INVESTMENT OPPORTUNITIES IN THE NEW ZEALAND CHERRY INDUSTRY

Part of Emerging Growth Opportunities, Food and Beverage Information Project, 2018

FINAL REPORT; v1.00; completed late 2017; released March 2018

CORIOLIS
research·consulting·strategy

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Ministry for Primary Industries
Manatū Ahu Matua

NEW ZEALAND TRADE & ENTERPRISE

STEERING & GUIDANCE

This project would not have been possible without the strong guidance of our Steering Committee. In particular, we would like to thank Andrew McCallum of MBIE for his tireless energy in keeping this project on track, while at the same time pushing us forward.

Draft versions of parts of this document were distributed to key firms for comment, addition or correction. This was done in the form of emails and phone calls. We thank those who helped us in this process for their time and effort. We also thank those who provided their photos.

We are grateful for all of the input we have received, but the report is ours and any errors are our own.

Finally, we acknowledge the support of the Ministry of Business, Innovation and Employment (MBIE), New Zealand Trade and Enterprise (NZTE) and the Ministry for Primary Industries (MPI). It is their funding that has made this report possible.

CONSTRAINTS & INHERENT LIMITATIONS

This work was commissioned by the Ministry of Business, Innovation and Employment (MBIE) and prepared by Coriolis. This work is based on secondary market research, analysis of information available or provided to Coriolis by our client, and a range of interviews with industry participants and industry experts. Coriolis have not independently verified this information and make no representation or warranty, express or implied, that such information is accurate or complete.

The report is dated November 2017 and Coriolis accepts no liability for, and has not undertaken work in respect of, any event subsequent to that date, which may affect the report.

Key global trade data analysed in all sections of the F&B Information project are calculated and displayed in US$. This is done for a range of reasons:

- It is the currency most used in international trade
- It allows for cross country comparisons (e.g. vs. Denmark)
- It removes the impact of NZD exchange rate variability
- It is more comprehensible to non-NZ audiences (e.g. foreign investors)
- It is the currency in which the United Nations collects and tabulates global trade data

Anyone should feel free to call the authors if any of the material cannot be understood or accessed. We always welcome opportunities to discuss our research with our readers and users.

Projected market information, analyses and conclusions contained herein are based (unless sourced otherwise) on the information described above and on Coriolis' judgment, and should not be construed as definitive forecasts or guarantees of future performance or results. Neither Coriolis nor its officers, directors, shareholders, employees or agents accept any responsibility or liability with respect to this document.

Coriolis wishes to draw your attention to the following limitations of the Coriolis report "Emerging Growth Opportunities in the New Zealand Cherry Industry 2017" (the Coriolis Report) including any accompanying presentation, appendices and commentary (the Coriolis Commentary):

a. Coriolis has not been asked to independently verify or audit the information or material provided to it by, or on behalf of the Client, or any of the parties involved in the project;

b. the information contained in the Coriolis Report and any Coriolis Commentary has been compiled from information and material supplied by third party sources and publicly available information which may (in part) be inaccurate or incomplete;

c. Coriolis makes no representation, warranty or guarantee, whether express or implied, as to the quality, accuracy, reliability, currency or completeness of the information provided in the Coriolis Report and any Coriolis Commentary, or that reasonable care has been taken in compiling or preparing them;

d. the analysis contained in the Coriolis Report and any Coriolis Commentary are subject to the key assumptions, further qualifications and limitations included in the Coriolis Report and Coriolis Commentary, and are subject to significant uncertainties and contingencies, some of which, if not all, are outside the control of Coriolis; and

e. any Coriolis Commentary accompanying the Coriolis Report is an integral part of interpreting the Coriolis Report. Consideration of the Coriolis Report will be incomplete if it is reviewed in the absence of the Coriolis Commentary and Coriolis conclusions may be misinterpreted if the Coriolis Report is reviewed in absence of the Coriolis Commentary.

Coriolis is not responsible or liable in any way for any loss or damage incurred by any person or entity relying on the information in, and the Recipient unconditionally and irrevocably releases Coriolis from liability for loss or damage of any kind whatsoever arising from, the Coriolis Report or Coriolis Commentary including without limitation judgments, opinions, hypothesis, views, forecasts or any other outputs therein and any interpretation, opinion or conclusion that the Recipient may form as a result of examining the Coriolis Report or Coriolis Commentary.

The Coriolis Report and any Coriolis Commentary may not be relied upon by the Recipient, and any use of, or reliance on that material is entirely at their own risk. Coriolis shall have no liability for any loss or damage arising out of any such use.

Unless otherwise noted, all photos used in this discussion document were provided by the New Zealand Story resource (www.nzstory.govt.nz), purchased by Coriolis from a range of stock photography providers as documented, or are low resolution, complete product/brand for illustrative purposes used under fair dealing/fair use for both "research and study" and "review and criticism". Our usage of them complies with New Zealand law or their various license agreements.

Cover image: Creative Commons

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Ministry for Primary Industries
Manatū Ahu Matua

NEW ZEALAND TRADE & ENTERPRISE

CORIOLIS
research·consulting·strategy

TABLE OF CONTENTS

The objective of this project is to identify and profile Emerging Growth Opportunities (EGO) in New Zealand's food and beverage exports

SITUATION

New Zealand has a clear comparative advantage in food & beverage (and the wider agricultural value chain). Food & beverage exports are $29b and account for 43% of New Zealand's total exports of goods and services.

New Zealand has a long history in producing and exporting food & beverages. New Zealand has a limited number of large export categories, namely dairy, beef, lamb, seafood, apples and more recently kiwifruit. Wine has also emerged in the last 20 years to become a billion dollar export. Growth has come from more volume but more importantly more value.

Past research as part of the Food & Beverage Information Project (see Emerging Growth Opportunities 2012) identified a range of growing and emerging export sectors.

Industry and government recognise that high growth industries need new capital and new capabilities to grow and develop.

OBJECTIVE

The objective of the Emerging Growth Opportunities research is to identify emerging high potential food and beverage export categories from New Zealand. Answering the question - What will be the next wine industry?

The research draws conclusions on potential industry **strategic directions**, highlights **opportunities** for further **investment** and identifies categories which have the potential to contribute to the goal of **growing exports.** The most promising categories are analysed further in separate reports (e.g. Cherries).

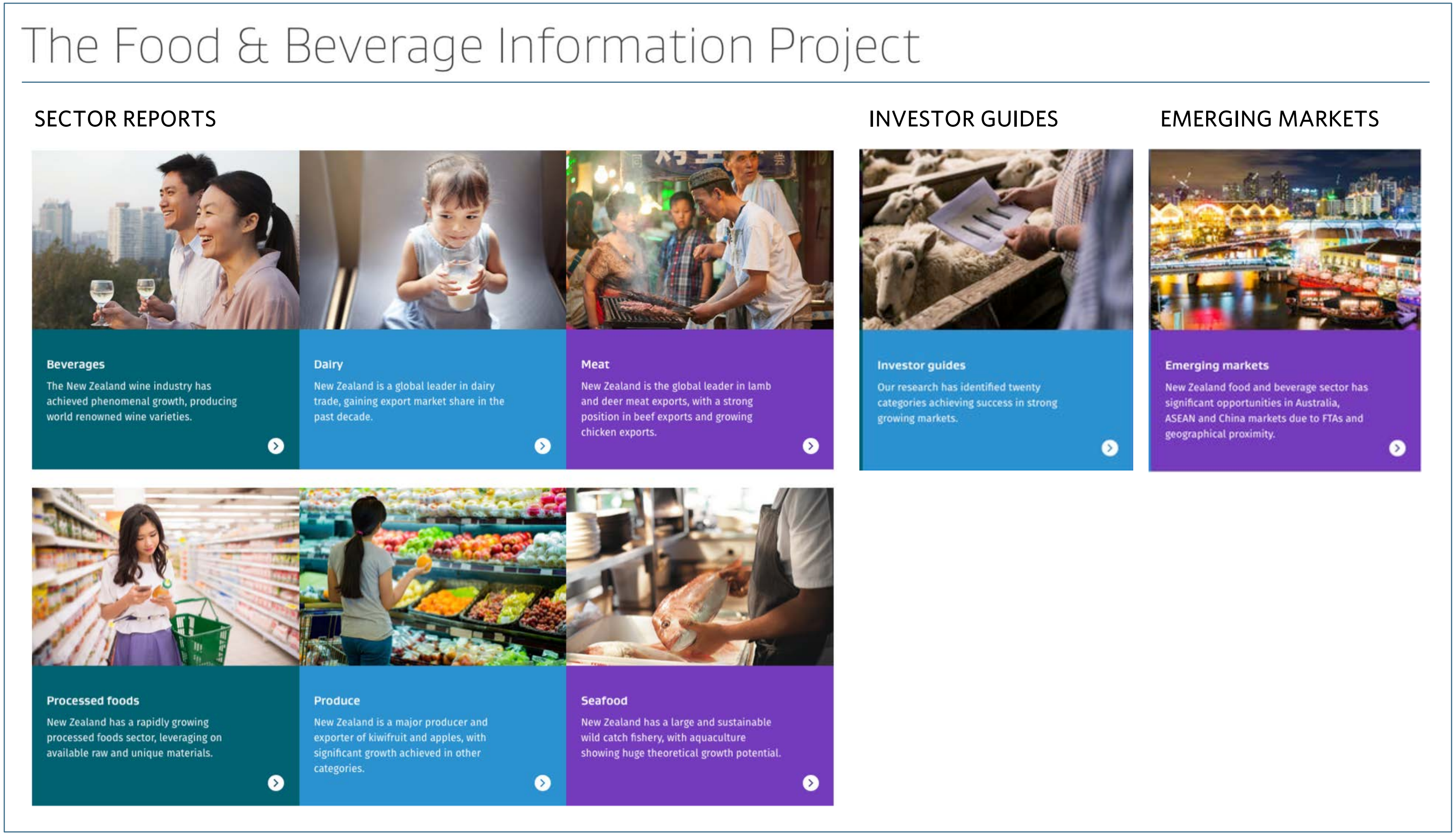
The research forms a part of – and builds on the information in - the wider Food & Beverage Information Project.

AUDIENCE

The report is designed to be used by four audiences:

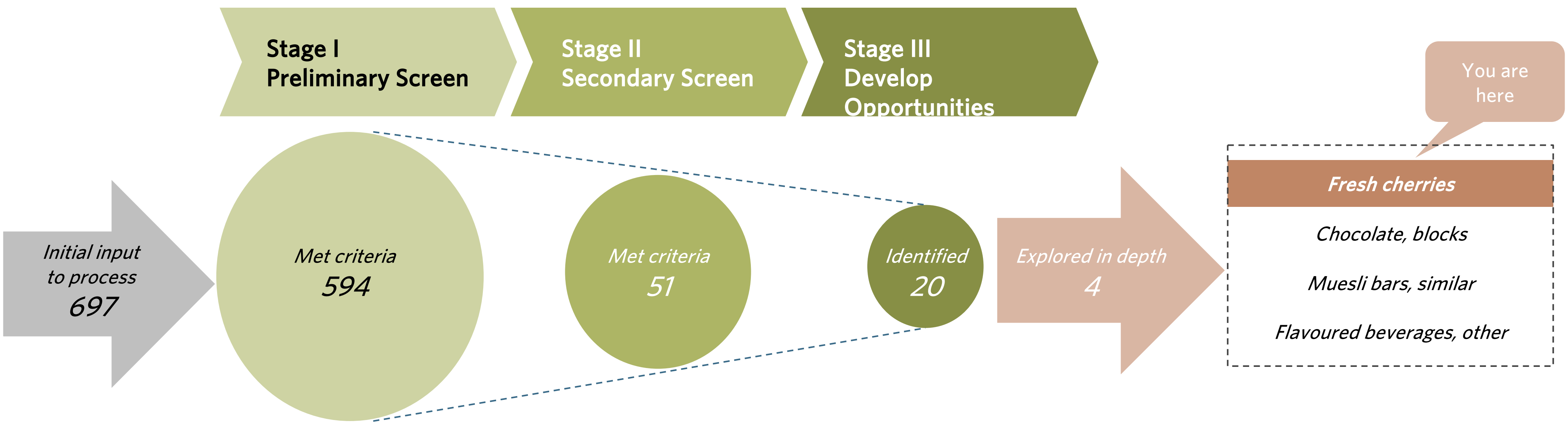
- **Investors** (domestic or international)
- **Industry** participants (firms & individuals)
- **Government** (across all roles and responsibilities)
- **Scientific researchers** (academic, government & corporate)

The Emerging Growth Opportunities (EGO) research is part of the wider New Zealand Food and Beverage Information Project



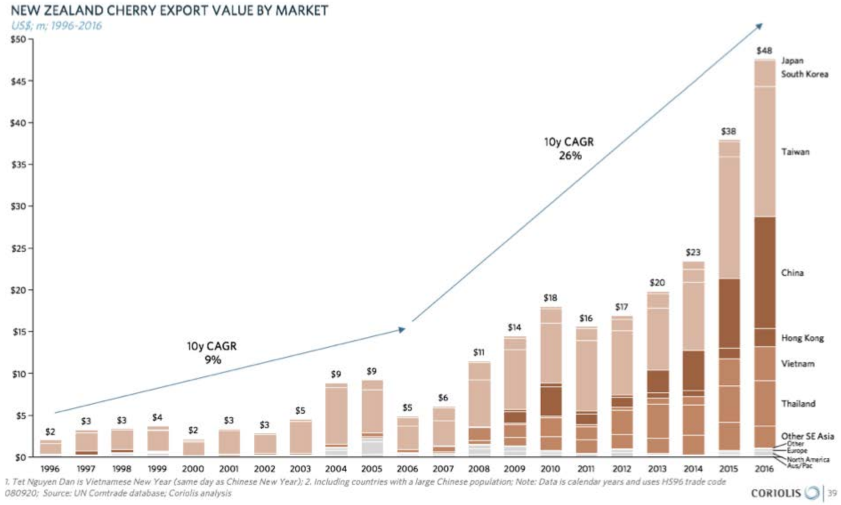
Cherries emerged from a multi-stage industry screen (Stages I & II) designed to identify, develop & highlight Emerging Growth Opportunities in New Zealand food and beverage exports

See related document for details available at www.foodandbeverage.govt.nz



ELEVATOR TEST New Zealand cherry exports can grow through a focus on building a super-premium position with Chinese consumers around Chinese New Year*

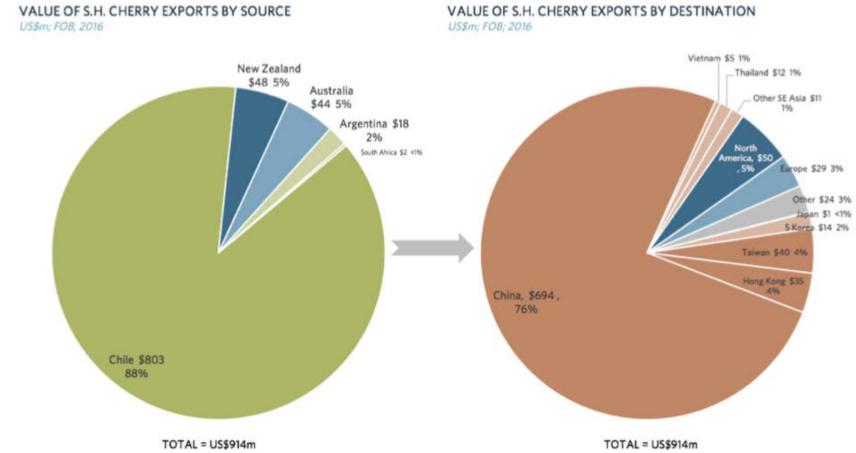
New Zealand's growth in cherry exports over the past twenty years has come predominantly from countries that celebrate Chinese New Year*, particularly Taiwan, China, Hong Kong, Vietnam (Tet[1]) and Thailand[2]



1. Tet Nguyen Dan is Vietnamese New Year (same day as Chinese New Year); 2. Including countries with a large Chinese population; Note: Data is calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

CORIOLIS | 39

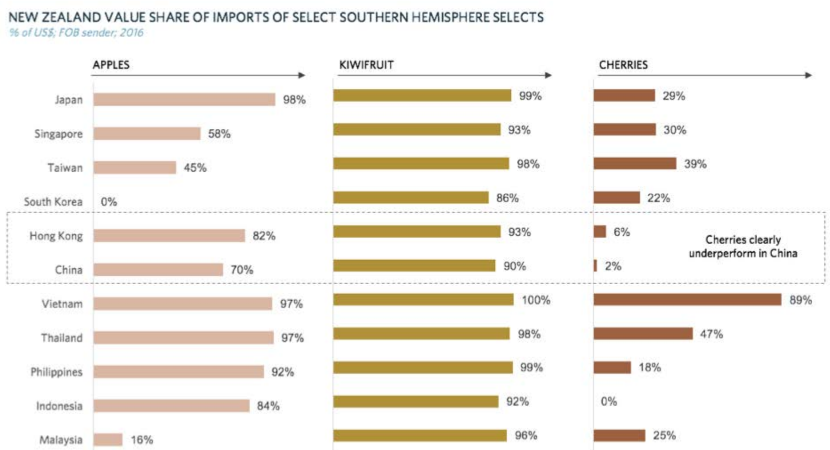
"Greater China" is the key market for Southern Hemisphere cherry exports as it accounts for ~84% of export dollars



Note: data here includes some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis

CORIOLIS | 57

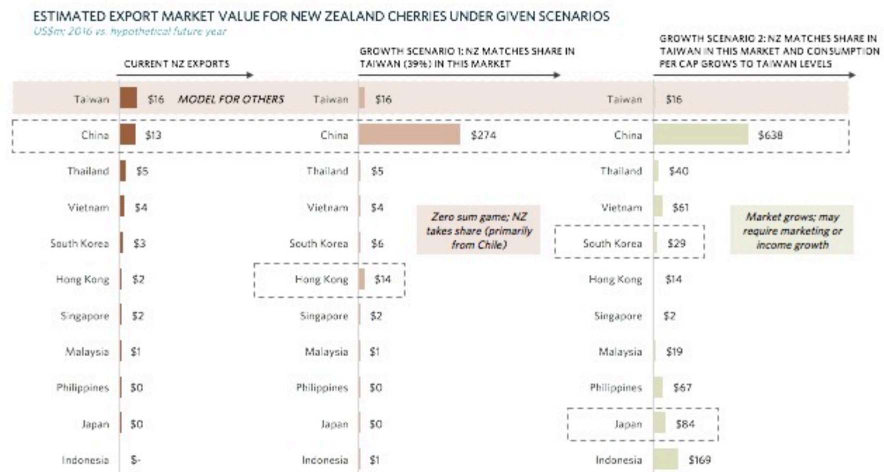
The success of counter-seasonal New Zealand apples and kiwifruit in key East and South East Asian markets shows success is possible; China stands out as having the greatest potential to grow market share



Source: UN Comtrade database; Coriolis analysis

CORIOLIS | 45

In terms of potential market size, China again stands out with the potential to grow into a US$274-638m market for New Zealand cherries



Source: Coriolis

CORIOLIS | 46

* See page 19

DRIVERS OF SUCCESS New Zealand's success in cherries has three key drivers

IDEAL CLIMATE & SOILS

Low production cost

- Temperate climate similar to Italy and France
- Temperature extremes moderated by surrounding ocean
- Isolated location protected by natural barriers
- Further land potentially available for expansion: 0.02% of Otago Region under cherries

EFFICIENT PEOPLE & SYSTEMS

Trusted by consumers

- Long history of fruit growing and breeding
- Industry is focused on export markets
- Pool of skilled orchard operators and managers
- Strong systems and support networks
- Advanced capabilities in packhouse systems
- Organised industry

LOCATION & MARKETS

High share in key products

- Close proximity to East & South-East Asian markets
- Excellent market access across Asia
- NZ was the first developed country to sign a free trade deal with China (2008)
- Counter-seasonal to Northern Hemisphere

** Closer Economic Relationship; Source: photo credit (purchased or creative commons (Dollar Photo Club; freenzphotos.com), Compac)*

SWOT ANALYSIS New Zealand has a strong niche position in the global cherry trade, but the environment is challenging and continued success cannot be taken for granted

STRENGTHS

- New Zealand track record of success in new fruit development (e.g. kiwifruit) and in breeding of new cultivars (e.g. Zespri Gold)
- Strong plant science capabilities at Plant & Food Research and elsewhere
- Counter seasonal to Northern Hemisphere in a narrow climatic window only shared by four competitors (Chile, Argentina, South Africa and Australia)
- Proximity to fast growing Asian markets
- Strong biosecurity; free from many diseases and pests
- High yields per hectare/high levels of export packout in export fruits relative to peers
- Unsubsidised industry competing successfully in world markets
- Industry consolidating into fewer, larger operations at scale
- Transition to integrated grower/packer/shipper model underway
- Supportive industry structure (Summerfruit, HEA), requiring all exporters to be registered and setting and overseeing

WEAKNESSES

- Lack of large supply of "guest workers" like some countries; seasonal labour shortages, accommodation shortages
- Limited air freight availability
- Too much area still in older varieties, older rootstocks and older planting systems (low average yields)
- Low/no ability to supply fruit year-round
- Higher cost structure than others in seasonal window (e.g. Chile)
- Lack of superior and differentiated New Zealand IP-Controlled cherry varieties beyond Freshmax activity (where is the NZ cherry version of Enza Jazz or Zespri Sungold?)
- Many smaller orchards and farms; benchmarking suggests fewer, larger farms preferable
- New cultivar development funding model needs improvement
- Structure of kiwifruit exporting impacting scale of other (beyond Zespri) NZ fruit exporters

OPPORTUNITIES

- Further develop narrow "Chinese New Year" window into Eastern Asian Markets
- Continued growth of middle-class in Asia
- Aging baby boomers focusing on positive living & eating for illness prevention
- Continued work on FTAs to develop tariff free markets (e.g. ASEAN); especially focussing on the high volume, high impact products and markets
- Growing demand for fresh, convenient produce especially into Asian markets
- Continued orchard-level technological innovation and management improvement leading to increased yields, automated pruning, rain protection
- Production of New Zealand developed/IP controlled varieties in counter-seasonal regions
- Growth of nutraceuticals and functional foods; fruits as "superfoods"
- Potential for research into specific health effects of New Zealand cherries
- Potential to utilise waste streams and convert them into high value products

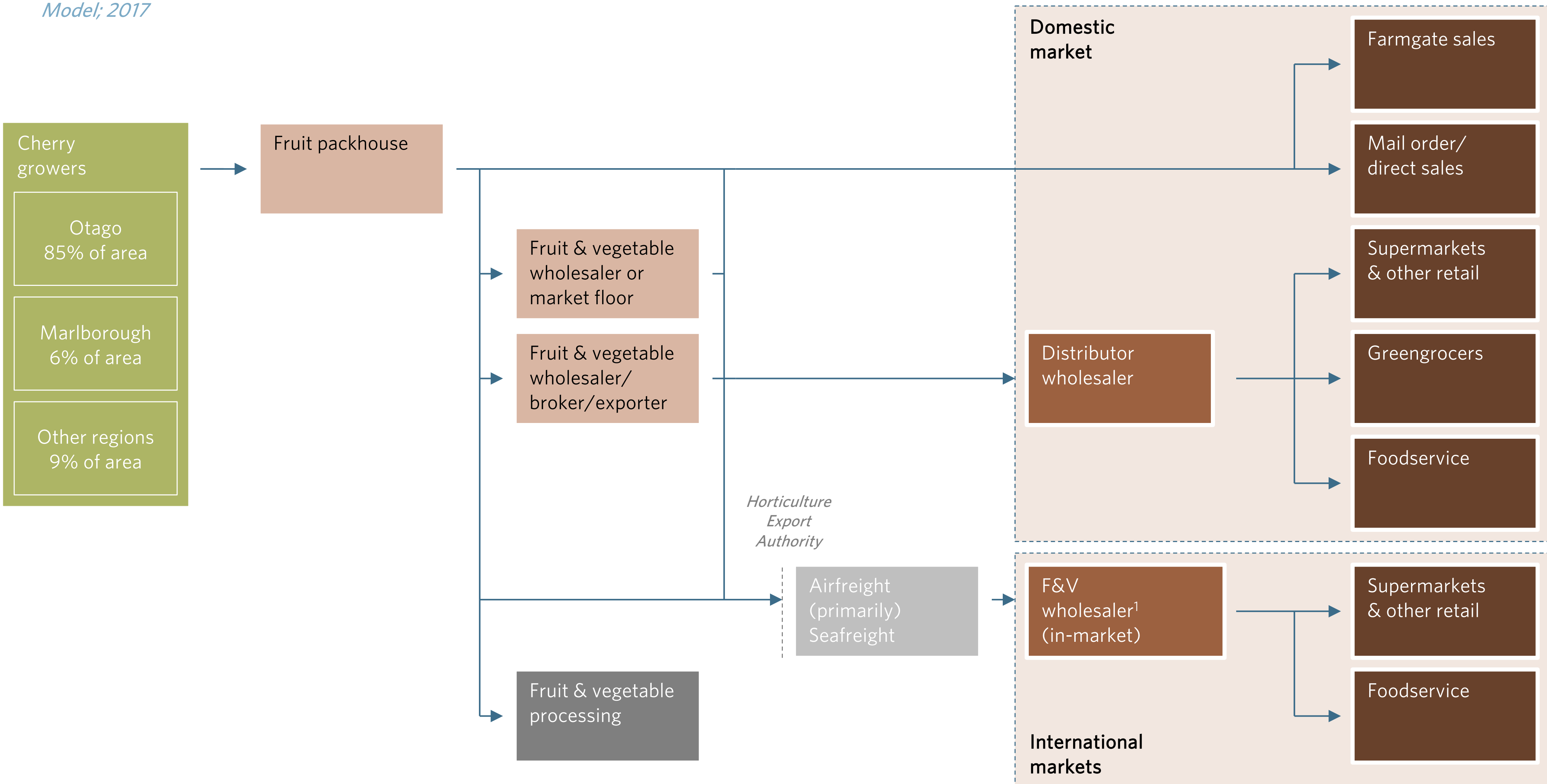
ISSUES/THREATS/RISKS

- Growing production of cherries in Chile; improving quality, strong marketing (US$5m Chinese promotional activity across 36+ cities 2016)
- Disease outbreaks (cf. PSA)
- The risk of disease outbreaks must be balanced against biosecurity retarding or preventing introduction of new genetics and new rootstocks
- The foreign phyto-sanitary protocols of other countries limiting extent and speed to market, particularly Australia, Japan and South Korea
- Time frame for protocols to gain access to new markets
- Re-labelling Chilean fruit as "Made in New Zealand" in-market endangering NZ reputation
- Changing climatic conditions impacting production rates, quality (e.g. hail damage)
- Other global centres of fruit development coming up with better products

SUPPLY CHAIN New Zealand has a simple supply chain that transports and delivers fresh cherries to consumers in New Zealand and across Asia and the world

SIMPLIFIED MODEL OF NEW ZEALAND CHERRY SUPPLY CHAIN

Model; 2017



1. There may be one or more layers of wholesaling, depending on product or market; some wholesale functions maybe captive inside retailers or foodservice operators; Source: Coriolis

Potential Investment Themes

+ Growing production
+ Supply chain efficiencies
+ Improved marketing
+ Value-added products

01

The industry is excited about cherries and their future

"Cherries are a glamorous industry to be a part of, it is very exciting. We have a great future ahead of us."

Sales and Marketing, Large packhouse, Central Otago

"Cherries are such a sexy product and easy to sell compared to other products."

Export Manager, Large grower, packer shipper

"There is a lot of future growth in the industry, it's very exciting."

Manager, Large grower, packer shipper

"We produce a great premium product and we need to make sure we continue to do this into the future."

CEO, Large grower, packer shipper

"We could be the next golden kiwifruit story."

CEO, Large grower, packer shipper

"We had 1,500 tonnes this year, but will grow to 3,000 by 2019"

Manager, Large grower, packer shipper

Four broad investment themes exist for driving export growth in the New Zealand cherry industry

I. GROWING PRODUCTION	II. SUPPLY CHAIN EFFICIENCIES	III. IMPROVED MARKETING	IV. VALUE-ADDED PRODUCTS
Increase production to meet market demand	*Drive down packing & logistics costs*	*Engage more effectively with the consumer*	*Monetise waste streams where it makes sense*
More land	Longer shelf life	Consistent messaging	Select super-premium foods and beverages
Higher yields & New varieties	Reduced packing costs	Embracing Chinese New Year	Select extracts, natural health products & nutraceuticals
Better export packout	More efficient logistics	Facilitating gifting	

Significant opportunity exist for industry to work together across these themes to share learnings and ideas, benchmark performance and co-ordinate activity, in particular in export focused regions

Many industry participants think a more collaborative approach would benefit the industry

“It would be great to share more learnings, to do orchard walks and talk best practice, who drives this?”

Sales and Marketing, Large packhouse, Central Otago

"Gathering and sharing data would be useful, it would make everyone realise what was coming online, and prepare for it in a more coordinated way."

Export Manager, Large grower, packer shipper

"Benchmarking across the industry would be useful, it would be really beneficial to all companies."

Manager, Large grower, packer shipper

"It would be great if we could share ideas. A collaborative approach would enhance the industry."

CEO, Large grower, packer shipper

First, there are opportunities to grow cherry production

I. GROWING PRODUCTION

II. SUPPLY CHAIN EFFICIENCIES

III. IMPROVED MARKETING

IV. VALUE-ADDED PRODUCTS

Situation creating opportunity	***Potential investment theme***	***What you would need to believe***
- Otago is a large region, similar in size to Belgium, Taiwan or Switzerland, with a climate suited to temperate fruit - Currently only 0.02% of land is planted in cherries - Otago has almost four times as much area in wine grapes (1,937ha) compared with cherries (546ha)	More land	- Additional land suitable for cherries is available - Land and orchard establishment costs will deliver a competitive economic return - Export market demand exists to absorb more New Zealand cherries - Increase in domestic demand to absorb non-export fruit - Affordable rain cover developed to allow access to more areas of land
- Realised, real-world cherry yields vary for a wide range of reasons, including genetics, management and systems - Yields vary across countries, regions and farmers - While NZ achieves good yields, competing regions achieve as good or better yields - Demand for large size early fruiting variety	Higher yields & New varieties	- Yield is not a simple trade-off with quality - Orchard management skills for improving systems can be taught - Higher yielding cherry genetics and rootstocks exist in NZ or can be brought into the country through biosecurity barriers - New variety able to be breed for early fruiting and large size
- The NZ cherry industry is highly dependent on export markets and exports sell for twice the value of local fruit - Currently two thirds of fruit achieve export grade and are exported and one third is sold in the domestic market - Export pack-out rates vary by grower and by packhouse - If all fruit were export grade, the added value would be an additional +$18-20m per annum (based on 2015-16)	Better export pack-out	- On-farm skills and systems impact export grade pack-out rates in the packhouse - Packhouse skills, systems and equipment impact export grade packout (e.g. rapid cooling of fruit) - Research around affordable retractable rain cover increases packout and efficiencies

Industry is investing in growth across existing orchards, new orchards and packhouses

"It's a real boom industry with a lot of development and investment in new orchards and packhouses."

GM, Large packhouse, Central Otago

"The industry will double in size over the next 5-6 years as new orchards come online."

CEO, Industry Body

"We will double over the next few years, we don't have any problems with demand for our cherries, we have a problem with supply."

GM, Large packhouse, Central Otago

"We have plenty of great horticultural land around that is being converted, or already converted, into orchards and millions is being invested in new packhouse technology. It's really exciting."

Sales and Marketing, Large packhouse, Central Otago

"As a guideline, it costs between $150-200,000/ha to set up the orchard (based on a 20-40ha block), we are seeing a lot of new blocks being developed."

Director, HortInvest, Central Otago

Second, the supply chain can be improved to increase efficiency

I. GROWING PRODUCTION	II. SUPPLY CHAIN EFFICIENCIES	III. IMPROVED MARKETING	IV. VALUE-ADDED PRODUCTS

Situation creating opportunity	*Potential investment theme*	*What you would need to believe...*
- Cherries have a relatively short interval between maturity and ripening leading to a short shelf life - Refrigerated cherries with a well managed cool chain can last for about four weeks - Unlike other New Zealand fruit (e.g. kiwifruit, apples), cherries are air-freighted to Asia at a high cost	Longer shelf life	- Post harvest management and systems impact shelf life - Modified atmosphere packaging can work for cherries? - Plant genetics can influence shelf life, with variation across trees; new breeds could be developed with longer shelf life? - A "Smartfresh" (1-MCP) type solution could be developed that would work on cherries?
- Three major variable costs the the greatest effect on the total cost of packing cherries. These are: labour, electricity and packaging material - Packaging directly impacts both total shipping weight and fruit to packaging ratios, both of which are particularly critical with airfreight - New Zealand has a large number of packhouses relative to crop size (22 export certified over 3,397t in 15/16) - Cherry packhouses average (154t/unit) achieve a low throughput relative to kiwifruit (10,600t/unit) or apples (7,200t/unit)	Reduced packing costs	- Unit packaging costs are cheaper for larger orders/at scale - Packaging is not purely a trade-off between rigidity/strength and weight; it is possible to be lighter and stronger - Larger packhouses have lower costs per unit than smaller businesses - Further industry consolidation would improve relative scale economics and competitiveness - Key firms in key regions would be willing to merge
- Total freight and logistics costs are a significant part of the final price of cherries; any reductions in this cost could be shared between the producer and the consumer - Airfreight is significantly more expensive than seafreight - NZ cherries are predominantly airfreighted to key markets - Key S.H. competitor Chile uses a mixture of air and sea	More efficient logistics	- Opportunities exist to improve speed and increase industry coordination to reduce net freight cost per kilogram - Opportunities exist to increase the efficiency of logistics in local trucking (e.g. full trucks, return loads) - Chilean work with shipping lines to (1) reduce shipping times by 5 days (to 22-25 days), (2) have last minute loading and (3) priority unloading on arrival in Asia could work for NZ

Industry highlight the availability of freight and labour as significant challenges going forward

"We have to ensure air freight is available. Our key advantage in market is our premium quality. When you open a box of cherries picked 48 hours ago compared to a box that's been on the sea for 4 weeks, there is no comparison."

GM, Large packhouse, Central Otago

"We have to make sure that we have the logistics and labour to keep up with growth in cherry exports."

CEO, Industry Body

"The industry has real freight issues. We rely on the cargo availability in planes out of Christchurch airport, but we mainly have to transport cherries to Auckland."

GM, Large packhouse, Central Otago

"Getting labour and accommodation for labour over such a small window is difficult. This will get worse with additional supply over the next few years."

GM, Large packhouse, Central Otago

"Sea freight is definitely an option for us, we need to ensure that the quality of fruit is maintained throughout the supply chain so it's in premium condition when it reaches market."

Export Manager, Large grower, packer shipper

"There is an acute shortage of potential managers and skilled workers, which doesn't look like being alleviated in the near future, NZIS [NZ Immigration Service] don't recognise experience only qualifications."

Owner, Medium packhouse, Central Otago

Third, the marketing of New Zealand cherries can be improved

I. GROWING PRODUCTION	II. SUPPLY CHAIN EFFICIENCIES	**III. IMPROVED MARKETING**	IV. VALUE-ADDED PRODUCTS

Situation creating opportunity	*Potential investment theme*	*What you would need to believe…*
- NZ cherries represent "a drop in the ocean" of total Asian fruit consumption; in this environment, achieving "cut through" and getting the attention of the consumer is very difficult - Key competitor Chile has significantly larger market share and in-market presence or "shelf weight" - Current messaging in key markets on NZ cherries is fragmented with multiple messages - Cherries can learn from other sectors who show a common industry story, brand, quality mark or slogan	Consistent messaging	- A coordinated "Why Otago cherries?" story with shared talking points would increase prices and sales - It is possible to get all key stakeholders to agree to implement a shared message - Shared messaging could be linked to regional tourism (e.g. an "Otago cherry blossom festival") - Shared messaging could be tied into traceability systems
- Cherries are naturally red - More than seven-in-eight New Zealand export cherries are sold to people celebrating Chinese New Year (CNY) - CNY is strongly linked to the colour red (e.g. large numbers of red lanterns are used in decoration and red envelopes of money are given as gifts) - New Zealand, Chile and Australia are effectively the only regions able to supply cherries to Asia for CNY - New Zealand also has cultural celebrations with similarities to CNY	Embracing Chinese New Year	- Opportunities exist to better tie NZ cherries to CNY through marketing, packaging and regional activity - NZ cherries could create "ownership" of CNY (cf. fabrication by De Beers that diamonds = engagement rings) - NZ can identify cultural similarities between Matariki & CNY to enhance relationships
- Confucian teaching and East Asian/Chinese culture put a strong importance on gifting in a wide range of situations - A wide range of products are given as gifts; imported foods and beverages have disproportionate importance in their use as gifts - Many NZ cherries exported in large boxes are repacked in market into gift packs	Facilitating gifting	- Quality assurance and track-and-trace systems have value - It may be possible to gift pack more cherries before export - It is possible to support in-market gift packing (e.g. through stickers) without facilitating counterfeiting - It is possible to co-pack other Otago goods into gift packs (e.g. red wines)

Gifting is associated with special events and occasions across most cultures, with both country and regional similarities and differences

NZ MAORI

New beginnings

- Matariki – named for the Pleiades star cluster; Matariki disappears during Autumn for two months and rises again around the winter solstice
- The beginning of a new life cycle, a new year
- A time to remember family and make offerings to land-based gods, plant new crops to signal new beginnings
- In modern day Maori acknowledge family, celebrate the respect for the land, hold events, fly kites, celebrate, feast and give gifts

EUROPEAN

Merry Christmas

- Key Holidays – Christmas (biscuits, cake) New Year (wine, champagne), Easter (chocolate)
- Historically many events were based on harvests and changing seasons (Christmas = winter solstice, Easter = Spring)
- Key Gifting Occasions/Events - Valentines Day (chocolate), Weddings, Birthdays, Birth of a child, Mother's Day, Father's Day, Visiting, Travel (returning)
- Food and/or Drink is brought when invited for a meal (e.g. wine or chocolate)

EAST ASIAN

Gifts and Rituals for Harmony

- Key Holidays - Chinese New Year, Dragon Boat Festival, Mid Autumn Festival
- Key Gifting Occasions/Events - Valentines Day, Weddings, Birthdays, Birth of a child, Visiting, Travel (during and returning)
- Work – Introductions, Client meetings, Building relationships
- Gifts – Food, Beverages, Health Supplements, Tea, Regional Specialties, money in red packets
- Colour – favour red and gold
- Sets of 6 or 8 (not 4)
- Associated with fireworks and lanterns

Photo credit: fair use/fair dealing; low resolution; complete product/brand for illustrative purposes); NZStory, Chris Williams; Creative Commons; Source: www.teara.govt.nz; Coriolis

Many New Zealand firms produce premium products appealing to the gifting market

EXAMPLES OF NEW ZEALAND GIFTING PRODUCTS

Select; 2017

Wine

Gin

Whisky

Butter

Abalone


Assorted Chocolate

Biscuits/Baked Goods


Cherries

Health Supplements

Infant Formula

Honey

Venison

Photo credit: fair use/fair dealing; low resolution; complete product/brand for illustrative purposes); Creative Commons; Coriolis

As these New Zealand and Australia examples show, the cherry category has strong appeal as a gifting item

EXAMPLES OF PREMIUM GIFT CHERRIES

Select; 2017

NEW ZEALAND

Cherry Corp – Premium Pack

Pure Pac – Pure Gold

Caythorpe - Wine & Cherries

AUSTRALIA

Reid Cherries and Cider - Tasmania

Koala Cherries – Black Label - VIC

Glenburn Orchards - Tasmania

Photo credit: fair use/fair dealing; low resolution; complete product/brand for illustrative purposes); Coriolis

Finally, there are select opportunities to create value-added products from New Zealand cherry waste streams

I. GROWING PRODUCTION	II. SUPPLY CHAIN EFFICIENCIES	III. IMPROVED MARKETING	IV. VALUE-ADDED PRODUCTS

Situation creating opportunity	*Potential investment theme*	*What you would need to believe…*
- There is strong demand across all key Asian markets for New Zealand cherries and premium and super-premium foods and beverages - Premium/super-premium foods and beverages are often given as gifts (e.g. French Cognac) - Gift shops, souvenir shops, and duty-free shops are major outlets for super-premium foods and beverages	Select super-premium foods and beverages	- Select foods and beverages that use cherries as an ingredient (e.g. liqueurs, liqueur-filled chocolates, powdered and freeze dried cherries) can be made from NZ processing grade/export-reject cherries - Products could be differentiated such that they could demand a premium - NZ firms have the marketing skills to deliver on super-premium items
- Often in highly competitive food sectors, successful firms are those that best monetise their waste streams - There is growing demand for natural health products and supplements, both in the Western world and East Asia - Most nutraceuticals are, in practice, value added to existing waste streams (e.g. calcium, green tea) - New Zealand has proven capabilities in nutraceutical science R&D, product development and production (e.g. manuka honey, green lipped mussel extract) - There is a growing body of research linking cherries to various positive health benefits - The NZ cherry industry generates a wide range of waste streams, including skins, pits, bark and leaves)	Select extracts, natural health products & nutraceuticals	- It is possible to extract and market New Zealand cherry extracts as nutraceuticals - Research supports NZ cherries are higher in characteristics that support functional benefits (e.g. antioxidants, melatonin, beta-sitosterol etc.) - New Zealand cherry extracts can compete in a global market - New Zealand cherry extracts can create a point of difference such that they can command higher prices than competitors

Koala Cherries in Victoria, Australia adds value to cherries by producing a variety of derivative lines

KOALA CHERRIES

2017

Koala CHERRIES | ALL ABOUT TASTE

Christmas Cherries

Chutney

Sauce

Ice Cream

Liqueur

Source: Koala cherries website; Coriolis

Opportunities exist to research New Zealand cherries unique health benefits

"Summerfruit are a long way off the nutraceutical space but there is an opportunity to develop the sector further."

Sales and Marketing, Large Exporter

"We need more R&D into the health properties of NZ cherries. The high UV impacts on antioxidant levels and melatonin levels. We could develop a real story around that."

GM, Large packhouse, Central Otago

"Cherries have real health benefits, but we don't want to be a processed product, then it's just another ingredient. We need research around New Zealand cherries in particular."

Director, Large packhouse, Central Otago

New Zealand Cherry Industry

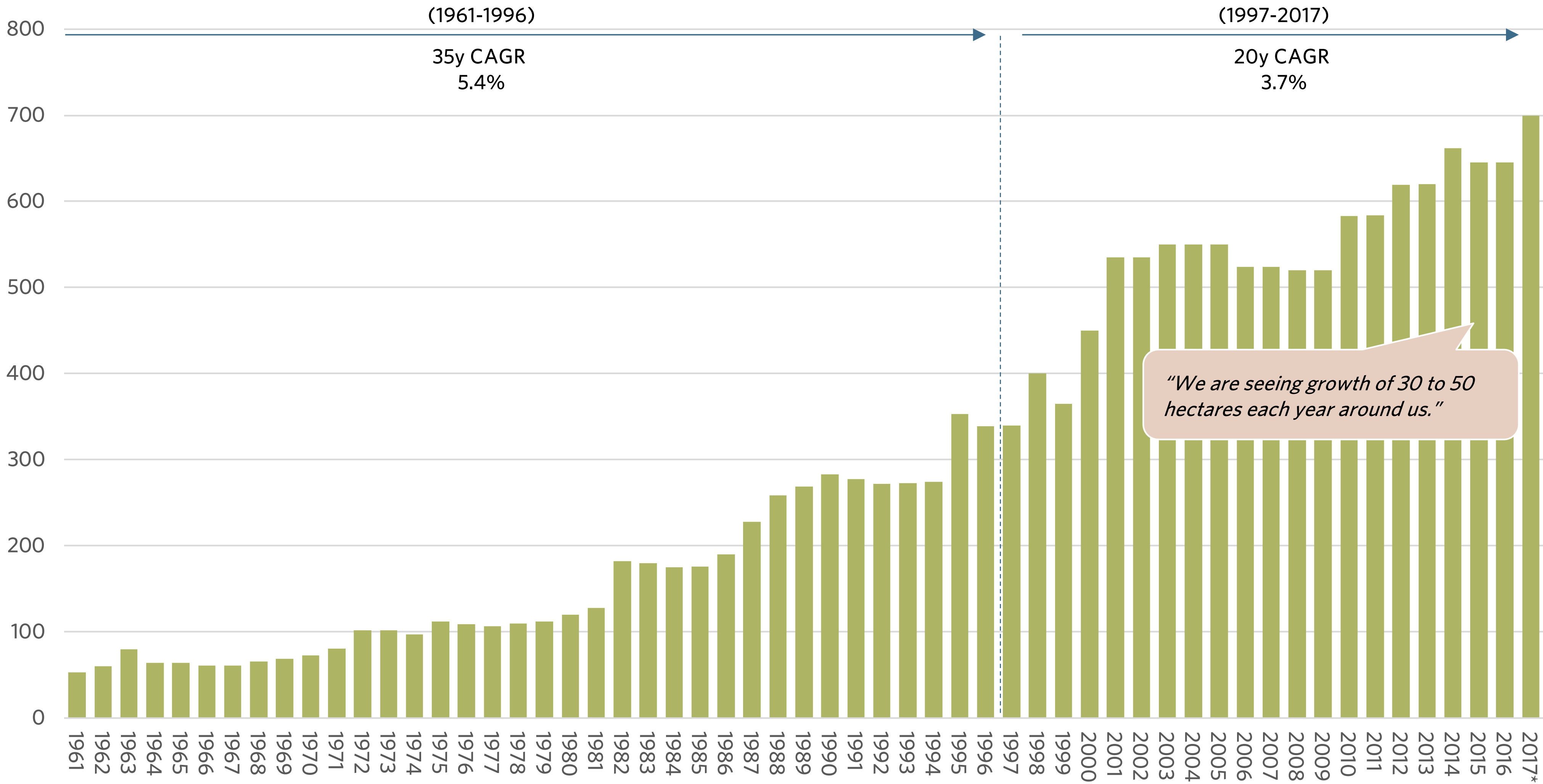
+ Area
+ Yield
+ Production
+ Supply chain
+ Packhouse operations

02

New Zealand area planted in cherries is showing steady growth

AREA PLANTED IN CHERRIES IN NEW ZEALAND

Hectares; 1961-2017

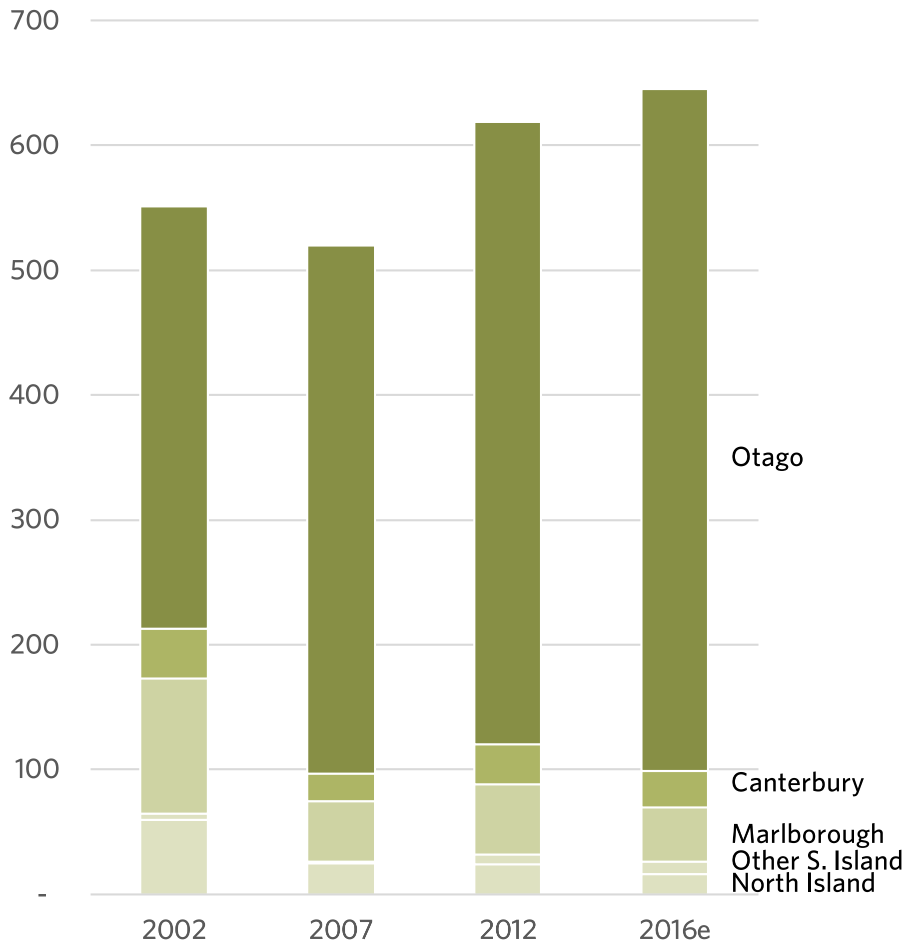


*CAGR Compound Annual Growth Rate; Note: data are a Coriolis synthesis; existing data has minor disagreements in places; * 2017 industry estimate; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis*

Most of the New Zealand area planted in cherries is in Central Otago and the region is continuing to increase plantings

AREA PLANTED IN CHERRIES IN NEW ZEALAND BY REGION

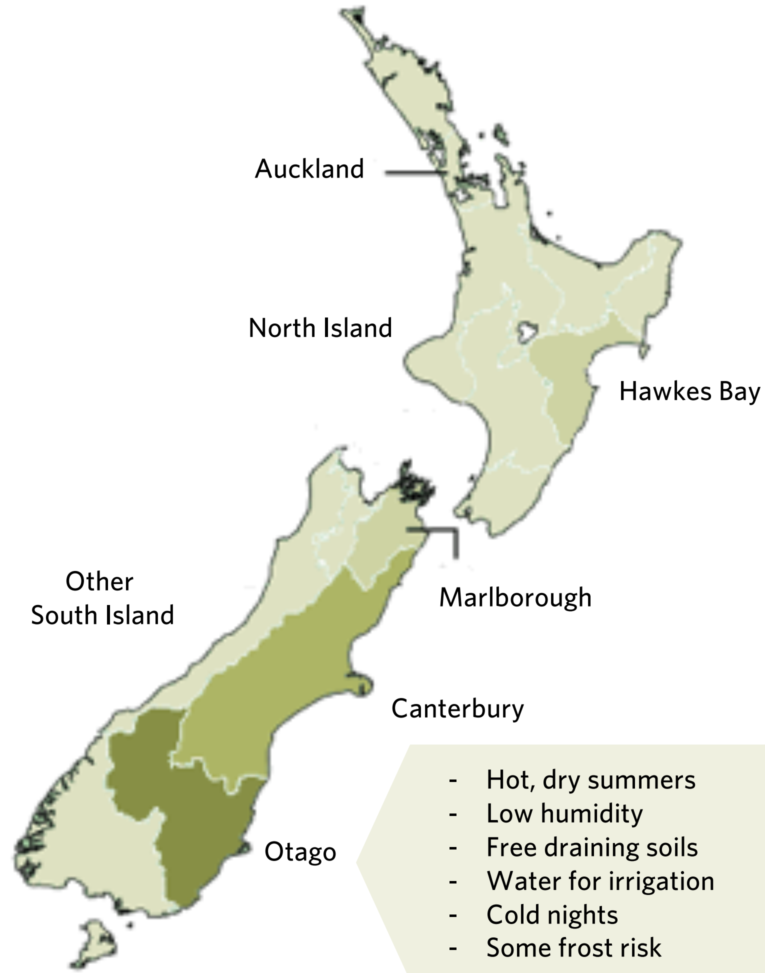
Hectares; 1961-2016



61%	81%	81%	85%	*Otago as a % of total*

LOCATION OF KEY CHERRY PRODUCING REGIONS

2016



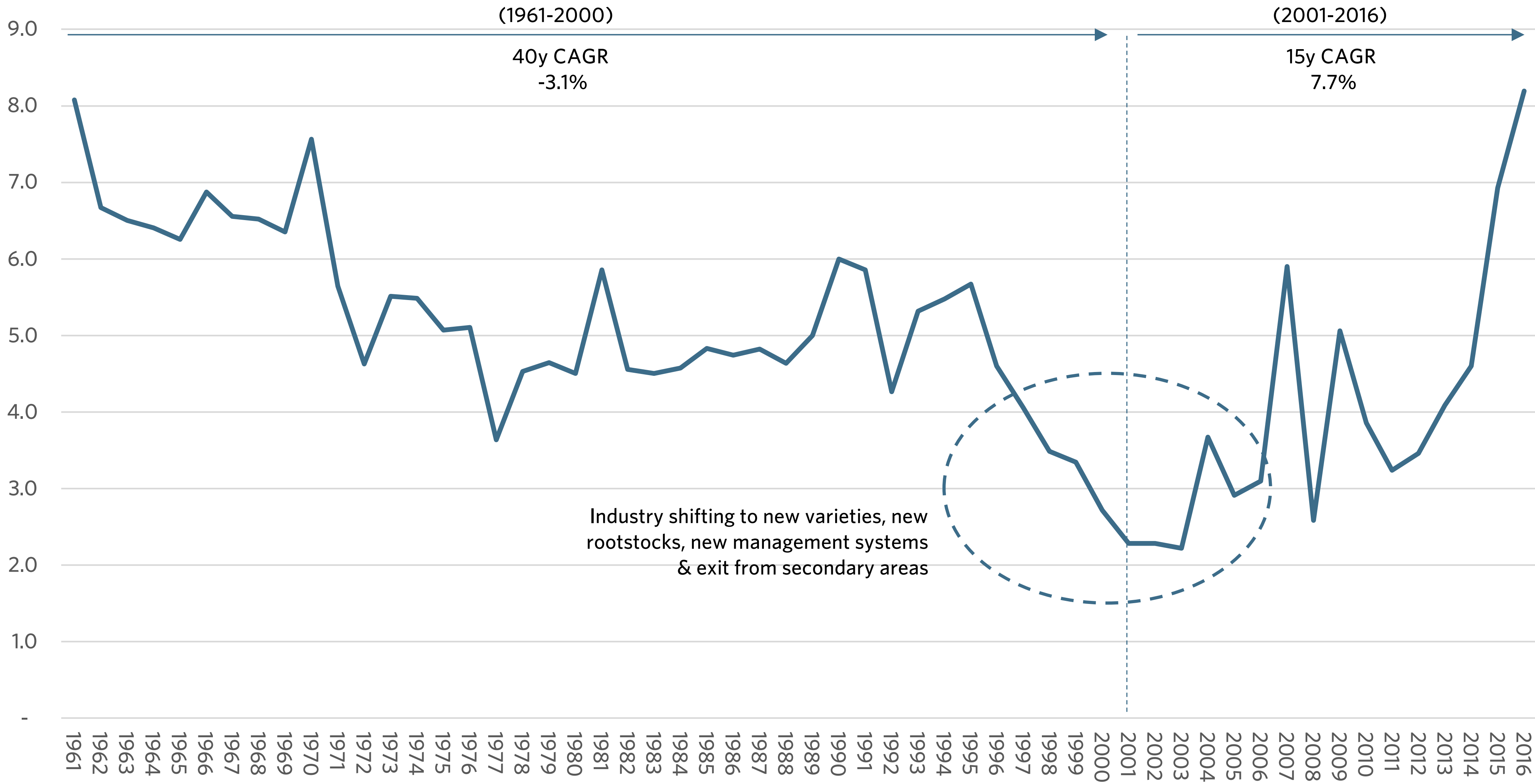
- Hot, dry summers
- Low humidity
- Free draining soils
- Water for irrigation
- Cold nights
- Some frost risk

Note: 2016 is a Coriolis estimate from available data; image source (Benchill; CCSA 3.0); Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis

New Zealand cherry yields were drifting, until a move to new varieties at the dawn of the new millennium reset the industry, leading to growing productivity

AVERAGE CHERRY YIELD IN NEW ZEALAND

Tonnes/hectare; 1961-2016

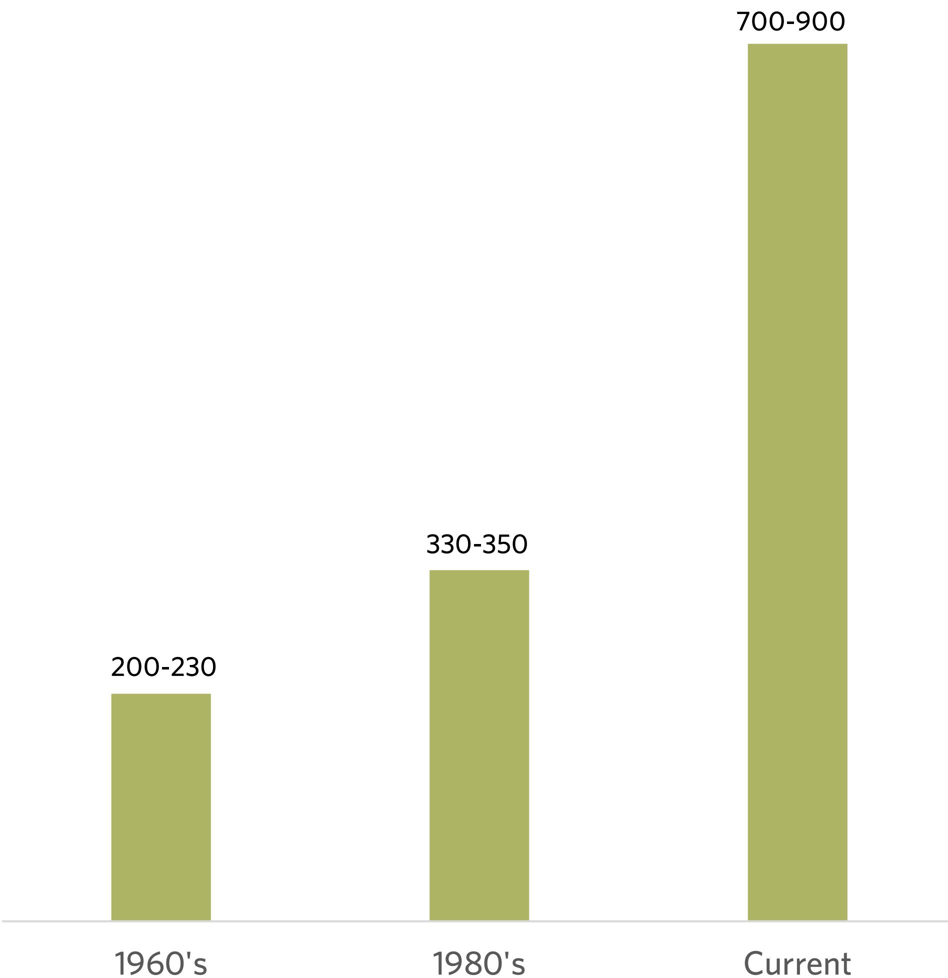


Note: data is a Coriolis synthesis; existing data has disagreements in places; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis

A range of drivers are contributing to yield increases

AVERAGE NUMBER OF CHERRY TREES PER HECTARE

Trees/hectare; select years



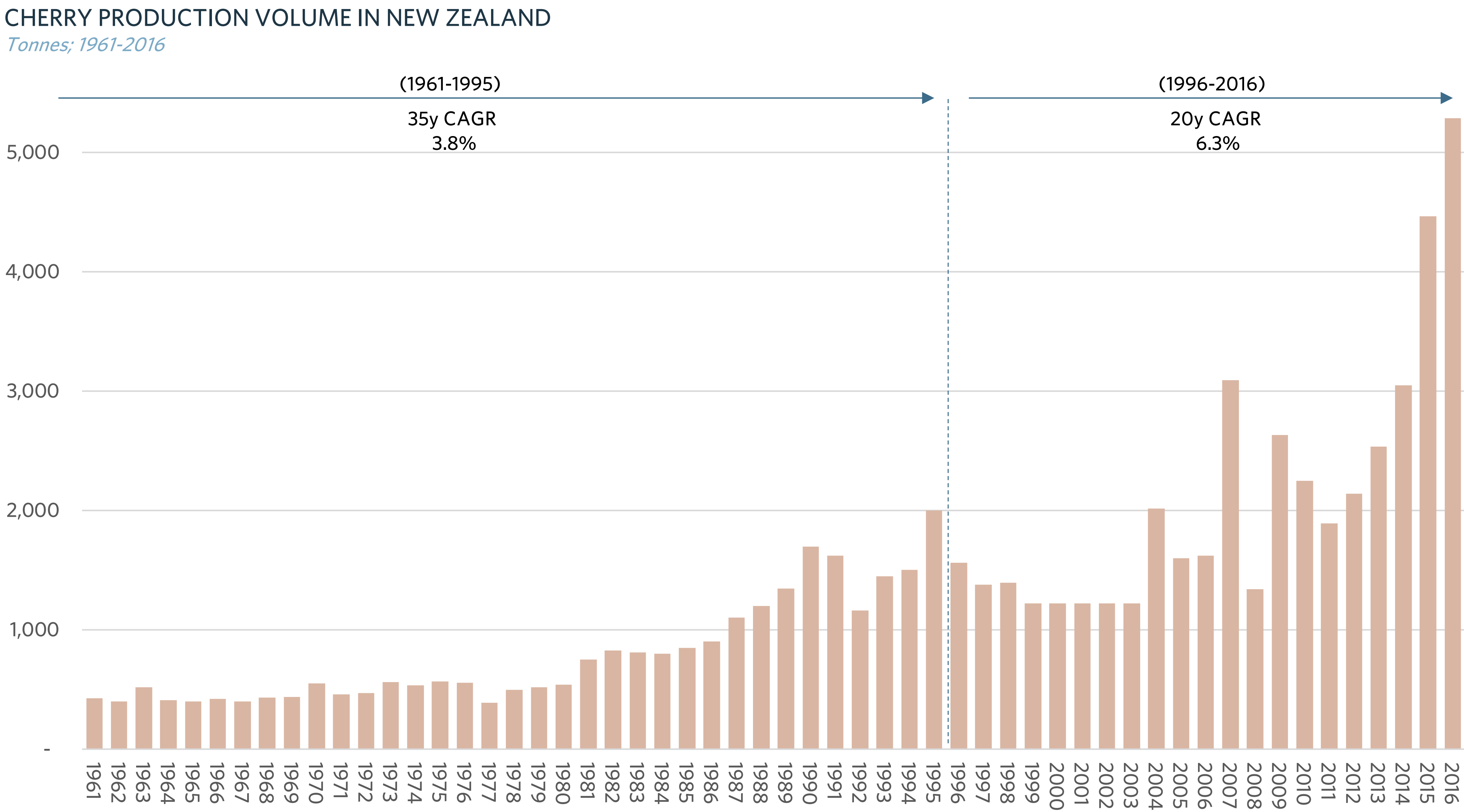
DRIVERS OF REAL-WORLD YIELD

Model; 2017

Farm Management	Skills & Training, Intelligence & Experience; Soil Management & Improvement Programs; Agronomy Systems/Timing
Farm Size	Larger Orchards; More Automation; Better Skills
On-Farm Capital	More/Better Equipment; More On-Farm Investment (e.g. irrigation); More On-Farm Storage
Agri-Chemicals	Pesticides; Herbicides; Fertiliser
Environment	Soils; Rainfall; Elevation
Plant Genetics	Availability; Suitability; Improvement
Macro-Environment	Labour Laws; Regulations; Economic & Political Stability
Inter-Year Climate Variation	Sun & Rain; Temperature; Weather Events

Source: New Zealand Department of Agriculture; interviews; past Coriolis work; Coriolis analysis

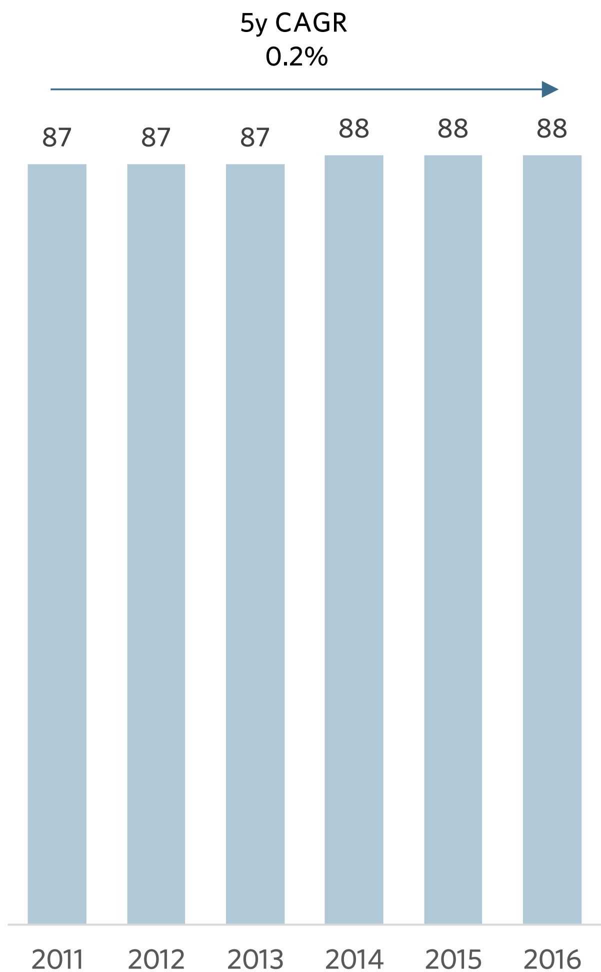
As a result of growing area and growing yields, New Zealand is achieving solid cherry production growth rates (20y CAGR 6.3%)



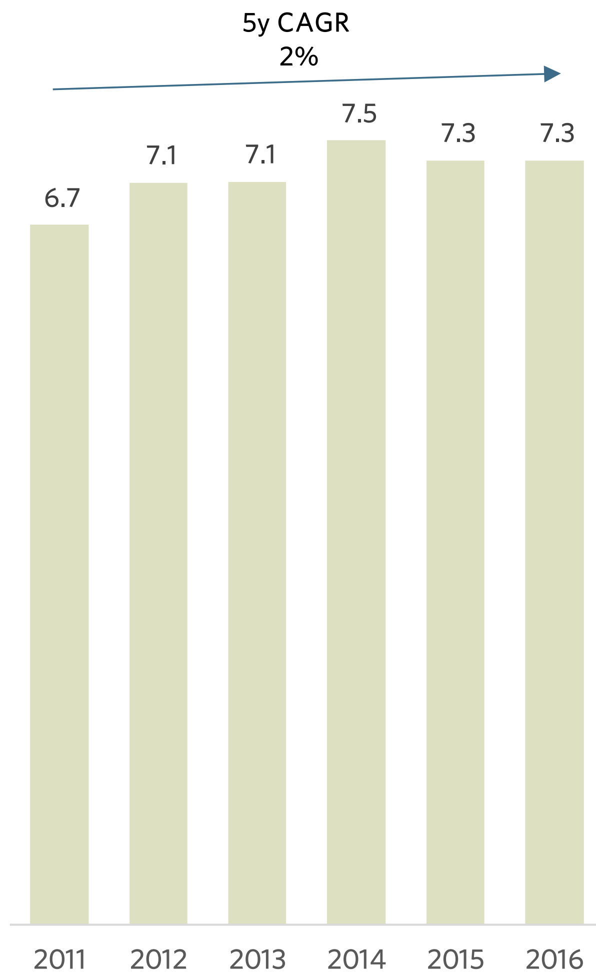
Note: data are a Coriolis synthesis; existing data has disagreements in places; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis

Recent production growth is coming from more output per farm unit (5y CAGR 23%) and some modest growth in the farm size (CAGR 2%), as the number of growers is static

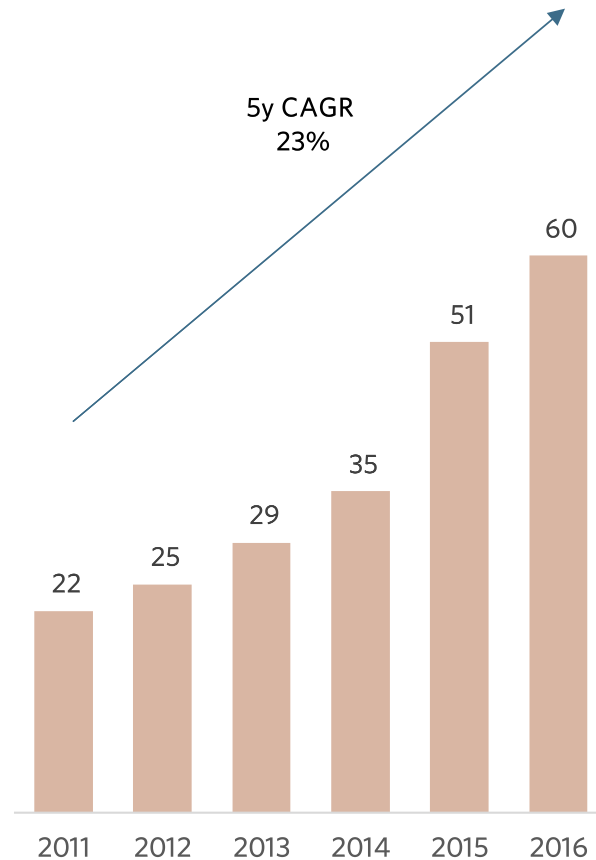
NUMBER OF CHERRY GROWERS
Actual; 2011-2016



AVERAGE UNIT SIZE
Hectares/grower; 2011-2016



AVERAGE OUTPUT PER FARM UNIT
Tonnes/grower; 2011-2016



Note: data are a Coriolis synthesis; existing data has disagreements in places; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis

Cherries have a short shelf life and therefore require a supply chain which can deliver top quality products to key markets rapidly

SIMPLIFIED MODEL OF NEW ZEALAND CHERRY SUPPLY CHAIN

2017

8-24 hours | 48+ hours | Variable by market

HARVEST
88 growers

- 88 growers; small number of large operators
- Almost totally export focused (80+% of crop) into a narrow seasonal window
- Exports targeting Chinese New Year (which has a shifting date)
- Picking starts mid-Dec, ramps up in early January and runs through mid-Feb
- Requires 2,000-2,500 pickers at any one time in season; large farms may use 200+ at a time
- Need to be Global GAP certified
- Weather can dramatically impact the crop

PACKHOUSE
~24 export certified

- Cherries gradually cooled on arrival to 0-2 degrees
- Highly mechanised, but still needs 700-900 seasonal labour staff at any one time in season
- Packhouses vary in size based on local production volumes
- Huge seasonal spike; key weeks in January may move 15-20% of total crop
- Registered members of Summerfruit

LOGISTICS & EXPORTERS
11* export certified

- Four week shelf life
- Refrigerated airfreight cargo containers
- Airfreighted to key markets; airfreight operators may divert cargo planes
- "Best case" can get cherries to market in 72 hours of picking (24 hours possible)
- Exporting may be packhouse direct (e.g. NZCC) or by larger exporter with a wide range of produce exports (e.g. Freshmax)
- License required to export, managed by HEA

IN-MARKET DISTRIBUTION

- Relationship driven
- Received by larger import-focused wholesaler brokers
- Multiple layers of regional wholesalers/distributors
- Cool chain quality varies from excellent to poor

Often vertically integrated and managed by one group as a grower packer shipper (GPS) – total of 24 export licenses

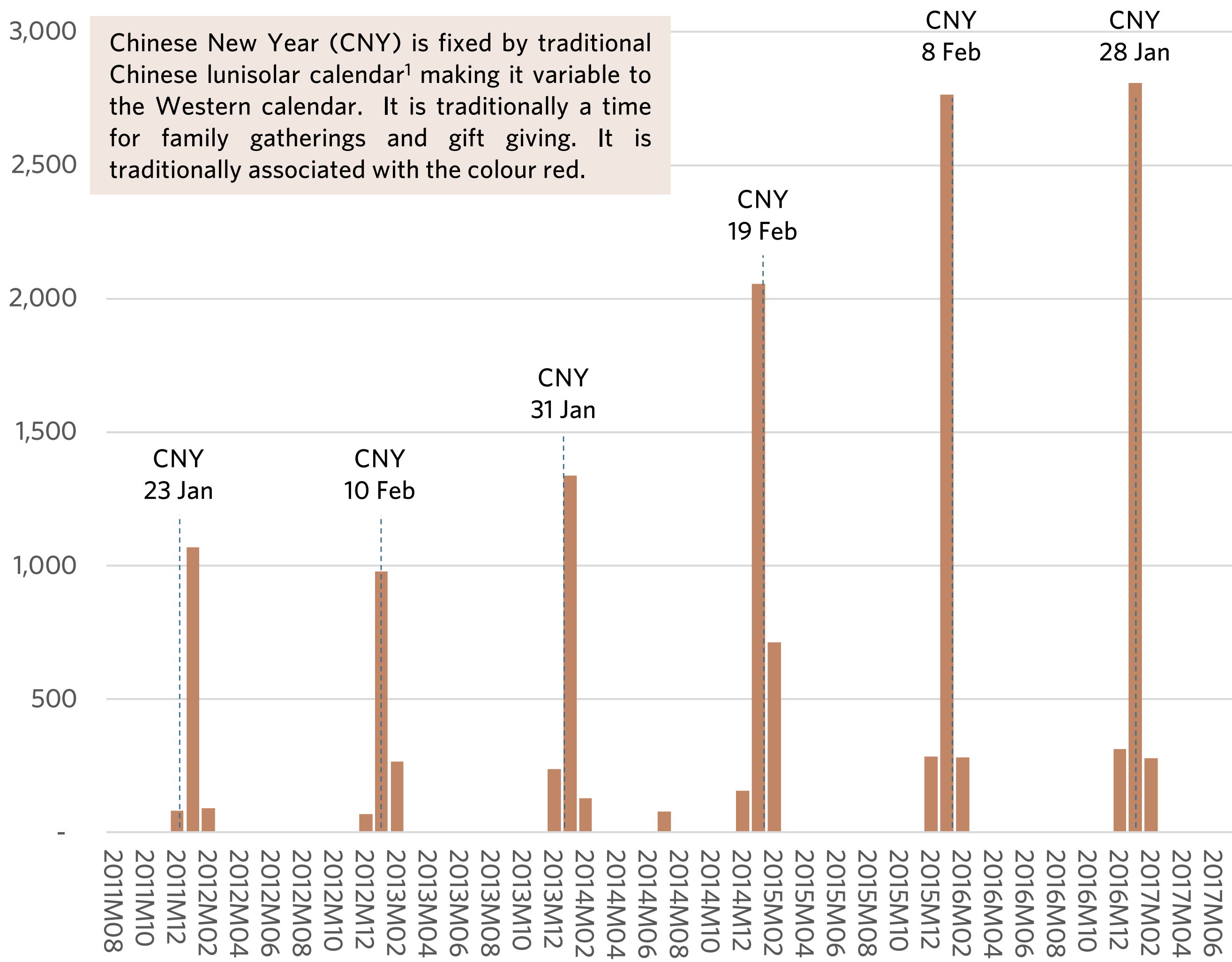
**MPI Korea Export licenses; Source: Coriolis from a wide range of sources and interviews*

New Zealand cherry production and exports are highly seasonal, with ~80% of volume moving in January, so that it can arrive in market for Chinese New Year

NEW ZEALAND CHERRY EXPORT VOLUME BY MONTH

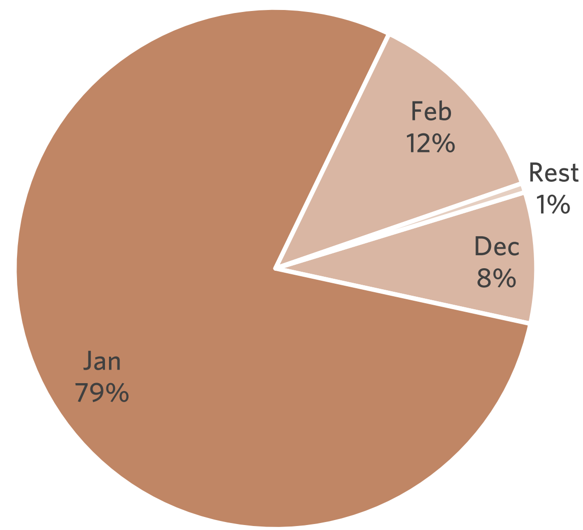
Tonnes; 12/13-16-17

Chinese New Year (CNY) is fixed by traditional Chinese lunisolar calendar[1] making it variable to the Western calendar. It is traditionally a time for family gatherings and gift giving. It is traditionally associated with the colour red.



AVERAGE EXPORT VOLUME BY MONTH

% of tonnes; 6y average; 11/12-16/17



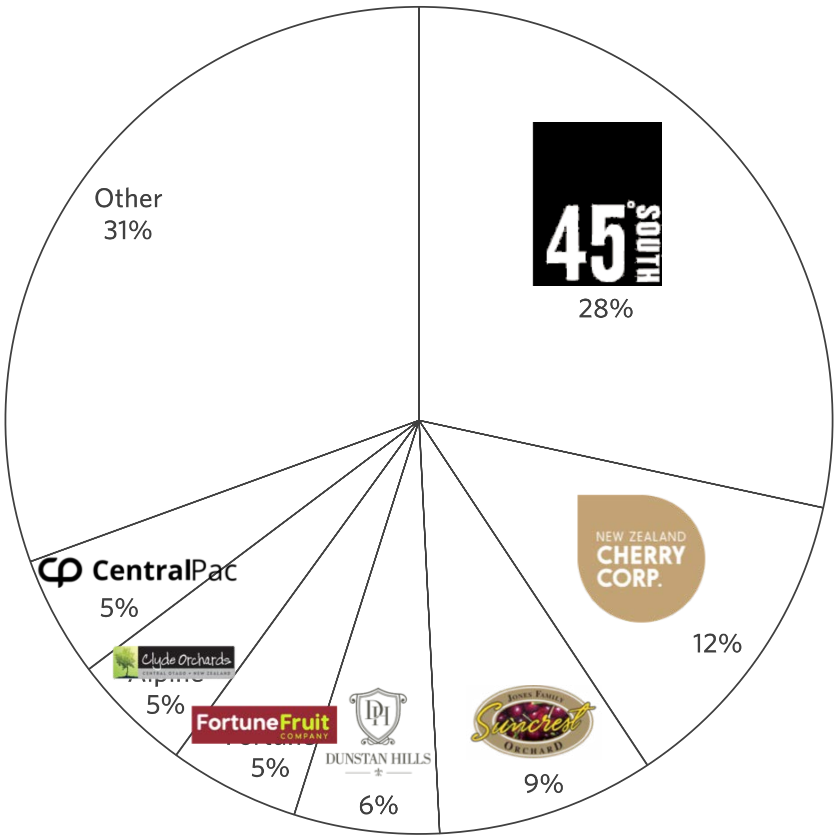
1. The calculation of this calendar is too complex to explain here; for further information see: https://en.wikipedia.org/wiki/Chinese_New_Year; Source: Statistics NZ; Coriolis analysis

There is a large number of growers; two packhouses handle over a third of the crop volume

PRELIMINARY
Many hectares not in production

ESTIMATED CHERRY PACKHOUSE MARKET SHARE

% of total volume throughput; 2016/17



Total = 5,284t

NZ CHERRY PACKHOUSE VOLUME BUILD-UP/MODEL

2016

Firm	Location	Supplying Area	Throughput
45 South	Cromwell Central Otago	150ha	1,500t
NZ Cherry Corp	Cromwell Central Otago	40ha (own)	650t
Suncrest	Cromwell Central Otago	55ha	450t*
Dunstan Hills	Earnscleugh Central Otago	21ha	300t*
Fortune Fruit	Cromwell Central Otago	34ha	270t*
Alpine Packhouse (Clyde Orchards)	Alexandra Central Otago	30ha (own)	250t*
CentralPac	Cromwell Central Otago	35ha	250t
Others		302ha	1,614t*
TOTAL		645ha	5,284t

*NOTE: PurePac NZ start packing from their new facility in the 2017/18 season (450t); many hectares are not in production or full production; *calculated based on ha; tonnes based only on their area, excludes other orchards; Source: Coriolis from a wide range of sources and interviews*

Key Markets for NZ Cherries

+ Market strategy
+ Growth
+ Market mix
+ Market share
+ Opportunities

03

The New Zealand cherry industry needs different strategic priorities for key market segments

Taiwan
Japan
South Korea
Singapore
[Hong Kong]

DEVELOPED, HIGH INCOME E/SE ASIA

Position as premium
Expand usage

- Improve access
- Reduce tariffs
- Grow per capita consumption of imported counter-seasonal cherries
- Position NZ as luxury/super-premium
- Ensure high biosecurity requirements are maintained

Thailand
Vietnam
Malaysia
Other SEA

EMERGING SE ASIA

Introduce fruit
Grow consumption

- Develop awareness
- Suggest usage occasions; focus on seasonal gift giving, particularly CNY/Tet
- Position NZ as premium
- Improve access

China
[Hong Kong]

CHINA, CHINA, CHINA

Fix underperformance
Gain market share

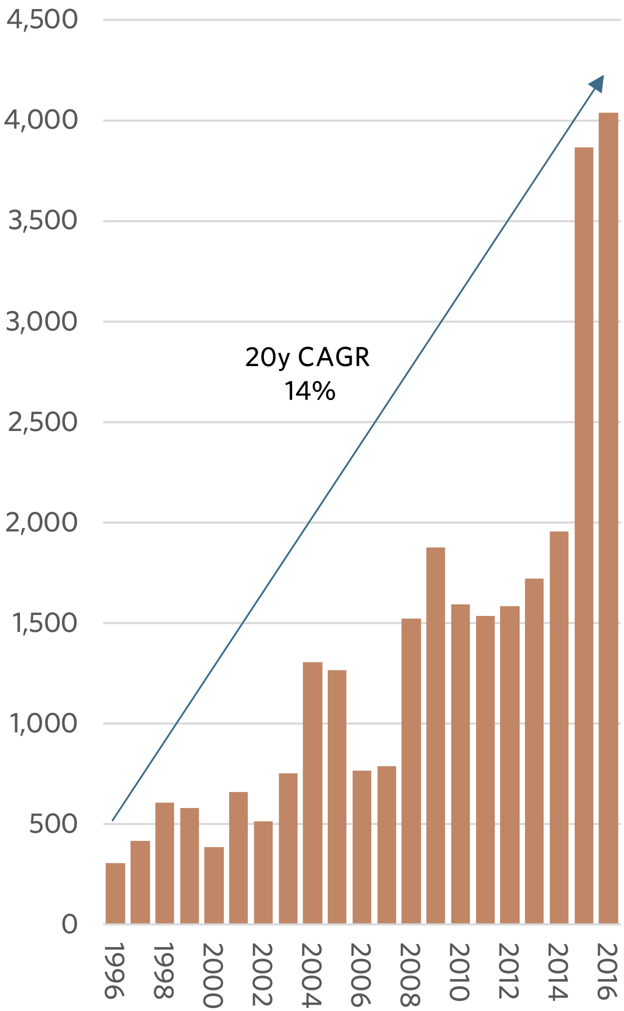
- Embrace and own Chinese New Year
- Position NZ as "the premium cherry" or "the Cognac of cherries"
- Better gift packs
- Ensure best leverage of FTA*
- Potential for Chinese investment to improve route-to-market and ensure "green lane" access

*SEA South East Asia; *China Free Trade Agreement; Source: photo credit (purchased or creative commons (Dollar Photo Club; freenzphotos.com))*

The value of NZ cherry exports has been growing rapidly, driven by strong volume increases (20y CAGR 14%) and moderate price increases (20y CAGR 3%), leading to strong export value growth (20y CAGR 17%)

NZ CHERRY EXPORT VOLUME

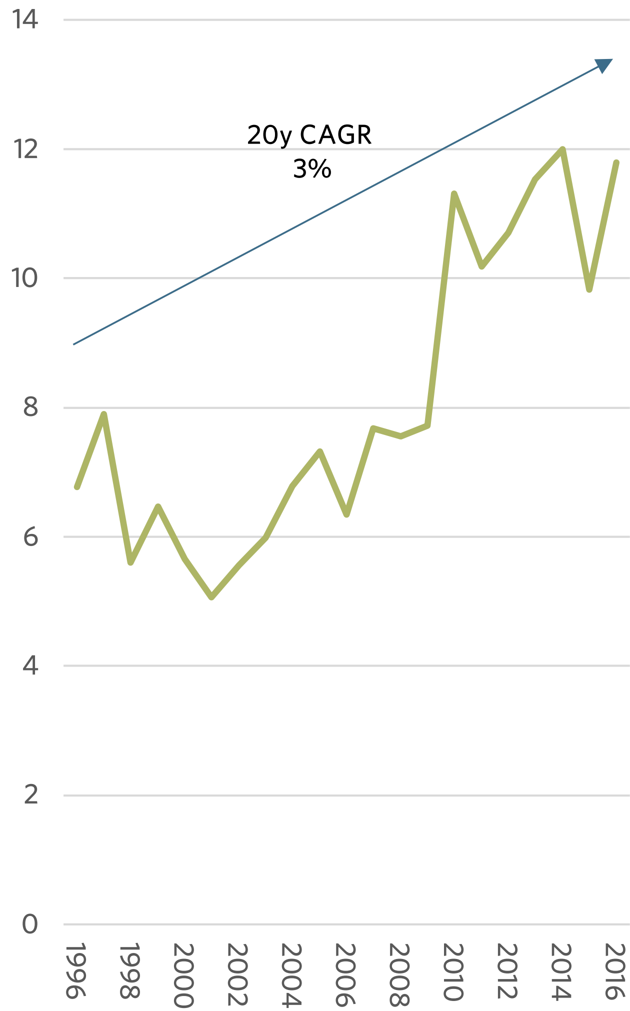
Tonnes; 1996-2016



x

AVERAGE EXPORT PRICE PER KILOGRAM

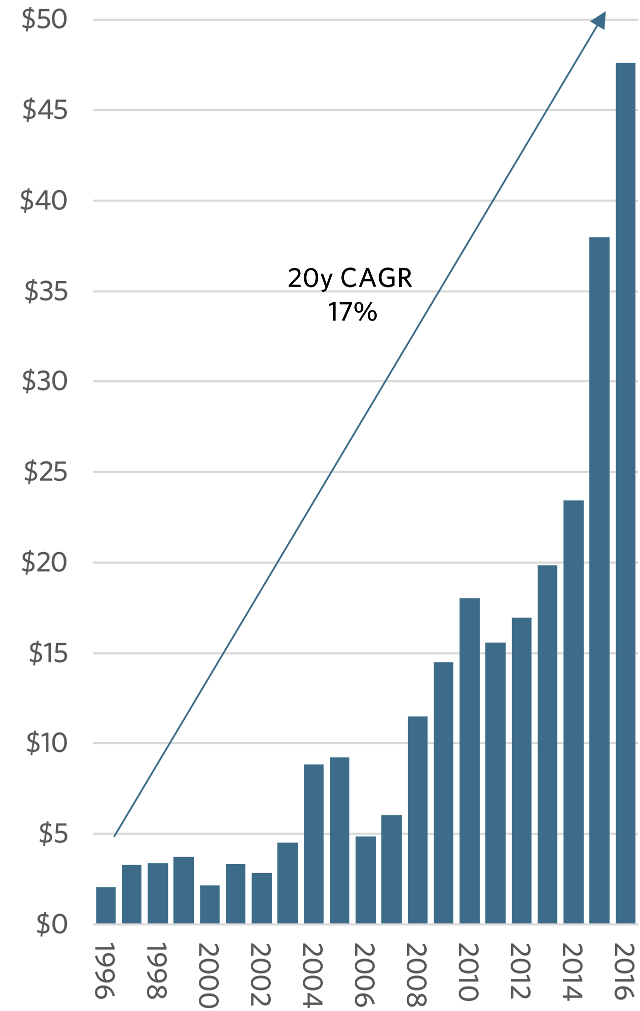
US$; not inflation adjusted; 1996-2016



=

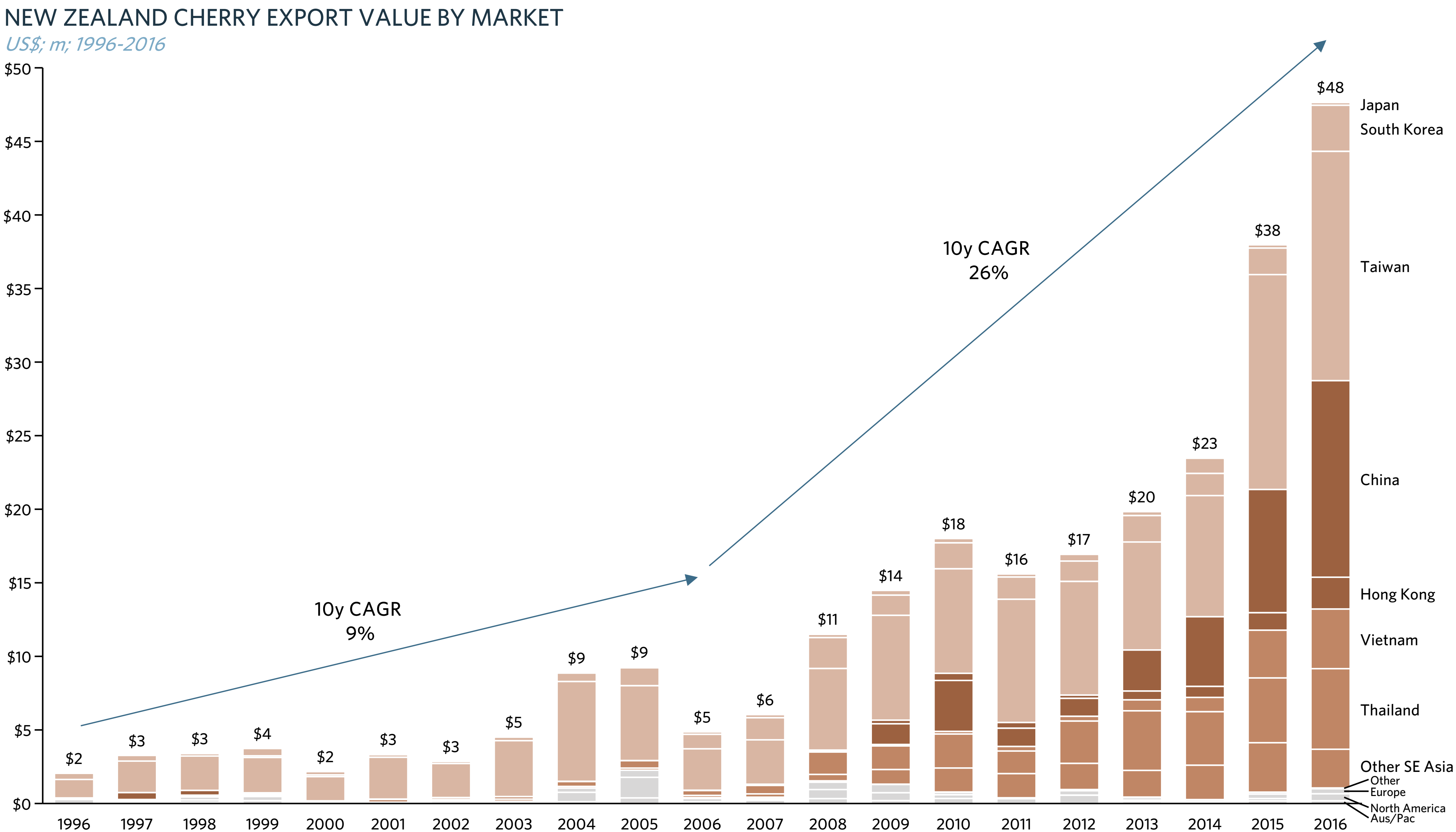
NZ CHERRY EXPORT VALUE

US$; m; 1996-2016



Note: Data are calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

New Zealand's growth in cherry exports over the past twenty years has come predominantly from countries that celebrate Chinese New Year*, particularly Taiwan, China, Hong Kong, Vietnam (Tet[1]) and Thailand[2]



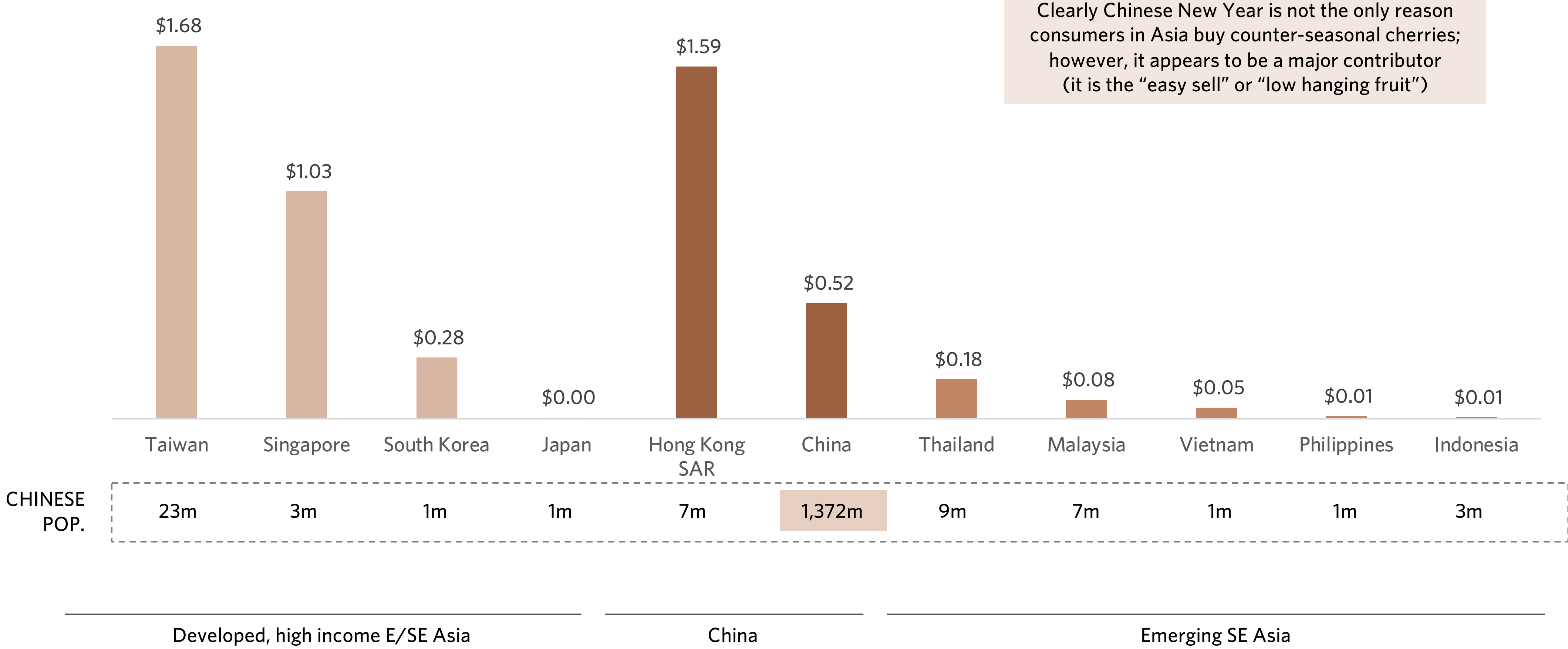
1. Tet Nguyen Dan is Vietnamese New Year (same day as Chinese New Year); 2. Including countries with a large Chinese population; Note: Data is calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

As an observation; rich countries that celebrate Chinese New Year* spend the most per capita on counter-seasonal cherries

TOTAL PER CAPITA SPENDING ON IMPORTED COUNTER-SEASONAL/SOUTHERN HEMISPHERE CHERRIES

US$/person; FOB sender; 2016

Clearly Chinese New Year is not the only reason consumers in Asia buy counter-seasonal cherries; however, it appears to be a major contributor (it is the "easy sell" or "low hanging fruit")

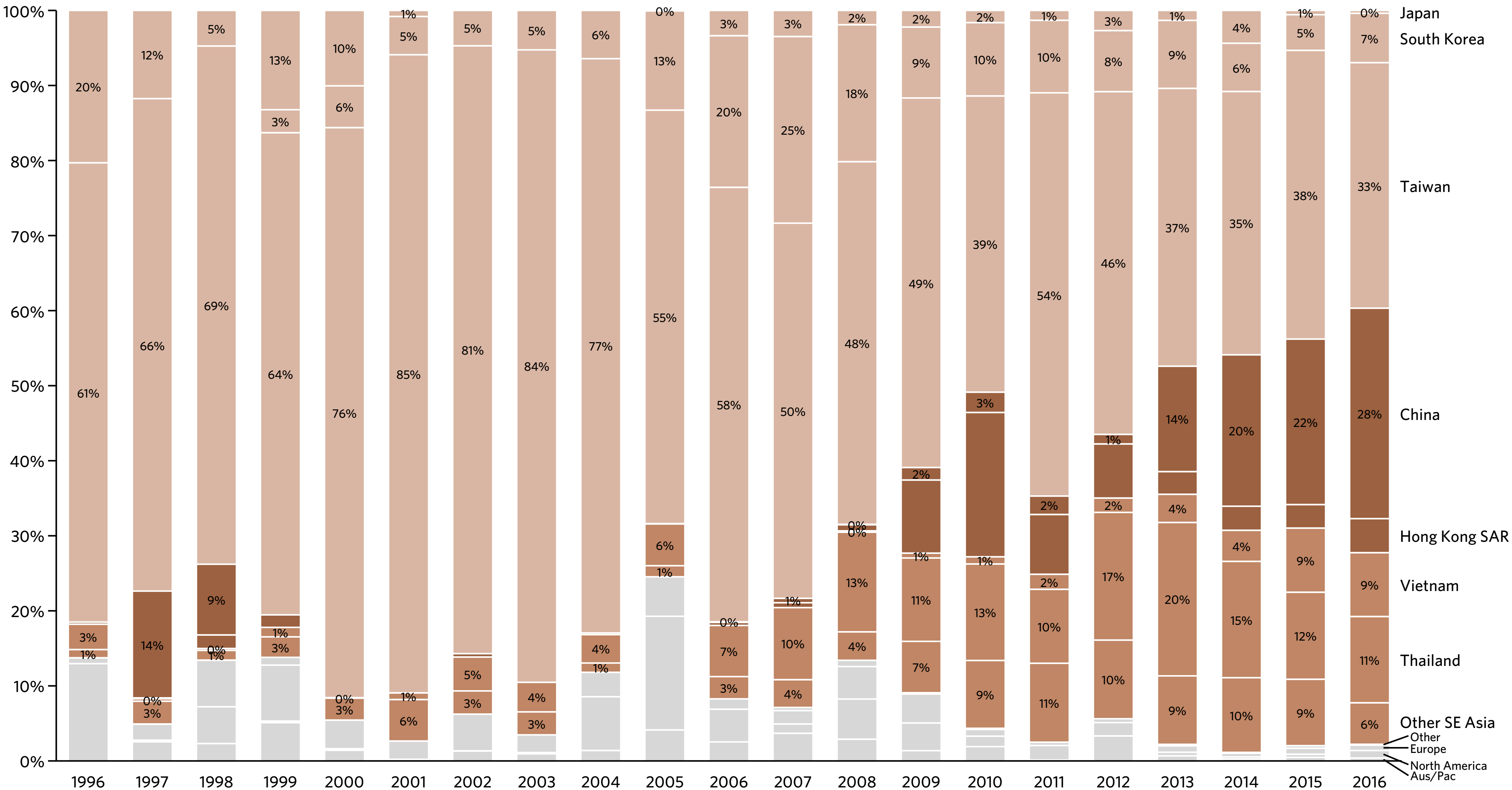


** or Tet; including countries with a large Chinese population; Note: Data is calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3); Source: UN Comtrade database; Coriolis analysis*

The export market for New Zealand cherries has moved from a dependence on Taiwan in the mid-90's, to a wider range of destinations today; with China and Vietnam standing out for recent growth in share

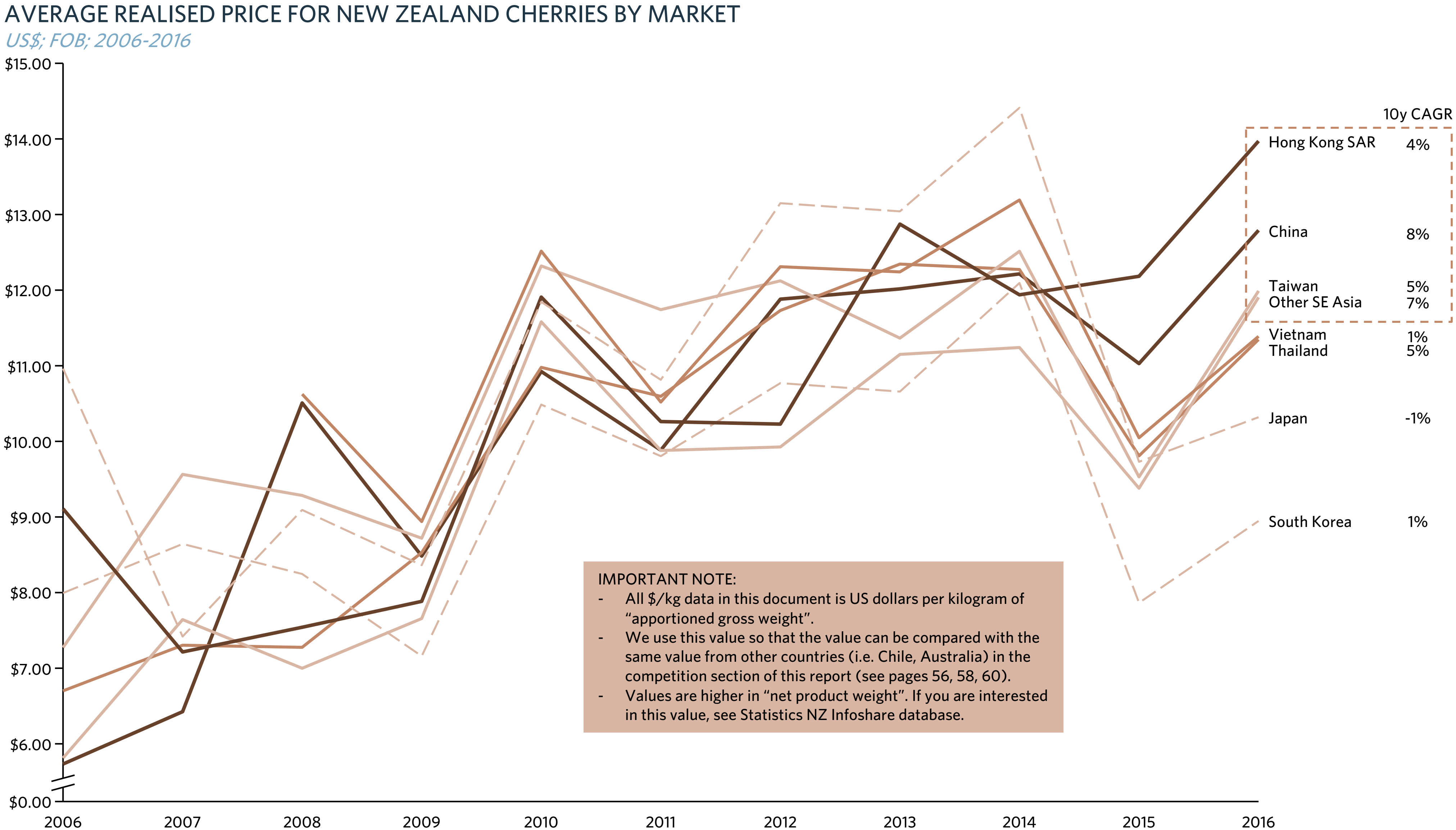
NEW ZEALAND SHARE OF CHERRY EXPORTS VALUE BY MARKET

US$; m; 1996-2016



Note: Data are calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

The price realised for New Zealand cherries varies by market, with Hong Kong and China standing out as paying the highest prices and Japan and South Korea paying less with flat to falling values



IMPORTANT NOTE:

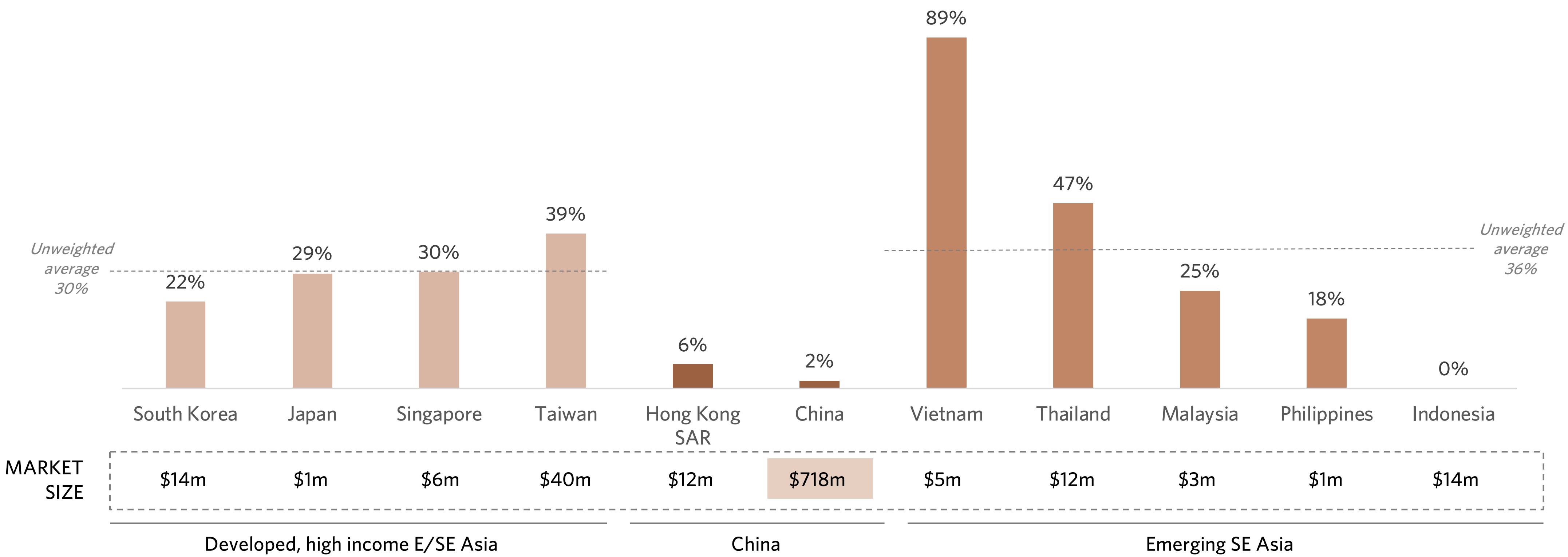
- All $/kg data in this document is US dollars per kilogram of "apportioned gross weight".
- We use this value so that the value can be compared with the same value from other countries (i.e. Chile, Australia) in the competition section of this report (see pages 56, 58, 60).
- Values are higher in "net product weight". If you are interested in this value, see Statistics NZ Infoshare database.

Note: Data are calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

New Zealand counter-seasonal cherry market share varies by country and region; performing well in SE Asia and developing East Asia, but underperforming in China

NEW ZEALAND VALUE MARKET SHARE OF COUNTER-SEASONAL (S.H.) CHERRIES

% of US$; 2016

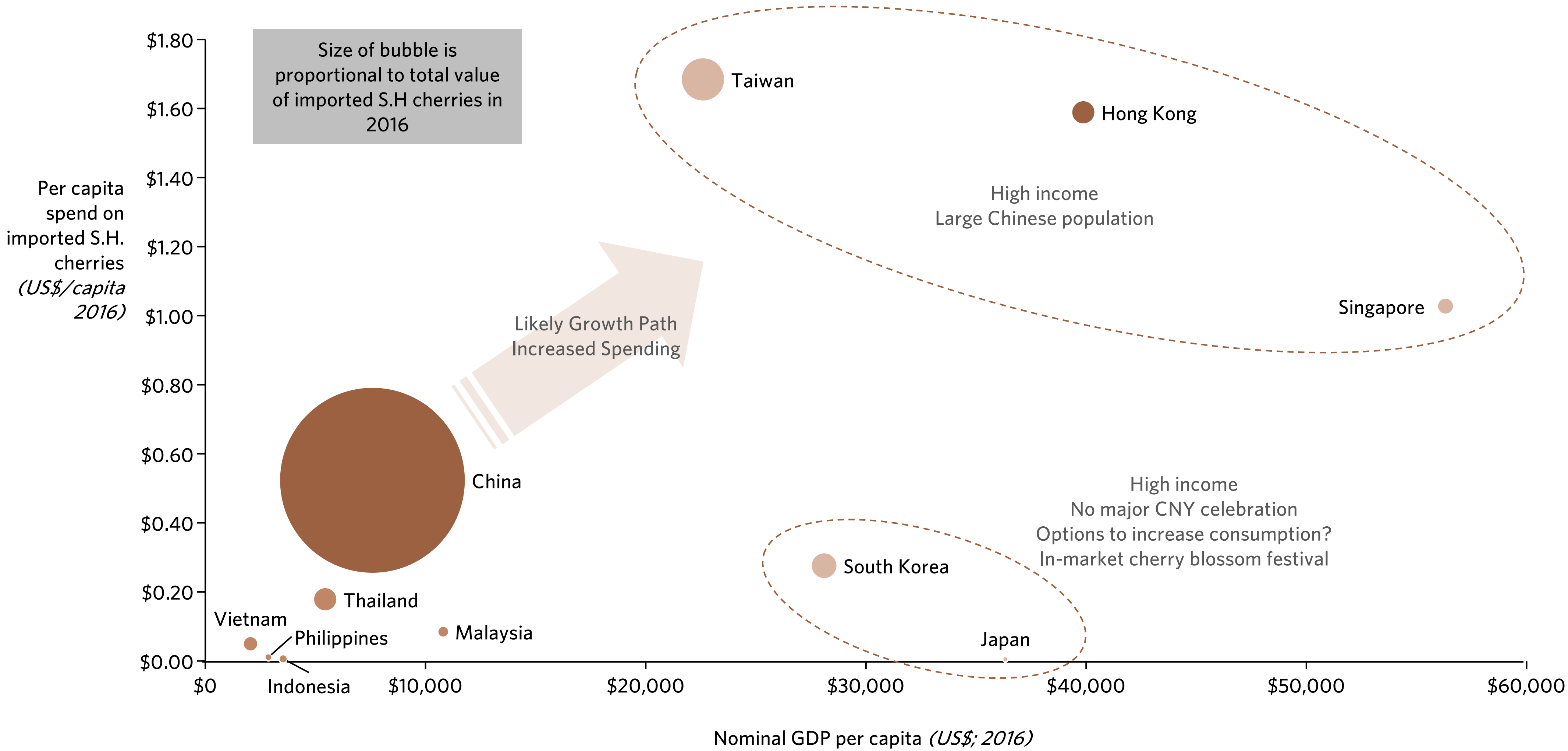


S.H = Southern Hemisphere; Note: Data are calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3 by value); Source: UN Comtrade database; Coriolis analysis

Per capita spending on imported S.H. cherries is influenced by GDP per capita; China stands out as a large market with significant growth prospects as income grows

GDP PER CAPITA VS. TOTAL PER CAPITA SPEND ON IMPORTED S.H. CHERRIES VS. MARKET SIZE

US$/capita; FOB sender; 2016



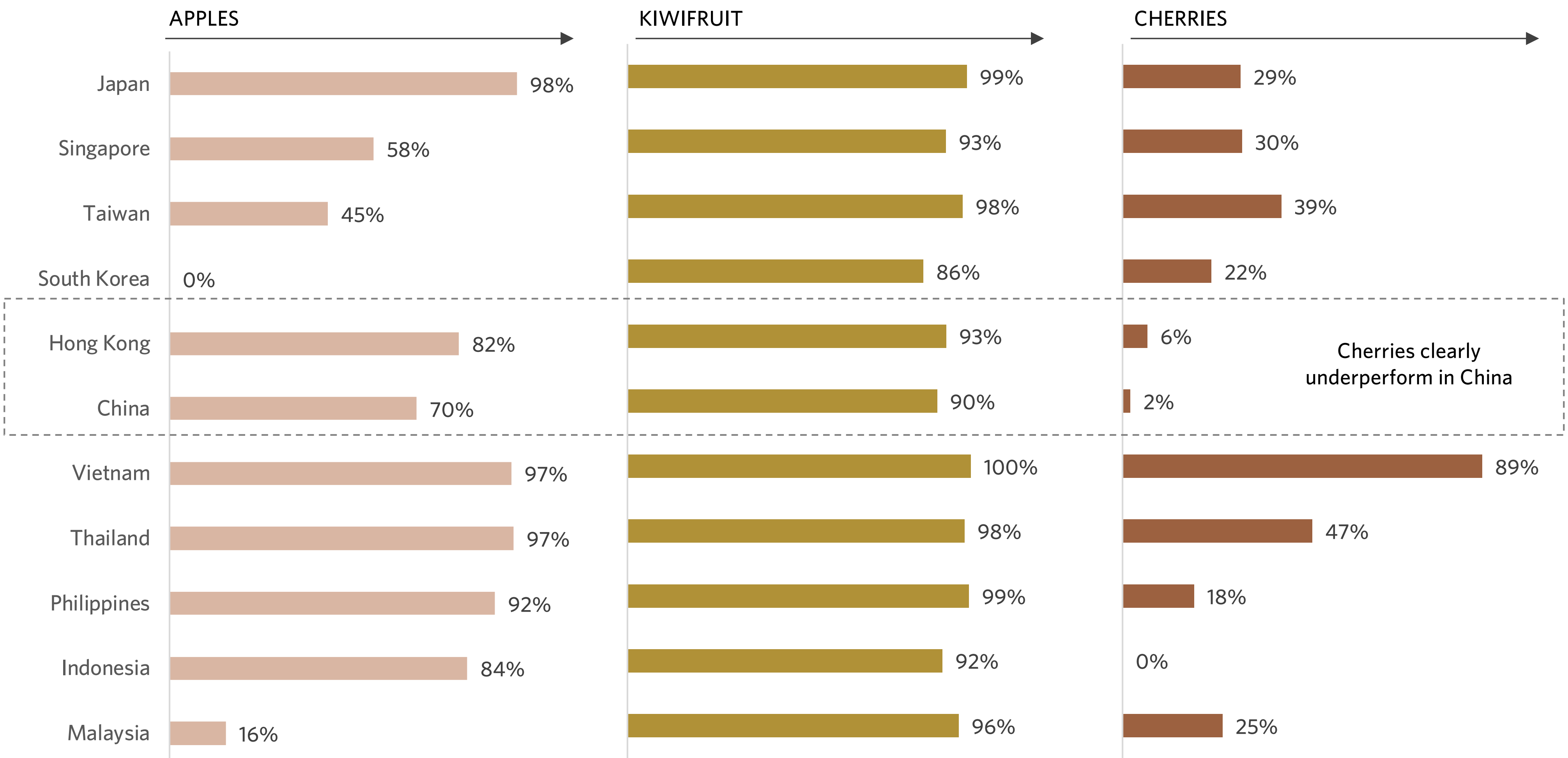
S.H = Southern Hemisphere; Note: Data are calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3)

Source: UN Comtrade database; Coriolis analysis

The success of counter-seasonal New Zealand apples and kiwifruit in key East and South East Asian markets shows success is possible; China stands out as having the greatest potential to grow market share

NEW ZEALAND VALUE SHARE OF IMPORTS OF SELECT SOUTHERN HEMISPHERE SELECTS

% of US$; FOB sender; 2016

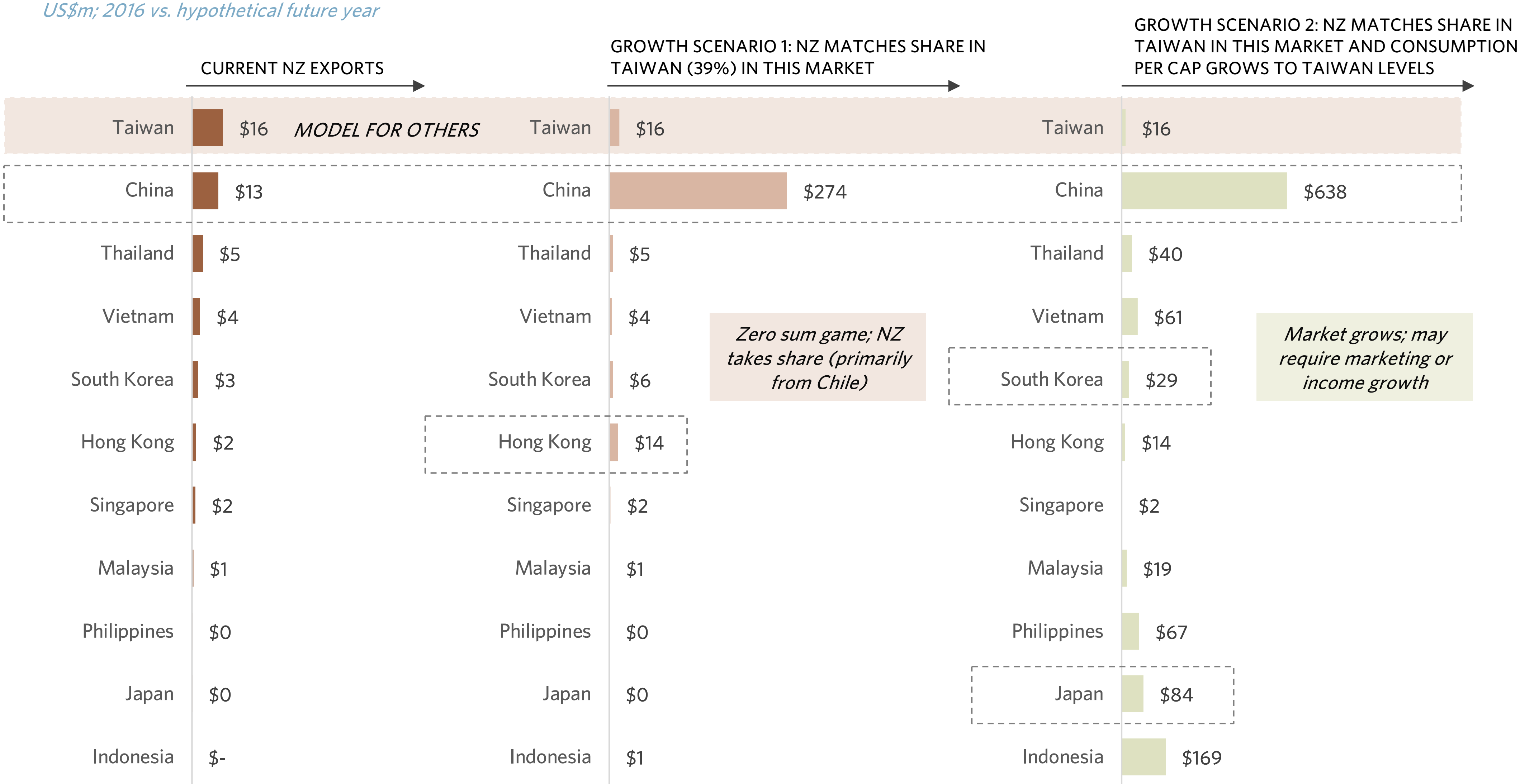


Source: UN Comtrade database; Coriolis analysis

In terms of potential market size, China again stands out with the potential to grow into a US$274-638m market for New Zealand cherries

ESTIMATED EXPORT MARKET VALUE FOR NEW ZEALAND CHERRIES UNDER GIVEN SCENARIOS

US$m; 2016 vs. hypothetical future year



Source: Coriolis

Competitive Situation

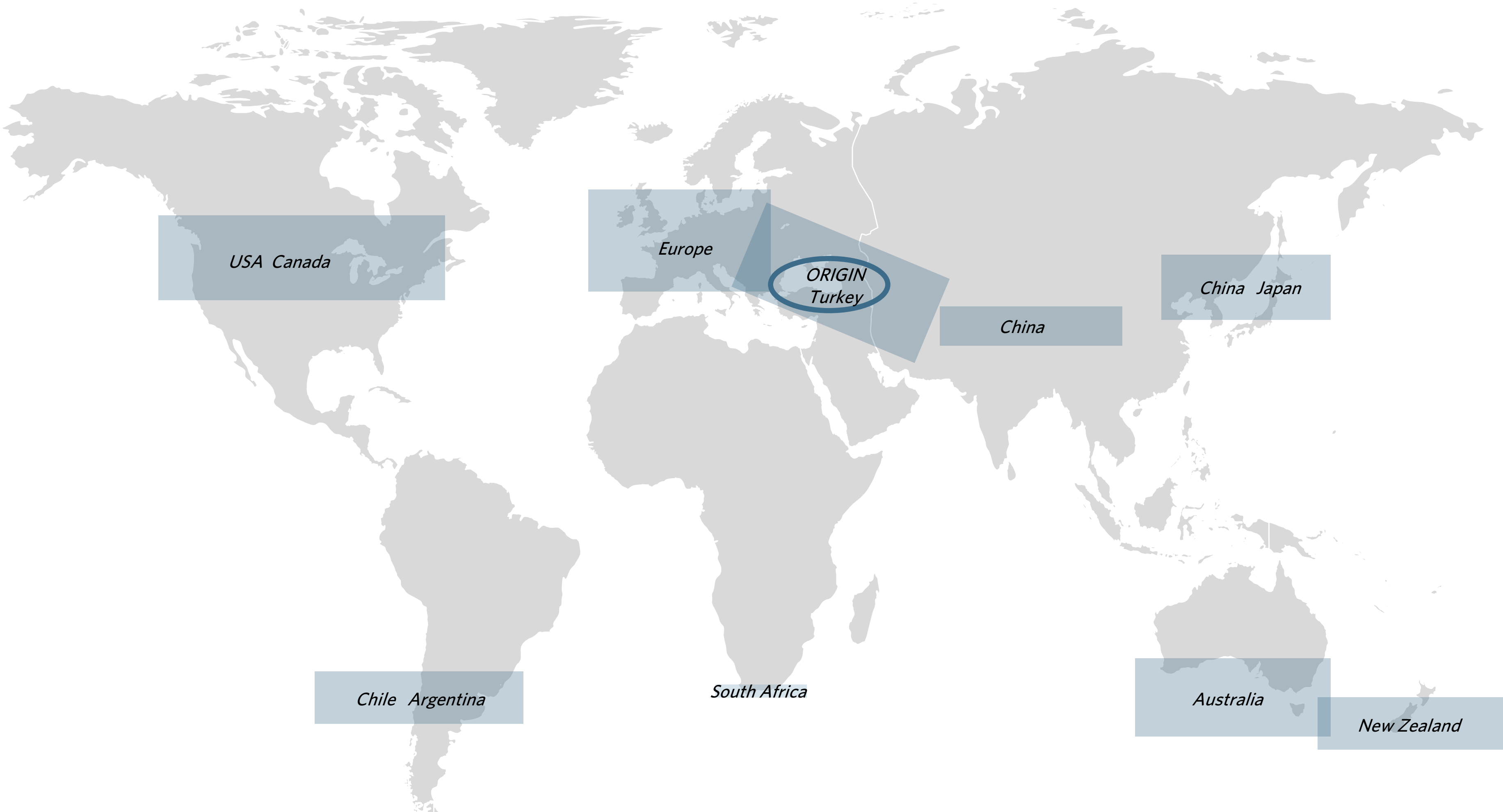
+ Global situation
+ Southern Hemisphere window
+ Key competitors
+ Key markets

04

Only temperate regions with cold winters can produce sweet cherries commercially

APPROXIMATE REGIONS WHERE SWEET CHERRIES CAN BE PRODUCED IN COMMERCIAL QUANTITIES

Conceptual model; 2017

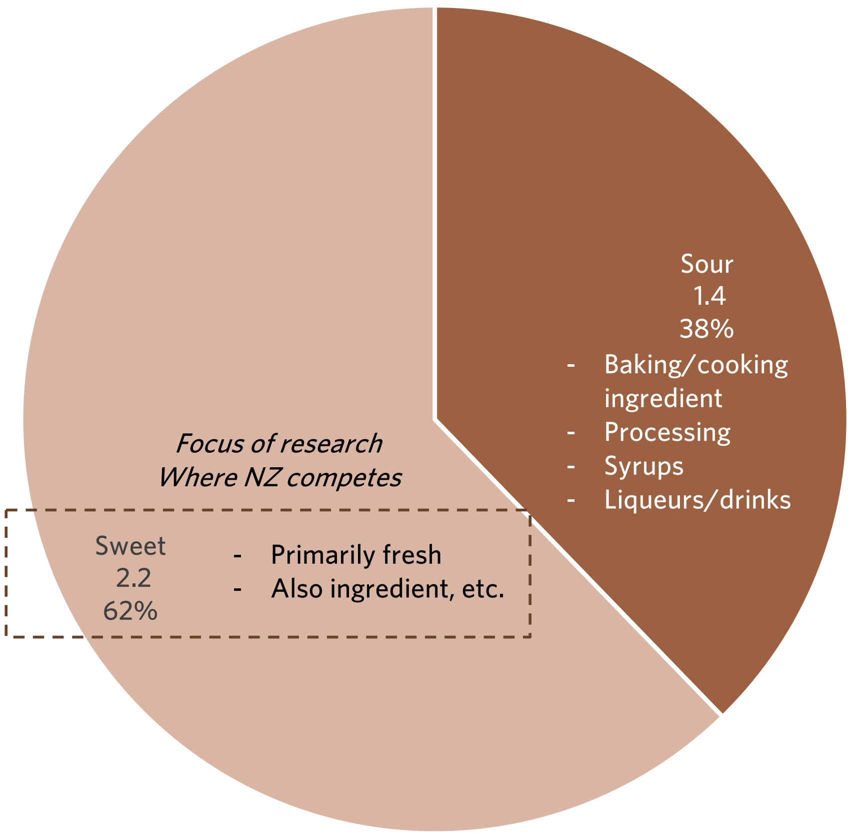


Source: Coriolis analysis of production data

Global cherry production is 3.6m tonnes, split two thirds sweet (62%), one third sour (38%); global production growth is low and relatively stable; New Zealand only competes in sweet

GLOBAL CHERRY PRODUCTION BY TYPE

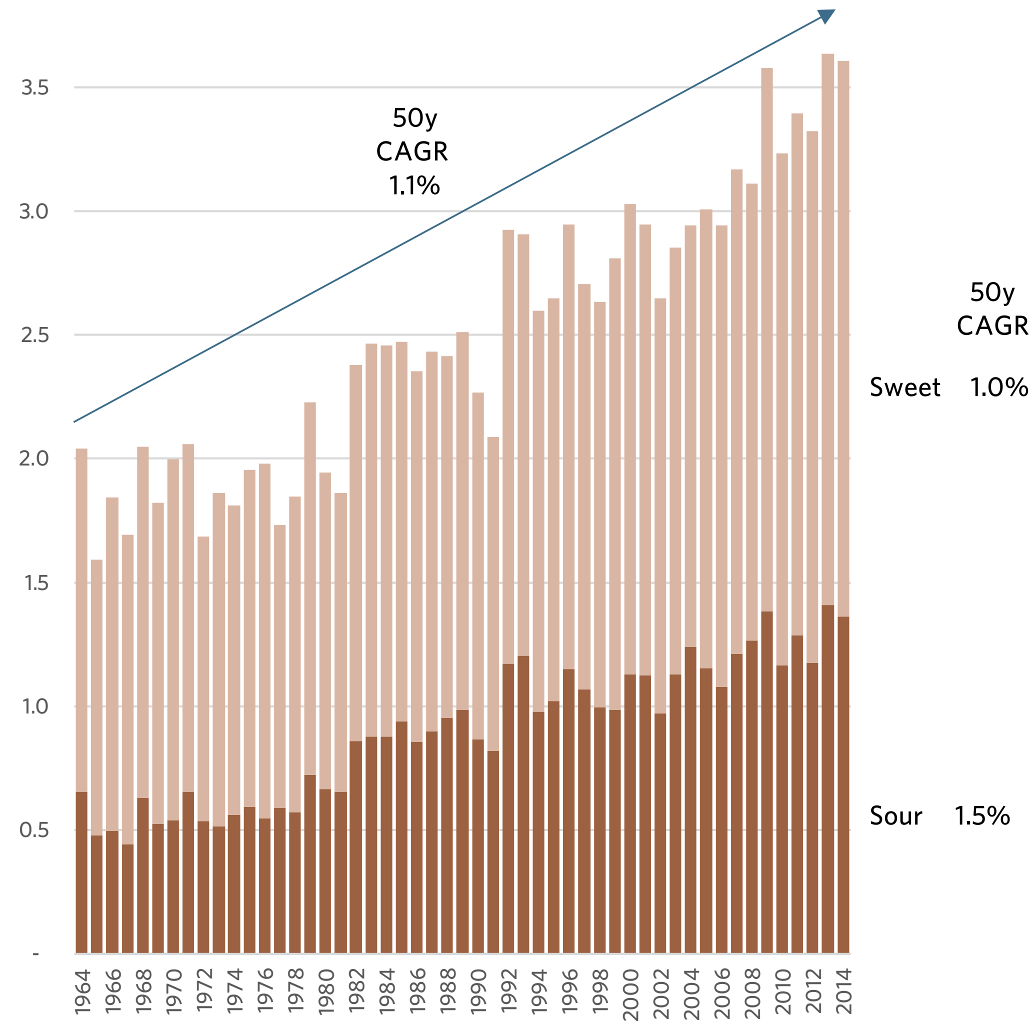
Tonnes; m; 2014



TOTAL = 3.6m tonnes

GLOBAL CHERRY PRODUCTION BY TYPE

Tonnes; m; 1964-2014

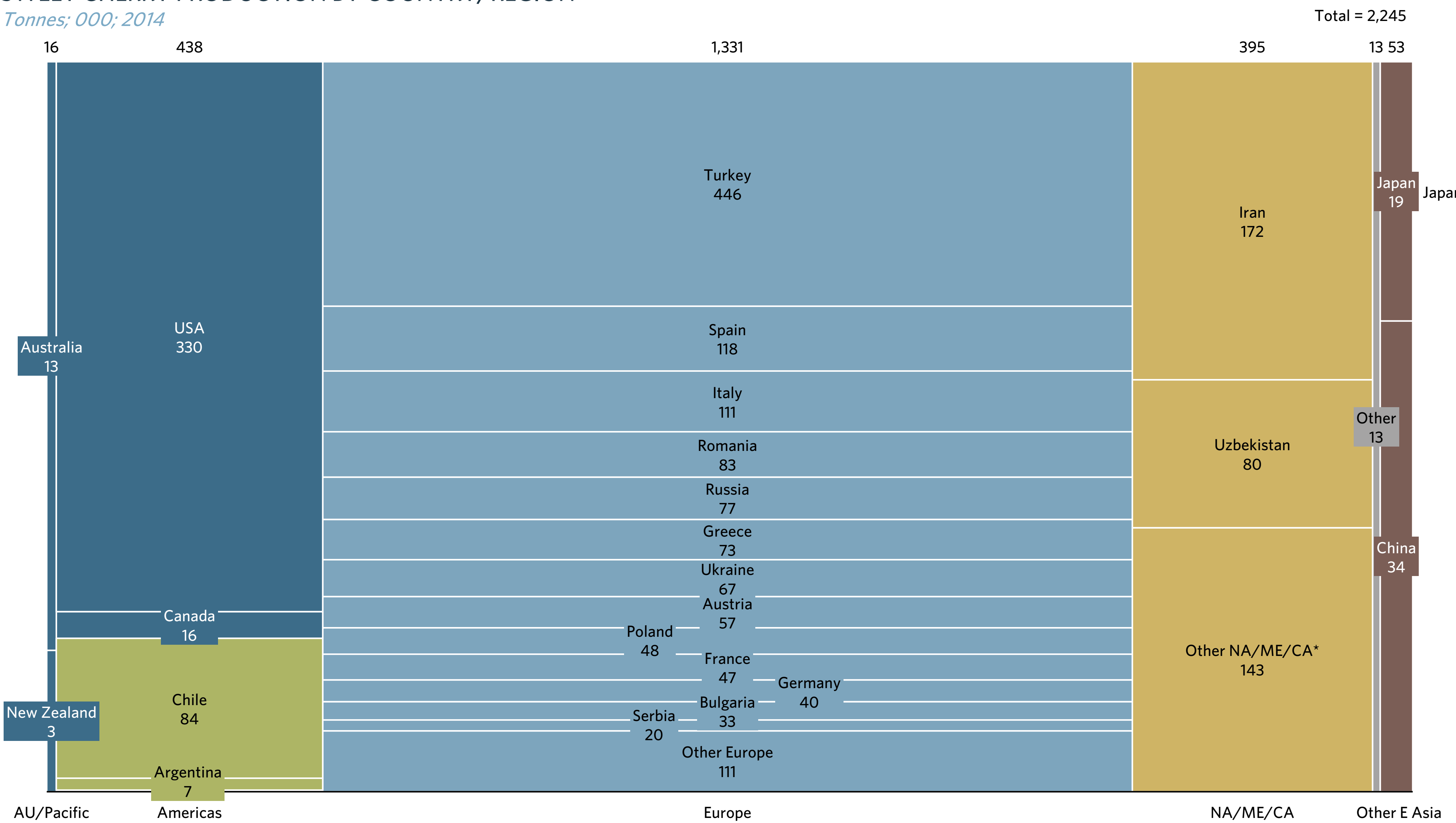


Source: UN FAO database; Coriolis analysis

Global sweet cherry production is concentrated in the colder and/or mountainous regions of Europe, Central Asia, North America, East Asia, Australia and New Zealand

SWEET CHERRY PRODUCTION BY COUNTRY/REGION

Tonnes; 000; 2014

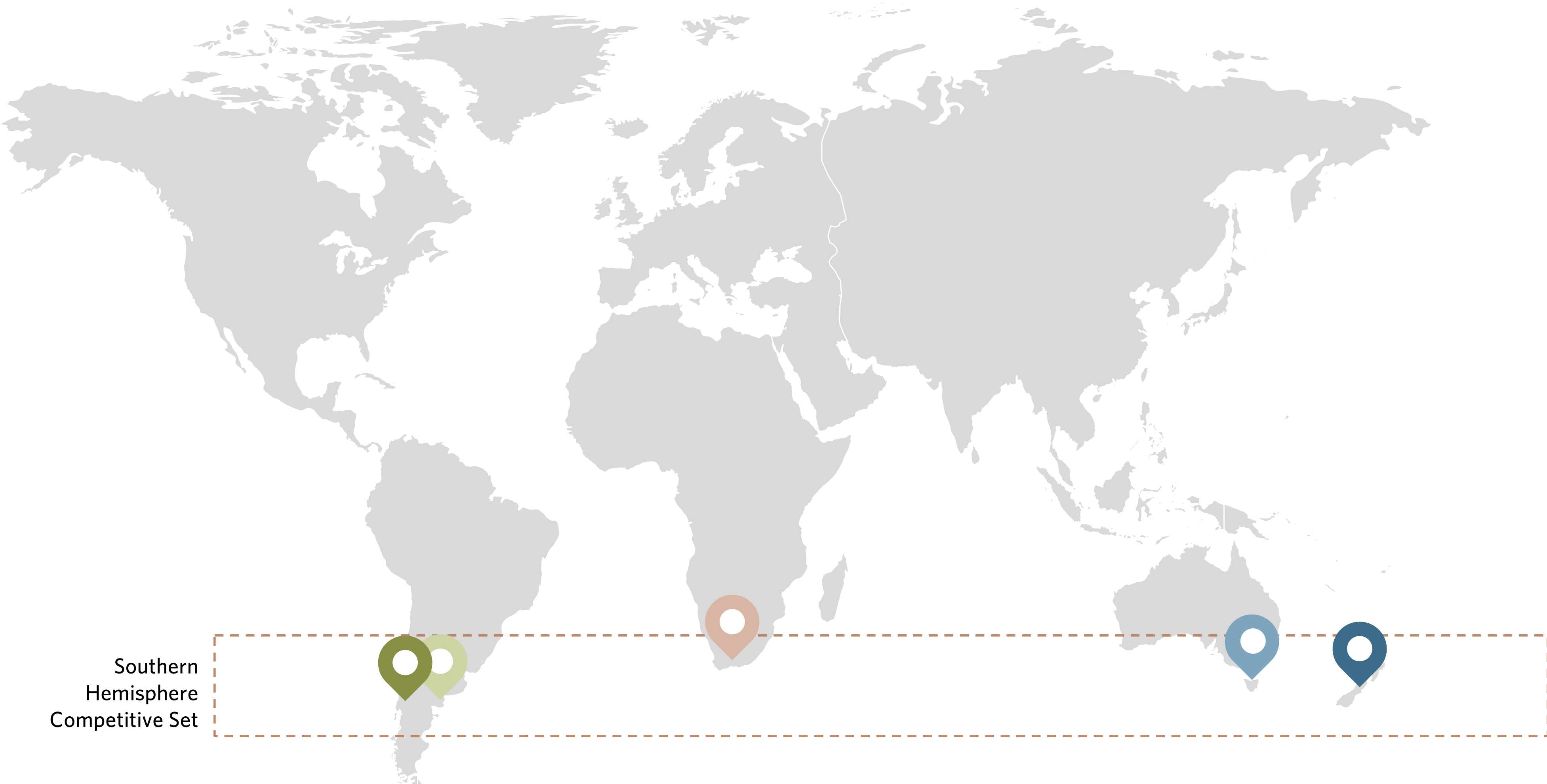


*NA/ME/CA = North Africa/Middle East/Central Asia; Source: UN FAO database; Coriolis analysis

As a Southern Hemisphere producer, New Zealand faces a very narrow competitive set, being effectively Australia, Chile and Argentina

APPROXIMATE REGIONS WHERE SWEET CHERRIES CAN BE PRODUCED COMMERCIALLY IN SOUTHERN HEMISPHERE

Conceptual model; 2017

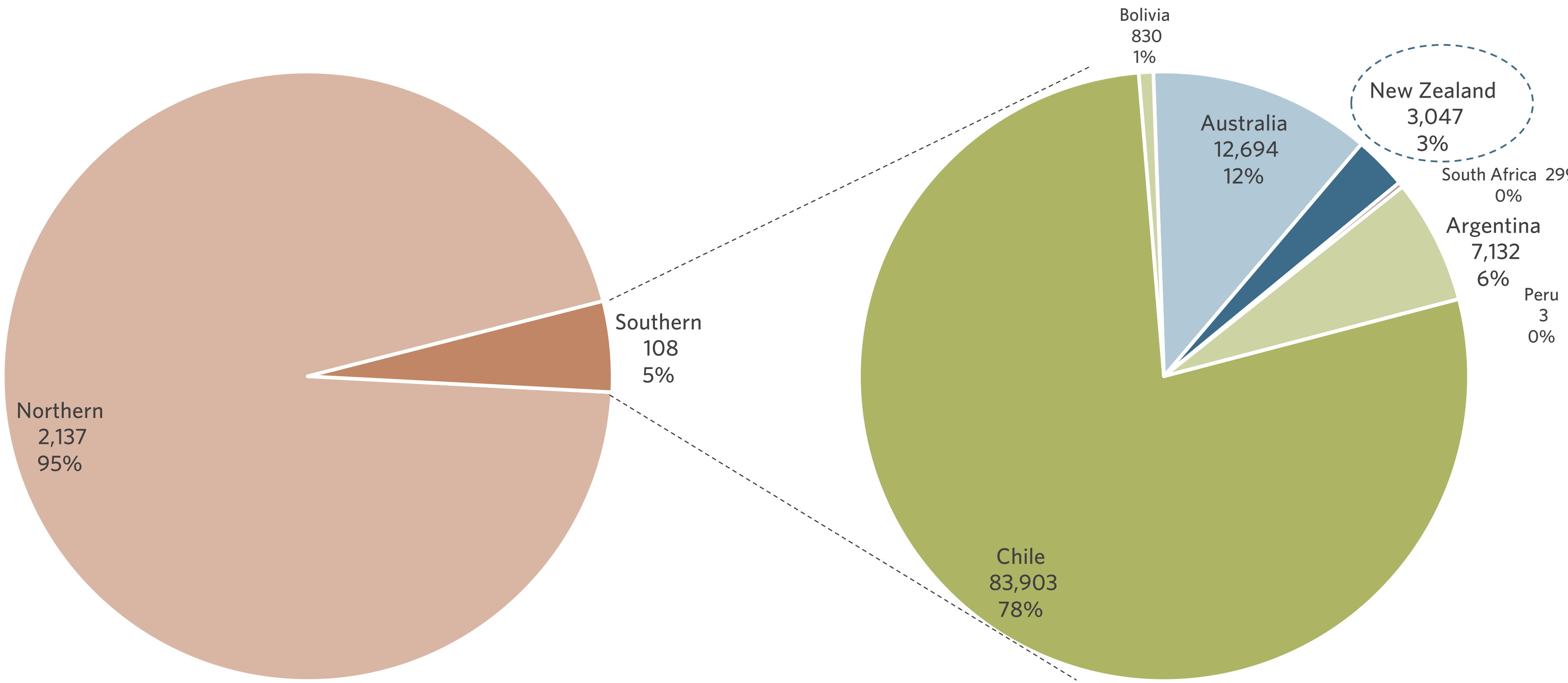


Source: Coriolis analysis of production data

The Southern Hemisphere accounts for 5% of global sweet cherry production; Chile is the leading producer accounting for over three quarters, while New Zealand is the fourth largest regional producer

SWEET CHERRY PRODUCTION BY HEMISPHERE
Tonnes; 000; 2014

SWEET CHERRY PRODUCTION IN SOUTHERN HEMISPHERE
Tonnes; actual; 2014



TOTAL = 2,245 tonnes (000)

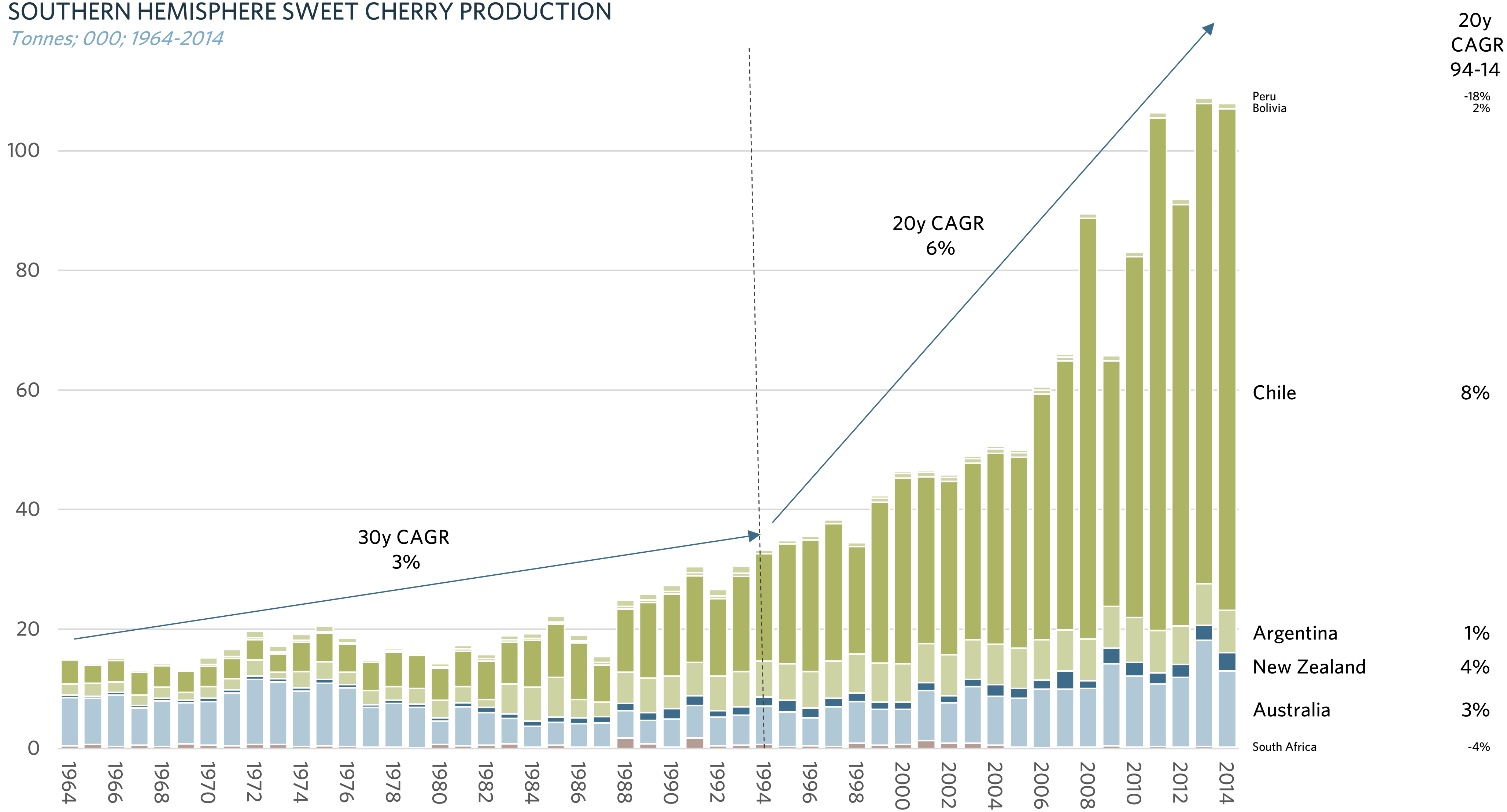
TOTAL = 107,908 tonnes

Source: UN FAO database; Coriolis analysis

Southern Hemisphere sweet cherry production is growing, led by Chile

SOUTHERN HEMISPHERE SWEET CHERRY PRODUCTION

Tonnes; 000; 1964-2014



Source: UN FAO database; Coriolis analysis

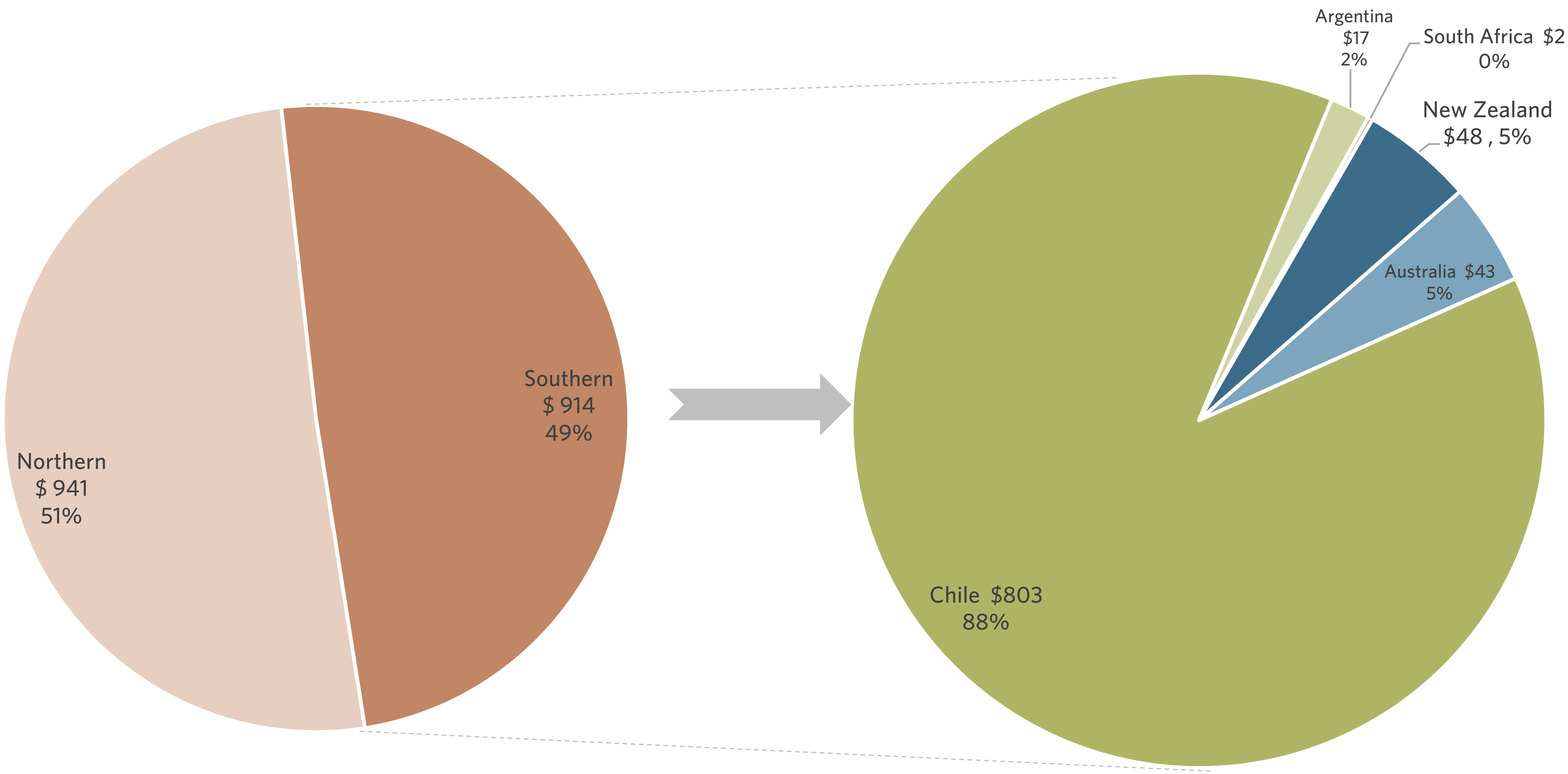
While a relatively small producer in the global picture, the Southern Hemisphere accounts for 49% of global sweet cherry export value; Chile is the leading S.H. exporter (88%), followed by New Zealand (5%)

SWEET CHERRY EXPORT VALUE BY HEMISPHERE

US$; m; 2016

SWEET CHERRY EXPORT VALUE IN SOUTHERN HEMISPHERE

US$; m; 2016



TOTAL = US$1,855m

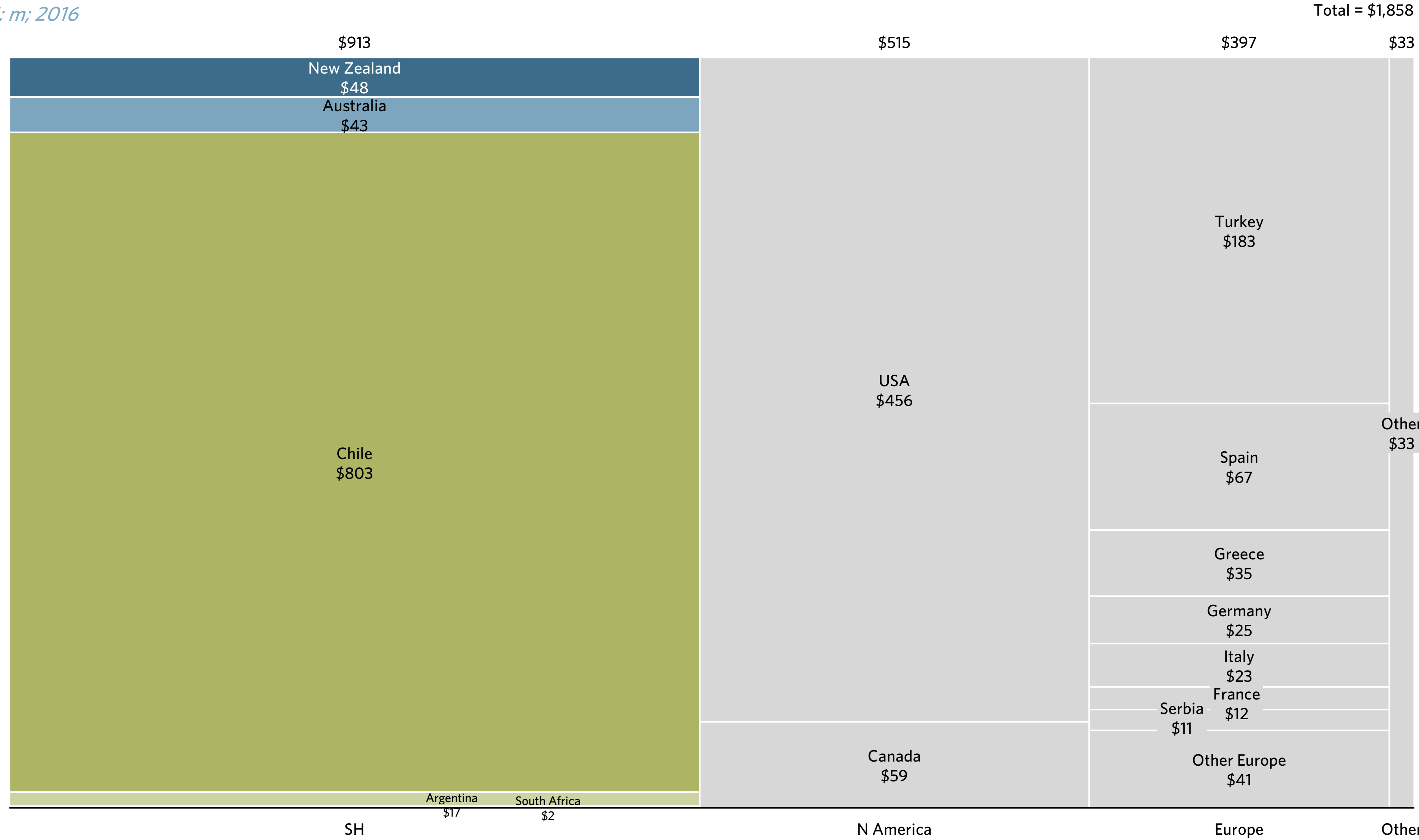
TOTAL = US$914m

Source: UN FAO database; Coriolis analysis

Chile ($803m) is the largest global sweet cherry exporter, followed by the US ($456m), Turkey ($183m), Spain ($67m), Canada ($59m) and New Zealand ($48m)

GLOBAL SWEET CHERRY EXPORTS BY COUNTRY/REGION

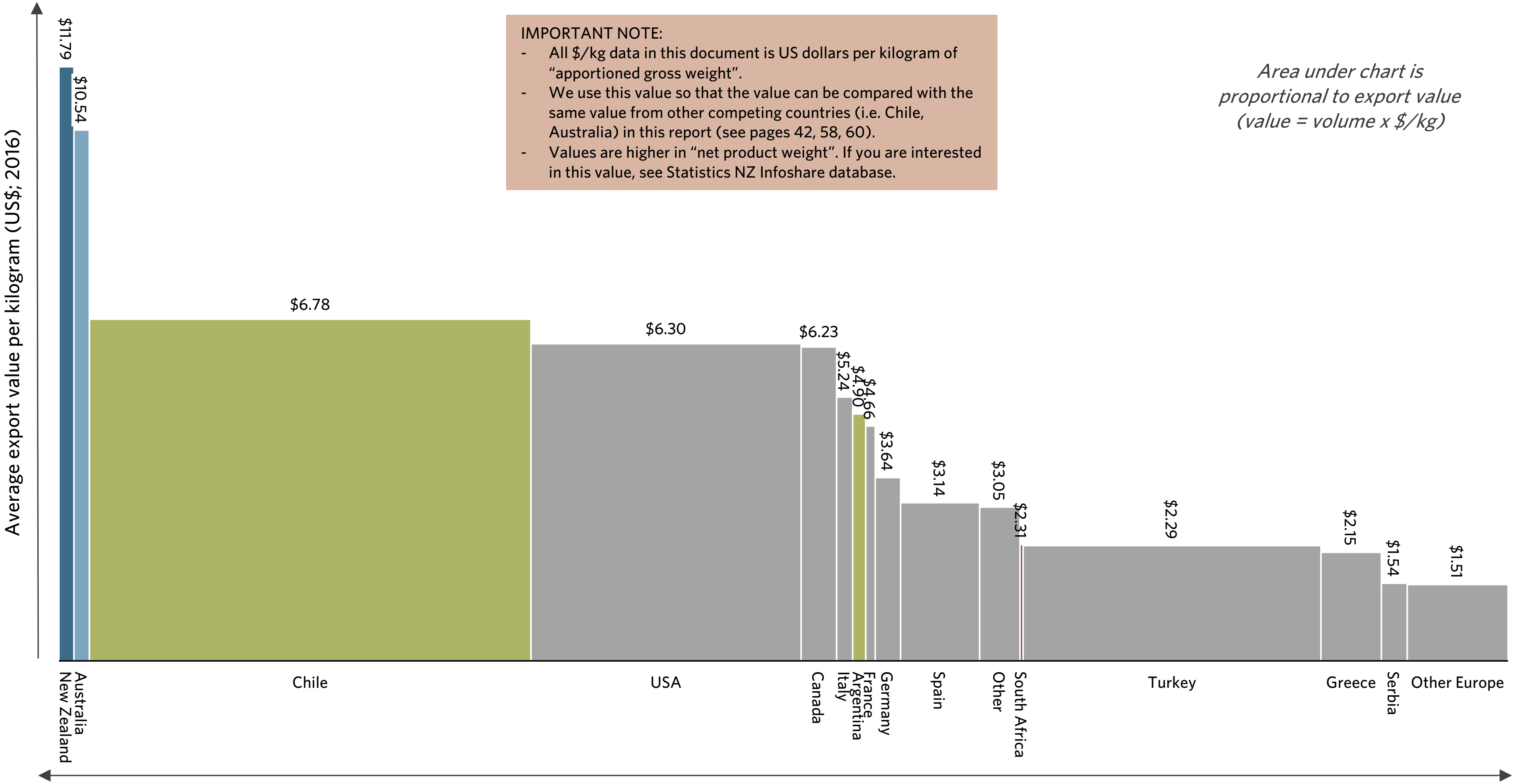
US$; m; 2016



Based on the global trade data, New Zealand achieve premium prices ($11.79/kg) for cherry exports, followed by Australia, Chile, the USA and Canada

GLOBAL SWEET CHERRY EXPORTS: VOLUME VS. AVERAGE PRICE PER KILOGRAM

Tonnes; US$/kg; 2016



IMPORTANT NOTE:
- All $/kg data in this document is US dollars per kilogram of "apportioned gross weight".
- We use this value so that the value can be compared with the same value from other competing countries (i.e. Chile, Australia) in this report (see pages 42, 58, 60).
- Values are higher in "net product weight". If you are interested in this value, see Statistics NZ Infoshare database.

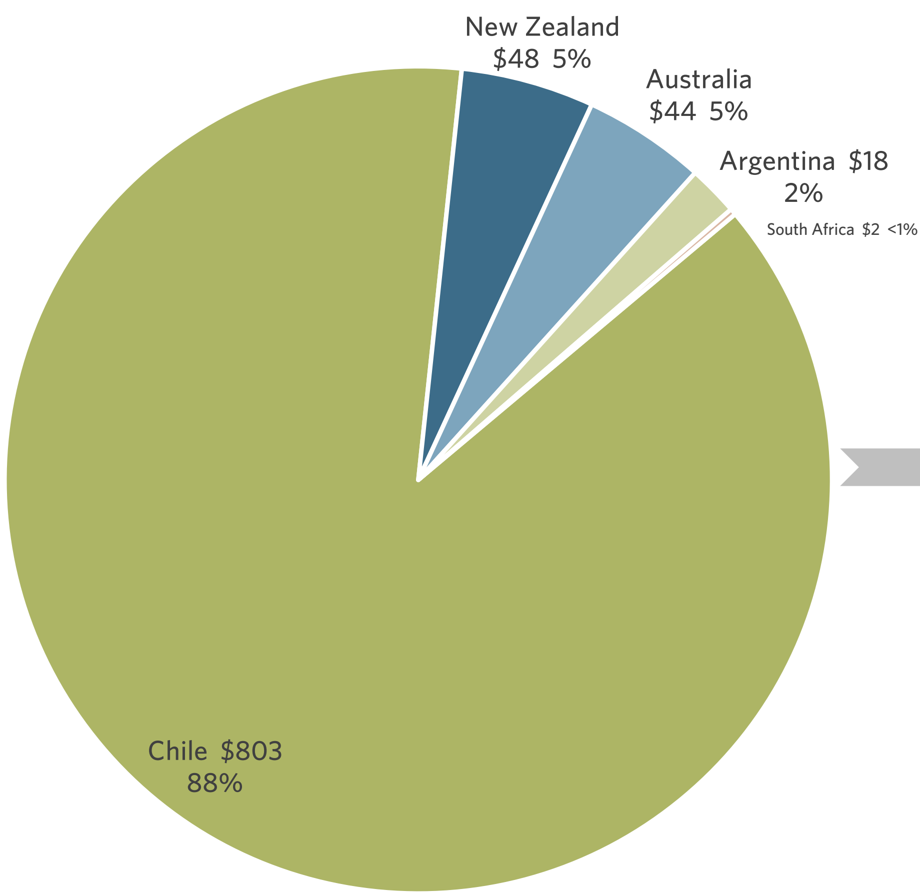
Area under chart is proportional to export value (value = volume x $/kg)

Source: UN FAO database; Coriolis analysis

"Greater China" is the key market for Southern Hemisphere cherry exports as it accounts for ~84% of export dollars

VALUE OF S.H. CHERRY EXPORTS BY SOURCE

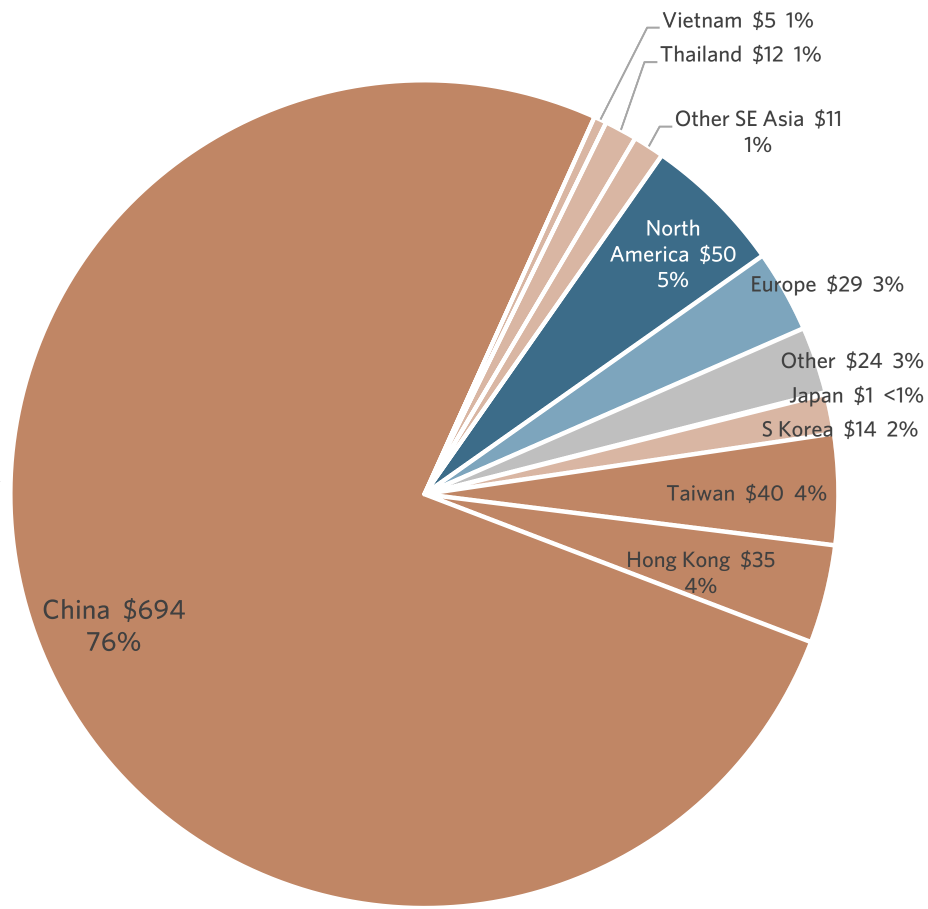
US$m; FOB; 2016



TOTAL = US$914m

VALUE OF S.H. CHERRY EXPORTS BY DESTINATION

US$m; FOB; 2016



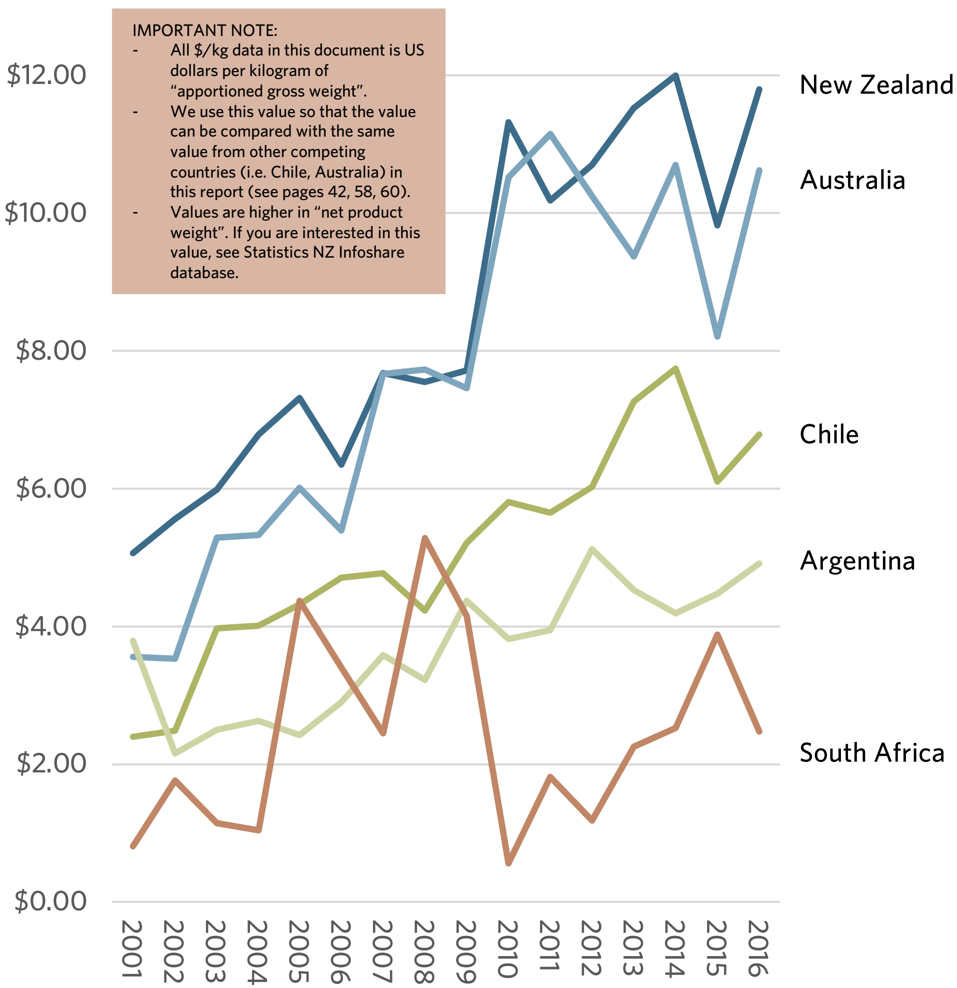
TOTAL = US$914m

Note: data here includes some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis

New Zealand cherries maintain a substantial price premium over Chilean cherries

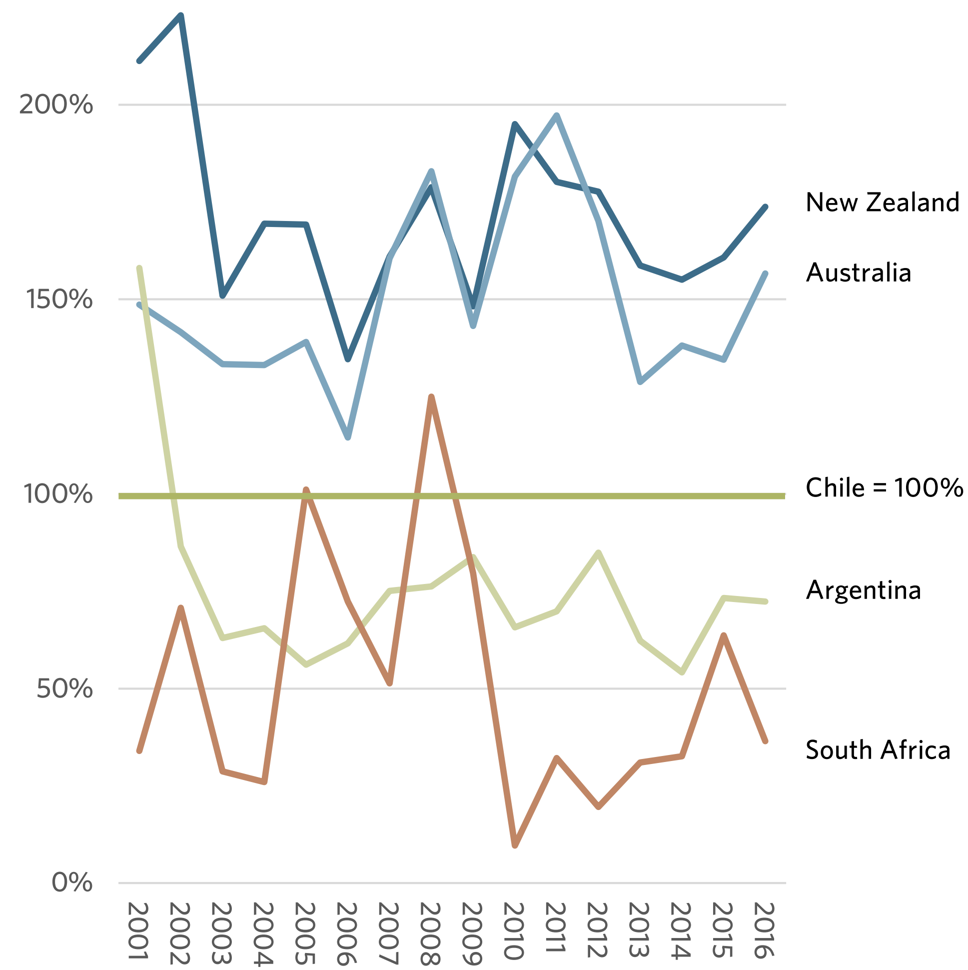
AVERAGE CHERRY EXPORT PRICE

US$/kg; FOB; 2001-2016



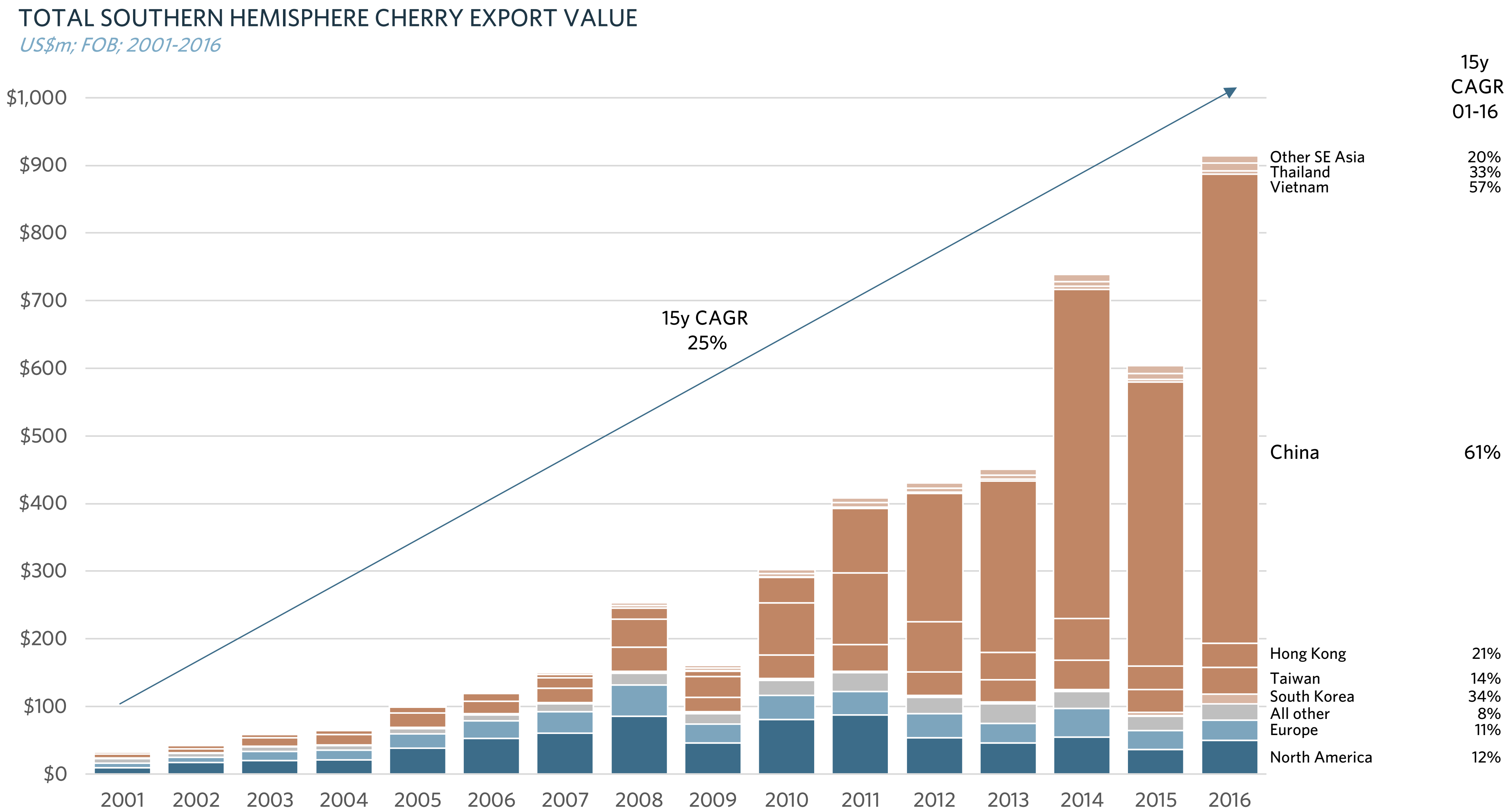
AVERAGE CHERRY EXPORT PRICE INDEXED TO CHILE

Chile =100%; 2001-2016



Note: data here include some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis

Market growth for Southern Hemisphere cherries has come from China (15y CAGR 61%) and a range of other East & SE Asian countries



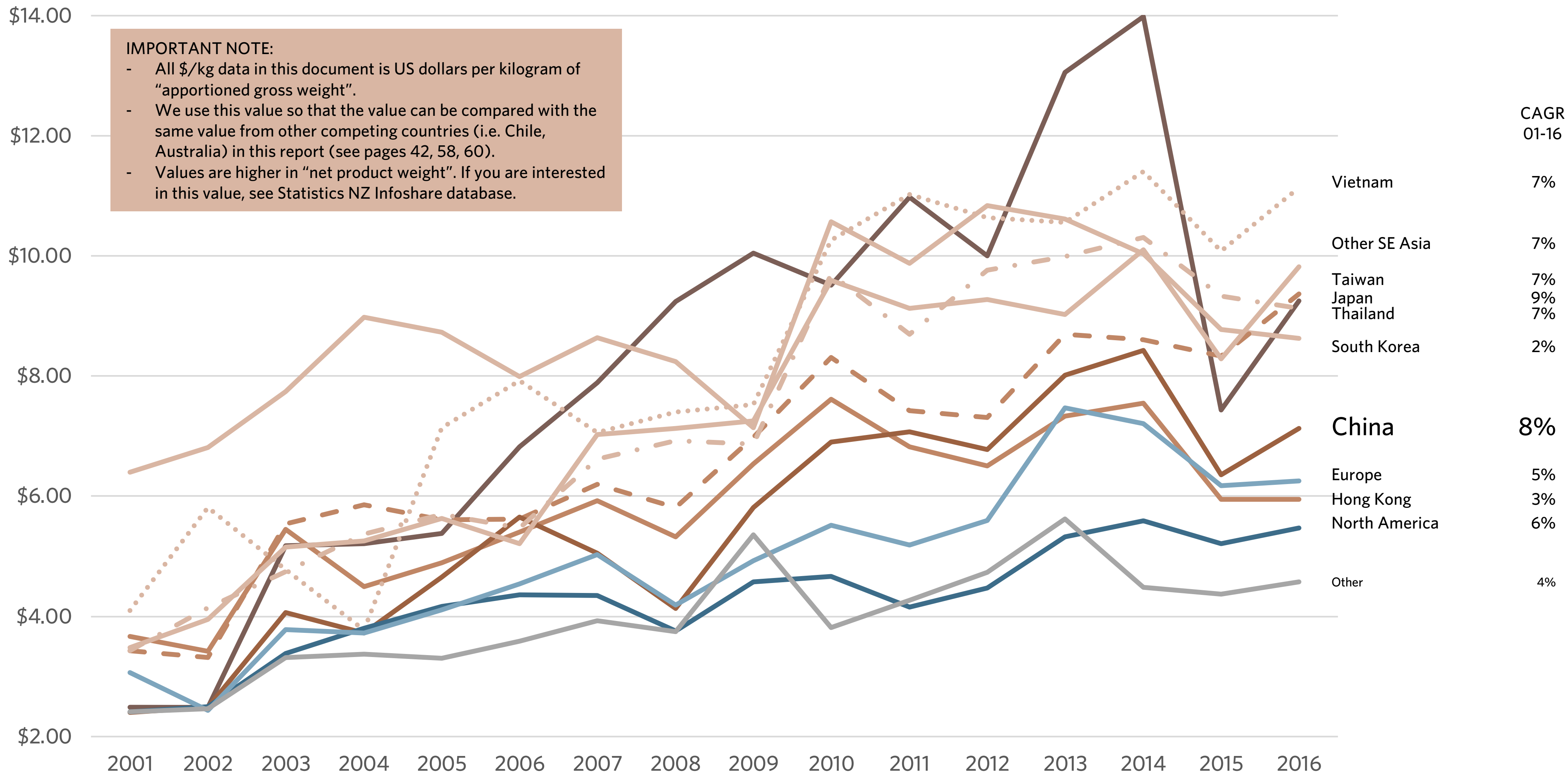
Note: data here include some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis

Markets vary in average FOB price per kilogram they pay for Southern Hemisphere cherries

AVERAGE DECLARED FOB CHERRY EXPORT PRICE PER KILOGRAM FOR S.H. FRUIT

US$/kg; FOB; 2001-2016

IMPORTANT NOTE:
- All $/kg data in this document is US dollars per kilogram of "apportioned gross weight".
- We use this value so that the value can be compared with the same value from other competing countries (i.e. Chile, Australia) in this report (see pages 42, 58, 60).
- Values are higher in "net product weight". If you are interested in this value, see Statistics NZ Infoshare database.



FOB Free On Board, Note: data here include some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis

Key NZ Cherry Firms - Packhouses

+ Themes

+ Firm Profiles

05

The New Zealand cherry crop is packed and exported by a mix of dedicated cherry operators and more general summerfruit firms

SELECTED NEW ZEALAND CHERRY OPERATIONS

2017

DEDICATED CHERRY ORCHARD/PACKHOUSE OPERATIONS

- 45° South
- Pure Pac – New Zealand Cherries
- New Zealand Cherry Corp.
- Leaning Rock Cherries – Central Otago, New Zealand
- CentralPac
- From the Garden of Eden Orchards – Fresh Cherries
- Fortune Fruit Company
- Jones Family Suncrest Orchard
- Sarita Orchard

SUMMERFRUIT ORCHARD/PACKHOUSE OPERATIONS

- Dunstan Hills
- Clyde Orchards – Central Otago • New Zealand
- McIntosh Orchard – Since 1881
- NZ Orchard Direct
- Southern Fresh – Rob's Fruit – Central Otago
- Darling's
- New Zealand Remarkable Fruit
- New Zealand Gourmet
- Central Organics Ltd.
- Hinton Orchard & Packhouse

FRESH FRUIT EXPORTERS

- RD8 Fresh Produce
- 45° South
- LeFresh
- C V Exports
- JP Exports
- freshmax
- New Zealand Cherry Corp.
- Dawsons
- Freshco
- Oravida – Products of New Zealand
- Te Mata Exports
- Fresh Produce New Zealand
- T&G – A BayWa Company
- Foodview – a food fellowship

Source: Coriolis analysis

The majority of export orchards and packhouses are located in Central Otago

CENTRAL OTAGO EXPORT PACKHOUSES BY DISTRICT

2016

CENTRAL OTAGO

CROMWELL (6)

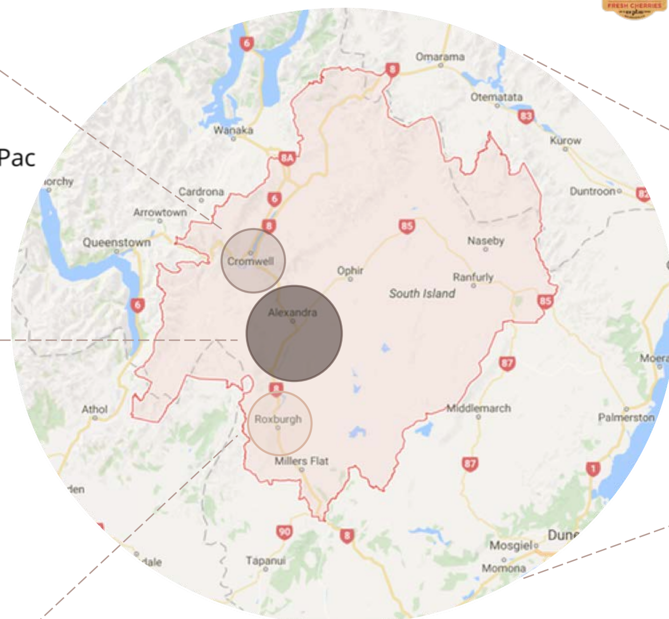
45° South
New Zealand Cherry Corp.
Suncrest Orchard
Sarita Orchard
Fortune Fruit Company
CentralPac

ALEXANDRA (10)

Central Organics
Clyde Orchards
Dunstan Hills
Panmure Orchards
Forrests Orchard
R Dawson & Co.
Leaning Rock Cherries
Hinton Orchard & Packhouse
McIntosh Orchard
Southern Fresh Rob's Fruit

ROXBURGH (4)

NZ Orchard Direct
New Zealand Gourmet
Darling's



SOUTH ISLAND

Blenheim (3)

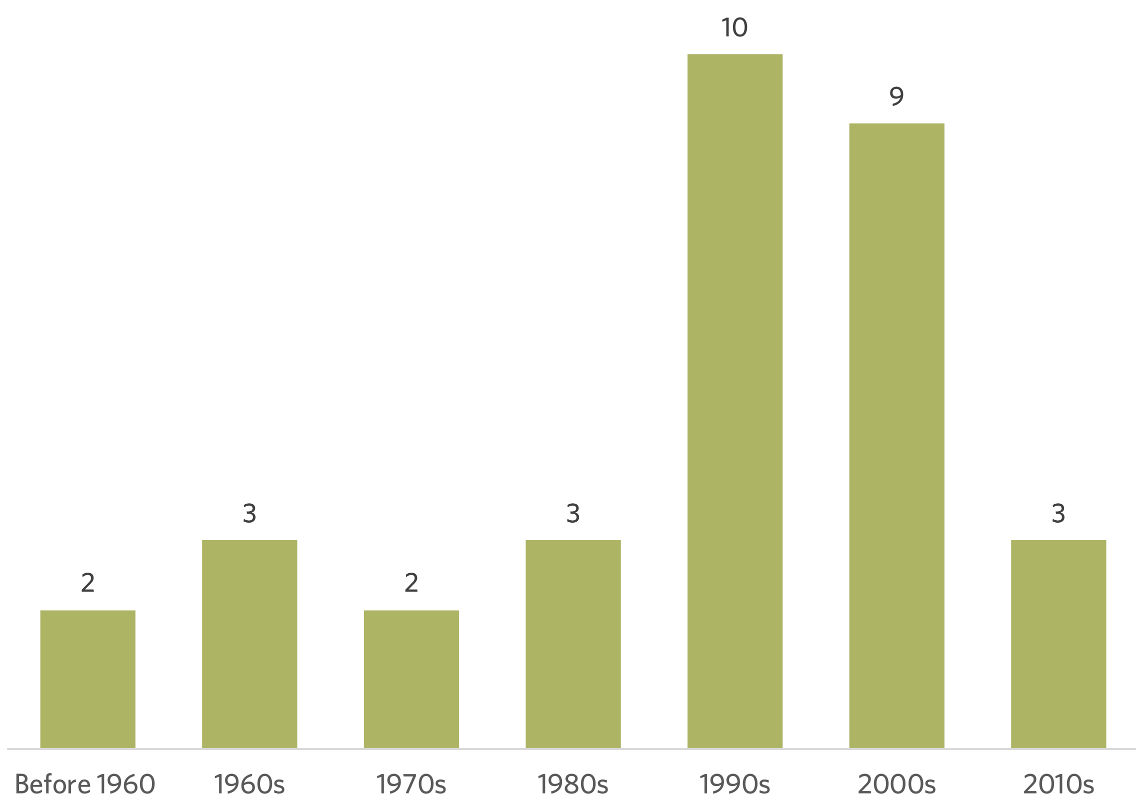
Eden Orchards
Cherrybank Orchard
Cherryland

Source: Google Maps; Coriolis

New Zealand has a vibrant cherry industry that continues to attract new entrants

TOP 32 NEW ZEALAND CHERRY PACKHOUSE/ORCHARD OPERATORS BY DECADE ESTABLISHED

Count; n = 32; 1862-2017



- Growth in numbers of export packhouse/orchard operators in the 1990s and 2000s align with the increase in area planted in cherries

- New operations in this decade are larger scale to meet New Zealand's increasing cherry production volumes (5,284 tonnes in 2016)

- Select new ventures have been collaborative in nature e.g. group of growers investing in new packhouse and brand

Source: Coriolis analysis from various public sources

The industry is moving towards more collaborative branding efforts for exports

CENTRAL OTAGO PREMIUM FRUIT LTD

Example; 2017

- Central Otago Premium Fruit Ltd is a premium global brand established in 2012 and owned by group of local growers
- Shareholders - Duncan Mathers (Sarita Orchard), Tim Jones (45 South), Earnscy Weaver, Stephen Darling (Darling's Fruit)
- Markets and sells Central Otago cherries in Malaysia, Vietnam, Hong Kong, China, New Zealand, and apricots in USA. Partnerships with Food View (China focus), RD8 (Vietnam, Malaysia, USA focus), MG Marketing
- Grower suppliers - 45 South, Sarita Orchards, Ripponvale Orchards, Teviot Orchard Company & Clutha Packing Centre, Fairview Orchard, Remarkable Orchards, Webbs Fruit & Darling's Fruit

Source: Central Otago Premium Fruit website; http://www.centralotagofruit.co.nz; New Zealand Companies Office; various published articles; Coriolis analysis

A new collaborative grower-owned packhouse has launched and will begin packing in the 2017/18 season

PURE PAC LTD

Example; 2017

- State of the art packhouse built in partnership with Compac; utilising new End View visual sizing and grading technology. 1,200 tonnes per season capacity. Plan to pack 450 tonnes in 2017/18 season with volumes increasing to 1,000 tonnes over the next four to five years
- Grower owners - Malmuzza Holdings (Felton Park Cherries) 15%, Moonshine Cherries 15%, Pisa Range Orchards 15%, Gold Cow 15%, Somerville 10%, G.A. Young & Co 10%, JK Tyler 10%, Little (Felton Park Cherries) 10%
- 40 hectares in production as a group, 30 hectares developing

Source: Pure Pac website; New Zealand Companies Office; various published articles; Coriolis analysis; Photo credit: Compac

PACKHOUSE FIRMS

45 SOUTH MANAGEMENT/ ORCHARD FRESH	CENTRALPAC	CLYDE ORCHARDS/ ALPINE PACKHOUSE	DARLINGS FRUIT
Tim Jones Managing Director	Michael Stuart General Manager	Kevin Paulin Director	Stephen Darling Owner
DESCRIPTION: Cherry grower, packer, exporter; orchard management and domestic fresh fruit delivery businesses; controls 150ha of orchards; export 70-80% of production; NZ largest cherry exporter producing 30-40% of NZ export cherries	DESCRIPTION: Growers and packers; sustainability focus, minimal application of chemicals; 12 ha of red and white cherry varieties; onsite packhouse; contract packing; orchard mngt service via sister company Central Orchard Management; exports and packs the J&P Turner 1885 brand	DESCRIPTION: 100 ha of orchards; one third cherries, one third Flatto peaches and nectarines, rest a mix of summer fruit; exclusive rights to Flatto varieties; exports to Russia, Europe, China; growing partner with Freshmax in developing IP cherry variety Lani; export under CV Exports	DESCRIPTION: Fruit grower and packer; exports mostly apples and apricots
KEY PRODUCTS: Cherries, plums	KEY PRODUCTS: Cherries	KEY PRODUCTS: Cherries, nectarines, peaches, apricots	KEY PRODUCTS: Stone fruit, pip fruit
OWNERSHIP: NZ; Private (Hinton, Cook, Jones)	OWNERSHIP: NZ; Private (Turner family)	OWNERSHIP: NZ; Private (Paulin family)	OWNERSHIP: NZ; Private (Darling family)
COMPANY NUMBER: 964255	COMPANY NUMBER: 1609826	COMPANY NUMBER: 460752	COMPANY NUMBER: 686586
ADDRESS: Corner Ord Road & State Highway 6, Cromwell	ADDRESS: 828 Luggate-Cromwell Road, State Highway 6, Cromwell	ADDRESS: Earnscleugh Road, Alexandra	ADDRESS: 5133 Ettrick-Raes Junction Road, Ettrick
PHONE: +64 3 445 1402	PHONE: +64 3 445 4600	PHONE: +64 3 449 2873	PHONE: +64 3 446 6703
WEBSITE: www.orchardfresh.co.nz; www.45s.co.nz	WEBSITE: www.centralpac.co.nz	WEBSITE: www.clydeorchards.co.nz	WEBSITE: www.darlingsfruit.co.nz
YEAR FORMED: 1984	YEAR FORMED: 2016	YEAR FORMED: 1990	YEAR FORMED: 1995
STAFF EMPLOYED: 35-400 peak	STAFF EMPLOYED: 150 peak	STAFF EMPLOYED: 100	STAFF EMPLOYED: N/A
REVENUE: $20-30m*	REVENUE: $2.5-4m	REVENUE: $2-5m*	REVENUE: $2-5m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Recent investment in new packhouse equipment.	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

PACKHOUSE FIRMS

DUNSTAN HILLS	EDEN ORCHARDS	FORTUNE FRUIT COMPANY	H&J ROBERTS ORCHARD
Ingrid Hofma Director	Steph Bignell Director	Hugh Dendy Owner	Harry Roberts Owner
DESCRIPTION: Fruit grower and packer; 200 ha property, 50 ha fruit trees; 26 ha apricots, 21 ha cherries, 1.4 ha nectarines, 1.25 ha peaches; predominantly exports; co-own Le Fresh International NZ exporting company	DESCRIPTION: Fruit grower, marketer, exporter; 30 ha of cherry orchard in Waihopai Valley, Marlborough; Eden Orchards (growing), Legacy Cherries (export sales), Cherry Club (corporate sales), The Cherry Man (local sales), The Cherry Man Juice; source 40ha from Central Otago	DESCRIPTION: Cherry grower and packer; 34ha cherry orchard; original family owned orchard in Canada; Morning Glory brand	DESCRIPTION: Fruit grower, packer and retailer; Southern Fresh brand; three orchard blocks
KEY PRODUCTS: Cherries, apricots, peaches, nectarines	KEY PRODUCTS: Cherries, apricots, nectarines, peaches	KEY PRODUCTS: Cherries	KEY PRODUCTS: Apricots, cherries, nectarines, peaches, plums
OWNERSHIP: NZ; Private (Ingrid Hofma)	OWNERSHIP: NZ; Private (Bignell, Purdue)	OWNERSHIP: NZ; Private (Hugh Dendy)	OWNERSHIP: NZ; Private (Roberts family)
COMPANY NUMBER: 1294091	COMPANY NUMBER: 3980659	COMPANY NUMBER: 947366	COMPANY NUMBER: 146144
ADDRESS: 253 Strode Road, Earnscleugh	ADDRESS: 825 Waihopai Valley Road, Blenheim	ADDRESS: Lowburn Valley Road, Cromwell	ADDRESS: 8 McIntosh Road, Earnscleugh
PHONE: +64 3 449 2203	PHONE: +64 3 572 4406	PHONE: +64 3 445 3504	PHONE: +64 3 449 2047
WEBSITE: www.dunstanhills.co.nz; www.lefresh.co.nz	WEBSITE: www.edenorchards.co.nz	WEBSITE: www.fortunefruit.com	WEBSITE: www.hjroberts.co.nz
YEAR FORMED: 2003	YEAR FORMED: 2010	YEAR FORMED: 1999	YEAR FORMED: 1961
STAFF EMPLOYED: N/A	STAFF EMPLOYED: N/A	STAFF EMPLOYED: 154	STAFF EMPLOYED: N/A
REVENUE: $3-7m*	REVENUE: $2-5m*	REVENUE: $2-5m*	REVENUE: $2-5m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Expanding capacity	COMPANY HIGHLIGHTS:

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

PACKHOUSE FIRMS

HINTON ORCHARD & PACKHOUSE	LEANING ROCK CHERRIES	MCINTOSH ORCHARD	NEW ZEALAND CHERRY CORP
Nigel Hinton Managing Director	Peter Bennie Director & Orchard Manager	McIntosh Family Owner	Henry van der Velden Director
DESCRIPTION: Fruit grower and packer; exports under C.V. Exports brand; Taiwan (70-80%), China, Australia, UK, USA; Hinton Estate Vineyard business, tasting room beside packhouse	DESCRIPTION: Fruit grower and packer; 42ha orchard, 21ha of cherries; 15 varieties; one of the largest exporters of cherries in South Island; 150t of cherries exported, 100t of cherries and 150t of nectarines and peaches for domestic market; partnership with MG Marketing	DESCRIPTION: Fruit grower, packer, processor; exports to Asia; 40ha orchard; 34,000 fruit trees; 10ha of cherry net canopy; supply ~5% of peach and nectarine domestic market; cherries 40% of income; smallest cherry packhouse in Central Otago, hand sorts to keep the cherries in bunches	DESCRIPTION: Vertically integrated growers and packers of cherries; 40ha netted orchard; 23,000 trees; NZ's largest fully climate controlled netted orchard; harvest 700t; 3,500 sqm Cherrypac packhouse in Cromwell; exports to 12 markets across Asia, Russia
KEY PRODUCTS: Apricots, cherries, nectarines, peaches, plums	KEY PRODUCTS: Cherries, peaches, nectarines, organic apples and pears	KEY PRODUCTS: Cherries, apricots, peaches, nectarines, plums, apples	KEY PRODUCTS: Cherries; 7 varieties; Red Envy, Cherry Delight, Kiwi Delight export brands, Red Sensation, Mr Henry domestic brand
OWNERSHIP: NZ; Private (Hinton family)	OWNERSHIP: NZ: Private (Bennie family 31%, Shearer 18%, Ibbotson 18%, others)	OWNERSHIP: NZ; Private (McIntosh family)	OWNERSHIP: NZ; Private (van der Velden)
COMPANY NUMBER: 147890	COMPANY NUMBER: 614490	COMPANY NUMBER: 1259215	COMPANY NUMBER: 1506443
ADDRESS: 19 Chicago Street, Alexandra	ADDRESS: 93 Rock View Road, Alexandra	ADDRESS: 115 McIntosh Road, Earnscleugh	ADDRESS: 19 Ree Crescent, Cromwell
PHONE: +64 3 448 8231	PHONE: +64 3 448 8497	PHONE: +64 3 449 2044	PHONE: +64 3 443 0474
WEBSITE: www.hinton.co.nz	WEBSITE: www.leaningrockcherries.co.nz	WEBSITE: www.mcintoshorchard.co.nz	WEBSITE: www.nzcherrycorp.com; www.bigcherries.co.nz
YEAR FORMED: 1969	YEAR FORMED: 1993	YEAR FORMED: 1881	YEAR FORMED: 2005
STAFF EMPLOYED: 250	STAFF EMPLOYED: N/A	STAFF EMPLOYED: 58	STAFF EMPLOYED: 8 perm. 320 seasonal
REVENUE: $5-10m*	REVENUE: $2-5m*	REVENUE: $2-4m*	REVENUE: $10-15m*
COMPANY HIGHLIGHTS: Supplied supermarkets directly for first time in 2016; invested in new cherry grader; recently invested in early stage conversion dairy farm	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: State-of-the-art cherry packhouse with 10-lane Compac grader, including firmtech machine commissioned in '15; launched two new export brands and new logo at Asia Fruit Logistica '16

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

PACKHOUSE FIRMS

NEW ZEALAND GOURMET	NZ ORCHARD DIRECT	PURE PAC	REMARKABLE ORCHARDS
Paul Martin Chief Executive	Gary Bennetts Director	Malcolm Little Director	Sid Birtles Owner
DESCRIPTION: Fruit and vegetable grower, packer and exporter; Gourmet Paprika, Blueberries, Mokai, Summerfruit, Waiuku, and Sweet Red Gourmet operations across New Zealand; 59ha of cherries and blueberries in Roxburgh; import business in USA, Gourmet Trading	DESCRIPTION: Fruit grower, packer and exporter; comprises of Fairview Orchard, Teviot Orchard (49ha of orchard, 30% cherries, 40% apricots), Clutha Packing Centre companies	DESCRIPTION: Grower owned cherry packhouse and marketing company; Pure Gold, Gold Reserve brands; 70ha in production through shareholders; planting additional 16,000 trees in 2017; 450t estimated to pack in 2017/18 (increasing to 1,000t)	DESCRIPTION: Fruit grower and packer; 99ha property; 33ha orchard; 50% apples, 30% apricots, 10% cherries, 10% peaches; all apples and cherries are exported; new 1,250 sq m packing shed in 2014
KEY PRODUCTS: Blueberries, strawberries, tomatoes, capsicums, cherries, chillies	KEY PRODUCTS: Apricots, cherries	KEY PRODUCTS: Cherries	KEY PRODUCTS: Cherries, apricots, nectarines, peaches, apples
OWNERSHIP: NZ; Private (Lawler, Marin, Lineen)	OWNERSHIP: NZ; Private (Bennetts, Alison family)	OWNERSHIP: NZ; Private (7 grower suppliers)	OWNERSHIP: NZ; Private (Birtles, van der Voort)
COMPANY NUMBER: 1522263	COMPANY NUMBER: 2150255	COMPANY NUMBER: 6257470	COMPANY NUMBER: 2178056
ADDRESS: 83 Pukaki Road, Mangere	ADDRESS: 3474 Fruitlands-Roxburgh Road, Roxburgh	ADDRESS: 84 Felton Road, Cromwell	ADDRESS: McElligot Road, Roxburgh East
PHONE: +64 9 275 3415	PHONE: +64 3 446 8151	PHONE: +64 27 484 5099	PHONE: +64 3 446 8240
WEBSITE: www.nzgourmet.net	WEBSITE: www.nzorcharddirect.co.nz	WEBSITE: www.purepac.nz	WEBSITE: www.remarkableorchards.co.nz
YEAR FORMED: 1993	YEAR FORMED: 2008	YEAR FORMED: 2017	YEAR FORMED: 1994
STAFF EMPLOYED: N/A	STAFF EMPLOYED: 150	STAFF EMPLOYED: N/A	STAFF EMPLOYED: 165
REVENUE: N/A	REVENUE: $2-5m	REVENUE: N/A	REVENUE: $2-5m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: New state of the art packhouse, commencing packing operations in Dec 2017	COMPANY HIGHLIGHTS:

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

PACKHOUSE FIRMS

SARITA ORCHARD	SUNCREST ORCHARD
Duncan Mathers General Manager	Michael Jones Director
DESCRIPTION: Cherry grower and packer; 34.6 ha; exports to China, Vietnam, Taiwan, Singapore, Hong Kong, USA, Australia; supply to Central Otago Premium Fruit cooperative brand	DESCRIPTION: Fruit grower, packer and retailer; Mrs Jones' Fruit Stall, 7th Heaven Vineyard; 70 ha orchard, 55 ha of cherries; growing partner with Freshmax in developing IP cherry variety Lani
KEY PRODUCTS: Cherries	KEY PRODUCTS: Cherries, apricots, nectarines, peaches, plums, apples, pears, grapes
OWNERSHIP: NZ; Private (Bouton Paper Co, Lewis, Vosper, Deaker family, others)	OWNERSHIP: NZ; Private (McKay)
COMPANY NUMBER: 965036	COMPANY NUMBER: 972968
ADDRESS: State Highway 6, Cromwell	ADDRESS: 330 Ripponvale Road, Cromwell
PHONE: +64 3 445 1184	PHONE: +64 3 445 3444
WEBSITE: www.saritaorchard.co.nz	WEBSITE: www.suncrestorchard.co.nz
YEAR FORMED: 1999	YEAR FORMED: 1979
STAFF EMPLOYED: 120	STAFF EMPLOYED: 280
REVENUE: $2-5m*	REVENUE: $5-10m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

Key New Zealand Cherry Firms – Exporters

+ Firm Profiles

05

EXPORT FIRMS

FOOD VIEW	FRESHMAX NZ LTD	FRESH PRODUCE GROUP	J & P TURNER
 Sue Carter Managing Director	 Peter Ellis Group CEO	Russell Faulkner Managing Director	Peter Turner Managing Director
DESCRIPTION: Markets NZ fresh produce in China and USA; works with NZ exporters and also hold export licenses. NZ offices in Cromwell, Auckland, and Tauranga in New Zealand; office in Shanghai, repacking facility for retail and direct to consumer logistics.	DESCRIPTION: Vertically integrated Southern Hemisphere fresh produce business; significant exporter from NZ and major importer into Australia; orchards, operations and facilities throughout NZ, Australia, USA, Canada and South America	DESCRIPTION: Produce marketer and exporter; export to Asia, North America, Australia; blackberry extract processing; Sea Fresh Trading Co seafood exporting business	DESCRIPTION: Fresh produce and flower wholesalers, importers & exporters; Fresh Direct, JP Exports, Purefresh Organics, Fresh Direct Floral
KEY PRODUCTS: Cherry, plum, apricot, apple, pear, kiwifruit, kiwiberry, passionfruit, feijoas, orange, lemon, persimmon.	KEY PRODUCTS: Fresh fruit and vegetables; material positions in apples, bananas, stone fruit, citrus	KEY PRODUCTS: Blackcurrants, cherries, berries, summerfruit, tamarillos, kiwiberries, citrus, feijoas, tomatoes, yams	KEY PRODUCTS: Cherries, stone/summerfruit, avocadoes, bananas, fresh flowers, apples, berryfruit, subtropicals and Purefresh organics brand
OWNERSHIP: NZ; Private (Carter, Miller, Zhou, Zhang)	OWNERSHIP: AU; PE (Maui Capital (NZ) & Stahl (Singapore) 62%); Private (Mgt 38%)	OWNERSHIP: NZ; Private (Faulkner, Moffatt, Tavendale, Dineen)	OWNERSHIP: NZ; Private (Turner)
COMPANY NUMBER: 4347080	COMPANY NUMBER: 1842723	COMPANY NUMBER: 2383256	COMPANY NUMBER: 643531
ADDRESS: Level 4, 17 Albert Street, Auckland Central	ADDRESS: 113A Carbine Road, Mount Wellington, Auckland	ADDRESS: 114 Grace Road, Tauranga	ADDRESS: 27 Clemow Drive, Mount Wellington, Auckland
PHONE: +64 9 368 9166	PHONE: +64 9 573 8500	PHONE: +64 7 543 2839	PHONE: +64 9 573 4100
WEBSITE: www.foodview.nz	WEBSITE: www.freshmax.co.nz; www.valleyfresh.co.nz	WEBSITE: www.freshproducegroup.co.nz	WEBSITE: www.jpt.co.nz; www.jpexports.co.nz; www.freshdirect.co.nz; www.turnersglobal.com
YEAR FORMED: 2013	YEAR FORMED: 1997	YEAR FORMED: 2009	YEAR FORMED: 1994
STAFF EMPLOYED: 12	STAFF EMPLOYED: 492 (plus 700 seasonal)	STAFF EMPLOYED: N/A	STAFF EMPLOYED: 400 + 250 seasonal
REVENUE: $15-25m	REVENUE: $219m (FY16)	REVENUE: N/A	REVENUE: $150-200m (FY14)
COMPANY HIGHLIGHTS: Strong growth throughout 2017: largest Shanghai based importer and social media marketer of NZ cherries, first company to introduce NZ persimmons to Chinese consumers, and largest importer and marketer of NZ lemons; utilise online and offline sales channels; 2017 started direct to retail sales in Texas and opened Cromwell office.	COMPANY HIGHLIGHTS: Focused on Asian markets; developing a major position in IP and new varieties in pipfruit, cherries, berries, citrus and stonefruit; Avora, new avocado procurement and distribution for '16; launched Dazzle apple collaboratively in '16; multi-million investment in ripening and warehousing in Brisbane and Melbourne in 2017	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Expanding warehousing and undergoing operational restructuring to gain efficiencies

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

EXPORT FIRMS

ORAVIDA NZ	RD8 FRESH PRODUCE	T&G GLOBAL	TE MATA EXPORTS
Julia Xu Managing Director	Craig Hall Managing Director	 Alastair Hulbert Chief Executive Officer	 Murray Tait Managing Director
DESCRIPTION: Producer, processor, exporter and marketer; select premium New Zealand food products to China; multiple sales channels including ecommerce and own retail store in Shanghai	DESCRIPTION: Fresh produce export company; exports to Australia, Asia, India, Sri Lanka, United Kingdom, Europe, Russia, Middle East, North America; export brands Brookevale, Molyneux, Red Pearl, Central Organics, Sarita; exports 700t of cherries, ~20% of NZ's cherry exports	DESCRIPTION: Global grower, seller, marketer and distributor of quality fresh produce; 1,100ha farmed; 32 global locations; offices in 12 countries; owns a variety of subsidiaries and brands, ENZA, Delica, Floramax, Kerifresh, and the plant variety rights to Jazz™, Envy™ , Pacifc Rose™ apples	DESCRIPTION: Fresh produce exporter; exports to Europe, North America, Middle East, India, Australia, Asia
KEY PRODUCTS: Cherries, bottled water, milk, honey, seafood, lamb, wine	KEY PRODUCTS: Apples, cherries, stonefruit, blueberries, persimmons, feijoas	KEY PRODUCTS: Pipfruit, grapes, asparagus, citrus, tomatoes, kiwifruit, cherries, berries, fruit juice concentrate, processed fruit and vegetables	KEY PRODUCTS: Apples, avocados, cherries, citrus, vegetables
OWNERSHIP: NZ; Private (Gilligan Sheppard Nominees, Shi)	OWNERSHIP: NZ; Private (Hall, Smith, Astill)	OWNERSHIP: Germany; Public (BayWa Aktiengesellschaft (FWB:BYW6) 74%); China; Private (Wo Yang Limited 20%)	OWNERSHIP: NZ; Private (MG Marketing 50%, Tait 25%, Thompson 25%)
COMPANY NUMBER: 2356805	COMPANY NUMBER: 2332054	COMPANY NUMBER: 41406	COMPANY NUMBER: 3757476
ADDRESS: 3rd Floor, 139 Quay Street, Auckland	ADDRESS: 2/1 Picton Street, Ponsonby	ADDRESS: 1 Clemow Drive, Mt Wellington, Auckland	ADDRESS: 22 Aotea Crescent, Havelock North
PHONE: +64 9 379 7308	PHONE: +64 9 969 1522	PHONE: +64 9 573 8700	PHONE: +64 9 431 5352
WEBSITE: www.oravida.com	WEBSITE: www.rd8.co.nz; www.freshberrycompany.co.nz	WEBSITE: www.tandg.global; www.delicaglobal.com	WEBSITE: www.temataexports.co.nz
YEAR FORMED: 2011	YEAR FORMED: 2010	YEAR FORMED: 1897	YEAR FORMED: 2000
STAFF EMPLOYED: 10	STAFF EMPLOYED: N/A	STAFF EMPLOYED: 1,500 perm. +2,500 seas.	STAFF EMPLOYED: 10-30
REVENUE: N/A	REVENUE: $10-50m*	REVENUE: $872m (FY16)	REVENUE: $30-40m
COMPANY HIGHLIGHTS: Successfully procuring and exporting a range of premium NZ products throughout China; forging strong relationships with our supply channels and working alongside premium NZ food brands; obtained a Certificate of Recognition from NZ Story in addition to becoming a member of the New Zealand FernMark Licence.	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: MOU signed with Zespri in '16 to develop export market opportunities for kiwifruit in SE Asia; sold Fruit Case Co crate hire business to Pact Group for $21m in '16; opened offices in Washington state and Bangkok '16; launched 'FirstPick' online ordering in NZ '16; first commercial harvest of grapes in Peru; Golden Wing Mau acquired 20% of T&G Global in '16	COMPANY HIGHLIGHTS:

Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis

EXPORT FIRMS

THE FRESH FRUIT COMPANY OF NZ	LE FRESH INTERNATIONAL
Glenn Pool General Manager	Ingrid Hofma Director
DESCRIPTION: Vertically integrated fresh fruit and vegetable exporter; 4,000 TEU container equivalent /year; orchards in Nelson and Hawkes Bay; JV Freshco Nelson Ltd with apple growers; JV to export squash to Japan and Korea; sole marketer for Tendertips Asparagus and Leaning Rock Cherries	DESCRIPTION: Vertically integrated exporter of cherries and apricots; sourcing fruit from Dunstan Hills
KEY PRODUCTS: Apples, squash, asparagus, cherries; Breeze, Sonya, Cheekie proprietary apple varieties	KEY PRODUCTS: Apricots (10 varieties) and cherries
OWNERSHIP: NZ; Private (Taylor, Owens, Mangan, Petter, Pool)	OWNERSHIP: NZ; Private (Taylor, Owens, Mangan, Petter, Pool)
COMPANY NUMBER: 412966	COMPANY NUMBER: 689136
ADDRESS: 46 Jervois Road, Herne Bay, Auckland	ADDRESS: PO Box 101 269 NSMC North Shore City
PHONE: +64 9 376 9990	PHONE: +64 9 489 3399
WEBSITE: www.freshco.co.nz	WEBSITE: www.lefresh.co.nz
YEAR FORMED: 1988	YEAR FORMED: 1995
STAFF EMPLOYED: 135-400 seasonal	STAFF EMPLOYED: N/A
REVENUE: $20-50m*	REVENUE: $5-10m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:

** Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*

Appendices

+ Industry bodies

+ Glossary of terms

06

INDUSTRY ORGANISATIONS

New Zealand has a broad range of produce organisations that support industry

United Fresh New Zealand Incorporated

- Represent the entire supply chain from seed producer to consumer on pan-produce issues
- Funding from voluntary membership fees, 5+ A Day logo user fees and sponsorship
- www.unitedfresh.co.nz

Horticulture New Zealand

- Represent 5,500 growers
- Commodity Levy (FruitFed and VegFed) Order 2007 ($XXm)
- 22 product groups pay levy
- www.hortnz.co.nz

New Zealand Horticulture Export Authority

- Mandatory exporters licencing fees (52 Companies, holding 77 licences)
- NZHEA Amendment Bill 2016
- Product Group under HEA fees (10 groups)
- www.hea.co.nz

Industry Regulation

Summerfruit New Zealand

- Represent the summerfruit industry (cherries, apricots, nectarines, peaches, plums etc.)
- Primarily levy funded; Summerfruit Commodity Levy Order (2014)
- www.summerfruitnz.co.nz

Industry Strategy & Vision Advocacy

Plant & Food Research

- Science company providing research and development that adds value to fruit, vegetable, crop and food products
- NZ government owned, Crown Research Institute
- www.plantandfood.co.nz

Industry Science

Source: Coriolis from various websites, annual reports and other sources

New Zealand cherry exports are regulated by the New Zealand Horticulture Export Authority

What is the HEA?

A statutory authority charged with the application of legislation – NZ Horticulture Export Authority Act 1987.

The primary function of the HEA is "to promote the effective export marketing of horticultural products" (section 6 of the HEA Act).

Since its creation in 1987, the HEA Act has provided an option for horticulture industries to assist with the development of their sectors. The HEA system is based around sectors developing their own export marketing strategy and applying this through the HEA licensing of exporters. This framework for industry cooperation and collaboration encourages growers and exporters to develop export opportunities.

Industry Product Groups opt (vote) to come under the HEA model. There are currently 9 sector product groups operating under the structure: avocados, blackcurrants, buttercup squash, chestnuts, kiwifruit to Australia, persimmons, summerfruit, tamarillos and truffles. Collectively these 9 achieved export earnings of $346m in y.e. 30 June 2017.

The HEA framework is based on 2 key tools:

1. **The Export Marketing Strategy** (exporting rules) for each product group &

2. **Licencing exporters**

HEA's Goal: exports under the structure to reach $600million by 2020.

How does HEA provide value?

The HEA legislative framework enables Product Groups to enforce their agreed standards. These standards may cover:

- Developing and enforcing export quality grade standards.
- Operating a food safety programme.

The HEA framework also enables Product Groups to:

- collect industry information from all participants on product exports,
- generate funding for industry good functions, develop a co-ordinated industry structure encompassing growers, packers and exporters.

How is HEA funded?

While the HEA reports to the Minister for Primary Industries, the HEA is **funded 100% by its industry sector participants** via:

1) statutory fees on Recognised Product Groups &

2) Fees on export licence holders (application fees and annual monitoring fees).

HEA expenditure in 2016 amounted to 0.12% of the value of the exported products under the HEA framework. This translates to on average $1.20 for every $1,000 of exported product.

Source: hea.co.nz

GLOSSARY OF TERMS

A$/AUD	Australian dollar
ABS	Absolute change
ANZSIC	AU/NZ Standard Industry Classification
AU	Australia
Australasia	Australia and New Zealand
b	Billion
CAGR	Compound Annual Growth Rate
CN	China
C/S America	Central & South America (Latin America)
CRI	Crown Research Institute
CY	Calendar year (ending Dec 21)
E Asia	East Asia
EBITDA	Earnings before interest, tax, depreciation and amortization
FAO	Food and Agriculture Organisation of the United Nations
FOB	Free on Board
FY	Financial year (of firm in question)
GBP	British pounds
HK	Hong Kong
IQF	Individually quick frozen
JV	Joint venture
m	Million
n/a	Not available/not applicable
NA/ME/CA	North Africa / Middle East / Central Asia
N. America	North America (USA, Canada)
Nec/nes	Not elsewhere classified/not elsewhere specified
N/C	Not calculable
N.H	Northern Hemisphere
NZ	New Zealand
NZ$/NZD	New Zealand dollar
R&D	Research and Development
S Asia	South Asia (Indian Subcontinent)
SE Asia	South East Asia
S.H	Southern Hemisphere
SS Africa	Sub-Saharan Africa
T	Tonne
US/USA	United States of America
US$/USD	United States dollar

AUSTRALIA
Coriolis Australia Pty Ltd
PO Box 5831
St Georges Terrace
Perth, WA 6831
Australia
+61 8 9468 4691

NEW ZEALAND
Coriolis (New Zealand) Limited
PO Box 90-509
Victoria Street West
Auckland, 1142
New Zealand
+64 9 623 1848

www.coriolisresearch.com

Coriolis is the leading Australasian management consulting firm specialising in the wider food value chain. We work on projects in agriculture, food and beverages, consumer packaged goods, retailing & foodservice. In other words, things you put in your mouth and places that sell them.

WHERE WE WORK

We focus on the Asia Pacific region, but look at problems with a global point-of-view. We have strong understanding of, and experience in, markets and systems in Australia, China, Japan, Malaysia, New Zealand, Singapore, South Korea, Thailand, the United Kingdom and the U.S. We regularly conduct international market evaluations and benchmarking.

WHAT WE DO

We help our clients assemble the facts needed to guide their big decisions. We develop practical, fact-based insights grounded in the real world that guide our clients decisions and actions. We make practical recommendations. We work with clients to make change happen. We assume leadership positions to implement change as necessary.

HOW WE DO IT

All of our team have worked across one-or-more parts of the wider food value chain, from farm-to-plate. As a result, our recommendations are grounded in the real world. Our style is practical and down-to-earth. We try to put ourselves in our clients' shoes and focus on actions. We listen hard, but we are suspicious of the consensus. We provide an external, objective perspective. We are happy to link our fees to results.

WHO WE WORK WITH

We only work with a select group of clients we trust. We build long term relationships with our clients and more than 80% of our work comes from existing clients. Our clients trust our experience, advice and integrity.

Coriolis advises clients on growth strategy, mergers and acquisitions, operational improvement and organisational change. Typical assignments for clients include...

FIRM STRATEGY & OPERATIONS

We help clients develop their own strategy for growing sales and profits. We have a strong bias towards growth driven by new products, new channels and new markets.

MARKET ENTRY

We help clients identify which countries are the most attractive – from a consumer, a competition and a channel point-of-view. Following this we assist in developing a plan for market entry and growth.

VALUE CREATION

We help clients create value through revenue growth and cost reduction.

TARGET IDENTIFICATION

We help clients identify high potential acquisition targets by profiling industries, screening companies and devising a plan to approach targets.

DUE DILIGENCE

We help organisations make better decisions by performing consumer and market-focused due diligence and assessing performance improvement opportunities.

EXPERT WITNESS

We provide expert witness support to clients in legal cases and insurance claims. We assist with applications under competition/fair trade laws and regulations.