

Food & Beverage Information Project 2011 Industry Snapshot

Final Report
February 2012; v1.0 0

www.foodandbeverage.govt.nz

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Coriolis is a strategic management consulting and market research firm

We work with organisations to help them grow. For corporations, that often means developing strategies for revenue growth. For governments, it means working on national economic development. For non-profits, it means helping to grow their social impact.

We address all the problems that are involved in growth: strategy, marketing, pricing, innovation, new product development, new markets, organisation, leadership, economic competitiveness.

We bring to our clients specialised industry and functional expertise. We invest significant resources in building knowledge. We see it as our mission to bring this knowledge to our clients and we publish much of it for the benefit of others.

A hallmark of our work is rigorous, fact-based analysis, grounded in proven methodologies. We rely on data because it provides clarity and aligns people.

However, we deliver results, not reports. To that end, we work side by side with our clients to create and implement practical solutions.

The Coriolis name

The coriolis force, named for French physicist Gaspard Coriolis (1792-1843), may be seen on a large scale in the movement of winds and ocean currents on the rotating earth. It dominates weather patterns, producing the counterclockwise flow observed around low-pressure zones in the Northern Hemisphere and the clockwise flow around such zones in the Southern Hemisphere. *To us it means understanding the big picture before you get into the details.*

PO Box 90-509, Victoria Street West, Auckland 1142, New Zealand
Tel: +64 9 623 1848 www.coriolisresearch.com



The objective of this report is to provide a **factual** source of high quality **information** on the current situation in the New Zealand Food and Beverage industry for four audiences:

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

It creates a common set of **facts** and **figures** on the current situation in the industry.

It forms a part of the wider Food & Beverage Information Project. It does not attempt to duplicate the material present in the other modules - particularly the sector level analysis - instead it looks primarily at the big picture and meta-drivers of growth. It will be updated annually.

For additional information visit: www.foodandbeverage.govt.nz



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GLOSSARY OF TERMS

This report uses the following acronyms and abbreviations

| | | | |
|--------------------|--|------------------|---|
| A\$/AUD | Australian dollar | NA/ME/CA | North Africa / Middle East / Central Asia |
| ABS | Absolute change | NZ | New Zealand |
| ANZSIC | AU/NZ Standard Industry Classification | NZ\$/NZD | New Zealand dollar |
| AU | Australia | R&D | Research and Development |
| Australasia | Australia and New Zealand | S Asia | South Asia (Indian Subcontinent) |
| b | Billion | SE Asia | South East Asia |
| CIF | Cost, Insurance and Freight | S.H./N.H. | Southern/Northern Hemisphere |
| CAGR | Compound Annual Growth Rate | SS Africa | Sub-Saharan Africa |
| C/S America | Central & South America (Latin America) | T/O | Turnover |
| CRI | Crown Research Institute | US/USA | United States of America |
| CY | Calendar year (ending Dec 21) | US\$/USD | United States dollar |
| E Asia | East Asia | UK | United Kingdom |
| EBITDA | Earnings before interest, tax, depreciation and amortization | YE/YTD | Year ending/Year to date |
| FOB | Free on Board | | |
| FY | Financial year (of firm in question) | Sources | |
| £/GBP | British pounds | AR | Annual report |
| HS Codes | Harmonised System Codes for commodity classifications | Ce | Coriolis estimate |
| JV | Joint venture | Ci | Coriolis interview |
| m | Million | K | Kompass |
| n/a | Not available/not applicable | Ke | Kompass estimate |
| | | ws | Website |

METHODOLOGY & DATA SOURCES

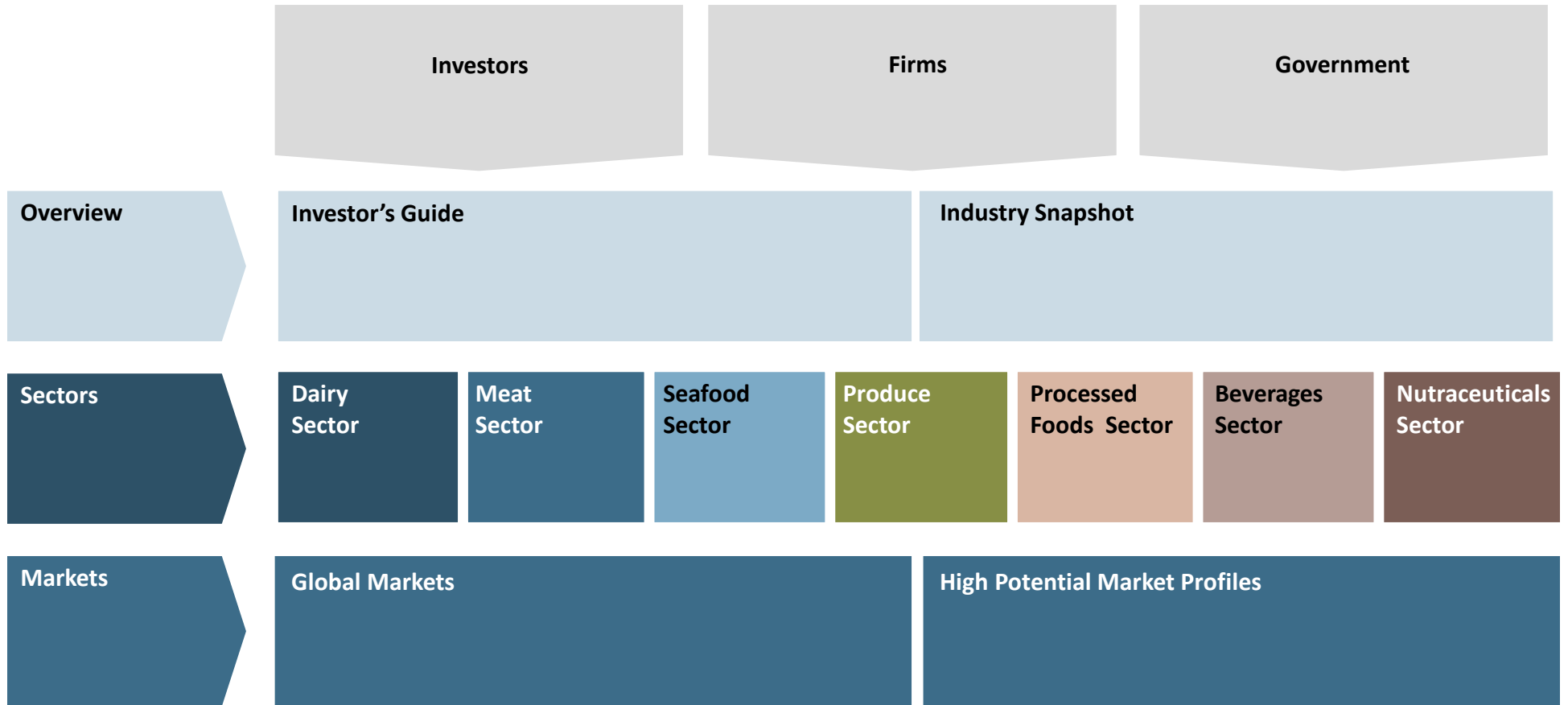
Data was from a variety of sources, and has a number of identified limitations

- This report uses a range of information sources, both qualitative and quantitative.
- The numbers in this report come from multiple sources. While we believe the data are directionally correct, we recognise the limitations in what information is available.
 - In many cases different data sources disagree (e.g. Statistics New Zealand vs. FAO* vs. UN Comtrade).
 - Many data sources incorporate estimates of industry experts.
 - As one example, in many cases, the value and/or volume recorded as exported by one country does not match the amount recorded as being received as imports by the counterparty [for understood reasons].
- In addition, in some places, we have made our own clearly noted estimates.
- 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 data sources used in the project.
 - The information contained in the report and any 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.
- 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 report.
- All 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:
 1. It is the currency most used in international trade
 2. It allows for cross country comparisons (e.g. vs. Denmark)
 3. It removes the impact of NZD exchange rate variability
 4. It is more comprehensible to non-NZ audiences (e.g. foreign investors)
 5. It is the currency in which the United Nations collects and tabulates global trade data
- The opinions expressed in this report represent those of the industry participants interviewed and the authors. These do not necessarily represent those of Coriolis Limited or the New Zealand Government.
- If you have any questions about the methodology, sources or accuracy of any part of this report, please contact Tim Morris, the report's lead author at Coriolis, on +64 9 623 1848

F&B INFORMATION PROJECT

The New Zealand Food & Beverage Information Project is designed to be the foundation of facts and figures on which a range of audiences can build

Structure of the New Zealand Food & Beverage Information Project
(2011)



INDUSTRY SNAPSHOT

This snapshot of New Zealand's Food & Beverage industry forms a part of the wider Food & Beverage Information Project

Structure of the New Zealand Food & Beverage Information Project
(2011)

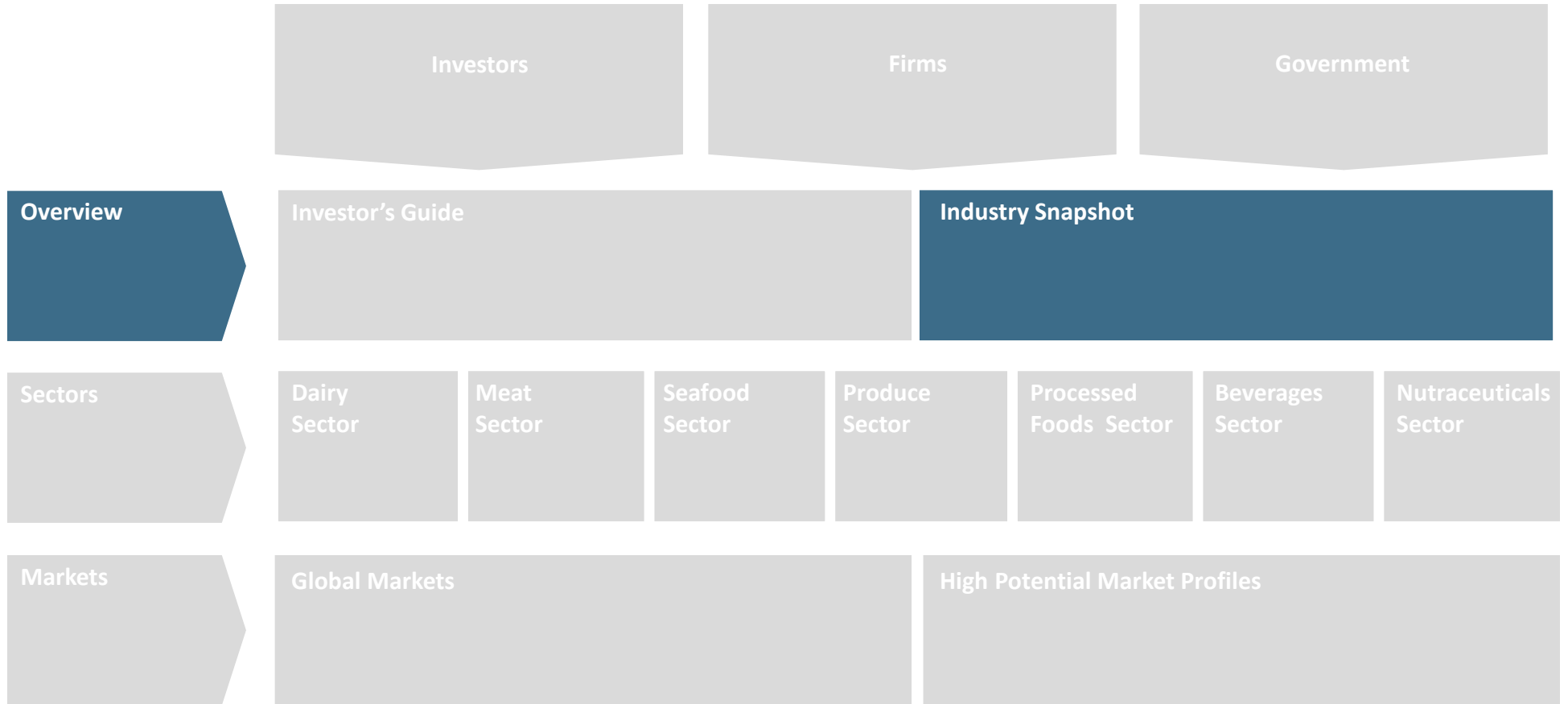




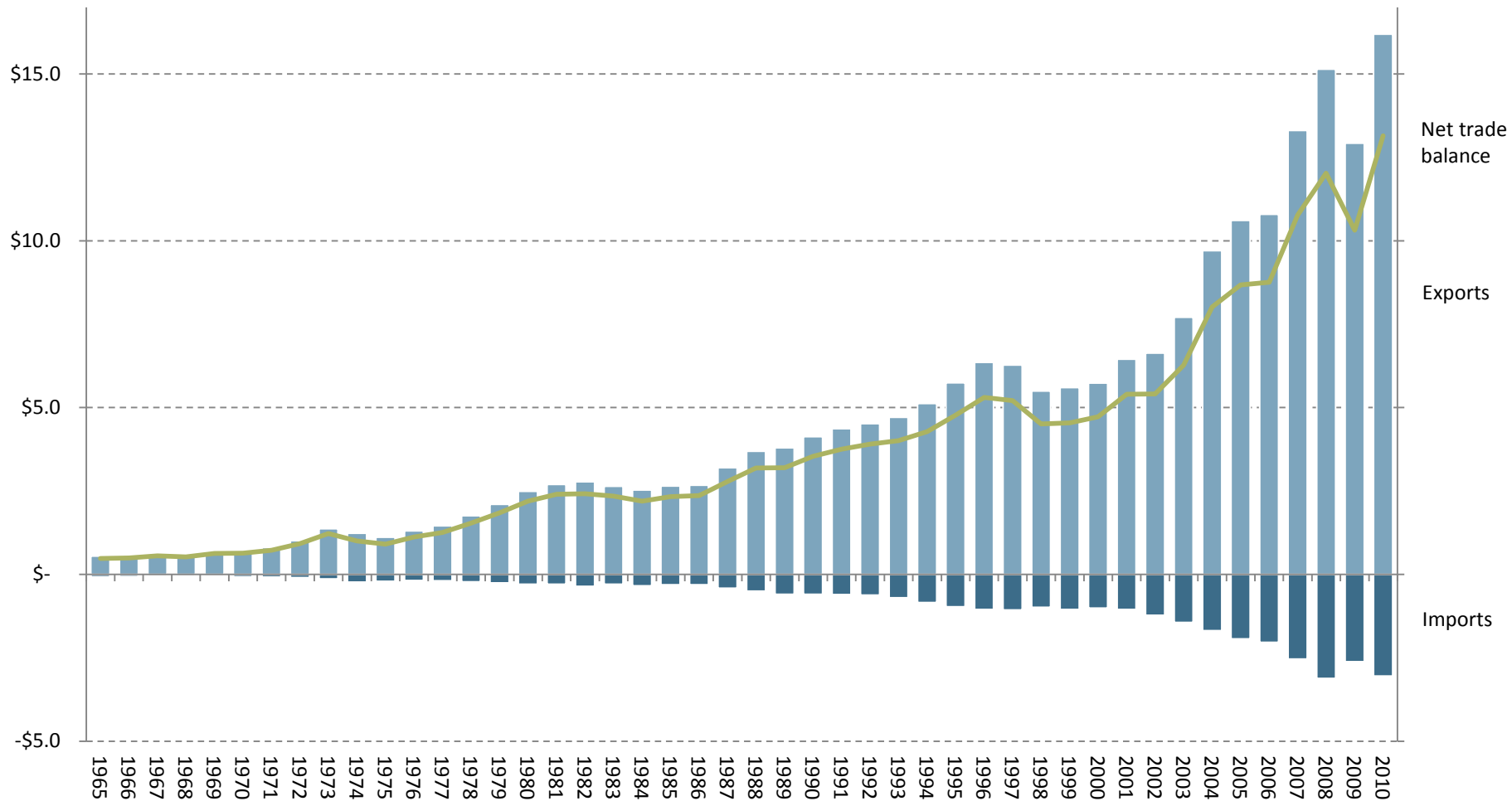
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NZ F&B TRADE BALANCE

New Zealand has a strong and growing trade surplus in food and beverage

New Zealand F&B trade value: exports vs. imports
(US\$b; 1965-2010)



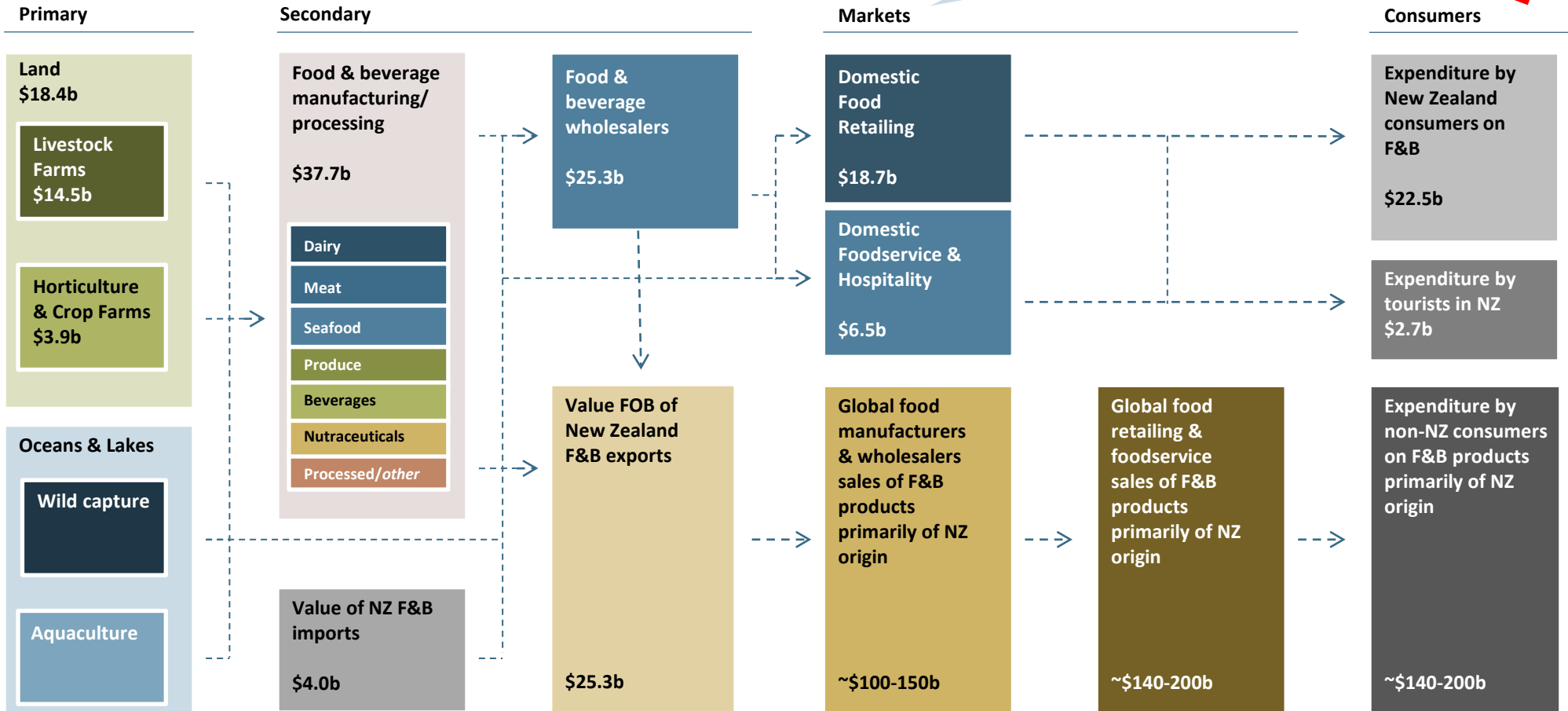
NZ F&B INDUSTRY VALUE CHAIN MODEL

We propose the following simplified model of the New Zealand food & beverage industry value chain; this model guides our work

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)

We consume domestically almost 50% of the food we produce

Contains significant estimates – treat as DIRECTIONAL



1. PRIMARY PRODUCTION

The first section looks at primary production

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)

Primary

Land
\$18.4b

Livestock
Farms
\$14.5b

Horticulture
& Crop Farms
\$3.9b

Oceans & Lakes

Wild capture

Aquaculture

SITUATION – PRIMARY PRODUCTION

New Zealand's historical low intensity farming model is under pressure; intensification appears to be the path forward

Growing global need for food

- The global population continues to increase and has just passed the seven billion people mark. At the same time, the rising middle class in Asia has increasing disposable income leading to increasing demand for premium, high quality food and beverage. The world needs to significantly increase food production and New Zealand can play a part in that process.

New Zealand is currently low intensity

- While New Zealand's exports of food and beverage (F&B) are significant, these account for just 2.5% of global trade in food. The country has considerable untapped capacity to export more. New Zealand is a country the size of Italy or the United Kingdom, but with the population of Singapore. However Italy feeds a domestic population of 60m people and exports twice as much F&B as New Zealand.
- The New Zealand Government has set a target of tripling the country's food and beverage exports over the next 15 years. This will be achieved through both growth of existing major sectors and the newer emerging growth stars.

Multiple pressures

- New Zealand has had a long period of bringing new – often increasingly marginal - land into production. However, this easy growth appears to have come to an end. Multiple pressures are now coming to a head:
 1. The growth of lifestyle blocks and “urban sprawl”

2. The drive to continue to increase primary production

Intensification the path forward

- As a result of these pressures, primary production is moving into a phase of intensification. Examples of intensification include:
 - Conversion of sheep paddocks into wine grapes
 - Conversion of rain fed beef farms into irrigated dairy farms
 - Flat wild catch of seafood being supplemented by more aquaculture
- New Zealand can't ignore these issues. As a country New Zealand has a competitive advantage in pastoral agriculture. It also has strong agricultural science, and research capability in its Universities, private institutes and Crown Research Institutes. At the mega level New Zealand now needs to leverage these capabilities and build on its existing strengths to develop ways to increase production without degrading the land and water.

Learn from peers

- There is nothing unique with the problems facing New Zealand, other countries have had very similar pressures. The experience of high relevant global peers (e.g. Denmark, Ireland, Oregon) strongly suggests intensification will continue going forward and that strong increases in production are possible. These peers clearly have strong lessons available for New Zealand.

PRIMARY SECTOR – CONCLUSIONS

It is difficult to see production growth going forward driven by anything other than intensification

| More | But... |
|---|---|
| More lifestyle blocks/urban area | Less farm land |
| More irrigation... | ...used to grow grass (?) |
| More milk More cull dairy cows | Fewer sheep Fewer beef cattle |
| More urban areas More lifestyle blocks | Less fruit area (except grapes) Less vegetable area |
| More continuous improvement required | Less relative competitiveness (e.g. No longer low cost dairy producer) |
| More aquatic parks | Less ocean available |
| Slightly more aquaculture | Less wild capture fish |

Intensification the likely outcome, as it has been in other peer group countries and regions at a similar point in their evolution

1. PRIMARY PRODUCTION – LAND BASED

Land based primary production had a turnover of \$18.4b

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)

Primary

Land
\$18.4b

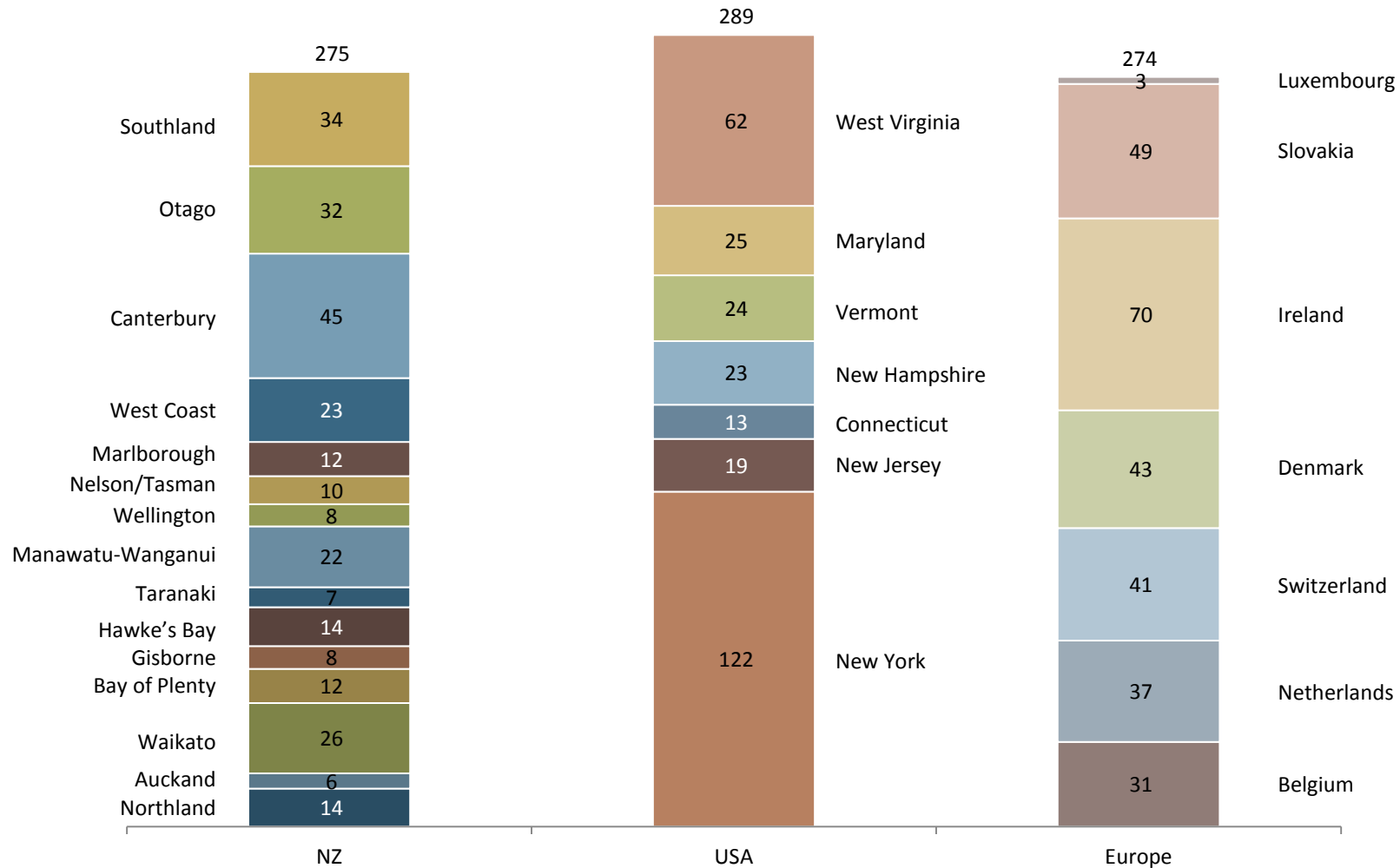
Livestock
Farms
\$14.5b

Horticulture
& Crop Farms
\$3.9b

HOW BIG IS NEW ZEALAND?

New Zealand is not a small country; many regions of New Zealand are the size of major European countries or American states

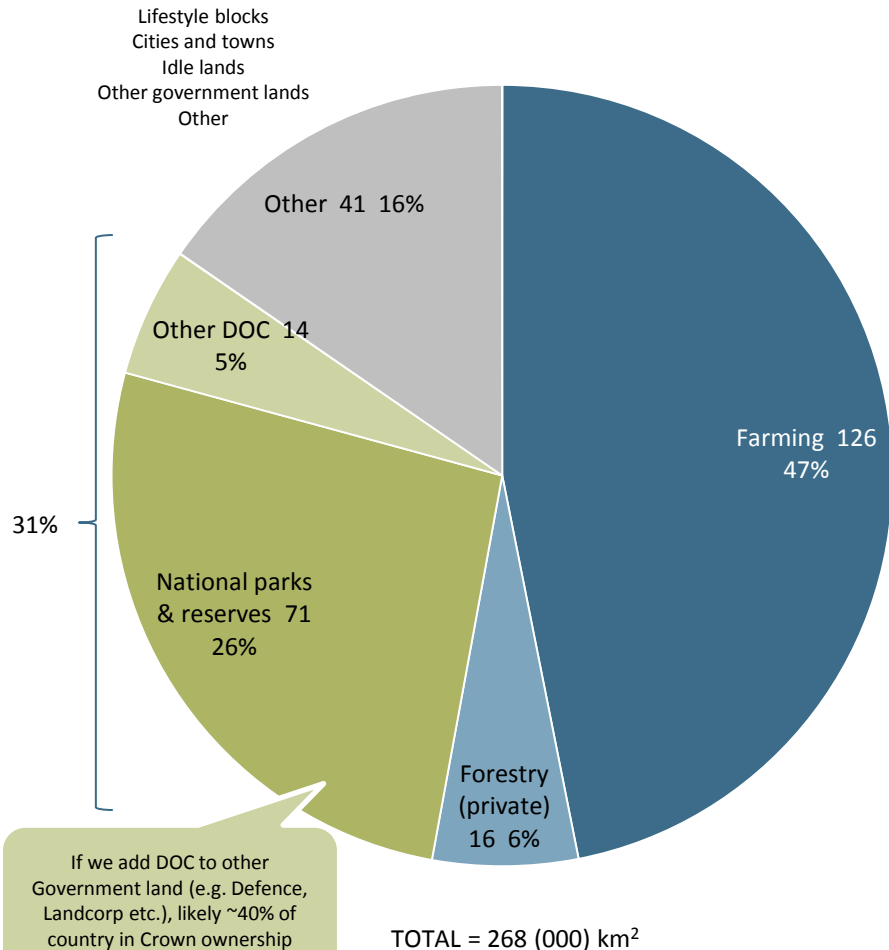
Total area: New Zealand vs. Select US East Coast states vs. select developed peer countries
(km²; 2011)



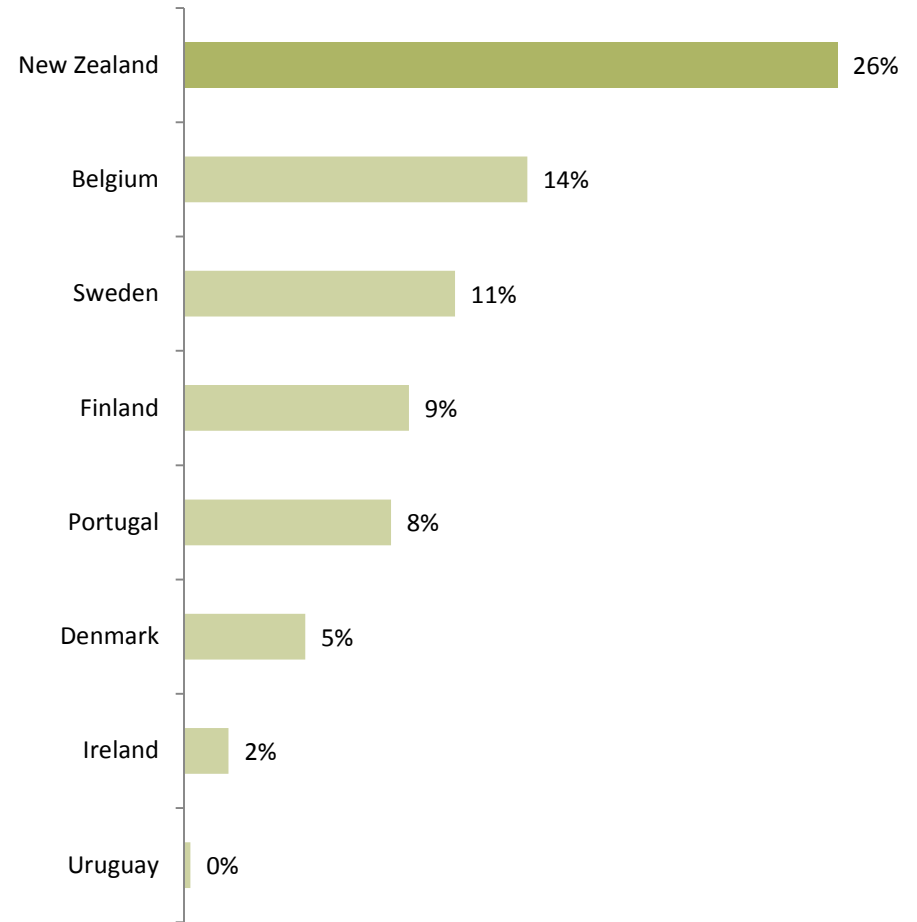
LAND – TOTAL LAND USE

Farming uses 47% of New Zealand’s land area, private forestry 6%, national parks & reserves 26% and all other uses 21%; New Zealand has more park and reserve relative to peers

New Zealand land use
(km²; 000; 2010)



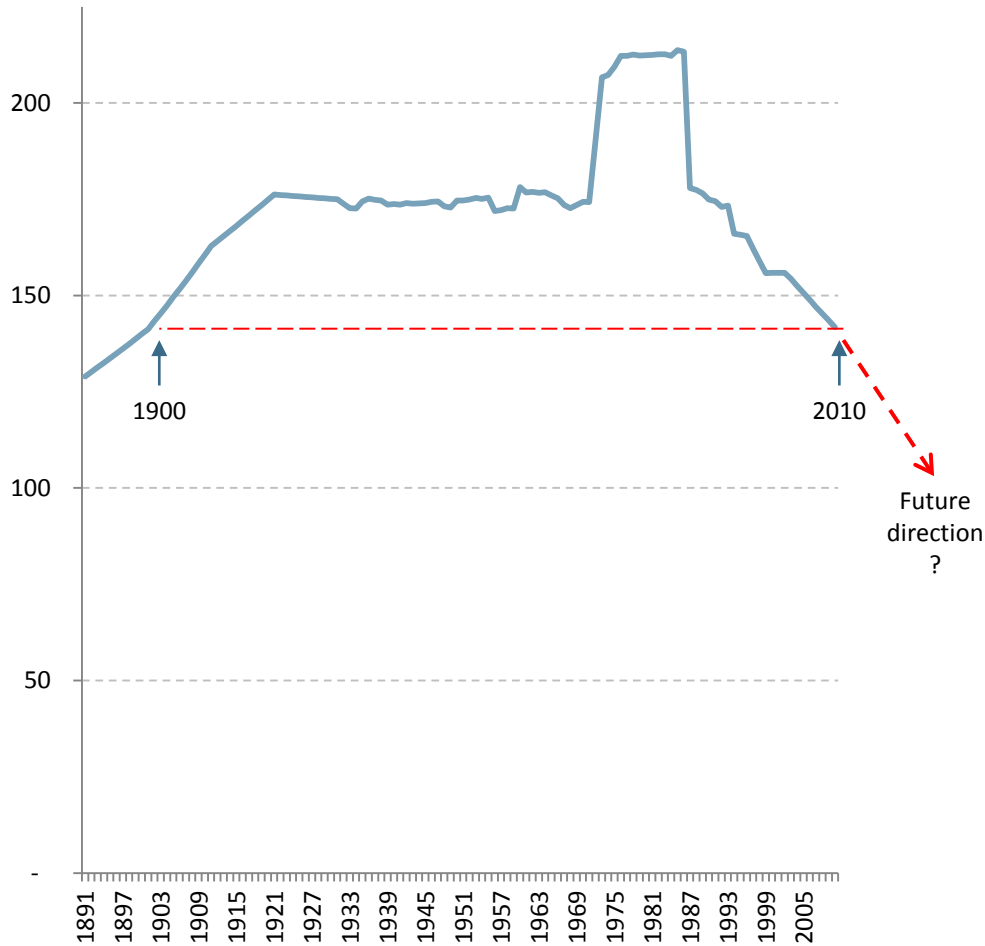
% of terrestrial area which is park or other protected: NZ vs. peers
(% of km²; 2010)



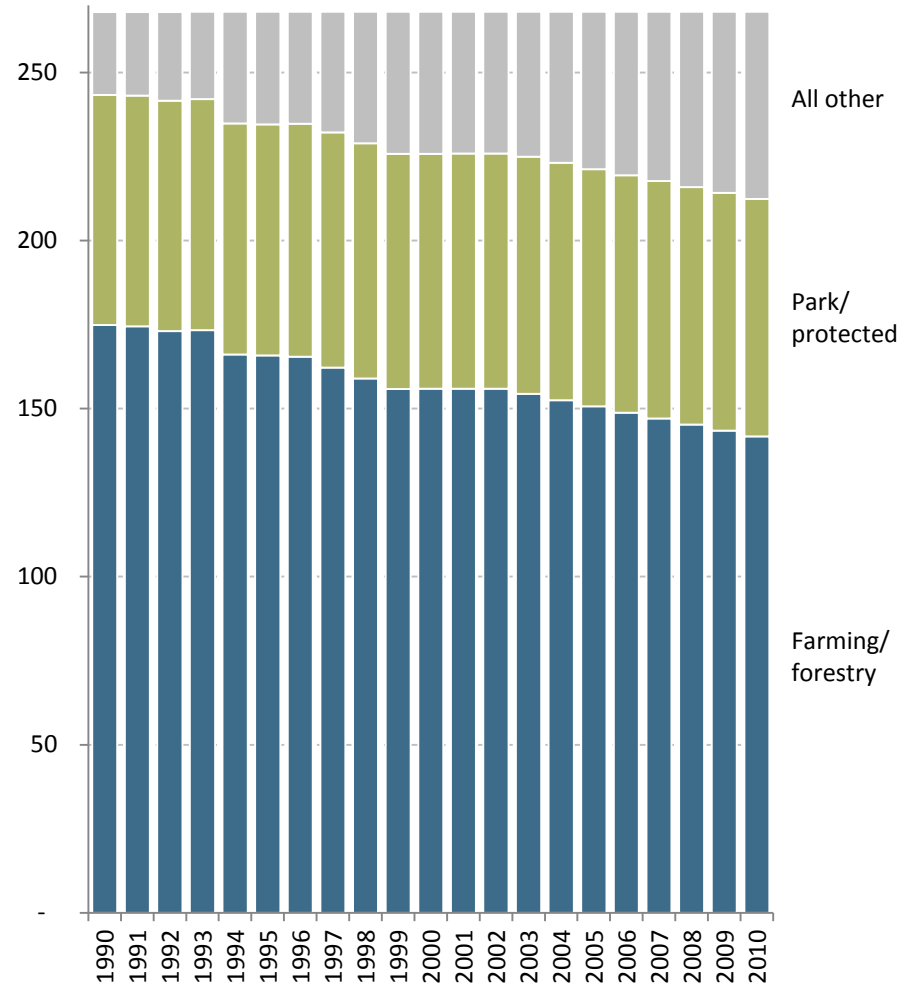
LAND – FARM LAND USE

The amount of farm land is declining rapidly such that New Zealand is now farming the same amount of land it did in 1900 (~120 years ago); growth of “other” appears to be prime driver since 1990

Total New Zealand area in farming and private forestry
(sqkm; 000; 1891-2010)



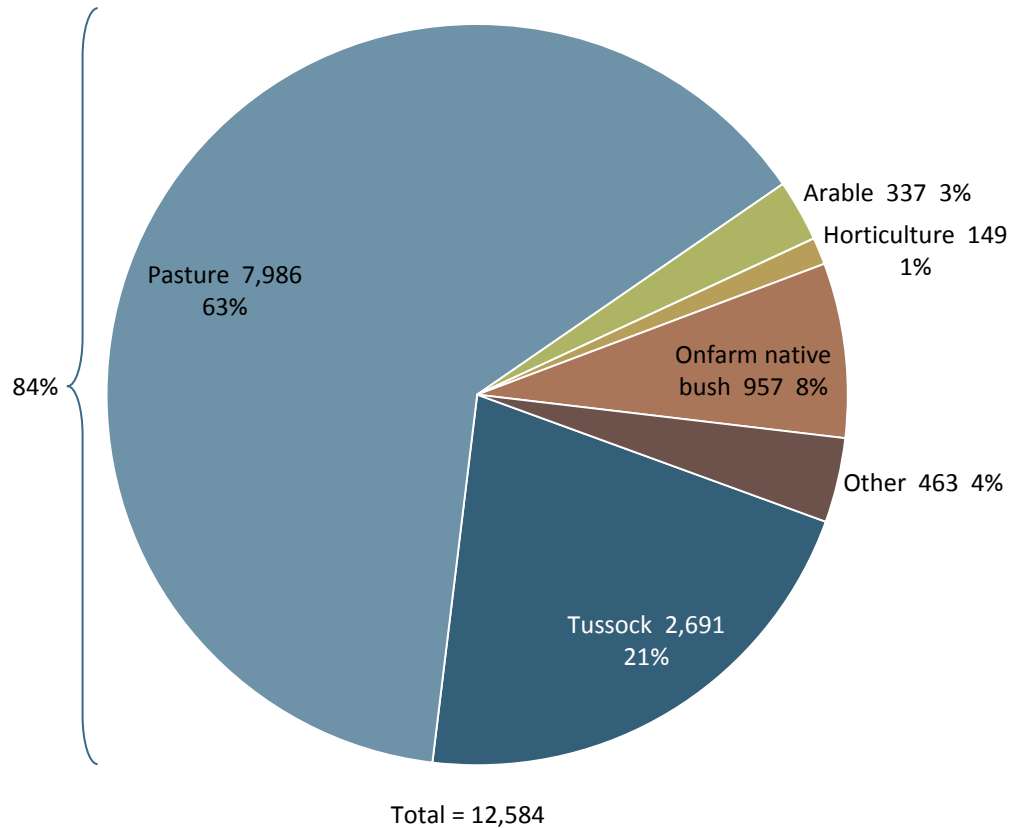
Share of area by major use types
(sqkm; 000; 1990-2010)



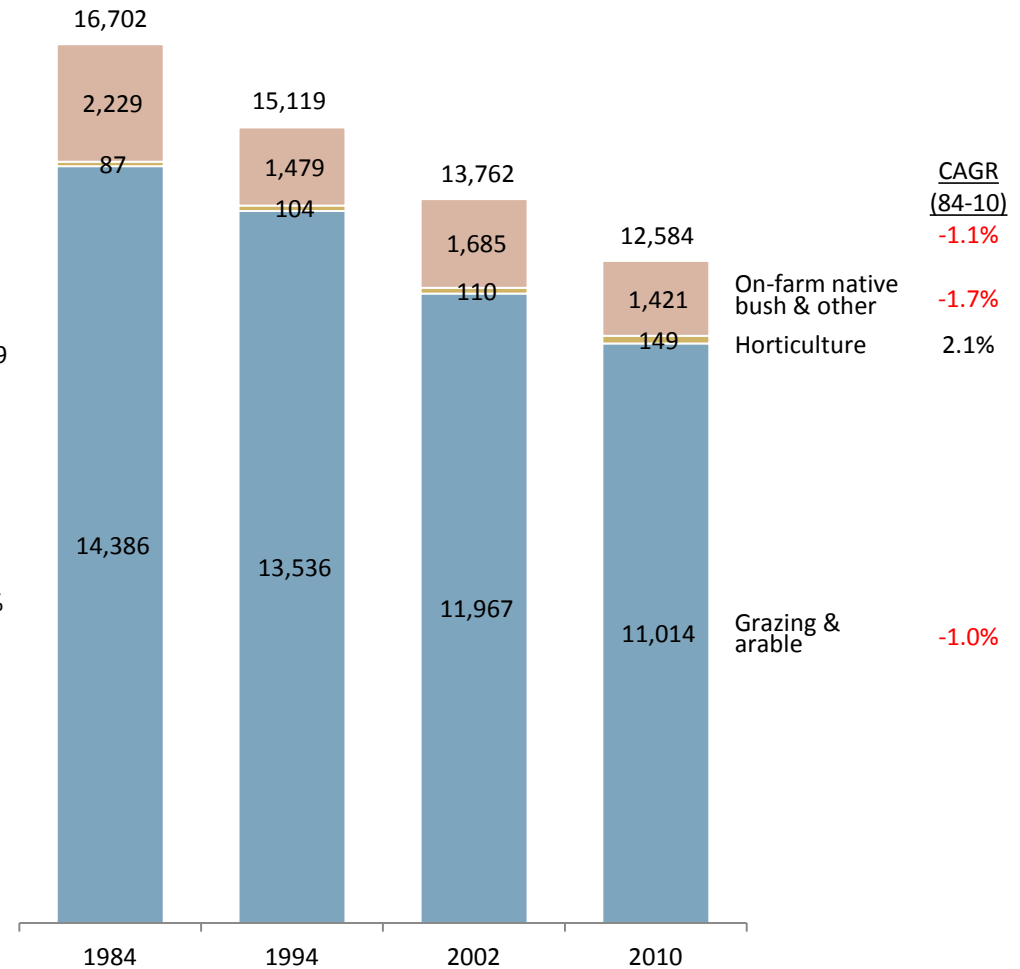
LAND – FARM LAND BY TYPE

84% of farm land is used for grazing; the amount of grazing and arable/fodder land has been falling at **-1.0%** per year for the past quarter century

Percent of farm land by type
(% of sqkm; 2010)



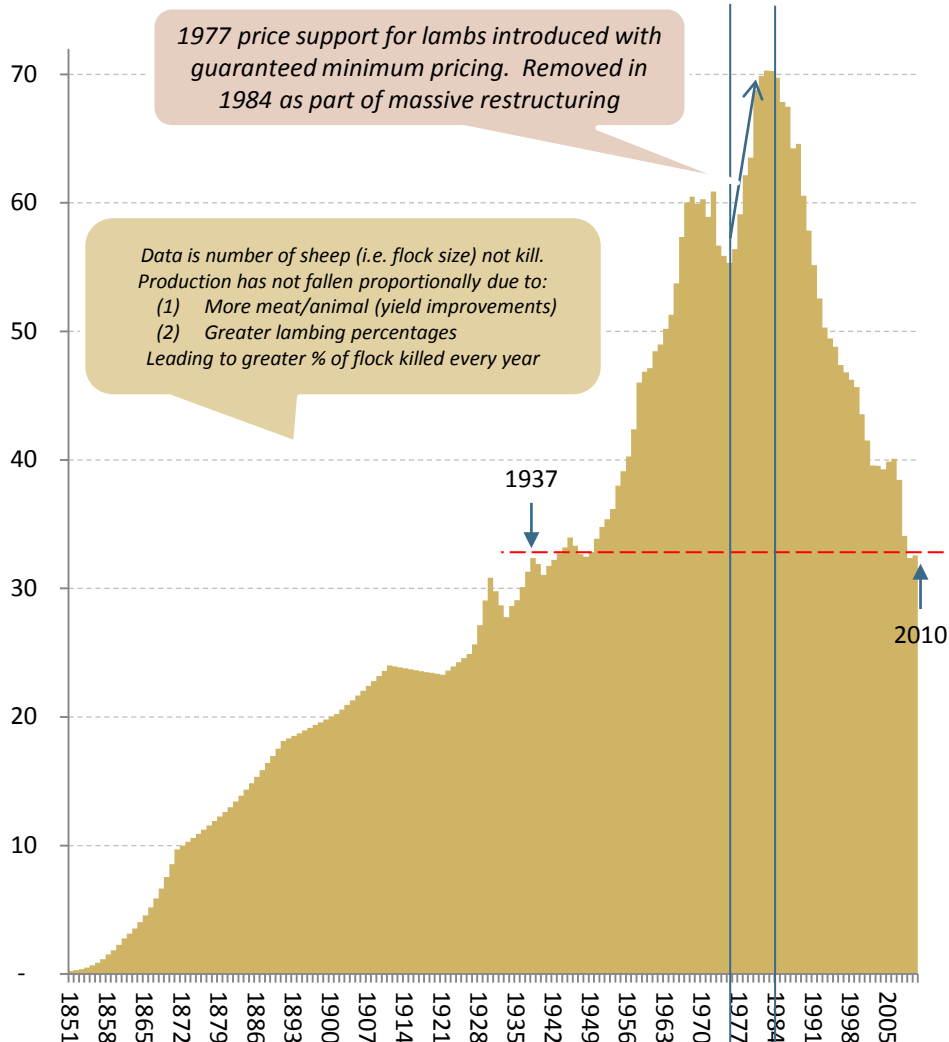
Farm land by type
(sqkm; 1984-2010)



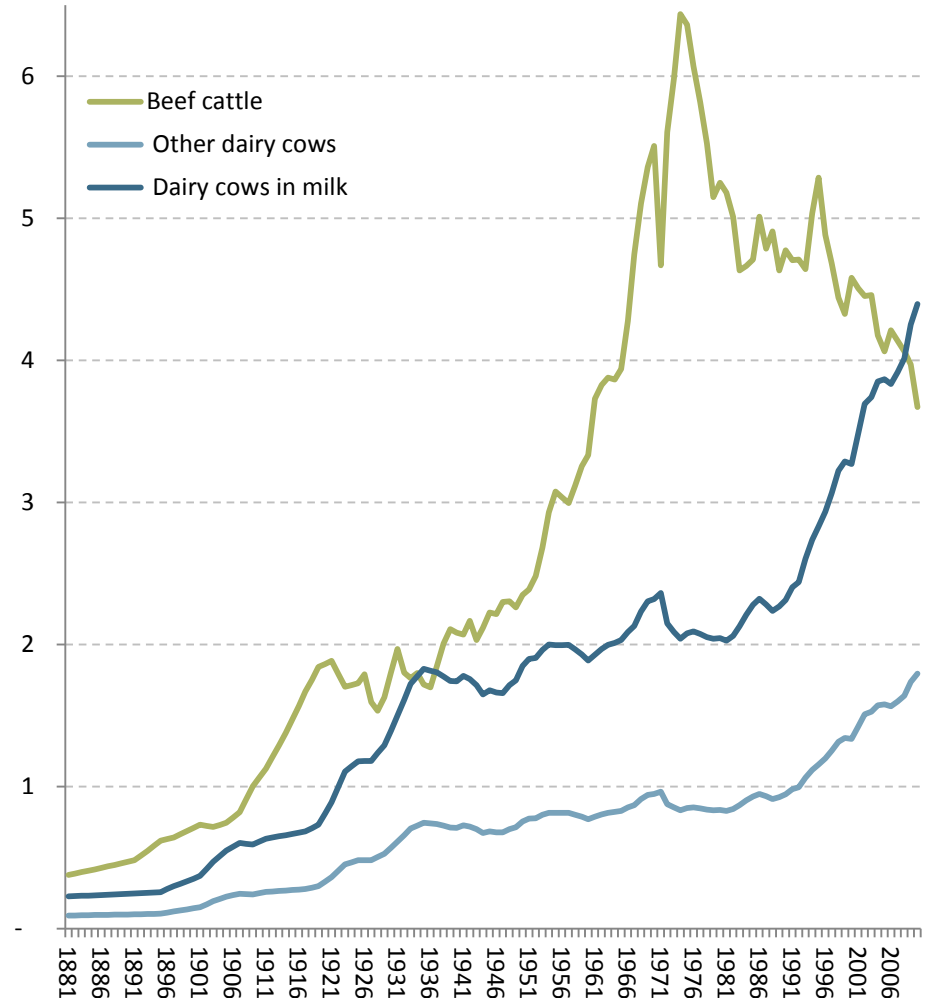
OF ANIMALS

The combination of falling farm area and dairy conversions has led to a dramatic fall in the number of sheep and beef cattle

Number of sheep in New Zealand
(#, m; 1851-2010)



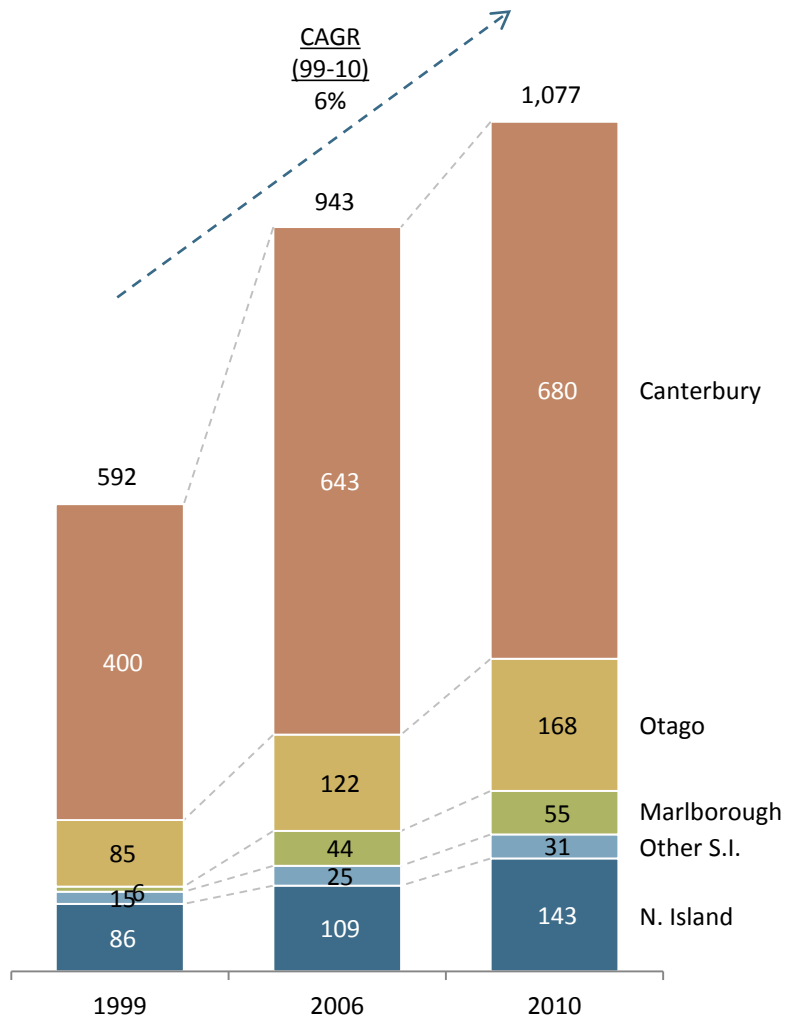
Number of cattle in New Zealand
(#, m; 1881-2010)



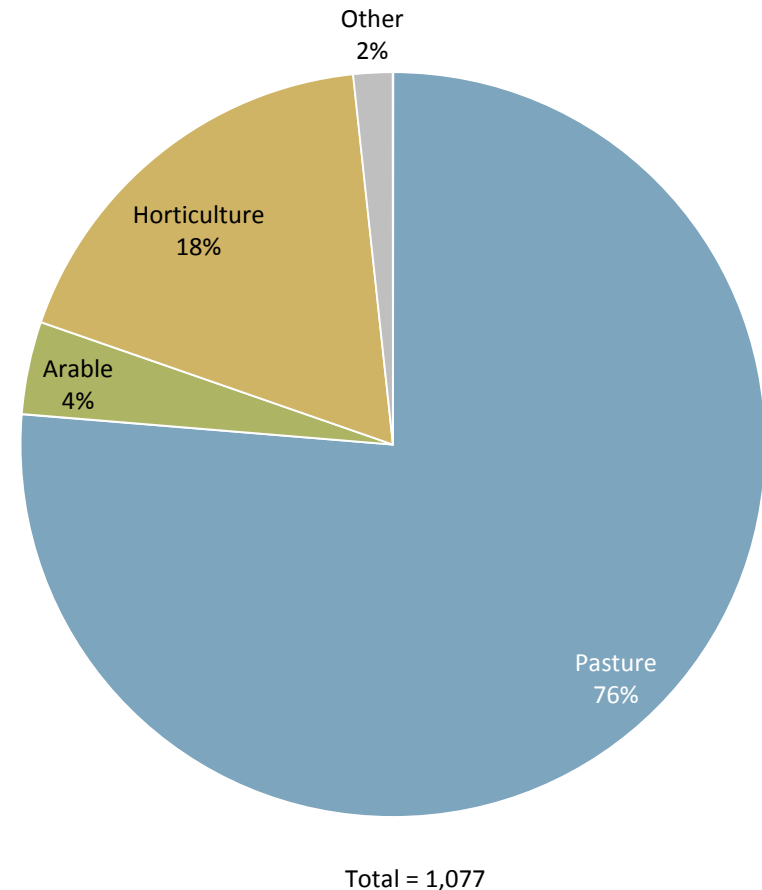
LAND – IRRIGATION IN NZ

New Zealand land under irrigation has been growing at 6% per annum, driven by the South Island; 76% of irrigated land grows grass

Consented irrigation area by key region
(ha; 000; 1999-2010)



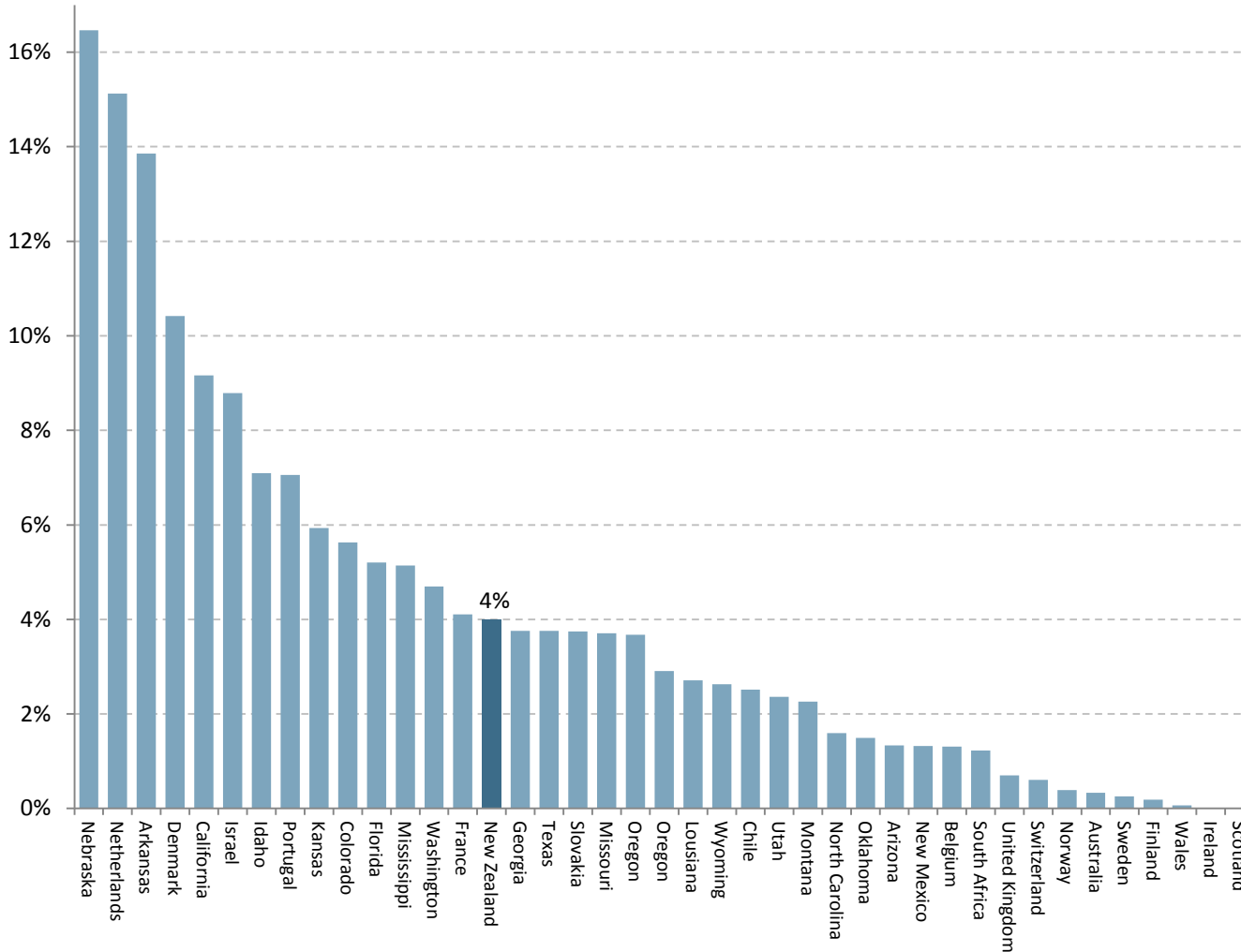
Percent of consented irrigation area by type
(ha; 000; %, 2010)



LAND – IRRIGATION VS. PEERS

New Zealand is now in the middle-of-the-range relative to peers in terms of share of land area irrigated

Percent of total area which is irrigated: NZ vs. select identified peers
(%; 2010)



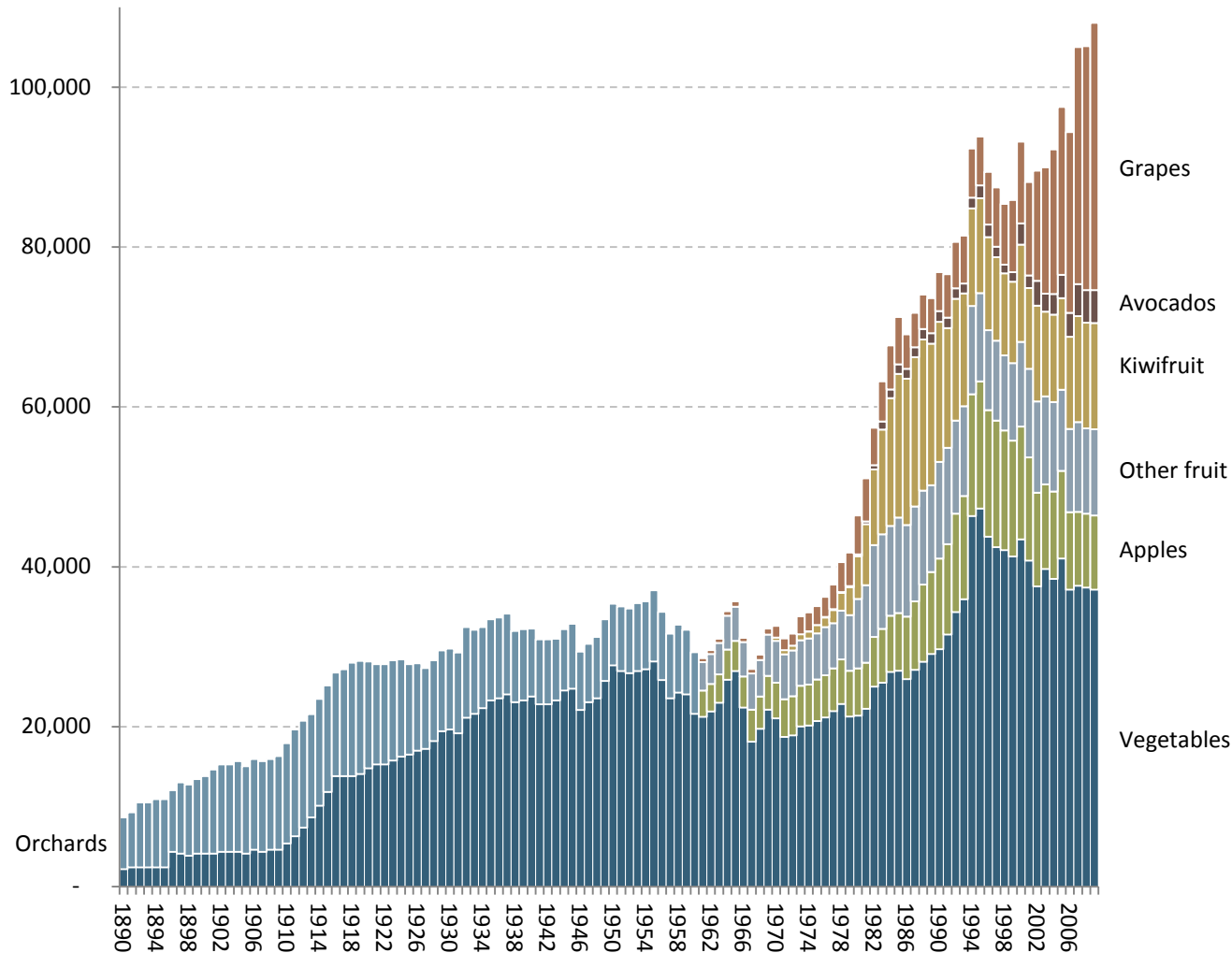
Comments/Notes

- Unlike some industry commentary, this suggests NZ is already relatively well irrigated
- Based on experience and past work, we suggest that no other country on this list uses 76% of its irrigation growing grass
- Is irrigating grass to feed cows a halfway house to irrigating arable crops to feed to cows?
- Is irrigation being overused as it is not correctly priced?

HORTICULTURAL AREA

Horticultural area experienced a strong surge in the mid 70's through the mid 90's; since then grapes have grown while the area for most other fruit has declined

120 years of area in fruit and vegetables in New Zealand
(ha; actual; 1890-2009)

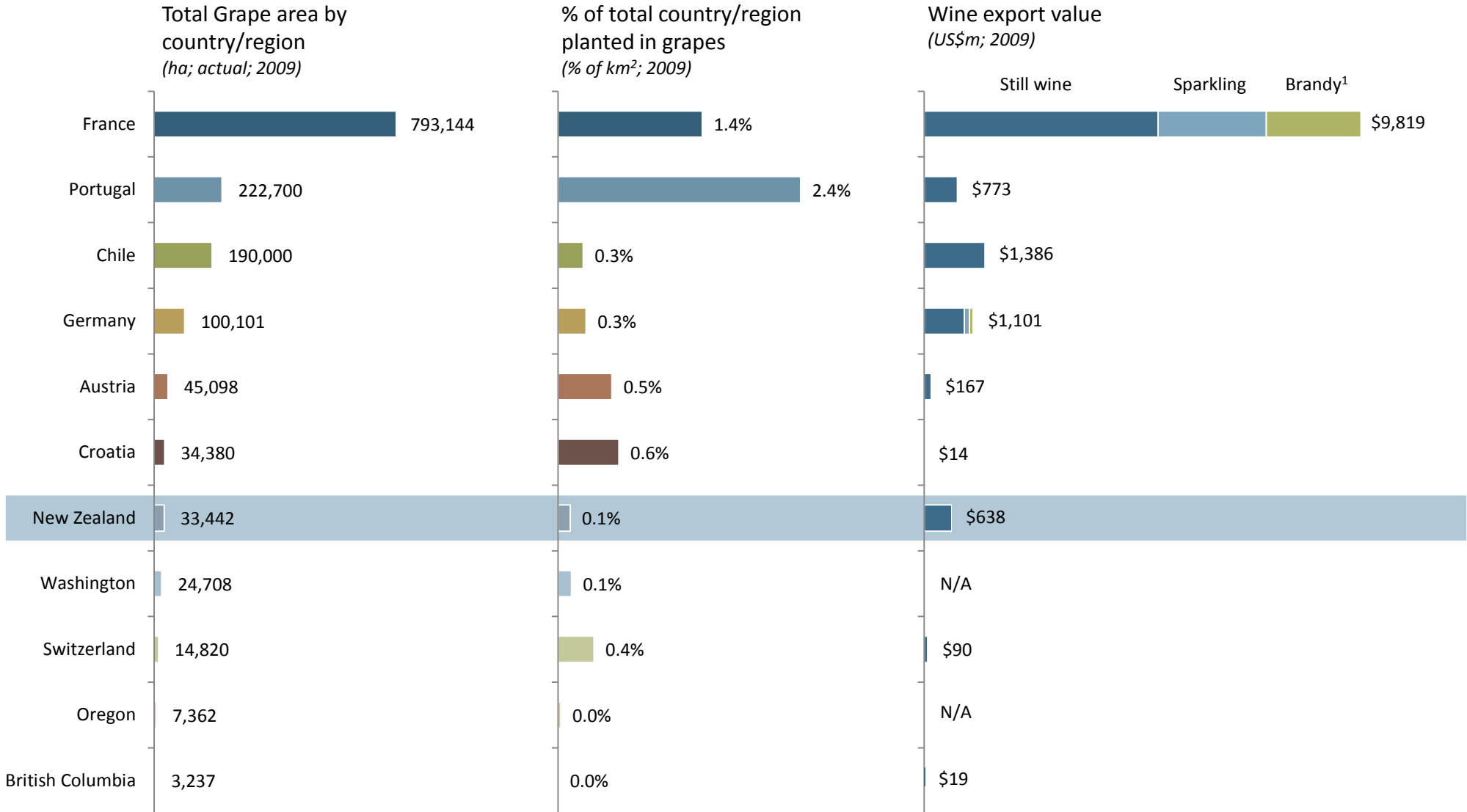


Comments/Notes

- Historical data should be treated as directional due to adjustments made to data (discussed below)
- Historical vegetable data is “market gardens, nurseries, residences, private grounds and gardens” adjusted to remove non-commercial vegetable component
- Does not include nuts or olives
- Does not include non-food horticulture (e.g. nurseries, turf)

WINE – BENCHMARKING

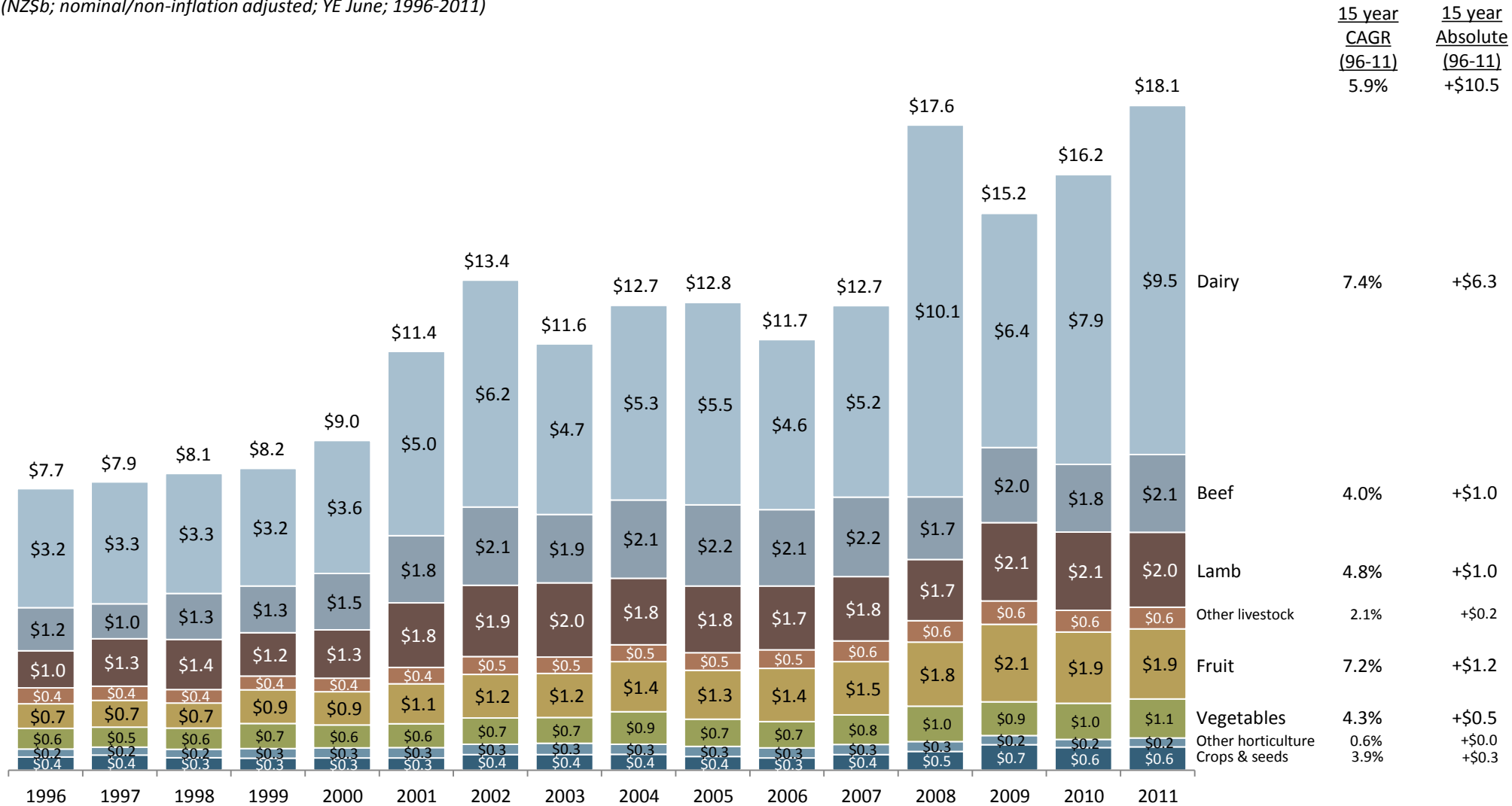
Cool climate peer group suggest opportunities for further wine area



FARM GATE F&B REVENUE

Farm gate F&B revenue has been growing, driven by dairy

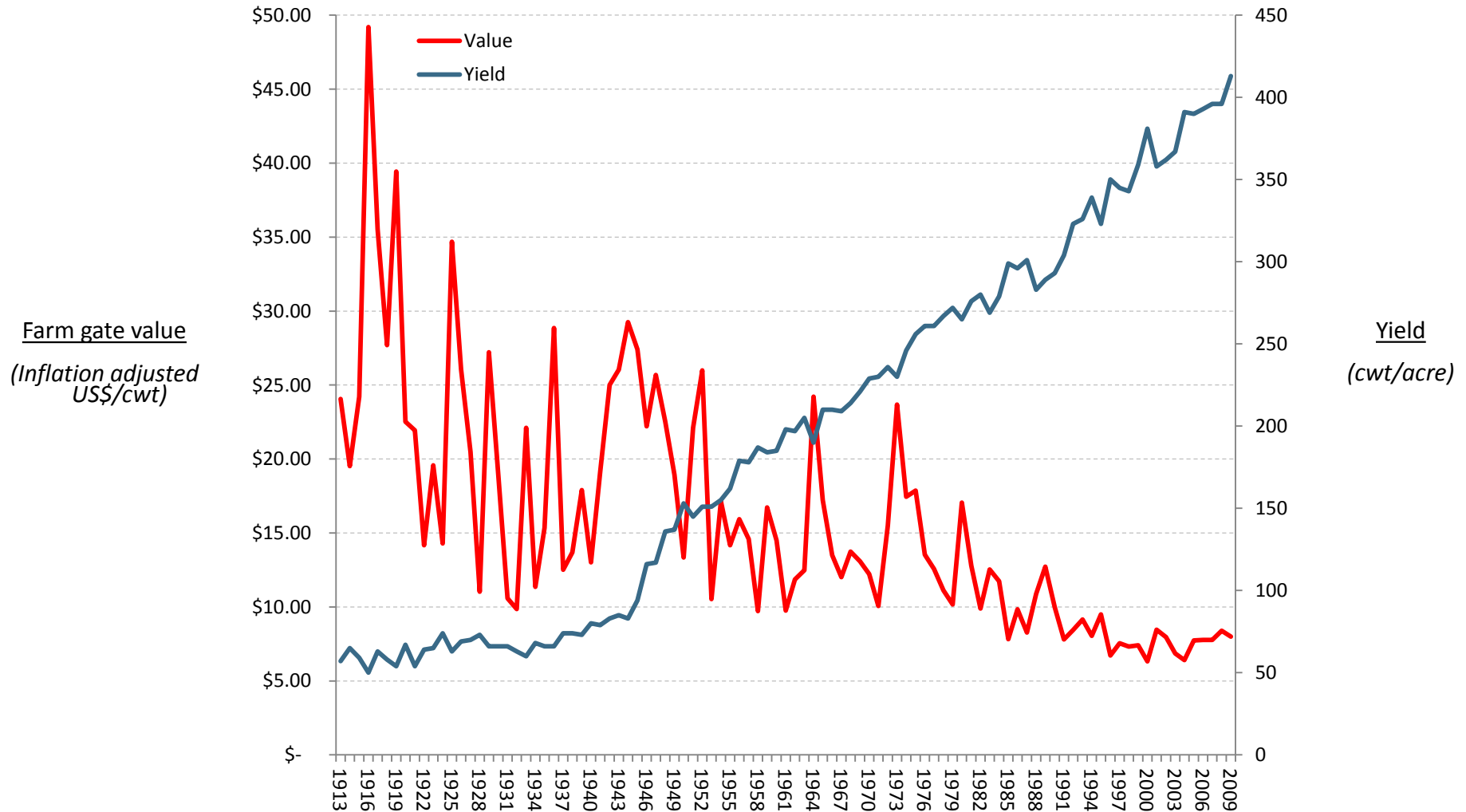
Farm gate gross agricultural revenue from food and beverage primary products
(NZ\$b; nominal/non-inflation adjusted; YE June; 1996-2011)



PRICE VS. YIELD

Farming is a difficult business; farmers must make constant gains just to stand still

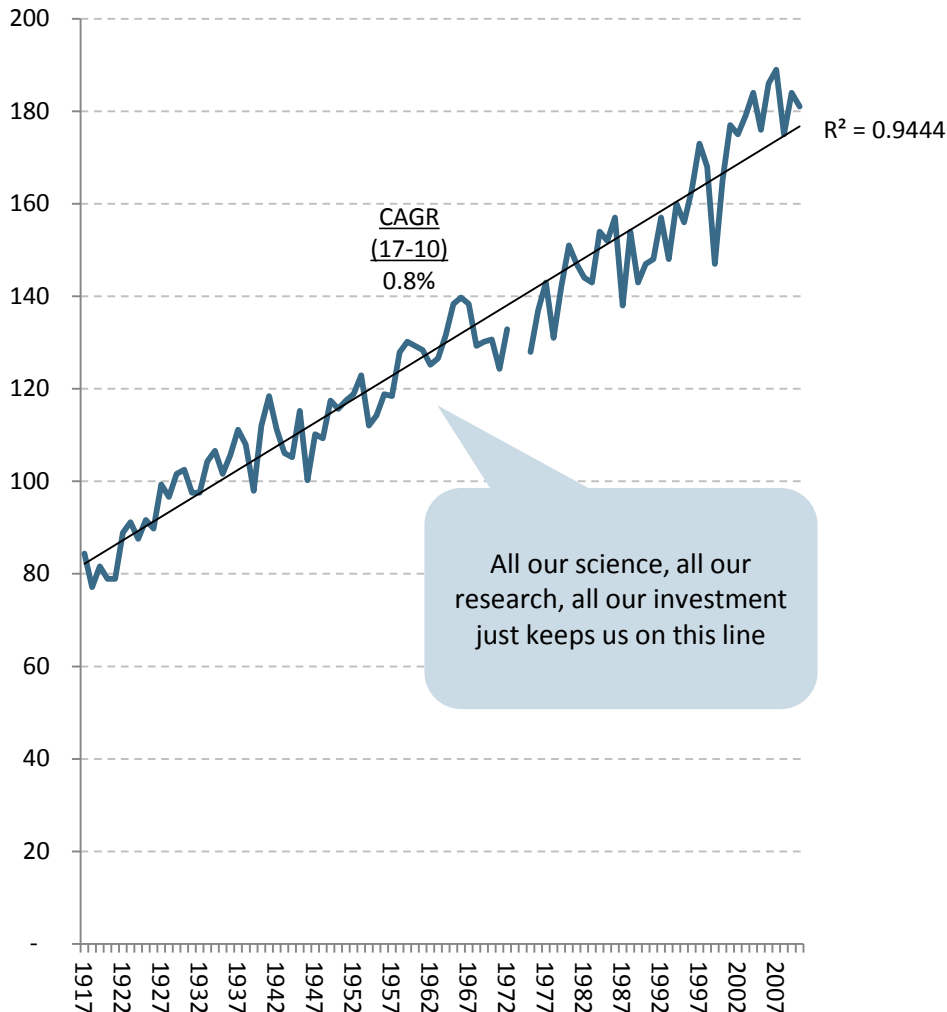
EXAMPLE: Potatoes in the United States: price vs. yield
(1913-2009)



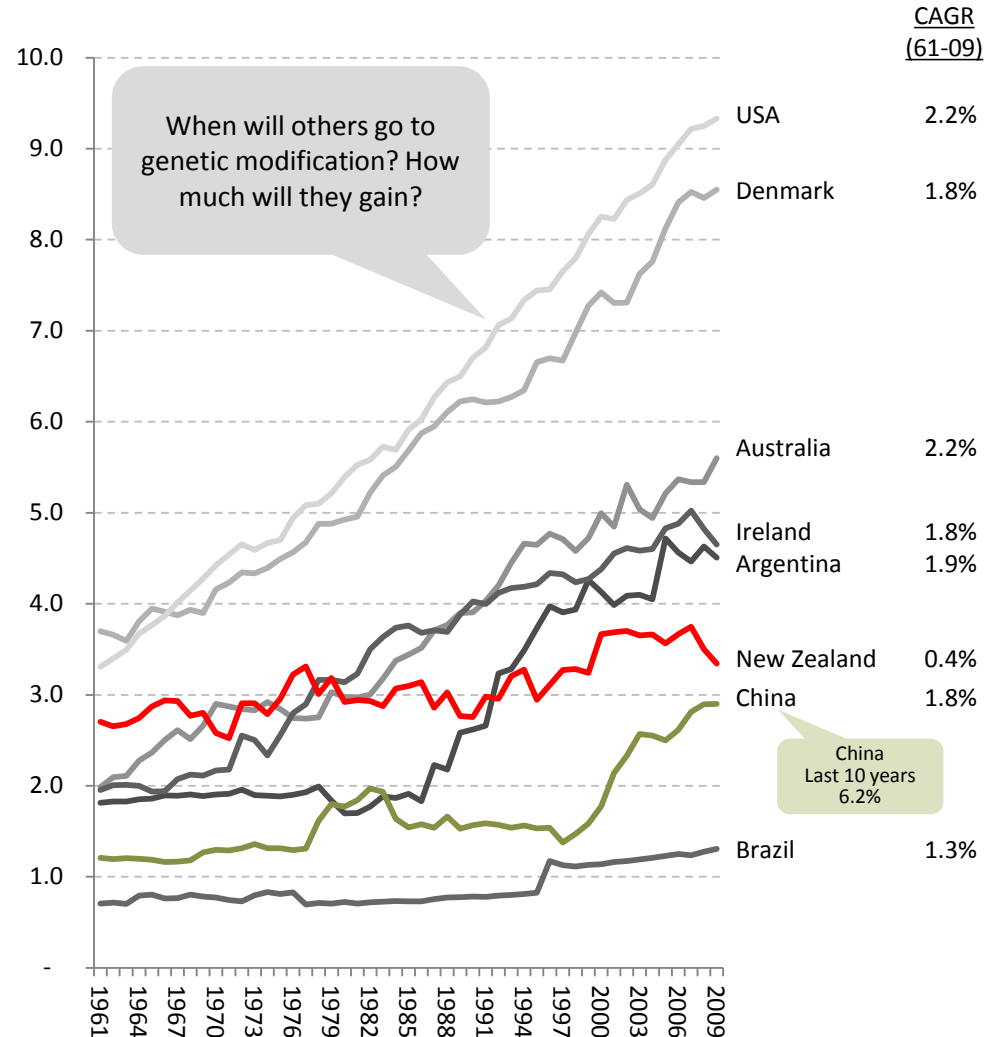
FARMING SYSTEM IMPROVEMENT EXAMPLE – DAIRY

Any given farming system has an underlying rate of improvement, but competing systems may improve at different rates (e.g. pasture vs. feedlot), as this example from the dairy industry shows

93 years growth in New Zealand butterfat per cow
(kg/cow; 1917-2010)



Milk per cow: NZ vs. select peers
(t/cow; 1961-2009)



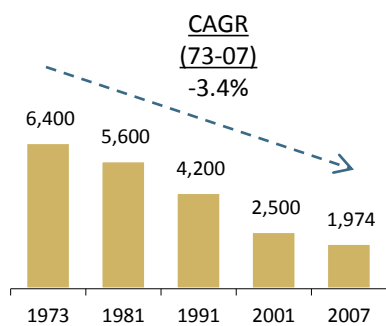
COMPETITORS IMPROVING FASTER

New Zealand's key dairy competitors are not standing still; they continue to improve, often at a faster rate

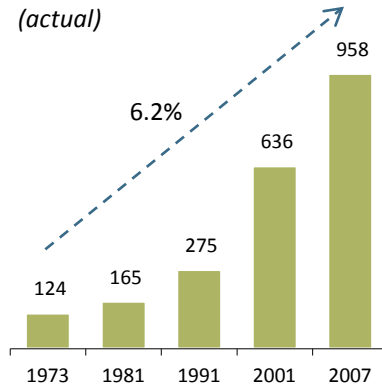
EXAMPLE: Changing variables in milk production: California vs. New Zealand (1973-2007)



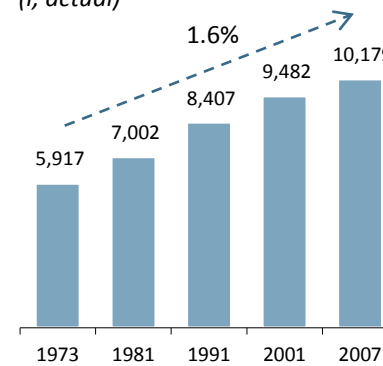
of dairy farms
(actual)



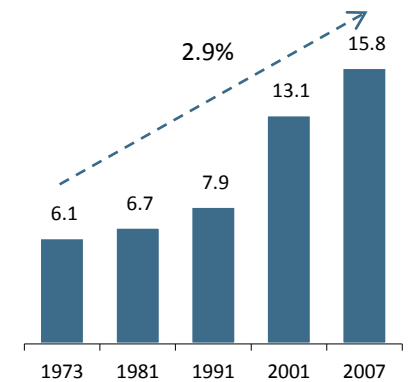
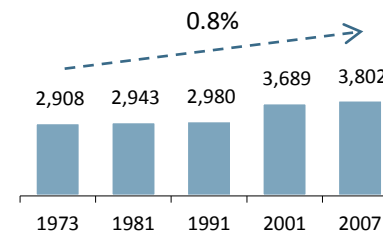
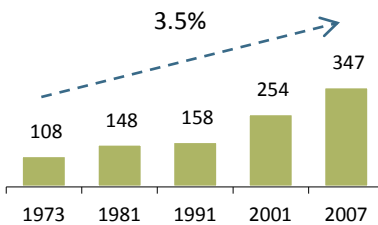
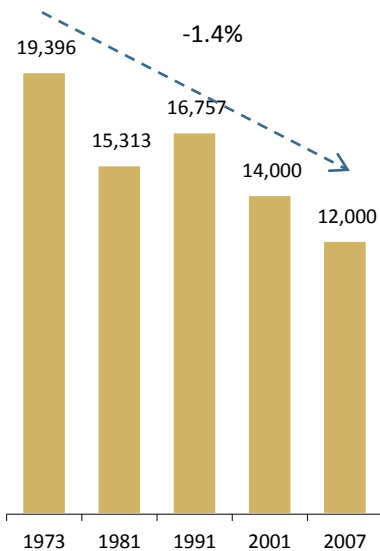
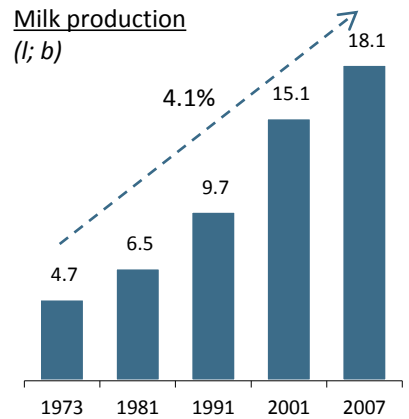
Cows/farm
(actual)



Milk/cow
(l; actual)



Milk production
(l; b)



Question: Can you project these variables in 2025?

1. PRIMARY PRODUCTION – WATER BASED

Water based primary production incorporates wild capture and aquaculture

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)

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Land
\$18.4b

Livestock
Farms
\$14.5b

Horticulture
& Crop Farms
\$3.9b

Oceans & Lakes

Wild capture

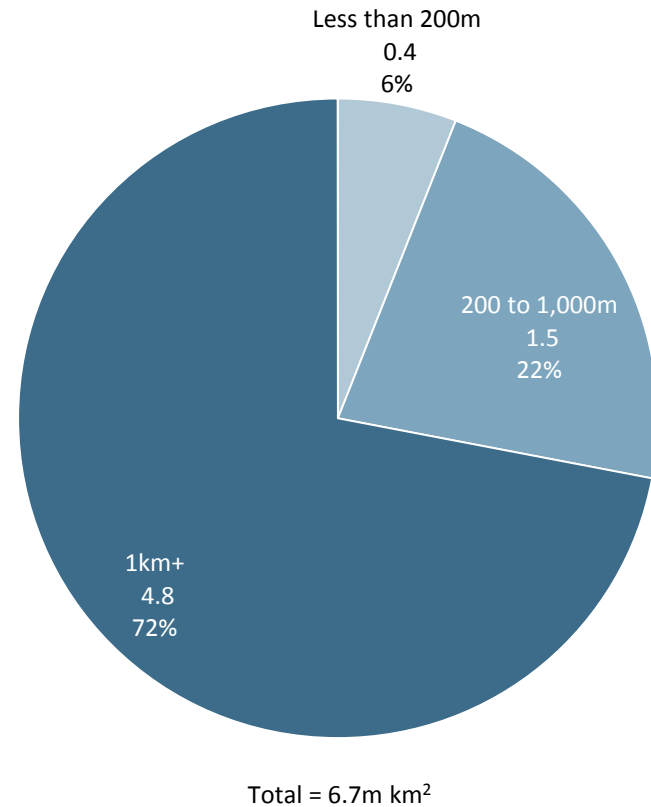
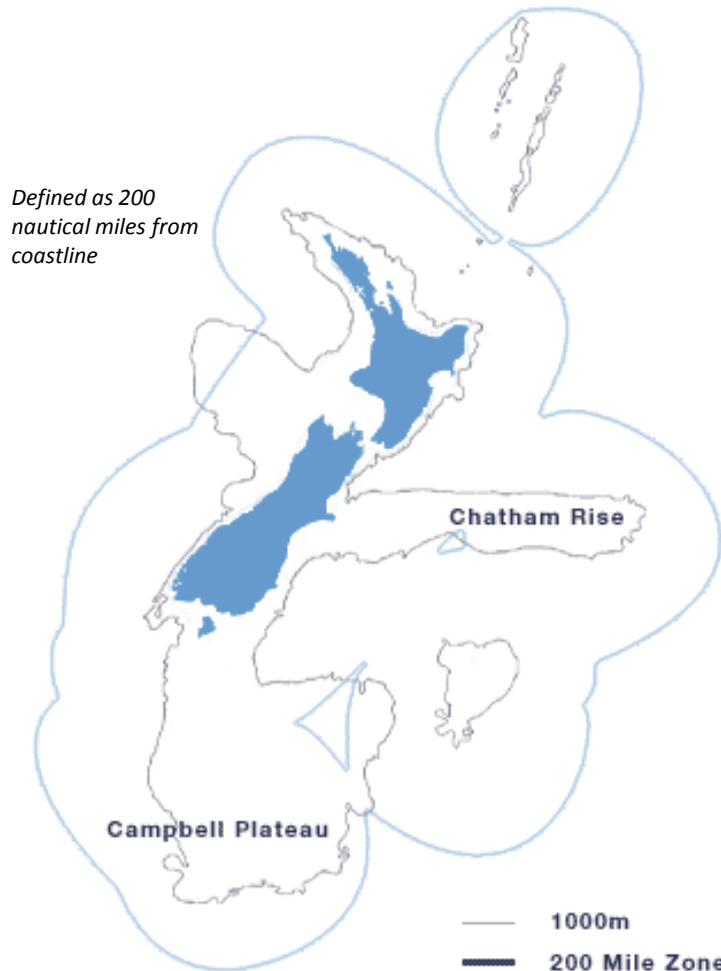
Aquaculture

WATER – FISHING AREA

New Zealand has 6.7m square kilometres of controlled ocean space (15 times the land area); unfortunately much of this is relatively unproductive water over a kilometre deep

Limit of Exclusive Economic Zone (EEZ)
(area, depth, 2010)

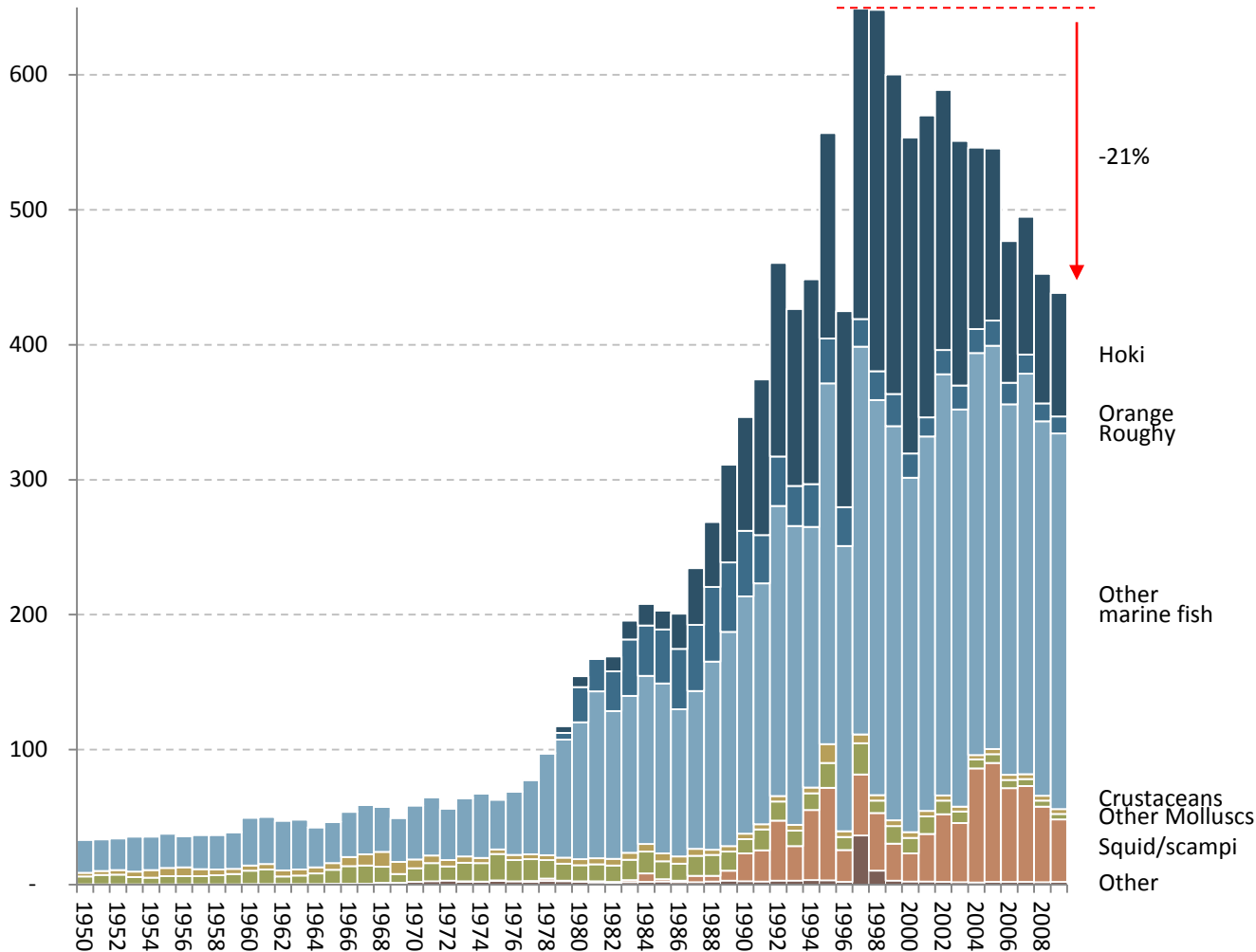
Area of EEZ by water depth
(km²; % of area; 2010)



WATER – WILD CATCH

Wild catch has fallen; direction over the next 15 years is unclear, but unlikely to be up

Wild capture production volume of fish/seafood in New Zealand waters
(t; 000; 1950-2009)



Comments/notes

- Data is volume not value; crustaceans, particularly lobster/crayfish, are highly valuable but not large in volume
- One way to read the -21% is this is the amount that industry capacity (boats, employees, processing lines) has needed to shrink
- Opinions vary on whether wild capture has stabilised or will continue to fall; we were told it had stabilised 5 years ago, so we take stabilisation projections with a “grain of salt”

SPACE – AGRICULTURE VS. AQUACULTURE

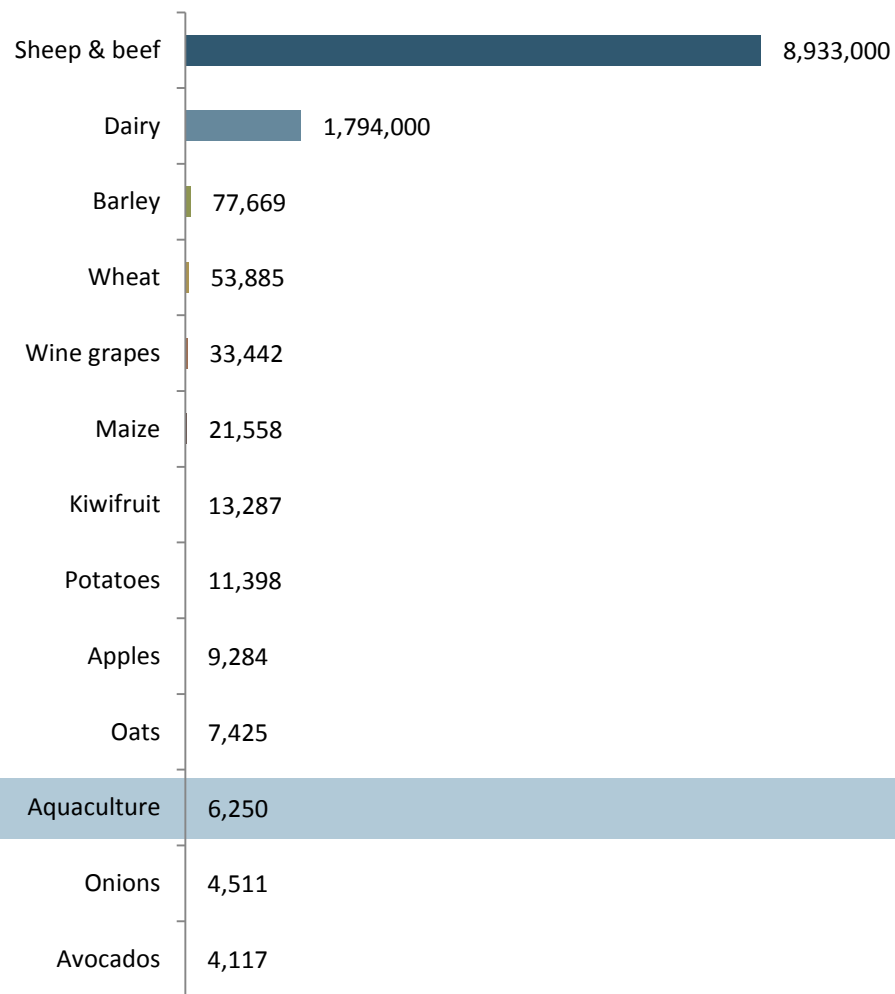
Proportional to agricultural land use, the 6,250 hectares used in aquaculture in 2010 were relatively minimal, being slightly more than onions but less than oats

Latest available comprehensive New Zealand aquaculture metrics (2010)

| | # of farms | Productive marine space (ha) | Value (NZ\$m) | \$/ha |
|--------------|--------------|------------------------------|---------------|--------------------|
| Mussels | 1,000 | 5,250 | \$206 | \$39,238 |
| Salmon | 16 | 100 | \$145 | \$1,450,000 |
| Oysters | 250 | 900 | \$26 | \$28,889 |
| TOTAL | 1,146 | 6,250 | \$377 | \$60,320 |

Clearly, this is revenue only and does not reflect the cost of business, expenses, capital outlay etc. Figure should be taken as directional as varies depending on the figure used for productive space

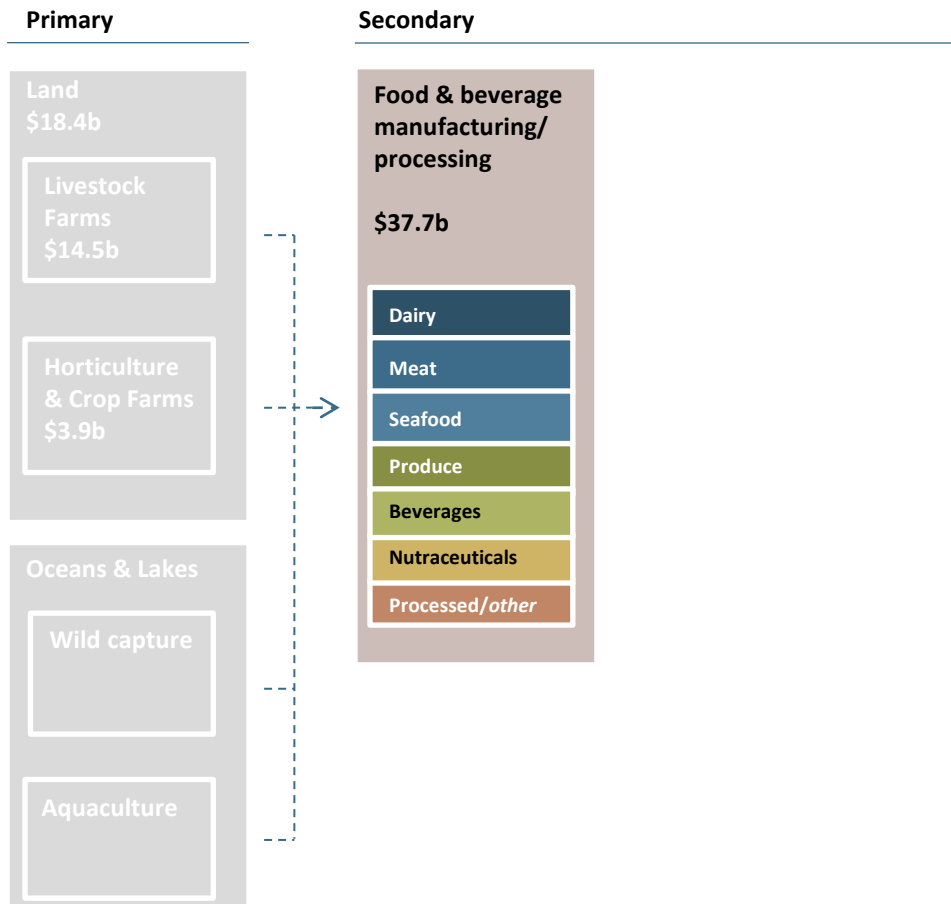
Relative area usage (ha; actual; 2010 or as available)



2. F&B MANUFACTURING

Food & beverage manufacturing has a turnover of \$37.7b

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)



OVERVIEW – THE SITUATION

F&B manufacturing is an important sector that will require significant capital if it is to triple exports over the next fifteen years

An important sector

- New Zealand's food & beverage (F&B) manufacturing sector is large, with almost 2,000 enterprises, employing 80,000 people with a total revenue of approximately NZ\$38 billion. It accounts for 54% of exports.

Still New Zealand owned, primarily by farmers

- Historically New Zealand has been a major producer of ingredients through farmer-owned cooperatives and marketed via quasi-government monopsonies¹.
- Despite media comment, the New Zealand F&B industry is still owned by New Zealanders. Four of the top five New Zealand F&B firms are owned by farmers. There is nothing wrong with farmers owning the food industry. This is a common situation across peer group countries all of whom have a somewhat similar structure of ownership of primary production.

Moving to the centre

- Broadly speaking 50% of what is sold in a supermarket anywhere in the world is fresh perishables (e.g. meat, seafood, produce, dairy) and 50% is consumer-ready packaged shelf-stable products. The export mix of peer group countries match these proportions (i.e. 50/50). New Zealand, on the other hand, is 80% weighted toward perishables and only 20% shelf-stable.
- In the last 10-15 years New Zealand's F&B industry has begun to transform into a producer of consumer ready packaged goods.
- Processed/packaged F&B are showing rapid growth, and over the

next 20 years New Zealand's F&B exports will likely come to resemble those of peer group countries.

- The government's Economic Growth Agenda (EGA) has set a target of tripling New Zealand's F&B exports over the next 15 years. While this is a clearly a stretch target all of our research suggests it is possible.
- To achieve this, the path forward over the next 20 years is about turning ingredients into packaged/processed foods (e.g. infant formula instead of milk powder). This transition will require large amounts of new investment in research, plants and equipment, sales and marketing.
- Conceptually this will require something approaching tripling the amount of capital in the F&B industry. Firms will need to make a significant increase in their investment to make this required transition to packaged goods.

Foreign capital filling the gap

- Producer owned co-operatives strive to maximise returns to members, which limits availability of capital to fund growth.
- Nevertheless, international investors are providing a large and constant in-flow of capital, particularly in the areas of strong growth potential going forward (i.e. beverages and processed foods).

CAPABILITY ASSESSMENT

To truly succeed in the international market New Zealand needs to improve in some key areas

Capabilities required to succeed in exporting
(2010)

| | NZ current capabilities |
|--------------------------------------|-------------------------|
| Deep experience in global management | ○ |
| International governance experience | ○ |
| Strategy focused | ○ |
| Information rich | ◐ |
| Large, deep domestic pool of capital | ○ |
| Low cost production infrastructure | ● |
| Successful innovations | ◐ |
| Excellent technology | ◐ |
| Market share leader | ◐ |
| Global sales force | ○ |

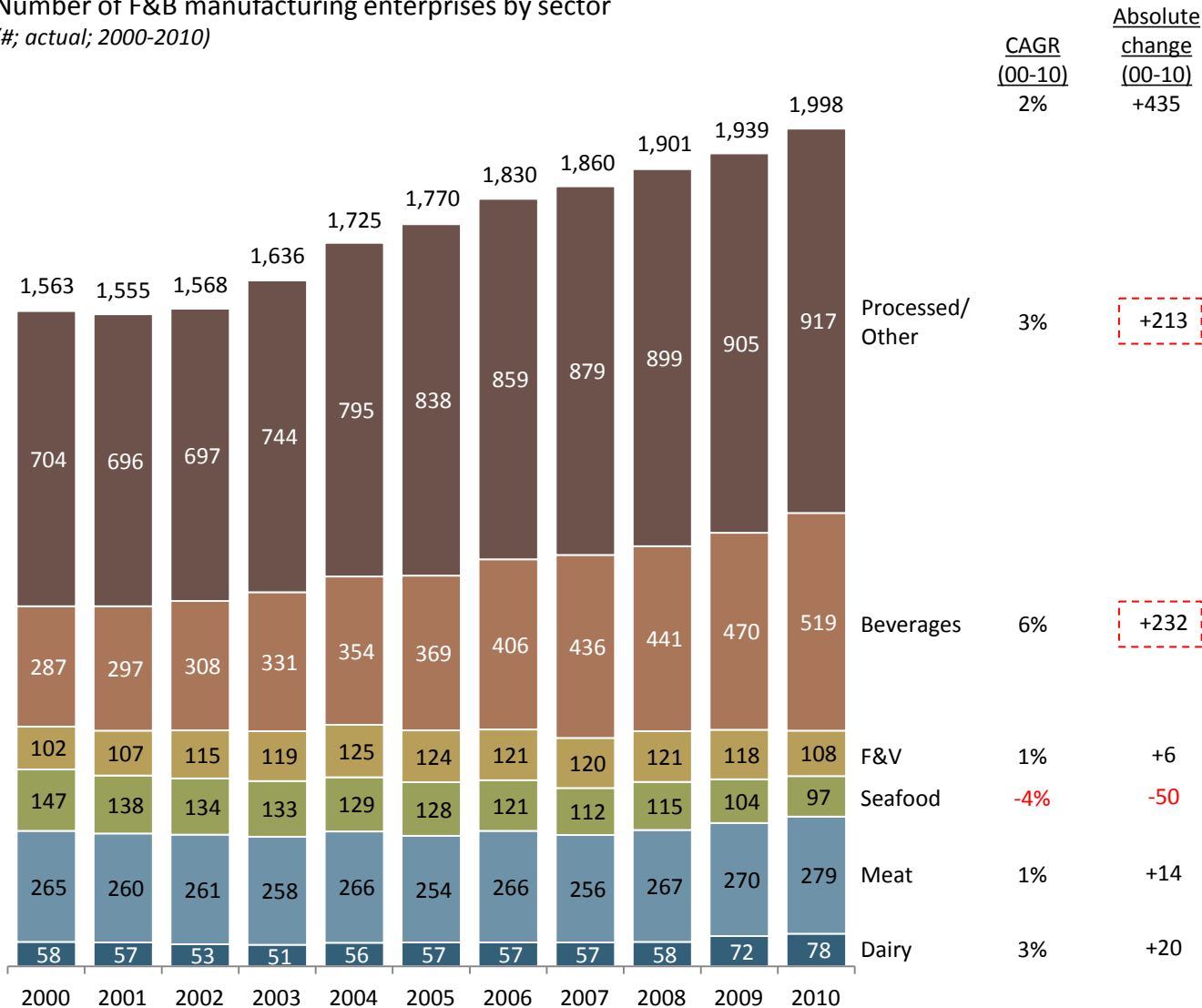
Somewhat addressing this with Food and Beverage Information Project

○ ◐ ●
low medium high

F&B MANUFACTURING – # OF ENTERPRISES

The number of F&B manufacturing enterprises in New Zealand is growing, driven by beverages and processed/other foods

Number of F&B manufacturing enterprises by sector
(#; actual; 2000-2010)



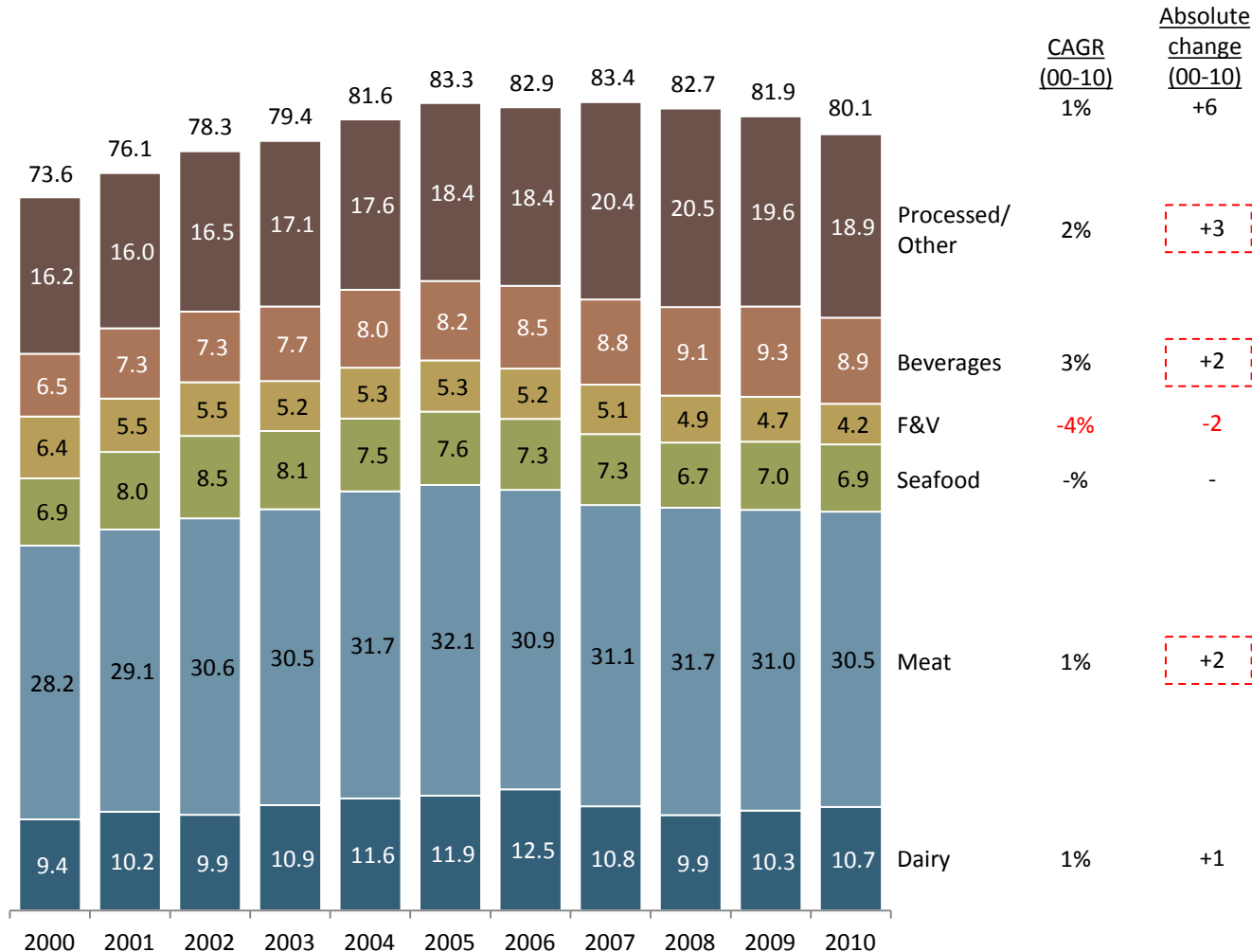
Comments/Notes

- Statistics NZ does not collect data on nutraceuticals and foods for health; we suspect much (but not all) of this sector is caught in "other" food
- New enterprise formation is a likely indicator of sectors/sub-sectors at the early stages of their lifecycle

F&B MANUFACTURING – EMPLOYMENT

The number of people employed in F&B manufacturing was growing through 2005 and has been flat-to-down since then

Number of people employed in F&B manufacturing by sector
(people; head count; 000; 2000-2010)



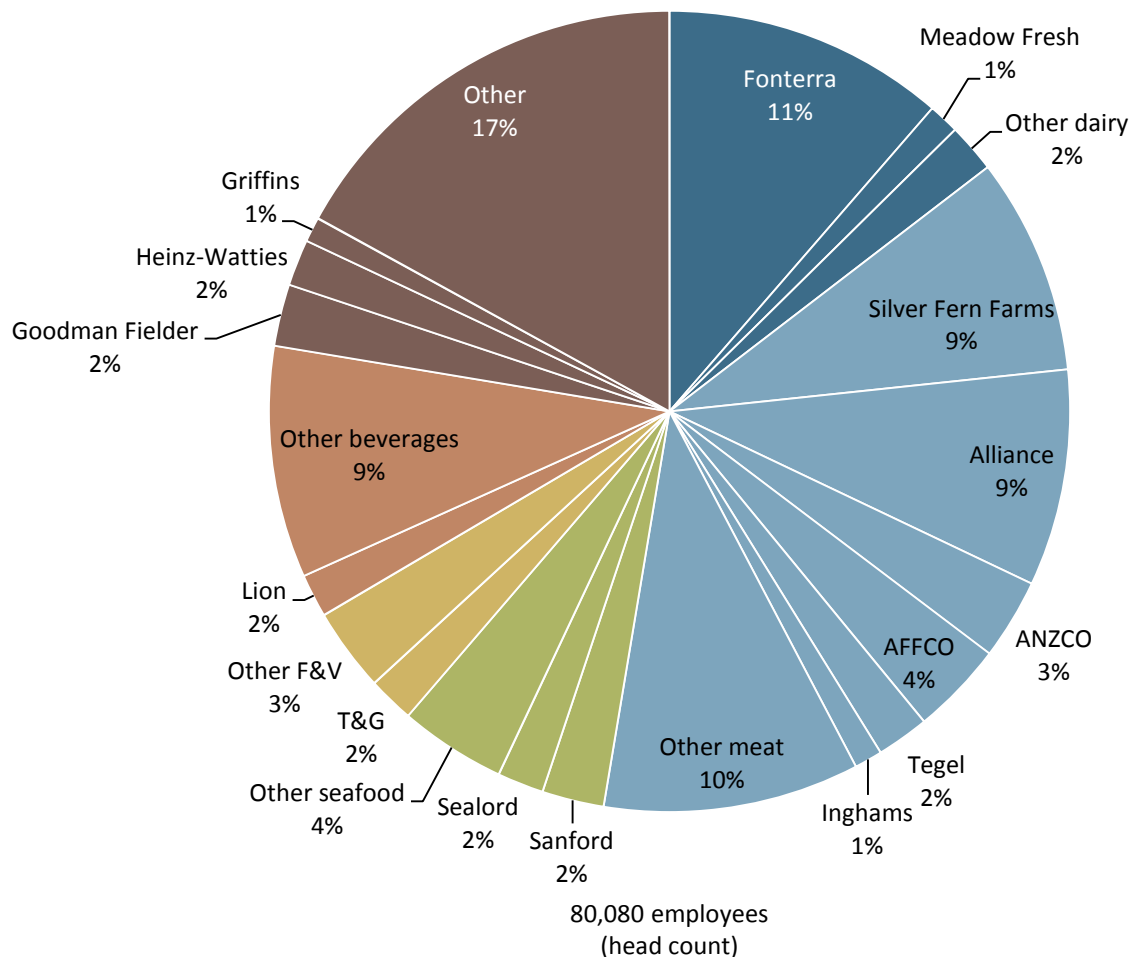
Comments/Notes

- Statistics NZ does not collect data on nutraceuticals and foods for health; we suspect much (but not all) of this sector is caught in "other" food
- Dairy clearly has higher productivity per employee than meat
- Head count is as of Feb of year in question; this will not catch some seasonal surges

F&B MANUFACTURING – EMPLOYMENT BY KEY FIRM

Looking at total industry employment by key firms and sectors highlights that industry employment is spread across a wide range of firms

Number of people employed in F&B manufacturing in New Zealand by key firm and by sector
(people; head count; %; 2010)



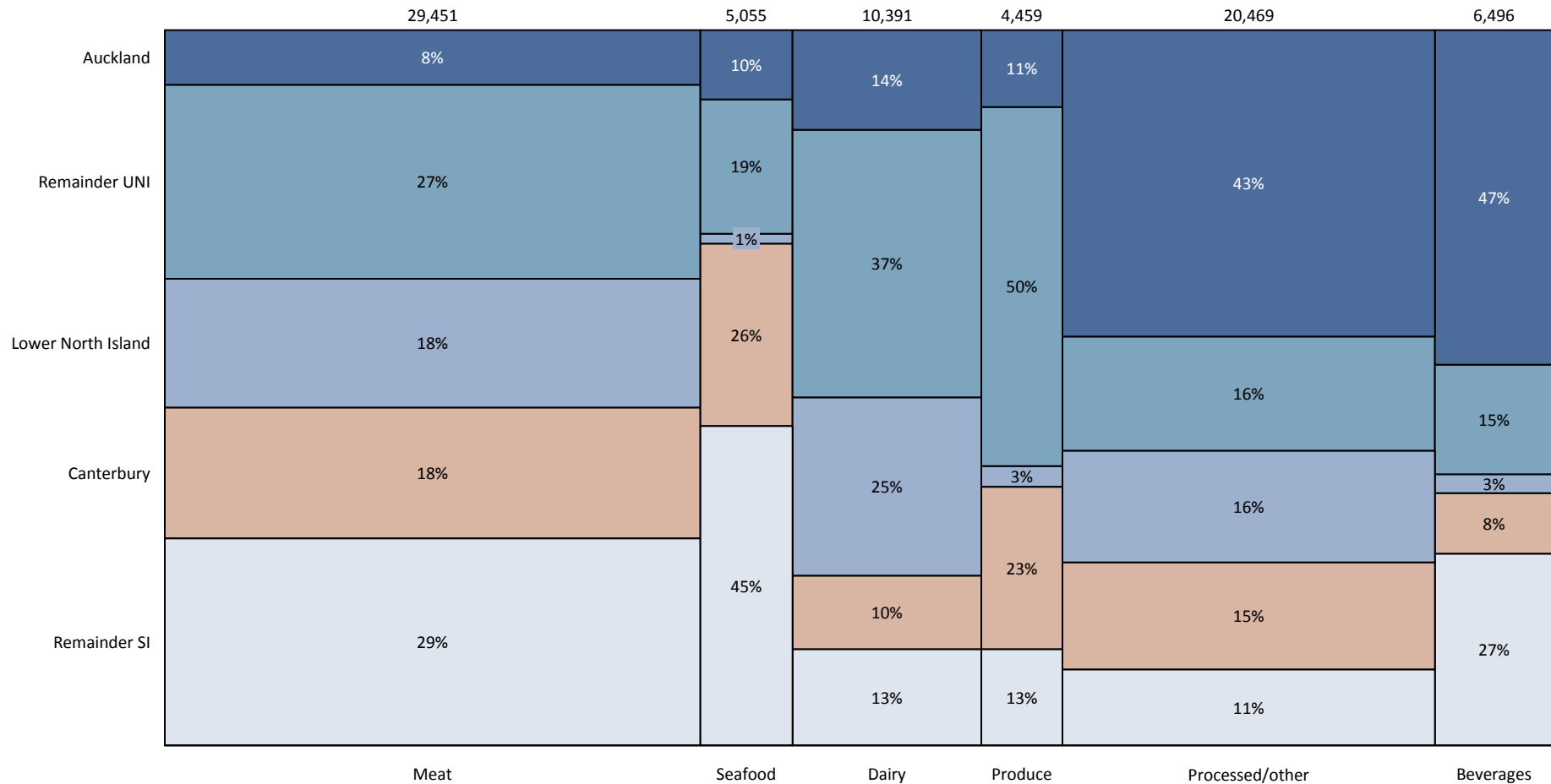
Comments/Notes

- Results should be treated as partially directional as SNZ does not disclose actual firm sector classification (i.e. classifications are Coriolis assumptions)
- Interestingly Fonterra is not a large employer relative to its export volumes (high employee efficiencies)
- Classification of some firms overlaps multiple classifications (e.g. Heinz-Watties)
- Fonterra is domestic employees (excluding TipTop)
- Excludes wholesaling

EMPLOYMENT BY INDUSTRY BY REGION

Looking at industry by region we find farm-based products spread across the regions, but processed foods more concentrated in Auckland

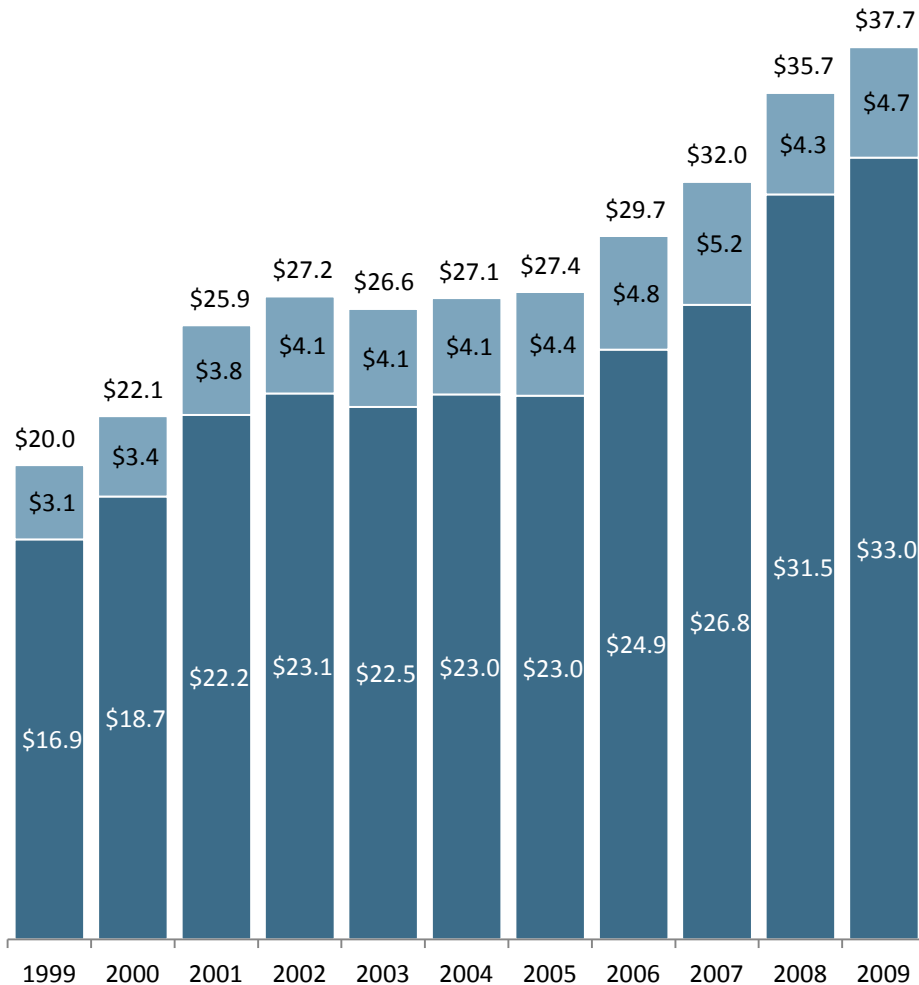
F&B employment by industry by region
(people; head count; 2010)



F&B MANUFACTURING – TURNOVER

Total F&B manufacturing turnover was \$37.7b in 2009; manufacturing turnover has been growing at a 6.5% CAGR over the last decade

F&B manufacturing turnover growth
(NZ\$; b; 1999-2009)



| | <u>CAGR</u> <u>(00-10)</u> | <u>Absolute</u> <u>change</u> <u>(00-10)</u> |
|----------|-------------------------------|--|
| | 6.5% | +\$17.7 |
| Beverage | 4.1% | \$1.5 |
| Food | 6.9% | +\$16.1 |

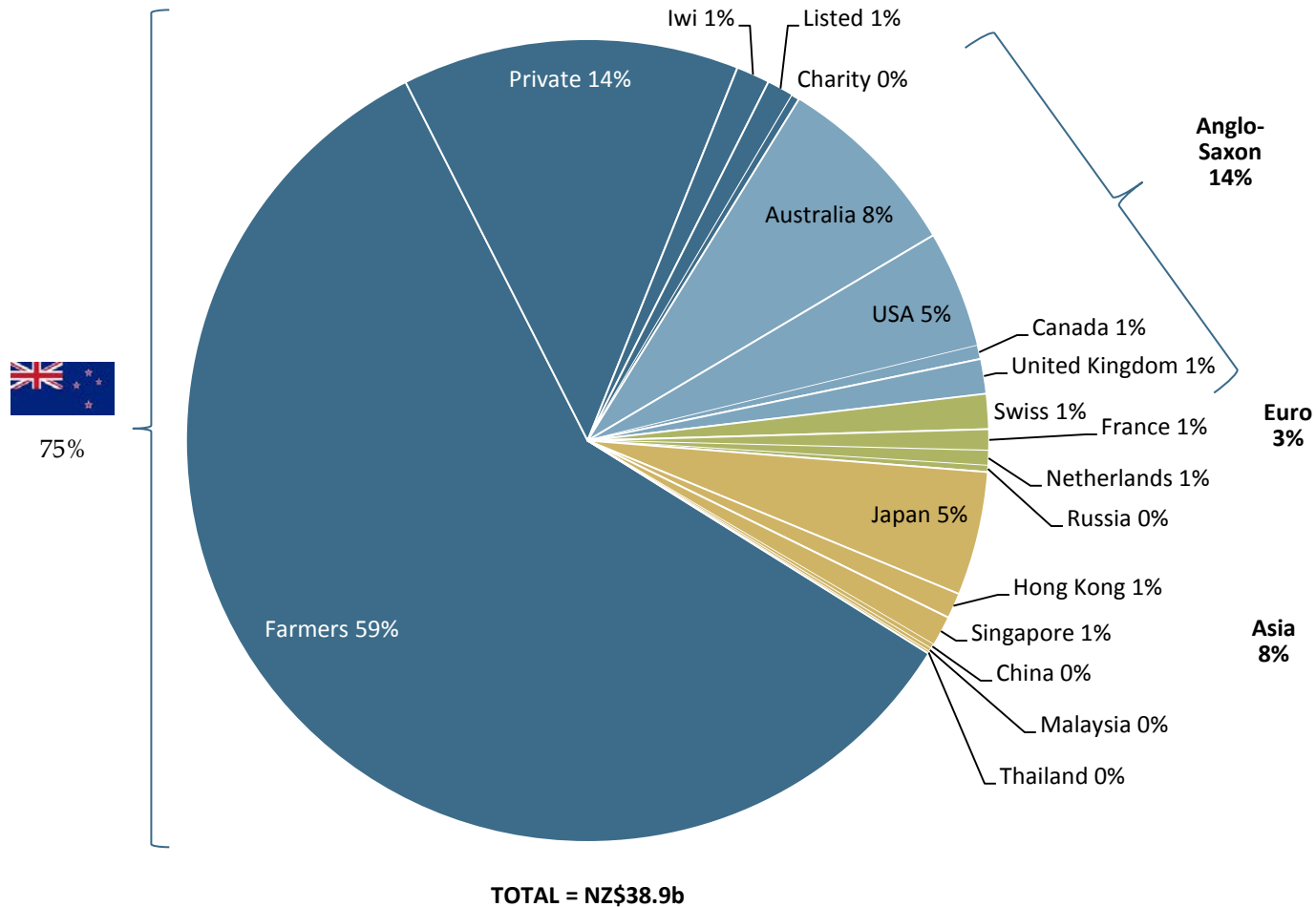
Comments/Notes

- 2010 not yet available
- Data appears to be turnover of New Zealand operations, not global sales
- Beverages technically includes tobacco manufacturing, though we do not believe cigarettes are manufactured in this country
- The NZ Annual Enterprise Survey (AES) comes from IR10 tax data, a postal survey and other sources. "The data collected feeds into the calculation of the economy's GDP, through the current price annual industry accounts, which are compiled within an input-output framework."

TOP 64 NZ F&B BY OWNERSHIP

Looking at the ownership of the turnover of the top 64 New Zealand F&B firms, we find ~60% owned by farmers, 75% owned by New Zealanders, 14% by other Anglo-Saxon countries, 3% by Europeans and 8% by Asia

Turnover of top 64 New Zealand F&B firms by ownership type/country
(% of NZ\$m; 2010e)



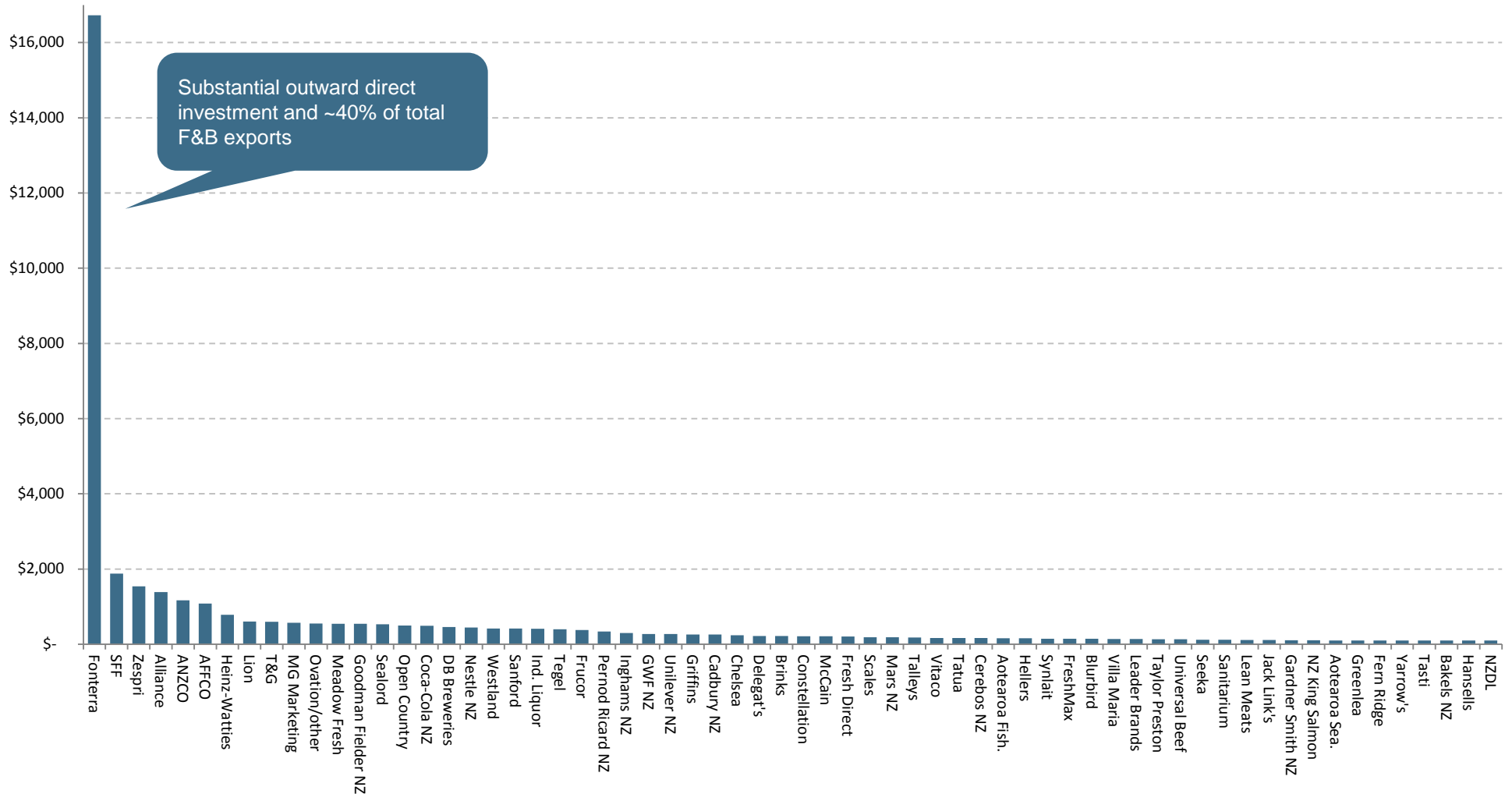
Comments/Notes

- Companies with mixed ownership (e.g. Japan/Iwi) have had their turnover allocated proportionally
- The Anglo-Saxon four own as much as private individuals
- Data includes significant number of estimates
- Totals may not sum due to rounding

F&B MANUFACTURING – FIRM TURNOVER

New Zealand has one very large F&B firm (Fonterra), a handful of other large firms, and a long tail of smaller firms

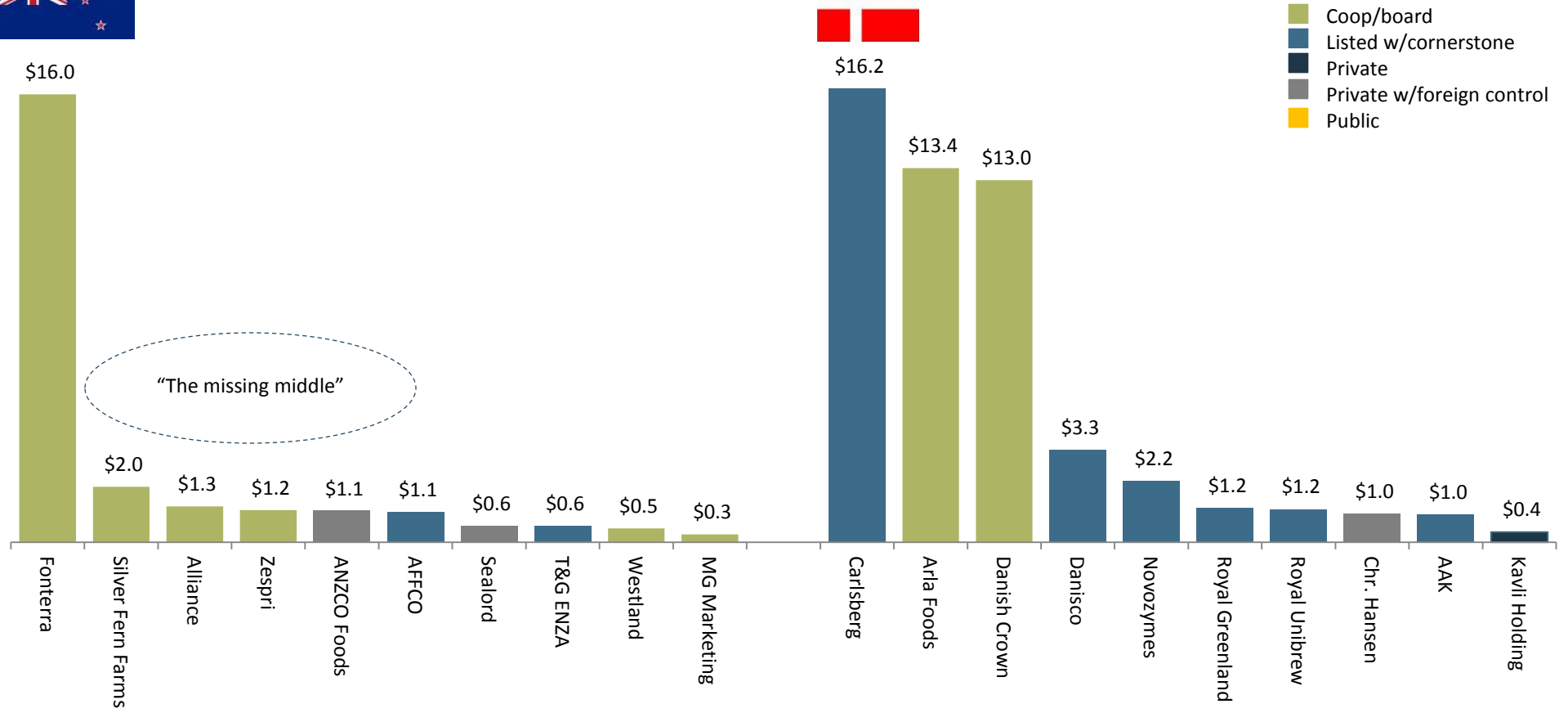
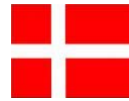
Turnover of top 64 New Zealand F&B companies
(NZ\$m; 2010)



TOP 10 RESIDENT FOOD & BEVERAGE COMPANIES: NZ VS. DENMARK

Benchmarking the turnover of the top 10 domestic resident F&B firms in the New Zealand food industry with Denmark indicates there is a “missing middle” of large firms other than Fonterra

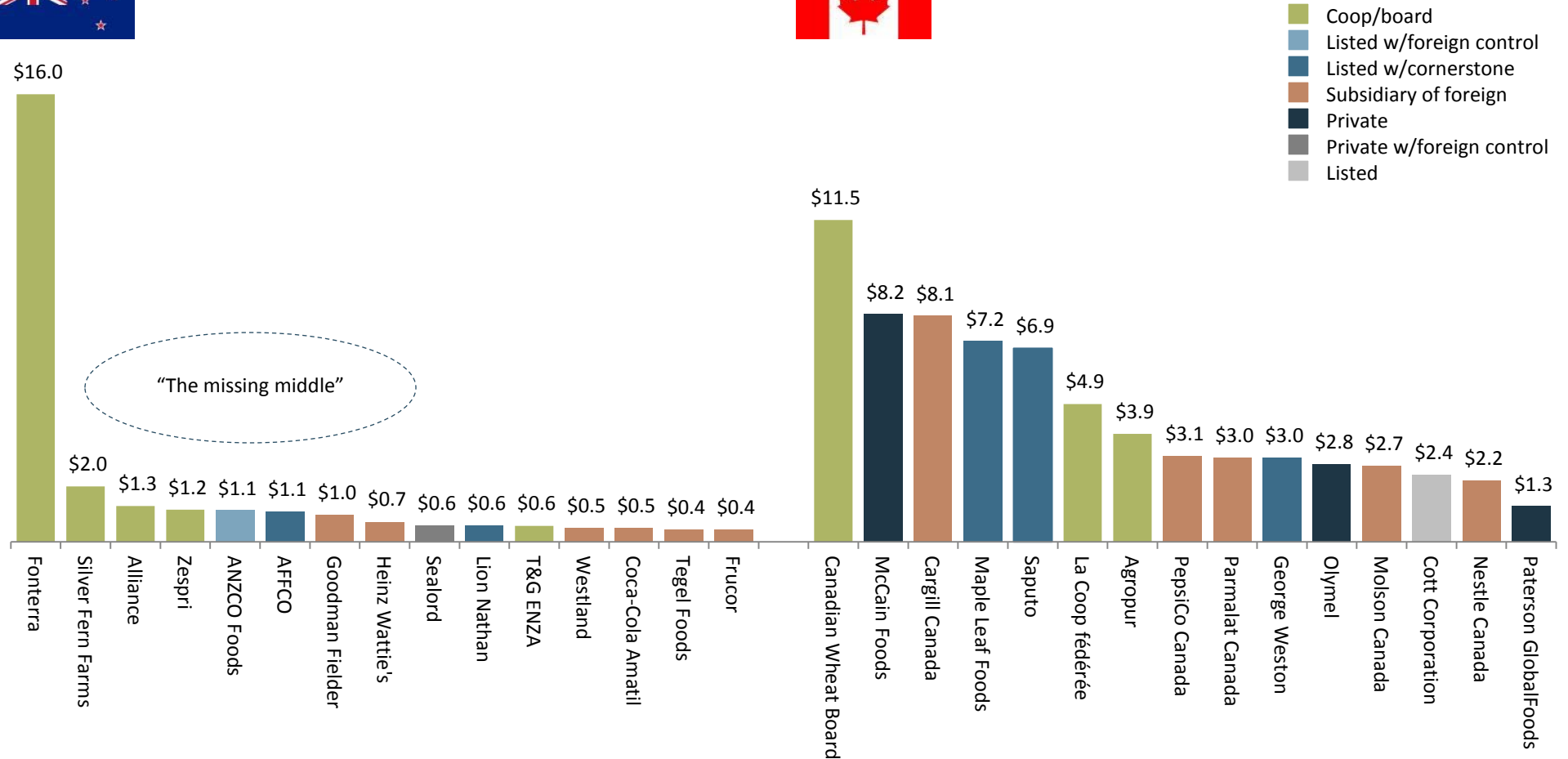
Comparison of sales and ownership structure of top 10 food & beverage industry firms (domestic-residence only): Denmark vs. NZ
(NZ\$bn; 2008)



TOP 15 FOOD & BEVERAGE COMPANIES: NZ VS. CANADA

A similar message comes from a benchmarking of the top 15 F&B firms in the New Zealand food industry with Canada: there is a “missing middle” of large firms other than Fonterra

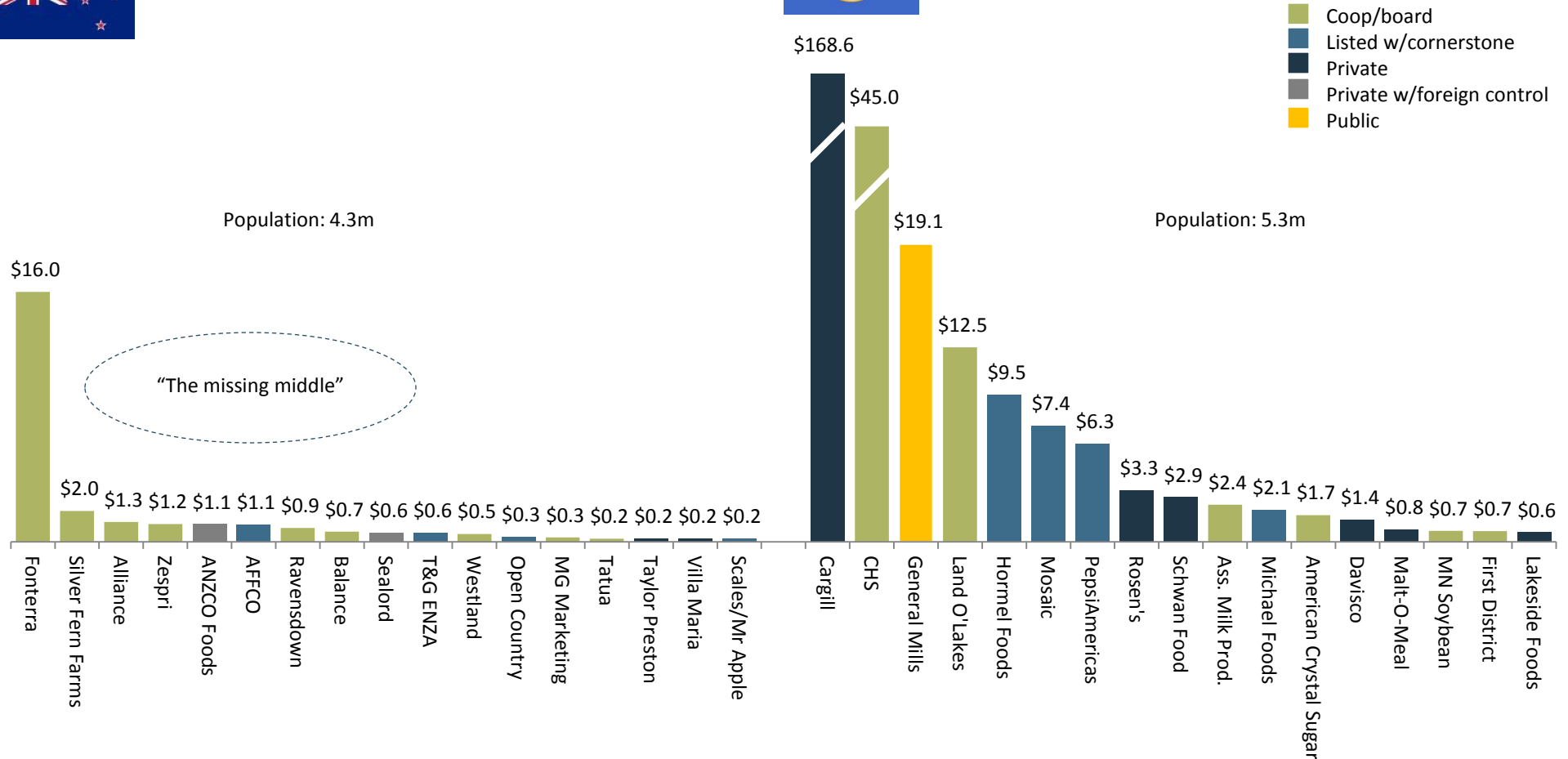
Comparison of sales and ownership structure of top 15 food & beverage industry firms: NZ vs. Canada (all ownership)
(NZ\$bn; 2008)



TOP 17 RESIDENT FOOD & BEVERAGE COMPANIES: NZ VS. MINNESOTA

A similar message comes from a benchmarking of the top 17 resident F&B (+agribusiness) firms in the New Zealand food industry with the state of Minnesota (a major food producing state in the US)

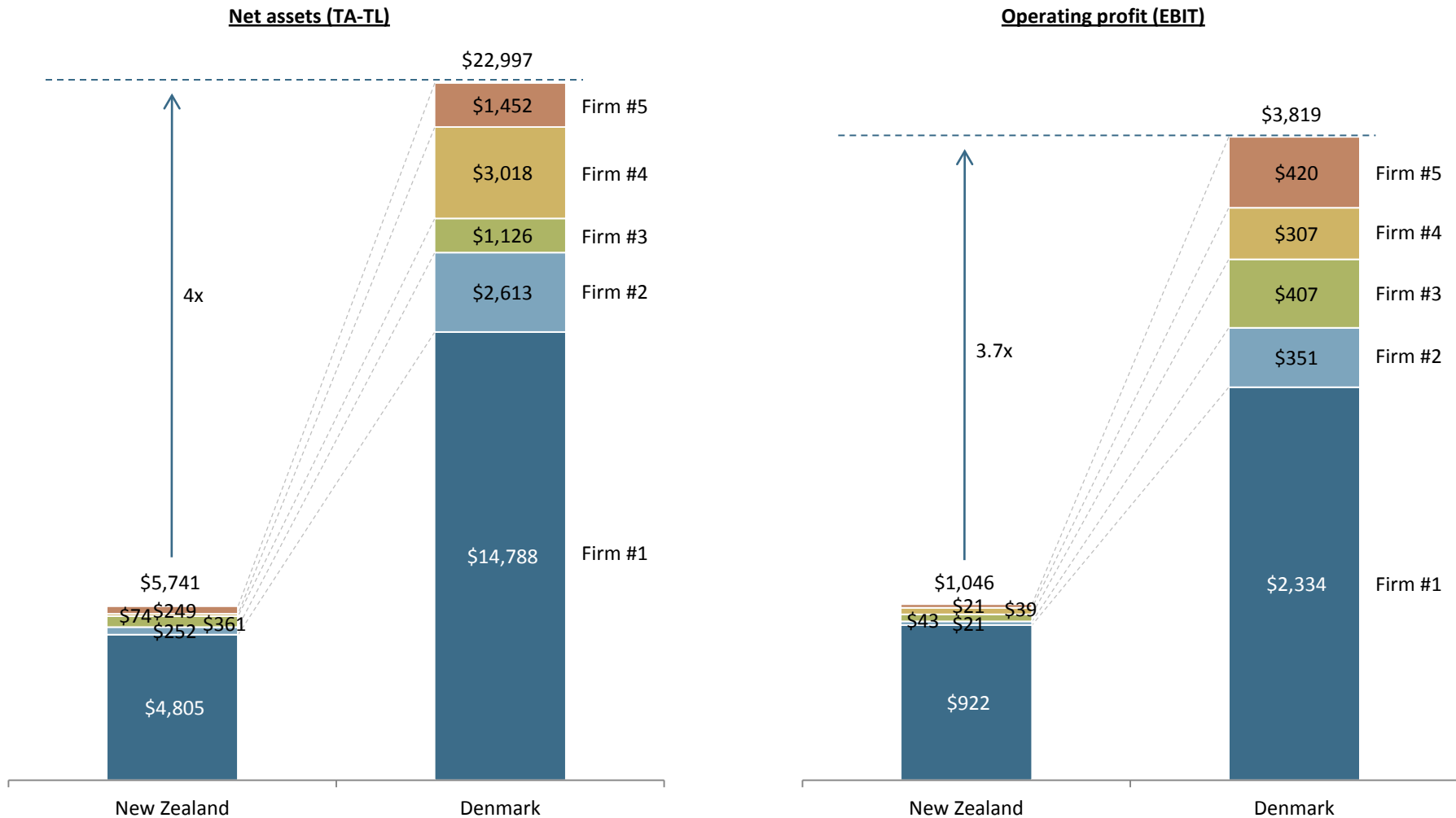
Comparison of sales and ownership structure of top 17 resident food, beverage & agribusiness industry firms: NZ vs. Minnesota
(NZ\$b; 2008)



FINANCIAL RATIOS: NZ VS. DENMARK

The New Zealand food & beverage sector is under-capitalised relative to peers; as a result, it is less profitable

Select financial ratios of top five food & beverage businesses: New Zealand vs. Denmark
(NZ\$m; FY09)

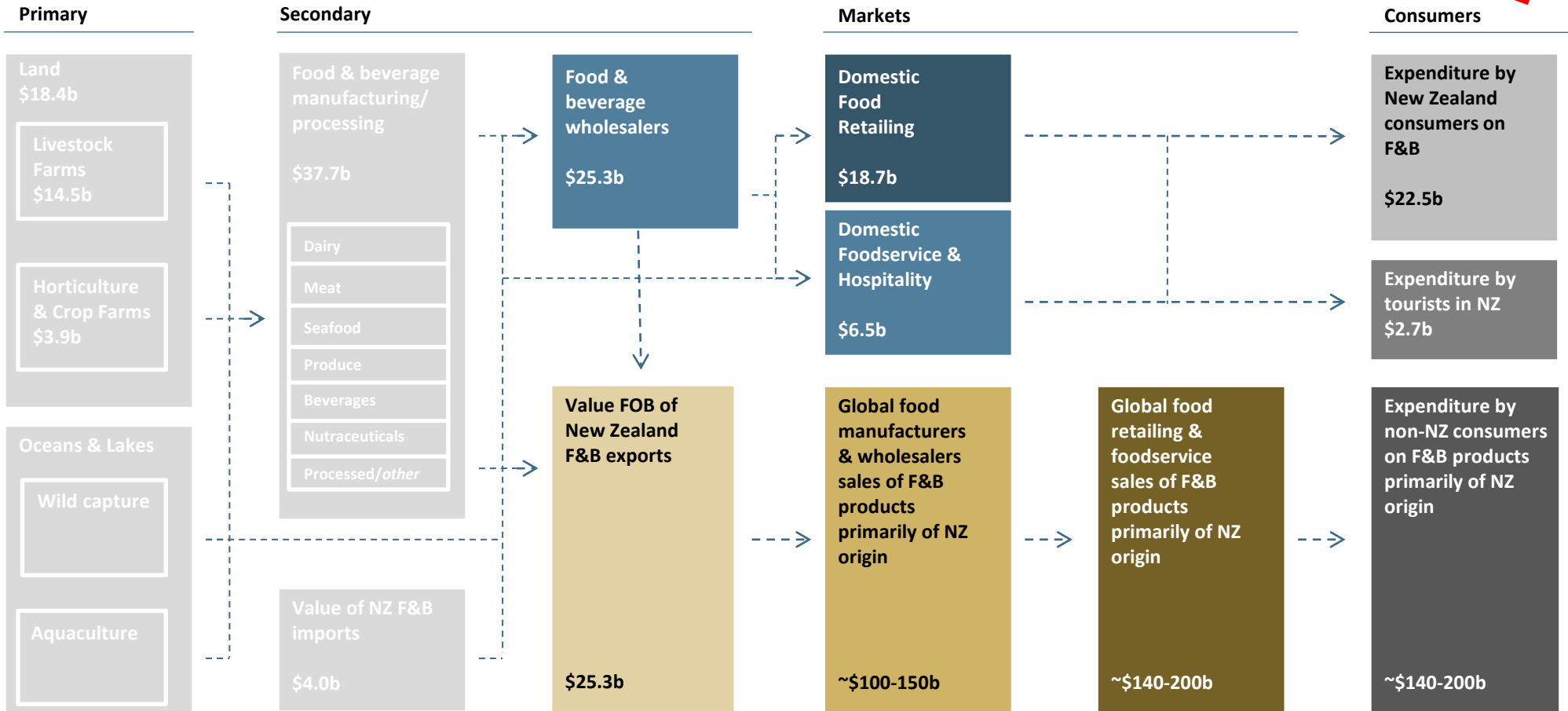


3. MARKETS

New Zealand food & beverages are sold to domestic retail and foodservice outlets and into export markets

Simplified model of the New Zealand food & beverage industry supply/value chain
(model; NZ\$b; YE June 2011 or as available)

Contains significant estimates – treat as DIRECTIONAL



OVERVIEW – THE SITUATION

New Zealand is in the middle of a fundamental transition from feeding Westerners to feeding the Asia-Pacific region; this transition is driving rapid change in what is being produced and where it is being sold

Situation

- In the early days of its founding New Zealand was, conceptually speaking, Britain's farm. The country produced staples of the English diet such as lamb, beef, butter, cheese and apples. These were produced in large quantities on a counter-seasonal basis for shipment to the "home country" and other rich Western markets.
- There is the perception by many today that this is still the case. If you were to ask the average person on the street in New Zealand today where the country's food exports go, you would still get some form of the "Food to Britain" narrative. Many smaller food and beverage manufacturers, in our experience, would also articulate something similar.
- Reality is very different. New Zealand is in the middle of a fundamental transition from feeding Westerners to feeding the Asia-Pacific region. This transition is driving rapid change in the New Zealand food industry in what is being produced and where it is being sold. Key exports today include:
 - Milk powder for Asian dairy factories, used to produce yoghurt and other dairy products
 - Frozen french fries, frozen hamburgers, and processed cheese for fast food restaurants in South East Asia
 - Gold kiwifruit for Asian consumers
- Imagine an alternative reality where New Zealand was colonised not by England, but rather Japan or China. In this reality, New Zealand would produce very different foods and beverages. This is what the future potentially looks like.

New Zealand

- With a population of 4.4 million people, New Zealand has a relatively small domestic market. This limits the scale of domestic producers – with many operating plants and equipment at the very small end of the scale globally. In addition, the domestic F&B retail scene is highly consolidated into two main players (Woolworths Australia and Foodstuffs). Foodservice, while less concentrated, has a relatively high cost to serve.
- As a result, New Zealand firms need to begin exporting at a much smaller relative scale and at a much earlier stage of their growth cycle than similar firms in other countries.

Australia

- With CER¹, FSANZ² and the purchase of Progressive by Woolworths Australia³, we have seen the effective emergence of a single trans-Tasman market for F&B.
- New Zealand F&B firms have reacted well to this shift and New Zealand F&B exports to Australia have been growing at double digit rates over the last decade.
- These F&B exports to Australia are dominated by packaged, consumer-ready, processed foods. Conceptually the path forward is to replicated this export profile to the rest of the world.

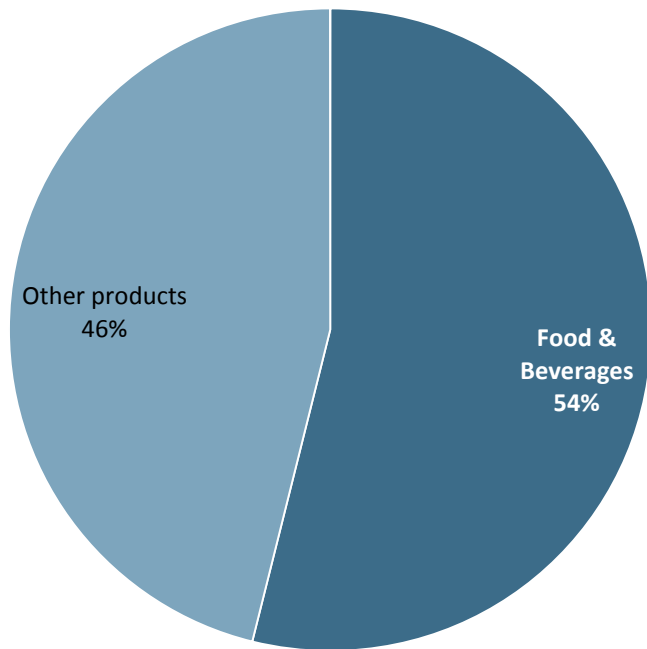
Asia

- The emerging middle income consumers of Asia are signalling quite strongly they want high quality, premium branded, high status products. New Zealand requires a new skill set and mentality to succeed in these markets. However, the wine industry shows that New Zealand can do premium with the best.

MAJOR F&B EXPORTER

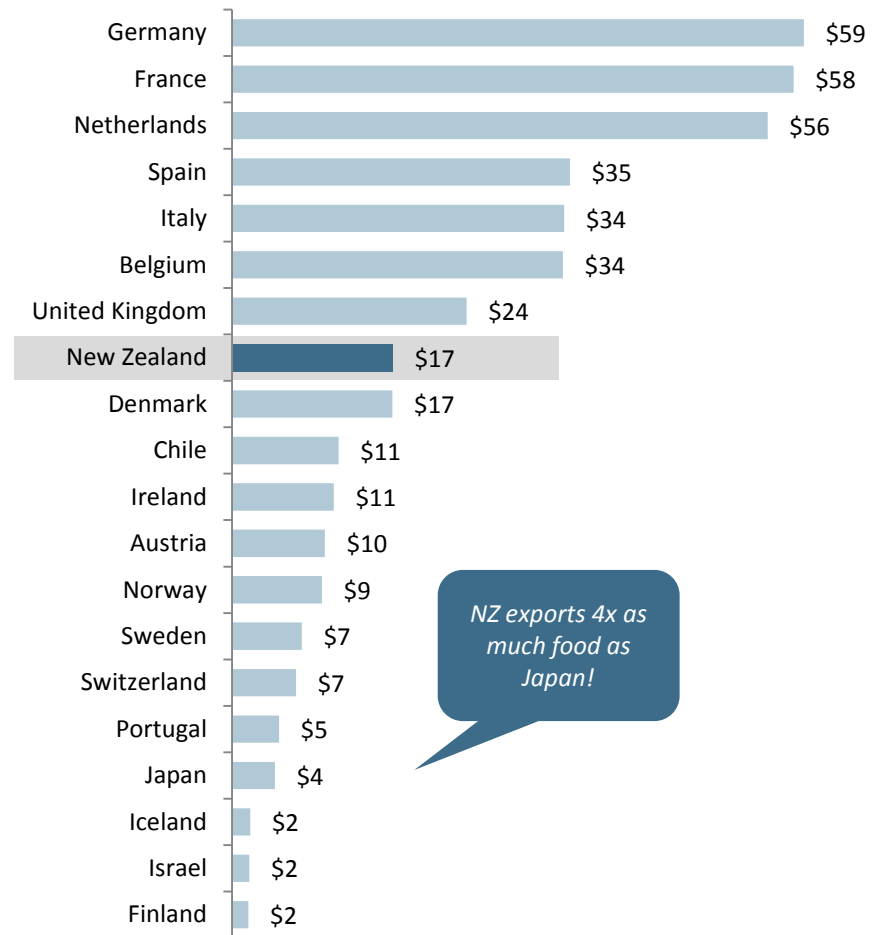
Food and beverage exports are important to New Zealand and the country is a major F&B exporter

Food & Beverages as a percent of New Zealand's total export value
(%; 2010)



Total F&B export value: New Zealand vs. peers
(US\$b; 2010)

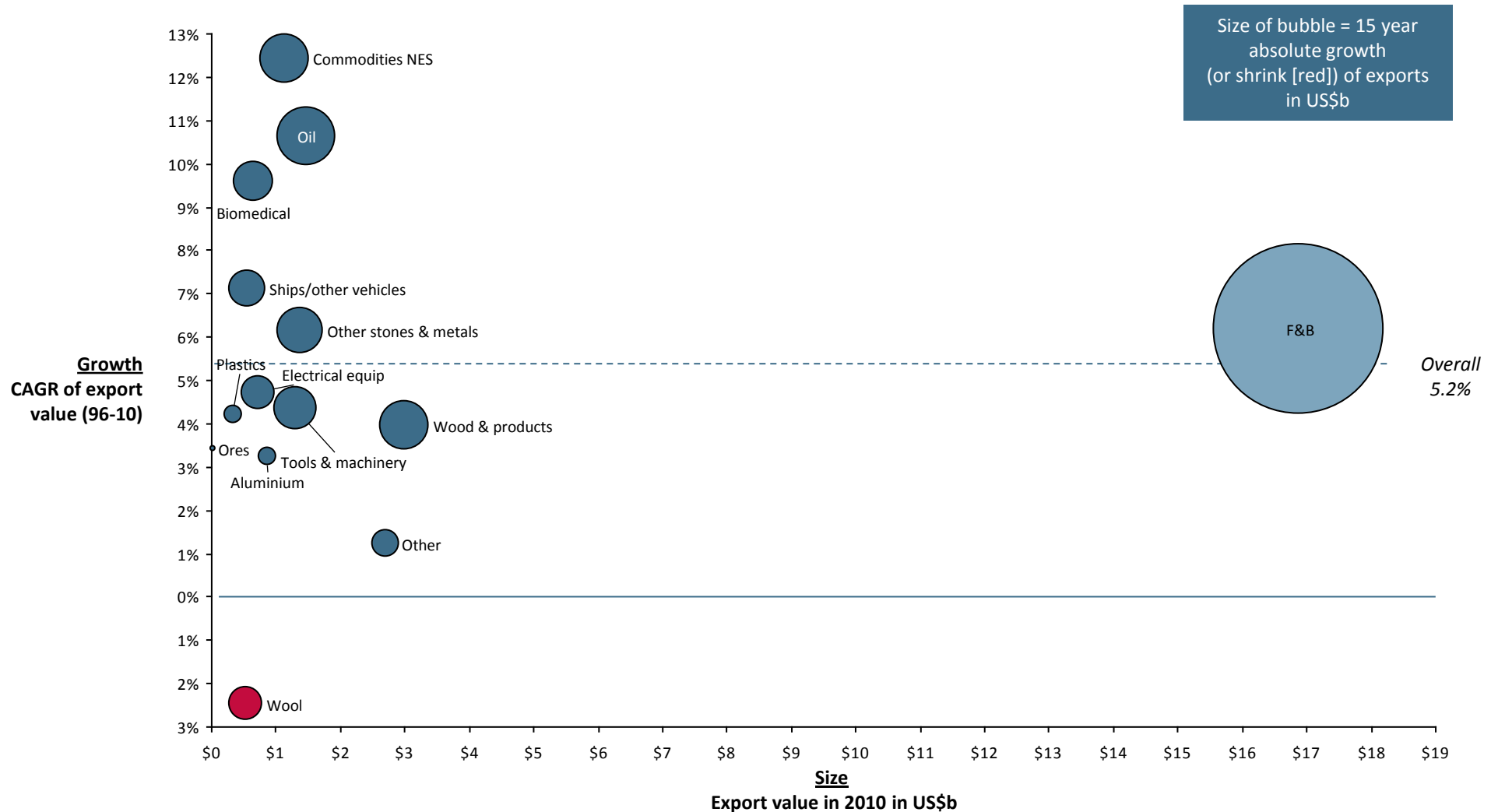
Note: uses US\$



ENGINE OF EXPORTS

The F&B sector has been the engine of New Zealand exports and export growth

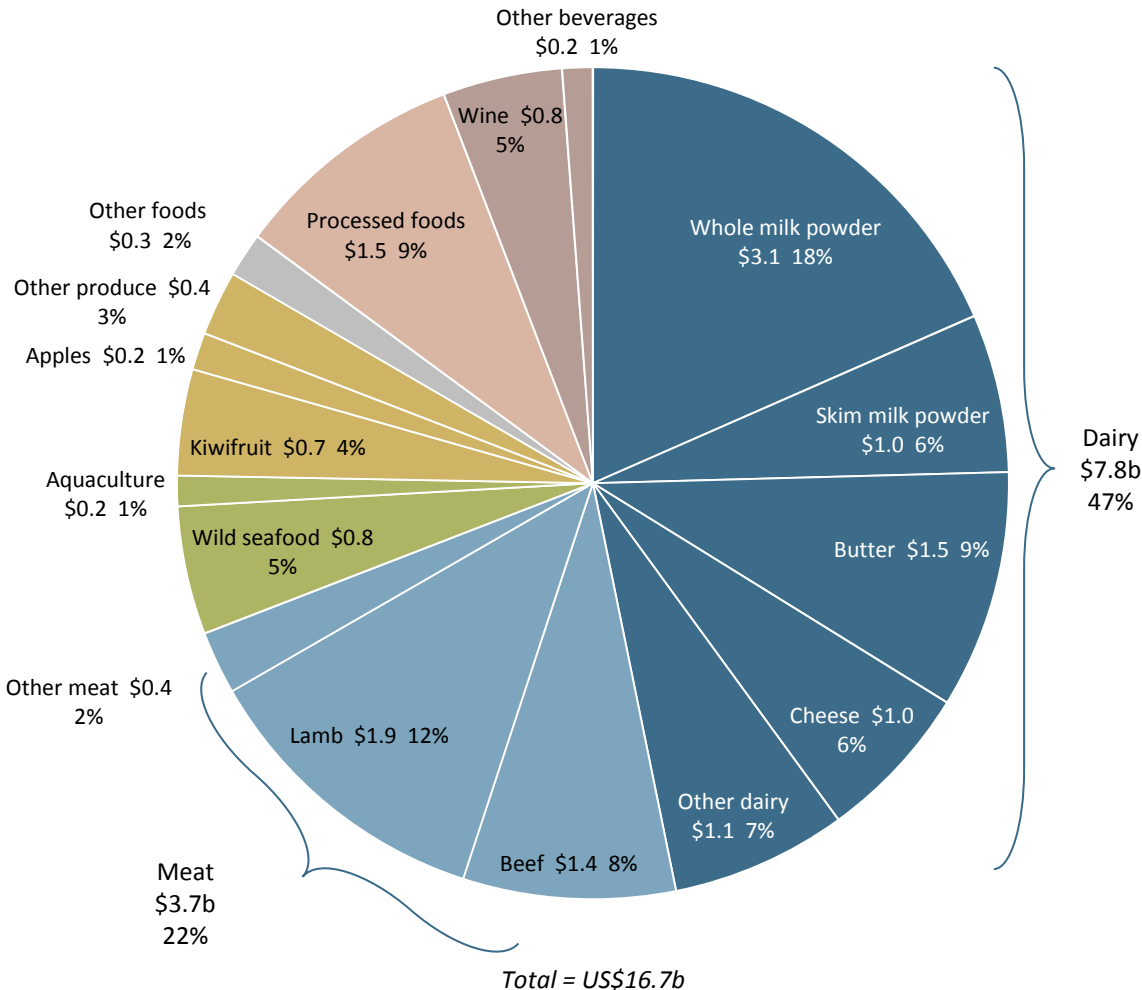
Export value of key products in 2010 vs. 15 year CAGR of export value vs. 15 year absolute growth in exports
(US\$b; nominal; 1996v2010)



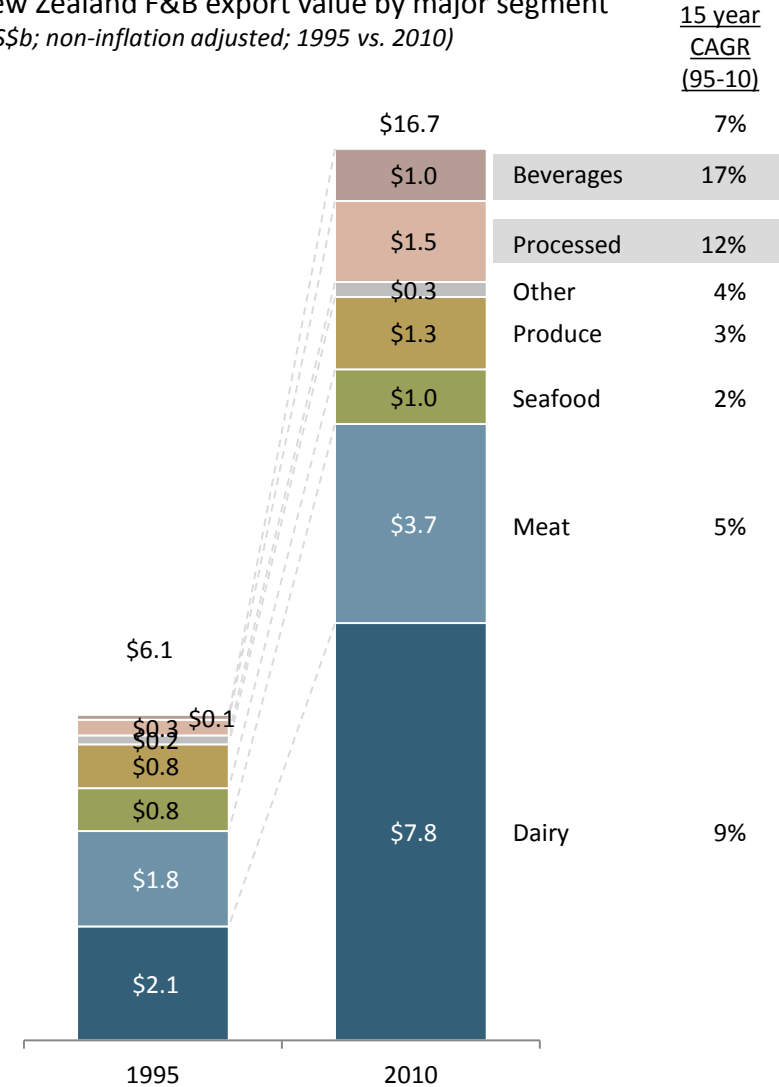
RANGE OF SECTORS

New Zealand food exports are spread across a range of product sectors; while all are achieving export value growth, processed foods and beverages stand out as growth stars

New Zealand F&B export value by major segment (US\$b; 2010)



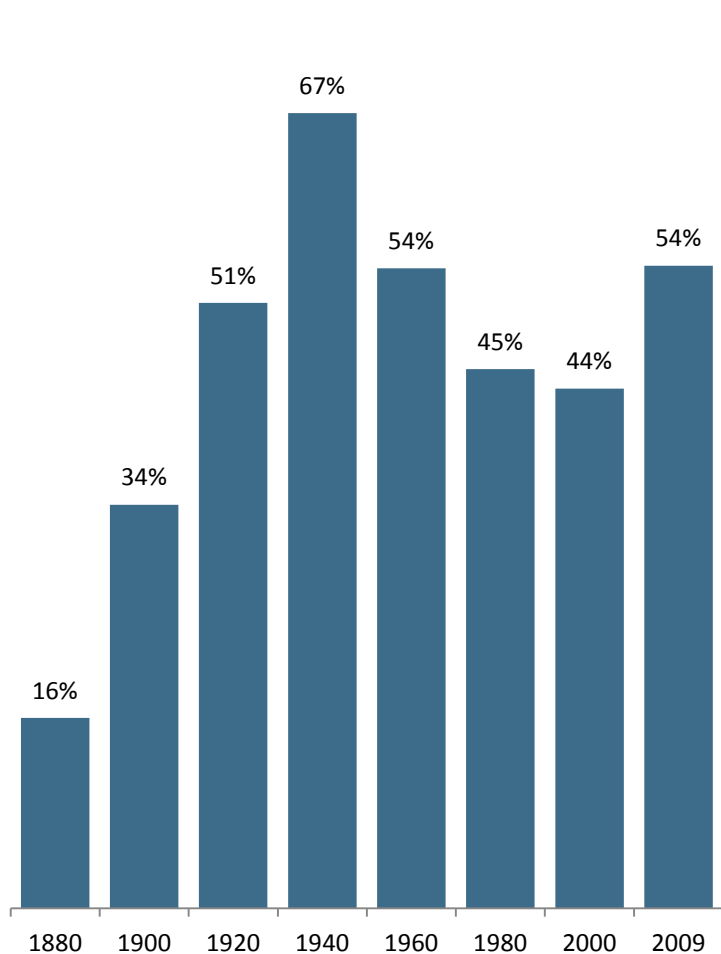
New Zealand F&B export value by major segment (US\$b; non-inflation adjusted; 1995 vs. 2010)



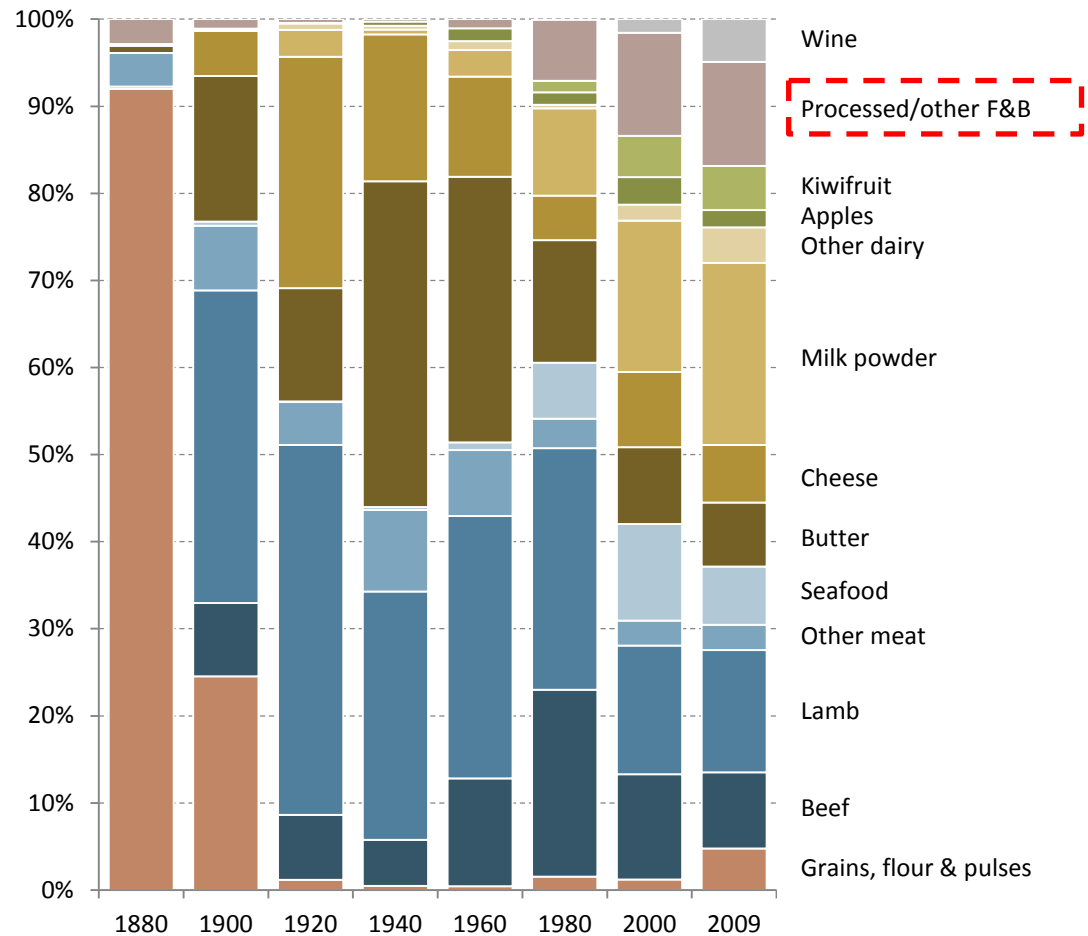
LONG TERM SHIFTS

F&B have been our largest single export for the last 100 years; however F&B export mix not “set in stone”; changes have occurred throughout history; shift currently underway towards processed

F&B as a % of total NZ export value for 130 years
(% of export £ or NZ\$; 1880-2009)



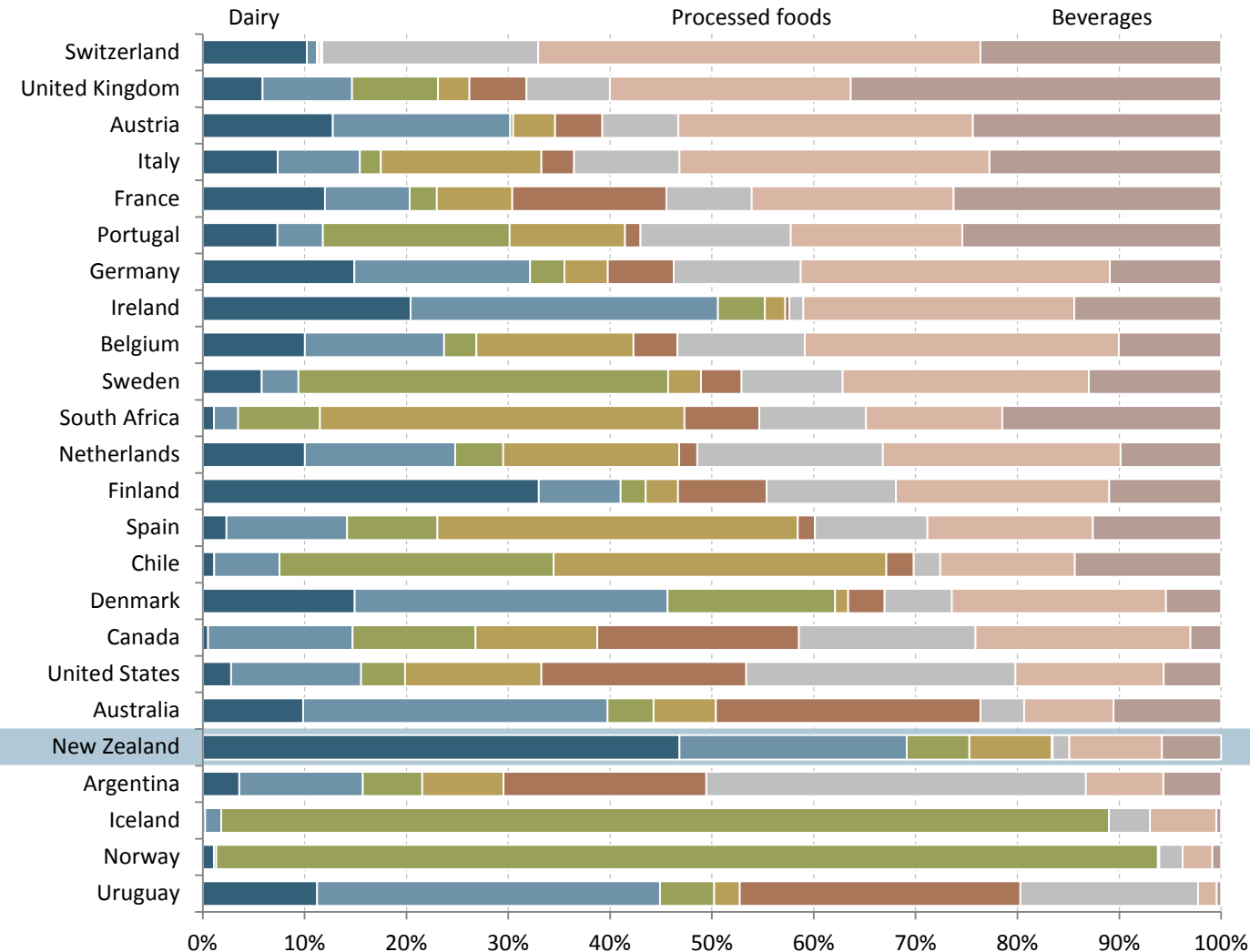
NZ F&B export value mix by type for 130 years
(% of total F&B sales; given years)



F&B EXPORT VALUE

Comparing export product mix by country highlights that New Zealand is overweighted to dairy and meat; peers highlight processed foods and beverages as opportunity

Share of food & beverage export value by sector: New Zealand vs. identified climatic peers
(% of US\$; 2010 or latest available)



Comments/Notes

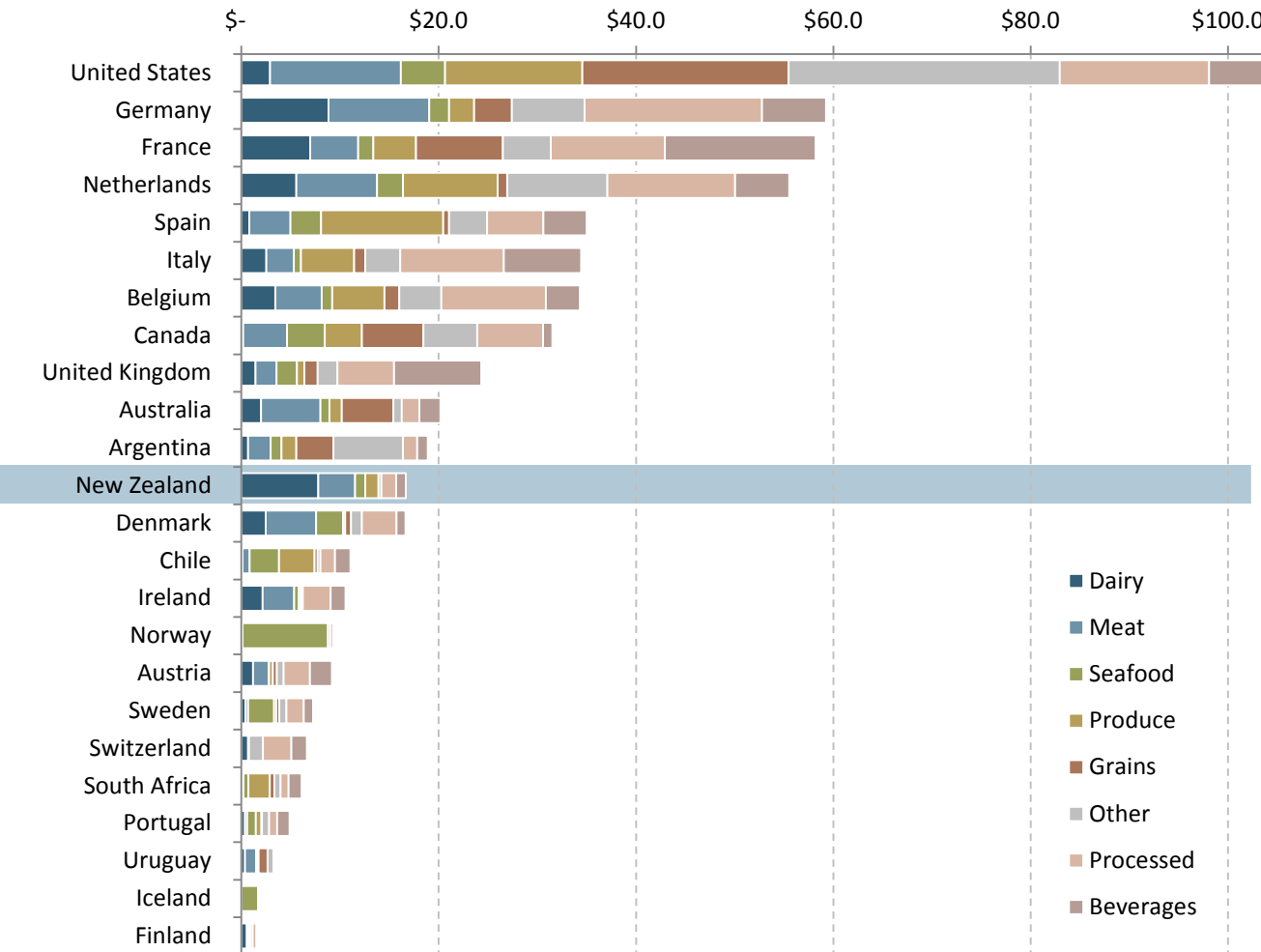
- This suggests that there may be more growth potential in beverages
- Chile, Spain, Uruguay, Netherlands, Austria & Argentina use 2009 data



F&B EXPORT VALUE

Comparing New Zealand F&B exports by sector with peers we find peers achieving success across a wide range of products

Total food & beverage export value: New Zealand vs. identified climatic peers
(US\$b; 2010 or latest available)



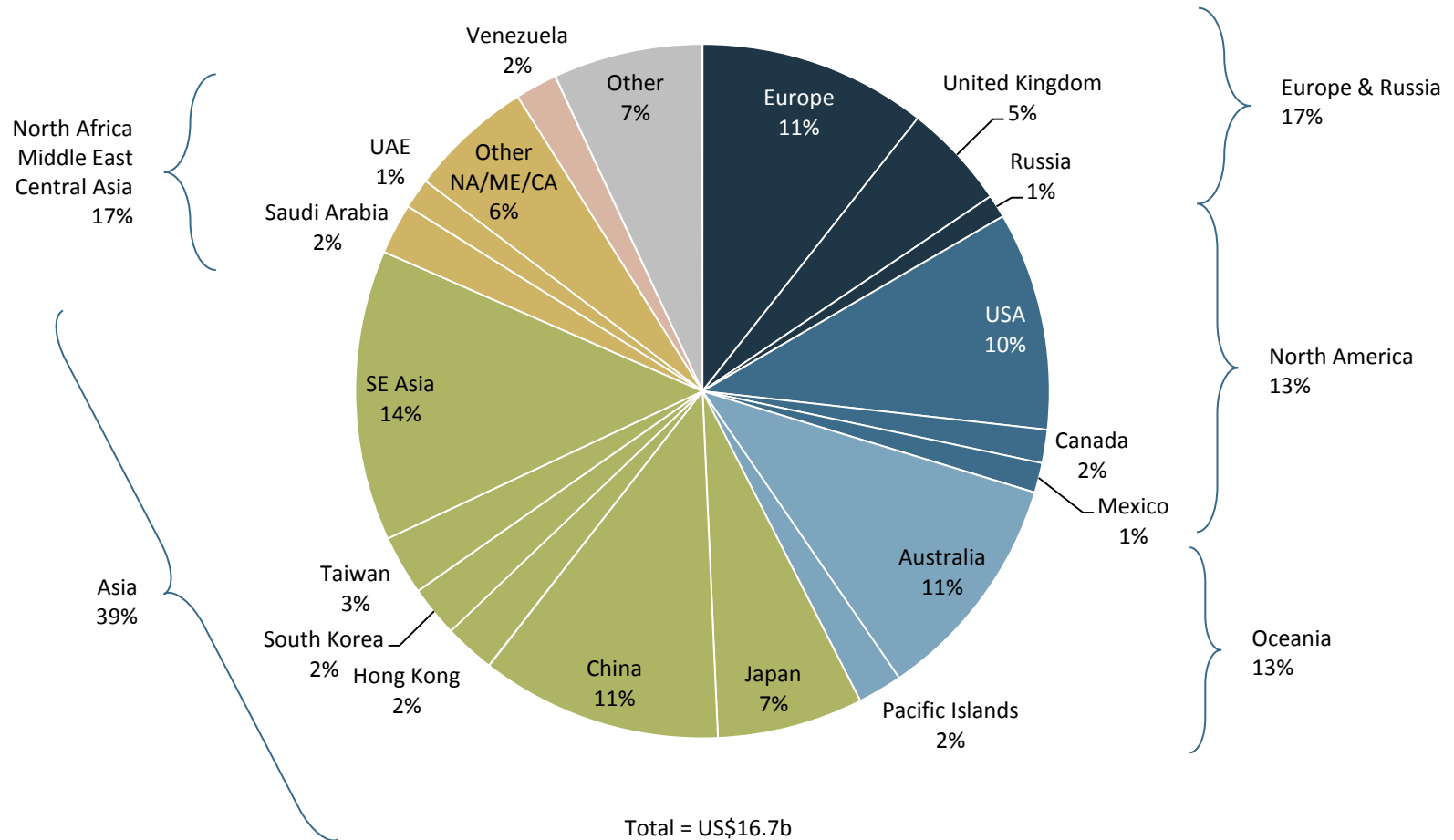
Comments/Notes

- This comparison with peers suggests it is difficult to see major F&B export growth coming from anything other than processed foods and beverages; we suggest a strong focus on these
- Clearly our production mix is not fixed and can change over time (for example: sheep to wine grapes in Marlborough)
- Chile, Spain, Uruguay, Netherlands, Austria & Argentina use 2009 data

NZ F&B EXPORTS BY DESTINATION

New Zealand exports F&B to a wide range of destinations; interestingly Australia now takes twice as much as the United Kingdom and Asia is worth +33% more than Europe, Russia and North America combined

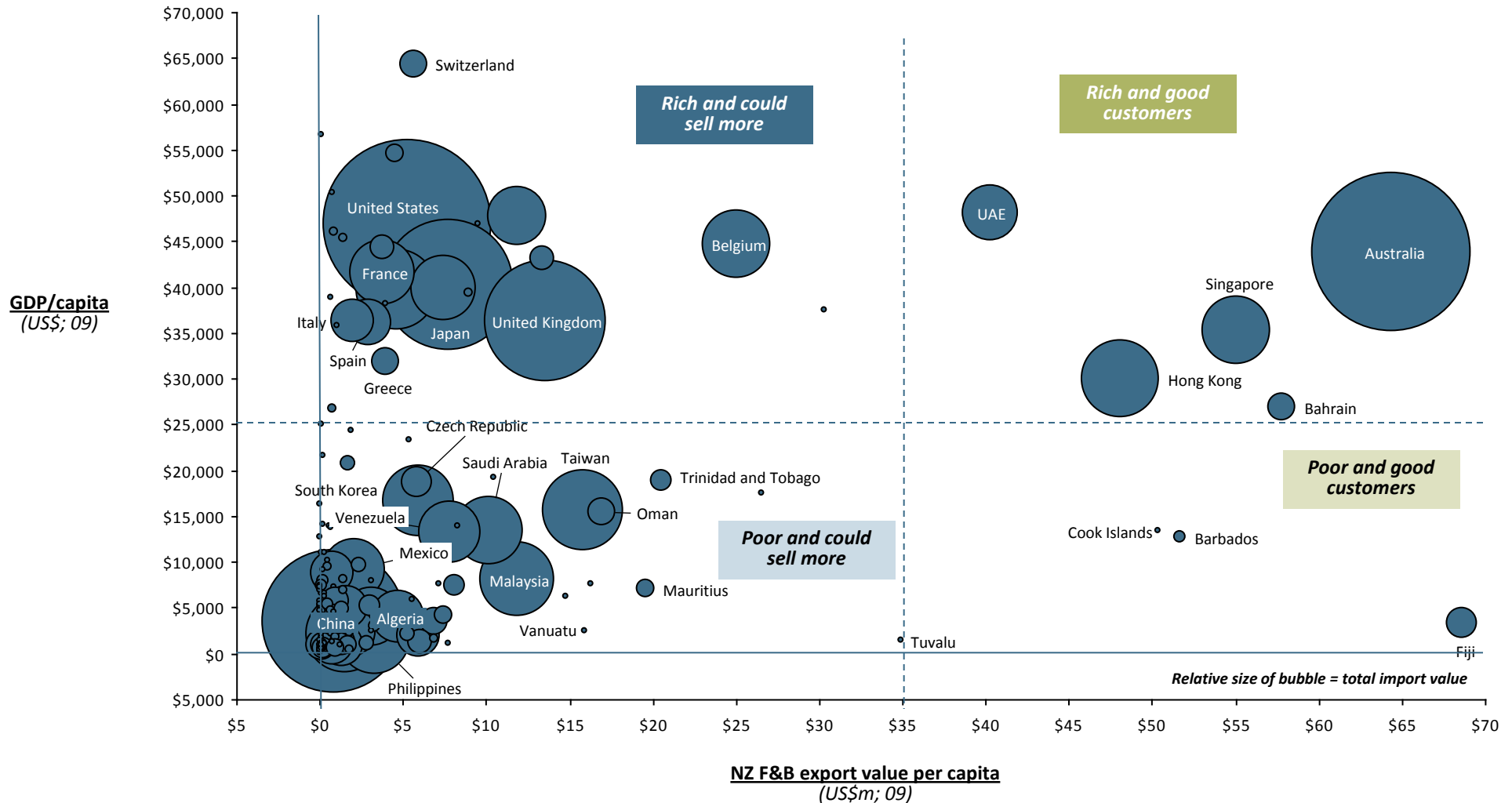
Aggregate annual food & beverage export value by key markets and total
(US\$b; 2010)



NZ EXPORT VALUE MATRIX

Drilling in to country level data highlights a wide range of opportunities to sell more

New Zealand export value matrix: NZ export value per capita vs. GDP/capita vs. total NZ export value
(various; US\$, 2009)





www.foodandbeverage.govt.nz

