permanent troops are stationed
Prisons	28 500 prisoners in March 2011*	Food generally serviced through in-house kitchens using inmate staff
Schools	Student numbers in schools equipped with canteens or offering boarding	6357* Primary 1409* Secondary 1286* Combined 396 Special Servicing a total of 3.5 million* students
Tertiary institutions	813 000* full-time students in higher education	Meals sold through canteens operated either by the institution itself or contract caterers
Corporate	Numbers of company canteens and staffing	Mostly major corporations offering in-house canteens
	Employees in remote mining facilities	Companies serving meals to mining camps

* Source: ABS

Section 6

Food processing



Processed foods sector

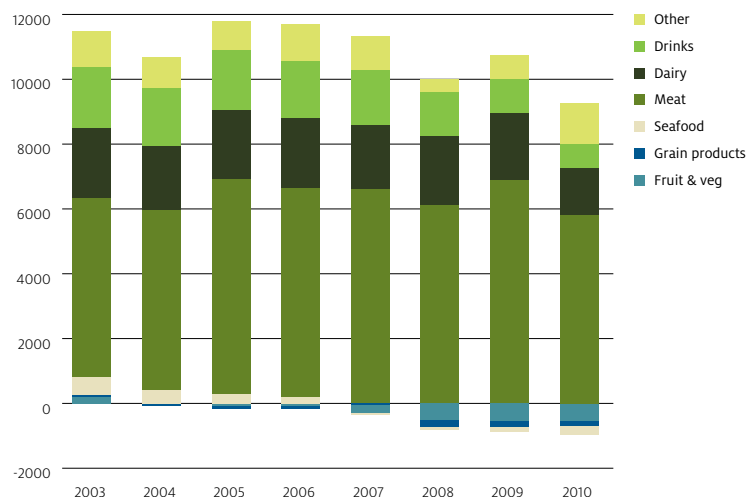
Australia has a significant food processing sector. The processed food sector (which includes products which have undergone minimal or substantial transformation) earns a significant net trade surplus for Australia. In 2009–10 this was assessed at \$7.4 billion, of which the beef industry alone earned \$5.8 billion (based on ABS data). The net trade in other food sectors is summarised in the charts on this page.

The overall processed food export trade has declined over recent years from a peak of \$10.5 billion in 2004–05 (when beef earned \$6.6 billion in exports). Imports have increased over this period, with Figure 84 providing an explanation of the major categories of growth.

The trends affecting the net food trade in major food categories over recent years include:

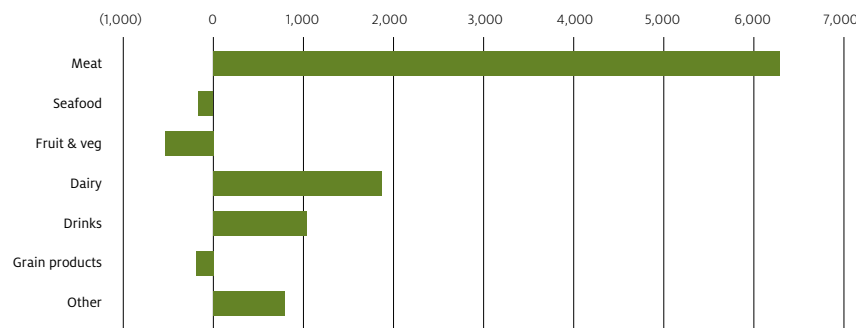
- fluctuating volumes of beef production due to more volatile climatic conditions, while meat prices have varied due to turbulence in key beef export markets and fluctuating currencies

83. Net trade in processed food, average over 3 years 2008–10 (\$m)

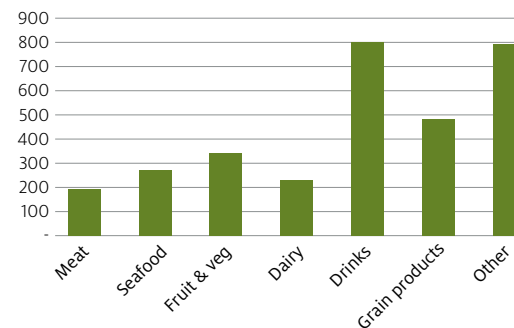


- gradual decline in exportable dairy product volumes, because of the effects of drought on milk production in export manufacturing regions
- the increasing value of the A\$ causing steady growth in the imports of processed food and drinks ingredients, and prepared fruit and vegetable lines
- growth in demand for seafood products, which has outstripped local catch and processing capacities.

84. Net Trade in processed food and beverages (\$m)



85. Increases in processed food imports between 2005 and 2010 (\$m)



Processed foods retail market

The product categories of processed foods are extensive and varied. However, there is limited data on the volume or value of the total retail market sales for these products into all retail and foodservice categories.

The data available from the grocery channel (which excludes sales through independent, convenience and the various foodservice channels) gives an insight into the relative size of the value of the market for each of the major product groups.

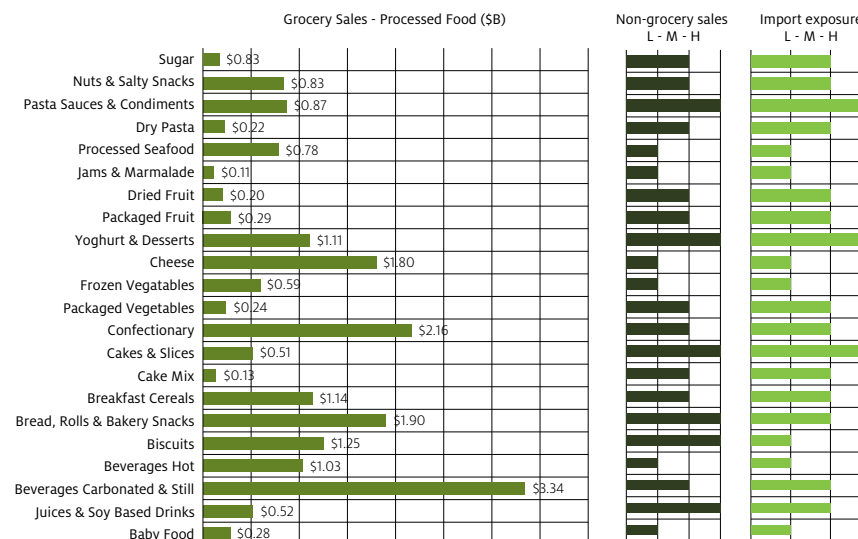
Figure 86 shows the retail sales value of the categories within the total grocery market for the year to July 2010 (source: Retailworld).

The chart indicates the extent of sales into non-grocery markets, in addition to sales through grocery channels. A high rating implies the non-grocery channel has a significant percentage of sales volumes, of equal or greater volume than passes through grocery stores. These include the following examples:

- use of sugar as an industrial ingredient
- convenience sales of snack foods, confectionery and cold drinks
- sales of coffee products through cafés, QSR outlets and other eating-out venues
- sales of bakery products through specialist bread, cake and pastry stores
- sales of frozen vegetables (chiefly, frozen potatoes into QSR and snack food use).

Relative import exposure is also provided in this chart, based on the analysis of data provided by the Australian Bureau of Agricultural and Resource Economics and Sciences. A high import exposure indicates strong import competition for local manufacturers of these products.

86. The markets for processed foods



Ownership

Over time, the ownership of brands and the manufacture and processing of products supplied to the grocery trade has been increasingly dominated by foreign companies. The chart on the right shows the approximate shares of ownership of product categories sold through grocery stores for the year to August 2010 (source: Retailworld).

A further complexity in this ownership mix is the incidence of private-label food products, which are estimated to currently represent about a quarter of all supermarket sales. While the brand is owned by the retailer, for our purposes the ownership of the supply capacity and contract is more important. The chart assumes either local or foreign ownership based on the known supplier of the private label in each case.

This level of foreign involvement is not new, and it is not unique to Australia. Global food companies have been a feature of the retail food market for decades, and a number of large multinational brand owners maintain a significant commitment to the Australian market.

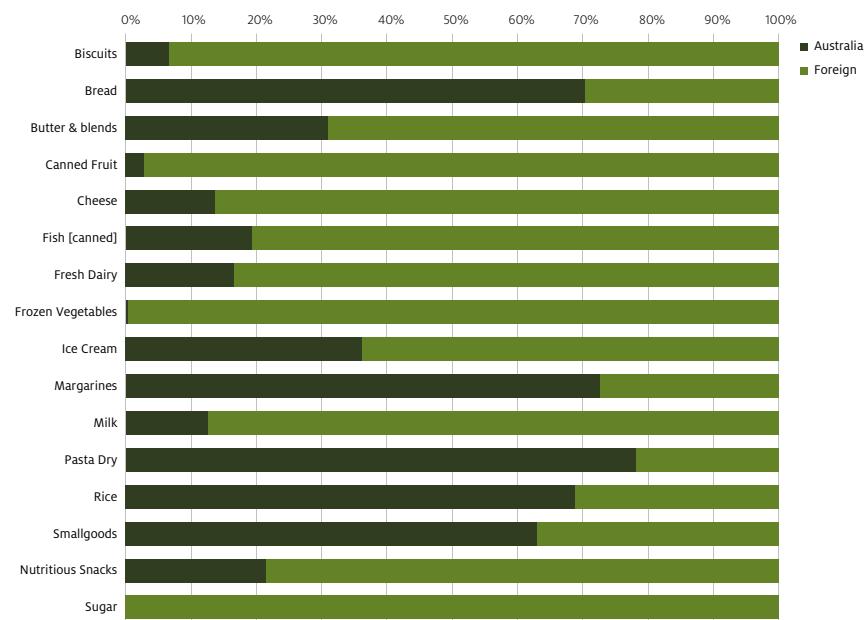
The trend towards increasing foreign ownership has been a steadily creeping series of acquisitions and integrations, sector by sector, based on opportunities taken when apparent value and integration benefits have been identified. Some sectors have resisted a movement to foreign ownership, because the scope for efficiency and supply of know-how may be limited (e.g. eggs, smallgoods).

Some sectors have been more vulnerable to foreign ownership than others because of the development of supply chains and the historical structure of corporate presence.

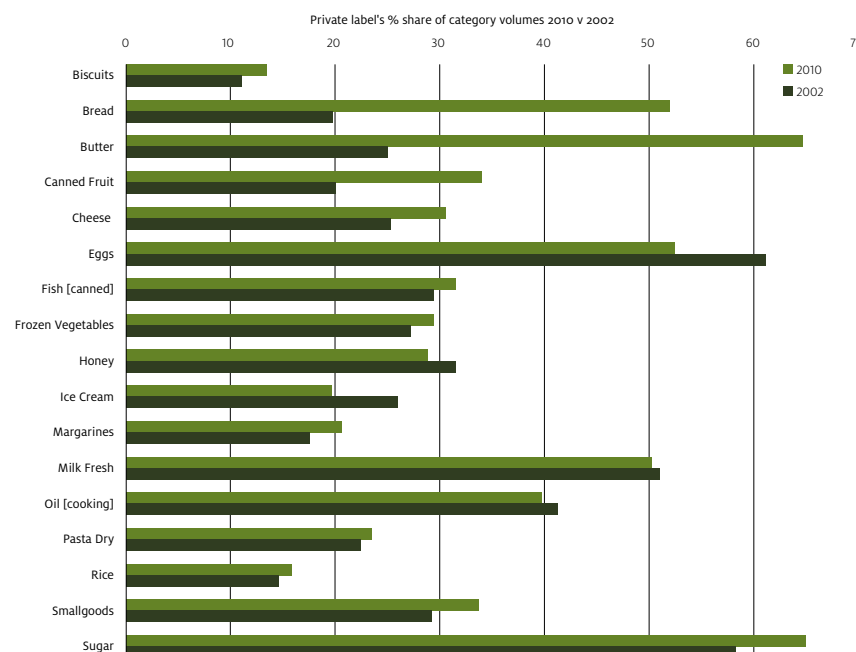
Brands

- There is a significant influence on the processed food sector of supermarket private-label products, which are prevalent in most dry grocery and packaged, chilled food categories. The extent of private-label share of sales varies by category, influenced by the relative strength of supplier brands and the nature of product differentiation that exists within categories.
- The chart on page 95 shows the extent of private-label share within selected categories and the growth in shares between 2002 and 2010.

87. Ownership of grocery brands in per cent terms by sales value



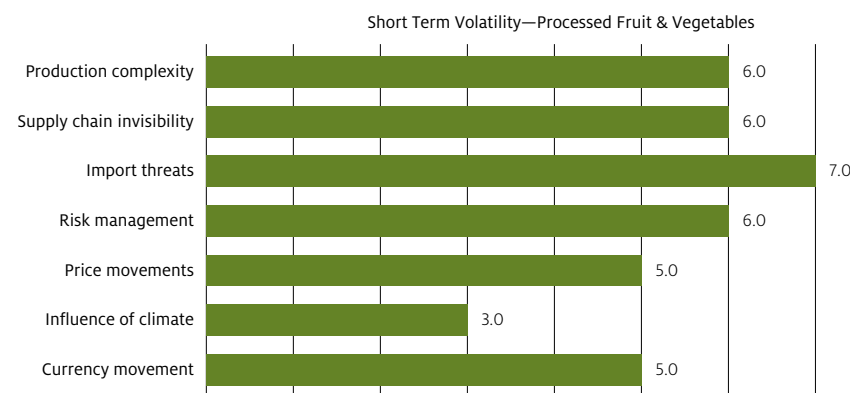
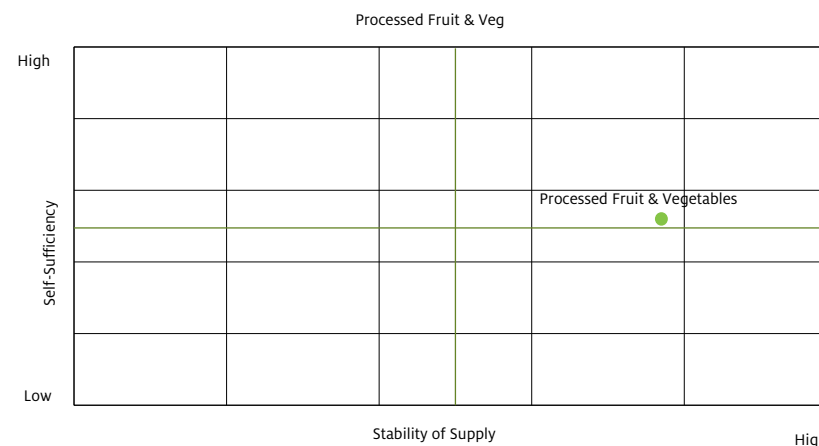
88. Private-label per cent market shares within grocery product categories, 2002 versus 2010



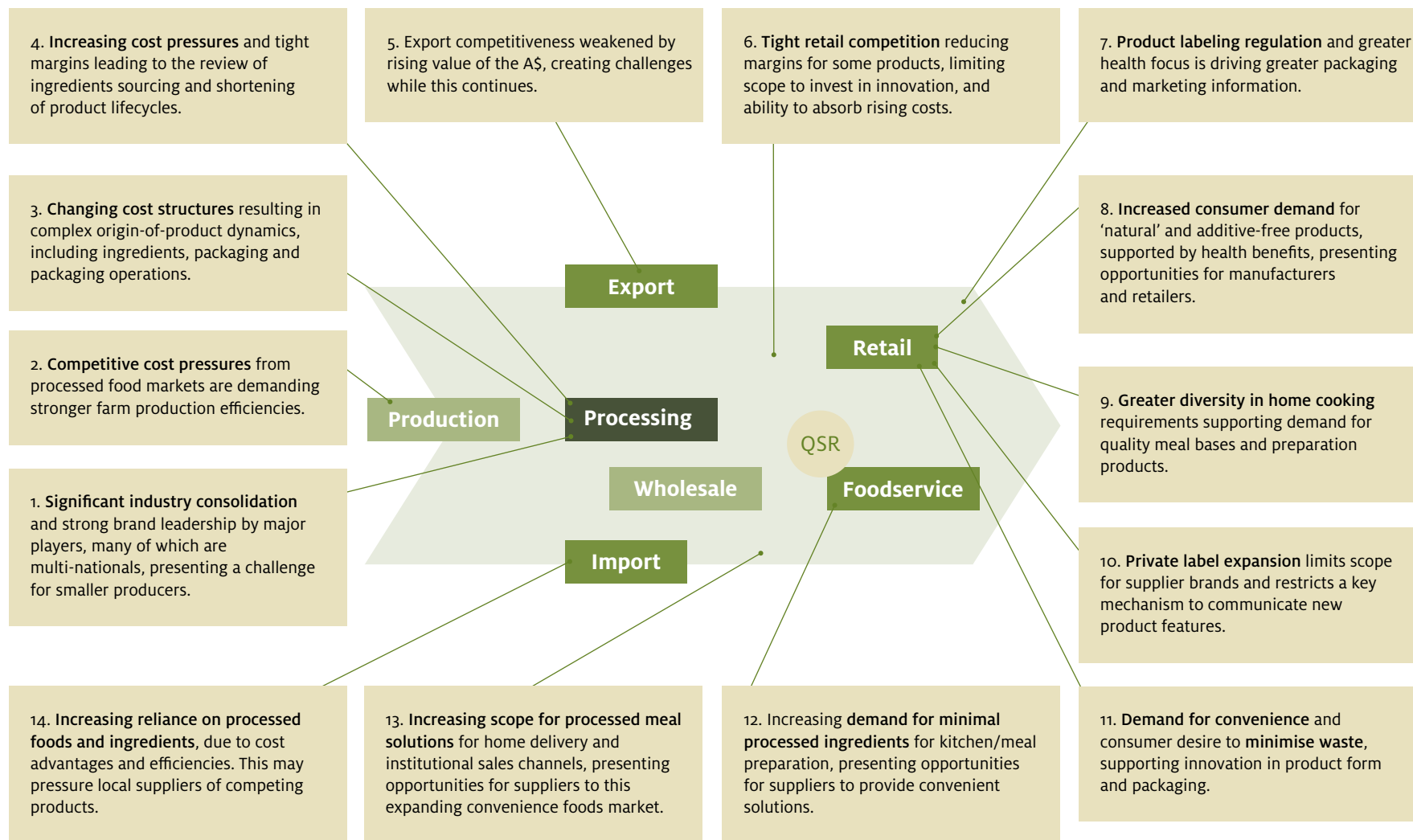
Pressure points in processed food products

- The chart on page 96 identifies a number of general points that apply across the processed grocery food sector.
- The charts to the right provide further detail on processed fruit and vegetables (as a part of the dry grocery category), outlining the relative level of self-sufficiency and stability of supply. Unlike the fresh sector, Australia has a lower level of self-sufficiency of processed fruit and vegetables, relying on imports of some products, which in turn have an influence on the short-term volatility of supply and prices.

89. Processed fruit and vegetable self-sufficiency, stability and volatility



90. Processed fruit and vegetable pressure points



Processed fruit and vegetables

Processed horticulture products represent a major component of the processed foods market.

There are significant volumes of processed fruit and vegetables sold into domestic grocery markets and foodservice markets.

Key features of channels to market

- Major FSS have dominant role in the sale of processed fruit and vegetables but a significant volume of product (such as frozen potatoes) moves into foodservice through foodservice distributors.

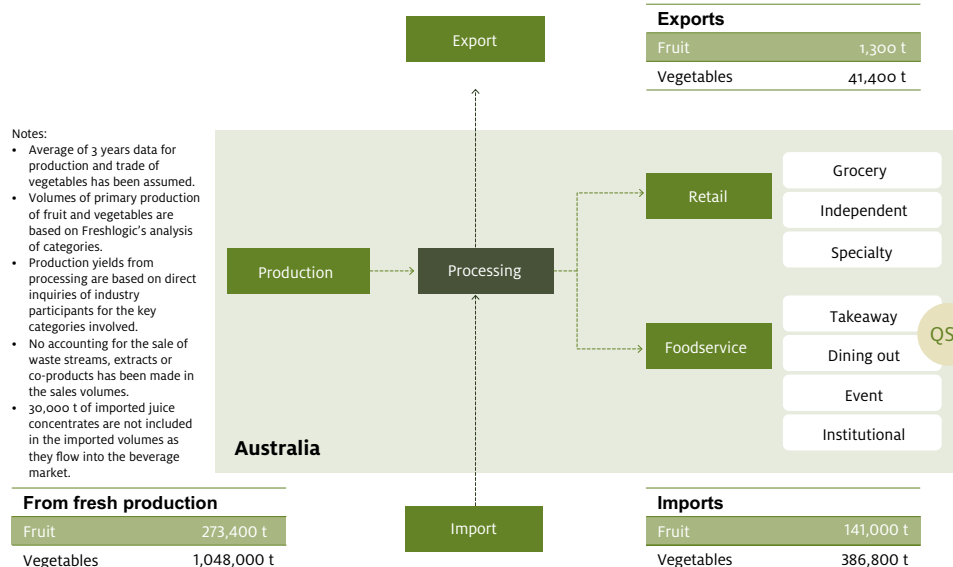
Dominant drivers of value

- private-label presence/share and use of 'everyday low pricing' practices to ensure competitiveness of offering
- scope for product extension through additives, such as nutrient enrichment, and other differentiators
- incidence/opportunity for imported processed product to fill a role in the category, including private-label lines.

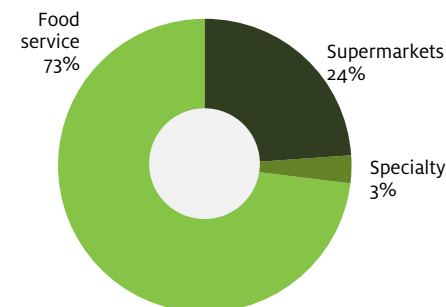
Major trends and dynamics

- FSS stores are still commanding growth in dry grocery categories which are less susceptible to pressure from convenience preferences of consumers.

91. Processed fruit and vegetables supply chain volume map



Processed fruit and vegetables domestic market share



Domestic sales

Supermarket	275,200 t
Specialty	30,600 t
Foodservice	826,800 t

Sources of fruit and vegetables

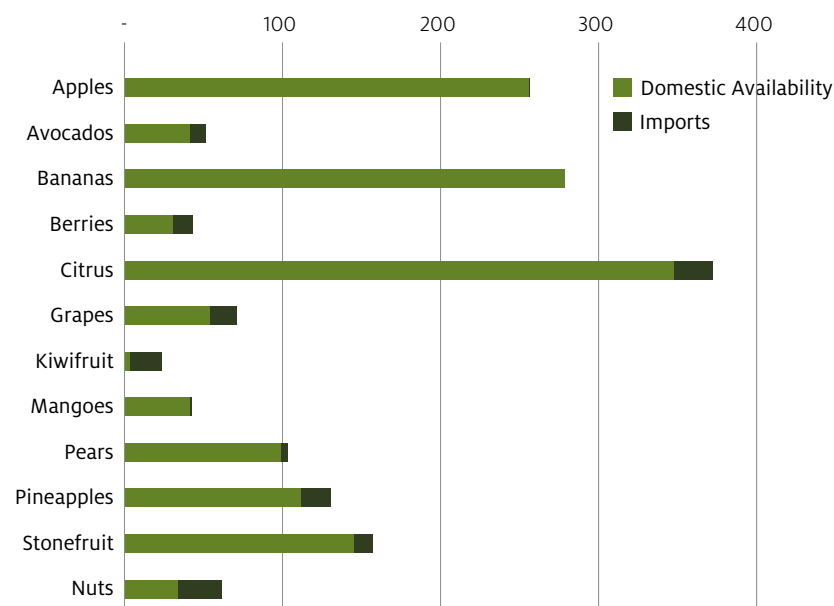
Fruit and vegetables are a key processed food category.

Freshlogic's analysis indicates that total fruit and vegetable supply to Australian consumers amounted to approximately 3.8 million tonnes, of which processed products accounted for 24 per cent, or 925 000 tonnes (based on the average of the five years from 2005 to 2010).

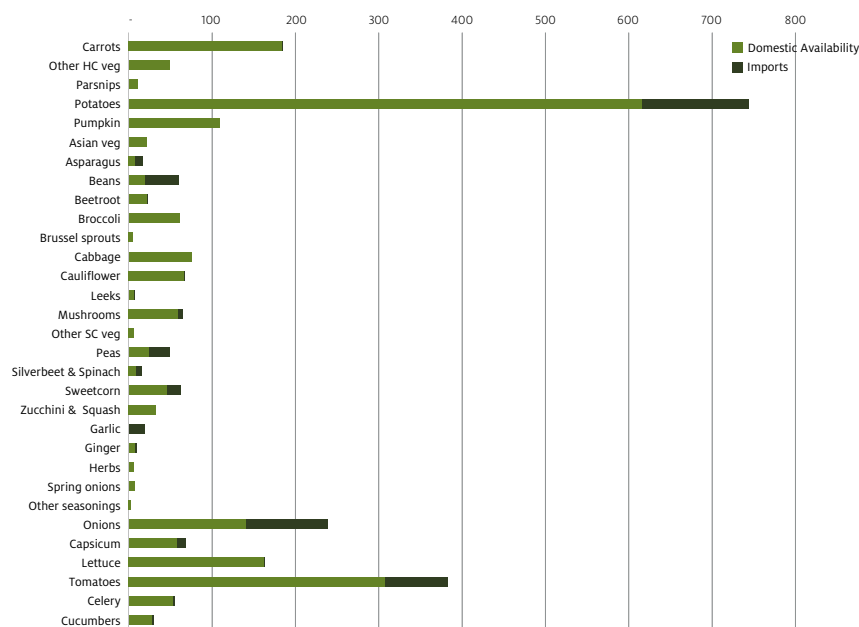
The charts show the sourcing of a number of common categories of fruit and vegetables—including both fresh and processed—distinguishing between locally produced and imported products. This shows imported sources make up a small percentage of total consumption—estimated by Freshlogic to have averaged 11 per cent over the period.

However, imports represent 32 per cent of the total processed products consumed in these categories (of which potatoes and tomatoes were the largest volumes of imported lines), whereas only five per cent of fresh product consumption was imported.

92. Sources of major fresh and processed fruit consumed ('000 tonnes)



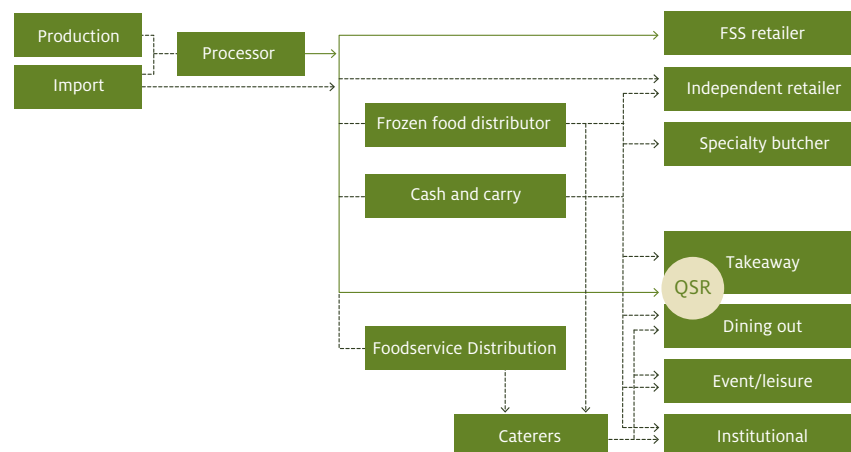
93. Sources of selected fresh and processed vegetables consumed ('000 tonnes)



Channels to the consumer—processed fruit and vegetables

- This category includes fruit and vegetables which are processed into canned, bottled or frozen products. The distribution structures are accordingly similar to generic dry grocery lines and non-alcoholic beverages, with strong dominance of sales through grocery channels for canned lines.
- There is significant concentration at retail, with FSS retailers commanding a dominant share of sales of canned and frozen consumer pack vegetables. Direct sourcing arrangements of imported product accounts for an increasing share of the intake into that channel with the expansion of private-label sales volumes.
- There are a number of wholesale businesses supplying the independent retail and foodservice markets, including specialist frozen food distributors.

94. Processed fruit and vegetables channels to the consumer



Glossary

A\$	Australian dollar
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
DAFF	The Department of Agriculture, Fisheries and Forestry
Discretionary spending	The portion of available household spending applied to non-essential items of consumer durables, food products and leisure activities
Dry groceries	Packaged grocery products (in tinned, cardboard or plastic packaging) excluding chilled products, delicatessen items, fresh produce and meat.
FAO	Food and Agriculture Organization of the United Nations
FMD	Foot and mouth disease
FMCG	Fast moving consumer goods
FOODmap 2007	A comparative analysis of Australian food distribution channels published by DAFF in 2007.
Foodservice	Provision of meals or snacks across various day-part occasions through takeaway, eating-out, institutional healthcare, and other event- or travel-based food outlets
Fresh dairy products	Refers to milk, cream, yoghurts and dairy desserts
FSS	Full-service supermarkets (such as operated by Woolworths, Coles, Supa-IGA, etc.)
Manufactured dairy products	Products including milk powders, cheese, butterfat (spreads) and other ingredients
Non-grocery	Food sales through all channels excluding major and independent supermarkets
QSR	Quick service restaurant such as McDonald's, KFC, Subway, etc.
Specialist retailers	Retail stores that specialise in specific food categories such as greengrocers, bakers, butchers, fishmongers and delicatessens
UHT	Ultra heat treated milk

The 'Biosphere' Graphic Element

The biosphere is relevant to the work we do and aligns with our mission—we work to sustain the way of life and prosperity for all Australians. We use this shape as a recognisable symbol across our collateral.

The biosphere imagery used in *FOODmap: An analysis of the Australian food supply chain* represents key elements and food distribution channels for major categories within the Australian food industry, from food producer to consumer.



For more information please contact:

Food Policy and Programs Section

Department of Agriculture, Fisheries and Forestry
GPO Box 858
Canberra ACT 2601

Phone +61 2 6272 3933

Email foodinfo@daff.gov.au



daff.gov.au/foodmap