



Australian Government

**Department of Agriculture
and Water Resources**

ABARES

A stocktake of selected agricultural markets of the European Union

Opportunities for Australia

Research by the Australian Bureau of Agricultural
and Resource Economics and Sciences

Caroline Gunning-Trant and Natasha Frawley (eds.)

Research Report 17.8
July 2017



© Commonwealth of Australia 2017

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 4.0 International Licence](#) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to copyright@agriculture.gov.au.



Cataloguing data

ABARES 2017, *A stocktake of selected agricultural markets of the European Union—Opportunities for Australia*, Gunning-Trant, C & Frawley, N (eds.), ABARES research report no.17.8, Canberra, July.

ISSN 1477-8358

ISBN 978-1-74323-350-4

ABARES project 43613

Internet

This publication is available at agriculture.gov.au/abares/publications.

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

Postal address GPO Box 858 Canberra ACT 2601

Switchboard +61 2 6272 2010

Email info.abares@agriculture.gov.au

Web agriculture.gov.au/abares

Disclaimer

The Australian Government acting through the Department of Agriculture and Water Resources, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture and Water Resources, ABARES, its employees and advisers disclaim all liability, including for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on information or data in this publication to the maximum extent permitted by law.

Acknowledgements

This report was prepared by staff in the Agricultural Commodities and Trade Branch. The authors of each chapter are acknowledged at the start of the chapter. The project was managed by Caroline Gunning-Trant. The authors thank Trish Gleeson, Peter Gooday, Jammie Penm and Karen Schneider of ABARES for their valuable comments and advice. For their constructive feedback the authors thank Sian Hewitt, Wendy Voss and Louise Graham from Trade and Market Access Division.

Contents

Synopsis	6
1 The EU almond industry	12
2 The EU beef industry	19
3 The EU dairy industry	37
4 The EU sheep meat industry	50
5 The EU sugar industry	62

Tables

Table 1 Applied tariffs on Australian almond exports by destination	15
Table 2 Hilton quota allocations and utilisation, 2009–10 to 2015–16	26
Table 3 European Union tariff-rate quotas for dairy products	44
Table 4 Sheep and goat meat import quota allocations and utilisation, European Union, 2012 to 2016	55
Table 5 Sugar and isoglucose production quotas, by EU member state or region, 2016 and 2017	68
Table 6 EU import arrangements for raw sugar, 2016–17 and 2017	73

Figures

Figure 1 Share of Australian agricultural exports, by destination, 1990–01 to 2015–16	6
Figure 2 World almond production, 2005–06 to 2015–16	12
Figure 3 World almond consumption, 2005–06 to 2015–16	13
Figure 4 Share of world almond imports, 2015–16	13
Figure 5 Volume of Australian almond exports, 2005–06 to 2015–16	14
Figure 6 EU almond imports by member country, 2000 to 2015	16
Figure 7 Total and per person beef consumption, European Union, 2000 to 2016	19
Figure 8 Cattle herd size and proportion of dairy cows, European Union, 2000 to 2016	20
Figure 9 Annual voluntary coupled support, by member state and sector, European Union, 2015 to 2020	22

Figure 10 Beef exports, European Union, 2010 to 2016	23
Figure 11 Beef imports by source, European Union, 2010 to 2016	24
Figure 12 Imports under the Hilton quota, by source and quota limit, European Union, 2009–10 to 2015–16	25
Figure 13 Imports under the grain-fed tariff-rate quota and total quota limit, European Union, 2009–10 to 2015–16	28
Figure 14 Imports under the frozen beef tariff-rate quota and combined quota limit, European Union, 2009–10 to 2015–16	29
Figure 15 Beef imports from major Mercosur exporters, European Union, 2010 to 2016	30
Figure 16 Real average export unit values, Australia, 2000 to 2016	32
Figure 17 Beef exports to the European Union and EU share of beef exports, Australia, 2000 to 2016	33
Figure 18 Dairy cow herd and cow milk production, European Union, 1992 to 2014	37
Figure 19 Butter and skim milk powder prices, monthly average, European Union, March 2014 to March 2017	40
Figure 20 Private storage aid and public intervention stocks, European Union, March 2015 to March 2017	42
Figure 21 Imports of major dairy products, European Union, 2000 to 2015	43
Figure 22 Australian cheese exports to the European Union, China and ASEAN, 2000–01 to 2015–16	48
Figure 23 Total and per person sheep meat consumption, European Union, 2000 to 2016	51
Figure 24 Sheep meat production by member state, European Union, 2000 to 2016	52
Figure 25 Annual voluntary coupled support, by member state and sector, European Union, 2015 to 2020	53
Figure 26 Imports of NZ sheep meat, European Union, 2000 to 2016	57
Figure 27 Sheep meat, real unit export values, main markets, Australia, 2000–01 to 2015–16	59
Figure 28 EU sugar beet production, by country, 2006–07 to 2015–16	63
Figure 29 Sugar beet area harvested and average beet yield, European Union, 2006–07 to 2015–16	64
Figure 30 EU sugar production, by country, 2006–07 to 2015–16	64
Figure 31 EU and world sugar consumption, per person, 2006 to 2015	66
Figure 32 EU sugar production, by quota type, 1999–2000 to 2015–16	69
Figure 33 EU sugar exports, by destination, 2000 to 2015	72
Figure 34 Australian sugar export volumes, by destination, 2006–07 to 2015–16	76

Boxes

Box 1 UK almond trade and consumption	17
Box 2 UK beef industry	22
Box 3 UK dairy industry	38
Box 4 UK sheep meat	58
Box 5 UK sugar industry	71

Synopsis

The Australian Government and the European Commission are working towards commencing negotiations for a free trade agreement (FTA). The European Union is one of the largest consumers of agricultural goods in the world, so a preferential agreement may present opportunities for Australian agricultural exporters.

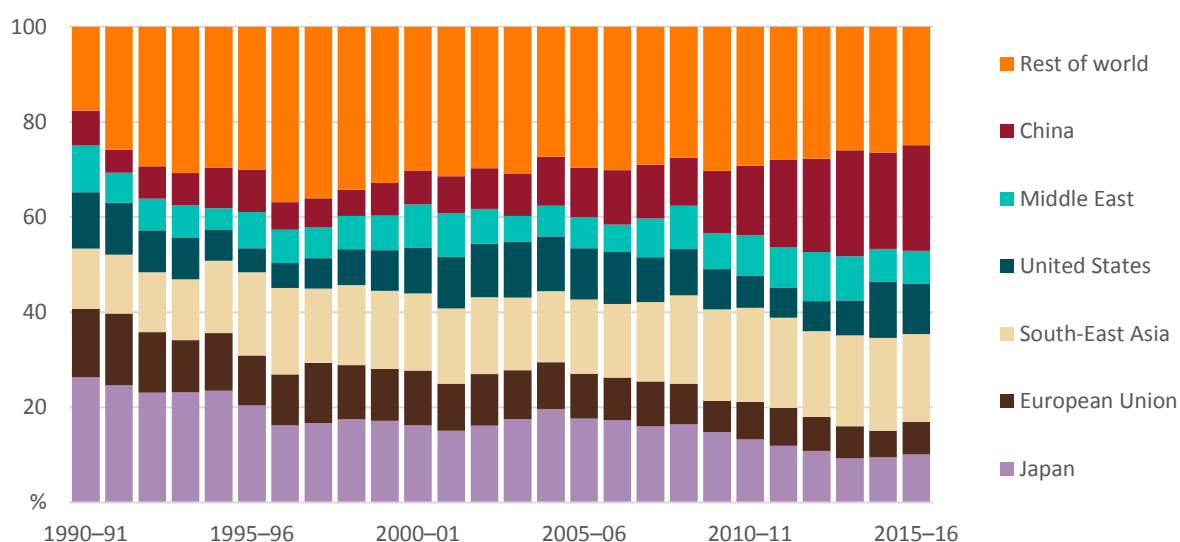
The European Union is Australia's sixth-largest export destination for agricultural products—mainly almonds, beef, rapeseed (largely for industrial purposes), wine and wool. It is also Australia's largest source of agricultural imports—mainly alcoholic beverages, dairy products, pig meat and processed vegetables.

This compendium examines the markets of five EU agricultural industries—almonds, beef, dairy, sheep meat and sugar. The chapters were originally published as articles in *ABARES Agricultural commodities* quarterly reports between June 2016 and March 2017. Each chapter has been updated and is current as at June 2017.

This report covers high-value commodities and Australian industries with growth potential. Improved market access to large EU markets could be significant for Australia. The objective of this analysis is to inform stakeholders of this potential and to highlight opportunities for Australia in these markets.

Until the mid 1990s the European Union was a principal market for Australian agricultural exports, mainly because of Australia's historical ties with the United Kingdom. However, since then the share of exports destined for the European Union has fallen as growth in Australia's total exports has been increasingly directed to the more lucrative and geographically closer markets in the Asian region (Figure 1).

Figure 1 Share of Australian agricultural exports, by destination, 1990–01 to 2015–16



Sources: ABARES; ABS 2017

The decline in the relative value of the EU market for Australian agricultural exports has been caused in part by the regulation that supports the EU agricultural sector. The European Commission has used import tariffs, price support, export subsidies and other policy instruments to protect the EU market from foreign competition.

The Common Agricultural Policy

The Common Agricultural Policy (CAP) has shaped the EU agricultural sector since 1962. CAP mechanisms have included minimum price support, intervention purchasing systems, import tariffs, export subsidies and production quotas to protect EU farmers, producers and consumers from market price variability and foreign competition.

Brief history

In 1962 the CAP was established to meet policy objectives including increasing agricultural productivity and securing supply of agricultural produce. It was to provide a minimum standard of living for producers and to manage the price volatility they faced in commodity markets. The CAP was also intended to ensure food was available for consumers at reasonable prices (Delayen 2007).

The CAP was designed to create a free internal market within the European Union. The policy sheltered this internal market from foreign competition by imposing variable import levies on most agricultural commodities. Within the EU market, the CAP offered producers a guaranteed minimum price for their produce. This was known as the intervention price and was set by the European Commission. Under the intervention buying system, member states purchased surplus products on behalf of the European Commission when domestic prices fell below the intervention price. Products were stored and released back onto the domestic market when prices recovered. Because internal EU prices were higher than world prices, the European Commission made export subsidies available to exporters to facilitate disposal of excess supplies on the world market.

During the 1970s CAP support for European producers precipitated a substantial expansion in agricultural production. Production exceeded domestic market requirements, so the European Union became a major producer and exporter of agricultural commodities. By the early 1980s it was routinely producing surplus agricultural product, which required storage and disposal. The cost of export subsidies increased significantly. The combination of increasing production as a result of high internal prices, high storage costs and large export subsidies resulted in substantial budgetary pressures. A significant share of these pressures could be attributed to dairy policies.

These factors prompted the European Commission to reform the CAP, firstly by introducing milk quotas in 1984 with a levy on excess production. The quotas were designed to limit production—to prevent the oversupply of milk and therefore reduce the cost of the CAP. However, quota limits were not sufficiently restrictive so were tightened several times in the late 1980s and early 1990s. The European Commission also increased the levy on excess production.

In 1992 further reforms to the CAP targeted cereals and meat products. These reforms were the first in a new approach to EU agricultural policy. Support prices were progressively lowered to levels closer to world market prices and producers began to receive direct income support payments based on land holdings. The completion of the Uruguay Round of multilateral trade negotiations in 1994 led the European Union to simplify its system of import tariffs and quotas and further lower its level of domestic support.

In 2000 and 2003 the European Commission led major CAP policy reforms—resulting in further reductions in support prices, increased direct support payments and the extension of reforms to

new commodities. From 2003 direct support payments were progressively moved towards a single farm payment.

Current policy

In 2017 the main CAP policy objectives are largely similar to those of 1962—namely, to improve agricultural productivity so consumers have a stable supply of affordable food and to ensure that EU farmers can make a reasonable living. However, CAP objectives have broadened to include ensuring viable food production (to contribute to feeding the world), addressing climate change and sustainably managing natural resources, caring for EU land and keeping rural EU economies alive (European Commission 2017a).

The CAP is likely to face challenges in the short to medium term. The exit of the United Kingdom from the European Union (Brexit) will result in less funding available to finance CAP support and is likely to result in lower levels of support for EU agriculture after 2019. In early 2017 the European Commission was beginning to consult on simplifying and modernising the CAP (European Commission 2017b).

Impact of Brexit on agricultural industries uncertain

On 23 June 2016 the United Kingdom voted to leave the European Union (Brexit). The United Kingdom began the formal process of exiting the European Union when it triggered Article 50 of the Treaty of Lisbon in March 2017. The United Kingdom has two years from that date to negotiate the terms of its exit. The UK Prime Minister previously indicated the United Kingdom would leave the EU single market and customs union, but the outcome of the June 2017 election has made this less clear. Leaving the single market and customs union will enable it to independently negotiate FTAs with countries from outside the European Union, including Australia, once the exit process is complete.

The agricultural trade relationship between the United Kingdom, other EU member states and non-EU countries will remain uncertain until the United Kingdom announces changes to its agricultural trade policies following the negotiated exit from the European Union. The United Kingdom has undertaken to continue providing CAP-level support to UK farmers until around 2022 (Conservative and Unionist Party 2017).

Outcomes from a free trade agreement between Australia and the European Union

The European Union is a high-value market for Australian agricultural exporters. However, EU imports of most commodities examined in this report are subject to restrictive quotas, in-quota tariffs and prohibitive out-of-quota tariffs. Without a significant increase in Australia's existing access to the EU market, the benefits to the Australian agricultural sector from an FTA are likely to be limited.

Almonds

Trade barriers are relatively low for EU imports of almonds, unlike for many agricultural commodities. Australia is the second-largest exporter of almonds to the European Union, behind the United States. Prolonged strengthening of import demand by the European Union, supplemented by a drought in the almond-growing areas of the United States, contributed to the doubling of Australian almond exports to the European Union between 2012–13 and 2015–16.

Removal of the already low tariff on almond imports from Australia into the European Union would improve Australia's competitiveness compared with other almond exporters. However, export gains would be modest over the long term. A lower tariff is unlikely to offset the ongoing recovery in US almond production, which is expected to regain most of the EU market ceded during the drought years.

Beef

The European Union is the third-largest beef consumer in the world and consumption is mainly met by domestic production. The EU beef industry is largely a by-product of the dairy industry. Therefore, changes to dairy policy affect availability of cattle for beef production.

From 2007 to 2015 per person beef consumption fell as a result of high beef prices and low or slow-growing incomes. These factors are likely to continue to place downward pressure on beef consumption. The lifting of the EU milk quota in 2015 is expected to result in increased herd sizes and consequently increased domestic production of beef. This would put downward pressure on the domestic price of beef and weaken import demand.

The European Union is a high-value market for Australian beef exports. EU beef imports are controlled by several tariff-rate quotas available to various exporters, including Australia. Exports to the European Union represent only a small share of Australia's total beef exports, but the Australian beef industry has been responsive to past improvements in EU market access because of the profitability of that market. An Australia-EU FTA that improved market access for Australian exporters would provide the industry with more certainty and therefore an incentive to invest in gaining accreditation to export to the EU market.

Dairy

Until around 2007–08 the European Union was a large market for Australian dairy exports. However, falling EU domestic dairy prices led to a weakening of demand for imported products. European imports of cheese and butter almost halved between 2000 and 2014.

An Australia-EU FTA would be unlikely to increase dairy product exports to that market in the short term. High EU domestic production, overall weak demand and alternative markets for Australian dairy exports would all be likely to constrain exports to the European Union despite any improvements to market access stemming from an FTA.

Sheep meat

The European Union is one of the world's largest producers and consumers of sheep meat. However, its consumption represents only a small proportion of total EU meat consumption because of its relatively high price point. Slow consumer income growth over the 10 years to 2016 resulted in a long-term decline in sheep meat consumption.

Australia is the second-largest supplier of sheep meat to the European Union (mostly to the United Kingdom), behind New Zealand, but this market represents only a small proportion of Australian sheep meat exports. Australian sheep meat is subject to a restrictive tariff-free quota of less than 20,000 tonnes a year, compared with the NZ quota of more than 200,000 tonnes a year. Both countries are subject to a prohibitive out-of-quota tariff. In the five years to 2015 Australia largely filled its quota, but New Zealand only filled an average of 73 per cent as a result of structural adjustments in its agricultural sector. If Australia could negotiate improved access to the EU market, Australian sheep meat exporters would benefit from the increased volume of trade and from the relatively high prices for sheep meat in that market.

Sugar

The EU sugar market has been highly regulated since the establishment of the CAP. It includes strict production quotas, export bans and various sugar import quotas and tariffs.

On 1 October 2017 the European Commission will remove its quotas for sugarbeet and isoglucose production and its support pricing for sugar beet and beet sugar. This is expected to result in higher beet plantings in the more efficient producing countries and increased availability and use of isoglucose as an alternative sweetener. The overall effect of this planned policy change is uncertain, but it is expected to result in weaker EU demand for imported sugar as domestic production and exports increase. EU sugar competes with Australian sugar in other third markets.

Australia exports a small quantity of sugar to the European Union under a quota with a reduced tariff. These exports are destined mainly for the United Kingdom. Therefore, opportunities for Australian sugar exporters will be uncertain until the European Union and the United Kingdom reach an agreement on post-Brexit arrangements.

Conclusion

The European Union is expected to remain committed to protecting its agricultural industries. In early 2016 the European Commission ran a public consultation with EU businesses and individuals on potential FTAs with Australia and New Zealand. The European Commission stated that removing existing trade barriers for certain goods, services, investment and public procurement would benefit European stakeholders but that EU agricultural sensitivities would need to be considered (European Commission 2016).

An Australia–EU FTA may result in larger quotas and either lower or nil tariffs on imports of the five Australian commodities featured in this report. However, Australian exports to the European Union are unlikely to increase strongly. This is because EU demand for agricultural products is not expected to strengthen in the short to medium term due to economic growth remaining below 2 per cent and consumer income growth being weak (IMF 2017).

References

ABS 2017, International trade, Australia: February 2017 [unpublished data], cat. no. 5465.0, Australian Bureau of Statistics, Canberra, accessed 3 May 2017.

Conservative and Unionist Party 2017, [Forward, Together—Our Plan for a Stronger Britain and a Prosperous Future: the Conservative and Unionist Party Manifesto 2017](#), London, 23 June.

Delayen, C 2007, [The Common Agricultural Policy: a brief introduction](#), Institute for Agriculture and Trade Policy, Minneapolis, 27 September.

European Commission 2016, [Online public consultation on the future of EU-Australia and EU-New Zealand trade and economic relations](#), Brussels, 3 June.

—2017a [Agriculture: a partnership between Europe and farmers](#), Brussels, 13 February.

—2017b, [Consultation on modernising and simplifying the common agricultural policy \(CAP\)](#), Brussels, accessed 4 April 2017.

IMF 2017, [World Economic Outlook Database April 2017](#), International Monetary Fund, Washington, DC, accessed 19 April 2017.

1 The EU almond industry

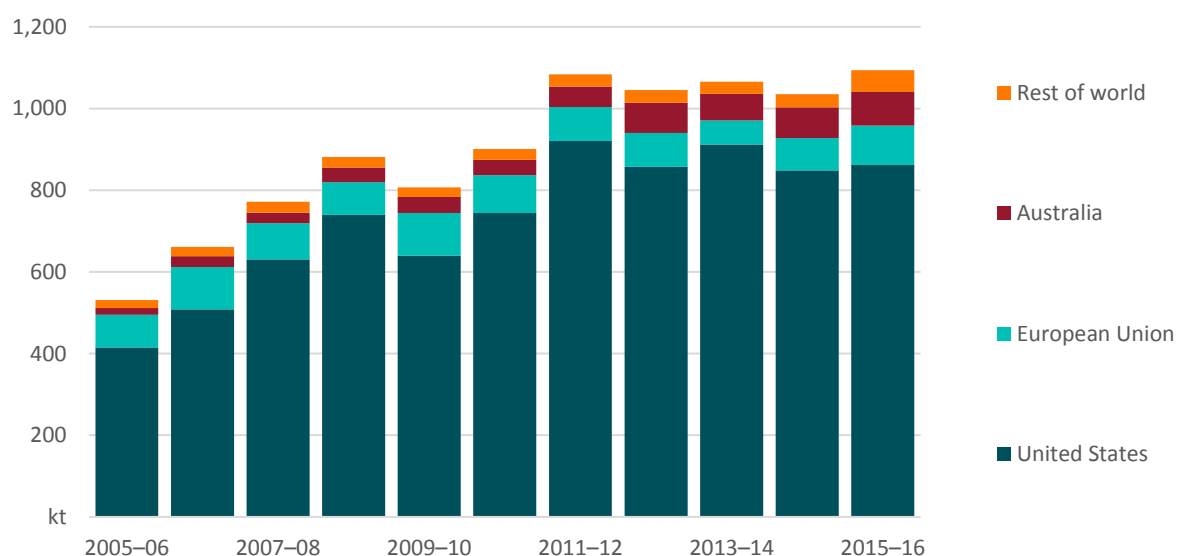
Sarah Smith

The European Union is the world's largest consumer and importer of almonds and since 2005–06 has been a growing export market for Australian almonds. In November 2015 the Australian Government and the European Commission agreed to begin the process of working towards a free trade agreement (FTA). Australian almond exporters could potentially benefit from improved access to the EU market. However, identifying where the opportunities might lie requires an understanding of the EU market and the policies that support its tree nut industry. This chapter examines the EU almond industry in that context and the Australian industry's potential in the EU market.

Global production, consumption and trade of almonds

The United States is the world's largest producer of almonds (Figure 2). In 2015–16 it produced 862,000 tonnes of almonds (kernel weight), accounting for almost 80 per cent of global production. The European Union was the second-largest almond producer (at 96,000 tonnes of kernel) and Australia was the third-largest (83,000 tonnes).

Figure 2 World almond production, 2005–06 to 2015–16

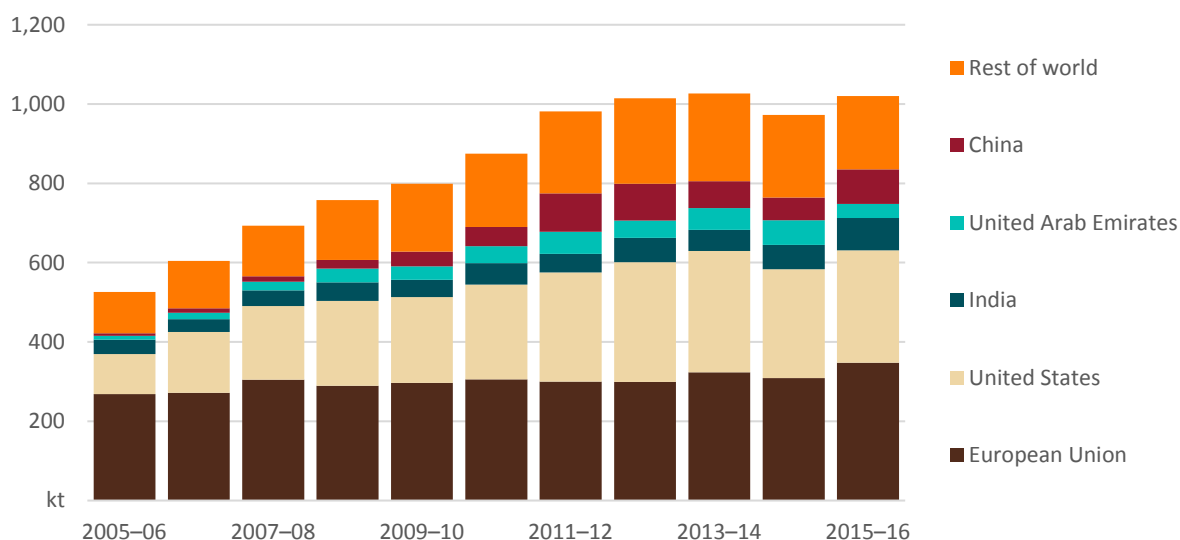


Note: Volume is expressed in kernel weight.

Source: USDA–FAS 2017

World consumption of almonds grew by an average of 7 per cent a year between 2005–06 and 2015–16 (Figure 3). The European Union is the largest almond consumer, with annual consumption since 2007–08 being relatively stable at around 300,000 tonnes of kernel. In 2015–16 the European Union accounted for 34 per cent of world consumption. The United States is the second-largest almond-consuming country. US consumption almost tripled between 2005–06 and 2015–16, to 283,000 tonnes, or 28 per cent of global consumption. Other expanding markets for almonds are China and India, each accounting for about 8 per cent of world consumption in 2015–16.

Figure 3 World almond consumption, 2005–06 to 2015–16

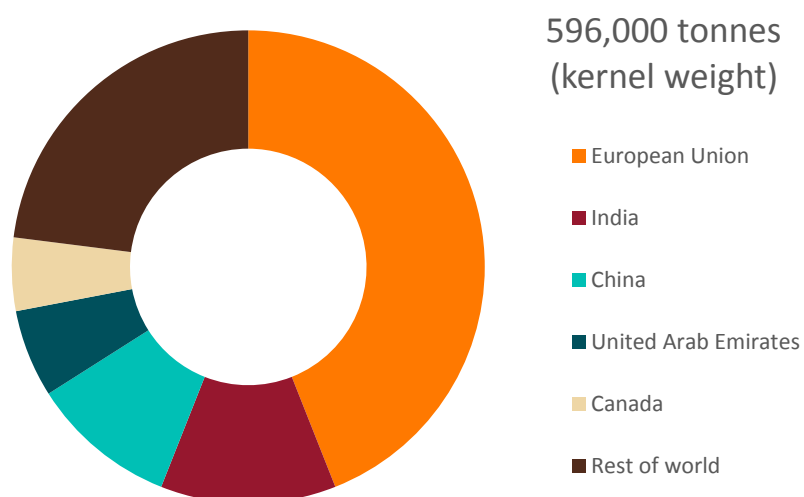


Note: Consumption is defined as domestic production plus imports minus exports.

Source: USDA–FAS 2017

The European Union is the world's largest importer of almonds (Figure 4), accounting for 44 per cent of total world imports in 2015–16. India, China, the United Arab Emirates and Canada are also large importers—each accounting for between 5 per cent and 12 per cent of global imports in 2015–16 (USDA–FAS 2017).

Figure 4 Share of world almond imports, 2015–16



Source: USDA–FAS 2017

The United States is the largest exporter of almonds, accounting for more than 85 per cent of global exports. In 2015–16 its principal markets by volume included the European Union (250,000 tonnes or 43 per cent of US exports), India (71,000 tonnes or 12 per cent), Hong Kong (71,000 tonnes or 12 per cent) and the United Arab Emirates (34,000 tonnes or 6 per cent) (US Census Bureau 2017).

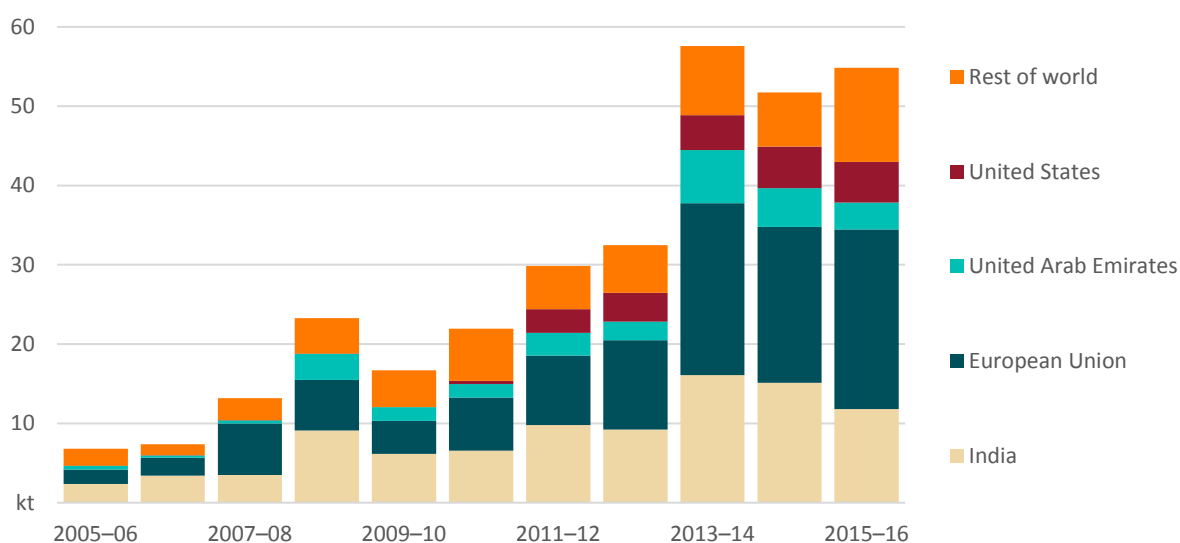
The Australian almond industry

Australia is the third-largest producer of almonds, behind the United States and the European Union. Significant plantings in 2006 and 2007 led to a twofold increase in the volume of production in the five years to 2015—to 83,000 tonnes of kernel in the March to February marketing year (Almond Board of Australia 2016). Production growth is expected to expand slowly over the next five years as recent plantings reach maturity (Smith & Cameron 2017).

The Australian almond industry is export oriented, with two-thirds of production exported in 2015–16. Export volumes have expanded rapidly since 2005–06 in response to strong global demand. Export growth averaged 30 per cent a year between 2005–06 and 2012–13 (Figure 5). Exports then nearly doubled in 2013–14, to around 58,000 tonnes of kernel, and remained high because drought-affected production in California constrained competing US almond exports to the European Union and India. In 2015–16 almonds were Australia’s largest horticultural export by value, worth \$616 million.

The European Union is an important and growing export market for Australian almonds. In 2015–16 Australia exported \$263 million of almonds to the European Union, of which 99 per cent were shelled (kernel) (ABS 2017). The European Union accounted for 41 per cent (23,000 tonnes) of total Australian almond export volume. India is also a growing export market, accounting for 22 per cent of export volume in the same year. Other important markets included the United States (9 per cent) and the United Arab Emirates (6 per cent).

Figure 5 Volume of Australian almond exports, 2005–06 to 2015–16



Note: Volume is expressed in kernel weight.

Source: ABS 2017

Australia’s exported almonds are subject to relatively low tariffs in its four major export markets (Table 1). The European Union applies its most-favoured nation (MFN) tariff to imported Australian almonds. For almonds in shells the tariff is 5.6 per cent and for shelled almonds (kernels) it is 3.5 per cent. India applies fixed tariffs of US\$0.55 a kilogram to almonds in shells and US\$1.01 a kilogram to shelled almonds. For 2015–16 this is estimated to have been equivalent to about a 10 per cent tariff on almonds in shells (which accounts for 95 per cent of Australia’s total almond exports to India) and a 16 per cent tariff on shelled almonds (ABARES estimate). The United Arab Emirates applies a 5 per cent tariff to both types of

almonds. Under the Australia–United States FTA, Australian shelled almonds entering the US market have been tariff-free since January 2005 and almonds in shells have been tariff-free since January 2008.

Table 1 Applied tariffs on Australian almond exports by destination

Importing country	Unit	Almonds in shells	Almonds shelled
European Union	%	5.6	3.5
India	US\$/kg	0.55	1.01
United Arab Emirates	%	5	5
United States	–	None	None

Note: The Harmonized System code for almonds in shells is 0802110000 and for shelled almonds 0802120000.

Source: WTO 2017

The EU almond industry

The European Union is the world's second-largest almond producer. Most of this production is in Spain.

Germany, Spain, France and Italy are the largest almond-consuming countries in the European Union. Together these four countries account for over half of total EU almond consumption (International Nut and Dried Fruit Council 2015). Total annual consumption of almonds in the European Union is significantly higher than domestic production. As a result, three-quarters of annual EU consumption is imported (USDA–FAS 2017). The EU Common Agricultural Policy (CAP) and trade policies govern the production and trade of almonds in the European Union.

Common Agricultural Policy

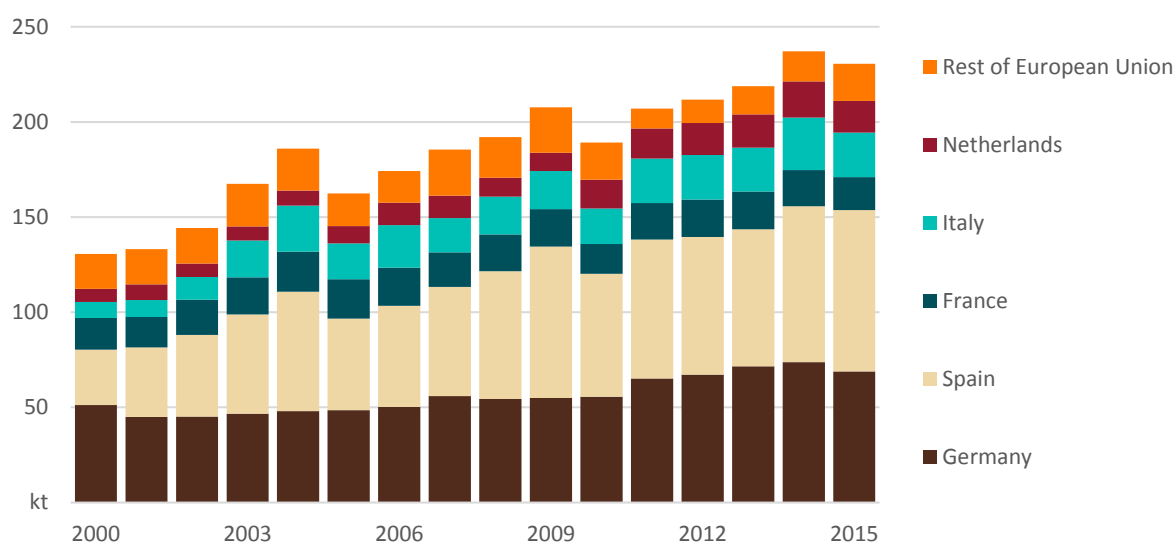
The CAP was established in 1962 to support the agricultural sector of the European Union. Between 1962 and 2003, several CAP reforms changed the way agricultural producers received support. Support to nut producers remained relatively unchanged until the reforms of 2003.

In 2003 price support for nut producers under the CAP was replaced with an annual single farm payment of up to €120.75 for each nut-producing hectare, provided tree density and plot size requirements are met. In Spain, the maximum payment is estimated to have covered one-third of variable production costs between 2003 and 2005 (European Commission 2007). However, since the single farm payment for nut producers has remained unchanged since its introduction, the share of production costs it now covers will have decreased. The total EU nut-producing area eligible for the single farm payment is 829,000 hectares, with each member state allocated a maximum eligible area by the European Commission. The member states are also entitled to independently supplement the single farm payment with an additional payment of up to €120.75 a hectare (European Commission 2003). Spain has made supplementary payments to its producers since the 2003 reforms, but the value of these payments has been declining since 2012 (USDA–FAS 2014).

Trade and trade policy

The European Union is a net importer of almonds, mostly almond kernels (99 per cent in 2015). Between 2000 and 2015, almond imports increased by 76 per cent to 230,000 tonnes (UN Statistics Division 2017). In 2015 the largest importing EU countries by volume were Spain (37 per cent of total EU imports), Germany (30 per cent) and Italy (10 per cent) (Figure 6).

Figure 6 EU almond imports by member country, 2000 to 2015



Note: Excludes intra-EU trade. Volume is expressed in kernel weight.

Source: UN Statistics Division 2017

Most EU almond imports, including those from the United States and Australia, are subject to EU MFN tariffs. Almonds are tariff-free for countries that have negotiated agreements with the European Union, including Morocco, Chile, Tunisia and Turkey. However, these countries together accounted for only 1 per cent of total EU almond imports in 2015.

Between 2000 and 2015, the United States supplied an average of 94 per cent of EU almond imports. Australia's share of EU imports grew over the period but remained relatively small, from less than 1 per cent in 2000 to 10 per cent in 2015 (UN Statistics Division 2017). Drought in the almond-producing regions of California caused EU imports of US almonds to fall by 14 per cent between 2013 and 2015 (US Census Bureau 2017), which benefited Australian exporters.

The European Union also imposes several non-tariff measures. These include meeting:

- tolerance limits of contamination by certain substances, including aflatoxins, salmonella, pests, soil, weed seeds and extraneous material
- tolerance limits for pesticide residues
- labelling and packaging requirements
- hygiene requirements during production and processing
- inspection requirements
- traceability requirements, including origin of materials and processing history (Department of Agriculture and Water Resources 2016; World Bank 2016).

The EU non-tariff measures are similar to those of Australia's other major export markets and comply with the general standards of Codex Alimentarius (the UN international food standards body). For example, all almond-importing countries, including Australia, impose tolerance limits on aflatoxins—a toxic fungus that can infect almonds in the orchard, in stockpiles or in storage. Before 2010 the EU tolerance for aflatoxins in almonds was four parts per billion for ready-to-eat almonds and 10 parts per billion for almonds for further processing. In March 2010 the European Union raised the aflatoxin limit in line with the Codex general standard of 10 parts per

billion for ready-to-eat almonds and 15 parts per billion for almonds for further processing (European Commission 2010). Nevertheless, these limits are lower than for Australia's other major almond export markets, including the United States (20 parts per billion), the United Arab Emirates (20 parts per billion) and India (30 parts per billion) (Almond Board of California 2012).

Box 1 UK almond trade and consumption

The United Kingdom does not produce almonds. Almond consumption in 2015 was estimated at 18,761 tonnes, about 6 per cent of EU consumption (European Commission 2017b; UN Statistics Division 2017; USDA–FAS 2017).

In 2016 the United Kingdom was the sixth-largest importer of almonds in the European Union (accounting for 5.6 per cent of total EU imports, including extra-EU trade and intra-EU trade). Around 60 per cent of UK imports were sourced from the United States and more than a third came from other EU countries—including Spain, the Netherlands and Germany. The remainder was imported from Australia (3 per cent) (European Commission 2017a; UN Statistics Division 2017).

Conclusion

Growth in Australian almond exports to the European Union has been driven mainly by expanding EU import demand, but the recent reduction in US production has also contributed. Australia's access to the EU market is broadly similar to that of other almond-exporting countries, including the United States (its main competitor). A decrease in the EU-applied tariffs that may be derived through an FTA would improve the competitiveness of Australian almonds relative to those of other almond-exporting countries. However, any export gains from such a policy change would be modest over the longer term. This is because EU import tariffs on Australian almonds are already relatively low and equal to those applied to US almonds. Any rise in Australian exports stemming from a tariff decrease would likely be at least partially offset by the expected recovery of the US almond industry and its subsequent capacity to regain the EU market ceded during drought years.

References

- ABS 2017, International trade, Australia: February 2017 [unpublished data], cat. no. 5465.0, Australian Bureau of Statistics, Canberra, accessed 10 March 2017.
- Almond Board of California 2012, [International aflatoxin tolerances \(pdf 268kb\)](#), *Industry Backgrounder*, March.
- Almond Board of Australia 2016, [Almond Insights 2015–16](#), April, Loxton, South Australia.
- Department of Agriculture and Water Resources 2016, [Manual of Importing Country Requirements](#), Canberra.
- European Commission 2003, [Council regulation \(EC\) no. 1782/2003](#), *Official Journal of the European Union*, 29 September, Brussels.
- 2007, [Nut sector—impact of the coupled payment suppression on nuts margins](#), Directorate-General for Agriculture and Rural Development, December, Brussels.
- 2010, [Commission regulation \(EU\) no. 165/2010](#), *Official Journal of the European Union*, 26 February, Brussels.
- International Nut and Dried Fruit Council 2015, [Global Statistical Review 2014–15](#), May 26, Spain.
- Smith, S & Cameron, A 2017, 'Horticulture: outlook to 2021–22', in [Agricultural commodities: March quarter 2017](#), *Australian Bureau of Agricultural and Resource Economics and Sciences*, Canberra.
- UN Statistics Division 2017, [UN Comtrade Database](#), United Nations, New York, accessed 10 March 2017.
- US Census Bureau 2017, [USA Trade Online](#), Washington DC, accessed 10 March 2017.
- USDA–FAS 2014, [EU-28 Tree nuts annual 2014 \(pdf 269kb\)](#), *GAIN Report*, no. SP1422, 15 September, Foreign Agricultural Service, US Department of Agriculture, Washington, DC.
- 2017, [Production, Supply and Distribution Online](#), Foreign Agricultural Service, US Department of Agriculture, Washington DC, accessed 10 March 2017.
- World Bank 2016, [World Integrated Trade Solution](#), Washington, DC, accessed 6 July 2016.
- WTO 2017, [Tariff Download Facility](#), World Trade Organization, Geneva, accessed 10 March 2017.

2 The EU beef industry

Jack Mullumby and Matthew Howden

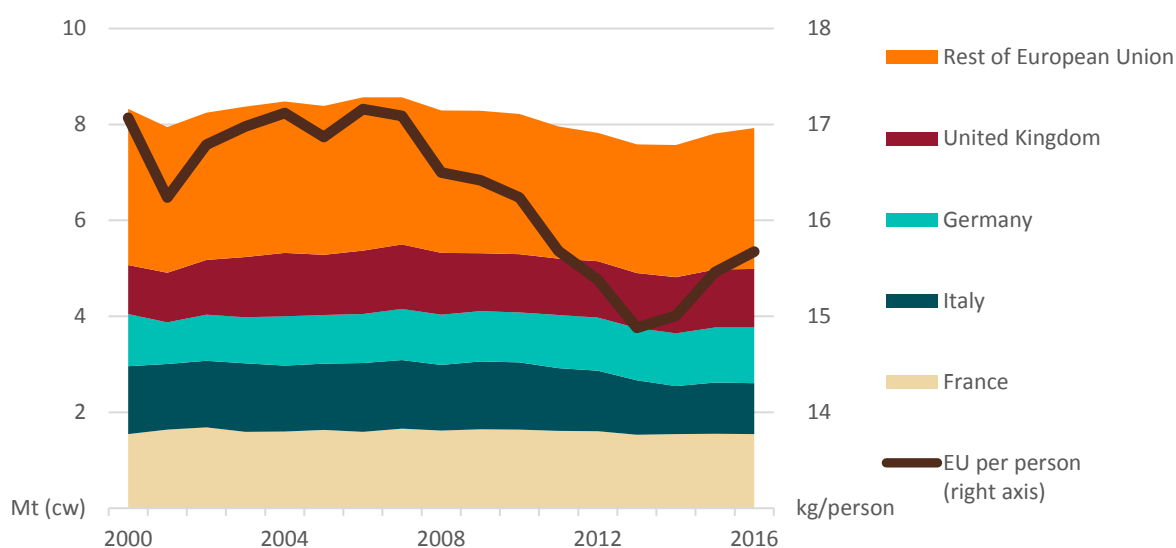
The Australian Government is working towards commencing negotiations on an FTA with the European Union, one of the largest consumers of beef in the world. Access to the EU beef market is controlled by tariff-rate quotas (TRQs), relatively high out-of-quota tariffs and strict sanitary requirements. As a result, imported beef comprises only a small proportion of total EU beef consumption.

The EU beef market is a high-value market that is attractive to beef-exporting countries like Australia. In the past, partner nations have benefited from preferential access to the EU beef market, which has led to tangible growth in their beef exports. Improved market access for Australia would provide real benefits for Australian beef exporters. This chapter examines the EU beef market and the policies that support it to better understand how Australian exporters could gain from such opportunities.

EU beef consumption

Between 2000 and 2016 the European Union accounted for 13 per cent of world beef consumption annually (USDA–FAS 2017). It was the second-largest consumer of beef in the world behind the United States. In the 16 years to 2016, EU consumption of beef remained relatively steady at around 8.1 million tonnes (carcase weight) a year (Figure 7). The largest consuming member state is France, accounting for around 20 per cent of total EU consumption. Other significant consumers of beef included Italy (16 per cent), the United Kingdom (15 per cent) and Germany (13 per cent) (European Commission 2017a).

Figure 7 Total and per person beef consumption, European Union, 2000 to 2016



Sources: European Commission 2017a; FAO 2017

Per person beef consumption in the European Union varies across member states, ranging from around 30 kilograms a year in both Luxembourg and Denmark to less than 10 kilograms each in Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. For the European Union as a

whole, per person beef consumption averaged 15.7 kilograms in 2016, 8 per cent lower than in 2000.

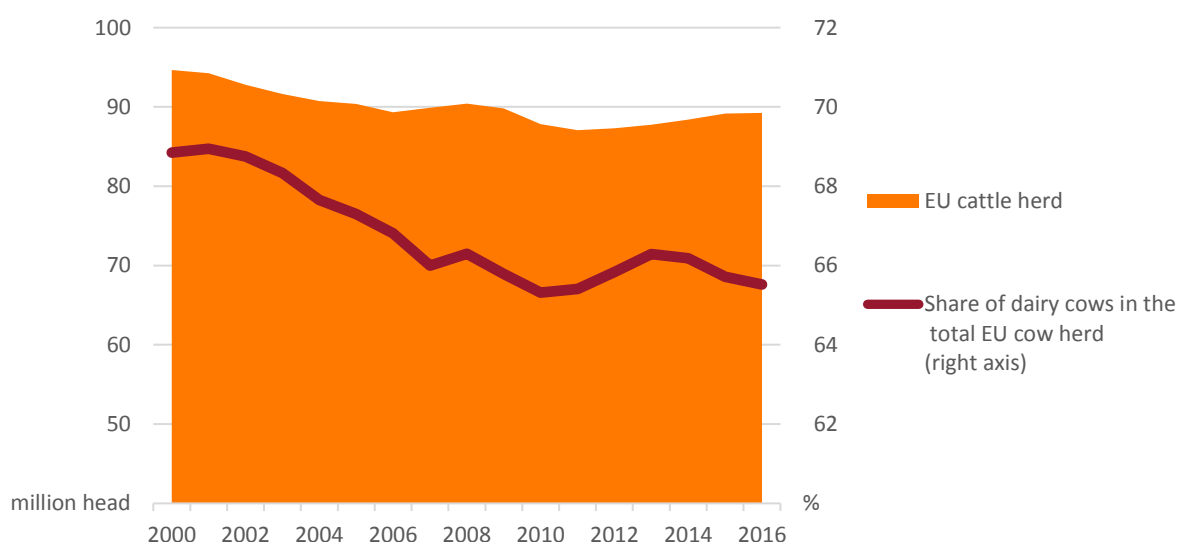
The decline in EU per person beef consumption reflects contractions in economic growth in more than half of all member states (European Commission 2017a). Following the 2008 global financial crisis, falling incomes and high beef prices contributed to a fall in per person beef consumption (Charlebois, McCormick & Juhasz 2016; European Commission 2016c). The downward trend has also been linked to human and animal health and disease concerns (Ekmekcioglu et al. 2016) and environmental and animal welfare issues (Morgan & Prakash 2006; Westhoek et al. 2014).

EU beef production and cattle herd

Almost all beef consumed in the European Union is produced domestically. The European Union was the third-largest beef producer in the world from 2000 to 2016 (USDA–FAS 2017). However, beef production is largely a by-product of milk production because two-thirds of the cows in the European Union are dairy breeds (Figure 8). Beef breeds concentrated in Western Europe make up the remainder of the EU cow herd. A third of all EU beef breed cows are in France, with Spain (16 per cent) and the United Kingdom (13 per cent) also accounting for a significant proportion of the EU beef cattle herd (European Commission 2017a).

The EU beef industry is reliant on dairy slaughter, so any changes in the EU dairy industry have implications for the EU beef industry. Over the 16 years to 2016, EU dairy cow numbers fell by 3.6 million head or 13 per cent. This resulted in the total number of cattle in the European Union contracting by around 6 per cent to 89.3 million head. However, EU beef production remained around 7.8 million tonnes (European Commission 2017a).

Figure 8 Cattle herd size and proportion of dairy cows, European Union, 2000 to 2016



Source: European Commission 2017a

EU support policies

Common Agricultural Policy

The European Union supports the beef and cattle industries through the CAP. The CAP supports all agricultural sectors in member states, but two CAP mechanisms have provided targeted and

specific support to the EU beef and cattle industries. These are the dairy milk quota system and a proportion of the direct payments budget called voluntary coupled support (VCS).

Dairy milk quota system

Between 1984 and 2015, the milk quota system supported domestic dairy prices by limiting milk production (Réquillart 2008). However, the quota markedly reduced the size of the EU cattle herd and as a result limited EU beef production. During that period, productivity improvements in the dairy sector led to increased milk yields. As a result, total cattle numbers contracted because fewer dairy cows were required to meet EU production quotas (Huettel & Jongeneel 2011). More efficient milk-producing member states, which had the greatest yield improvements, reduced their dairy herds by a larger proportion than less efficient dairy-producing states.

In France for example, milk yields rose by 49 per cent between 1990 and 2016, with dairy cow numbers contracting by 31 per cent or 1.6 million head (European Commission 2017a). The shrinking EU dairy cattle herd reduced the supply of cattle available for slaughter over this period and limited total beef production. Cattle slaughter in France fell from 6.7 million head in 1990 to around 4.7 million head in 2016. Beef production contracted by 16 per cent or 288,000 tonnes.

On 1 April 2015 the European Union abolished the milk quota production scheme. Since then, milk production has increased in some EU member states (see ‘The EU dairy industry’ and Howden, McCarthy & Hyde 2016). However, global demand for dairy has been relatively weak since 2014. As a result, the European Union has modified several policies that support its domestic dairy industry—including an increase in targeted financial aid, the extension of storage support and a voluntary milk reduction scheme (Whitnall 2017).

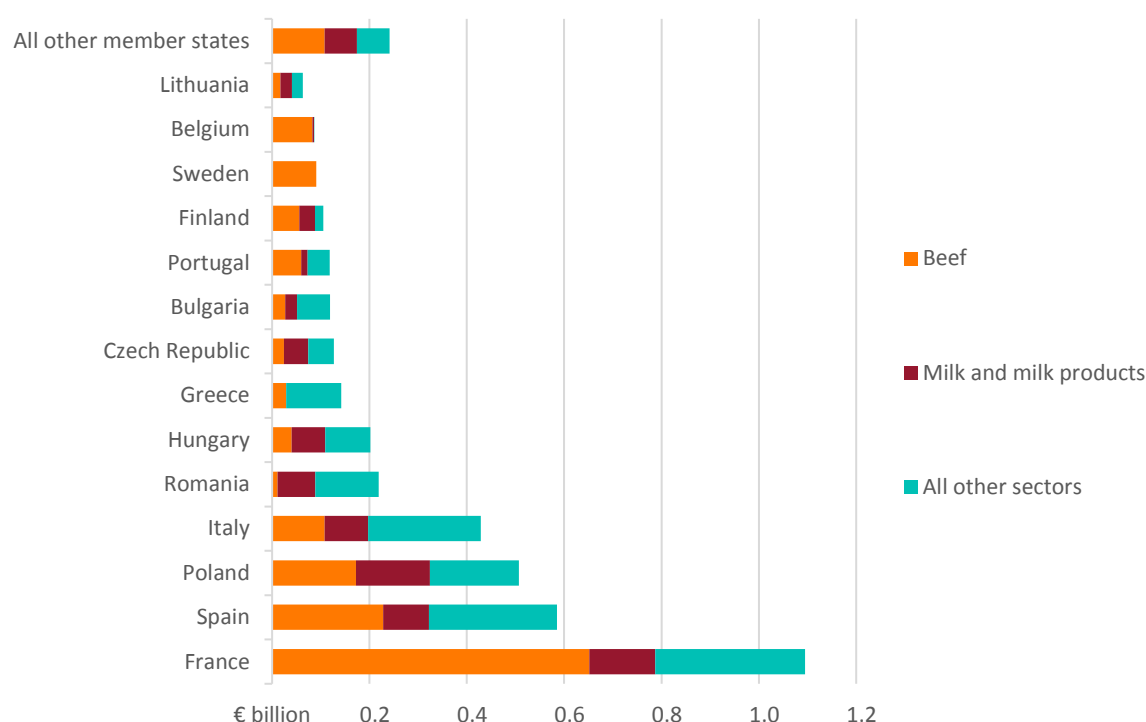
Voluntary coupled support

The VCS payment scheme provides financial assistance to producers of specific agricultural commodities (European Commission 2013c). In the case of livestock production, payments are linked to animal numbers. For EU beef farms, payments are based on the number of calves born. For EU dairy farms, payments are based on the number of milking cows (Menadue & Hart 2014).

The annual VCS budget for the CAP period 2015 to 2020 is €4.2 billion (Figure 9), 10 per cent of the direct payments budget (European Commission 2013c). Together, EU beef farms account for the largest share of the annual VCS budget at 41 per cent or €1.71 billion a year. Farms that produce milk and milk products are the second-largest recipient, at 20 per cent or €0.83 billion a year.

The amount of support available to EU farmers varies between member states and agricultural sectors (Menadue & Hart 2014). For example, the annual VCS budget allocated to France is €1.1 billion, around 60 per cent of which is for beef farms and 12 per cent for dairy farms. In contrast, only 5 per cent of Romania’s €0.2 billion budget is allocated to beef farms and 35 per cent to dairy farms.

Figure 9 Annual voluntary coupled support, by member state and sector, European Union, 2015 to 2020



Sources: European Commission 2015b, 2016b

Box 2 UK beef industry

The United Kingdom is the fourth-largest beef producer in the European Union. In the 15 years to 2015, it accounted for about 10 per cent of total annual EU beef production (0.8 million tonnes) and 15 per cent of annual EU consumption (1.2 million tonnes). Per person beef consumption averaged 18.8 kilograms a year, making consumption in the United Kingdom the ninth-highest in the European Union over this period (European Commission 2017b; FAO 2017).

The United Kingdom is a net importer of beef. UK beef imports in the five years to 2015 averaged around 248,000 tonnes a year. Of this total, around 91 per cent was sourced from other EU member states. Ireland accounted for around 70 per cent of all UK beef imports during this period. Australia was the largest non-EU supplier of beef to the United Kingdom, averaging 7,000 tonnes a year or 3 per cent of annual UK beef imports. Over the same period, South American suppliers together accounted for 4 per cent of UK beef imports, averaging 10,200 tonnes a year (European Commission 2017b; UN Statistics Division 2017).

In the five years to 2015, annual UK beef exports averaged around 116,700 tonnes (shipped weight). Of this total, 95 per cent was shipped to other EU member states. Hong Kong was the largest export market outside the European Union, averaging just 2,000 tonnes a year between 2011 and 2015. This was equivalent to about 2 per cent of annual UK beef exports (UN Statistics Division 2017).

EU beef exports and trade policies

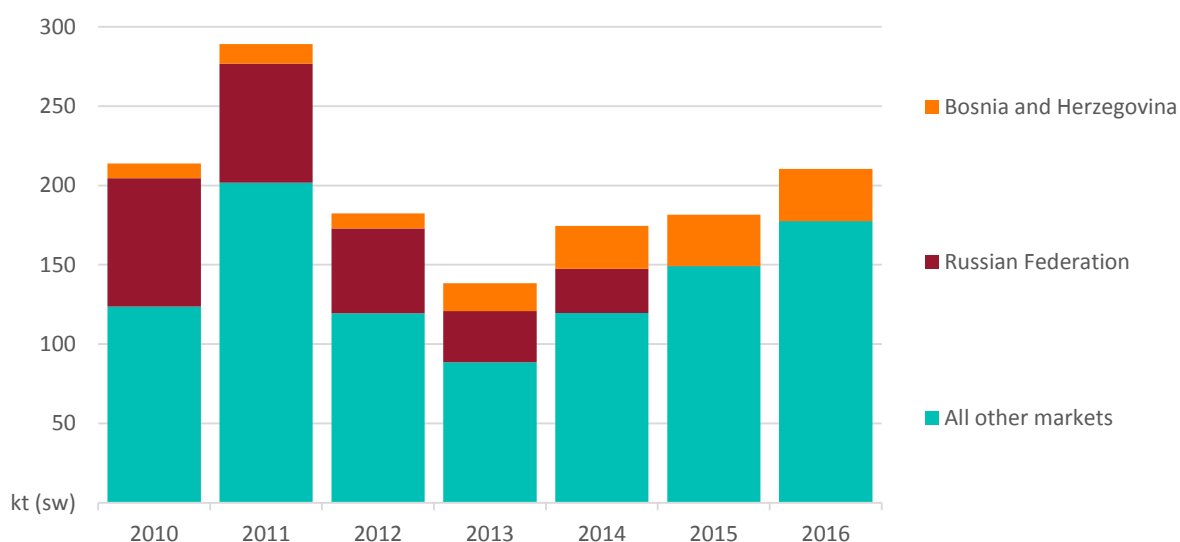
Beef exports from the European Union comprise only a small share of the EU beef market. In the five years to 2016, EU beef exports accounted for less than 3 per cent of total beef production. Despite the small share, the large size of the beef market supports the European Union's ranking as the eighth-largest beef exporter in the world (USDA-FAS 2017).

Between 2000 and 2016, the European Union accounted for around 4 per cent of world beef exports (USDA-FAS 2017). EU beef exports averaged around 198,700 tonnes (shipped weight)

in the seven years to 2016 (Figure 10). The Russian Federation was its largest market, accounting for around 20 per cent total EU beef exports. However, export volumes to the Russian Federation declined sharply during this period, with only 20 tonnes shipped in 2016 (European Commission 2017a).

The decline was partly the result of the August 2014 Russian ban on EU agricultural products, including beef (European Commission 2015a). Weak economic conditions in the Russian Federation and devaluation of the rouble during this period also strongly reduced Russian demand for imported beef (USDA-FAS 2014).

Figure 10 Beef exports, European Union, 2010 to 2016



Source: European Commission 2017a

Weaker import demand from the Russian Federation has largely been offset by increased volumes of EU beef shipped to other markets. The largest increase between 2010 and 2016 was to Bosnia and Herzegovina (by 20,600 tonnes), followed by Hong Kong (13,600 tonnes), Norway (11,200 tonnes) and the Philippines (9,700 tonnes) (European Commission 2017a).

The number of EU beef export markets also increased from an average of 101 markets in the decade to 2010 to 150 markets in 2016. The largest new markets are in Asia, Eastern Europe and Africa, but the volumes shipped to these destinations have been relatively small (European Commission 2017a).

The increase in export markets reflects improved market access for EU beef. This follows the lifting of animal health restrictions imposed between 1990 and 2010 after outbreaks of bovine spongiform encephalopathy (multiple cases between the mid 1980s and 2000s) and foot-and-mouth disease (2001 and 2007). Countries that have recently removed trade restrictions on EU beef include Japan (February 2016), Ukraine (January 2016), Saudi Arabia (October 2015), the United States (December 2014) and Canada (September 2014).

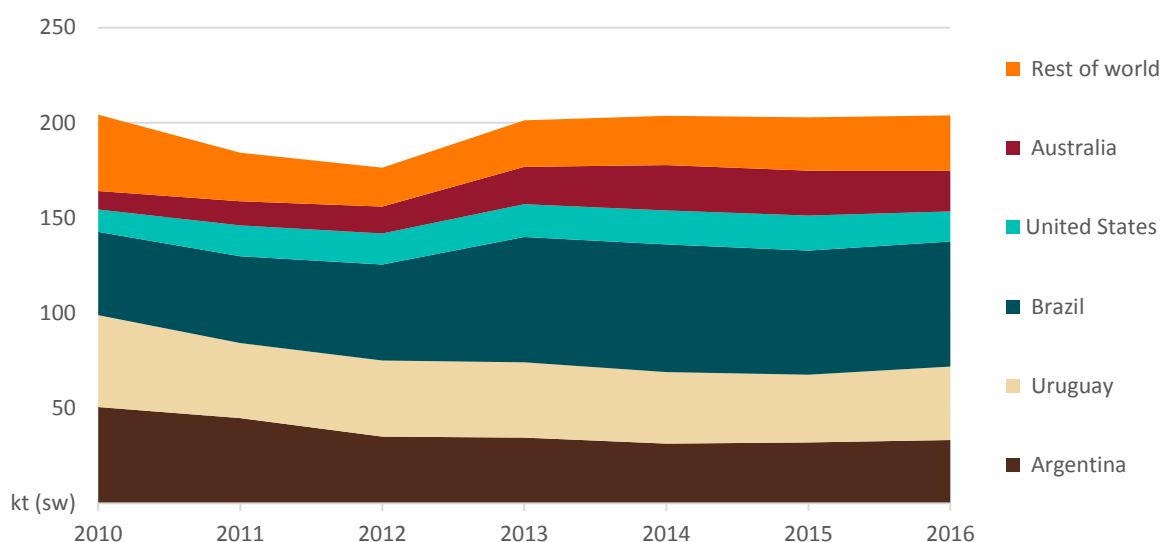
EU beef imports

Beef imports comprised less than 3 per cent of EU beef consumption in the seven years to 2016. However, given the large size of its market, the European Union accounted for around 5 per cent

of world beef imports over this period, making it the fifth-largest beef importer in the world (USDA–FAS 2017).

In the seven years to 2016, EU beef imports averaged just under 200,000 tonnes a year (shipped weight) (Figure 11). The Mercosur region (Argentina, Brazil, Paraguay and Uruguay; Venezuela was suspended on 1 December 2016) supplied more than two-thirds of all EU beef imports during this period. Australia accounted for 9 per cent of imports and the United States 8 per cent (European Commission 2017a).

Figure 11 Beef imports by source, European Union, 2010 to 2016



Source: European Commission 2017a

Thirteen countries are currently eligible to export red meat (including beef) to the European Union (European Commission 1996, 2002, 2008, 2010). These countries are required to satisfy three criteria:

- 1) The animal health status of the country must meet EU requirements.
- 2) An EU-approved residue plan must be in place.
- 3) Meat-processing plants must be EU listed.

Beef imported into the European Union from eligible countries can only be sourced from cattle that have lifetime traceability and have not been treated with hormonal growth promotants (HGP). Non-HGP cattle must also be separated from HGP cattle throughout the supply chain (including on-farm and at feedlots, saleyards and abattoirs).

Apart from the eligibility requirements for imported beef, the European Union also regulates the volume of imports through a system of TRQs. Almost half of all beef imported into the European Union enters under one of two TRQs for high-quality beef—the Hilton or the grain-fed quotas. Most of the remaining imported beef enters under one of three TRQs for frozen beef.

The European Union imports a relatively large volume of beef outside of the high-quality beef TRQs. Most of this beef is from Brazil and incurs the MFN tariff rate of 12.8 per cent plus a specific tariff that ranges between €1,414 a tonne and €3,034 a tonne depending on the cut. Frozen beef imports that exceed the frozen quotas attract tariffs of 12.8 per cent plus a specific tariff that ranges from €1,414 a tonne to €3,041 a tonne (WTO 2016).

EU tariff-rate quotas for beef

Hilton quota

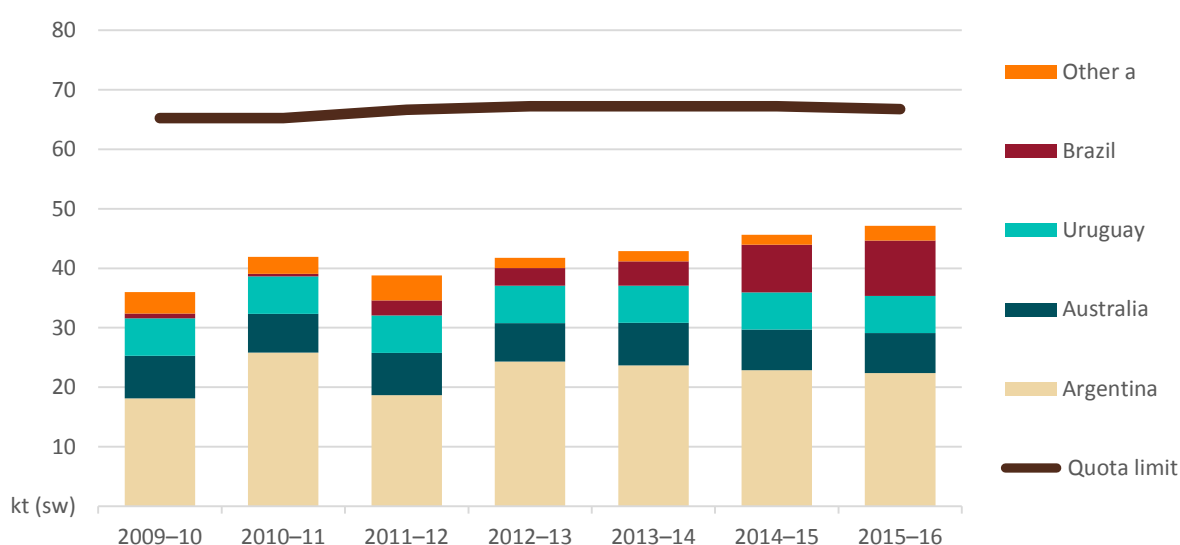
The Hilton TRQ allows high-quality beef to be imported into the European Union, subject to a 20 per cent import tariff (European Commission 2013a). The quota operates annually from July to June and quota allocations are administered by exporting country regulators. The Hilton beef quota was established during the 1979 Tokyo round of multilateral trade negotiations and has increased over time, totalling 66,750 tonnes (shipped weight) in 2015–16.

Canada and the United States were the first countries to gain access to the Hilton quota and now share an allocation of 11,500 tonnes. Since 1979 an additional seven countries have received allocations. South American nations have the largest allocation at around 70 per cent of the total. Argentina has access to the largest share of all nations at 29,500 tonnes or 44 per cent, compared with Australia at 7,150 tonnes (European Commission 1997, 2013a).

Country-specific regulations govern the type of beef that can be imported under the Hilton quota (European Commission 2013a). These regulations specify whether the product from each eligible country can be bone-in or boneless, grain fed or grass fed, and whether it can be fresh, chilled or frozen. For example, beef imported from Australia under the Hilton quota can be grain- or grass-fed beef cuts and fresh, chilled or frozen, but it cannot consist of carcasses, livers or tongues. In contrast, imports from Argentina can only be grass-fed, boneless product and must be fresh or chilled (European Commission 2013a).

Between 2009–10 and 2015–16, EU beef imports under the Hilton quota steadily increased from 36,000 tonnes to 47,200 tonnes (Figure 12). The increased use of the quota mainly reflects larger import volumes from Brazil. Imports rose from 800 tonnes to 9,300 tonnes over the same period. Despite the increase, utilisation of the quota remains low, with an average fill rate of about 65 per cent (Table 2). For example, between 2011–12 and 2015–16 the United States and Canada together used an average of only 7 per cent of their Hilton quota allocation. Instead they used the tariff-free grain-fed quota.

Figure 12 Imports under the Hilton quota, by source and quota limit, European Union, 2009–10 to 2015–16



a Canada, New Zealand, Paraguay and the United States.

Source: European Commission 2016e

Table 2 Hilton quota allocations and utilisation, 2009–10 to 2015–16

Country	Quota	Unit	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Argentina a	Quota allocation	'000 tonnes (sw)	28.0	28.0	29.4	30.0	30.0	30.0	29.5
	Volume shipped	'000 tonnes (sw)	18.1	25.8	18.7	24.3	23.7	22.9	22.4
	Utilisation	%	64.8	92.3	63.6	81.1	78.9	76.2	75.8
Australia b	Quota allocation	'000 tonnes (sw)	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	Volume shipped	'000 tonnes (sw)	7.2	6.5	7.1	6.4	7.1	6.8	6.8
	Utilisation	%	100.0	91.0	98.9	90.1	99.8	95.3	94.4
Uruguay	Quota allocation	'000 tonnes (sw)	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	Volume shipped	'000 tonnes (sw)	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	Utilisation	%	63.0	62.9	63.0	62.9	62.8	62.8	62.5
Brazil	Quota allocation	'000 tonnes (sw)	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	Volume shipped	'000 tonnes (sw)	0.8	0.5	2.6	3.0	4.1	8.0	9.3
	Utilisation	%	12.6	7.2	40.7	47.3	64.7	126.8	147.5
New Zealand	Quota allocation	'000 tonnes (sw)	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	Volume shipped	'000 tonnes (sw)	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	Utilisation	%	100.0	100.0	100.0	98.6	100.0	100.0	100.0
Canada/ United States	Quota allocation	'000 tonnes (sw)	11.5	11.5	11.5	11.5	11.5	11.5	11.5
	Volume shipped	'000 tonnes (sw)	1.3	0.5	2.5	0.4	0.4	0.4	0.3
	Utilisation	%	11.6	4.5	21.8	3.8	3.8	3.1	2.5
Paraguay	Quota allocation	'000 tonnes (sw)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Volume shipped	'000 tonnes (sw)	1.0	1.0	0.4	0.0	0.0	0.0	0.9
	Utilisation	%	98.6	100.0	36.9	0.0	0.0	1.2	91.6
TOTAL	Quota allocation	'000 tonnes (sw)	65.3	65.3	66.6	67.3	67.3	67.3	66.8
	Volume shipped	'000 tonnes (sw)	36.0	41.9	38.8	41.8	42.9	45.6	47.2
	Utilisation	%	55.2	64.2	58.2	62.1	63.8	67.8	70.6

a Argentina also has access to a quota of 200 tonnes for 'boneless buffalo meat, fresh, chilled or frozen'. **b** Australia also has access to a quota of 2,250 tonnes for frozen boneless buffalo meat.

Note: Totals may not sum to 100 due to rounding.

Source: European Commission 2016e

Grain-fed quota

The grain-fed TRQ allows 48,200 tonnes of grain-fed beef to enter the European Union tariff-free. The TRQ operates annually from July to June on a first-come, first-served basis, with allocations distributed by the European Union to EU importers.

The grain-fed quota is available to Argentina, Australia, Canada, New Zealand, the United States and Uruguay. Beef imported from these countries under the quota must meet these age, dietary and quality requirements (European Commission 2012):

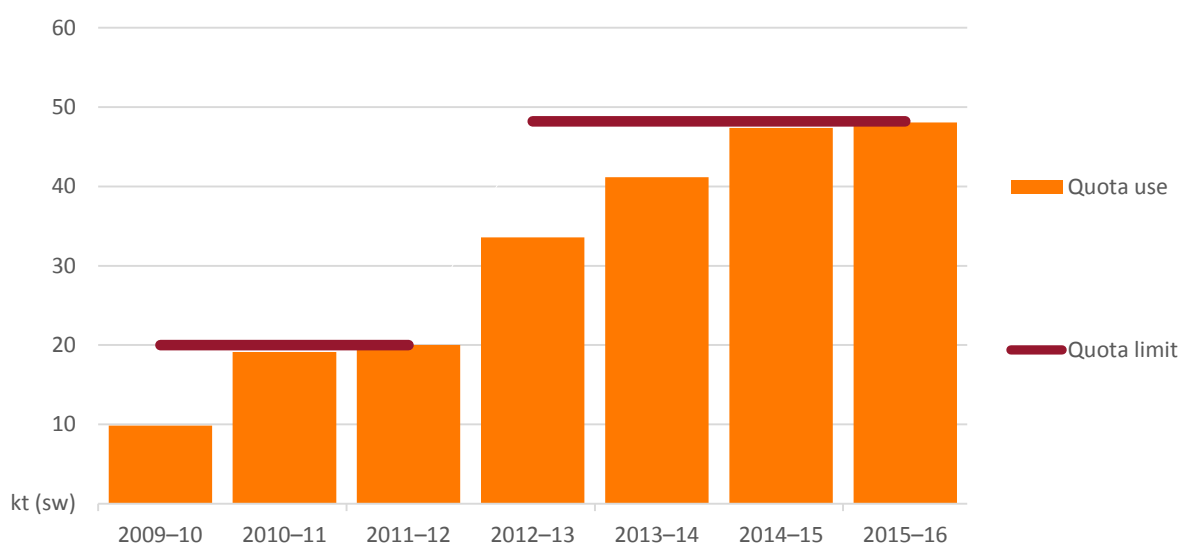
- Beef must be obtained from a steer or maiden heifer under 30 months of age at slaughter.
- Cattle must be grain fed for at least 100 days prior to slaughter.
- Feed rations must, on a dry-matter basis, contain at least 62 per cent of concentrates or grain and have a minimum energy content of 12.26 megajoules a kilogram.
- Feed rations must be consumed at an average daily rate of at least 1.4 per cent of live body weight.
- Beef imports must meet specifications for fat, colour, depth and marbling.

The grain-fed quota resulted from a 2009 memorandum of understanding (MOU) between the European Union and the United States, following an extended WTO dispute over the use of hormones for treating cattle (European Commission 2013b; Johnson 2015). Under Phase 1 of the MOU (August 2009 to August 2012), the European Union opened a 20,000-tonne tariff quota for all eligible countries. In return, the United States reduced the level of sanctions applied to a range of EU products (European Commission 2013b).

Under Phase 2 (August 2012 to August 2013), the European Union increased the size of the quota to 48,200 tonnes. In response, the United States suspended the EU trade sanctions it had imposed during the hormones dispute (European Commission 2013b). In October 2013 Phase 2 was extended by two years, with a new expiry date of August 2015. This kept the grain-fed quota open to all eligible exporters in exchange for continued suspension of US import duties on EU products.

The MOU parties have not yet agreed on Phase 3. The United States has raised concerns over the current operation of the MOU and is exploring options to improve its share of the quota.

Use of the grain-fed quota averaged around 85 per cent between 2009–10 and 2015–16 (Figure 13). However, import volumes have increased significantly since the expansion of the total quota allocation in August 2012. Utilisation of the grain-fed quota was lowest in 2012–13 and 2013–14 because supply chain issues in exporting countries restricted their capacity to meet the larger quota allocation. The quota fill rate in 2014–15 and 2015–16 was around 99 per cent, with around 48,000 tonnes shipped in both years.

Figure 13 Imports under the grain-fed tariff-rate quota and total quota limit, European Union, 2009–10 to 2015–16

Sources: European Commission 2016e; USDA–FAS 2014

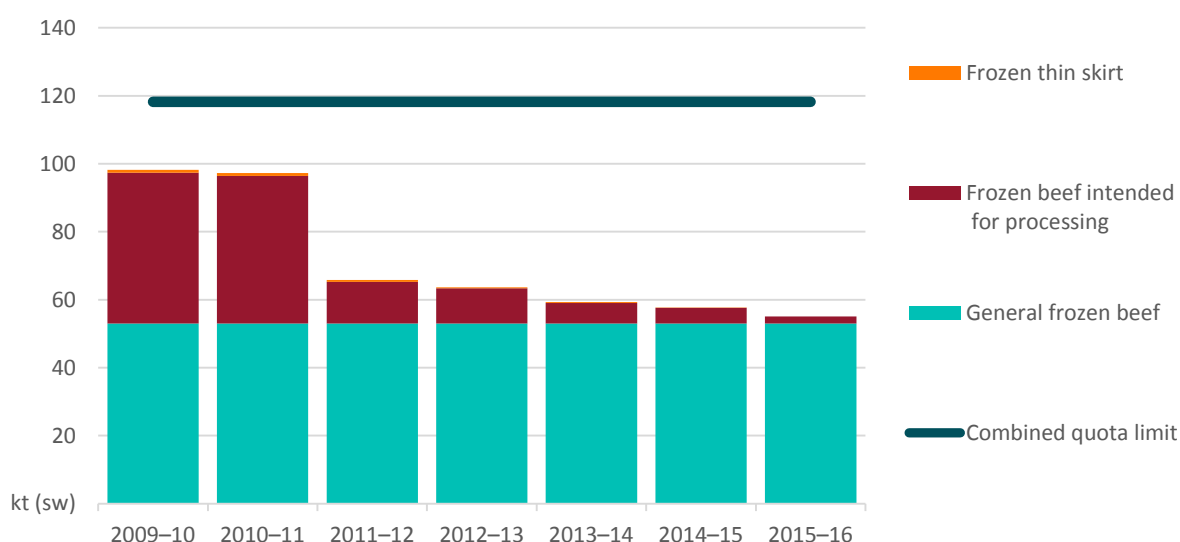
Frozen beef tariff-rate quotas

The European Union operates three TRQs for frozen beef. The two largest are a processing beef quota of 63,703 tonnes quota and a general frozen beef quota of 53,000 tonnes. The other TRQ is a 1,500 tonne quota for thin-skirt beef cuts, of which 700 tonnes is allocated exclusively to Argentina.

The three frozen beef import quotas are open to all eligible exporting countries and are allocated on a first-come, first-served basis to EU importers. The in-quota tariffs for the three quotas range from 4 per cent to 20 per cent depending on the product (European Commission 2014).

Of the three frozen beef TRQs, only the 53,000-tonne general frozen beef quota has been regularly filled since 2009–10 (Figure 14). Imports under the TRQ for frozen beef intended for processing fell from around 85 per cent of quota utilisation in 2009–10 to less than 5 per cent in 2015–16. The frozen thin-skirt quota was not used to import beef into the European Union in 2015–16. Utilisation of this quota has been falling steadily since 2009–10, when it was about 50 per cent (800 tonnes).

Figure 14 Imports under the frozen beef tariff-rate quota and combined quota limit, European Union, 2009–10 to 2015–16



Source: European Commission 2016e

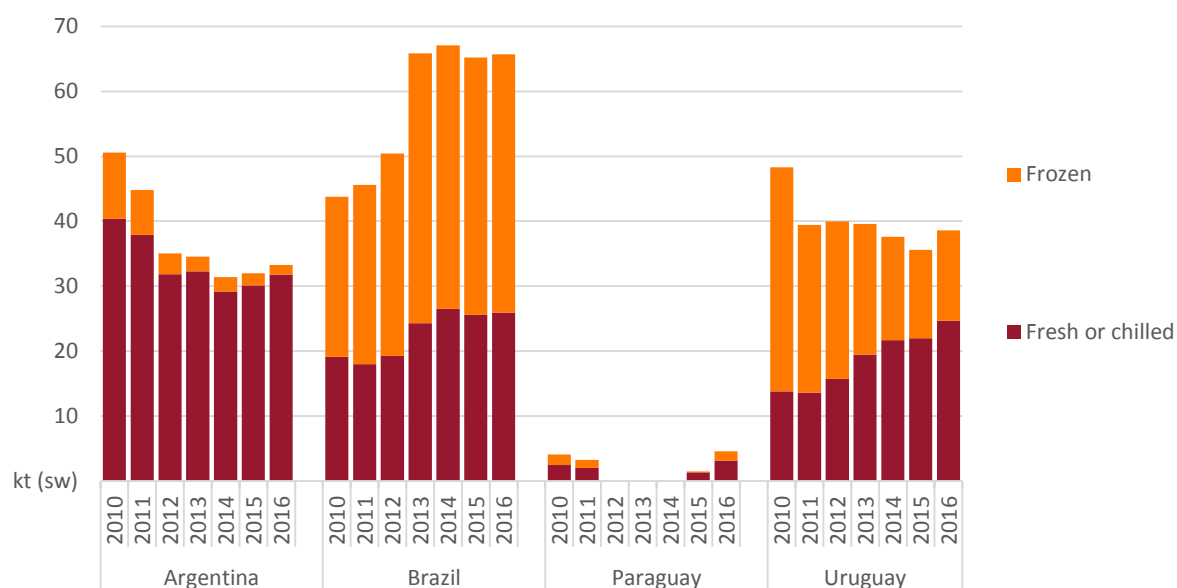
Mercosur countries

The Mercosur countries together are the largest supplier of EU beef imports, accounting for more than two-thirds of the total between 2010 and 2016. Over this period, EU beef imports from these countries averaged around 137,000 tonnes a year. Most EU beef imports from Mercosur countries were supplied to the Netherlands, Italy and Germany (European Commission 2017a).

Between 2010 and 2016 EU beef imports from Uruguay were relatively stable at around 40,000 tonnes, although the share of chilled beef rose during this period (Figure 15). This reflects Uruguay's increased use of the grain-fed quota. During the same period, Uruguay's utilisation of the Hilton quota averaged around 100 per cent (European Commission 2016e).

EU beef imports from Argentina declined by around a third between 2010 and 2016 (Figure 15), as a result of a contraction in Argentine beef production. Both chilled and frozen beef exports fell over this period. This was despite Argentina successfully negotiating an increase in its Hilton quota allocation of 500 tonnes in 2010 and gaining access to the grain-fed quota in 2014.

EU beef imports from Brazil rose by around 50 per cent between 2010 and 2016 as a result of increased accreditation of Brazilian suppliers to EU standards. Brazil does not have access to the grain-fed quota despite exporting around 26,000 tonnes of chilled beef to the European Union in 2016. Brazil's allocation under the Hilton quota is only 10,000 tonnes, so most of the chilled beef shipped to the European Union landed outside the TRQ system and therefore incurred the MFN tariff rate.

Figure 15 Beef imports from major Mercosur exporters, European Union, 2010 to 2016

Source: European Commission 2017a

EU–Mercosur free trade agreement

The European Union is negotiating a trade agreement with the Mercosur region. Negotiations were officially relaunched at the EU–Mercosur summit in Madrid in May 2010 and are ongoing. The most recent negotiations took place in March 2017 (European Commission 2017b). Access to agricultural markets, particularly for beef, remains a contentious issue for all parties.

United States of America

EU beef imports from the United States averaged 17,000 tonnes a year in the five years to 2016. US utilisation of the Hilton quota (shared with Canada) averaged around 7 per cent over this period, with almost all US beef entering the European Union under the grain-fed quota. This reflects US exporters' preference for the tariff-free access provided under the grain-fed quota over the 20 per cent in-quota tariff of the Hilton quota.

Transatlantic Trade and Investment Partnership

As at June 2017, 15 rounds of negotiations for the Transatlantic Trade and Investment Partnership (TTIP) had taken place between the United States and the European Union. Negotiations are currently on hold because of different policy priorities of the new US administration (European Commission 2017c). Agricultural market access is likely to remain a contentious issue, particularly with respect to beef.

Canada

Canada is the sixth-largest exporter of beef in the world and has access to the high-value EU market through the Hilton and the grain-fed TRQs (USDA–FAS 2017). However, the volume of beef shipped to the European Union is small, reflecting Canadian exporters' preference for the tariff-free access provided by the much closer US market. Between 2010 and 2016 Canadian beef exports to the European Union averaged around 500 tonnes a year, accounting for only 0.25 per cent of total Canadian beef exports (European Commission 2017a; UN Statistics Division 2017). Similarly, Canadian beef accounted for less than 0.5 per cent of total EU beef imports (European Commission 2017a).

Comprehensive Economic Trade Agreement

Canada and the European Union signed the Comprehensive Economic Trade Agreement (CETA) on 30 October 2016. Much of the agreement (including goods market access provisions) can provisionally enter into force following consent by the European Parliament. CETA must be ratified by Canada, the European Parliament and all EU member states before it comes fully into effect beyond provisional application subject to consent.

Under CETA, Canada will be able to export beef to the European Union under two country-specific TRQs. The first TRQ under CETA provides tariff-free access for 5,140 tonnes of fresh or chilled beef and veal in the first year of the agreement. The quota will increase by 5,140 tonnes annually until it reaches 30,840 tonnes in the sixth year of the agreement. The second CETA TRQ provides tariff-free access for 2,500 tonnes of frozen beef in the first year of the agreement. This quota will increase annually by 2,500 tonnes until it reaches 15,000 tonnes in the sixth year of the agreement.

Canada will retain its access to the European Union's high-quality beef TRQs. Out-of-quota Canadian beef exports will be charged MFN tariff rates, ranging from 12.8 per cent plus €1,414 a tonne to 12.8 per cent plus €3,041 a tonne depending on the product's tariff line.

European Union sanitary regulations will remain unchanged under CETA. Canadian exporters will have to ensure their cattle are HGP free, traceable throughout the supply chain and processed at EU-accredited facilities (European Commission 2016d). The European Union and Canada are working to resolve differences in sanitary practices before ratifying CETA. These practices include Canadian treatment of carcasses with an antibacterial wash (CCA 2016; US MEF 2016).

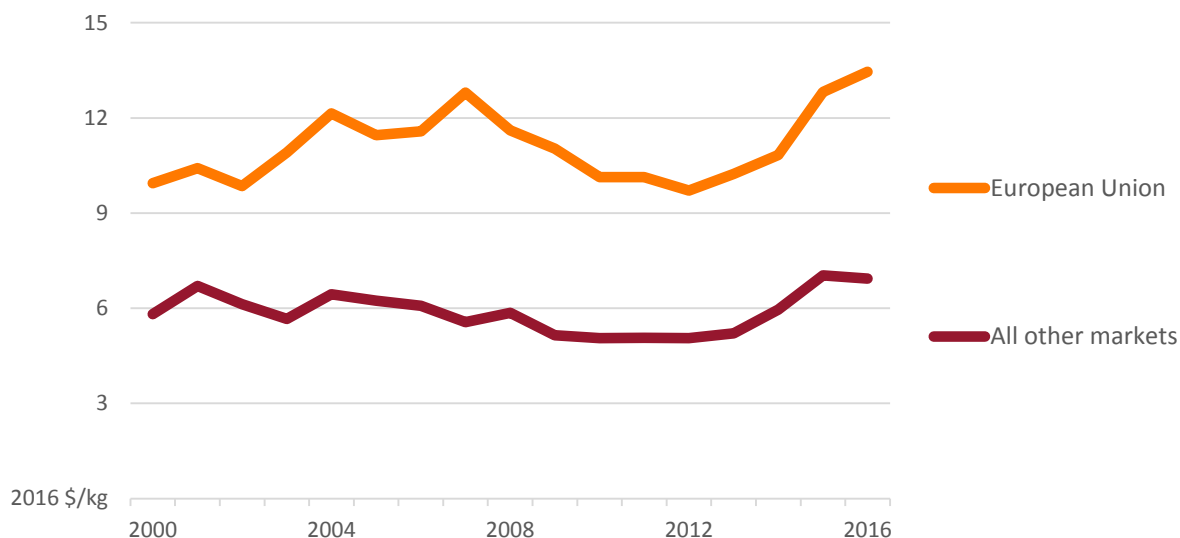
Other trading partners

The European Union has signed trade and partnership agreements with more than 50 partners, including the Southern African Development Community (SADC), and is in the process of finalising seven more (European Commission 2016a). The volume of beef imported by the European Union from countries under these concluded and prospective agreements is small. SADC member states Namibia and Botswana are the largest of these suppliers. Annual beef imports from Namibia averaged 8,000 tonnes between 2010 and 2016, equivalent to about 4 per cent of total EU beef imports. Imports from Botswana averaged 5,000 tonnes (3 per cent).

Australia–EU beef trade

In 2016 Australia exported around 20,300 tonnes of beef to the European Union, valued at \$302 million. Since 2000 around half of Australia's EU beef exports have been to the United Kingdom. Of the remainder, Italy (18 per cent) and the Netherlands (15 per cent) are the most significant destinations. Most Australian beef shipped to the United Kingdom is grass fed. The majority of beef exported to the other EU member states is grain fed (ABS 2017; Department of Agriculture and Water Resources 2016).

The EU market is a valuable export destination for Australian beef, reflected by much higher average export unit values than for other beef export markets. Between 2000 and 2016 beef export unit values to the European Union averaged \$11.12 a kilogram, 89 per cent higher than the average \$5.89 a kilogram for all other export markets (Figure 16).

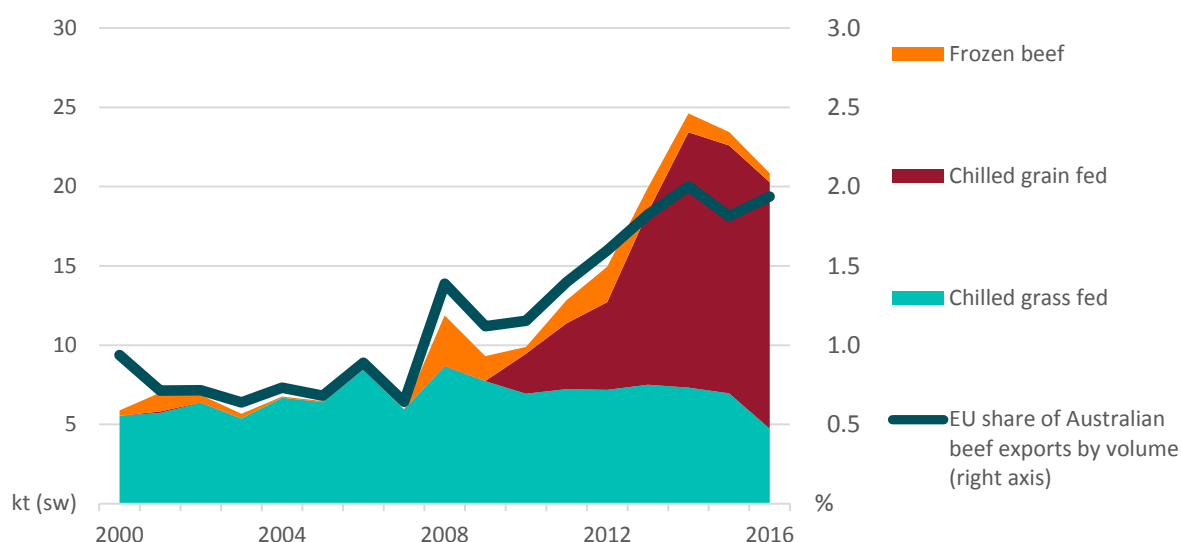
Figure 16 Real average export unit values, Australia, 2000 to 2016

Source: ABS 2017

Despite being the highest value market for Australian beef exports, the EU share of Australia's beef exports remains small. Between 2010 and 2016 the European Union accounted for just 1.7 per cent of Australia's average annual beef exports of 1.1 million tonnes (shipped weight). The out-of-quota tariff rate imposed on Australian exporters that exceed the quota makes the European Union a less attractive market than other export destinations.

Since being granted access to the grain-fed quota in 2010, Australian beef exports to the European Union have more than doubled (Figure 17). In 2016 Australia exported nearly 16,000 tonnes of chilled, grain-fed beef to the European Union, accounting for around a third of all EU imports under the grain-fed quota.

Australian exports of chilled, grass-fed beef varied little from 2000 to 2016, averaging around 7,000 tonnes a year. Most of these shipments entered the European Union under the Hilton quota, which provides Australia with an annual allocation of 7,150 tonnes. Australian utilisation of the Hilton quota has therefore been relatively high, averaging more than 90 per cent since 2000.

Figure 17 Beef exports to the European Union and EU share of beef exports, Australia, 2000 to 2016

Source: ABS 2017; Department of Agriculture and Water Resources 2016

EU accreditation within the Australian beef industry is relatively low, reflecting the small share of Australian exports destined for the European Union. In 2015 around 20 per cent of Australian abattoirs had EU accreditation. For feedlots this share falls to around 10 per cent and for beef cattle farms 5 per cent.

Conclusion

Australia's high utilisation of the Hilton quota and, since 2010, the grain-fed quota demonstrates Australian industry's responsiveness to opportunities provided by improved market access. However, the future of the grain-fed quota is uncertain. An FTA between Australia and the European Union that secures access equivalent to or better than that provided under the existing high-quality EU beef quotas would provide some certainty to the Australian industry.

Increased certainty could potentially drive stronger export growth to the EU market. However, the EU accreditation process for beef exporters is unlikely to change under an agreement with Australia. An FTA that improves access to the EU market would create an incentive for the Australian beef industry to invest in gaining accreditation to export to the European Union and take advantage of the benefits of selling in such a high-value market.

The European Union has made significant progress in liberalising trade in beef in recent years. However, imports remain a small component of total EU beef consumption. Even if Australia were to secure improved access to the EU beef market, EU demand for imported beef is expected to remain relatively weak over the medium term. This is largely because growth in EU beef consumption is expected to remain weak, limited by relatively high prices and low income growth. In addition, the end of the EU milk quota in early 2015 is expected to result in an expansion of the EU dairy herd and to increase the supply of domestically produced beef. Australian exporters will need to be competitive relative to lower-cost, beef-exporting nations to maintain their current market share in the EU market.

References

- ABS 2017, International Trade, Australia: February 2017 [unpublished data], cat. no. 5465.0, Australian Bureau of Statistics, Canberra, accessed 13 April 2017.
- CCA 2016, [CCA welcomes the signing of CETA, urges resolution of barriers to beef trade](#), *Action News*, Canadian Cattlemen's Association, vol. 16, no. 11, Calgary.
- Charlebois, S, McCormick, M & Juhasz, M 2016, [Meat consumption and higher prices](#), *British Food Journal*, vol. 118, no. 9, pp. 2251–70, doi: 10.1108/bfj-03-2016-0121.
- Department of Agriculture and Water Resources 2016, [Red meat export statistics 2016](#), Canberra.
- Ekmekcioglu, C, Wallne, P, Kundi, M, Weisz, U, Haas, W, & Hutter, H 2016, [Red meat, diseases and healthy alternatives: a critical review](#), *Critical Reviews in Food Science and Nutrition*, doi: 10.1080/10408398.2016.1158148.
- European Commission 1996, [Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC](#), *Official Journal of the European Union*, Brussels, 29 April.
- 1997, [Commission Regulation \(EC\) No. 936/97 of 27 May 1997 opening and providing for the administration of tariff quotas for high-quality fresh, chilled and frozen beef and for frozen buffalo meat](#), *Official Journal of the European Union*, L137/10, Brussels, 27 May.
- 2002, [Council Directive 2002/99/EC of 16 December 2002 laying down the animal health rules governing the production, processing, distribution and introduction of products of animal origin for human consumption](#), *Official Journal of the European Union*, L18/11, Brussels, 16 December.
- 2008, [Corrigendum to Regulation \(EC\) No. 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin \(OJ L 139, 30.4.2004\)](#), *Official Journal of the European Union*, L226/22, Brussels, 29 April.
- 2010, [Commission Regulation \(EU\) No. 206/2010 of 12 March 2010 laying down lists of third countries, territories or parts thereof authorised for the introduction into the European Union of certain animals and fresh meat and the veterinary certification requirements \(Text with EEA relevance\)](#), *Official Journal of the European Union*, L73/1, Brussels, 12 March.
- 2012, [Commission Implementing Regulation \(EU\) No. 481/2012 of 7 June 2012 laying down rules for the management of a tariff quota for high-quality beef](#), *Official Journal of the European Union*, L148/9, Brussels, 7 June.
- 2013a, [Commission Implementing Regulation \(EU\) No. 593/2013 of 21 June 2013 opening and providing for the administration of tariff quotas for high-quality fresh, chilled and frozen beef and for frozen buffalo meat](#), *Official Journal of the European Union*, L170/32, Brussels, 21 June.
- 2013b, [Proposal for a council decision on the conclusion of a revised memorandum of understanding with the United States of America regarding the importation of beef from animals](#)

[not treated with certain growth-promoting hormones and increased duties applied by the United States to certain products of the European Union](#), Brussels, 2 October.

—2013c, [Regulation \(EU\) No. 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation \(EC\) No. 637/2008 and Council Regulation \(EC\) No. 73/2009](#), *Official Journal of the European Union*, L347/608, Brussels, 17 December.

—2014, [Agricultural TRQ regulations: TRQs managed by DG AGRI with licences—main elements](#), Brussels, 2 December.

—2015a, [The Russian ban on EU agricultural products—12 months on](#), Brussels, 7 August.

—2015b, [Voluntary coupled support—sectors mostly supported. Notification of decisions taken by member states by 1 August 2014 \(pdf 1.1mb\)](#), Brussels, 30 July.

—2016a, [Agreements](#), Brussels, accessed 13 April 2017.

—2016b, [Direct payments 2015–2020—decisions taken by member states. State of play as at June 2016: information note](#), Brussels, June.

—2016c, [EU agricultural outlook: prospects for EU agricultural markets and income 2016–2026](#), Brussels, 6 December.

—2016d, [EU–Canada Comprehensive Economic and Trade Agreement \(CETA\)](#), Brussels.

—2016e, [European Meat Market Observatory](#), Brussels, accessed 20 September 2016.

—2017a, [Eurostat](#), Brussels, accessed 31 March 2017.

—2017b, [Joint EU-Mercosur communiqué following the XXVIIth round of negotiations](#), Brussels, 27 March.

—2017c, [Transatlantic Trade and Investment advisory group meeting report of 9 March 2017](#), Brussels, 10 April.

FAO 2017, [FAOSTAT](#), Food and Agriculture Organization of the United Nations, Rome, accessed 31 March 2017.

Howden, M, McCarthy, O & Hyde, M 2016, 'The EU dairy industry', in [Agricultural commodities: June quarter 2016](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

Huettel, S & Jongeneel, R 2011, [How has the EU milk quota affected patterns of herd-size change?](#), *European Review of Agricultural Economics*, vol. 38, no. 4, pp. 497–527, doi: 10.1093/erae/jbq050.

Johnson, R, 2015, [The US–EU beef hormone dispute \(pdf 487kb\)](#), *Congressional Research Service*, Washington, DC, 14 January.

Menadue, H & Hart, K 2014, [Member state implementation of the CAP for 2015–2020—a first round-up of what is being discussed](#), *Institute for European Environmental Policy*, Brussels, 16 April.

Morgan, N, & Prakash, A 2006, [International livestock markets and the impact of animal disease \(pdf 104kb\)](#), *Scientific and Technical Review of the Office International des Epizooties*, vol. 25, no. 2, pp. 517–28.

Réquillart, V 2008, [Economic analysis of the effects of the expiry of the EU milk quota system \(pdf 1.6mb\)](#), *Institut D'Economie Industrielle*, March.

UN Statistics Division 2017, [UN Comtrade](#), United Nations, New York, accessed 13 April 2017.

USDA–FAS 2014, [EU-28—Livestock and products annual](#), *GAIN report*, no. NL4033, Foreign Agricultural Service, US Department of Agriculture, Washington, DC, 9 September.

—2017, [Production, Supply and Distribution Online](#), Foreign Agricultural Service, US Department of Agriculture, Washington, DC, accessed 13 April 2017.

US MEF 2016, [Canadian meat industry makes gains in EU agreement, but US must aim higher](#), United States Meat Export Federation, Denver.

Westhoek, H, Lesschen, JP, Rood, T, Wagner, S, De Marco, A, Murphy-Bokern, D, Leip, A, van Grinsven, H, Sutton, MA & Oenema, O 2014, [Food choices, health and environment: effects of cutting Europe's meat and dairy intake](#), *Global Environmental Change*, May, vol. 26, pp. 196–205, doi: 10.1016/j.gloenvcha.2014.02.004.

Whitnall, T 2017, 'Dairy', in [Agricultural commodities: March quarter 2017](#), Australian Bureau of Agricultural Resource Economics and Sciences, Canberra.

WTO 2016, [Tariff Download Facility](#), World Trade Organization, Geneva, accessed 16 September 2015.

3 The EU dairy industry

Matthew Howden, Owen McCarthy and Matthew Hyde

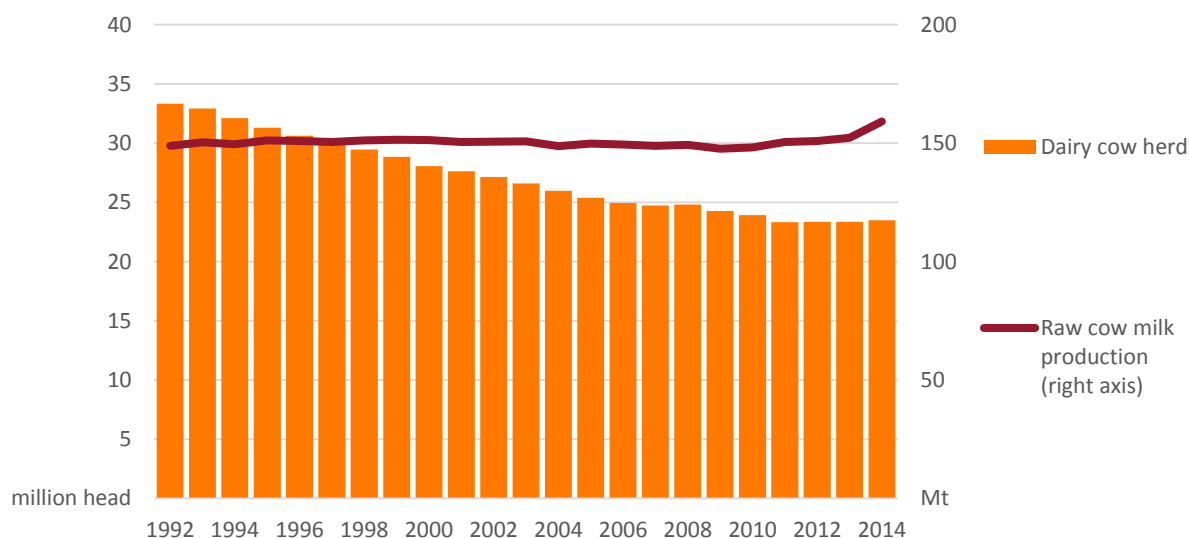
In November 2015 the Australian Government and the European Commission agreed to commence the process of working towards an FTA. Given the size of the European market, an FTA could present opportunities for Australian exporters across a range of agricultural commodities, including dairy. However, identifying dairy industry opportunities requires an understanding of the complexities of the European dairy industry. It is shaped by support policies that have evolved since the formation of the CAP in 1962. With the expansion of the European Union and multiple CAP developments, the 28 EU member states are now collectively the largest producers and consumers of dairy products in the world.

Overview of the EU domestic dairy market

Production and consumption

The European Union produced 164 million tonnes of raw milk in 2014, with 159 million tonnes of cow milk produced from a herd of around 23.5 million cows (Figure 18). Improvements to milk yields have allowed production to remain relatively constant since 1990, despite the decline in the dairy herd from around 33 million head in 1992. The European Union also produces milk and dairy products from other animals, especially sheep and goats.

Figure 18 Dairy cow herd and cow milk production, European Union, 1992 to 2014



Source: FAO 2017

The major milk-producing EU member states are Germany, France and the United Kingdom, with specialised enterprises accounting for most production. These three countries accounted for almost half of EU milk production in 2015 (European Commission 2016). Northern and western European countries are better suited to dairy production than those in southern Europe because of the temperate climate and pasture availability. Milk yields vary considerably among member states but average cow milk yields in the European Union are higher than those in Australia and New Zealand (FAO 2017).

Around three-quarters of the milk delivered to EU processors in 2015 was used to manufacture processed dairy products, such as cheese and butter. The remainder was for direct consumption as fluid milk. Around 36 per cent of milk delivered to processors was used for cheese production and 30 per cent for butter (European Commission 2016). Since 1983 EU cheese production has almost tripled and its share of the product mix has increased, while butter production has declined. Germany, France and Italy are responsible for almost 60 per cent of the cheese produced annually, while butter production is concentrated in Germany and France.

The largest consumers of dairy products in the European Union are Germany, France, Italy and the United Kingdom. However, per person consumption of dairy products is highest in Finland and the Netherlands, at more than 300 kilograms a year (FAO 2017). Newer EU member countries such as Cyprus and Slovakia have the lowest per person consumption, at less than 150 kilograms a year. Per person consumption growth in the European Union as a whole was less than 0.5 per cent a year between 2000 and 2013 but varied considerably between member states (FAO 2017).

Box 3 UK dairy industry

The United Kingdom is the third-largest cow milk producer in the European Union, supplying nearly 10 per cent of EU production by volume. The United Kingdom does not produce goat or sheep milk. It is the fourth-largest consumer of milk in the European Union—at 14.7 million tonnes in 2013 (latest data available). This represents around 12 per cent of EU consumption (FAO 2017).

Ireland is the United Kingdom's main trading partner for dairy products. In 2015 the United Kingdom imported 99 per cent of its dairy products (by value) from other EU dairy exporters, including Ireland (26 per cent of total UK dairy imports by value), France (20 per cent), Germany (12 per cent) and the Netherlands (8 per cent) (UN Statistics Division 2017). The United Kingdom is a net importer of dairy products.

In 2015, 82 per cent of UK dairy exports (by value) were destined for the European Union. These exports mainly went to Ireland (40 per cent of total UK dairy exports by value), France (11 per cent), the Netherlands (9 per cent), Belgium (6 per cent) and Germany (5 per cent). Outside of the European Union, the largest destination for UK exports was the United States (6 per cent of total UK dairy exports) (UN Statistics Division 2017).

Common Agricultural Policy

Since 1962 the European Union has supported the dairy industry through the CAP's system of variable import levies, state intervention and trading, and export subsidies. All of these have strongly influenced the development of the industry.

Variable import levies, guaranteed minimum internal prices and export subsidies supported artificially high farmgate prices for milk, which encouraged a substantial expansion in EU dairy production during the 1970s. This resulted in production far beyond domestic market requirements. The European Union consequently became a major producer and exporter of agricultural commodities, including dairy. By the early 1980s it was routinely producing surplus agricultural product, which required storage and disposal. The cost of export subsidies increased significantly. The combination of increasing production as a result of high internal prices, high storage costs and large export subsidies resulted in substantial budgetary pressures. A significant share of this was the result of dairy policies.

These factors prompted the European Union to reform the CAP, starting with the introduction of milk quotas in 1984. Milk quotas were designed to prevent oversupply by limiting milk production, which reduced the cost of the CAP. Individual member states were subject to two quotas: one for milk delivered to processors and the other for direct sales at the farm level. Both quotas were allocated among producers and linked to land holdings. Producers who exceeded their individual quotas were required to pay levies on the excess production only if the national

quota was also exceeded. The initial quotas were not considered sufficiently restrictive to constrain production so quota limits were tightened several times in the late 1980s and early 1990s. The levy on excess production was also increased.

Further reforms to all agricultural industries in the following years reduced support price levels so that domestic prices were closer to world market prices and producers began to receive direct income support payments based on land holdings rather than production. The 2003 review of the CAP specified that the implementation period for the dairy sector's reforms would begin in 2005. It maintained other long-established dairy support mechanisms, including import tariffs, export subsidies and provisions for public intervention and private storage aid (PSA).

Removal of the milk quota system

In 2008 the European Union announced it would remove the milk quota system, which it did in April 2015. In the intervening period, milk quotas were increased by 2 per cent in the 2008–09 marketing year (April to March) and then by 1 per cent each year from 2009–10 to 2013–14. The only exception to the schedule was Italy, which received the entire 5 per cent quota increase in 2009–10.

Milk quotas were removed because they were deemed no longer necessary (European Commission 2015). Milk production surpluses were no longer a problem for the European Union by the 2000s because global consumption of dairy products had expanded. Between the 2006–07 and 2013–14 marketing years, total EU milk deliveries were between 1 per cent and 7 per cent lower than the total quotas available for milk deliveries each year.

EU milk production has risen since the removal of milk quotas. Between April 2015 and March 2016, total EU milk deliveries were 4 per cent higher than during the same period a year earlier. However, the production increases varied among member states. Increases were concentrated in the northern and western EU member states, where production is generally more efficient. The fastest growth in milk deliveries occurred in Ireland (18 per cent), Luxembourg (14 per cent), Belgium (12 per cent) and the Netherlands (12 per cent). Deliveries fell in Romania (4 per cent), Italy (2 per cent) and Malta (2 per cent) (European Commission 2016).

Recent market and policy developments

Between mid 2014 and the beginning of 2016, a range of factors caused world dairy prices to fall. Import demand from two significant dairy importers, China and the Russian Federation, was weak—albeit for different reasons. China is a rapidly growing consumer of dairy products, but a build-up of stocks over time resulted in weaker import growth. The Russian Federation's August 2014 trade embargo on selected agricultural imports (including dairy) halted exports to that market from several major dairy exporters, including the European Union and Australia. As a result of the reduced Chinese and Russian demand, supplies of dairy products available to other importing markets increased and prices fell.

The Russian Federation extended its trade embargo from the one year planned initially to the end of 2017. Countries that imposed sanctions on the Russian Federation for its actions in eastern Ukraine are subject to the embargo. Before the embargo the Russian Federation was a significant market for European dairy products—accounting for around 12 per cent of the value of total EU dairy exports in 2013, including around a third of EU cheese and butter exports. The ongoing trade embargo has resulted in dairy products being diverted from countries subject to the embargo onto other markets.

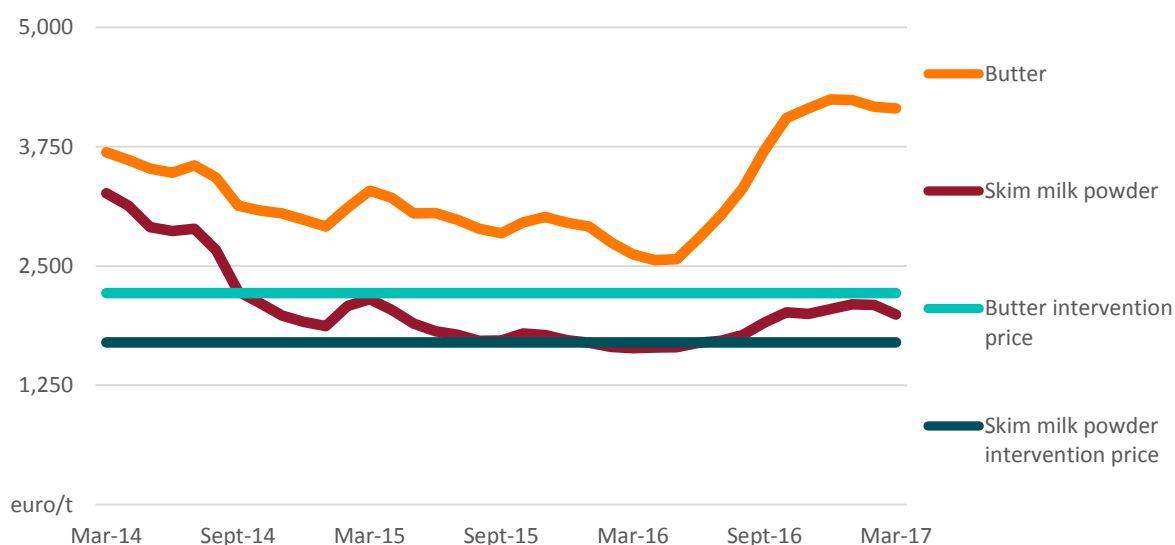
The world supply of dairy products also increased because of the rise in world milk production in 2014 and 2015. Much of this has been attributed to higher production through herd expansion in western and northern Europe. These production increases put additional downward pressure on the global price of dairy products.

Lower world prices from 2014 to 2016 affected the European domestic market. The unwinding of CAP support linked to agricultural production meant that domestic European dairy prices are more closely aligned with world price movements. Over this period, EU domestic market prices for butter and skim milk powder declined towards the intervention price as a result (Figure 19).

In response to the lower world prices from 2014 to 2016, the European Commission has implemented several market support measures for the dairy industry since 2014. These measures are designed to provide assistance to producers who are facing cash-flow difficulties as a result of the Russian Federation's trade embargo or from low world prices. Increased support has been provided through higher farm support payments and the activation and modification of public intervention and PSA schemes.

From mid 2016 ongoing EU market interventions and disruptions to dairy production in New Zealand, the world's largest whole milk powder and butter exporter, have put upward pressure on world dairy prices. Recovering Chinese demand for dairy has also encouraged the rise in prices.

Figure 19 Butter and skim milk powder prices, monthly average, European Union, March 2014 to March 2017



Source: European Commission 2017d

Additional farm income support payments

The closure of the Russian market affected some EU member states more than others. The Russian Federation was important to countries in the eastern part of Europe, including Estonia, Latvia, Lithuania and Finland, which exported significant amounts of cheese and butter before the trade embargo. The closure of the Russian market and falling world prices resulted in a significant reduction in dairy farmers' incomes in these member states. The European Commission responded in November 2014 by announcing a €28 million support package for milk producers in Estonia, Latvia and Lithuania. It followed this in December 2014 with a €10.7 million support package for Finnish milk producers.

In September 2015 the European Commission announced another direct support package of €420 million for livestock producers, including dairy producers, to be distributed among all EU member states. It allocated 80 per cent of this according to member states' milk quotas in the 2014–15 marketing year. The remaining 20 per cent was allocated to livestock farmers particularly affected by the Russian Federation trade embargo or to those facing feed crop difficulties because of drought.

The European Commission provided further support to the EU dairy industry through the milk reduction scheme, from October 2016 to January 2017. Farmers received €0.14 for each kilo of milk solids they did not produce during that period compared with their historical production levels. Global dairy prices recovered somewhat in late 2016 and early 2017 and the scheme was not extended (European Commission 2017b).

Public intervention and private storage aid

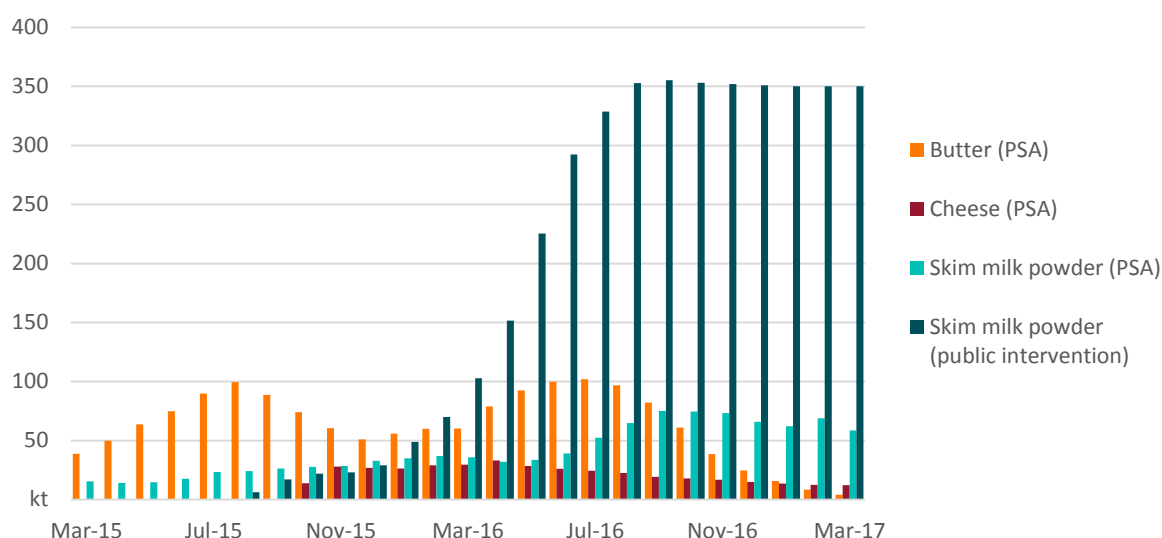
Public intervention is the term for government-funded purchase and storage of EU agricultural products when domestic market prices fall below set intervention prices. Purchases are made between 1 March and 30 September each year, but these dates can be extended. For the dairy sector, public intervention is available for butter and skim milk powder.

Public intervention is normally available for butter when the domestic market price falls below €2,217 a tonne, with an intervention limit of 60,000 tonnes. The intervention price for skim milk powder is €1,698 a tonne and the volume limit is 109,000 tonnes. Public authorities of member states make purchases at the fixed intervention price while stocks are below the volume limit. After the volume limit is reached, products can only be offered into intervention through a tendering process—where producers bid to have their products purchased by public authorities at prices that may be below the intervention price.

The decline in world dairy prices between 2014 and 2016 caused domestic skim milk powder prices to fall below the intervention price several times. However, butter prices remained above intervention levels. In 2016, as a result of ongoing low world dairy prices, the European Commission increased the volume limits for butter to 100,000 tonnes and skim milk powder to 218,000 tonnes in public intervention and extended the annual purchase eligibility period. The volume limit for skim milk powder was increased a second time in 2016 to 350,000 tonnes. Intervention prices were not changed. No butter was offered into intervention in the 2016–17 marketing year on account of the recovery in butter prices towards the end of 2016. However, ongoing low prices for skim milk powder have resulted in an extension to public intervention until the end of September 2017.

PSA schemes provide subsidies to producers to store eligible products privately and temporarily. PSA schemes are different from public intervention because the producer retains ownership of the product. The product must be stored for a minimum of 90 days but no longer than 210 days. For the dairy sector, PSA subsidies are normally available for butter and skim milk powder but were extended to cheese in September 2014 (Figure 20).

Figure 20 Private storage aid and public intervention stocks, European Union, March 2015 to March 2017



Source: European Commission 2017d

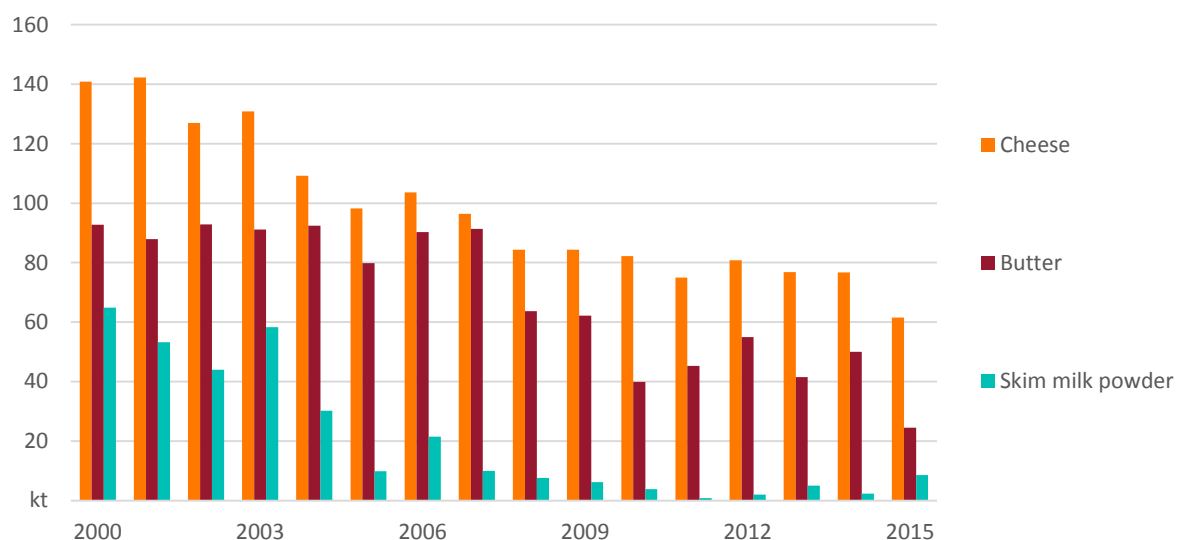
From 2014 to 2016, PSA was opened for skim milk powder, butter and cheese. PSA was closed for butter and cheese in September 2016 as prices recovered. PSA for skim milk powder was extended to February 2017 (AHDB 2017). Intervention and PSA stocks represent only a small share of total EU production but are large relative to export volumes. The consequence of the stocks build-up is the increased supply of dairy products available for future export, which contributes to the downward pressure on some world dairy prices.

The combination of higher farm income support payments, public intervention and PSA schemes has allowed EU dairy producers to maintain production despite low world prices. By removing product from the market, public intervention and PSA schemes have supported domestic dairy prices and encouraged continued production.

EU dairy trade and trade policy

The European Union is a net exporter of most dairy products. Collectively it is the largest dairy exporter in the world. Key export markets are China (15 per cent, by value), the United States (8 per cent) and Hong Kong (7 per cent). Total dairy exports were valued at almost US\$32 billion in 2015, with infant formula (US\$8.2 billion), cheese (US\$7.7 billion) and milk powders (US\$7.3 billion) the main exported products (UN Statistics Division 2017). Exports of butter were valued at US\$1.6 billion.

The European Union also imports dairy products but to a lesser extent. Import volumes of the main dairy products have been declining since the mid 2000s (Figure 21). In 2015 the European Union imported US\$945 million of dairy products—from Switzerland (US\$528 million), New Zealand (US\$219 million) and the United States (US\$77 million). Cheese accounted for almost half of total dairy imports (US\$482 million). The remainder was mainly casein (US\$153 million) and butter (US\$79 million). Australia accounted for less than 1 per cent (US\$1.2 million) of EU dairy imports and its share of imports has declined over time.

Figure 21 Imports of major dairy products, European Union, 2000 to 2015

Source: UN Statistics Division 2017

EU cheese import types vary by origin. Switzerland and Norway mostly supply speciality cheeses, while New Zealand, the United States, Australia and Canada primarily supply cheese for processing and cheddar cheese for consumption.

Tariffs and quotas

The European Union operates a complex tariff system for dairy products that has relatively high applied tariffs, restrictive quotas and several non-tariff trade barriers (Table 3). Countries that do not have preferential agreements but export dairy products to the European Union face several TRQs with high in-quota tariffs. The European Union's domestic support policies have changed considerably since 2000, but its TRQs have remained largely unchanged since 1994.

Table 3 European Union tariff-rate quotas for dairy products

Product	Quota level (tonnes)	In-quota tariff rate (€/tonne)	Out-of-quota tariff rate (€/tonne)
<i>Multilateral TRQs</i>			
Butter and butter oil	11,360	948	2,313
Cheddar	15,005	210	862 to 2,212
Cheese for processing	20,007	835	869 to 2,150
Emmenthaler	18,438	719 (processed) 858 (unprocessed)	1,449 (processed) 1,717 (unprocessed)
Gruyere	5,412	719 (processed) 858 (unprocessed)	1,449 (processed) 1,717 (unprocessed)
Other cheeses	19,525	690 to 1,064	805 to 2,313
Skim milk powder	68,537	475	1,254
<i>Preferential TRQs</i>			
Australian cheeses	4,211	170.60	869 to 2,150
New Zealand cheeses	11,000	170.60	869 to 2,150
New Zealand butter	74,693	700	2,313
Canadian cheddar	2,750	137.50	862 to 2,212

Sources: Dairy Australia 2015; European Commission 2017e

Products not subject to TRQs usually face either specific or compound tariffs. Specific tariffs are charged as a flat rate per tonne imported. Compound tariffs are specific tariffs combined with an additional measurable component of the product, such as the concentration of lactic matter. For example, imports of skim and whole milk powders are subject to compound tariffs. These are calculated according to the concentration of lactic matter in the powder at a rate of €1,190 a tonne of lactic matter, in addition to a tariff of €1,254 a tonne product weight. The ad valorem equivalent of the specific component of the tariff on skim milk powder is around 69 per cent at 2015–16 average world prices.

EU tariffs on dairy products reduce the competitiveness of imported products compared with domestic products. Additionally, high in-quota tariffs and the burden of the quota administration can impose further costs on importers. As a result, most European import quotas for dairy products were not filled in the 2012–13 marketing year (WTO 2015).

Sanitary and phytosanitary standards

The European Union applies strict sanitary and phytosanitary (SPS) standards to the production of all dairy products intended for sale in the European Union. SPS standards ensure that imported products do not pose a health and safety risk to consumers or the community.

To meet the EU SPS import standards, non-EU dairy exporters must complete several stages of inspection, testing and accreditation before shipment. EU-certified inspectors physically inspect and accredit the exporter's entire supply chain. Veterinarians certify the health of the dairy herd. Dairy products destined for export to the European Union must undergo batch testing before departure from the originating port and again on arrival. Consignments must be accompanied by certification that the animals from which the product was sourced were of good health and would pose no risk to either consumers or destination market animals.

Geographical indications

Geographical indications (GIs) are a form of intellectual property. They identify a good as originating from a certain geographical area with a particular quality, reputation or other characteristic of the good being essentially attributable to its geographical origin.

GIs are designed to signal to consumers that products labelled with certain terms originate from a specific geographic area and in the case of the EU have been produced according to methods and in conditions set out in the EU GI registration system. Protection in the European Union prevents producers who do not meet the specific criteria from using these terms. Producers can use GIs to target premium markets for their products. However, GIs can be contentious because some products originally produced in particular regions—such as parmesan cheese (as a translation of *Parmigiano Reggiano*)—are now made all over the world. The EU considers that products produced according to the conditions specified in the EU registration are genuine. New World producers believe many of these terms are now generic and describe a style or type of product rather than an indication of origin.

The recognition and enforcement of GIs has been key in recent free trade negotiations between the European Union and other countries. In its free trade negotiations the European Union usually seeks protection for certain product terms, including for some that non-European producers consider generic. This can lead to non-European producers having to change names used for products considered generic, which can be problematic if consumers do not recognise newly labelled products.

Australia and the European Union have an agreement that recognises GIs for wine. Non-wine GIs (including for dairy products) can be protected as certification trademarks in Australia.

Existing and prospective free trade agreements

Existing agreements

The European Union has few FTAs with major dairy exporters. It has a bilateral agriculture agreement with Switzerland and a preferential arrangement with Norway as part of the European Economic Area (EEA) agreement.

Under these agreements, the European Union has gradually removed quotas and tariffs on imports of some dairy products from Switzerland and Norway. When the EEA and bilateral agreements entered into force in 1994, the applied tariff on cheese was €65.80 a tonne for Emmentaler, gruyere, sbrinz, bergkase and Appenzeller cheeses. A quota of 3,000 tonnes was applied to cheeses not mentioned elsewhere in the agreement. Basic quotas for Swiss imports of cheese into the European Union were more prescriptive, with eight separate quotas of between 500 tonnes and 5,000 tonnes applied to different types of cheese. Tariffs on other cheeses ranging from €1,600 a tonne to €2,800 a tonne were reduced annually and have since been eliminated (European Commission 2002). The cheese trade between the European Union and Switzerland is fully liberalised.

The Comprehensive Economic and Trade Agreement

CETA is an FTA between the European Union and Canada. Negotiations were completed in August 2014 and the legal review was completed in February 2016. The agreement is yet to enter into force.

Historically, Canada has not exported significant volumes of dairy products to the European Union. Its domestic production is limited by quotas, so export volumes are small and primarily destined for the United States and Mexico.

Under CETA, Canada and the European Union will increase SPS cooperation on accreditation, certification and testing organisations. Bilateral recognition of testing procedures undertaken before trade, and further streamlining of testing procedures, will reduce the burdens placed on exporters. Canada has also accepted the EU food labelling system, so use of protected GIs in Canada will be restricted for domestic producers and third parties trading with Canada. Canada will also implement origin labelling to further highlight product origins. This will restrict the use on product packaging of symbols such as flags or other icons synonymous with certain regions.

In exchange for accepting these measures the European Union will fully liberalise dairy imports from Canada by removing all tariffs and quotas. This is the first time the European Union has agreed to offer this level of access to the EU dairy market to a developed economy. However, Canada is not a major exporter of dairy products because of the quota system that controls Canadian milk production. The European Commission does not expect Canada to increase exports to the European Union under CETA (European Commission 2017a).

Transatlantic Trade and Investment Partnership

Negotiations between the European Union and the United States for the TTIP commenced in 2013 but are on hold following the change in US administration (European Commission 2017c).

The European Union is a net exporter of dairy products to the United States. Cheese and butter make up most of this trade. Cheese exports rose from US\$950 million in 2000 to more than US\$1.3 billion in 2015 (in 2015 US dollars) and comprise mostly speciality cheeses, including parmesan and gouda.

The United States has no preferential access to the European Union so its exports face the MFN tariff rate. EU imports of US dairy products have increased since 2000—from US\$31 million to US\$77 million in 2015 (in 2015 US dollars). Most 2015 trade comprised milk albumin (US\$53 million).

Agricultural market access is being negotiated under the TTIP, but neither party considers improving dairy market access a priority. The European Union's insistence on GI recognition has become an issue.

EU-Mercosur free trade agreement

Mercosur is a South American subregional customs union of Argentina, Brazil, Paraguay and Uruguay. Venezuela was suspended from Mercosur on 1 December 2016. A Mercosur-EU FTA has been under negotiation since 2010, with preliminary market access offers exchanged in April 2016. Venezuela is an observer to these negotiations but not a party. Argentina and Uruguay are significant dairy exporters but do not export to the European Union. Both countries export mostly whole milk powder, which the European Union does not usually import.

EU-NZ free trade agreement

The European Union is scoping an agreement with New Zealand. New Zealand is the second-largest exporter of dairy products (mainly butter) to the European Union. Most of New Zealand's butter exports are destined for the Netherlands and the United Kingdom.

The dominance of butter in NZ-EU trade is largely the result of a preferential quota agreed to during the Uruguay Round of multilateral trade negotiations in 1994. The country-specific quota

allocated to New Zealand was 76,667 tonnes, with a specific tariff of €868 a tonne. This compared with the MFN tariff of €2,313 a tonne. In 2006 the NZ quota was reduced to 74,693 tonnes and the in-quota tariff was lowered to €700 a tonne. The quota is equivalent to around 3 per cent of EU butter production.

Overview of Australia–EU dairy trade

The European Union is a minor market for Australian dairy products. Exports to the 28 EU member states peaked in 2000–01 at \$189 million, 6 per cent of dairy exports in that year. Cheddar cheese was the main product exported. Since then Australian exports to the European Union have fallen steadily, reaching \$7.3 million in 2015–16 and comprising less than 1 per cent of total Australian dairy exports. Most of that trade was infant formula (\$2.4 million) and skim and whole milk powders (\$2 million).

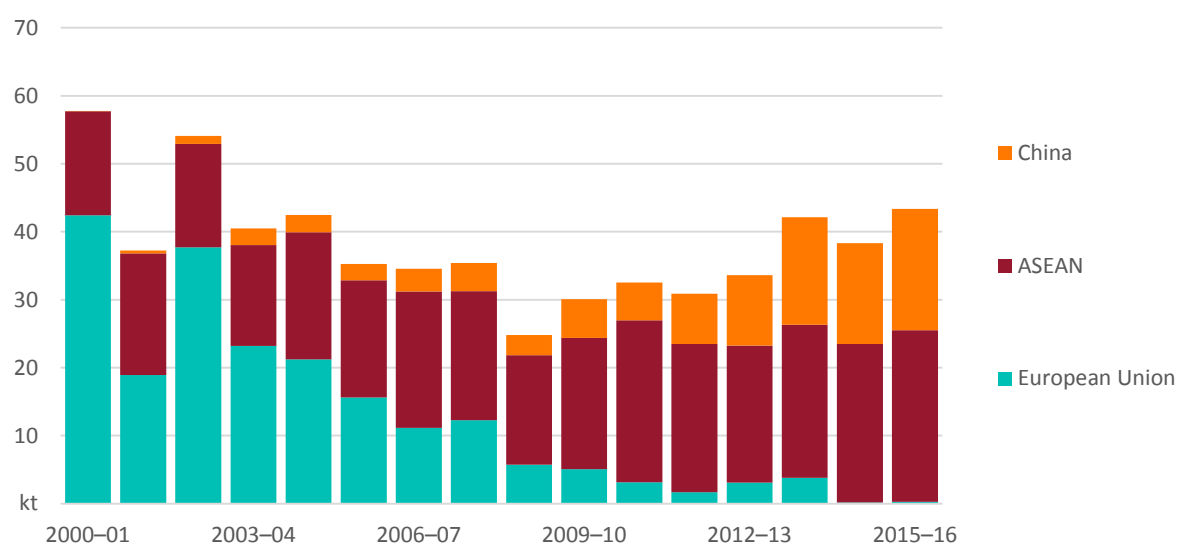
In comparison, the real value of Australian imports of EU dairy products has increased by almost 130 per cent since 2000–01 and reached \$206 million in 2015–16. The European Union was the second-largest supplier of dairy products to Australia, behind New Zealand. Cheese is the main product imported—with cheddar dominating imports (\$67 million), followed by blue cheese (\$23 million) and feta (\$23 million). Imports of most cheeses into Australia are subject to a quota of 11,500 tonnes—with an in-quota tariff rate of \$0.096 a kilogram and an out-of-quota rate of \$1.22 a kilogram. Tariffs of 4 per cent also apply to dairy spreads and ice cream.

The fall in Australian dairy product exports to the European Union mirrors the trend for all dairy product exporters to that market. The high tariffs on EU dairy imports combined with the absence of any significant price premium for Australian dairy products since the early 2000s has lessened the incentive to export to that market. Falling domestic prices for dairy products in the European Union have led to a general weakening of EU demand for imported products. As a result, the volume of total European cheese and butter imports almost halved between 2000 and 2015.

Australia has two country-specific quotas for cheese exports to the European Union. These were obtained as part of the outcomes of the 1994 Uruguay Round. The quotas are for 500 tonnes of cheese for processing and 2,500 tonnes of cheddar cheese for consumption. The cheddar quota was expanded in 2006 to 3,711 tonnes to account for the addition of new EU member states in 2004 (McQueen, Welsman & Harris 2008). Australia's exports to the European Union exceeded the quota limits in most years before 2014, but the quotas were not used at all in 2015 and 2016 because of the current excess supply of dairy products in the European market. Cheddar cheese is Australia's main cheese export to the European Union and was its second-largest dairy export overall in 2015–16, behind fresh cheese curd.

When European dairy prices were falling, import demand from China and the ASEAN region was strengthening. As a result Australia diverted much of its trade away from the European Union to the Asian markets (Figure 22). Demand for dairy products in these markets is growing and they are geographically closer to Australia. This presents an important and ongoing opportunity for Australian exporters of dairy products, including cheddar cheese. FTAs with the Republic of Korea (2014) and China (2015) and the economic partnership agreement with Japan (2015) have made Asian markets even more attractive for Australian dairy exporters.

Figure 22 Australian cheese exports to the European Union, China and ASEAN, 2000–01 to 2015–16



Source: ABS 2017

Australia is unlikely to increase exports to the European Union in the short term given current world prices. Dairy product consumption in the European Union is relatively stable and domestic production continues to increase in several member states. The existing trade barriers for Australian dairy exports and weak European demand for imported dairy products are likely to continue to constrain Australian dairy exports to that market.

References

ABS 2017, International Trade in Goods and Services, Australia, February 2017 [unpublished data], cat. no 5368.0, Australian Bureau of Statistics, Canberra, accessed 13 March 2017.

AHDB 2017, [EU Intervention stocks](#), Agriculture and Horticulture Development Board, London, 15 May.

Dairy Australia 2015, [Dairy tariffs](#), Melbourne, accessed 17 March 2017.

European Commission 2002, [Agreement between the European Community and the Swiss Confederation on trade in agricultural products](#), *Official Journal of the European Communities*, L 114, pp. 132–368, Brussels.

—2015, [The end of milk quotas](#), Brussels, 26 March, accessed 28 March 2017.

—2016, [Milk and milk product statistics](#), Brussels, October, accessed 17 March 2017.

—2017a, [CETA: summary of the final negotiating results](#), Brussels, 15 May, accessed 26 March 2017.

—2017b [EU support scheme helps reduce milk production](#), Brussels, 16 March.

—2017c, [European Commission position paper on the Transatlantic Trade and Investment Partnership between the European Union and the United States of America](#), Brussels, 31 March.

—2017d, [European Milk Market Observatory](#), Brussels, accessed 11 April 2017.

—2017e, [TARIC](#), Brussels, accessed 17 March 2017.

FAO 2017, [FAOSTAT](#), Food and Agriculture Organization of the United Nations, Rome, accessed 24 March 2017.

McQueen, J, Welsman, S & Harris, D 2008, [Report of the 2008 Dairy Quota Review Panel on administrative arrangements for EU and USA dairy quotas managed by Australia, report to the Minister for Agriculture, Fisheries and Forestry \(pdf 473kb\)](#), Department of Agriculture, Fisheries and Forestry, Canberra, June.

UN Statistics Division 2017, [UN Comtrade](#), United Nations, New York, accessed 21 March 2017.

WTO 2015, [Committee on Agriculture—Notification of Imports under Tariff Quotas \(MA:2\). 2012/13 and 2013 G/AG/N/EU/24G/AG/N/EU/24](#), World Trade Organization, 28 May.

4 The EU sheep meat industry

Peter Berry, Matthew Howden and Adrian Waring

Sheep meat comprises only a small proportion of total EU meat consumption. Nonetheless, the European Union is one of the world's largest producers and consumers of sheep meat. A long-term decline in production since the mid 2000s has been tied to changes in EU domestic support and trade policies. The consequent strong rise in sheep meat prices relative to other meats, combined with a range of other factors, has contributed to a similar decline in total EU sheep meat consumption.

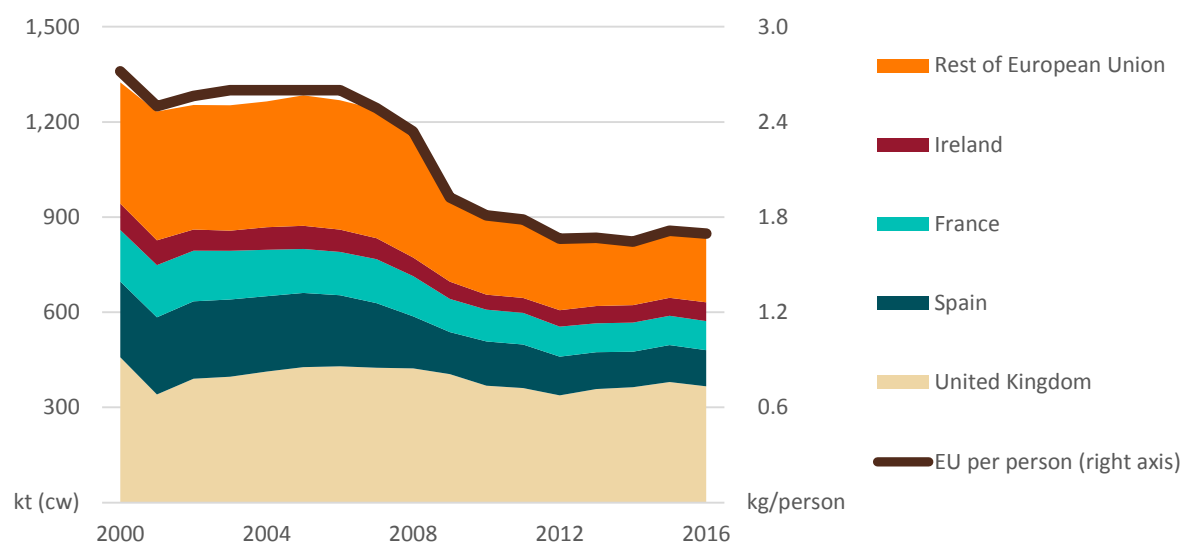
The high price of sheep meat in the European Union has made it a desirable market for sheep meat exporters. However, Australia's access to the EU market is restricted by comparatively low import quotas and high out-of-quota tariffs. This chapter examines the EU sheep meat market and the policies that support it to better understand how Australian exporters could benefit from improved access to this market.

EU sheep meat consumption

The European Union is the second-largest consumer of sheep meat in the world (OECD 2017). Between 2006 and 2015, an average of 984,000 tonnes (carcase weight) of sheep meat was consumed annually. This was second only to the amount consumed in China. In 2016 total EU sheep meat consumption was 857,000 tonnes. About three-quarters of the region's consumption was concentrated in the United Kingdom (43 per cent), Spain (13 per cent), France (11 per cent) and Ireland (7 per cent) (Figure 23) (European Commission 2017a).

Sheep meat is a relatively expensive meat purchased predominantly by older or wealthier consumers and for special occasions. Its consumption has been in long-term decline because of the changing European age demographic, its price relative to other meats and slow consumer income growth (MLA 2016).

Over the 10 years to 2016, total EU sheep meat consumption fell by 31 per cent (European Commission 2017a). Average per person consumption fell by 33 per cent over the same period, from 2.5 kilograms to 1.7 kilograms a year. By comparison, per person consumption of pork and poultry has been consistently higher, at 31.3 kilograms (pork) and 23.7 kilograms (poultry) per person (European Commission 2017b).

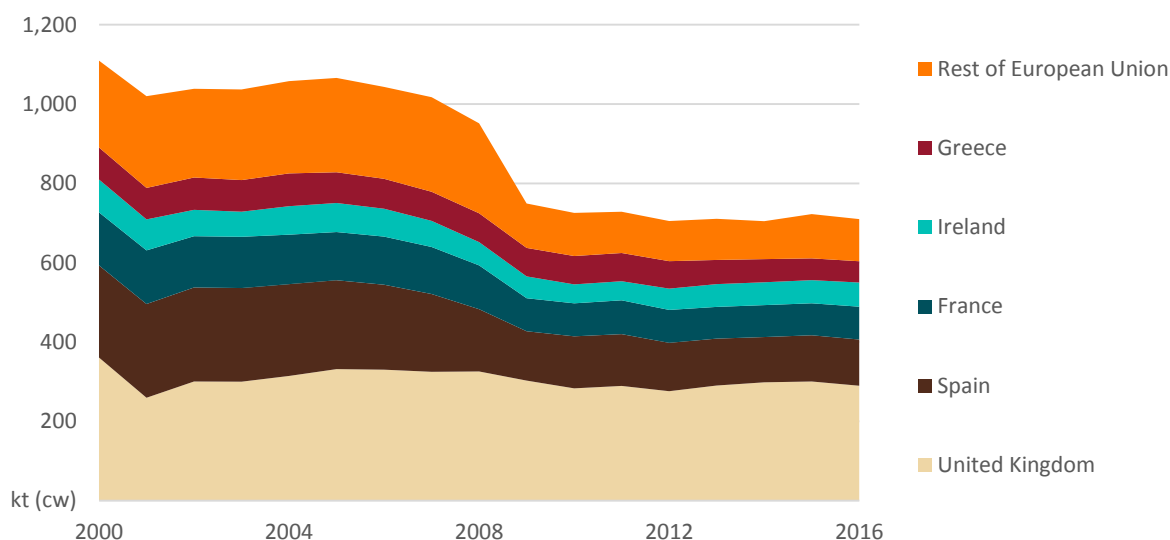
Figure 23 Total and per person sheep meat consumption, European Union, 2000 to 2016

Source: European Commission 2017a

EU sheep flock and sheep meat production

In 2014 the EU sheep flock was 98 million head, around 8 per cent of the global sheep flock (FAO 2017). The United Kingdom had the largest sheep flock in the European Union, with 24 million head, followed by Spain (16 million head), Romania (10 million head), Greece (9 million head), Italy (7 million head), France (7 million head) and Ireland (3 million head) (European Commission 2017a). Collectively, these countries accounted for 89 per cent of the total EU sheep flock (European Commission 2017a). In most countries, sheep are used for the meat and dairy industries, with the Italian and Romanian flocks more heavily skewed towards milk production (AHDB 2015a, b). Wool is largely a by-product of sheep meat production (Bertrand 2014; Rintoul 2010).

The European Union is the second-largest sheep meat producer, behind China, and accounted for about 10 per cent of world production in 2013 (FAO 2017). In 2016 it produced about 711,000 tonnes of sheep meat (carcase weight) (European Commission 2017a). Five EU member states accounted for 85 per cent of total production in that year. The United Kingdom was the largest producer, at 290,000 tonnes, followed by Spain (117,000 tonnes), France (83,000 tonnes), Ireland (61,000 tonnes) and Greece (54,000 tonnes) (Figure 24).

Figure 24 Sheep meat production by member state, European Union, 2000 to 2016

Source: European Commission 2017a

Sheep numbers and sheep meat production in the European Union have been in long-term decline. From 2000 to 2016 the flock contracted by 14 per cent and production by 36 per cent. The most significant period of decline occurred following the global financial crisis, when rising production costs, falling per person consumption and the impact of domestic policy reforms reduced the profitability of the industry.

EU support policies

Common Agricultural Policy

The European Union supports the sheep and goat meat industries—which it considers a single industry—through the CAP. Goat meat production is only about 6 per cent of sheep meat production, and it has also been declining for many years (European Commission 2017a).

Since the early 2000s, the CAP has undergone multiple reforms aimed at increasing the market orientation of EU agriculture. In the early 2000s the Single Payment Scheme supported farmers' incomes, leading to a reduction in sheep and goat numbers (European Commission 2003). In 2013 the scheme was replaced with the direct payments scheme under CAP reforms. The direct payments scheme continues to provide farmers with income support that is not linked to production levels. However, it provides a more uniform level of support to farmers across the European Union (European Commission 2013a). Under this scheme, two measures available to sheep and goat farmers in particular are VCS and the Basic Payment Scheme.

Voluntary coupled support

Since 2015 VCS has been available to farming sectors that are considered important for economic, social or environmental reasons and facing certain difficulties. In some areas of the European Union, the sheep and goat meat industries meet those criteria and are eligible to receive VCS payments. Payments are linked to production.

The annual VCS budget for the period from 2015 to 2020 is €4.2 billion, which is 10 per cent of the direct payments scheme budget (European Commission 2013a). In 2015 EU sheep and goat farms accounted for the third-largest share of the annual VCS budget, at 12 per cent or €486 million. VCS payments are linked to animal numbers for the sheep and goat meat

industries, and farmers received an average of €12 an animal in 2015 (European Commission 2015).

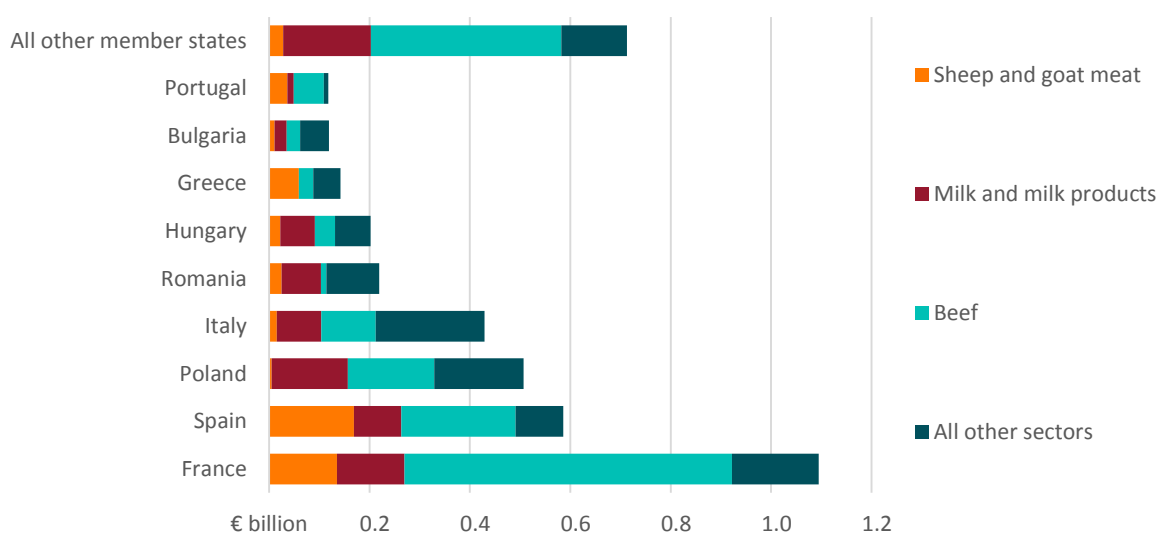
Participation in VCS is optional, so the amount of support available to farmers varies significantly between member states and agricultural sectors (Menadue & Hart 2014). For example, the annual VCS budget allocated to Spain is €586 million, around 29 per cent of which is for sheep and goat farms (Figure 25). In contrast, Poland receives €507 million for its VCS budget but allocates only 1 per cent of it to sheep and goat farms.

Basic Payment Scheme

Member states that opt out of the VCS can reallocate that proportion of their annual budget to the Basic Payment Scheme. This scheme provides basic income to farmers regardless of their industry or individual circumstances. For example, in 2015 Ireland and the United Kingdom opted out of the VCS and each allocated around two-thirds of their annual direct payments budget to the Basic Payment Scheme. The VCS accounted for less than 2 per cent of their total direct payment scheme budget (European Commission 2016a).

The United Kingdom is the largest sheep meat producer in the European Union but allocates only a small proportion of its annual direct payments budget to the VCS. This is because the United Kingdom has been actively supporting reforms that separate the amount of subsidy paid to producers from their levels of production since the early 2000s (Department for Environment, Food and Rural Affairs 2013).

Figure 25 Annual voluntary coupled support, by member state and sector, European Union, 2015 to 2020



Source: European Commission 2015, 2016a

EU trade policies

EU tariff-rate quotas for sheep and goat meat

EU sheep and goat meat imports are limited by TRQs allocated to specific trading partners. Because of the way the quotas are administered, both types of meat are imported under the quotas. However, goat meat makes up less than 1 per cent of the annual total quota volume (European Commission 2017a). In 2016 the total volume of sheep and goat meat imports permitted under the quotas was 286,800 tonnes (Table 4) (European Commission 2011).

Under the sheep and goat meat TRQs, in-quota shipments do not incur tariffs. Out-of-quota shipments incur the MFN tariff of 12.8 per cent and a specific tariff of between €902 and €3,118 a tonne, depending on the animal and cut of meat (WTO 2016).

New Zealand has the largest quota (almost 80 per cent of the total), followed by Argentina (8 per cent), Australia (7 per cent) and Chile (7 per cent). A small tariff-free quota of 200 tonnes of sheep and goat meat, known as the erga omnes quota, is also available on a first-come, first-served basis to all exporters (European Commission 2011). A second 200 tonne quota is available to WTO members that do not already have access to the EU sheep and goat meat markets.

New Zealand, Australia, Argentina, Chile, Uruguay and Iceland are the only countries that actively used their import quotas over the five years to 2016 (Table 4). However, quota utilisation varied across these countries over the period. For example, New Zealand averaged 73 per cent utilisation over the five-year period and Australia almost fully utilised its quota at 95 per cent, but Argentina utilised less than 5 per cent. Utilisation of the total quota averaged only 66 per cent (European Commission 2017a).

Table 4 Sheep and goat meat import quota allocations and utilisation, European Union, 2012 to 2016

Country	Quota	Unit	2012	2013	2014	2015	2016
New Zealand	Allocation	tonnes (cw)	228,254	228,254	228,254	228,254	228,254
	Volume shipped	tonnes (cw)	160,269	167,532	155,221	174,374	173,224
	Utilisation	%	70.2	73.4	68.0	76.4	75.9
Argentina	Allocation	tonnes (cw)	23,000	23,000	23,000	23,000	23,000
	Volume shipped	tonnes (cw)	1,814	974	1,425	534	832
	Utilisation	%	7.9	4.2	6.2	2.3	3.6
Australia	Allocation	tonnes (cw)	19,186	19,186	19,186	19,186	19,186
	Volume shipped	tonnes (cw)	16,426	19,113	18,996	18,962	18,323
	Utilisation	%	85.6	99.6	99.0	98.8	95.5
Chile	Allocation	tonnes (cw)	6,800	7,000	7,200	7,400	7,600
	Volume shipped	tonnes (cw)	3,123	3,965	3,560	2,502	2,540
	Utilisation	%	45.9	56.6	49.4	33.8	33.4
Uruguay	Allocation	tonnes (cw)	5,800	5,800	5,800	5,800	5,800
	Volume shipped	tonnes (cw)	3,502	3,199	3,274	1,784	1,583
	Utilisation	%	60.4	55.2	56.4	30.8	27.3
Iceland	Allocation	tonnes (cw)	1850	1850	1850	1850	1850
	Volume shipped	tonnes (cw)	340	432	822	1092	1711
	Utilisation	%	18.4	23.4	44.4	59.0	92.5
Norway	Allocation	tonnes (cw)	300	300	300	300	300
	Volume shipped	tonnes (cw)	0.0	0.0	0.1	0.0	0.3
	Utilisation	%	0.0	0.0	0.0	0.0	0.1
Turkey	Allocation	tonnes (cw)	200	200	200	200	200
	Volume shipped	tonnes (cw)	0.0	0.0	0.0	0.0	0.0
	Utilisation	%	0.0	0.0	0.0	0.0	0.0
Greenland	Allocation	tonnes (cw)	100	100	100	100	100
	Volume shipped	tonnes (cw)	0.0	0.0	0.0	0.0	0.0
	Utilisation	%	0.0	0.0	0.0	0.0	0.0
Faero Islands	Allocation	tonnes (cw)	20	20	20	20	20
	Volume shipped	tonnes (cw)	0.0	0.0	0.8	1.4	0.6
	Utilisation	%	0.0	0.0	4.1	7.2	1.4
Others a	Allocation	tonnes (cw)	200	200	200	200	200
	Volume shipped	tonnes (cw)	89.6	0.0	20.4	0.0	0.0
	Utilisation	%	44.8	0.0	10.2	0.0	0.0
Erga omnes b	Allocation	tonnes (cw)	200	200	200	200	200
	Volume shipped	tonnes (cw)	0.0	0.0	0.0	195.4	185.8
	Utilisation	%	0.0	0.0	0.0	97.7	92.9
TOTAL	Allocation	tonnes (cw)	285,910	286,110	286,310	286,510	286,710
	Volume shipped	tonnes (cw)	185,564	195,215	183,319	199,445	198,400
	Utilisation	%	64.9	68.2	64.0	69.6	69.1

a All other WTO members excluding Argentina, Australia, Chile, Greenland, Iceland, New Zealand and Uruguay. **b** All WTO members.

Note: Totals may not sum to 100 due to rounding.

Source: European Commission 2011, 2017c

EU sheep meat trade

Exports

The European Union is the world's third-largest exporter of sheep meat behind New Zealand and Australia. However, volumes are small by comparison. For example, in 2016 Australia exported about 401,000 tonnes (carcase weight) of sheep meat and New Zealand 360,000 tonnes. By comparison, the European Union exported 15,400 tonnes in that year, down from a peak of 34,200 tonnes in 2013. In 2016, Spain accounted for about 37 per cent of exports to non-EU countries, followed by the United Kingdom (21 per cent) and Ireland (12 per cent) (European Commission 2017a).

Over the five years to 2016, Hong Kong was the European Union's largest non-EU export destination for sheep meat, accounting for about 43 per cent of shipments. Exports to Middle-Eastern countries accounted for about 18 per cent and non-EU European countries for about 17 per cent (European Commission 2017a). Sheep meat exports from the European Union compete with Australian product mainly in the Middle East and Asia. However, the volume of competing supplies from the European Union in these markets remains relatively small.

Imports

The European Union is a net importer of sheep and goat meat, and all imports must comply with EU red meat standards. These standards outline the animal health and welfare, meat-processing and residue treatment requirements that accredited producers, processors and exporters must satisfy to export to the European Union. For a more detailed overview of the standards, see 'The EU beef industry' and Mullumby and Howden (2016).

From 2012 to 2016 the annual volume of EU sheep meat imports (excluding goat meat) averaged 179,000 tonnes (carcase weight), over 10 times the volume of exports. Over that period, New Zealand was the European Union's main supplier, followed by Australia. New Zealand had the dominant import share as a result of its large quota. Small volumes of sheep meat were also imported from South America and non-EU Europe (European Commission 2017c).

EU sheep meat imports have been falling since the late 2000s. Over the 10 years to 2011, import volumes averaged 230,000 tonnes a year (carcase weight) (European Commission 2017c). However, between 2011 and 2016 volumes fell by 9 per cent to 176,000 tonnes (carcase weight). The majority of the decline was from a 12 per cent drop in imports from New Zealand. Imports from South America also fell.

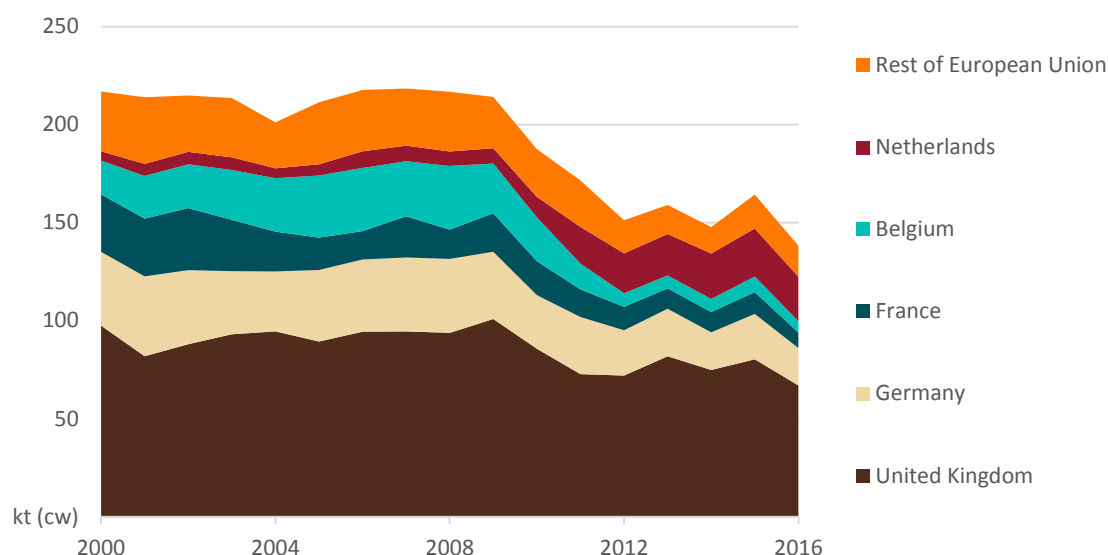
New Zealand

New Zealand is the largest source of imported sheep meat to the European Union, with a country-specific import quota of 228,254 tonnes (carcase weight) per calendar year. This is equivalent to 80 per cent of the total EU sheep meat and goat import quota, which gives New Zealand significantly greater market access compared with other sheep meat-exporting countries (European Commission 2011, 2017c).

New Zealand has had a comparatively high level of access to the EU market since the United Kingdom's accession to the European Union in 1973. At that time, New Zealand's access to the UK sheep meat market was safeguarded on the grounds that New Zealand had long and close political, cultural and trade links with the United Kingdom. Those privileges were subsequently extended to become an EU-wide commitment (European Commission 2016b).

Over the five years to 2016, the European Union imported an average of 152,000 tonnes (carcase weight) of sheep meat (excluding goat meat) a year from New Zealand (European Commission 2017c). Almost half of that was imported by the United Kingdom. The remainder was imported by the Netherlands (16 per cent), Germany (14 per cent), France (6 per cent) and Belgium (4 per cent) (European Commission 2017a) (Figure 26).

Figure 26 Imports of NZ sheep meat, European Union, 2000 to 2016



Source: European Commission 2017a

EU sheep meat imports from New Zealand have been falling since 2007. This is principally the result of a long-term contraction in New Zealand's sheep meat industry in favour of its expanding dairy industry (Beef+Lamb NZ 2016) and strengthening demand from China for NZ lamb (AHDB 2015b). As a result, over the five years to 2016 New Zealand filled only an average of 73 per cent of its EU import quota allocation (Table 4) (European Commission 2017c).

South America

Some South American countries also have access to the EU market through country-specific import quotas for sheep and goat meat. Argentina has an import quota of 23,000 tonnes, Chile 7,200 tonnes and Uruguay 5,800 tonnes (carcase weight). Over the five years to 2016, Argentina exported an average of 1,100 tonnes to the European Union, Chile 3,100 tonnes and Uruguay 2,700 tonnes. Together these countries filled an average of 19 per cent of their combined import quota allocations over the period (Table 4) (European Commission 2017c; MLA 2017).

Argentina has the second-largest quota allocation but utilises a very small proportion of it (AHDB 2015b). Its quota utilisation declined from 32 per cent in 2009 to less than 4 per cent in 2016, largely because of the decline in sheep meat production (AHDB 2015a; European Commission 2017c). By 2013 Argentina had largely ceased exporting sheep meat and its production went almost entirely to the domestic market (AHDB 2015b; UN Statistics Division 2017).

In December 2015 Argentina reformed its agricultural export policies. The Argentine Government removed most of its agricultural export taxes and quantitative export restrictions on grains, oilseeds and livestock products (Williamson 2016). These reforms are expected to

improve the trading environment for Argentina's agricultural exporters, but it is unlikely that the sheep industry will grow significantly in the short to medium term (Coronato et al. 2015).

Box 4 UK sheep meat

The United Kingdom is the largest sheep meat producer in the European Union. In 2016 it accounted for about 41 per cent of total EU sheep meat production. It is also the largest consumer of sheep meat, accounting for 43 per cent of total EU consumption.

In 2016 per person sheep meat consumption in the United Kingdom averaged 5.6 kilograms, the second-highest in the European Union behind Greece. Per person consumption has been declining but at a much slower rate than in many other EU member states, and it remains significantly higher than the EU average of 1.7 kilograms per person in 2016 (Figure 23).

UK sheep meat imports over the five years to 2016 averaged 106,000 tonnes a year (carcase weight). Around 86 per cent was sourced from outside the European Union and the remaining 14 per cent from other EU member states. Ireland accounted for almost 7 per cent of the EU total. New Zealand is the largest non-EU supplier of sheep meat to the United Kingdom. Over the five years to 2016, New Zealand accounted for an average of 73 per cent of UK sheep meat imports or about 79,000 tonnes a year. Australia is the second-largest non-EU supplier to the United Kingdom, averaging 13,400 tonnes a year or 13 per cent of annual UK sheep meat imports over the same period. Small amounts of sheep meat are also imported from South America.

Over the five years to 2016, annual UK sheep meat exports averaged 92,000 tonnes (carcase weight) and 88 per cent was shipped to other EU member states.

Australia–EU sheep meat trade

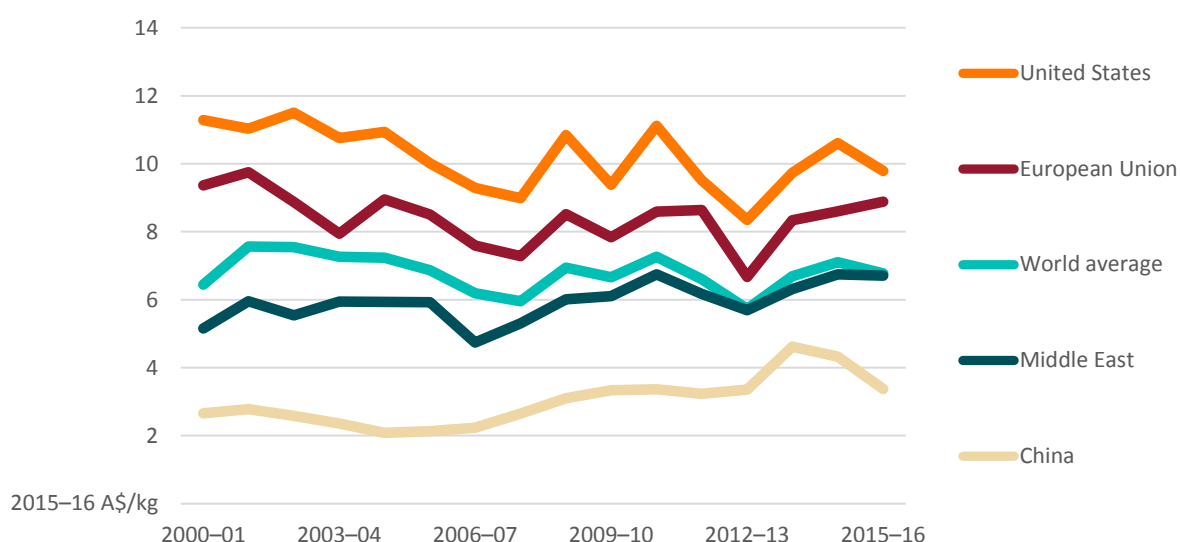
Australia is the second-largest source of EU sheep meat imports (excluding goat meat) after New Zealand. Over the five years to 2016, the European Union imported an average of 17,600 tonnes (carcase weight) a year from Australia (European Commission 2017a). The United Kingdom accounted for about 79 per cent. This was followed by the Netherlands (7 per cent), France (7 per cent), Germany (4 per cent) and Belgium (2 per cent) (European Commission 2017a).

The European Union is a relatively small market for Australian sheep meat exports, accounting for about 5 per cent of Australia's export share by volume. Trade is constrained by the country-specific import quota for sheep and goat meat of 19,186 tonnes a calendar year. Australia has almost entirely filled this each year since 2013.

Australia exports sheep and goat meat to the European Union. Over the five years to 2016, 92 per cent of Australia's trade under the quota consisted of sheep meat and 8 per cent goat meat. Lamb accounted for around 70 per cent of the sheep meat exported and mutton the remainder (ABS 2017).

The European Union is a high-value market for sheep meat-exporting countries. For Australian exporters this is reflected in the unit export returns for sheep meat to the European Union (Figure 27). Between 2000–01 and 2015–16, the European Union was Australia's second-highest value market after the United States. Unit export returns (in constant dollar terms) averaged 18 per cent lower than the United States but 23 per cent higher than the average across all markets (ABS 2017).

In 2015–16 the average unit export value for lamb to the European Union was \$8.90 a kilogram compared with an average of \$6.78 a kilogram across all export markets. The average unit export value for mutton to the European Union was \$7.83 a kilogram compared with an average of \$4.65 a kilogram across all of Australia's export destinations (ABS 2017).

Figure 27 Sheep meat, real unit export values, main markets, Australia, 2000–01 to 2015–16

Source: ABS 2017

Conclusion

EU sheep and goat meat imports were limited by a total quota of 286,800 tonnes in 2016. Over the five years to 2016 the utilisation rate averaged only 66 per cent, but quota utilisation differed significantly between supplying countries. Australia almost filled its quota each year over that period, unlike its primary competitors in the EU market.

New Zealand's supply constraints, the limited growth prospects for Argentina's sheep meat exports and Australia's lack of residual quota are likely to restrict any significant growth in EU imports in the short to medium term unless the European Union adjusts quota allocations across sheep-exporting countries. With import demand by the United Kingdom and the Netherlands strengthening since 2012, the combination of these supply and demand factors is expected to put further upward pressure on EU sheep meat prices. If Australia could negotiate improved access to the EU market, Australian sheep meat exporters would benefit not only from the increased volume of trade but from the relatively strong prices for sheep meat in that market.

The Australian sheep meat industry has strong price incentives to seek improved market access to the European Union. Export unit returns for sheep meat to the top five EU importers (the United Kingdom, Belgium, France, Germany and the Netherlands), averaged 34 per cent higher than the EU average over the five years to 2016. However, future trade with the European Union is likely to be influenced heavily by the outcome of Brexit negotiations. The United Kingdom exports a significant volume of sheep meat to the rest of the European Union, so any change to existing trade policies between the two parties could affect import demand by all member states. Future expanded trade with the United Kingdom in its own right could benefit the Australian industry given the United Kingdom's dominant share of total EU sheep meat consumption and imports. But opportunities for Australian sheep meat exporters will be uncertain until the European Union and the United Kingdom have reached agreement on their own post-Brexit arrangements.

References

- ABS 2017, International Trade, Australia: February 2017 [\[unpublished data\]](#), cat. no. 5465.0, Australian Bureau of Statistics, Canberra, accessed 26 April 2017.
- AHDB 2015a, [Cattle and sheep market update](#), Agriculture and Horticulture Development Board, Issue 31, Kenilworth, England, January, accessed 11 January 2017.
- 2015b, [World sheep meat market to 2025](#), Agriculture and Horticulture Development Board, Kenilworth, England.
- Beef+Lamb NZ 2016, [New season outlook 2016–17](#), Beef + Lamb New Zealand, Wellington, September.
- Bertrand, M 2014, [Shepherding Britain’s wool industry towards more ethical pastures](#), *The Guardian*, 4 September.
- Coronato, F, Fasioli, E, Schweitzer, A & Tourrand J-F 2015, [Rethinking the role of sheep in the local development of Patagonia, Argentina](#), *Revue d’élevage et de médecine vétérinaire des pays tropicaux*, vol. 68, no. 2–3, pp. 129–33.
- Department for Environment, Food and Rural Affairs 2013, [Common Agricultural Policy deal struck](#), UK Government, London, 20 March.
- European Commission 2003, [Council Regulation \(EC\) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers and amending Regulations \(EEC\) No 2019/93, \(EC\) No 1452/2001, \(EC\) No 1453/2001, \(EC\) No 1454/2001, \(EC\) 1868/94, \(EC\) No 1251/1999, \(EC\) No 1254/1999, \(EC\) No 1673/2000, \(EEC\) No 2358/71 and \(EC\) No 2529/2001](#), *Official Journal of the European Union*, L270/1, Brussels, 21 October.
- 2011, [Commission Implementing Regulation \(EU\) No. 1354/2011 of 20 December 2011 opening annual Union tariff quotas for sheep, goats, sheepmeat and goatmeat](#), *Official Journal of the European Union*, L338/36, Brussels, 20 December.
- 2013a [Regulation \(EU\) No. 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation \(EC\) No. 637/2008 and Council Regulation \(EC\) No. 73/2009](#), *Official Journal of the European Union*, L347/608, Brussels, 17 December.
- 2015, [Voluntary coupled support—Sectors mostly supported. Notification of decisions taken by Member States by 1 August 2014](#), Brussels.
- 2016a [Direct payments 2015–2020—decisions taken by member states](#), June, Brussels.
- 2016b, [Press Release Database](#), Brussels, accessed 20 January 2017.
- 2017a, [Eurostat](#), Brussels, accessed 16 January 2017.
- 2017b, [Short-term outlook for EU agricultural markets](#), Brussels, accessed 18 April 2017.
- 2017c, [Tariff quota consultation](#), Brussels, accessed 16 January 2017.

FAO 2017, [FAOSTAT](#), Food and Agriculture Organization of the United Nations, Rome, accessed 17 January 2017.

MLA 2017, [EU sheepmeat market snapshot](#), Meat & Livestock Australia, Canberra, February.

Menadue, H & Hart, K 2014, [Member state implementation of the CAP for 2015–2020—a first round-up of what is being discussed](#), *CAP2010*, Institute for European Environmental Policy, London, 16 April, accessed 12 January 2017.

Mullumby, J & Howden, M 2016, 'The EU beef industry', in [Agricultural commodities: December quarter 2016](#), Australian Bureau of Agricultural Resource Economics and Sciences, Canberra.

OECD 2017, [Meat consumption](#), Organisation for Economic Co-operation and Development, accessed 17 January 2017.

Rintoul, J 2010, [Europeans shun wool in favour of meat exports](#), *Farm Weekly*, Victoria Park, Western Australia, 28 May.

UN Statistics Division 2017, [UN Comtrade](#), New York, accessed 23 January 2017.

Williamson, L 2016, 'Recent developments in Argentina's agricultural export policies', in [Agricultural commodities: March quarter 2016](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

WTO 2016, [Tariff download facility](#), World Trade Organization, accessed 13 December 2016.

5 The EU sugar industry

Benjamin K Agbenyegah and Natasha Frawley

The Australian Government and the European Union are expected to commence negotiating an FTA in 2017. The European Union is one of the largest consumers of sugar in the world. Improved access to the EU sugar market could present opportunities to Australian exporters. The EU sugar market is complex and highly regulated, with strict production quotas, support prices and restrictive trade policies. This chapter examines the EU sugar market and the policies that support it, to better understand the opportunities for Australian sugar exporters.

Overview of the EU sugar market

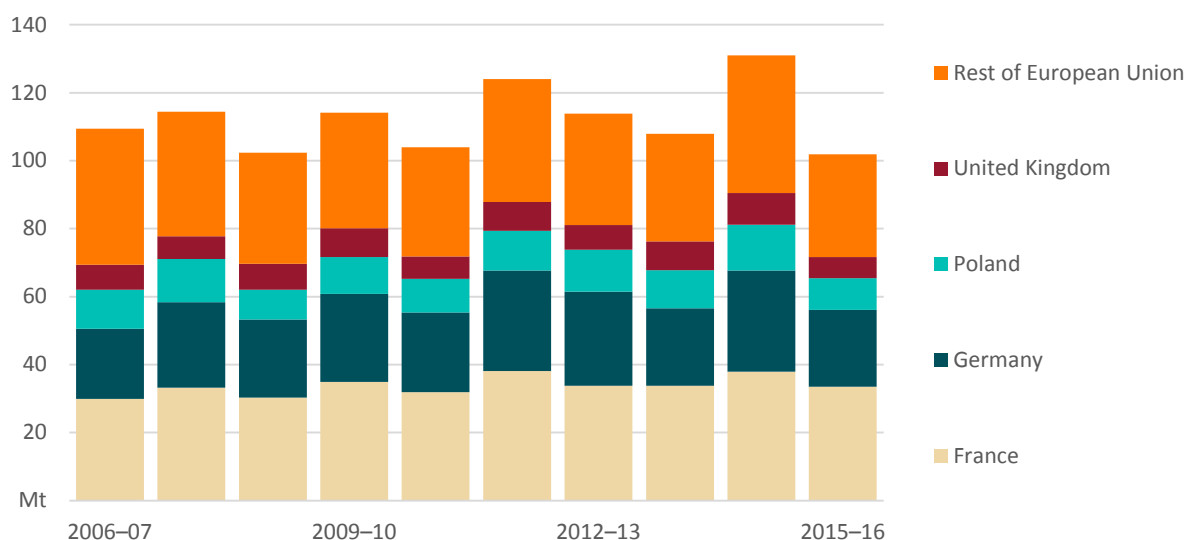
Production of sugar and related products

Sugar production

The European Union is the world's third-largest sugar producer behind Brazil and India. Over three-quarters (80 per cent) of the world's sugar is produced from cane. In contrast, 98 per cent of sugar in the European Union is produced from sugar beet. A small cane sugar-refining industry processes imported raw cane sugar to produce the remaining 2 per cent. In the 10 years to 2015–16, the European Union produced an average of 17.5 million tonnes of sugar a year (ISO 2016, 2017b; USDA–FAS 2017).

The European Union is the world's largest producer of beet sugar, accounting for nearly 50 per cent of global production. Other large producers of beet sugar are the Russian Federation (15 per cent), the United States (13 per cent), Turkey (6 per cent) and Ukraine (4 per cent) (ISO 2016).

Beet sugar is produced from sugar beet, which is grown in 19 EU member states. Together the northern countries of France, Germany, Poland and the United Kingdom produced almost 70 per cent of total EU sugar beet in the 10 years to 2015–16 (Figure 28). The climate in those countries was best suited for sugarbeet production (CEFS 2016; European Commission 2017a).

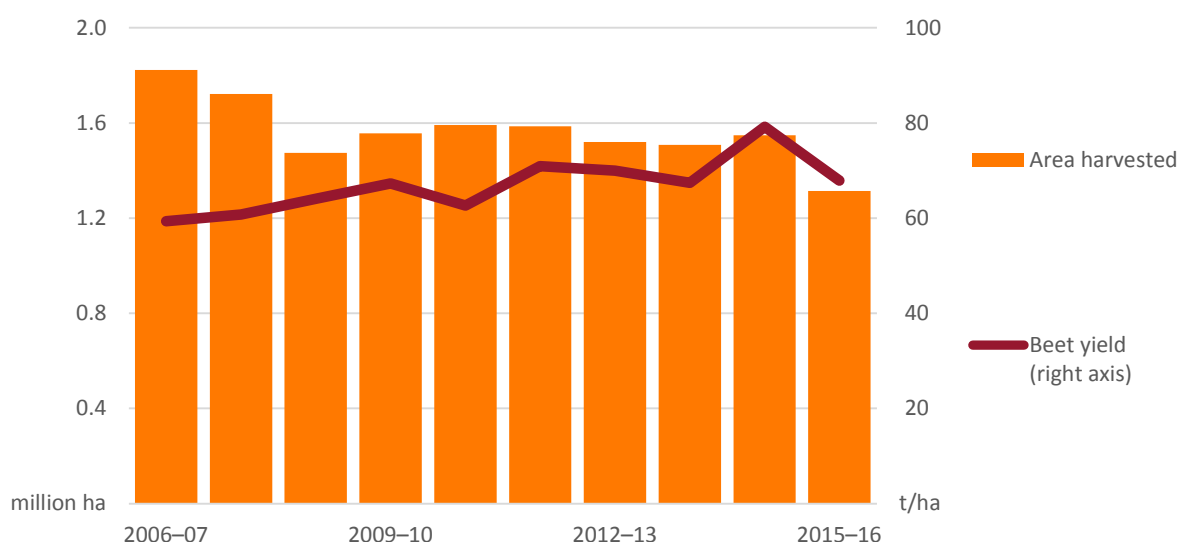
Figure 28 EU sugar beet production, by country, 2006–07 to 2015–16

Note: Data presented in crop year (October to September).

Sources: European Commission 2017a

Area planted to sugar beet declined significantly after 2005–06, with the introduction of EU policies that limited its production (see ‘EU sugar policies’ in this chapter). The beet area harvested fell from 1.8 million hectares in 2006–07 to around 1.3 million hectares in 2015–16 (Figure 29). During this period the industry became more concentrated. The number of beet growers reduced by more than half—from 304,890 to 137,354—but the size of an average beet farm increased from around 7.2 hectares to 10 hectares. At the same time, productivity improved and average beet yields increased by 16 per cent to 67.9 tonnes a hectare (CEFS 2016). Higher beet yields were the result of increased investment in genetic research; more widespread adoption of disease and pest controls; increased mechanisation of various growing and harvesting phases to reduce wastage and soil compaction; and improved seed selection (FAO 2009; Gianessi 2013).

Figure 29 Sugar beet area harvested and average beet yield, European Union, 2006–07 to 2015–16

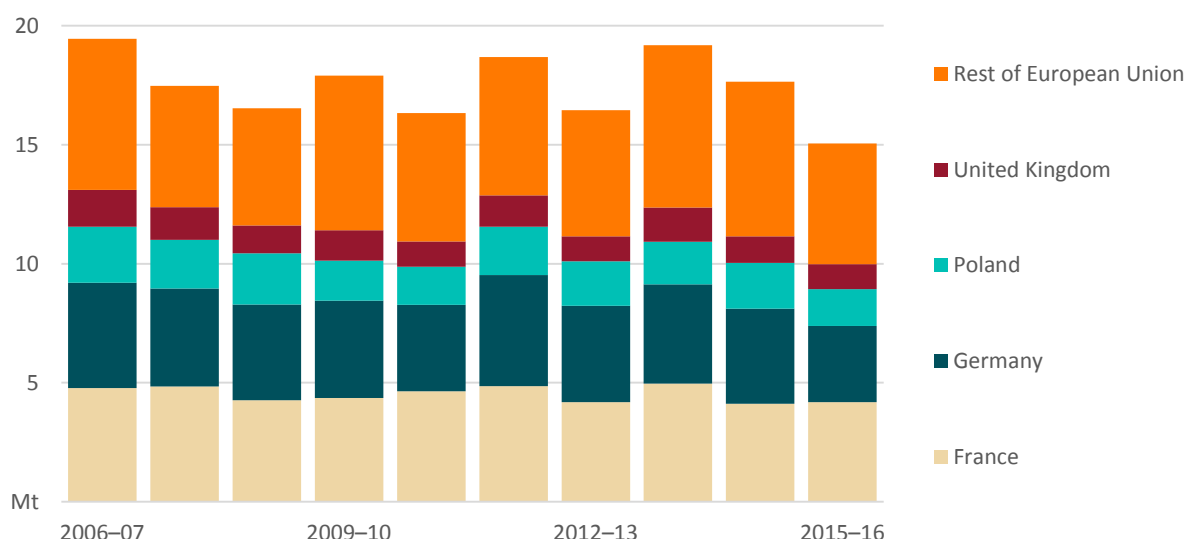


Note: Sugarbeet yield is measured as total beet production divided by area harvested of sugar beet. Data presented in crop-year (October to September).

Sources: CEFS 2016

The four largest sugarbeet-growing countries in the European Union are also the largest sugar producers. Each year between 2006–07 and 2015–16, they produced about two-thirds of the European Union's sugar (Figure 30). France and Germany alone accounted for around 50 per cent (ISO 2017b; USDA–FAS 2017).

Figure 30 EU sugar production, by country, 2006–07 to 2015–16



Note: Production in raw value equivalent. Data presented in crop year (October to September).

Sources: ISO 2017b; USDA–FAS 2017

By-products of sugar cane and beet

The quality of the sugar produced from cane and beet is similar, but the extraction processes for each produces different by-products. Sugarbeet by-products, such as beet pulp and sugarbeet molasses, are generally used in animal feed because they have neither the biomass content nor

the solar conversion efficiency to be used in the industrial sector. Bagasse, a by-product of sugar cane, is used as a biofuel and in the manufacture of pulp and building materials. Molasses is a by-product of both sugar beet and sugar cane. It can be used for human consumption and to produce rum if it is sourced from sugar cane. However, beet molasses is unpalatable for human consumption, so it is used as an additive to animal feed (FAO 2009).

Isoglucose

Isoglucose is an artificial sweetener that is 375 times sweeter than sugar. It is often derived from corn and is known as high-fructose corn syrup. In the European Union, isoglucose is derived from wheat, corn or potato.

The European Union accounts for less than 5 per cent of annual world isoglucose production (OECD 2007). Nine EU countries produce isoglucose. Production is mainly concentrated in Hungary, Belgium and Bulgaria, which have ethanol plants that produce isoglucose for human consumption. In 2015–16 these countries together accounted for around 67 per cent of EU production. Other large producers of isoglucose include Slovakia (9 per cent), Germany (7 per cent) and Spain (7 per cent). Poland, Italy and Portugal produce the remainder (European Commission 2016d; OECD 2007, 2011).

Isoglucose has not competed with sugar for food use in the European Union because domestic production quotas and restrictions on imports limit its availability (see ‘EU sugar trade and trade policy’ in this chapter). However, imminent policy changes are expected to result in increased isoglucose production from 2017–18 (see ‘Recent market and policy developments’ in this chapter) (USDA–FAS 2016).

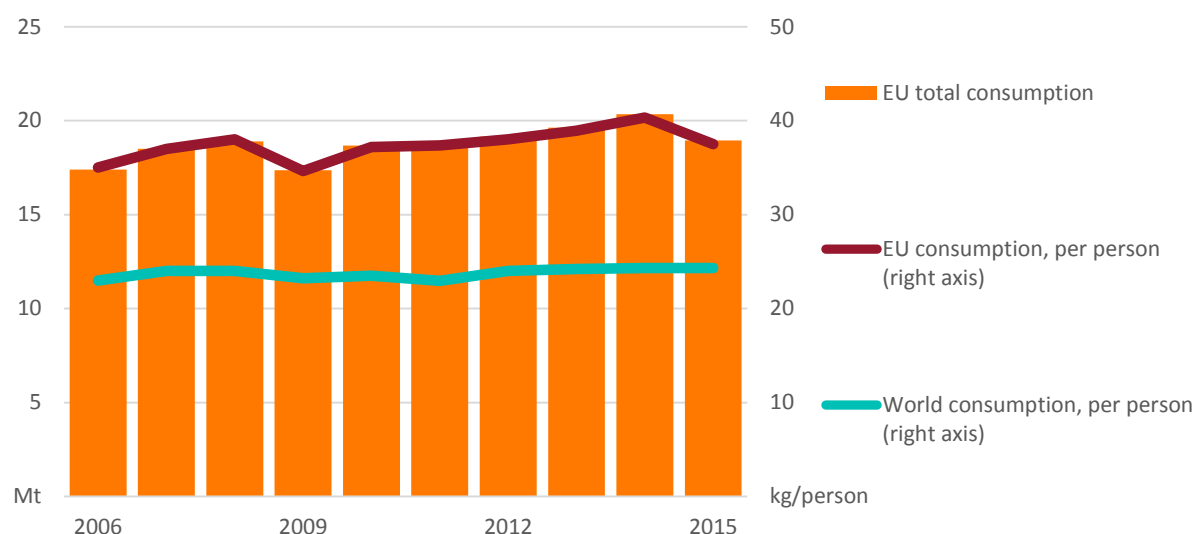
Ethanol

The current regulatory framework for biofuels in the European Union is based on two directives that were adopted in 2009. The directive promoting the use of energy from renewable sources requires that 10 per cent of the energy used in EU transport is to come from renewables by 2020. The EU Fuel Quality Directive 2009/30/EC requires greenhouse gas emissions from transport fuels be reduced by 6 per cent between 2008 and 2020 (UNICA–Apex-Brasil 2017a). Ethanol comprises about a fifth of the EU biofuels market.

The European Union is the fourth-largest ethanol producer in the world behind the United States, Brazil and China. From 2009 to 2015, EU ethanol production increased by more than 60 per cent to 5.8 billion litres. In 2015 less than one-fifth of EU ethanol production was sourced from sugar beet. During the same period, most EU-produced ethanol was sourced from corn (38 per cent) and wheat (37 per cent) (ePURE 2016).

EU sugar consumption

The European Union is the second-largest consumer of sugar in the world behind India and accounted for about 11 per cent of total world consumption in the 10 years to 2015–16. In the 10 years to 2015, EU sugar consumption grew by around 2 per cent a year to around 19 million tonnes (Figure 31). This increase mainly reflected population growth, higher consumer incomes in EU countries and limited availability of alternative sweeteners in the European Union.

Figure 31 EU and world sugar consumption, per person, 2006 to 2015

Note: Consumption in raw value equivalent.

Sources: ABARES; ISO 2013, 2015, 2016, 2017b; United Nations 2015

Consumption of sugar per person in the European Union has remained consistently above the world average since 2000. In 2015 EU sugar consumption was 38 kilograms per person, significantly higher than the world average of 24 kilograms per person (ISO 2012, 2016, 2017a; United Nations 2015). Relatively high sugar consumption is the result of the low availability of alternative sweeteners. The production quota and import restrictions on alternative sweeteners mean the European Union uses fewer of these products in food production than countries such as the United States and Canada, two of the world's largest consumers of isoglucose.

EU sugar policies

The EU sugar market is regulated under the CAP. Until 2006 the policy objectives for the sugar market were to guarantee EU self-sufficiency in sugar and ensure a fair income for growers of sugar beet (Agrosynergie 2011). High import tariffs, restrictive import quotas and export subsidies were the main measures used to protect the industry. Domestically, guaranteed sugarbeet and sugar prices also protected farmers and processors from market variability. These policies did not extend to sugar beet produced for industrial use, which included beet processed into fuel ethanol, rum and yeast.

Until 2006 sugar for food purposes was produced under two quotas (A quota and B quota), which together totalled 17.441 million tonnes (refined sugar equivalent). The two quotas were used to guarantee availability of sugar to the domestic market. The A quota accounted for 82 per cent of the total quota allocation and covered sugar produced for general consumption. B quota accounted for 18 per cent of the production quota. It was used to cover year-to-year variability of sugarbeet production resulting from adverse seasonal conditions or particularly low yields. Sugar beet produced for the A and B quotas was eligible for the guaranteed minimum price. Beet supplied for A quota sugar received a guaranteed minimum price of €46.72 a tonne and beet for B quota received a guaranteed minimum price of €32.42 a tonne.

Beet sugar produced under the A and B quotas was mainly sold domestically and had a guaranteed minimum price of €631.90 a tonne for refined sugar and €523.70 a tonne for raw sugar. Sugar produced within the quotas but in excess of the needs of the domestic market was

eligible for export subsidies. However, these were seldom needed because exports of A quota and B quota sugar were minimal. Sugar produced outside of these two quotas was the main source of EU sugar exports. This sugar could not be sold on the domestic market and was ineligible for the guaranteed minimum price or export subsidies (Elbehri, Umstaetter & Kelch 2008).

In 2004 Australia, Brazil and Thailand filed a complaint to the World Trade Organization (WTO). The complaint accused the European Union of violating its WTO obligations by providing export subsidies for sugar in excess of its WTO export subsidy commitment levels. The European Union was spending more than €1 billion annually on sugar export subsidies, more than double the WTO agreed limit of €499.1 million (DFAT 2005). In 2005 the WTO found that the out-of-quota sugar, the majority of the European Union's sugar exports, was cross-subsidised by sugar produced under the A and B quotas. The WTO ruling required that from 2007 EU sugar exports be limited to the equivalent of 1.35 million tonnes of refined sugar or 1.5 million tonnes raw value equivalent (RVE) per year (Elbehri, Umstaetter & Kelch 2008; USDA–FAS 2016).

2006 sugar reforms

The WTO ruling constrained the European Union's capacity to export excess domestic production. As a result, the European Commission re-evaluated its sugar policies. The EU sugar reforms of 2006 simplified the A and B quotas to a single quota, limiting annual sugar production for food purposes to the equivalent of 13.5 million tonnes of refined sugar (14.7 million tonnes RVE). The quota was allocated across the 19 member states that produce sugar (Table 5) and was phased in over four years from 2006–07 to 2009–10 (Figure 32) (European Commission 2006, 2017b; OECD 2007; Řezbová, Maitah & Sergienko 2015).

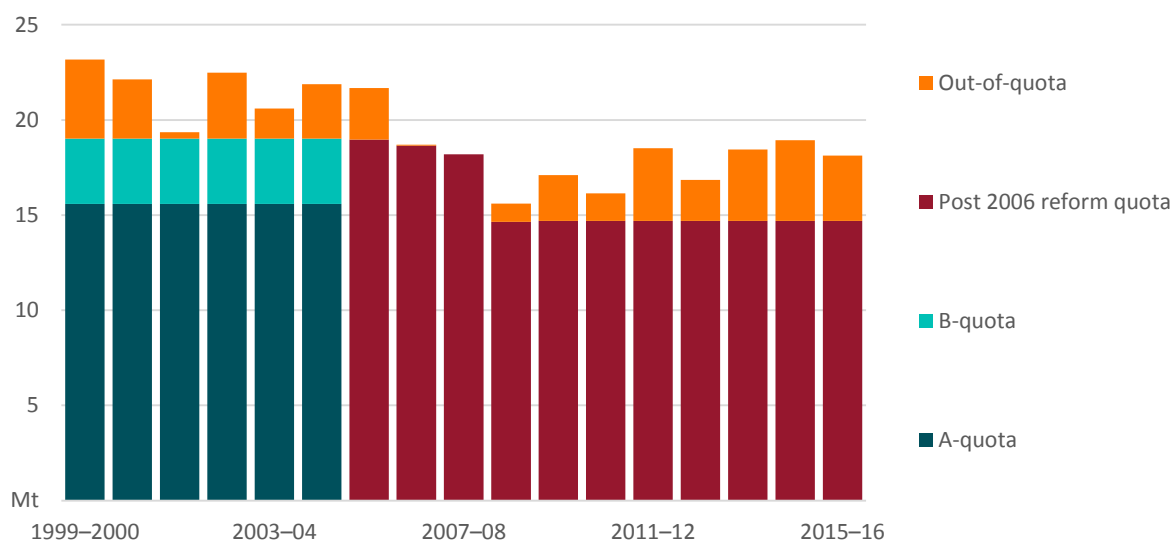
Table 5 Sugar and isoglucose production quotas, by EU member state or region, 2016 and 2017

Member state or region	Sugar (tonnes)	Isoglucose (tonnes)
France (metropolitan)	3,004,811	–
French overseas departments	432,220	–
Germany	2,898,256	56,638
Poland	1,405,608	42,861
United Kingdom	1,056,474	–
Netherlands	804,888	–
Belgium	676,235	114,580
Italy	508,379	32,493
Spain	498,480	53,810
Czech Republic	372,459	–
Denmark	372,383	–
Austria	351,027	–
Sweden	293,186	–
Croatia	192,877	–
Greece	158,702	–
Slovakia	112,320	68,095
Hungary	105,420	220,266
Romania	104,689	–
Lithuania	90,252	–
Finland	80,999	–
Portugal (mainland)	–	12,500
Portugal—Autonomous Region of the Azores	9,953	–
Bulgaria	–	89,198
TOTAL	13,529,618	690,441

Note: Sugar quotas in refined sugar equivalent.

Source: European Commission 2009a, 2013c

Figure 32 EU sugar production, by quota type, 1999–2000 to 2015–16



Note: Production in raw value equivalent.

Sources: Agrosynergie 2011; European Commission 2006, 2016d, 2017b

Isoglucose production quotas were amended alongside the 2006 sugar reforms. Production quotas were increased from 507,681 tonnes in 2006–07 to 690,441 tonnes in 2009–10, for the 27 countries in the European Union at that time. Some of this increase was because Bulgaria (a large isoglucose producer) and Romania joined the European Union in 2007.

Over the same period, the European Commission also steadily reduced the guaranteed minimum beet price by around 40 per cent to €26.29 a tonne and the sugar price by 36 per cent to €404.40 a tonne (refined sugar equivalent). It also introduced compensation to farmers for loss of income and designed a restructuring fund. The fund was created to encourage uncompetitive sugar producers to leave the sector or diversify to other commodities. Under the fund, the European Commission bought quota from sugar processors and provided payments to encourage factory closures (Elbehri, Umstaetter & Kelch 2008; USDA–ERS 2016).

In December 2015 more than 160 WTO member countries agreed to eliminate export subsidies. Developed countries, including those in the European Union, agreed to eliminate export subsidies immediately. Developing countries agreed to eliminate export subsidies by the end of 2018 (WTO 2015).

Until October 2017 (see ‘Recent market and policy developments’) the European Commission will continue to set sugar and isoglucose production quotas, which includes a small quota for cane sugar production in overseas territories, such as the Azores (an autonomous region of Portugal) and French overseas departments (Table 5). Out-of-quota sugar production is either:

- exported, pending availability of EU export licences and up to the WTO-imposed export ceiling
- disposed of through non-food uses, including for bio-ethanol production
- released on the domestic market with a €500 a tonne levy

or

- carried over into the following production year (European Commission 2013b; USDA–FAS 2016).

Support for beet and sugar producers

In addition to guaranteed minimum beet prices, most sugarbeet farmers from the larger producing member states receive income support through the CAP direct payment system. These payments are not dependent on annual sugarbeet production but do require that farmers be actively engaged in agricultural activity on their land (European Commission 2016a).

Individual member states have flexibility in how income support is implemented. As a result, some of the newer EU member states or smaller beet-producing countries, including Poland, Spain and the Czech Republic, tie support to production. This is used to create incentives to maintain production and protect their national industries (European Commission 2016a).

The European Commission can also intervene in the sugar market by providing support for PSA. PSA has not been used for sugar since it was introduced in 2006. However, the European Commission can activate PSA for domestically produced refined sugar if certain market conditions prevail—for example, if the average EU market price for sugar falls below the European Commission’s reference price, if producers’ costs increase significantly or if any other difficult market situation significantly affects margins. PSA can be activated across the European Union as a whole if the average market price falls below 85 per cent of the reference price and is expected to remain below that level for two months. It can also be activated in a single member state if the local market price falls or is expected to fall below 80 per cent of the reference price. If PSA is activated, the domestically produced sugar remains in private ownership and the owner receives support to cover storage costs for a specified period. The EU reference price is currently €404.40 a tonne for refined sugar (Agrosynergie 2011; European Commission 2017b).

Recent market and policy developments

In its CAP reforms of 2013, the European Commission agreed to abolish sugar and isoglucose production quotas and the guaranteed minimum beet and beet sugar prices from 1 October 2017. Until then, sugar and isoglucose production quotas will remain at around the allocated volumes of the 2010–11 marketing year. When the support for the domestic sugar industry is removed, EU sugar exports will no longer be restricted by the WTO-imposed export quota (European Commission 2013a, b, c; UNICA–Apex-Brasil 2017b).

The European Commission will continue to support sugarbeet and sugar producers under the new regime if downturns in the market occur. For example, it will still be possible to make use of PSA intervention if the domestic refined sugar price falls significantly below the reference price. The reference price will remain unchanged after September 2017 (European Commission 2013a, b, c).

The longer-term effect of the removal of the EU quota system on sugarbeet production after September 2017 is uncertain. Sugarbeet planting in member states with more efficient production systems, including France and Germany, is expected to increase but the extent of the increase will depend on world sugar prices. The potential effect of the quota removal on smaller producers is uncertain (ISO 2014a).

EU isoglucose production is expected to increase significantly following the removal of quotas in 2017 because it is generally cheaper to produce than beet or cane sugar (ISO 2014a). Increased isoglucose production in the European Union is expected to displace some demand for beet sugar, but the impact on overall beet production is unclear. New production facilities are likely

to be operating in 2017 and production is expected to more than double by 2026, growing to represent 10 per cent of the sweetener market (European Commission 2016b).

The effect of the abolition of the sugar quota in 2017 on ethanol production from sugar beet will depend on changes to EU policy and the world price of oil. The oil price is expected to recover in the five years to 2021, lending support to increased world demand for ethanol in the medium term (Martin 2017). World sugar prices are also expected to increase over the medium term, so EU sugarbeet planting is likely to rise. Industrial sugarbeet prices are also expected to rise over this period. This will decrease beet's competitiveness as an ethanol feedstock compared with maize and wheat, which would put downward pressure on the volume of beet used in ethanol production (European Commission 2016b).

Box 5 UK sugar industry

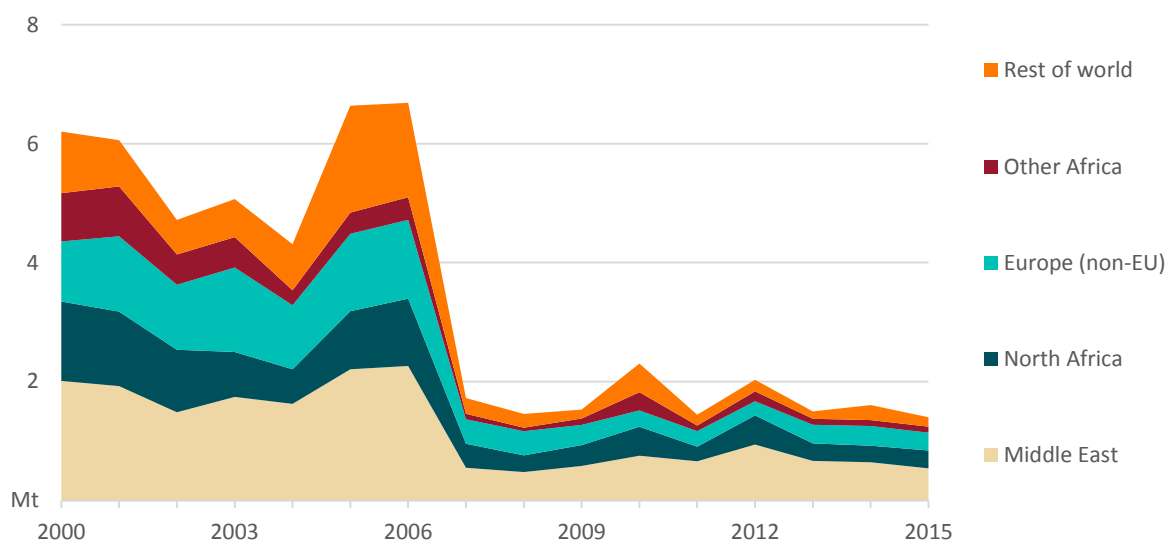
The sugar industry in the United Kingdom consists of beet sugar production and cane sugar refining. In 2015–16 the United Kingdom was the fourth-largest sugar producer in the European Union—behind France, Germany and Poland. It produced around 7 per cent of total EU sugar. The United Kingdom was the third-largest consumer of sugar behind France and Germany (13 per cent of EU consumption), the seventh-largest sugar exporter (7.2 per cent of total EU sugar exports by volume) and the fifth-largest sugar importer (9.4 per cent of total EU sugar imports by volume) (European Commission 2017a; ISO 2017b).

In 2015–16 only four of the 109 EU sugarbeet-processing factories were in the United Kingdom. UK processing factories are more productive than many other EU sugar producers because of their higher processing capacity. However, France and Germany have significantly more factories (France 25 and Germany 20) and the majority also have high processing capacity (CEFS 2016).

Refined sugar from cane only represents 2 per cent of EU sugar production. The United Kingdom is the largest refiner of cane sugar in the European Union. In 2015–16 the United Kingdom imported 22 per cent of all EU raw sugar imports for refining (Agritrade 2014; European Commission 2017a).

EU sugar trade and trade policy

Between 2000 and 2006 the European Union was the second-largest exporter of sugar in the world behind Brazil. It exported an average of 5.7 million tonnes of sugar a year (RVE) to countries mainly in the Middle East, North Africa and non-EU Europe (Figure 33). Its largest markets were Algeria, Syria, Israel, Switzerland and Norway (ISO 2011).

Figure 33 EU sugar exports, by destination, 2000 to 2015

Note: Exports in raw value equivalent. Under exceptional circumstances, a small volume of sugar can be exported from the European Union over the export limit (European Commission 2010).

Sources: ISO 2011, 2012, 2013, 2014b, 2015, 2016, 2017a

Rising consumption, the stricter limits on production and the 2005 WTO ruling that resulted in export-limiting quotas led to the European Union becoming a net sugar importer rather than a net sugar exporter. In 2015–16 it contributed only 2.3 per cent to world sugar exports but imported 6.7 per cent of the world's traded sugar (ISO 2017b).

Despite EU production quotas largely meeting domestic sugar demand, in 2015–16 the European Union was the second-largest sugar importer behind China. The European Union generally imports raw cane sugar that is processed by its small refining industry. Most of this imported raw cane sugar (73 per cent) was from least developed countries (LDCs) and those in the African, Caribbean and Pacific (ACP) group (ISO 2017a, b).

EU trade policies

The European Union operates a system of tariffs and restrictive quotas to control imports of sugar. Sugar imports from countries that are not party to a preferential trade agreement with the European Union are subject to prohibitive MFN tariffs of €339 a tonne for raw cane sugar for refining and €419 a tonne for refined sugar. Almost all countries with preferential access are subject to TRQs, with country-specific import quotas, reduced tariff or tariff-free in-quota access and a prohibitive out-of-quota tariff equal to the MFN tariff (Table 6) (European Commission 2017c; Unica–Apex-Brasil 2017b).

Table 6 EU import arrangements for raw sugar, 2016–17 and 2017

Countries or regions	Quota level (tonnes)	In-quota tariff rate (€ per tonne)	Out-of-quota tariff rate (€ per tonne)
Most-favoured nation tariff rate	na	na	339
African, Caribbean and Pacific and least developed countries	unlimited	0	na
CXL total a	676,925	–	–
– Brazil a	334,054	98	339
– Cuba a	68,969	98	339
– India a	10,000	0	339
– Australia a	9,925	98	339
– any third country a	253,977	98	339
Balkan total ab	201,000	–	–
– Serbia and Kosovo ab	181,000	0	339
– Bosnia and Herzegovina ab	12,000	0	339
– former Yugoslav Republic of Macedonia ab	7,000	0	339
– Albania ab	1,000	0	339
Moldova c	37,400	0	339
Ukraine c	20,070	0	339
Peru bc	24,640	0	339
Colombia bc	69,440	0	339
Central America (excluding Panama) bc	168,000	0	339
Panama bc	13,440	0	339

a Quota for marketing year (October to September). **b** Quota includes isoglucose. **c** Quota for calendar year. **na** Not applicable.

Note: Sugar quota in ‘tel quel’—the weight of sugar regardless of polarisation (100 tonnes tel quel of raw sugar is estimated to equal about 106 tonnes raw value equivalent). Quota can also include refined sugar.

Sources: European Commission 2009b, 2012a, b, 2014a, b, 2017d; USDA–FAS 2016

Isoglucose imports from countries without a preferential agreement with the European Union attract a tariff of €507 a tonne. In 2015–16 the European Union imported 23,460 tonnes of isoglucose and exported 75,803 tonnes (European Commission 2016d, 2017c).

Existing trade agreements

As at June 2017 the European Union does not have FTAs with any major sugar exporters, such as Brazil, Thailand or Australia. However, it provides several countries with preferential access under different arrangements. Most countries and regions are subject to TRQs. ACP countries and LDCs are the only groups of countries that have unlimited access to the EU market (European Commission 2017b).

The European Union has several preferential trade agreements with countries and regions that export isoglucose. These agreements provide unlimited tariff-free access to LDCs, ACP countries, Andorra, Georgia, Jordan, Lebanon, Moldova, the Republic of Korea and San Marino. Central America, Peru, Ukraine and the non-EU Balkan countries have access to tariff-free quotas (European Commission 2017d; Informa Agra 2016b).

Economic partnership agreements and the Everything-But-Arms initiative

Economic partnership agreements (EPAs) are aimed at improving regional integration and economic development in ACP countries, most of which were former colonies of EU member states. The EU-led Everything-But-Arms initiative (EBA) allows almost unlimited, tariff-free access to all non-armament imports into the European Union from LDCs. In 2015–16 import licences were granted for around 1.6 million tonnes of sugar under the EPA and EBA agreements. This was about 40 per cent higher than the volume granted under other EU sugar-preferential agreements over the same period (Informa Agra 2016a; USDA–FAS 2016).

CXL quota and tariff

As the number of EU member states has grown, countries that had exported raw sugar to the newest member states were given preferential access to the European Union's sugar import quota (Table 6). This preferential treatment was designed to help compensate those exporting countries that would have lost access to the EU market when new member states joined the European Union.

The quota and associated tariff are known as the CXL quota and CXL tariff. The total CXL quota is 0.68 million tonnes a year and the in-quota tariff is €98 a tonne. The exception is India, which has tariff-free in-quota access. Around 30 per cent of sugar imported by the European Union is through CXL agreements (European Commission 2009b; Informa Agra 2016b).

Australia has the smallest country-specific CXL quota at 9,925 tonnes for each marketing year (October to September). Australia usually fills its quota but does not often export additional sugar to the European Union because of the prohibitive out-of-quota tariff. EU imports through the CXL quota depend on demand by refiners for raw sugar. Australian sugar cannot easily compete with what is available locally or imports from countries with tariff-free access. For example, in 2014–15 the world and EU sugar prices were low. As a result, the European Union did not issue import licences for Australian sugar because it was cheaper for EU refiners to source the product from other countries with better market access arrangements. However, expected higher market prices in 2015–16 led the European Union to issue import licences for Australia's entire CXL quota in the first month of the marketing year. This gave Australian exporters the right to export the quota volume over the following 12 months as stronger prices prevailed (ABS 2017; Informa Agra 2015a, b).

Association agreements with Western Balkan countries, Moldova and Ukraine

Several non-EU Western Balkan countries (Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo and Serbia) have association agreements with the European Union that provide tariff-free quota access for sugar and isoglucose (Table 6). The agreements came into force between 2004 and 2013 and are aimed at establishing a free trade area between the European Union and the Western Balkans. Balkan quotas are for sugar and isoglucose imports combined (European Commission 2017f).

In 2014 Moldova and Ukraine each signed association agreements with the European Union. In these agreements, Moldova received tariff-free access for 37,400 tonnes of sugar and Ukraine for 20,070 tonnes a year. Ukraine also has access to a 12,000-tonne tariff-free quota for isoglucose. EU imports of isoglucose from Moldova are quota- and tariff-free (European Commission 2014a, b, 2017d).

EU–Central America association agreement

The Central American countries of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama have had an association agreement with the European Union since 2013. These quotas are for sugar and isoglucose imports combined. Under this agreement, Panama's country-specific tariff-free quota was 13,440 tonnes of raw sugar (or equivalent) in 2017. The tariff-free quota increases annually by 360 tonnes. The other countries party to the agreement have a combined tariff-free quota of 168,000 tonnes in 2017, which increases annually by 4,500 tonnes (European Commission 2012a). Since the agreement entered into force in 2013, EU sugar imports from the region have increased to meet the quota (ISO 2017a).

EU–Colombia and Peru trade agreement

A trade agreement between the European Union and Colombia and Peru entered into force in 2013. These quotas are for sugar and isoglucose imports combined. Under this agreement, Colombia and Peru gained tariff-free access for 69,440 tonnes and 24,640 tonnes of raw sugar (or equivalent) respectively in 2017. Colombia's quota increases annually by 1,860 tonnes and Peru's by 660 tonnes (European Commission 2012b).

Prospective trade agreements

EU–Southern African Development Community Economic Partnership Agreement

The EU–SADC EPA was signed by the SADC and the European Union in June 2016. The EU–SADC EPA must be ratified by the European Parliament, the 28 EU member states and SADC group countries before coming into force. It is uncertain when this ratification process will be completed.

Under the EU–SADC EPA, Botswana, Lesotho, Mozambique, Namibia and Swaziland will receive permanent, unlimited tariff-free access to the EU sugar market. South Africa will be able to export 150,000 tonnes a year tariff-free. Total sugar exports from these countries combined totalled only a little over 1 million tonnes in 2015 (Informa Agra 2016c; ISO 2017a).

EU–Mercosur free trade agreement

Mercosur is a South American subregional customs union of Argentina, Brazil, Paraguay, Uruguay and Venezuela. An EU–Mercosur FTA is under negotiation, with preliminary market access offers exchange in May 2016. The offer made by the European Union excluded both sugar and ethanol (European Commission 2016c; UNICA 2016).

Despite the European Union excluding sugar from negotiations to date, it does import sugar from Brazil under the CXL quota. In 2015, 232,951 tonnes of sugar were imported from Brazil, accounting for 7 per cent of total EU sugar imports in that year (ISO 2017a).

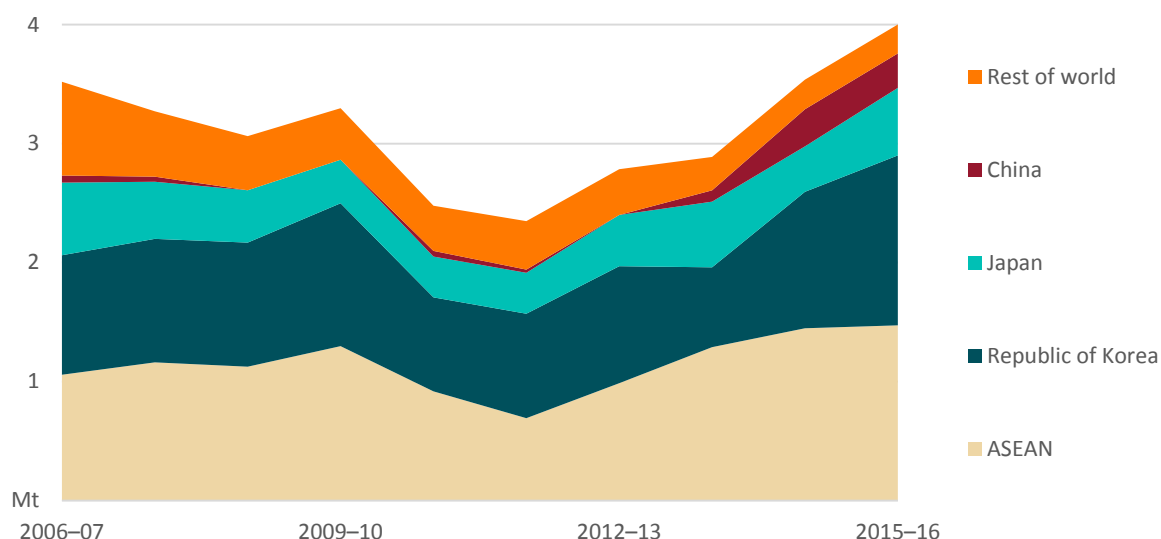
EU–Thailand free trade agreement

Negotiations for the EU–Thailand FTA were formally launched on 6 March 2013. Thailand is the second-largest sugar exporter in the world. However, the European Union only imported 9,802 tonnes of sugar from Thailand in 2015, accounting for around 0.3 per cent of its total sugar imports in that year (European Commission 2017e; ISO 2017b).

Overview of Australia–EU sugar trade

In the 10 years to 2015–16, Australia exported around 75 per cent of its sugar production. Around 90 per cent of sugar exports were destined for Asian markets. Australia's biggest export markets, including the ASEAN economies, the Republic of Korea, Japan and China, are all parties to FTAs (Figure 34).

Figure 34 Australian sugar export volumes, by destination, 2006–07 to 2015–16



Note: Exports are raw bulk exports. Refined exports are not available by destination country.

Source: ABS 2017

Recent trade agreements with the Republic of Korea (KAFTA) and Japan (JAEPA) improved access for Australian sugar to those markets. Under KAFTA the 3 per cent tariff on raw sugar was eliminated and the 35 per cent tariff on refined sugar will be phased out by 2031. Under JAEPA the 21.5 yen a kilogram tariff on high-polarity raw sugar was eliminated and the domestic levy was reduced on commencement of the agreement. The China–Australia FTA does not have concessions for sugar. However, China is a growing market for Australia's sugar exporters given its expanding food manufacturing industry (ABS 2017; Hyde 2015).

From 2006–07 to 2015–16, Australia exported only small quantities of sugar to the European Union under the restrictive CXL quota. Australian sugar exports to the European Union totalled 101,538 tonnes over the 10-year period and were valued at \$63.8 million (in 2016–17 dollars). This is equivalent to approximately 0.4 per cent of the total value of Australia's sugar exports during that period (ABS 2017).

Australia does not import sugar from the European Union. Until 2008 Australia imported very little sugar overall, usually less than 10,000 tonnes a year. Sugar imports increased from around 43,000 tonnes in 2009 to 141,000 tonnes in 2015 and were sourced mainly from Thailand (38 per cent), Brazil (18 per cent), Malaysia (16 per cent) and South Africa (10 per cent). The remainder came mainly from Central America, Mexico and China.

Export growth during the 2000s was affected by domestic production constraints, including the millennium drought, which limited the water available for sugarcane cultivation. Despite improved access to the sugar markets of the Republic of Korea and Japan, future growth in Australian sugar exports is expected to continue to be challenged by land and water availability.

Conclusion

The European Union will remove production quotas for beet sugar and isoglucose, and support pricing for sugar beet and beet sugar from 1 October 2017. The potential effects of this significant policy change on total EU beet sugar production are uncertain. Higher sugarbeet plantings in the larger and more efficient sugar-producing countries are expected, but plantings in smaller producing countries and by less-efficient producers will be more vulnerable to downward movements in the domestic market price. This could come from an increase in the supply of beets from the major EU producers or from the expected increase in the production of isoglucose, which may put downward pressure on demand for sugar by the food manufacturing sector as it substitutes towards the lower-cost input. However, with EU exports no longer constrained by the 2005 WTO ruling, new export opportunities for EU sugar could lend support to the EU beet sugar industry.

Australia's access to the European Union is constrained by its CXL quota, which is among the lowest country-specific quotas granted to those with preferential access to the European Union. In addition, unlike India's tariff-free in-quota access, the Australian CXL quota is subject to a €98 a tonne in-quota tariff. Many preferential sugar arrangements negotiated by the European Union have been based on historical relationships. However, recent trade agreements with some Central and South American countries have given them larger quota access for raw cane sugar than Australia receives. These agreements have also provided tariff-free access and quotas that increase annually.

Despite the CXL in-quota tariff, Australia continues to export sugar to the European Union. Any improved access to the EU market, either through a larger or increasing quota or through lower tariffs, would improve that competitiveness. The majority of Australia's sugar exports are currently destined for Asian markets, but improved access to the European Union—the second-largest sugar-consuming market in the world—would broaden opportunities for Australian sugar exporters.

References

- ABS 2017, International trade, Australia: February 2017 [unpublished data], cat. no. 5465.0, Australian Bureau of Statistics, Canberra, accessed 4 April 2017.
- Agritrade 2014, [Tate & Lyle/American Sugar Refining—corporate profile](#), Technical Centre for Agricultural and Rural Cooperation ACP–EU (CTA), Brussels, 23 July.
- Agrosynergie 2011, [Evaluation of CAP measures applied to the sugar sector](#), report for the Directorate-General for Agriculture and Rural Development, European Commission, Framework contract no. 30-CE-0309243/00-66, December.
- CEFS 2016, [CEFS sugar statistics 2016](#), Comité Européen des Fabricants de Sucre, European Association of Sugar Producers, Brussels.
- DFAT 2005, [European communities—export subsidies on sugar: frequently asked questions](#), World Trade Organization dispute settlement, Department of Foreign Affairs and Trade, Canberra, 5 December.
- Elbehri, A, Umstaetter, J & Kelch, D 2008, [The EU sugar policy regime and implications of reform](#), Economic Research Service, US Department of Agriculture, Washington DC, July.
- ePURE 2016, [European renewable ethanol—key figures 2015](#), European renewable ethanol, Brussels.
- European Commission 2006, [Common organisation of the sugar market](#), Summaries of EU legislation, Brussels.
- 2009a, [Commission Regulation \(EC\) No. 183/2009 of 6 March 2009 amending Annex VI to Council Regulation \(EC\) No. 1234/2007 as regards the adjustment of the quotas for the 2009/2010 marketing year in the sugar sector](#), *Official Journal of the European Union*, L63/9, 6 March, Brussels.
- 2009b, [Commission Regulation \(EC\) No. 891/2009 of 25 September 2009 opening and providing for the administration of certain community tariff quotas in the sugar sector](#), *Official Journal of the European Union*, L254/82, 25 September, Brussels.
- 2010, [Commission proposes additional export of out-of-quota sugar in 2009–2010 due to exceptional market situation. No final quota cut for EU producers](#), Press Release Database, IP/10/59, 27 January, Brussels.
- 2012a, [EU–Central America association agreement](#), Brussels.
- 2012b, [Trade agreement between the European Union and Colombia and Peru](#), Brussels.
- 2013a, [CAP reform—an explanation of the main elements](#), Brussels, 26 June.
- 2013b, [Reform of the Common Agricultural Policy \(CAP\): political agreement reached on last remaining points](#), Brussels, 24 September.
- 2013c, [Regulation \(EU\) No. 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations \(EEC\) No. 922/72, \(EEC\) No. 234/79, \(EC\) No. 1037/2001 and \(EC\) No. 1234/2007](#), *Official Journal of the European Union*, L347/671, 17 December, Brussels.

- 2014a, [Association agreement between the European Union and its member states, of the one part, and Ukraine, of the other part](#), *Official Journal of the European Union*, L161/3, May.
- 2014b, [Association agreement between the European Union and the European Atomic Energy Community and their member states, of the one part, and the Republic of Moldova, of the other part](#), *Official Journal of the European Union*, L260, 30 August, vol. 57.
- 2016a, [Direct payments](#), Agriculture and rural development, Brussels.
- 2016b, [EU Agricultural outlook: prospects for EU agricultural markets and income 2016–2026](#), Agriculture and Rural Development, December, Brussels, December.
- 2016c, [Mercosur–EU joint communique](#), Trade, Brussels, 23 June.
- 2016d, [Sugar and isoglucose balance sheets](#), Committee for the Common Organisation of Agricultural Markets, Brussels, 22 December.
- 2017a, [Eurostat](#), Brussels, accessed 4 April 2017.
- 2017b, [Sugar](#), Agriculture and rural development, Brussels, accessed 4 April 2017.
- 2017c, [Sugar trade statistics](#), Committee for the Common Organisation of Agricultural Markets, 30 May, Brussels.
- 2017d, [TARIC](#), Brussels, accessed 4 April 2017.
- 2017e, [Thailand](#), Countries and regions, Brussels, accessed 4 April 2017.
- 2017f, [Western Balkans](#), Countries and regions, Brussels, accessed 4 April 2017.
- FAO 2009, [Agribusiness handbook: sugar beet, white sugar](#), Food and Agricultural Organization of the United Nations, Rome.
- Gianessi, L 2013, [Highest sugar beet yields ever in the UK thanks to new fungicides](#), *International Pesticide Benefits Case Study* no. 100, 1 December, Washington, DC.
- Hyde M 2015, 'Key agricultural outcomes of recent free trade agreements', in [Agricultural commodities: March quarter 2015](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
- Informa Agra 2015a, [European Union—expectations of higher prices push up interest for import licences](#), *International Sugar & Sweetener Report—FO Licht*, 2 October.
- 2015b, [European Union—preferential EPA/EBA sugar imports—September 18, 2015](#), *International Sugar & Sweetener Report—FO Licht*, 18 September.
- 2016a, [European Union - No further CXL licences awarded in September](#), *International Sugar & Sweetener Report—FO Licht*, 26 September.
- 2016b, [EU sugar supply is tightening](#), *International Sugar & Sweetener Report—FO Licht*, 17 February.
- 2016c, [International—EU/SADC EPA to come into force](#), *International Sugar & Sweetener Report—FO Licht*, 7 June.
- ISO 2011, *Sugar Yearbook 2011*, International Sugar Organization, London.

- 2012, *Sugar Yearbook 2012*, International Sugar Organization, London.
- 2013, *Sugar Yearbook 2013*, International Sugar Organization, London.
- 2014a, MECAS (14)05, *The EU sugar market post 2017*, London, May.
- 2014b, *Sugar Yearbook 2014*, International Sugar Organization, London.
- 2015, [Sugar Yearbook 2015](#), International Sugar Organization, London.
- 2016, [Sugar Yearbook 2016](#), International Sugar Organization, London.
- 2017a, *Statistical bulletin*, International Sugar Organization, London, February.
- 2017b, *World sugar balances 2003/04 - 2016/17*, International Sugar Organization, London, February.
- Martin, K 2017, 'Oil', in [Resources and Energy Quarterly](#), March 2017, Department of Industry, Innovation and Science.
- OECD 2007, [Sugar policy reform in the European Union and in world sugar markets](#), Organisation for Economic Co-operation and Development, OECD Publishing, Paris.
- 2011, [Disaggregated impacts of CAP reforms: proceedings of an OECD workshop](#), OECD Publishing, Paris.
- Řezbová, H, Maitah, M & Sergienko, OI 2015, [EU quota sugar market concentration—the main drivers of EU sugar market](#), *Agris on-line Papers in Economics and Informatics*, vol. 7, no. 4, pp. 131–42.
- UNICA 2016, [UNICA's position paper on Mercosur–EU trade negotiations](#), UNICA position papers, Brazilian Sugarcane Industry Association (UNICA), São Paulo, May.
- UNICA–Apex-Brasil 2017a, [EU ethanol policy](#), São Paulo, accessed 4 April 2017.
- 2017b, [EU sugar policy](#), São Paulo, accessed 4 April 2017.
- United Nations 2015, [World population prospects: the 2015 revision](#), DVD edition, Department of Economic and Social Affairs, Population Division, New York.
- USDA–ERS 2016, [Common Agricultural Policy](#), European Union, Economic Research Service, US Department of Agriculture, Washington, DC.
- USDA–FAS 2016, [EU 28—Sugar annual \(pdf 0.8mb\)](#), *GAIN report*, no. E16020, 25 April, Foreign Agricultural Service, US Department of Agriculture, Washington, DC.
- 2017, [Production, supply and distribution online](#), Foreign Agricultural Service, US Department of Agriculture, Washington, DC, accessed 4 April 2017.
- WTO 2015, [WTO members secure 'historic' Nairobi Package for Africa and the world](#), WTO: 2015 news items, Geneva, 19 December.