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The Australia–Chile Free Trade Agreement and prospects for trade in fresh fruit: the cherry industry

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Abstract

Australia has reduced its international trade barriers by signing Free Trade Agreements (FTAs). These FTAs have brought benefits to some sectors of the economy, along with threats to some firms in local industries. The recent FTA between Australia and Chile has focused attention on the competitiveness of the Australian fruit industry, because of significant differences in costs of production in the two countries. In this paper the forces promoting and resisting the importation of fresh fruit, including cherries, into Australia from Chile are discussed. Both countries enjoy similar natural conditions to produce cherries and counter-seasonal competitive advantages to export to a range of countries. As well, the strong Australian domestic demand for fresh fruit could encourage Chilean exporters to access Australian markets. At the same time, phytosanitary requirements remain an obstacle to Chilean imports of cherries to Australia.

Key words: free trade agreements; bilateral trade; competitive advantage; production costs; cherry industry, force field analysis.

Introduction

Australia has reduced many of its trade barriers since the early 1970's and has removed the main assistance measures in agricultural and manufacturing industries, allowing imported goods to compete in the local markets (Connolly and Lewis 2010). Australia has sought also to establish ties through Free Trade Agreements (FTAs) with strategic partners, particularly in the Asia-Pacific region (Priestley 2008).

Following a similar open policy, Chile has signed multiple economic agreements and has developed new markets for many of its products. In 2008, Australia and Chile signed a comprehensive FTA that removed around 97% of the then current tariffs attached to the bilateral trade (Parliament of Australia Joint Standing Committee (PAJSC) 2008a). Although the FTA is likely to benefit the Australian services and mining sectors it poses a potential threat to parts of the Australian fruit industry. Exchange rates will play a role in this too. At the same time, the FTA creates opportunities for the Chilean fruit industry. Given the relatively lower costs of fruit production in Chile, the entrance of lower priced fruit during the local productive season has become a concern to Australian growers (Forrest 2008; Horticulture Australia Limited (HAL) 2008). The agreement, on the other hand, provides more supply alternatives to distribution channels such as supermarkets, giving them more bargaining power in relation to local producers. The main supermarket chains in Australia readily seek and obtain the cheapest sources of seasonal produce from overseas countries (White 2008).

But, how significant is this threat? Are Australian growers likely to be affected by this competition? Will Chilean exporters be able to gain access and compete in this new market? In this paper both the Chilean and Australian fruit industries are analysed to better understand the potential consequences that the entrance of lower priced Chilean fruit might cause to Australian producers. The fresh cherry industry is used as a case study.

The aims in this paper are to:

- (i) describe the international trade policies followed by Australia and Chile;
- (ii) compare elements of agriculture and horticulture in these two countries; and
- (iii) analyse and comment on prospects for fresh fruit commerce between Australia and Chile with specific reference to cherries.

The analysis of the influences most likely to affect future trade patterns between Australia and Chile is carried out using a Force Field Analysis model which describes the forces either maintaining the *status quo* (inertia) or leading to transformations within any organisation or industry (Thomas 1985).

Background

International trade policy

During the last two decades, globalisation has resulted in increasing connections of all economies. Significant efforts have been made to reach economic understandings and to reduce international trade barriers (Urata 2002). A fundamental step to initiate the multilateral dialogue among countries was the creation of the World Trade Organization (WTO) in 1994, replacing the previous General Agreement on Tariffs and Trade (GATT). The WTO provided the appropriate framework for the member countries to negotiate a broad and coordinated multilateral economic agreement that could be applied globally (McCalla 2003; Rixen 2010). The results did not meet expectations and since the WTO Doha Round of trade negotiations in 2001, the member countries, grouped in economic blocks according to their interests, have made a number of unsuccessful attempts to align their differences (McCalla 2003; Department of Foreign Affairs and Trade (DFAT) 2011). Distorting agriculture policies have been difficult to remove and remain the main conflict point between developed and developing countries (DFAT 2010). Although there are expectations to complete the round in 2011, the slow recovery after the recent Global Financial Crisis could, again, delay a final agreement (DFAT 2011).

In parallel with the so far futile Doha multilateral negotiations, policymakers have tried other paths to improve international commerce (Priestley 2008). Bilateral or regional Preferential Trade Agreements (PTAs) have become a frequent alternative to diminish trade obstacles and to enhance foreign investment (Saggi and Yildiz 2011). In particular, FTAs have played a critical role in the commercial integration of regional economies, stimulating bilateral trade yet also changing the competitive scenarios for several industries (Urata 2002).

It is argued that FTAs are a 'second best' option against the broad multilateral agreements, and that FTAs generate trade diversion in the sense that countries would prefer to trade based on the advantages provided by a particular FTA, rather than on the basis of comparative advantages in price or productive efficiency (Priestley 2008; DFAT 2011). There is considerable support for the view that broad multilateral agreements are more beneficial to reach trade liberalisation than bilateral FTAs (Audley 2003; Priestley 2008; DFAT 2011; DFAT 2010). In contrast, Saggi and Yildiz (2011) claim that FTAs not only promote the globalisation of trade, but that they are a necessary first stage towards multilateral agreements. Rixen (2010) advocates bilateral FTAs over multilateral agreements for the reason that "the asymmetry of investment flows can be better accommodated in bilateral bargains" (p.607).

The Australia – Chile Free Trade Agreement

Post the 1940s, Australia and Chile belonged to the GATT, and were then party to the revised 1994 agreement under the auspices of the WTO. Since the mid-1990s both countries have pursued the establishment of a multilateral trade liberalisation agreement (DFAT 2010; The Economist Intelligence Unit (EIU) 2010). However, given the lack of progress on this front, Australia and Chile have accorded bilateral and multilateral

agreements with several commercial partners of their own. Australian trade policies have resulted in FTAs with New Zealand, the United States, Singapore, Thailand, Chile and the ASEAN-Australia-New Zealand Free Trade Area (DFAT 2010). Similarly, since 1999, Chile has developed a broad commercial network. Beside a number of economic-complementation agreements and PTAs, up until 2010 Chile had signed FTAs with Australia, Canada, China, Colombia, Japan, Mexico, Panama, Peru, South Korea, Turkey, the United States, the European Free Trade Association and the Central American countries of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua (EIU 2010).

According to PAJSC (2008b), because of their similarly close proximity to markets (e.g. Asia and South America) Australia and Chile were compelled to develop closer economic relationships. In 2008 both countries signed a FTA, which came in to force in March, 2009 (EIU 2010). The Australia – Chile FTA (the FTA) immediately removed 91.9% of existing Chilean tariffs in 96.9% of all Australian imports into Chile. Australia eliminated 90.8% of existing tariffs affecting 97.1% of all Chilean imports into Australia. Australian goods excluded in the Agreement were table grapes and specific products related to the clothing and textile businesses; on the Chilean side, clothing and textiles were also excluded from being immediately tariff free, as well as some particular manufactured items. Both countries agreed to remove all tariff lines not currently included in the FTA after a period of six years (PAJSC 2008a).

The FTA assured non-discriminatory market access for both Australia and Chile's government procurement markets, as well as national equal treatment and most-favoured nation treatment for suppliers of goods and services in relation to international competitors. Intellectual property rights, custom procedures, electronic commerce, product specific rules of origin, competition policies and sanitary standards were also established by the FTA in both countries (PAJSC 2008a).

Trade imbalances

The bilateral FTA model embraced by Australia has had its detractors. Priestley (2008) claims that trade deficits favourable to Chile have been created; an assessment supported by government sources (DFAT 2009; Australian Bureau of Statistics (ABS) 2011). A second problem is related to trade diversion, with increasing imports coming from countries with which Australia has agreed to remove all tariffs. Again more broadly, Priestley (2008) argues that gains for Australian exporters have fallen well behind what was expected from the FTAs, while imported products have increased competition in the local market, damaging local industries.

The balance of trade in goods and services in Chile's favour is judged modest, representing only 0.2% of the entire Australian international commerce (PAJSC 2008b). However, excluding the year after the Global Financial Crisis (2009), the trade balance has grown steadily through the last five years; merchandise commerce has jumped from less than A\$350 million in 2005 to over A\$1.2 billion in 2010 (ABS 2011). Currently, Chile has become Australia's third largest trading partner in Latin America, and is considered as a

strategic and safe entrance place for investment into the growing Latin American market (PAJSC 2008b). Australia is the fourth largest direct foreign investor in Chile, accounting for over A\$3 billion, concentrated in the mining, gas distribution and energy generation sectors (PAJSC 2008a).

In terms of the major goods and services traded between Australia and Chile, in 2009 the reciprocal merchandise trade focused mainly on mining commodities with the export of copper from Chile providing the main source for the trade imbalance between the two countries (Table 1). During 2009, the total products and services exported from Chile to Australia totalled A\$839m, as compared to Australia's exports which were only A\$409m. Trade in business and professional services is becoming significant for both countries (DFAT 2009). Additionally, it is interesting to note that only processed fruit are exported from Chile to Australia, and the current fresh fruit trade between them is zero.

Table 1 Australia – Chile main products and services traded in 2009.

	Goods	Value (A\$m)	%	Services	Value (A\$m)	%
Australian exports to Chile	Coal	93	42.5	Business & Professional	90	47.4
	Civil engineering equipment	16	7.3	Education - related travel	46	24.2
	Transmission shafts	12	5.5			
	Specialised machinery	12	5.5			
	All other	86	39.3	All other	54	28.4
	TOTAL	219	100	TOTAL	190	100
Chilean exports to Australia	Copper	413	67.5	Business & Professional	90	39.6
	Lead ores & concentrates	65	10.6	Transportation	89	39.2
	Pulp & waste paper	19	3.1			
	Fruit, prepared or preserved	16	2.6			
	All other	99	16.2	All other	48	21.1
	TOTAL	612	100	TOTAL	227	100

Source: Adapted from DFAT (2009).

Exchange Rate 31st May, 2011: A\$ 1 = CL\$ 500.68

Comparative analysis of Australian and Chilean agriculture and horticulture

In terms of total gross domestic product (GDP), the Chilean economy is about 18% of the size of the Australian economy. In 2010, Australia's GDP was A\$1.2 trillion, whilst the Chilean GDP was A\$216 billion (International Monetary Fund (IMF) 2010). Despite this significant difference in the relative GDPs, the countries share some similar climatic and economic features. The importance of the agriculture sector in both countries has changed in a similar way over the last decades (Connolly and Lewis 2010; Garcia and Ruiz 2010).

Until the middle of the last century, the agriculture sector in Australia accounted for around 25% of the national economy and over 70% of exports (ABARE 2009). Since the

1960's, agriculture's share of GDP has declined sharply in comparison with other sectors. By 2010, the gross value of Australian agriculture as a percentage of GDP was around 3% (ABS 2009). Due to its large quantity of natural resources and relatively small population, agriculture in Australia is heavily export oriented (ABARE 2009). According to the National Farmers' Federation (2011), around 60% of total agricultural production (in volume) is exported. Whilst agricultural exports have increased in absolute terms over the long term, they have fallen substantially in relation to exports from the other economic sectors, being displaced by mining and energy exports (ABARE 2009).

While the absolute value of the Chilean agriculture industry has grown four times since 1960, its relative share of the GDP has progressively declined also, currently representing around 4% of the internal economy, which is dominated by the services sector (Garcia and Ruiz 2010; Braun et al. 2000). The development of agriculture in Chile during the last five decades has been linked to political and structural reforms (Portilla 2000). During the first half of the 20th century, agriculture made up between 12 to 15% of the national GDP with an annual rate of growth for the sector less than 1.8%. Chile's history is bound to the political events during the 1970's, which not only ended with a military dictatorship, but turned the whole economy, and in particular the agriculture sector, away from the development track until 1982. Structural reforms in 1983 re-opened the economy to foreign markets, reactivating the exports of the sector (Portilla 2000). Chilean exports have been dominated by the mining sector which accounts for over 50% of the current export value (DFAT 2009). Agricultural exports have grown rapidly over the last two decades, especially post the 1983 economic reforms. The change in Chilean economic openness has seen agricultural export volumes increase by 20% in 2009, reaching US\$3.9 billion. This represents around 6.8% of the national export value (Garcia and Ruiz 2010).

Horticulture

For horticultural production purposes, while Chile and Australia experience similar temperatures due to their geographic position, between the parallels 28°S and 43°S, their soils and rainfall distribution are different (HAL 2008). Both countries have the comparative advantage of geographic isolation as far as disease is concerned. Chile's isolation stems from the Pacific Ocean on one side, the Andes' mountains on the other, and the Atacama Desert in the north.

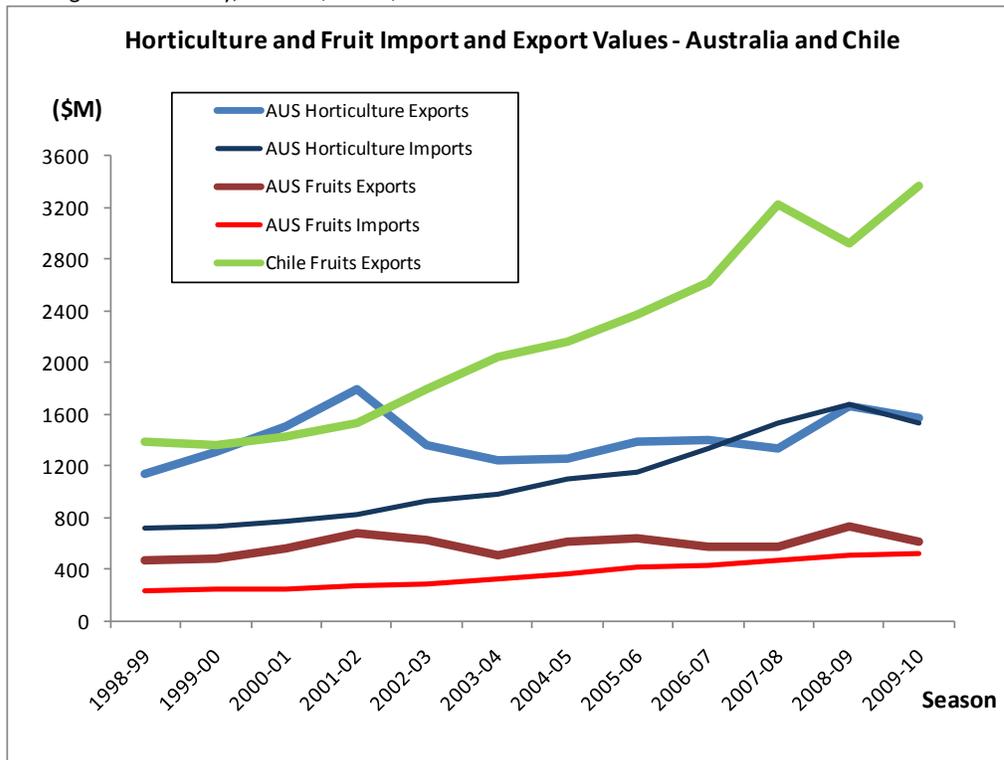
Australia's horticultural production is twice the size of Chile's (Department of Agriculture, Fisheries and Forestry (DAFF) 2010; Garcia and Ruiz 2010). In spite of the prolonged drought during the last decade, the gross value of the Australian horticultural industry grew 66.6% over this time, from A\$5.1 billion in 1998 to A\$8.4 billion in 2009, becoming Australia's third largest agricultural industry. By 2009, fruit production accounted for around 48% of the gross value of horticultural production (ABARE 2000; DAFF 2010). On the Chilean side, horticulture represents over 35% of the agricultural gross value added (GVA), accounting for around A\$3.6 billion (PROCHILE 2011).

Both countries have counter-seasonal advantages in supplying fresh produce to export markets in the Northern Hemisphere (ABARE 2000). Nonetheless, the Chilean export value for horticulture is approximately three times the Australian export value, accounting for over A\$3.3 billion (HAL 2008). Chile has become a major global trader of fresh fruit, having few quarantine restrictions to reach foreign markets (HAL 2008). The value of Chilean fruit exports has been increasing rapidly, currently representing over 90% of the horticultural exports (Figure 1) (Servicio Nacional de Aduanas de Chile (SNA) 2011).

Figure 1 Export and Import value of horticulture and fruits in Australia and Chile

Sources: Adapted from ABS (2011 - Tables 12a, 12b, 13a and 13b); SNA (2011).

Exchange Rate 31th May, 2011: A\$1 = CL\$500.68



In contrast, the horticulture sector in Australia focuses on the domestic market. Internal prices are comparatively high and there are ongoing concerns over phytosanitary access restrictions for export (ABARE 2009). The pattern with Australian horticultural exports over the last decade has been erratic (Figure 1). Exports reached their peak in 2002, then declined, and then started to increase again from 2005. In parallel, over the last 10 or so years, the import value of horticulture has increased at a steady rate balancing Australian horticultural trade in the last two years. In Figure 1 it is shown how import and export value of Australian fruits mirrors the changes in horticultural world trade (ABS 2011). The significant differences in export values of fruits provide insights into the market orientation of the industry in each country.

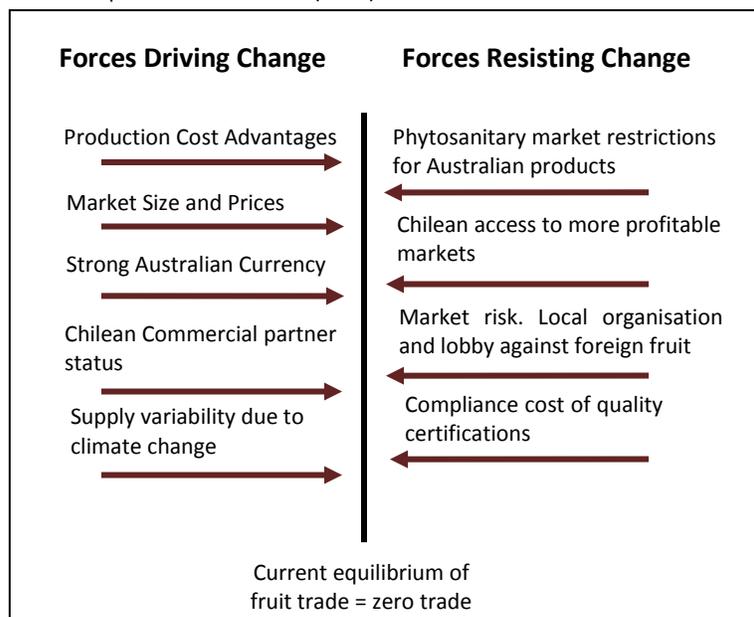
Horticultural production is an important source of employment in rural regions of Australia. Unlike other agricultural industries, horticulture remains labour intensive and has significant social impact: considering the processing of fruits and vegetables, the sector provides around 80,000 permanent job positions, and around 175,000 seasonal jobs (Hanson and Bell 2007). Similarly, the role of the Chilean horticulture sector is critical for the economy providing over 700,000 jobs, representing around 11% of the labour force. Following the same path in other developing countries, it is expected that horticultural employment levels will keep decreasing in both absolute and relative terms (Garcia and Ruiz 2010).

Fresh fruit trade – drivers and resistors

Given the characteristics of the fresh fruit markets in Chile and Australia, it is expected that trade in horticultural product would flow mainly from Chile to Australia (HAL 2008). In Figure 2 is shown the forces with potential to influence the export of Chilean fresh fruit to Australia, and the associated resistors to such trade. One clear incentive to increase the fruit trade stems from Chilean producers' competitive advantage in terms of lower production costs. The current minimum wage in Australia is A\$569.9 per week, while in Chile it is A\$86 per week (Exchange rate 31th May 2011: A\$ 1 = CL\$ 500.68) (Fair Work Australia 2011; Biblioteca del Congreso Nacional de Chile 2010). This significant disparity in minimum wages creates a large labour cost advantage for Chilean growers, especially in a labour intensive business such as fruit production. In practice, it allows Chilean products to compete better in developed economies such as the United States, Europe and Australia.

Figure 2. Force Field Analysis of fresh fruit trade between Australia and Chile

Source: Adapted from J. Thomas (1985).



As a result of the size of both economies, a second force encouraging further fruit trade is the difference in local market prices. Due to the higher population with associated purchasing power and fruit consumption levels, the Australian market is becoming an attractive target for Chilean exports. As expected in an exported-oriented industry, Chilean producers are actively seeking new markets to position their products.

Additionally, as the Australian Dollar has strengthened during 2010 and 2011, importers such as the supermarkets, wholesalers and medium size retailers are looking at other countries to find reliable suppliers at lower costs than local growers. A high \$A makes imports relatively less expensive than when the \$A is lower.

A fourth force increasing trade is the most-favoured nation treatment that both countries afforded one another when they signed the bilateral FTA. Although it has been acknowledged that the agreement itself does not change drastically the pre-existent trade conditions for horticultural products, the 'commercial partner' condition provides unique advantages to gain market access. In fact, the Australian horticulture industry claims that the agreement will accelerate the quarantine risk assessment process for Chilean fruit, although this statement has been denied by Australian authorities (PAJSC 2008b). It is likely that, one by one, Chilean fruits will receive quarantine protocols for access to the Australian market as in the case of the Chilean table grapes. This path may not be straightforward, as demonstrated by the history of New Zealand apples in gaining access to the Australian market after a long dispute under WTO supervision.

Finally, unexpected weather events in Australia, such as prolonged droughts or floods during the production season, encourage retail chains to seek foreign suppliers. The horticulture industry is exposed to summer rains in particular that affect productivity and reduce supply.

In terms of resistors, the higher quality standards and specific certifications demanded from governments and supermarket chains in the more developed economies are likely to deter trade. The associated compliance costs will diminish the attractiveness of new markets. A further factor that will possibly slow the appearance of any Chilean fresh fruit onto the Australian market is Chile's comparative ease of access under quarantine to Northern Hemisphere markets. Due to its counter-seasonal and phytosanitary advantages, Chile is able to reach the United States, Europe and Asia when seasonal supply of fruit is low in those countries and prices are high.

Exporters to Australia might also have negative perceptions about market risk. Recent effective efforts by the Australian table grape growers in lobbying against the importation of the first Chilean container shipment provide evidence of the difficulties and risks faced by exporters. Local lobbying and public campaigns may prove to be significant forces in undermining attempts to undertake bilateral trade.

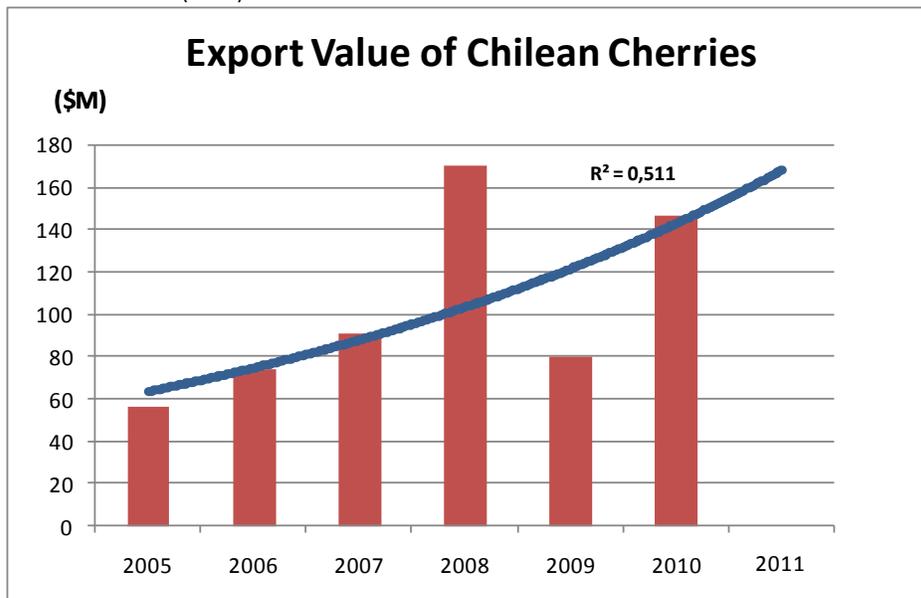
Prospects for cherry trade

The Australian cherry industry is considered small both in a global context and in relation to other local horticulture sectors. The industry accounts for 701 growers, spread over a production area of 3,670 hectares (ABS 2008). The gross value of cherry production is estimated at A\$98 million, with national yields varying from 8,000 to 10,000 tonnes, depending on weather conditions. With significant new plantings and the increase in production of new orchards, the national cherry yield is expected to be around 13,000 tonnes in the next two years, and to double during the next decade (HAL 2010).

On the Chilean side, the cherry industry is ranked third in the world in terms of the export value (Oficina de Estudios y Políticas Agrarias (ODEPA) 2010). In 2010, there were 3,343 cherry growers, spread over 13,143 hectares with a national yield over 45,000 tonnes (ODEPA 2010). Although the Chilean cherry sector is considered mature, exports have still doubled over the last five years (Figure 3).

Figure 3 Export value of Chilean cherries

Source: PROCHILE (2011).



Exports and market access

Despite its good fruit quality, Australia has experienced difficulties in achieving market access due to phytosanitary restrictions in several countries. Australia exports around 16% of its cherry production; the domestic market consumes over 77% and the processing industry accounts for the remaining 7% (HAL 2010). Main export markets for Australian cherries are in Asia, in particular Taiwan, Hong Kong and Singapore. In 2007 Taiwan closed market access to mainland Australian cherries due to quarantine concerns (HAL 2010). Similar restrictions have been put in place in China and New Zealand, reducing the trade options (HAL 2009).

A major problem for Australian fruit exporters, including cherries, has been the presence of fruit flies. In particular, the introduced Mediterranean fruit fly (*Ceratitis capitata*) and the native Queensland fruit fly (*Bactrocera tryoni*) have been responsible for economic damage across a wide range of cultivated fruits (Primary Industries and Resources of South Australia 2006). By 2010, only Tasmania had recovered its 'fruit-fly free' status, thereby contributing more than 50% of total cherry exports (HAL 2010). The cherry industry has attempted to gain market access into the United States, Thailand and Indonesia, following quarantine protocols using cold disinfestations as a fruit fly treatment (HAL 2009).

In contrast, Chile's 'fruit fly free' status since 1995 has allowed it to export to all countries. In order of importance, historically, the major export markets for Chilean cherries had been the United States, Europe, Taiwan, Hong Kong and Brazil. In the last five years, China has become a large importer of Chilean cherries, while the relative size of trade to the United States has diminished (PROCHILE 2011). This Chilean phytosanitary advantage has been critical in relation to competitors in the Southern Hemisphere such as Peru, Argentina and Australia, who face restricted access (Cherry Growers of Australia (CGA) 2005).

Market orientation

Australia's current population is around 22.6 million, while Chile's is slightly in excess of 17 million. However, there are significant differences in terms of average incomes and purchasing power. According to the International Monetary Fund, in 2010 the GDP per capita (at nominal value) in Australia was the seventh highest in the world, of around US\$55,600. The GDP per capita in Chile, on the other hand, was only US\$11,830. GDP adjusted for 'purchasing power parity' (PPP) provides a similar view. Australia's adjusted GDP becomes US\$39,700 per capita, while Chile improves its position to US\$15,000 per capita (IMF 2010). As mentioned earlier, there is a significant disparity in the minimum weekly wage.

Both countries are experiencing rural depopulation. Australia's population is spread across five main cities: Sydney, Melbourne, Brisbane, Perth and Adelaide, with consumption power to support a local market (CGA 2005). In Chile over 6.5 million people (38% of the population) live in the metropolitan region surrounding the capital, Santiago, effectively the only city with an attractive market size and purchasing power for high quality cherries (Instituto Nacional de Estadísticas (INE) 2003).

The cherry sector in Australia has been able to rely on its local market for the uptake of current volumes produced. Retail cherry prices in four major Australian markets (Sydney, Melbourne, Adelaide and Brisbane) have ranged between A\$5 and A\$23/kg, depending on supply levels and the stage on the production cycle (CGA 2005). According to CGA (2005), during the late 1990s the consumer ceiling price was up to A\$8/kg. Following cherry industry market programs in 2008, the price points attracting most sales were between A\$10 and A\$15/kilo with consumers being price-sensitive to prices above \$15/kg (HAL

2009). The domestic prices in Chile are notably lower. During the 2010/11 season, the prices for cherries in the three main open markets in Santiago (Central Lo Valledor, Feria Mapocho and Vega Poniente) were between A\$0.3 and A\$3.2/kilo, with average prices varying between A\$0.74 to A\$0.99/kilo (ODEPA 2011). The quality of fruit sold locally tends to be lower than that exported given that the Chilean export market returns an average price of A\$2.63/kilo for growers. (Exchange rate 31th May 2011: A\$ 1 = CL\$ 500.68) (Fundación para la Innovación Agraria (FIA) 2008).

The differences in local incomes, purchasing power, market access for exports, and the disparity of prices between domestic and export prices helps explain the different market orientations between the two countries. Chilean cherry growers depend on exports to make profits; Australian growers depend on their domestic markets (HAL 2010). While Chile's fruit industry strategy is clear and export oriented, the same cannot be said for Australia. Depending on prices and exchange rates, Australian domestic growers move from the export business to the local market and vice-versa. This behaviour by Australian producers and sellers may affect the global image of the sector, and damage the whole export oriented strategy undertaken by the cherry industry (CGA 2005). Given potential oversupply due to an increase in Australian production, a critical objective for the Australian cherry industry in the short term is to gain access to the Chinese, Korean, United States and Japanese markets (CGA 2005; HAL 2010).

Prospects for imports and Australian quarantine barriers

The CGA (2005) suggests that the availability of cherries during the off-season could break the historical seasonal link between supply of cherries and the Christmas and summer periods, having an impact on the current marketing strategy of the sector. Annual volumes of cherries coming from the United States (especially California) during the Australian off-season have reached 1,500 tonnes (HAL 2010; CGA 2005).

Under the Australia-Chile FTA, Chilean cherries could also gain access to the Australian market. Given that Chilean production occurs at the same seasonal time as Australian production, Australian growers would face the prospect of competing with imported cherries 'in season'. HAL (2008) estimates that the Chilean fruit could affect the local suppliers by reducing their market share by around 30% to 35%. An example of this type of threat is seen in the case of apples being imported from New Zealand and China. First estimations expect a reduction in the Australian apple growers' incomes by around 32%, with farm gate prices falling by about 21%, domestic production falling by about 11% and imports achieving about 22% of market share (Apple and Pear Australia Ltd 2011).

At present, only processed horticultural products have been imported from Chile with the annual value of these imports about A\$16 million (Table 1). While Australian phytosanitary barriers for Chilean processed products have been low, for fresh horticulture products the Australian quarantine requirements would be subject to an Import Risk Analysis which under normal circumstances could take up to 24 – 30 months (HAL 2008; DAFF 2002). It is worth noting that as with other trading destinations, and

before the signature of the FTA, Chile had requested phytosanitary access for a number of fresh fruits, including apples, pears, avocados, all kind of berries, kiwifruit and stone fruits (including cherries).

Arguably, the FTA will bring pressure to bear on Australian authorities to prioritise the quarantine assessment for Chilean fruits, in acknowledgment of the most-favoured nation treatment recognised in the bilateral FTA (HAL 2008). In fact, the PAJSC report (2008a) concedes that the FTA chapter on sanitary and phytosanitary (SPS) measures was incorporated in the FTA “at the insistence of the Chilean negotiators” (p.31). It would be anticipated that the risk management measures similar to those specified for table grape importation from Chile would apply to fresh cherry imports (Biosecurity Australia 2005).

Beyond working through quarantine-related issues, the potential problems in entering new markets can be illustrated with the recent attempted importation of table grapes into Australia’s port of Melbourne. Chile gained quarantine access for table grapes to enter Australia in 2006. After following the fumigation protocol imposed by Australian authorities as quarantine protection, a first shipment of 15 containers with a retail value of over A\$1 million was sent from Chile, expecting to arrive in April, 2011. This was the first attempt by Chile to bring fresh fruit into the Australian market. However, Australian importers and distributors were strongly lobbied by local producers and the Australian Table Grape Association (ATGA) to avoid buying Chilean grapes. The campaign against the Chilean table grapes appeared in the local press emphasising the so called inferior quality of the Chilean fruit due to the presence of methyl bromide (Godwin 2011a). Paradoxically, this chemical is normally used by Australian grape exporters to reach several foreign markets, and there exists the risk that the same argument will be used by importing countries against Australia. Forecasting a local hostile scenario, the Chilean shipment was redirected to other markets (Piscioneri 2011). It should be noted that the two main Chilean Fruit Associations, Asociación de Exportadores de Chile (ASOEX) and FEDEFRUTA, expressed their concern about the *impasse*, arguing rightly that the FTA with Australia should provide the legal framework to solve these problems in the future (La Segunda 2011; Godwin 2011b).

Comparative production cost analysis

To better understand the cost differences between the two countries in the cherry industry, a comparative ‘production cost analysis’ per hectare is provided in Table 2. In order to facilitate the assessment, arbitrary parameters have been established. Initial investment costs such as the cost of land and the method of establishing trees (trellis) have been omitted. Likewise, fixed administration costs, packing, transport and levies have not been included so only standardized direct production costs in both countries are compared (Department of Primary Industries (DPI) 2003; FIA 2008). The chosen parameters include tree density of 667 trees per hectare yielding 13,320 kg of fruit equating to 4 cases (5 kg) of fruit per tree. The marketable yield is about 75% of production.

As illustrated in Table 2, the total direct production cost per hectare of cherries in Australia is around 2.5 times the Chilean cost. Mainly due to labour cost differences, the cost of picking the fruit in Australia represents 72% of the production costs, while in Chile it accounts for slightly over 51%. Although pruning costs are similar in percentage terms, Chile's pruning cost (\$) per ha / kg are also much lower. Overall, Chile's lower production cost provides Chilean growers with a comparative advantage against Australian producers.

Table 2 Comparative cherry production cost analysis between Australia and Chile in 2008

Direct production costs	Australia			Chile		
	Cost/hectare (A\$)	Cost/case (A\$/5 kg)	% Cost	Cost/hectare (A\$)	Cost/case (A\$/5 kg)	% Cost
Disease control - fungicides	850	0.32	4.3	863	0.32	12.1
Insect control - insecticides	152	0.06	0.8	192	0.07	2.7
Weed control - herbicides	108	0.04	0.5	527	0.20	7.4
Nutrition	408	0.15	2.0	288	0.11	4.0
Pruning	2,669	1.00	13.4	839	0.31	11.8
Pollination	104	0.04	0.5	216	0.08	3.0
Irrigation	348	0.13	1.7	288	0.11	4.0
Machinery	942	0.35	4.7	240	0.09	3.4
Harvesting	14,357	5.39	72.0	3,662	1.37	51.5
Total (A\$)	19,937	7.48	100.0	7,113	2.67	100.0

Sources: Adapted from data in DPI (2003) and FIA (2008).

Australian values adjusted for inflation using based year 1989-1990. Values expressed in Australian dollars.

Exchange rate 31th May 2011: A\$ 1 = CL\$ 500.68

Conclusion

The lack of fresh fruit trade between Australia and Chile has the potential to change. The bilateral FTA provides the mechanism to facilitate exports from Chile, establishing a framework with international validity under the WTO rules. Given the income levels and GDP *per capita*, the Australian market will keep attracting cheaper fresh products from less developed economies. Additionally, the strengthening of the Australian dollar will increase import opportunities for Australian companies engaged in supplying fruit to the retail sector and to consumers.

Exporting countries like Chile are seeking new markets for cherry exports and this focus seems to be shifting toward newer markets such as Eastern Europe and Asia. As ASOEX (2011) stated: "In order to remain at the top of our game and help boost prices, one of Chile's main challenges is to reduce pressure on our traditional markets. So we're focussing on developing new and emerging destinations while still maintaining a presence in the mature markets". It is noteworthy that both Chile and Australia are members of the Southern Hemisphere Association of Fresh Fruit Exporters (2011). This body has its aim to "promote free trade and improve market access in the Northern Hemisphere countries". Therefore, the situation exists where the countries co-operate on one level in accessing

markets of common interest yet are conflicted in terms of Chile-to-Australia market access during the Australian domestic season.

It is likely that the combined pulling forces of the Australian supermarkets, medium size retailers and wholesalers are likely to result in some increase in the fresh fruit trade between Chile and Australia. The recent, albeit unsuccessful attempt to bring Chilean table grapes to Australia attracted the attention of Australian importers. This attention was consistent with “[...] the current trend of importers and large retail chains to seek supply from any part of the world where the price is attractive” (Terry Rudge, CEO of Rudge Produce Systems; personal conversation, 2011).

Despite the expected increase in Australian production in the short to medium term, the lower prices offered by Chilean growers are still likely to attract Australian demand, especially in years affected by extreme weather conditions where local fruit supply may be reduced. As an exported-oriented sector, although Chilean growers are faced with deterrents in a new market, it is likely that Chile will continue to work to establish a presence in the Australian fresh fruit market. At face value, any trade when the production seasons are head-to-head would seem illogical, yet given strong enough drivers, trade is not out of the question.

In a truly global trading environment, if it is likely that established trade boundaries will change, the questions are where and when? In the medium term, it is expected that free trade rules imposed by international organisations such as the WTO should help smooth the access for Chilean fresh products into the Australian market. The challenges for overseas fresh fruit exporters include meeting Australian quality standards and phytosanitary requirements cost effectively, as well as countering Australian industry resistance to any new entrants to markets. Such challenges are predictable for any new market entrant in international fresh produce markets.

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