### THE INVESTOR'S GUIDE TO THE NEW ZEALAND MEAT INDUSTRY 2017

*Part of the New Zealand Food & Beverage Information Project FINAL REPORT; v1.02; June 2017* 







stry for Primary Industries Manatū Ahu Matua

#### **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 of Primary Industries (MPI). It is their funding that has made this report possible.

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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

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### **PURPOSE** Why did the New Zealand government undertake this project?

#### What is the purpose of the project?

The project presents a comprehensive, business-focused overview of the total New Zealand food and beverage industry.

The project pulls together the available information on the food and beverage industry into one place, in a form which is familiar and useful to business. The reports contain analysis and interpretation of trends and opportunities to materially assist with business strategy and government policy.

The information will be of vital use to businesses, investors, government, and research institutions as the industry expands and diversifies. This industry view will be very useful to government, enabling better dialogue and the opportunity to address issues collectively.

#### What benefit will this bring to businesses?

- As support for raising capital
- As a base of market intelligence to enable business to be much more targeted in their own market research
- Reviewing and informing offshore market development strategies, including export and investment
- Assisting in identifying areas of innovation and R&D for the future
- Identifying strategic partners and collaborators
- Enabling a company to benchmark performance with that of its competitors
- Monitoring industry activity
- Gaining a better understanding of their own industry sector
- Identifying internal capability needs or external inputs

#### How will government use the reports?

While the government collects large amounts of industry data, little of this has an investor or industry-driven perspective.

This information will provide much greater insight into the industry, which is useful for a range of policy developments, from regulatory frameworks to investment in science and skills and facilitating access to international markets.

In particular, a single source of factual information will enable government agencies to better coordinate their efforts across the system and be more responsive to addressing industry issues.

All project resources are available online at: www.foodandbeverage.govt.nz

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**SITUATION SUMMARY** New Zealand is the global leader in lamb and deer meat exports and has a strong position in beef exports; other species are primarily focused on the domestic market, although in recent years chicken exports have been growing

#### LAMB

Both New Zealand and Australian lamb production has been flat for forty years. Falling domestic consumption at home has made more meat available for export. New Zealand & Australia together account for more than seventy percent of global lamb exports.

Top four New Zealand lamb meat processors account for 70% of NZ volume. The Australian industry is more fragmented. NZ lamb exporters primarily compete with each other and Australian firms.

The major lamb consuming countries are effectively the major lamb producing countries. In other words, the regions that grow lamb eat lamb (and those that don't, don't). However, most major lamb consuming countries are too poor to afford NZ lamb in quantity.

The key markets for New Zealand and Australian lamb are a handful of rich Western countries and the Gulf States. Supply is primarily counter-seasonal lamb for consumption around the time of traditional religious holidays (e.g. Christmas, Easter and the end of Ramadan). Lamb production flat-to-falling in these key markets and lamb consumption per capita falling due to an increasing price gap with other more efficient meats (e.g. chicken).

China is a rapidly emerging market for New Zealand's lamb exports, but also a strongly growing producer.

China has gone from producing a fifth as much lamb as New Zealand 40 years ago to more than four times as much today. However China is currently a growing customer and is unlikely to be a threat in key markets within the medium term.

#### BEEF

NZ is a minor global producer of beef (~1%). NZ beef breeds (e.g. Angus) have declining numbers and are not generally finished on grain, as is preferred by key premium markets. In addition, a growing proportion of beef production is a secondary product of the dairy industry, not optimal for meat quality.

Grass-fed beef has achieved minimum consumer cutthrough to date and sells at a discount to grain fed overall, despite healthy attributes. This low fat beef is however valued for patties in foodservice (e.g. supplying McDonalds).

Brazil and Australia are both major producers and exporters of beef into key NZ markets; in addition the USA is increasing beef exports driven by the weak USD, leading to increased imports of manufacturing beef.

#### DEER

NZ pioneered deer farming in the 1960's. The industry has two income streams (venison and deer velvet). The number of animals is in decline and long term economic viability unclear without major sustained breeding program to improve relative animal productivity.

#### CHICKEN

NZ has a modern chicken industry with four processors (Tegel, Inghams, Brinks & Turks). NZ chickens have an excellent FCR<sup>1</sup> due to lack of key poultry diseases. Bio-security prevents imports due to threat posed to iconic native birdlife (e.g. kiwi, kea, etc.). Exports have recently started growing strongly off a small base.

#### PORK

NZ pork production has been flat for 40+ years and growing consumption of bacon, ham & smallgoods (B,H&SG) is being filled by frozen imports. The domestic industry now predominantly supplies fresh pork and is currently uncompetitive in export markets without moves to improve productivity to global best practice.

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



#### **IDEAL CLIMATE & SOILS**

Low production cost

- Temperate climate similar to Italy or France
- Temperature extremes moderated by surrounding ocean
- Isolated location protected by natural barriers



#### **EFFICIENT PEOPLE & SYSTEMS**

Trusted by consumers

- Long history of continuous meat production
- Industry focused on export for over 100 years
- Large pool of skilled people
- Strong systems and support networks
- Implementing on-farm efficient systems and programs (e.g. New Zealand Farm Assurance Program)



#### LOCATION & MARKETS

Significant share in key products

- Excellent proximity to East & South-East Asian markets
- CER agreement with Australia
- NZ was the first developed country to sign free trade deal with China (2008)

**INVESTMENT OPPORTUNITIES** Potential areas for new and/or external investment primarily transforming ingredients rather than producing more ingredients

#### LAMB, BEEF & DEER

The New Zealand meat industry continues to have significant excess capacity, particularly in lamb. The ongoing decline in New Zealand sheep numbers has generated significant excess primary processing capacity, especially for lambs. This, in turn, has often led to bidding wars among competing industry buyers as each strives to meet the volume required by their plant(s). Prices paid to farmers rise and processor margins are reduced resulting in lowered financial returns.

Over the years numerous firms have exited the industry. There is every indication that the problem of declining sheep numbers and its corollary, excess processing capacity, will continue.

Ownership of top 4 processors, who account for ~75% of both lamb and beef production, is locked up with limited opportunity for new outside capital to participate: Alliance is a farmer-owned cooperative; Silver Fern Farms is a farmer owned cooperative with a Chinese shareholder; ANZCO has two cornerstone Japanese shareholders (Itoham & Nissui); and AFFCO is owned by the Talley's family following a decade long gradual takeover of a poorly performing listed firm.

That said, there is some opportunity for further consolidation among second tier beef & lamb

processors, particularly of smaller regional players each with one plant. Global experience shows single plant operators need to be above average size to achieve economies necessary for success.

#### CHICKEN

The New Zealand chicken industry performs well and has achieved reasonable sales and profit growth for the past two decades. In the past decade chicken exports have grown from almost nothing to over NZ\$100m in 2016, primarily through success in the Australian market, mainly in the form of frozen pieces.

Market leader Tegel was recently listed on the New Zealand stock exchange (by Affinity PE). Number two producer, Ingham, floated on the ASX by private equity, Brinks (#3) was for sale in 2009 and acquisition by Tegel rejected by the New Zealand Commerce Commission; no other bidders emerged.

#### PORK & PORK PRODUCTS

Domestic pork production has been flat for the last 40 years and the industry is sub-scale by global standards (e.g. Canada, USA, Denmark). International investors with global best practice capabilities in pork farming could find opportunities.

Following a number of major acquisitions, bacon, ham and smallgoods (B,H&SG) producers are now reasonably consolidated. Hellers (#1) is 50% owned by Rangatira (PE), recently acquired #3 Hutton's Kiwi (from Goodman Fielder). Premier Beehive (#2) was acquired by Brazil based global meat processing leader JBS (from Affinity PE).

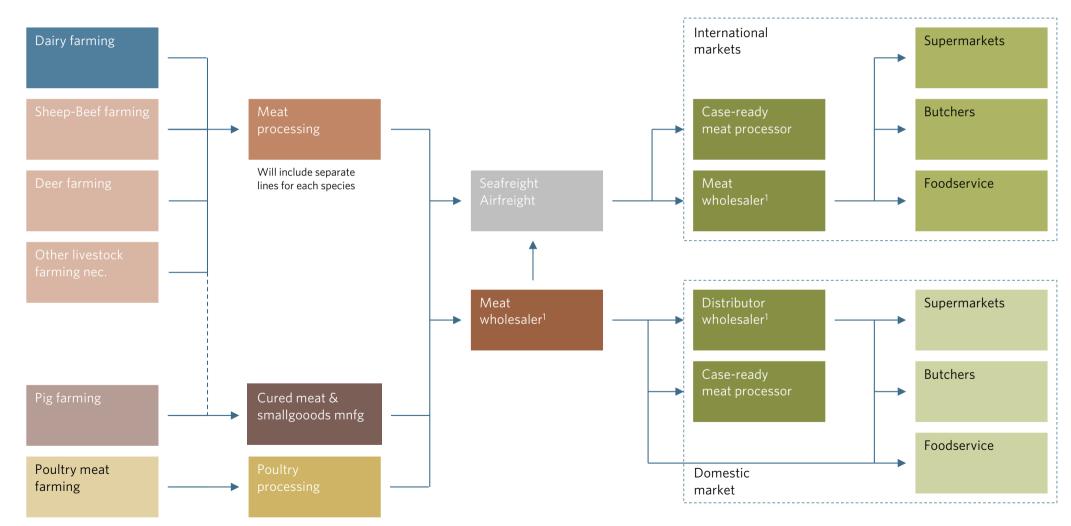
#### MEAT-BASED PROCESSED FOODS

New Zealand exports significant quantities of manufacturing beef as a raw material ingredient for processors in other countries. There are opportunities to make more value-added products in New Zealand. Tegel has set a strong example of what is possible in terms of adding value to raw material ingredients.

There are significant further opportunities for growth across a range of sectors, including frozen meals, soups, canned meats & meals, jerky, pet food, formed hamburgers for chain fast-food. These are reviewed in more detail in the "Processed Food" report. **SWOT ANALYSIS** The global meat industry is undergoing fundamental shifts and consolidation; New Zealand's competitive position is changing as a result

<ul> <li>Natural environment favourable to pastoral agriculture</li> <li>Natural environment favourable to pastoral agriculture</li> <li>Low cost, grass fed beef and sheep production systems</li> <li>Strong biasecurity rules and systems leading to low presence of key diseases</li> <li>High standards of food safety and animal welfare</li> <li>International recognition of high quality of New Zealand meat industry regulations</li> <li>Strong position in global lamb trade in counter-seasonal window to Northern Hemisphere</li> <li>Successful dairy industry generating large numbers of surplus stock</li> <li>Preferential access into Europe for some products for historical reasons</li> <li>Substantial research funding improving taste, quality of eating experience</li> <li>Nz reputation for quality products and trusted supplier</li> <li>Further negotitation of high quality for Erade Agreements with key markets (tran, UK, EU)</li> <li>Further negotitation of high quality provide parts of foodservice penetration across most key markets</li> <li>High and growing levels of foodservice penetration across most key markets</li> <li>Ability to extend shelf life or chilled product (extend season window)</li> <li>Increasing dord restrictions (e.g. Sikh, Muslim, Jewish, Hindu) also a risk</li> <li>Ability to extend shelf life or chilled product (extend season window)</li> <li>Increasing onk imports threatening the viability of New Zealand pork industry</li> <li>Soutent Soutes Affecting stock numbers and or trade access</li> <li>Further negotitation of livestock traceability and specific-animal identification</li> <li>Increasing pork inports threatening the viability of New Zealand pork industry</li> <li>Scientific research showing superior health product (extend season window)</li> <li>Increasing pork imports threatening the viability of New Zealand pork industry</li> <li>Market access reduced due to import trestrictions (e.g. Sikh, Mus</li></ul>	STRENGTHS	WEAKNESSES
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OPPORTUNITIESISSUES/THREATS/RISKS-Further negotiation of high quality Free Trade Agreements with key markets (Iran, UK, EU)-Continued conversion of beef and sheep land into dairy-Scientific research showing superior health properties of free range, grass-fed animals-Continued conversion of beef and sheep land into dairy-Scientific research to optimise output quality, animal productivity, growth rates etcContinued decline in consumption of lamb in developed markets-High and growing levels of foodservice penetration across most key markets-Continued decline in consumption of lamb in developed markets-Religious-based food restrictions (e.g. Sikh, Muslim, Jewish, Hindu) also a risk-Narket access reduced due to import restrictions (e.g. Sikh, Muslim, Jewish, Hindu), also an opportunity-Nove from frozen product to chilled; position/develop brands and case-ready, convenience foods products for retail and hospitality/foodservice-ETS, climate change legislation affecting cost of business-Nove from frozen product to chilled; position/develop brands and case-ready, convenience foods products for retail and hospitality/foodservice-Southern South America (e.g. Argentina, Uruguay, S. Brazil) improving their pasture system and "catching-up" with New Zealand-Extension/expansion of livestock traceability and specific-animal identification-USA market entry policy changing as Trump administration embraces "America First"	<ul> <li>High standards of food safety and animal welfare</li> <li>International recognition of high quality of New Zealand meat industry regulations</li> <li>135+ years experience exporting meat long distances</li> <li>Strong position in global lamb trade in counter-seasonal window to Northern Hemisphere</li> <li>Successful dairy industry generating large numbers of surplus stock</li> <li>Preferential access into Europe for some products for historical reasons</li> <li>Substantial research funding improving taste, quality of eating experience</li> </ul>	<ul> <li>markets of Asia</li> <li>Lack of in-market co-ordination</li> <li>Inefficient use of meat plants (declining stock numbers) and inefficient procurement of stock (competitive, not coordinated)</li> <li>Labour shortages both on farm and in processing</li> <li>Animal welfare issues around dairy calves</li> <li>Domestic and imported grain prices higher than competitors, which restricts</li> </ul>
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SIMPLIFIED MODEL OF NEW ZEALAND MEAT SUPPLY CHAIN<sup>1</sup> Model; 2017



# Global Market Overview

- + Global situation
- + Consumption
- + Production
- + Import demand
- + Key markets
- + Market growth



#### The global cross-border meat trade is large and growing; New Zealand has a strong position

#### CONSUMPTION

- Global meat consumption is concentrated in the Americas, Europe and China
- Global per capita meat consumption (all forms) is showing relatively low growth (~1%)

#### PRODUCTION

- Global meat production is 322m tons of raw meat, and production has been growing at a 3% CAGR over the last 50 years
- Total global production has grown 4.5 times in the last fifty years
- Meat production is spread across the globe with growth varying by region
- New Zealand produces almost half a percent of total world meat supply (all species)
- New Zealand the size of Japan or Italy, but with the population of Singapore - produces a significant meat surplus available for export (particularly beef and sheep); it is export focused and overweighted in trade

#### **GLOBAL TRADE**

 Global cross-border meat trade volumes are growing (4% CAGR) with moderate price gains (2% CAGR) across the cycle leading to export value growth (6% CAGR)

#### **DEMAND: PRODUCT CATEGORIES**

- Total global cross-border meat trade large (US\$140.9b); key species are beef (\$47.1b), pork (\$31.9b), chicken (\$24.4b) and sheep (\$6.1); processed meats are also large (\$20.8b)

 Frozen beef stands out for global growth over the past five years; a number of products (e.g. animal fats) are growing volume but not value

#### **DEMAND: IMPORT MARKETS**

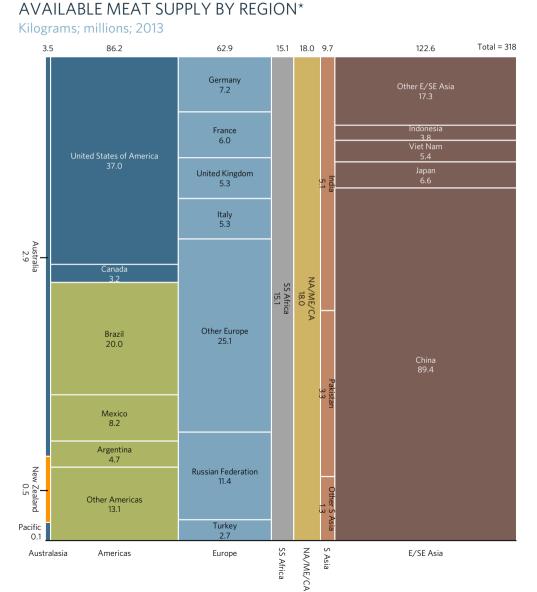
- Total global cross-border demand for meat was US\$140.9b in 2015; Europe (including inter-EU) is the single largest market, followed by Asia and North America
- Vietnam, China, the US and Singapore stand out for meat import market growth
- Markets vary in average meat import price driven by quality and mix - with the USA, Japan, Canada and the UK standing out as a high value markets

#### SUPPLY: EXPORTERS

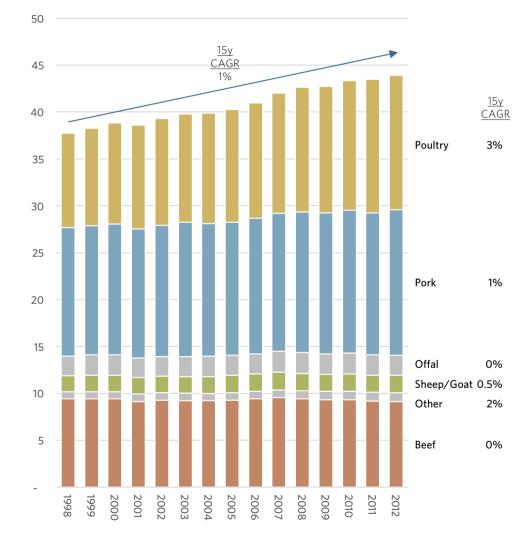
- New Zealand, Australia, the US, Canada, Brazil, Germany, and the Netherlands are the key exporters in the overall global meat trade
- New Zealand maintains a 3-4% share of global meat exports and is a more consistent supplier than other Southern Hemisphere grass fed operators (due to its more stable climate)
- New Zealand and Australia stand out for driving total value growth over the past five years relative to peer group
- Exporting countries vary in their average meat export price; New Zealand achieves leading prices on average (driven by quality and product mix)

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Global meat consumption is concentrated in the Americas, Europe and China; global per capita meat consumption is showing relatively low growth (~1%)

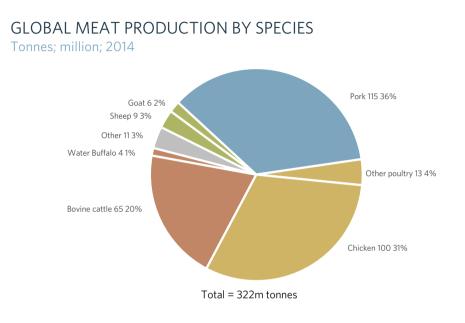


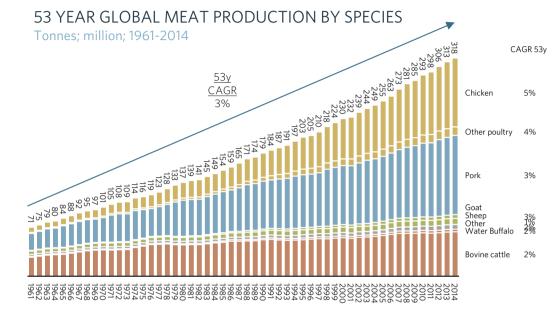
#### 15Y GLOBAL MEAT CONSUMPTION PER CAPITA BY SPECIES\*\* Kilograms/person; 1961-2011



\* Includes non-cow; includes milk, cultured and cheese; excludes butter, infant foods and ingredient/processed; \*\* data is apparent consumption all forms; Source: UN FAO; Coriolis analysis

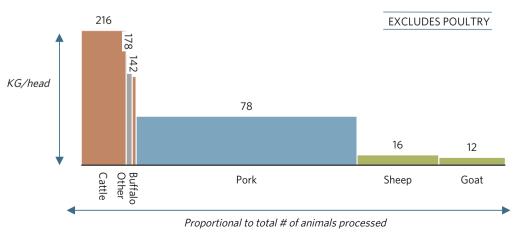
Global meat production is currently 322m tons of raw product, growing at 3% (53y CAGR); total global production has grown 4.5 times in the last fifty years



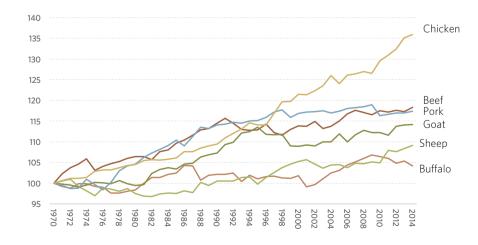


GLOBAL YIELD BY SPECIES

Animals vs. kg/head; 2014

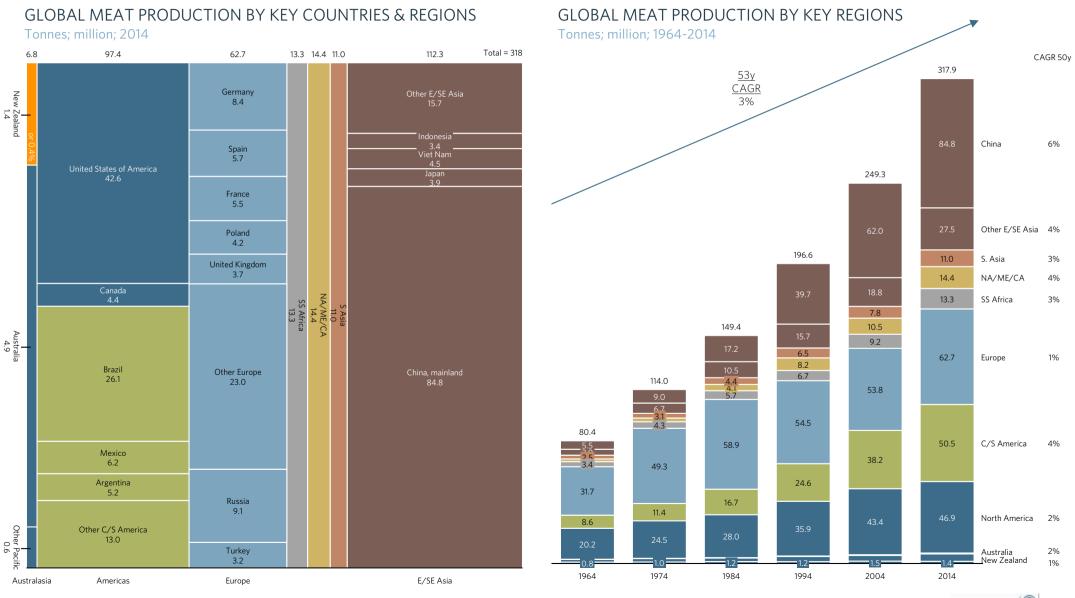


INDEXED MEAT YIELD BY KEY SPECIES 1970=100; 1970-2014



\* CAGR = Compound Annual Growth Rate; Note: 2014 is latest data available for all countries globally in FAOSTAT as of February 2017; Source: UN FAO database; Coriolis analysis

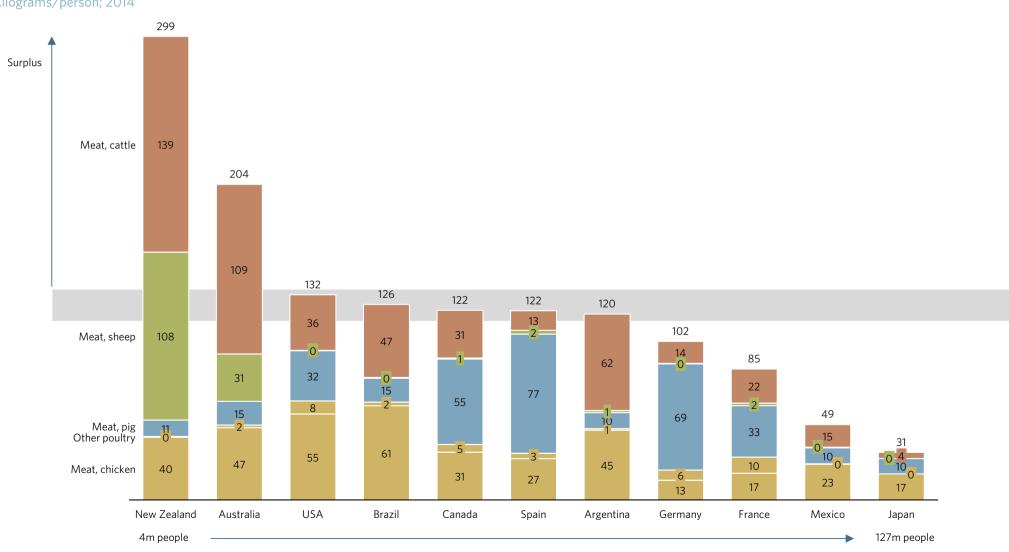
Meat production is spread across the globe, with growth varying by region; New Zealand produces almost half a percent of total world meat supply (all species)



Note: 2014 is latest data available for all countries globally in FAOSTAT as of February 2017; Russia includes historical USSR; Source: UN FAO database; Coriolis analysis

CORIOLIS () 14

New Zealand – the size of Japan with the population of Singapore – produces a significant meat surplus available for export (particularly beef and sheep)

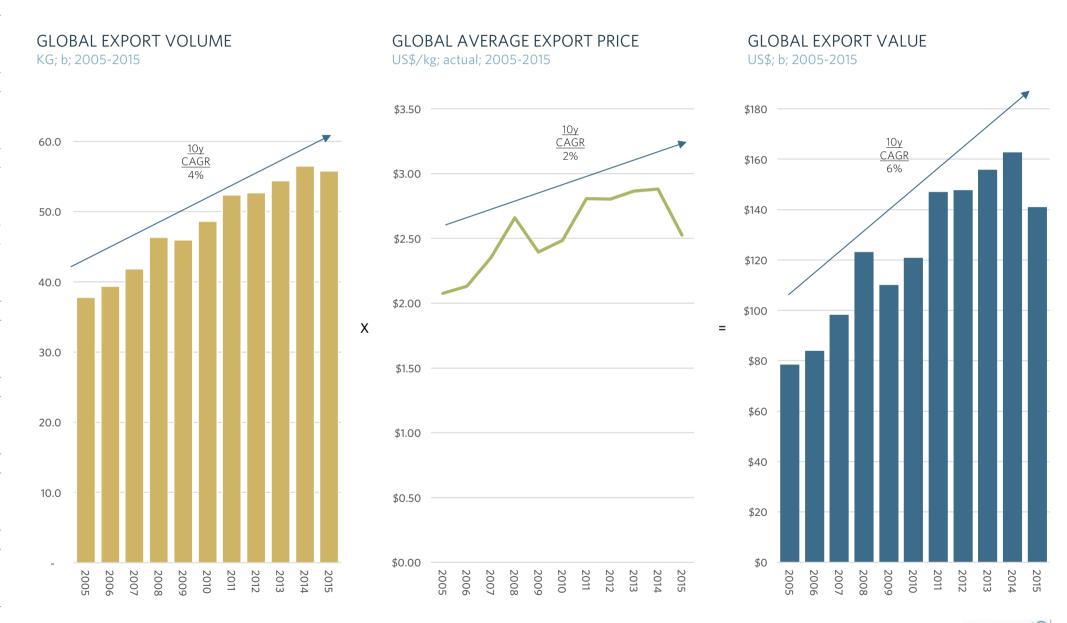


## RAW MEAT PRODUCTION PER PERSON (BEFORE TRADE): NEW ZEALAND VS. KEY COMPETITORS/PEER GROUP Kilograms/person; 2014

Note: 2014 is latest data available for all countries globally in FAOSTAT as of February 2017; Source: UN FAO database; Coriolis analysis

CORIOLIS () 15

Global cross-border meat trade volumes are growing (4% CAGR), with moderate price gains (2% CAGR) across the cycle, leading to export value growth (6% CAGR)



Note: data is as reported sender FOB; Source: UN Comtrade database; Coriolis classification and analysis

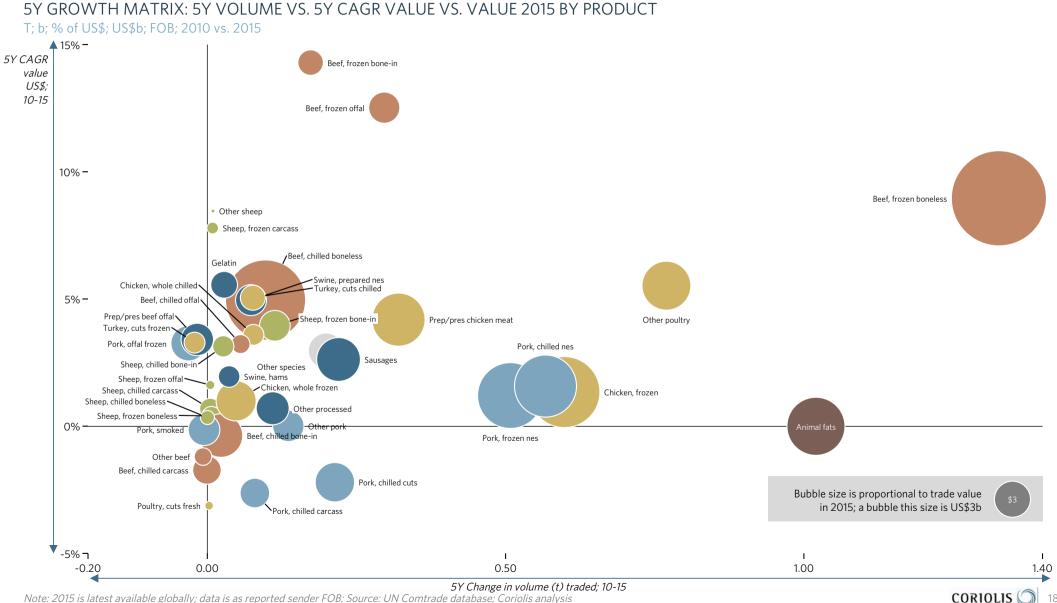
The total global cross-border meat trade is large (US\$140.9b); key species are beef (\$47.1b), pork (\$31.9b), chicken (\$24.4b), prepared/processed meats (\$20.8b) and sheep meat (\$6.1b)

## TOTAL GLOBAL MEAT EXPORT VALUE BY CATEGORY & MAJOR PRODUCTS US\$; b; FOB; 2015

\$20.8 Total = \$140.9 \$24.4 \$31.9 \$47.1 \$6.1 \$2.9 \$7.8 Sheep, chilled carcass \$1.0 Pork, frozen nes Beef, chilled boneless \$10.0 \$14.8 Chicken, frozen Sheep, chilled bone-in \$11.6 \$1.0 Beef, chilled bone-in Sheep, chilled boneless \$4.4 \$0.5 Beef, chilled carcass \$1.9 Pork, chilled nes Other species \$2.9 \$8.9 Sheep, Chicken, whole frozen \$3.7 ), frozen bone-in \$2.2 Prep/pres beef offal Chicken, whole chilled Pork, chilled cuts Poultry, cuts fresh \$1.0 \$3.6 Beef, frozen boneless \$20.9 \$0.2 Turkey, cuts chilled \$1.4 Pork, chilled carcass Turkey, cuts frozen \$2.0 \$1.0 Pork, offal frozen \$2.9 Sheep, frozen boneless \$0.8 Other poultry Pork, smoked Beef, frozen bone-in \$5.5 \$2.3 \$1.5 Sheep, frozen carcass Beef, frozen offal \$0.3 Other pork \$2.2 Beef, chilled offal Sheep, frozen offal \$2.3 Other bee \$0.8 \$0.2 \$0.7 Other sheep Sheep Poultry Pork Beef Other Fats Prep/proc \$0.0



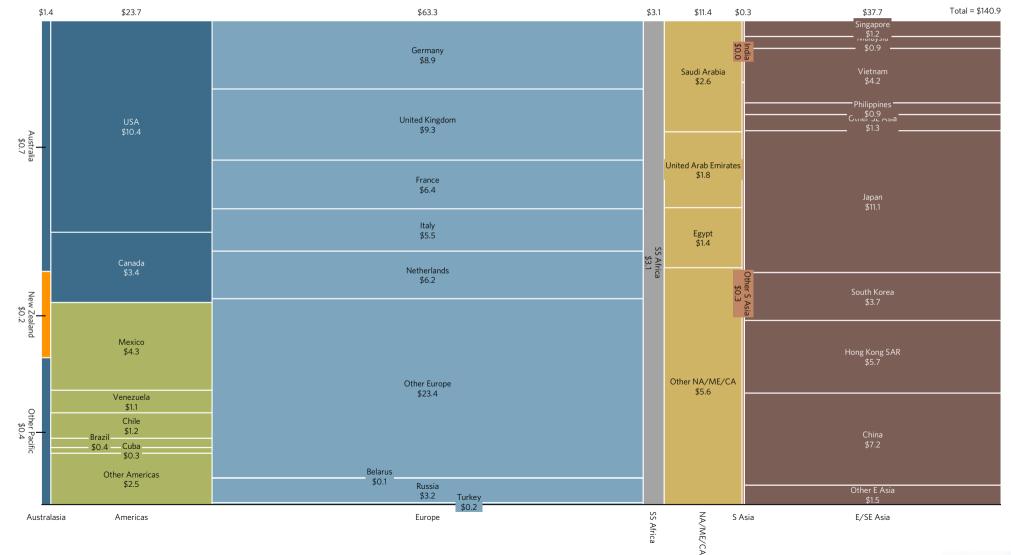
Frozen beef stands out for global growth over the past five years; a number of products (e.g. animal fats) are growing volume but not value



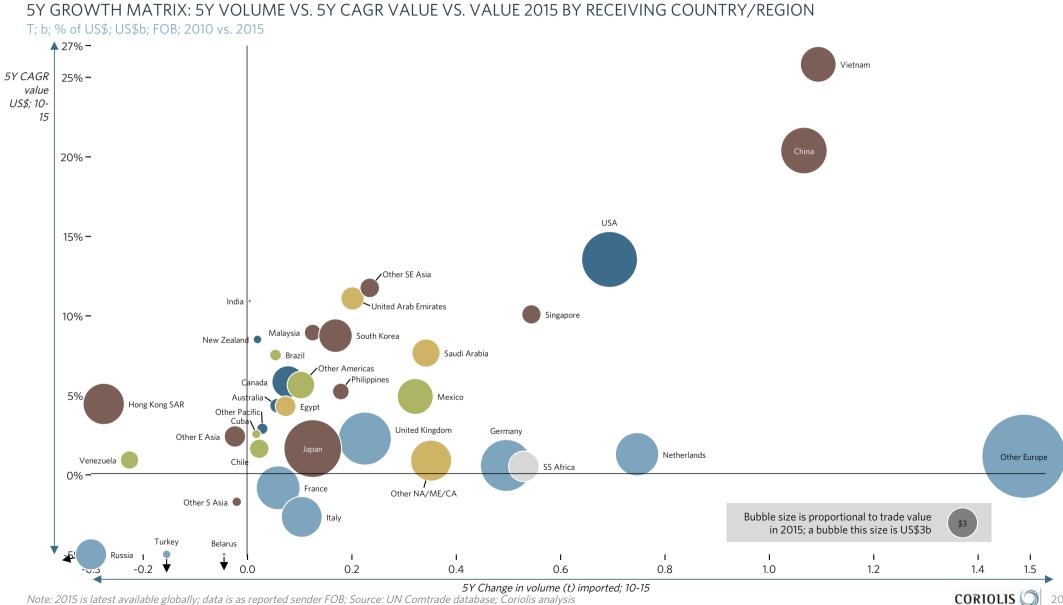
Total global cross-border demand for meat (US\$140.9b) is focused in Europe (including inter-EU), Asia and North America; key Middle East markets are also important

### TOTAL GLOBAL MEAT IMPORT VALUE BY RECEIVING COUNTRY/REGION

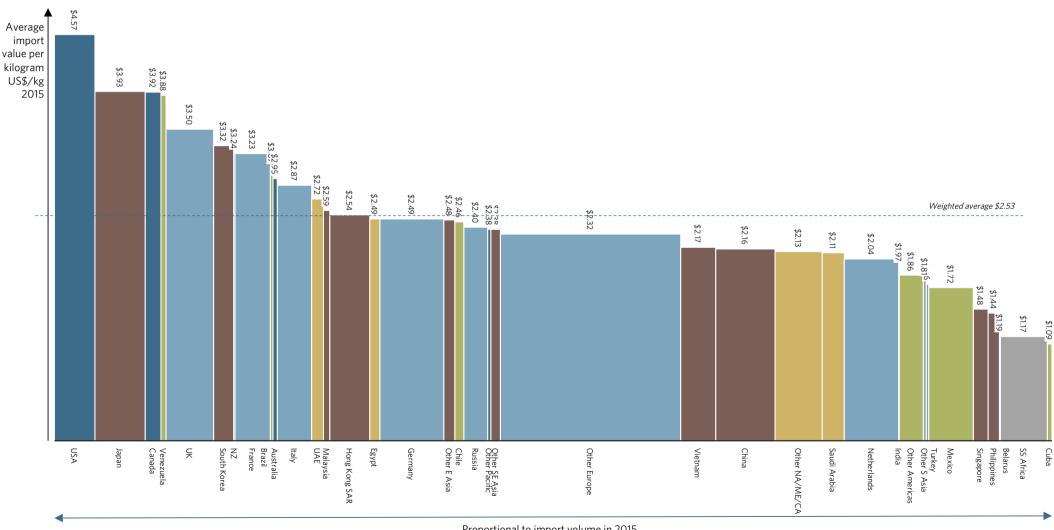
US\$; b; FOB; 2015



Vietnam, China, the US and Singapore stand out as growth markets for meat imports



Markets vary in average meat import price - driven by quality and mix - with the USA, Japan, Canada and the UK standing out as a high value markets

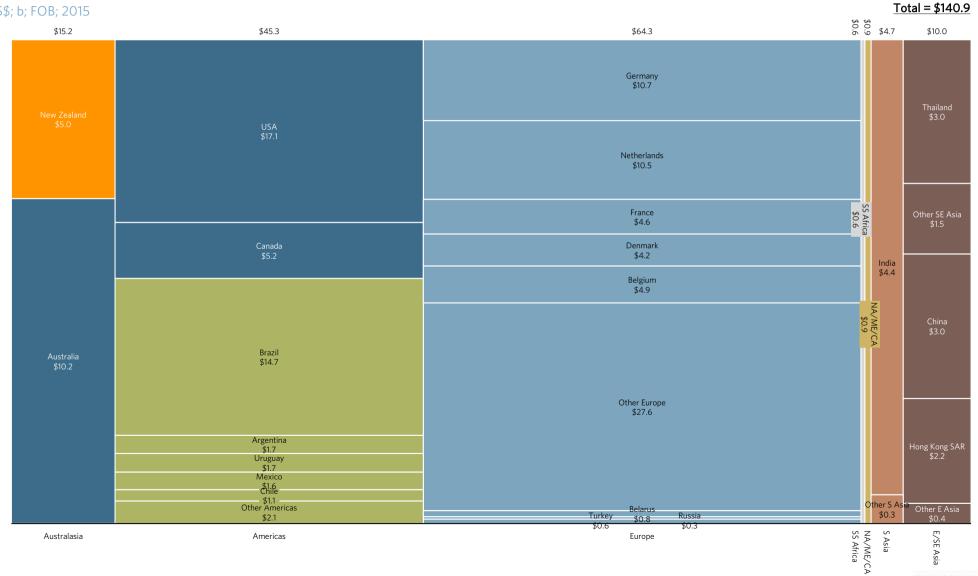


#### TOTAL GLOBAL MEAT IMPORT VOLUME VS. AVERAGE IMPORT PRICE BY KEY MARKET KG; millions; US\$/kg; actual; 2015

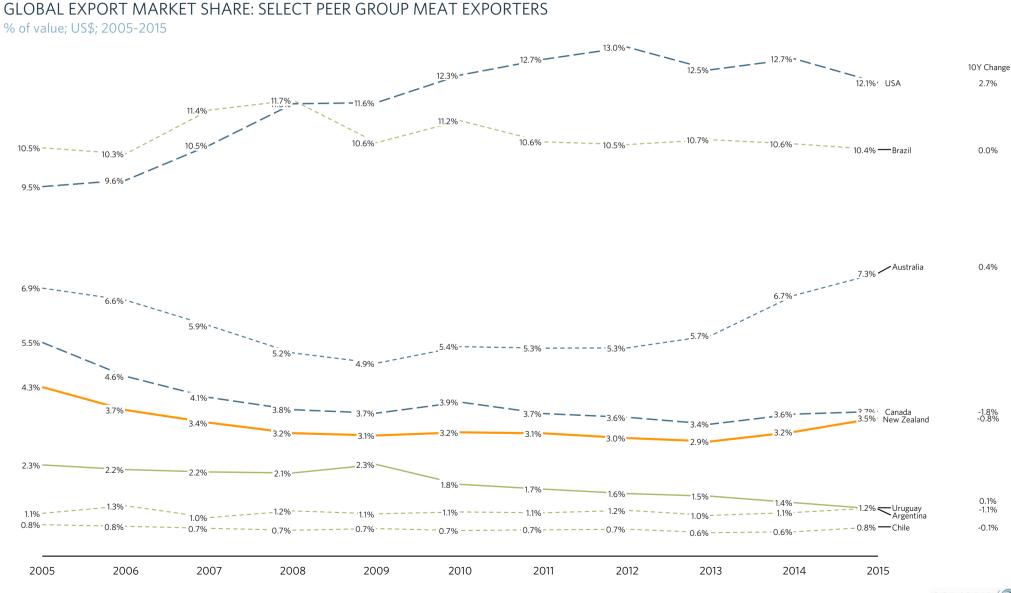
Proportional to import volume in 2015

CORIOLIS 🔘 21 On the supply side, New Zealand, Australia, the US, Canada, Brazil, Germany, and the Netherlands are the key exporters in the overall global meat trade

## TOTAL GLOBAL MEAT EXPORT VALUE BY SOURCE COUNTRY/REGION US\$; b; FOB; 2015

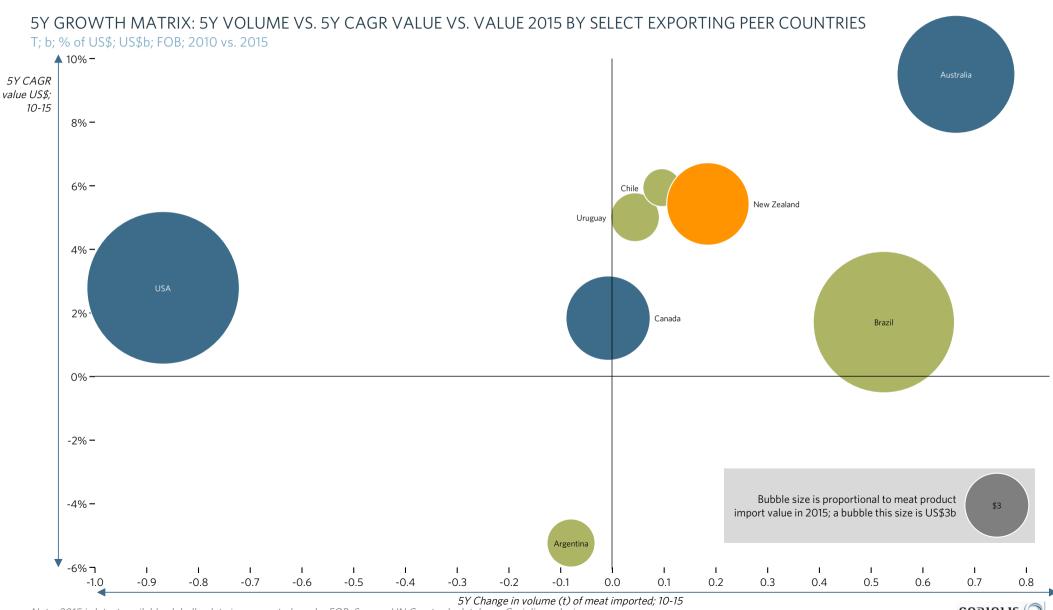


New Zealand maintains a 3-4% share of global meat exports and is a more consistent supplier than other Southern Hemisphere grass fed operators (due to its more stable climate)

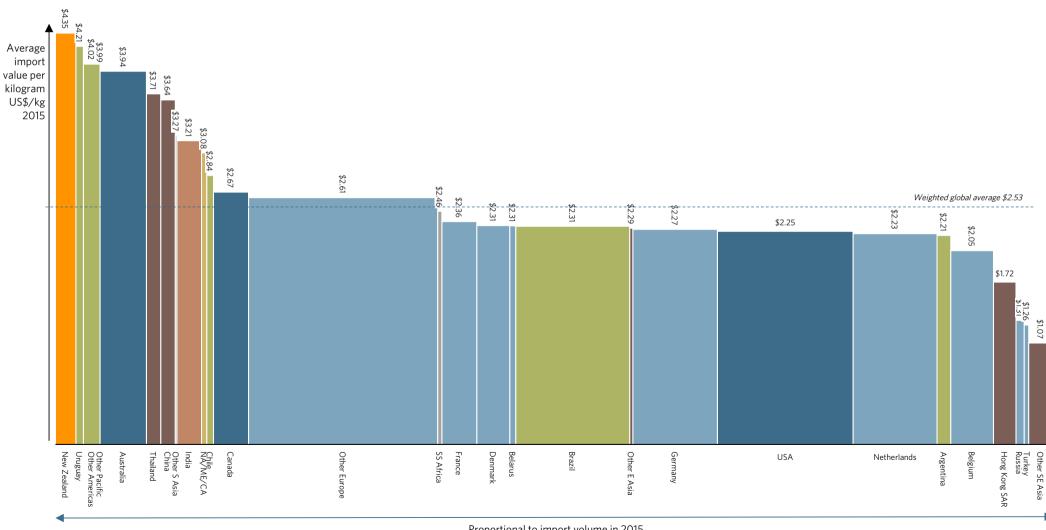


Note: Top 10 excluding Belarus; 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis

CORIOLIS 23 New Zealand and Australia stand out for driving total value growth over the past five years relative to peer group



Exporting countries vary in their average meat export price; New Zealand achieves leading prices on average (driven by quality and product mix)



TOTAL GLOBAL MEAT EXPORT VOLUME VS. AVERAGE EXPORT PRICE BY COUNTRIES/REGION KG; millions; US\$/kg; actual; 2015

Proportional to import volume in 2015

# New Zealand Production

- + Yield/productivity
- + Production

- + Regional activity
- + Growth upside



### New Zealand can continue to increase meat production going forward

#### **CHANGING INDUSTRY INPUTS**

The New Zealand meat industry is undergoing a long-term shift driven by high-level "mega" drivers

- As New Zealand lacks large amounts of grain/feed producing area, it uses grass-fed meat production systems in export-focused species
- The amount of grass area available to the meat industry is falling and the industry is producing fewer animals, and has fewer farming enterprises *(consolidation)*, but more people employed

#### POTENTIAL FOR FURTHER PRODUCTIVITY IMPROVEMENT

New Zealand may continue to increase animal productivity

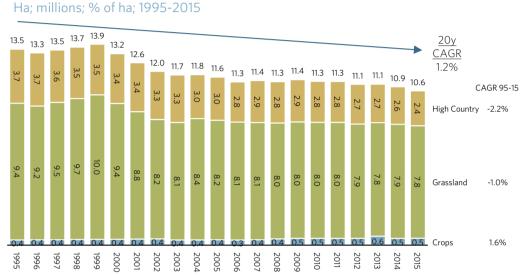
- New Zealand meat yield varies dramatically by species; yields per head are growing gradually across all key categories, except beef where the average yield is declining
- The New Zealand low input/low intensity system produces smaller animals than most competitors

#### **CHANGING MEAT PRODUCTION**

New Zealand has increased total production

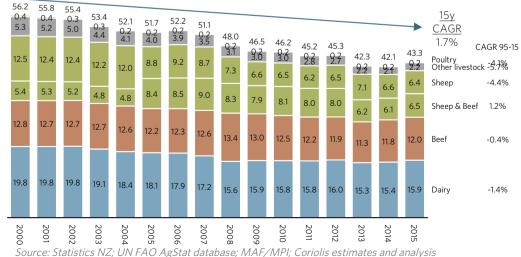
- New Zealand meat production has achieved stable long term growth through (1) more efficient producers (2) higher productivity and (3) higher yields; at the same time mix is changing in response to market demand
- Cattle, particularly dairy cows are replacing sheep across most regions; the South Island stands out for a particularly strong shift
- Looking at ten year growth drivers, the South Island stands out as increasing beef at the expense of sheep
- The New Zealand low intensity model produces different results than key peers

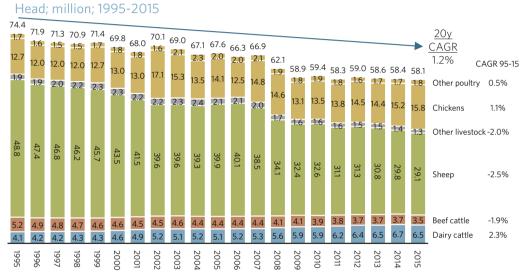
The amount of grass area available to the meat industry is falling and the industry is producing fewer animals, and has fewer farming enterprises (consolidation), but more people employed



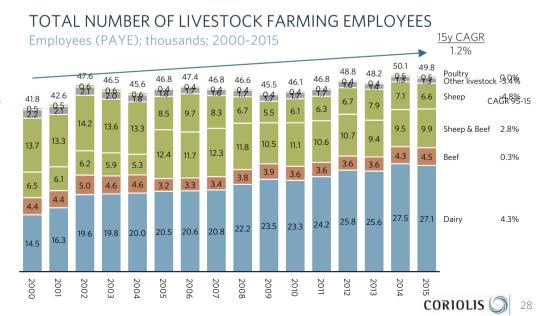
#### TOTAL NUMBER OF LIVESTOCK FARMING ENTERPRISES Units (tax entities): thousands: 2000-2015

TOTAL EFFECTIVE HECTARES IN GRASSLANDS & CROPS

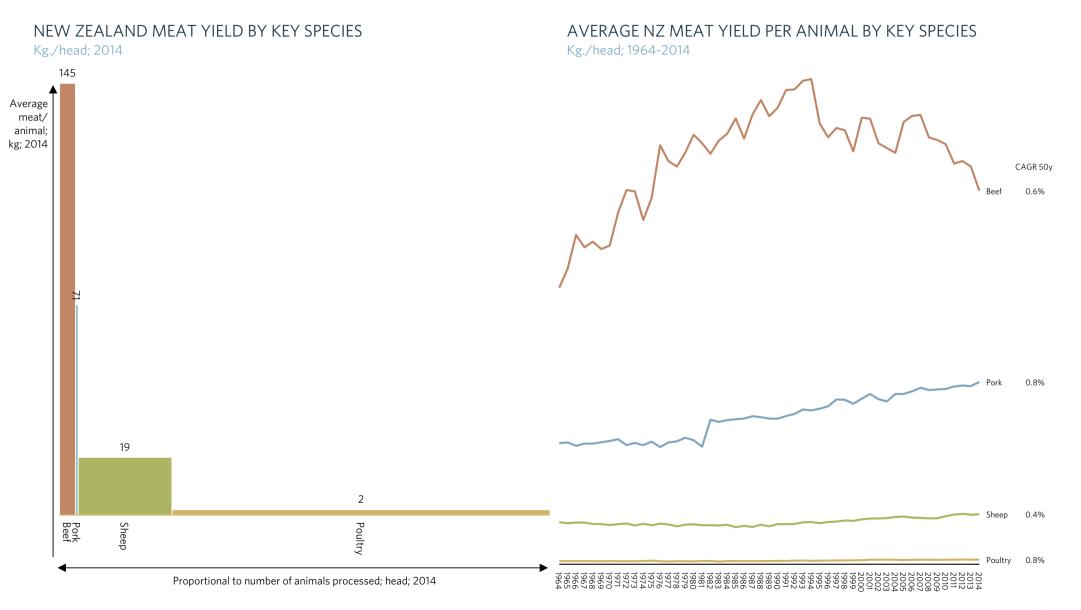




TOTAL MEAT ANIMAL POINT-IN-TIME INVENTORY

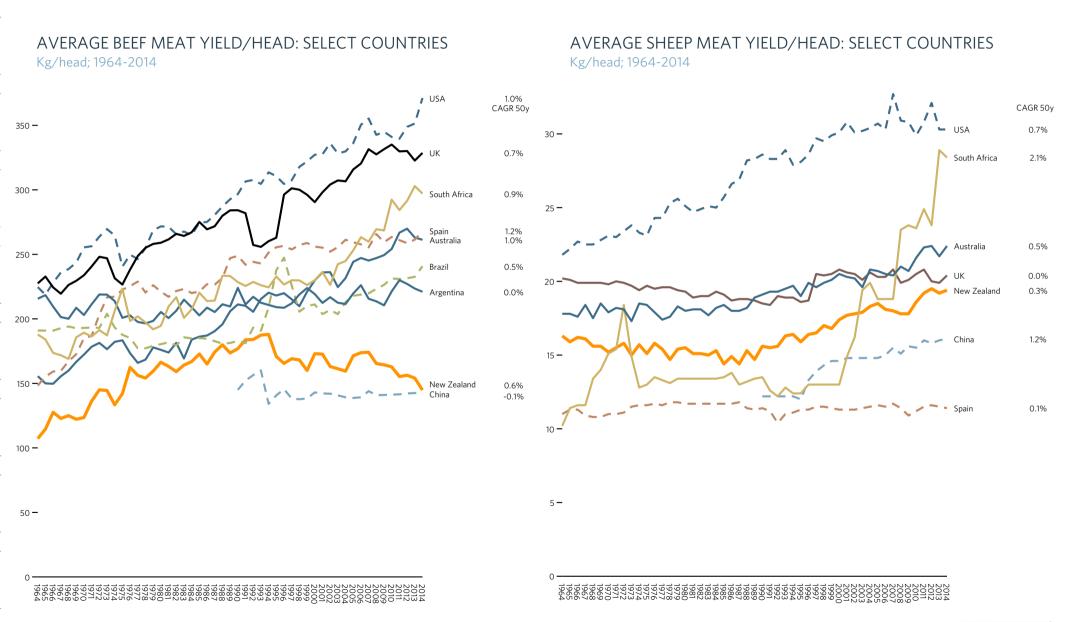


New Zealand meat yield varies dramatically by species; yields per head are growing gradually across all key categories, except beef where the average yield is declining



CORIOLIS () 29

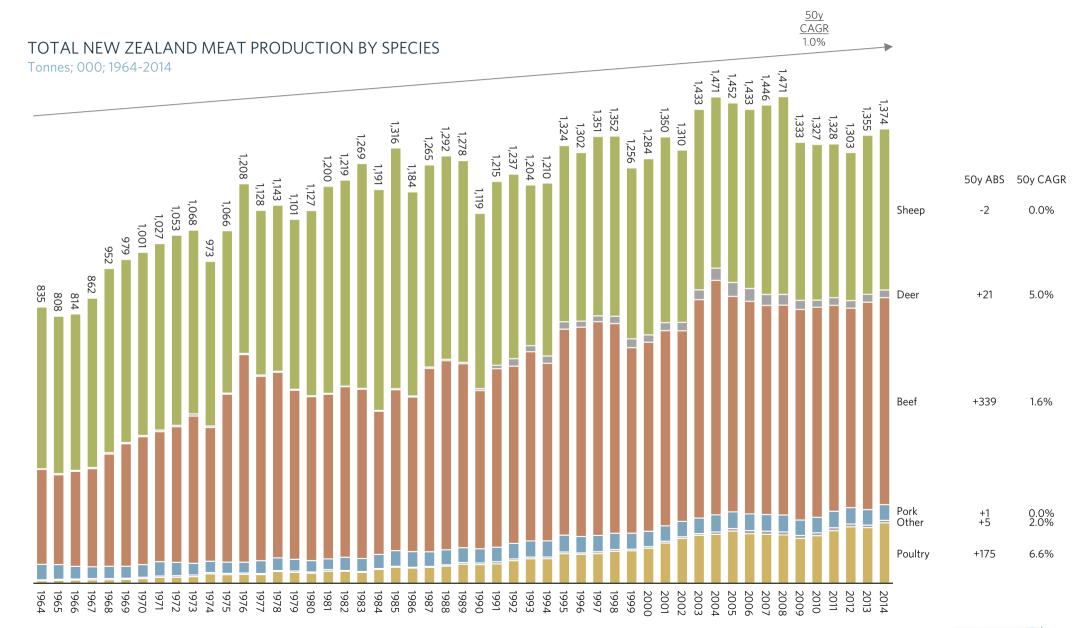
The New Zealand low input/low intensity system produces smaller animals than most competitors



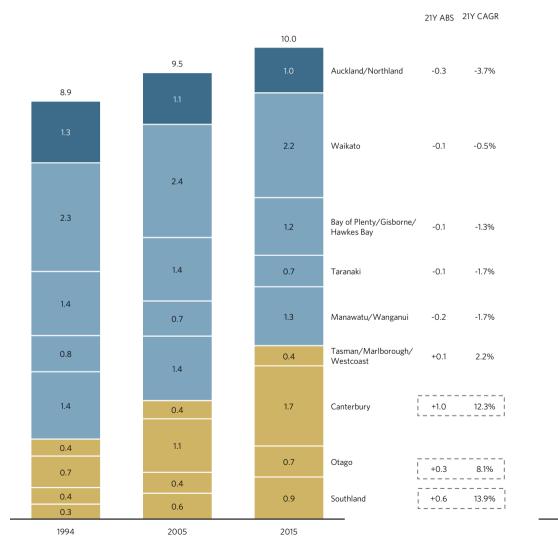
Source: Statistics NZ; UN FAO AgStat database; MAF/MPI; Coriolis estimates and analysis

CORIOLIS 30

New Zealand meat production has achieved stable long term growth through (1) more efficient producers (2) higher productivity and (3) higher yields; at the same time mix is changing in response to market demand



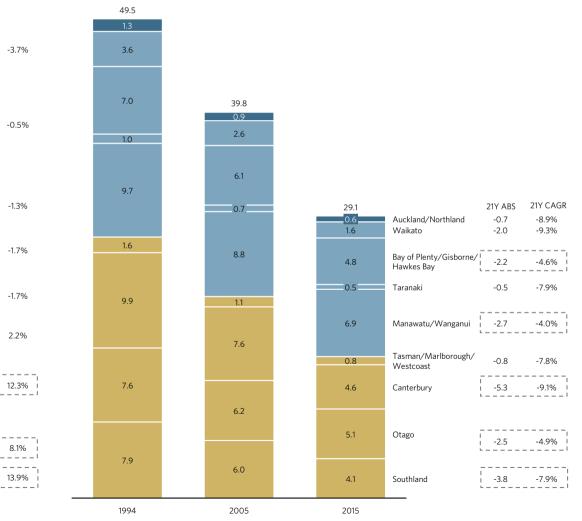
Cattle, particularly dairy cows are replacing sheep across most regions; the South Island stands out for a particularly strong shift



#### TOTAL CATTLE BY REGION

Head; m; point-in-time inventory; 1994/2005/2015

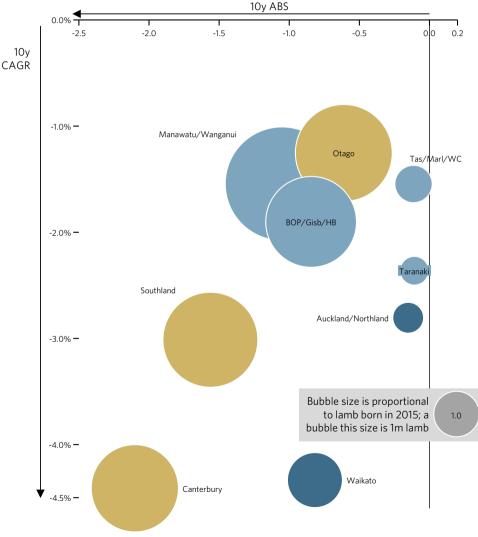
TOTAL SHEEP BY REGION Head; m; point-in-time inventory; 1994/2005/2015



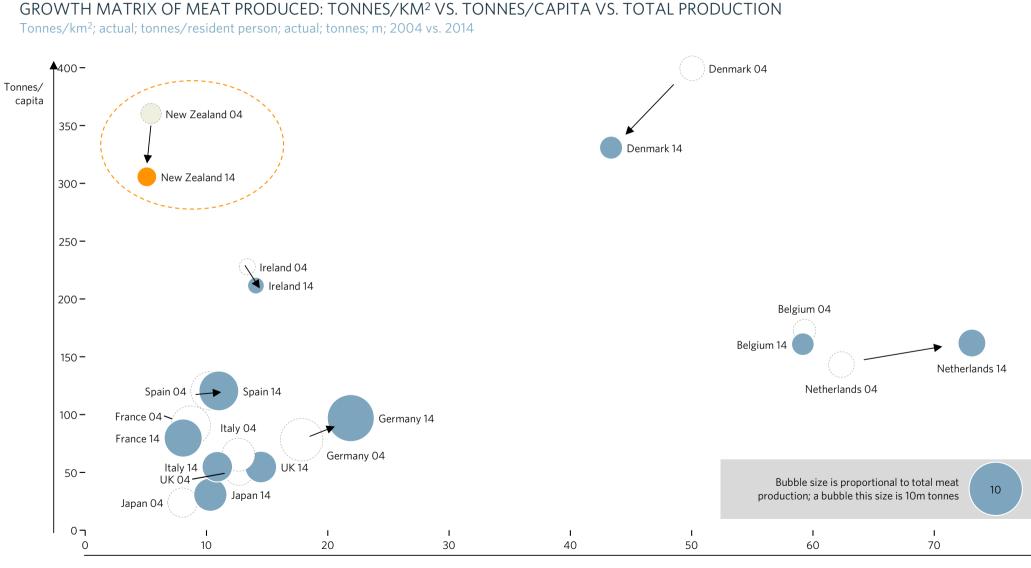
#### Looking at ten year growth drivers, again the South Island stands out

Head; m; 2005 vs. 2015 25.0% -Bubble size is 10y proportional to calves 0.2 CAGR born in 2015: a bubble this size is 0.2m calves Canterbury 20.0% -15.0% -10.0% -5.0% -Tas/Marl/WC Southland Otago Manawatu/Wanganui Auckland/Northland Waikato 0.0% 0.5 0.8 -0.5 Taranaki BOP/Gisb/HB -2.0% -

## GROWTH MATRIX: 10Y CHANGE IN CALVES BORN BY REGIONGROWTH MATRIX: 10Y CHANGE IN LAMBS BORN BY REGIONHead; m; 2005 vs. 2015Head; m; 2005 vs. 2015



The New Zealand low intensity model produces different results than key peers



Tonnes/square kilometre

80

# New Zealand Category Performance

- + Segmentation
- + Key products
- + Exports by product



New Zealand is the global leader in sheep meat exports, a major player in the world beef trade and emerging in venison and poultry meat

#### OVERVIEW

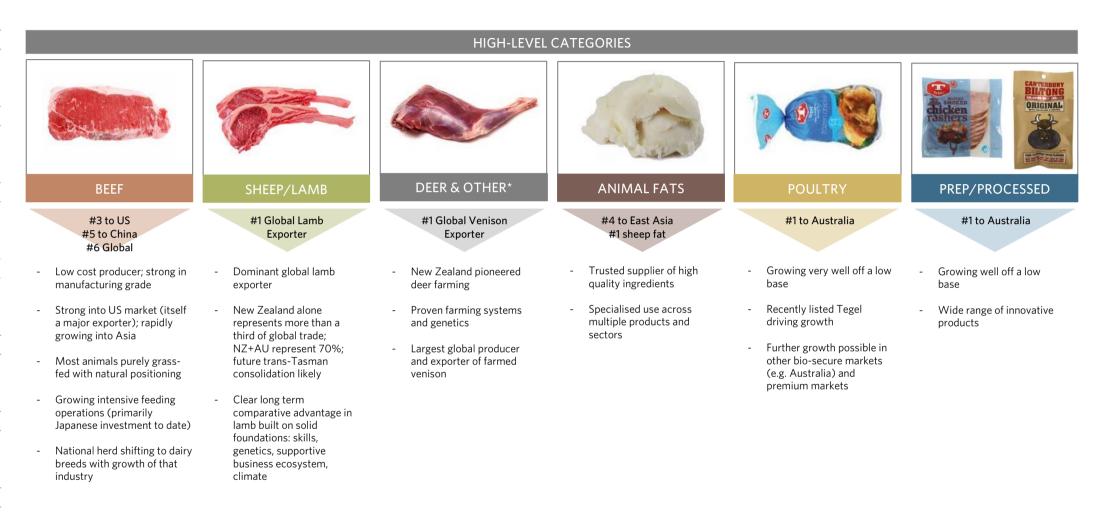
- New Zealand exports six categories of meat products
- New Zealand meat exports are predominantly beef (48%) and lamb (44%); all other products 8%
- Average export price varies, with deer venison and processed meats getting high prices
- New Zealand is the leading global exporter of sheep/lamb meat, strong in beef and deer/other and has growth opportunities elsewhere
- Beef and sheep meat are growing strongly in volume and value growth, though only achieving moderate price gains; poultry growing strongly
- New Zealand is the leading global exporter of sheep/lamb meat, strong in beef and deer/other and has growth opportunities elsewhere

#### **BY CATEGORY**

- New Zealand generates beef exports of US\$2.4b, with trade focused in North America, E. Asia, SE Asia and the Middle East; trade is predominantly boneless (frozen and chilled)
- New Zealand is the global leader in the lamb meat trade, with a strong position in East Asia, Europe and North America
- New Zealand pioneered deer farming and leads the world in venison production; an intriguing and innovative product effectively unknown in most markets
- New Zealand's animal fat exports go predominantly to East and South-East Asia
- New Zealand's poultry meat exports mostly go to Australia and the Pacific Islands; there appears to be widespread opportunities for growth worldwide
- New Zealand trails peer group countries in converting its abundant raw meat into prepared/processed, ready-to-heat or ready-to-eat meat products; however, the country is catching up fast

CORIOLIS () 3

### New Zealand exports six categories of meat products



#### **EXAMPLE PRODUCTS UNDER THESE CATEGORIES**

- Beef, frozen boneless
- Beef, chilled boneless
- Sheep/lamb, frozen bone-inSheep, chilled bone-in
- Deer meat
  Goat meat
- Animal fats
  - Lard stearin, etc.

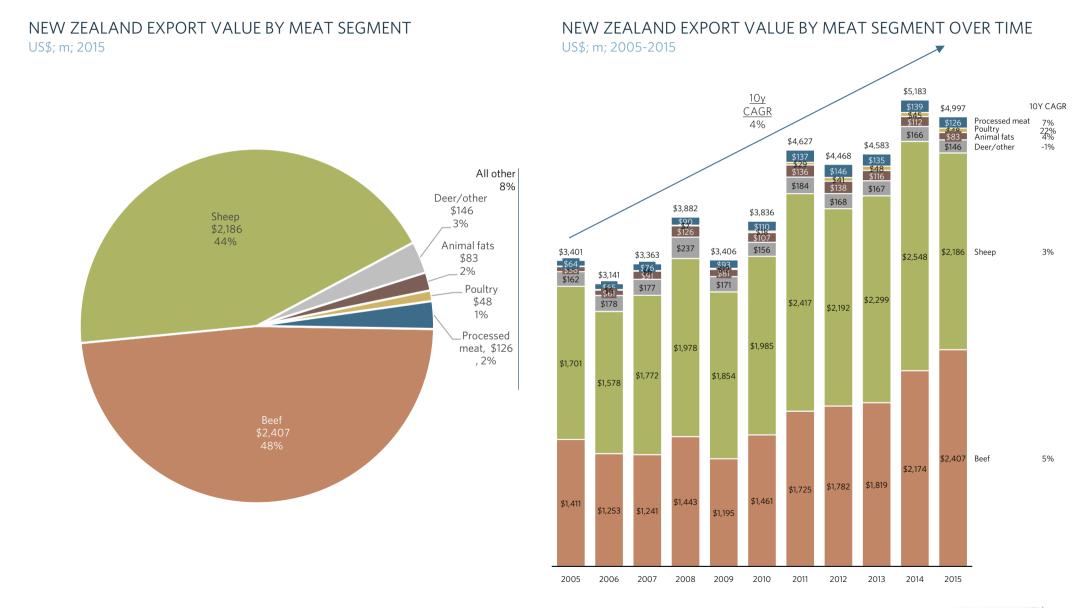
- Chicken, parts frozen
  - Chicken, whole frozen
- Prep/proc. chicken meat

CORIOLIS

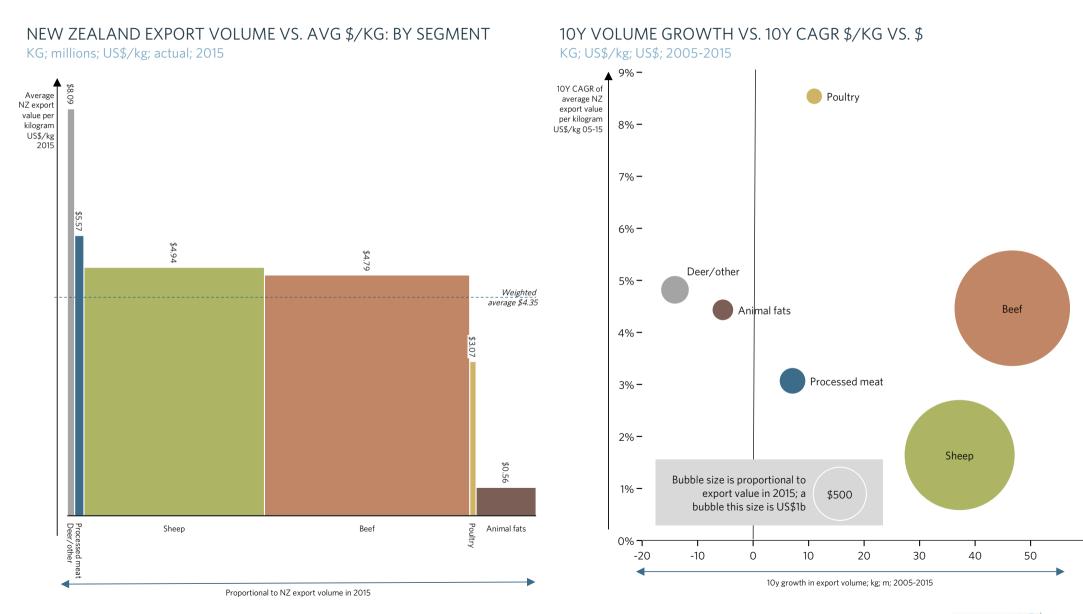
37

- Sausages

### New Zealand meat exports are predominantly beef (48%) and lamb (44%); all other products 8%



Average export price varies, with deer venison and processed meats getting high prices; beef and sheep meat are driving volume growth, though only achieving moderate price gains; poultry growing strongly



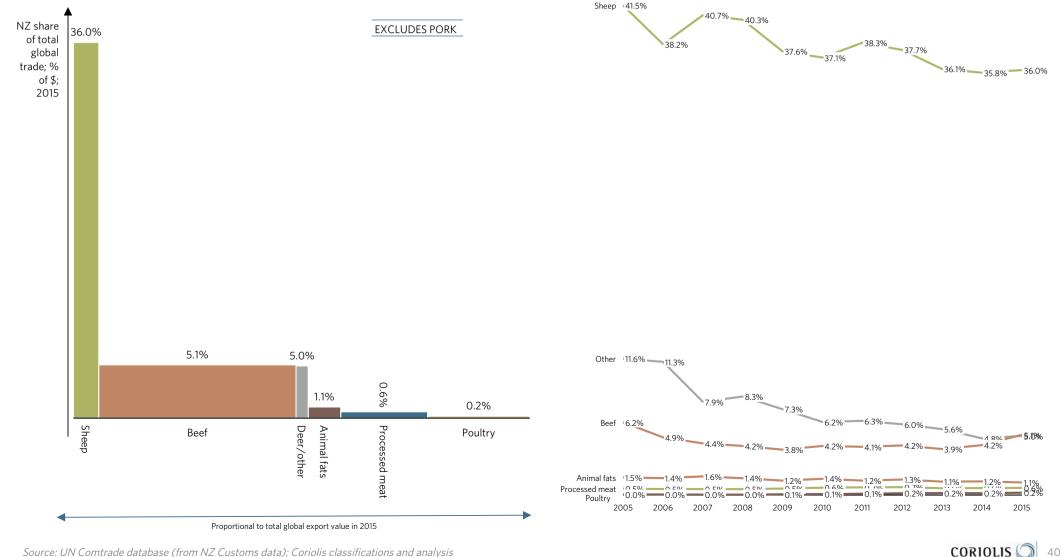
*Source: UN Comtrade database (from NZ Customs data); Coriolis classifications and analysis* 

New Zealand is the leading global exporter of sheep/lamb meat, strong in beef and deer/other and has growth opportunities elsewhere

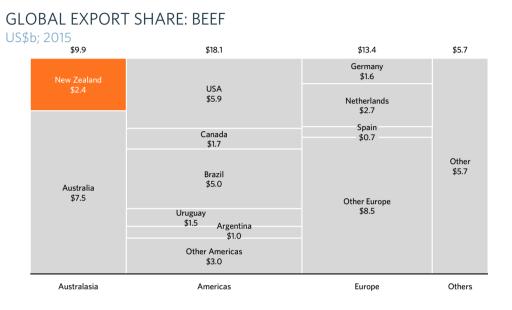
% of US\$; 2005-2015

NEW ZEALAND SHARE OF WORLD EXPORT VALUE BY CATEGORY

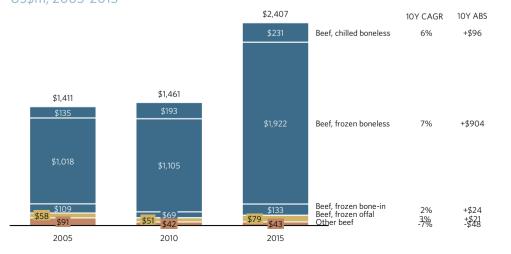
### NEW ZEALAND SHARE OF WORLD EXPORT VALUE BY CATEGORY US\$; % of US\$; 2015



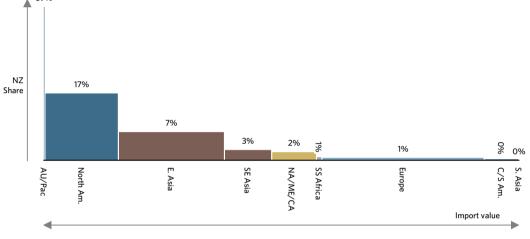
New Zealand generates beef exports of US\$2.4b, with trade focused in North America, E. Asia, SE Asia and the Middle East; trade is predominantly boneless (frozen and chilled)



### NZ EXPORTS BY TYPE: BEEF US\$m: 2005-2015



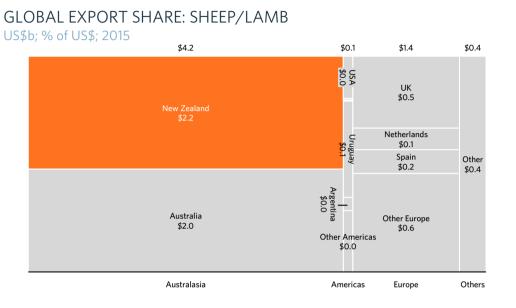
### GLOBAL REGIONAL IMPORT VALUE VS. NZ SHARE US\$; % of US\$; 2015



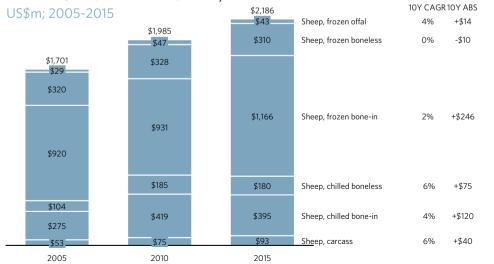
# EXAMPLE PRODUCTS: SILVER FERN FARMS 2017



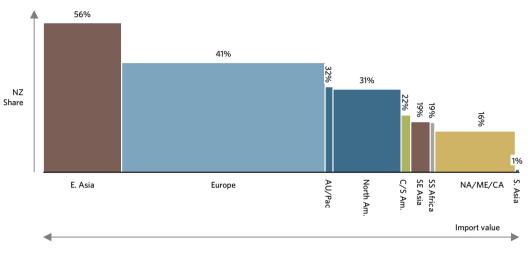
New Zealand is the global leader in the lamb meat trade, with a strong position in East Asia, Europe and North America



### NZ EXPORTS BY TYPE: SHEEP/LAMB



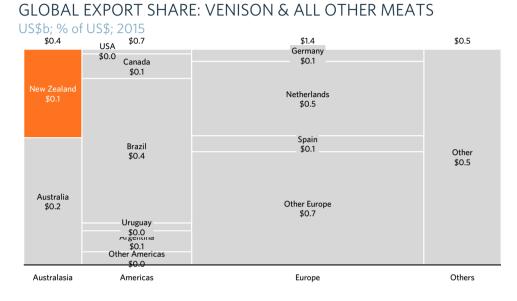
GLOBAL REGIONAL IMPORT VALUE VS. NZ SHARE US\$; % of US\$; 2015



## EXAMPLE PRODUCTS: WAITROSE 2017



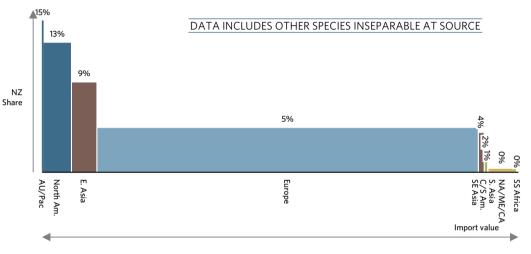
New Zealand pioneered deer farming and leads the world in venison production; an intriguing and innovative product effectively unknown in most markets



### NZ EXPORTS BY TYPE: VENISON & OTHER MEATS US\$m: 2005-2015

\$162 \$155 \$145 \$162 \$155 \$145 Deer/Other Species -1% -\$16 2005 2010 2015

### GLOBAL REGIONAL IMPORT VALUE VS. NZ SHARE US\$; % of US\$; 2015



### EXAMPLE PRODUCTS: WAITROSE 2017



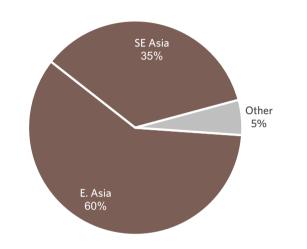
Source: UN Comtrade database; photo credit (fair use; low resolution; complete product/brand for illustrative purposes); Coriolis classifications and analysis

10Y CAGR 10Y ABS

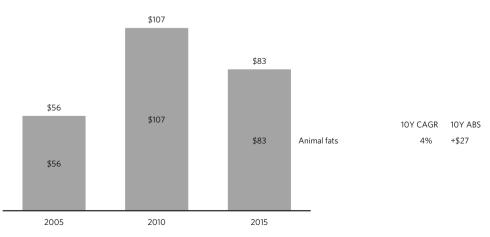
CORIOLIS () 43

### New Zealand's animal fat exports go predominantly to East and South-East Asia

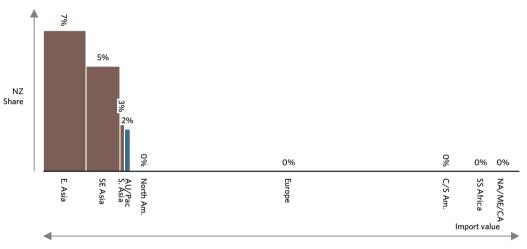
## NEW ZEALAND EXPORTS BY DESTINATION: ANIMAL FATS US\$m; 2015



NZ EXPORTS BY TYPE: ANIMAL FATS US\$m; 2005-2015



# GLOBAL REGIONAL IMPORT VALUE VS. NZ SHARE US\$; % of US\$; 2015



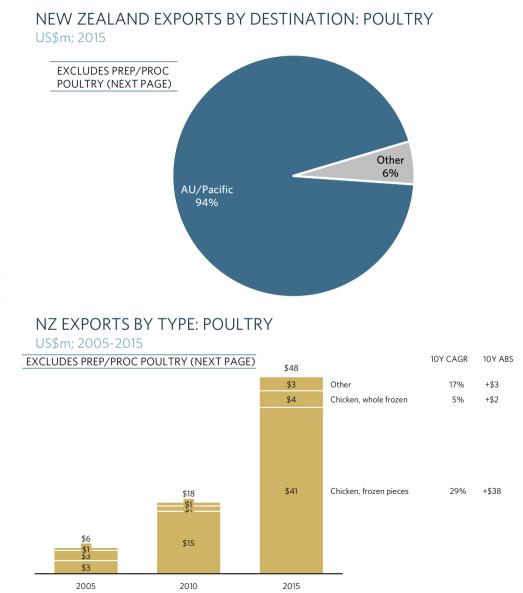
EXAMPLE PRODUCTS 2017



CORIOLIS 🕥 44

Source: UN Comtrade database; Coriolis classifications and analysis

New Zealand's poultry meat exports mostly go to Australia and the Pacific Islands; there appears to be widespread opportunities for growth worldwide



NZ Share 0% 0% 0% 0% 0% 0% 'n SE Asia North Am C/S Am Europe AU/Pac NA/ME/CA Asia Import value

GLOBAL REGIONAL IMPORT VALUE VS. NZ SHARE

EXAMPLE PRODUCTS: TEGEL 2017

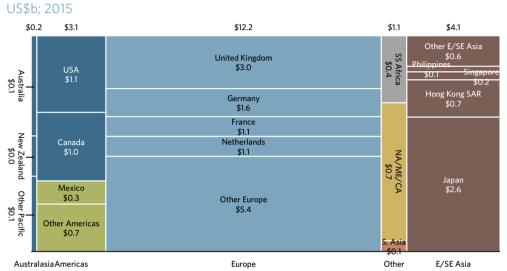
US\$نی% of US\$; 2015



Source: UN Comtrade database; photo credit (fair use; low resolution; complete product/brand for illustrative purposes); Coriolis classifications and analysis

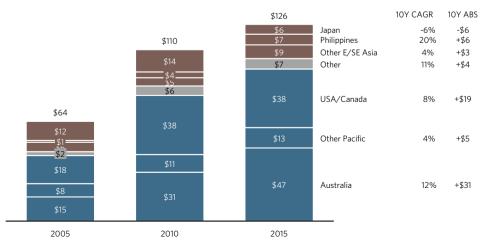
0%

S. Asia SS Africa New Zealand trails peer group countries in converting its abundant raw meat into prepared/processed, ready-to-heat or ready-to-eat meat-based products; however, the country is catching up fast

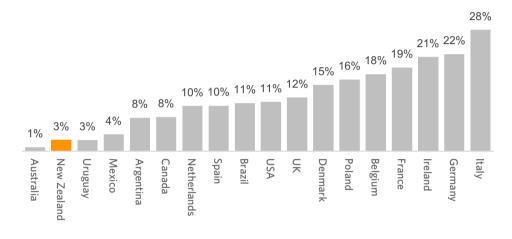


### WORLD MARKET FOR PROCESSED MEATS: KEY IMPORTERS

# NZ EXPORTS BY DESTINATION: PREP/PROC MEATS US\$m; 2005-2015



# SHARE OF MEAT EXPORTS WHICH ARE PREP/PROCESSED % of US\$; 2015



# EXAMPLE PRODUCTS: HELLERS 2017



# New Zealand Growth & Innovation

- + Horizons for growth
- + Emerging export stars
- + New viable options
- + Mega-trends driving change
- + Innovation & new products



New Zealand firms continue to develop a range of innovative new meat products

### THREE HORIZONS OF GROWTH

 Beyond its mature core export products (Horizon 1), New Zealand has both a strong range of emerging export stars (Horizon 2) and continues to innovate and produce new, viable export options (Horizon 3)

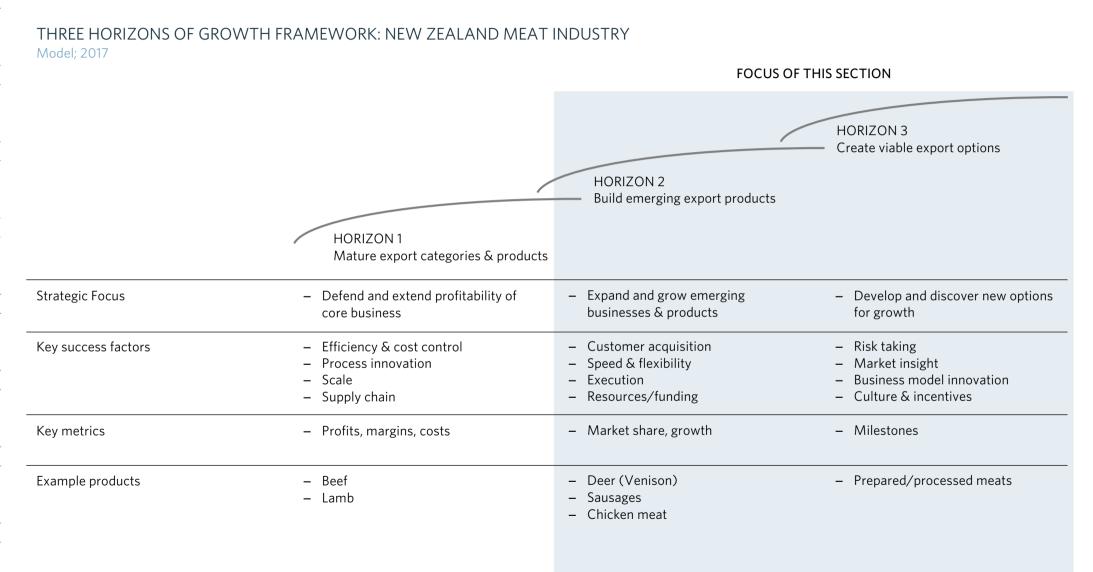
### **HORIZON 2: EMERGING EXPORT STARS**

- In Horizon 2, New Zealand is building a range of emerging export products
- Two meat products chicken (in various forms) and sausages emerge as "growth stars" from an evaluation of ten years of productlevel trade growth
- Chicken meat and processed product exports are growing and the product plays to New Zealand strengths as a safe, reliable meat supplier (free of diseases)
- In a virtuous circle, the growth of New Zealand chicken exports has triggered reinvestment in new packaging and new product innovation
- New Zealand sausage exports are growing, though they currently go primarily to Australia, Japan and the Pacific Islands

### **HORIZON 3: NEW, VIABLE OPTIONS**

- In Horizon 3, New Zealand is creating and nurturing a wide range of viable options for future export success
- Four broad global consumer mega-trends are driving growth and new product development in the food & beverage industry
- New Zealand meat products succeeding on-shelf in export markets are aligned with these trends
- These trends drive new product development, through (1) packaging,
   (2) product, (3) category and (4) channel innovation; success,
   however, often comes down to implementation and execution
- New Zealand meat firms are delivering on...
  - Packaging-driven innovation
  - Product-driven innovation
  - Category and channel innovation

Beyond its mature core (Horizon 1) export products, New Zealand has both a strong range of emerging export stars (Horizon 2) and continues to innovate and produce new, viable export options (Horizon 3)



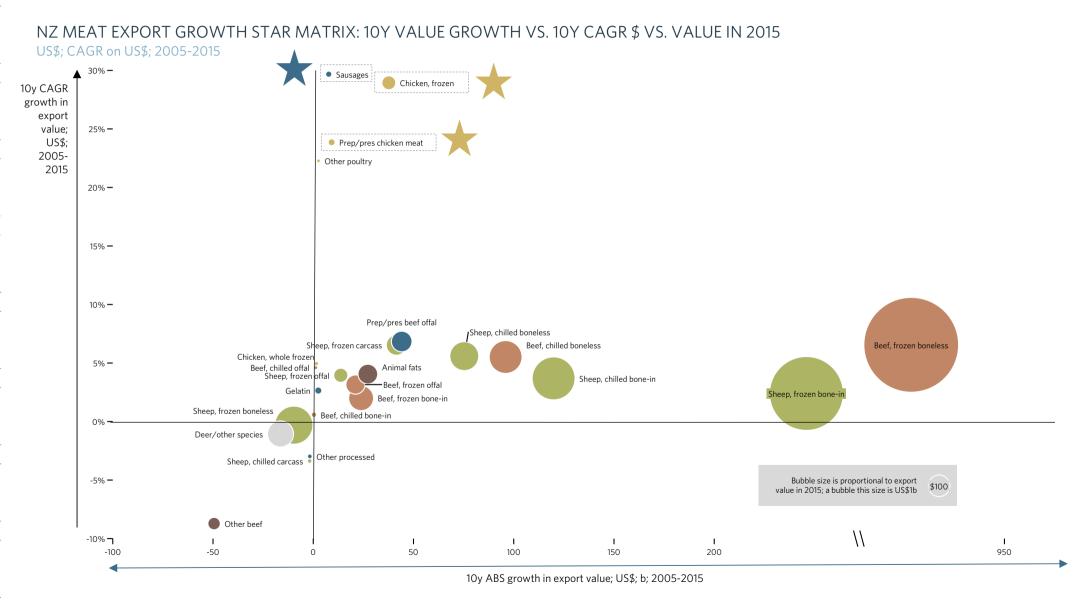
### In Horizon 2, New Zealand is building a range of emerging export products

#### HORIZON 3 Create viable export options **HORIZON 2** Build emerging export products HORIZON 1 Mature export categories & products Strategic Focus - Defend and extend profitability of Expand and grow emerging - Develop and discover new options businesses & products core business for growth Key success factors - Customer acquisition - Risk taking Efficiency & cost control Process innovation Speed & flexibility Market insight \_ \_ Business model innovation Scale Execution \_ \_ Resources/funding Culture & incentives - Supply chain Key metrics - Profits, margins, costs – Market share, growth Milestones Example products - Beef - Deer (Venison) Prepared/processed meats Sausages – Lamb \_ Chicken meat

### THREE HORIZONS OF GROWTH FRAMEWORK: NEW ZEALAND MEAT INDUSTRY Model; 2017

Source: McKinsey & Co.; Coriolis analysis

Two meat products – chicken (in various forms) and sausages – emerge as "growth stars" from an evaluation of ten years of product-level trade growth



Note: Data on this page is product level trade codes, not segment level aggregates as presented earlier; Source: UN Comtrade database (from NZ Customs data); Coriolis classifications and analysis

CORIOLIS 🕥 5

Chicken meat and processed product exports are growing and the product plays to New Zealand strengths as a safe, reliable meat supplier (free of diseases)



CORIOLIS () 52

In a virtuous circle, the growth of New Zealand chicken exports has triggered reinvestment in new packaging and new product innovation

### EXAMPLE: TEGEL EXPORT VALUE OF CHICKEN PRODUCTS

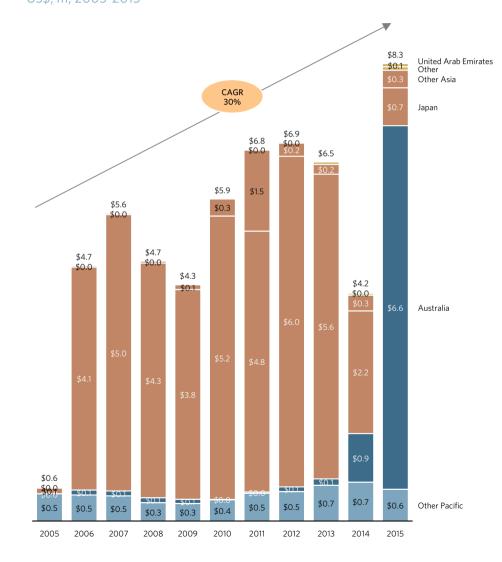
NZ\$m; exports Select; Feb 2017

2011	2012	2013	2014	2015	2016	2017
~\$20*m	~\$50*m	~\$60*m	~\$70*m	\$88m	\$102m	N/A
AFFINITY EQUITY PARTNERS				NZraised FREE RANGE		
<ul> <li>Staff 1,550</li> <li>Exports to Pacific Islands (started 2003), Hong Kong</li> </ul>	<ul> <li>R&amp;D facility commissioned to drive product innovation</li> <li>Invested \$20m in new</li> </ul>	<ul> <li>New sausage plant upgraded in New Plymouth (old Top Hat Foods premise)</li> </ul>	<ul> <li>Start exporting to UAE (Spinney's)</li> <li>Tegel win Supreme Exporter Award</li> </ul>	<ul> <li>Launch new value added Free range chicken "Tegel" brand</li> </ul>	<ul> <li>May 2016 listed on NZX/ASX</li> <li>2,300 staff</li> </ul>	<ul> <li>Developing Philippines (QSR), Japan (QSR)</li> <li>Market access to</li> </ul>
(started 2006) Australia (started 2009)	production line in Henderson plant - 350t/wk processed at	<ul> <li>Tegel #2 sausage supplier</li> </ul>			<ul> <li>Launch new brand imagery and packaging</li> </ul>	Bahrain and South Africa
<ul> <li>Affinity Equity</li> <li>Acquire Tegel for</li> <li>\$600m from PEP</li> </ul>	new plant, 75% exported – Added 300 people at				<ul> <li>Key export market Australia \$74m (Aldi, Costco),</li> </ul>	<ul> <li>Access to fresh chicken market in Australia</li> </ul>
	site jobs to total 2,000				<ul> <li>The Pacific Islands, UAE, Hong Kong</li> </ul>	<ul> <li>Installed new breast deboner</li> </ul>
	<ul> <li>Expanded cooked range for QSR, battered nuggets,</li> </ul>				<ul> <li>Expand in UAE foodservice channel (Country Hill)</li> </ul>	<ul> <li>Invested in new breeder farm</li> </ul>
	"Takeouts" and "Cuisine"				<ul> <li>New product initiatives for retail, foodservice</li> </ul>	<ul> <li>Strong growth projections</li> </ul>
	<ul> <li>Launched "Pure New Zealand Premium Chicken in HK"</li> </ul>				and QSR	

CORIOLIS 53

New Zealand sausage exports are growing, though they currently go primarily to Australia, Japan and the Pacific Islands

## NEW ZEALAND EXPORT VALUE BY MARKET: SAUSAGES US\$; m; 2005-2015



# EXAMPLE NEW ZEALAND PRODUCTS AVAILABLE: HELLERS Select; Feb 2017





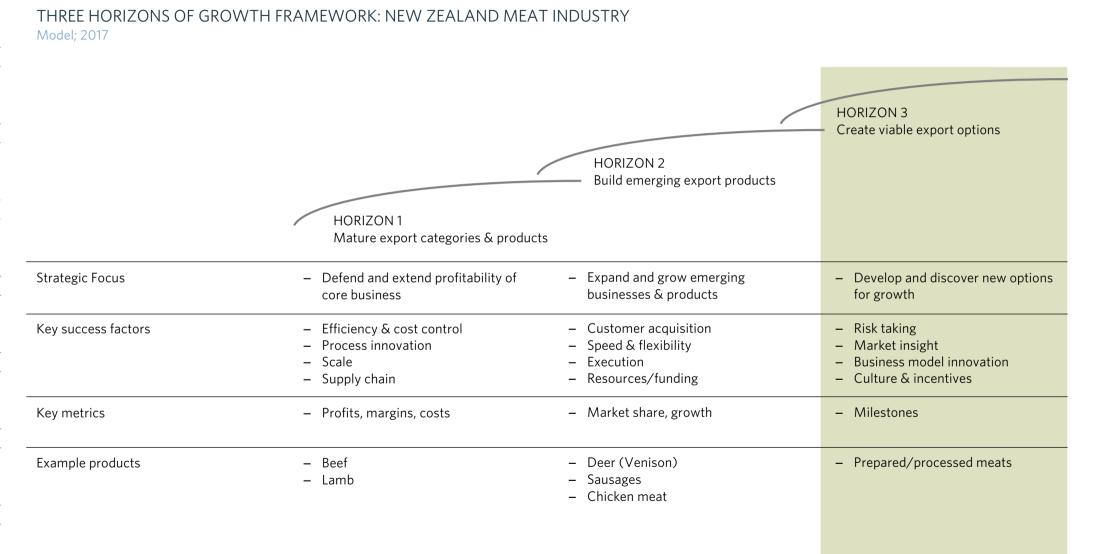








### In Horizon 3, New Zealand is creating and nurturing a wide range of viable options for future export success



#### Source: McKinsey & Co.; Coriolis analysis

### CORIOLIS 55

# Four broad global consumer mega-trends are driving growth and new product development in the food & beverage industry



#### **HEALTH & WELLNESS**

I am concerned about my health and am trying to live a healthy lifestyle

- Mid-high income countries experiencing an aging population
- Spread of Western lifestyle and Western diseases of affluence (e.g. diabetes)
- Ongoing waves of media hype around fad diets and new "superfoods"
- Food presented and viewed as both the problem and the solution
- May be addressing specific conditions (e.g. weight management; cholesterol)
- May target a specific family member (e.g. grandparent)
- May reflect wider "healthy living" worldview

#### FOUR CONSUMER FOOD & BEVERAGE MEGA-TRENDS



I am mindful of where my food comes from and how it is produced

- Dramatic global shift to city living; 1800=3%, 1900=14%, 2015=50%; developed nations 75%+; 400 cities 1m+
- Loss of attachment to the land and food production
- Ongoing "rights revolution" now spreading to animals
- Ongoing waves of food scares around contamination, additives
- May target specific foods perceived as high risk, unethical or visible (e.g. coffee, eggs)
- May target specific farming systems (e.g. grass-fed/free-range)
- May target a specific family member (e.g. child)



#### **EASY & CONVENIENT**

I am trying to achieve work-life balance and need quick-and-easy meal solutions

- Dramatic increase in female participation in the workforce globally
- Consumers working longer hours to maintain relative income
- Work hours no longer just "9 to 5"; food needs at all times (e.g. night shift)
- Rise in snacking and on-the-go meal occasions
- May represent a need for an immediate solution (e.g. hungry)
- May represent an easy solution to a future challenge (e.g. children's lunch)

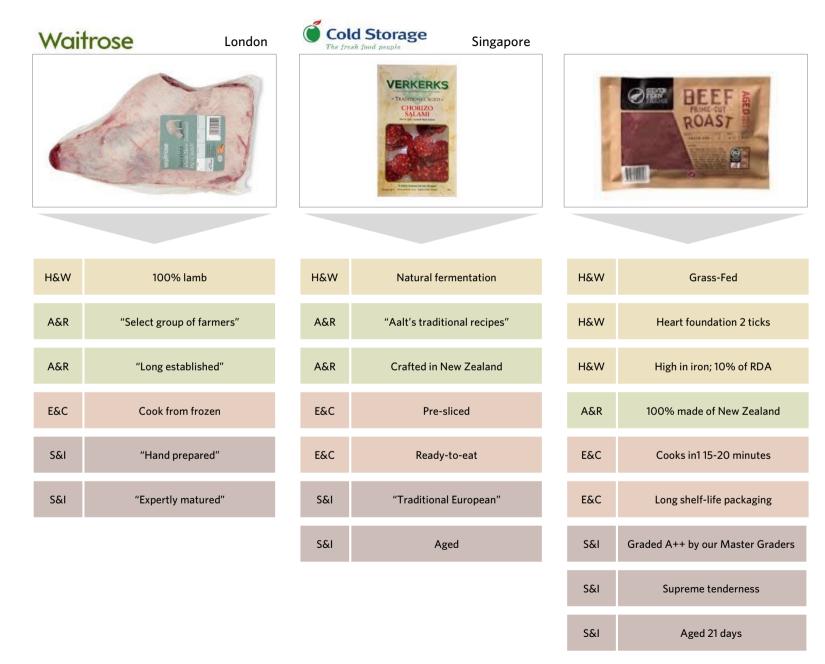


#### SENSORY & INDULGENT

I like to indulge in rich and sumptuous living beyond the bare necessities

- Growing income polarisation into "haves and have-nots"
- Strongly emerging trend to premium (and discount) at the expense of the mid-market
- Emerging middle class across developing world driving consumption growth
- Incredible power of food and beverages in many social settings
- May range from "everyday luxury" to an occasional "treat"
- May be used to demonstrate social status, taste or style (e.g. wagyu beef)

New Zealand meat products succeeding on-shelf in export markets are aligned with these trends

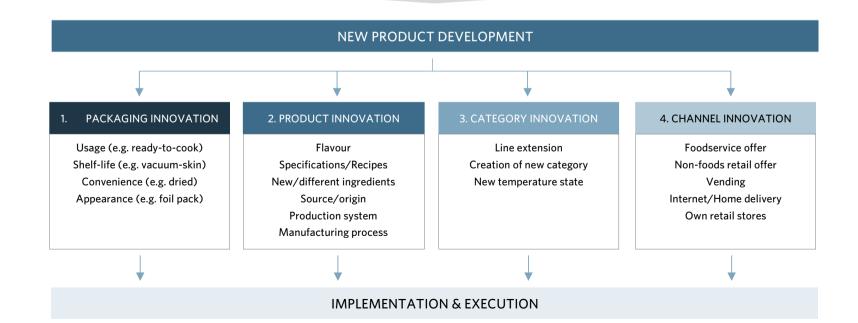


These trends drive new product development, through (1) packaging, (2) product, (3) category and (4) channel innovation; success, however, often comes down to implementation and execution

CONSUMER FACING INNOVATION IN THE FOOD & BEVERAGE INDUSTRY FROM TREND TO EXECUTION Simplified model; 2017



CONSUMER FOOD & BEVERAGE MEGA-TRENDS



### New Zealand meat firms are delivering on packaging-driven innovation

#### 1. PACKAGING INNOVATION

# SELECT EXAMPLES OF PACKAGING INNOVATION: NEW ZEALAND MEAT FIRMS 2017

### COMMENTARY

- Traditionally New Zealand produced transport-friendly frozen meat products (e.g. frozen lamb primals)
- Driven by location and use of sea freight (for cost competitiveness reasons)
- Emergence of new packaging forms, materials and technologies is ongoing globally
- Creating opportunities for long distance exports from New Zealand to key markets
- Further innovation in longer shelf-life, in particular, would enable further penetration of New Zealand produced consumer-ready products into new markets
- New packaging is often linked with new processing technologies



### INSIGHTS

- Skin packaging technology
- Easier view of shape and quality of meat
- Reduce need for trays, soakpads and cellophane
- Affco invested \$1m in new equipment
- Allows range increases in value added meat cuts
- Focus on consumers vs wholesalers





### INSIGHTS

- Tegel new modern product packaging design
- Appealing to younger audience
- Product description stands out

#### INSIGHTS

- Heller's Angus Pure meatballs
- Individually packed meatballs, non-stick packaging, maintains shape of ball
- Convenient packaging and presentation

Source: various articles or reports; photo credit (fair use; low resolution; complete product/brand for illustrative purposes); Coriolis classifications and analysis



#### 2. PRODUCT INNOVATION

# SELECT EXAMPLES OF PRODUCT INNOVATION: NEW ZEALAND MEAT FIRMS 2017

#### COMMENTARY

- Large brands are innovating in the drive to increase value added product lines
- Innovative products target a gap in the market (e.g. premium meat products, demand for convenient snacking)
- Innovation is supported in New Zealand by government supported programs (e.g. MPI's PGP programs and NZ Food Innovation Network facilities)
- Innovation often enabled by availability of new technology or science
- Emergence of new packaging forms, materials and technologies (e.g. aseptic pouch) is ongoing globally







### INSIGHTS

- Alliance Group, Headwaters New Zealand and MPI (PGP) program
- Producing a carcass lower in saturated fat, higher in polyunsaturated fat and packed with omega-3 oils
- Investing \$25m over 7 years
- Targeting New Wealth with High Health -Tapping into increasing demand for premium and healthy foods adding value to exports
- Lamb range in line with health and wellness plus sensory and indulgent

### INSIGHTS

- Tegel new free range products and ingredients claiming:
  - Animal welfare launch "NZ raised Free Range"
  - Premium 100% chicken breast
  - Healthy "No added hormones"
  - Superfood quinoa crumbed
- Appeal to quality-conscious consumers
- "Meal Maker" range of ready to eat products in line with convenience megatrend
- In-line with health and wellness mega-trend

#### INSIGHTS

- Silver Fern Farms New Zealand's largest meat company
- "Flat iron aged steak" adding to the range of premium meats featuring "Eating Quality mark, grass-fed, aged
- Reinventing this traditionally lower grade of meat
- +40% of prime beef being sold chilled and +30% of lamb sales



# SELECT EXAMPLES OF CATEGORY & CHANNEL INNOVATION: NEW ZEALAND MEAT FIRMS 2017

### Coastal Spring Lamb

- Coastal Spring lamb founded by co-owners Richard and Suze Redmayne
- Produce a total of 90,000 lambs throughout the year from 12 farm suppliers for domestic and eight export markets
- Strength in provenance and traceability "Growers Story -"Our Families" "Our Farms"; able to track the meat back to the farm via the QR code
- Multiple awards in New Zealand Food Awards 2016



#### Atkins Ranch appealing to high value audience

- Atkins, owned by Progressive Meats, sources lamb from over 100 families; primary processing in NZ plant and shipped to USA for further processing
- Atkins Ranch promote "Pasture raised Lamb", "100% Grass Fed" hormone free, antibiotic free, traceable back to farm (FarmIQ); Non-GMO accreditation in USA (2016) with third party verification
- Certified for GAP step 4 sheep program (2016); gives consumers confidence animals are raised in accordance with strict animal welfare standards
- Exports to Whole Foods Market (USA) plus Canada, markets with high animal welfare requirements



3&4. CATEGORY & CHANNEL INNOVATION

#### Magill's Butchery slow-cooked pulled beef range

- Magill's is a family owned "Premier Artisan Butchery" producing a range of Prime beef, lamb, pork and poultry based in the Waikato
- Company was looking for a way to add value to the subprimal cuts. Developed slow-cooked pulled ready to eat beef (reheat in 3 minutes)
- 'Haute cuisine' presentation and packaging
- Slow-cooked pulled Hereford beef NZ Food Awards 2015 Chilled Winner and Supreme Winner
- Extended range nationally and into wholesale, and foodservice



#### Silver Fern "Reserve" range

- Silver Fern Farms reserve range- differentiating a premium beef offer - only the finest cuts included in the program

FARMS RESERVE

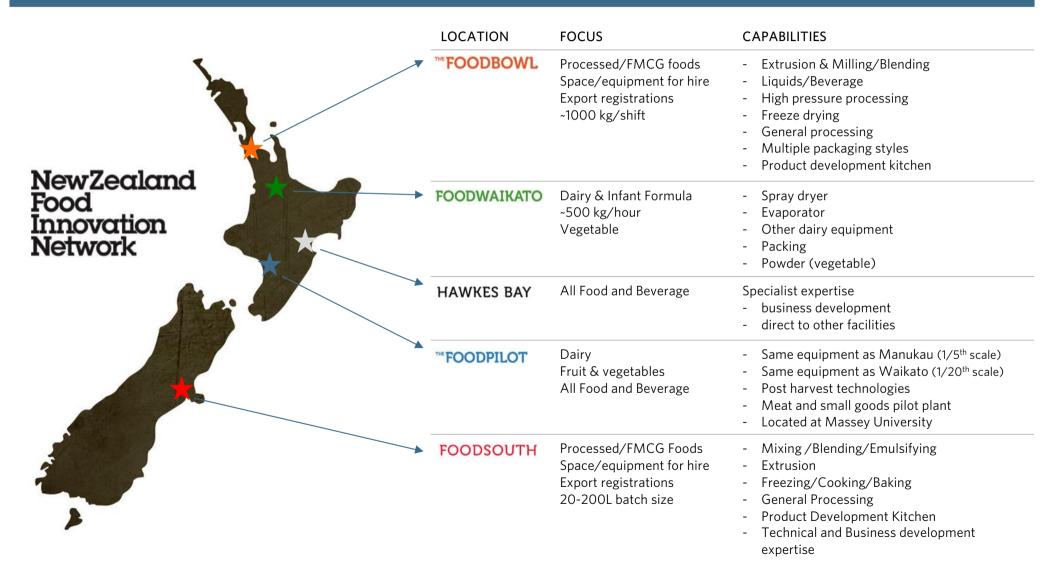
- Featuring :
- "Eating Quality System" stamp (measures seven scientific criteria to predict the eating quality)
- 100% Made of New Zealand
- Grass fed
- Hormone free
- No antibiotic feeding



Source: various articles or reports; photo credit (various firms or fair use; low resolution; complete product/brand for illustrative purposes); Coriolis classifications and analysis

New Zealand beverage firms are supported with access to advice, research facilities and pilot plants across five locations

NZFIN



# New Zealand Meat Firms

- + Enterprises
- + Employment
- + Production share
- + Turnover
- + Ownership

- + Foreign investors
- + Acquisitions
- + Investments
- + Firm Profiles



New Zealand has a strong and robust meat processing industry that continues to attract investment

### **OVERVIEW**

- The number of meat processing firms in New Zealand is growing and industry efficiency is improving, particularly in poultry
- New Zealand has a large and robust meat products industry with a wide range of participants of various sizes

### **KEY METRICS**

- Employment in meat processing in New Zealand is consolidating in red meat (fewer sheep), while growing in poultry and cured meats; poultry stands out for maintaining or improving efficiency
- Meat processing employs over 30,000 people spread across the country
- While meat processing employment is spread across a large number of firms, the top three meat processors account for over 50% of industry employment and the top eleven for 85%
- New Zealand has a reasonably consolidated meat industry, with a range of strong firms competing; however there appear to be further consolidation opportunities, particularly in lamb and beef
- Lamb processing share continues to change across the industry
- Beef processing share continues to change across the industry

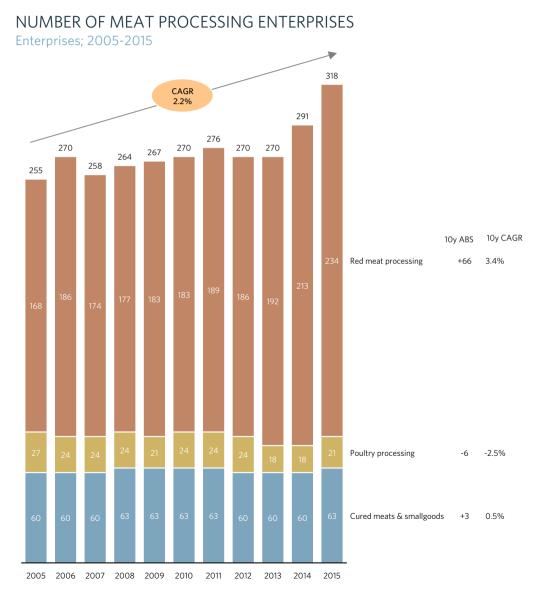
### FIRMS

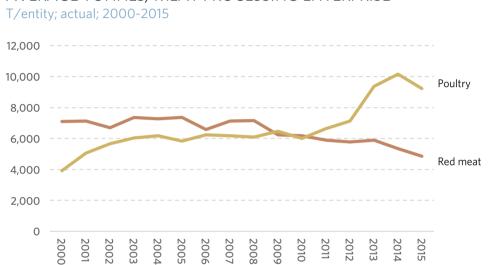
- Silver Fern Farms continues to be the largest meat firm in New Zealand by turnover
- The New Zealand meat industry has an almost even split of foreign and private ownership, while the largest two firms are farmer cooperatives

### INVESTMENT

- The New Zealand meat industry has attracted international investment, primarily from China and Japan
- New foreign firms continue to invest in the New Zealand meat industry
- Almost \$600m of acquisitions occurred over the last 18 months; overseas firms are looking to secure New Zealand beef and lamb and strengthen their global agrifood position
- Firms are continuing to invest in plant and equipment
- New Zealand meat firms are also investing in new and improved marketing

The number of meat processing firms in New Zealand is growing and industry efficiency is improving, particularly in poultry

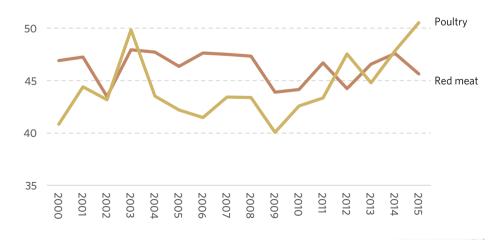




# AVERAGE TONNES/MEAT PROCESSING ENTERPRISE

AVERAGE TONNES/MEAT PROCESSING EMPLOYEE

T/employee; actual; 2000-2015



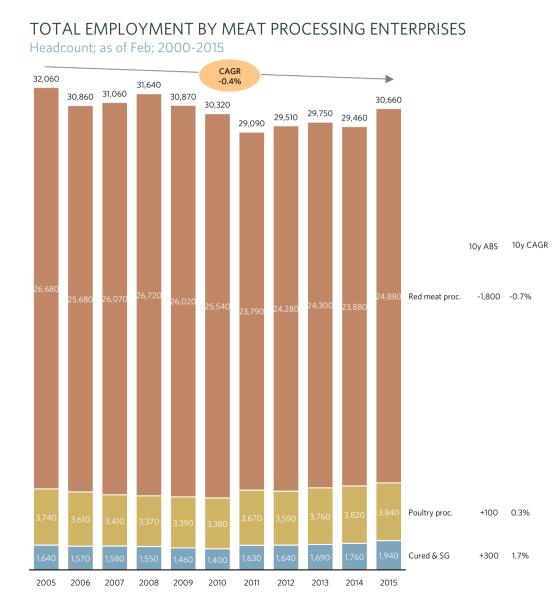
New Zealand has a large and robust meat products industry with a wide range of participants of various sizes

### DEFINED MEAT

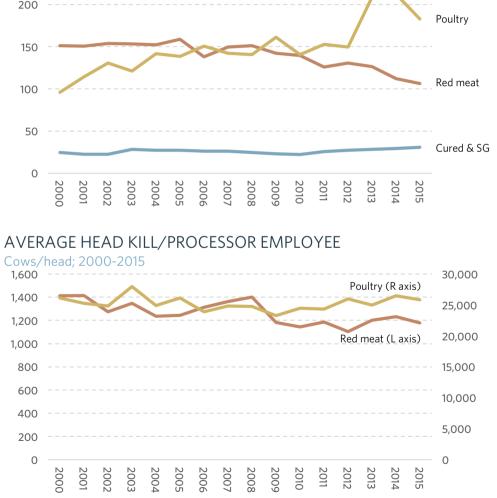
**DEFINED PROCESSED FOODS** 

MULTI SPECIES PROCESSORS	SPECIES SPECIFIC PROCESSORS			PROCESSED – BABY FOOD/MEAT BASED	
	POULTRY	PORK	BEEF	MEALS/PIES	
Alliance Group RECEDS SILVER FARMS	INCHAM'S Houst of the Table	Fresh Pork nz NZ's Pork Specialist	Greenlea	Only Organic. Watties Leader:	
TAYLOR PRESTON	Tegel'	Five Star Pork		Goodtime Mis Coupland's	
BXFOODS	Turk's	*	LAMB	Franklin Foods The lovely little food co.	
Cabernet Foods PRIME RANGE WILSON HELLABY	<b>Brink's</b>		Integrated Foods Ltd	PROCESSED – BEEF JERKY	
MEATS LTD — Jew Lyaland —				JACKLINKS	
MARKETERS AND EXPORTERS	VALUE ADDED MEAT PRODUCTS			J	
DAVMET NEW SEALANS LINITES	VERKERKS Hellers		BEEHIVE	PROCESSED - PET FOOD	
DAWMET HIGH SZALAHS LIMITES	Colonial Exect & Haw	SOURCE AND SUPPLY FOOD	LEONARD'S	MARS new zealand Good Food, Good Life	

Employment in meat processing in New Zealand is consolidating in red meat (fewer sheep), while growing in poultry and cured meats; poultry stands out for maintaining or improving efficiency



### AVERAGE EMPLOYEES/PROCESSOR Head/unit; 2000-2015



### Meat processing employs over 30,000 people spread across the country

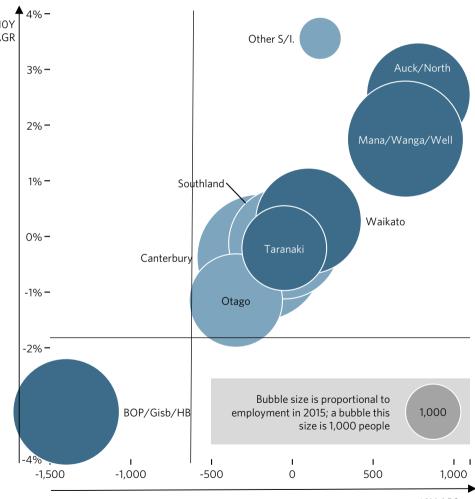
### Headcount; as of Feb; 2016 17,620 12,683 Other S/I. 10Y 583 CAGR Auckland/Northland Canterbury 5,200 Waikato BOP/Gisb/HB 3,710 Otago 2,850 Taranaki 2,350 Southland 4,050 Mana/Wanga/Well 4,400

North Island

South Island

### **10Y CHANGE IN MEAT PROCESSING EMPLOYMENT BY REGION**

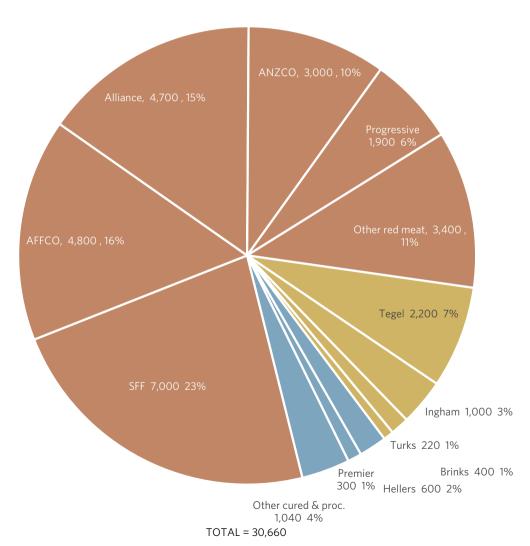
ABS; CAGR; 2016 total; Headcount; as of Feb; 2006 vs. 2016



#### 10Y ABS

MEAT PROCESSING EMPLOYMENT BY REGION

While meat processing employment is spread across a large number of firms, the top three meat processors account for over 50% of industry employment and the top eleven for 85%

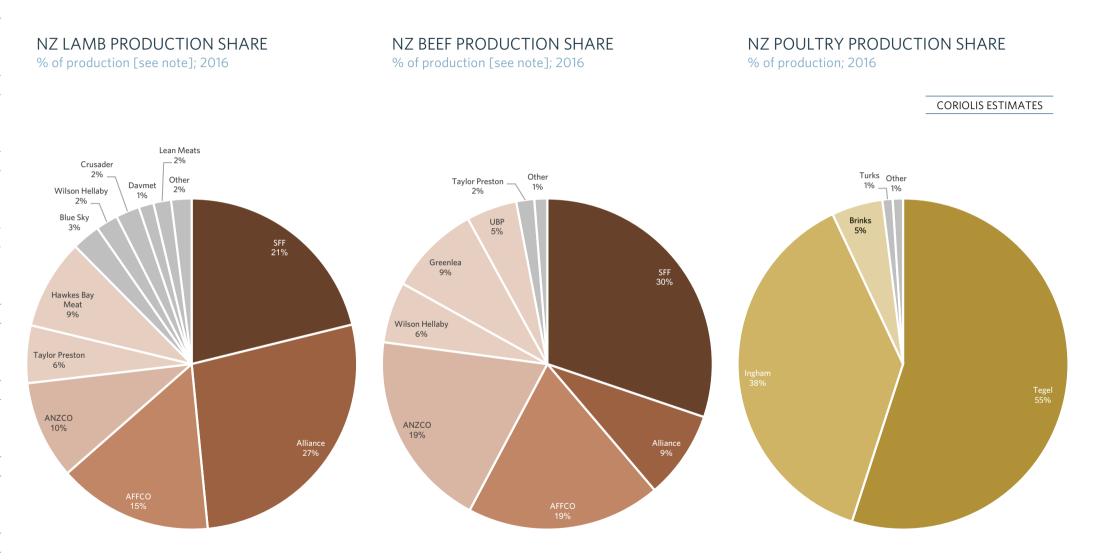


# NUMBER OF PEOPLE EMPLOYED: NZ MEAT MANUFACTURING BY KEY FIRM People; 2016

### COMMENTS/NOTES

- Figures are at peak employment and include seasonal workers
- Talley's is an estimate (from sum of individual site employee figures across meat operations)
- Progressive Meats is an estimate (from sum of individual site employee figures across meat operations)

New Zealand has a reasonably consolidated meat industry, with a range of strong firms competing; however there appear to be further consolidation opportunities, particularly in lamb and beef

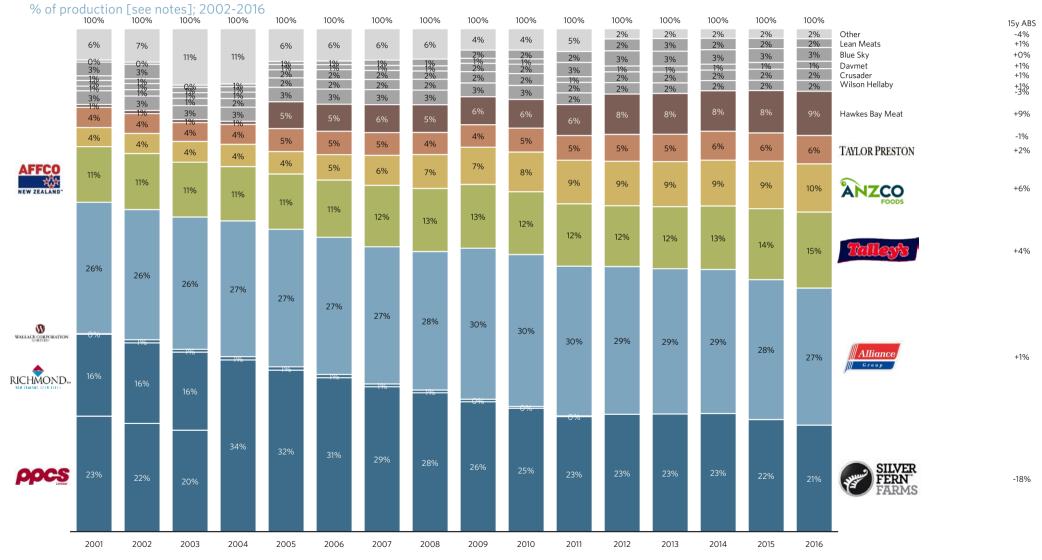


Note: The NZ Meat Board allocates access to quota market on the basis of production history for the three prior seasons; the data here can therefore be seen as a moving average for the three previous years; Source: New Zealand Meat Board EU Sheepmeat and Goatmeat TRQ Allocation data; Coriolis estimates & analysis

CORIOLIS () 70

### Lamb processing share continues to change across the industry

### NEW ZEALAND LAMB PRODUCTION MARKET SHARE

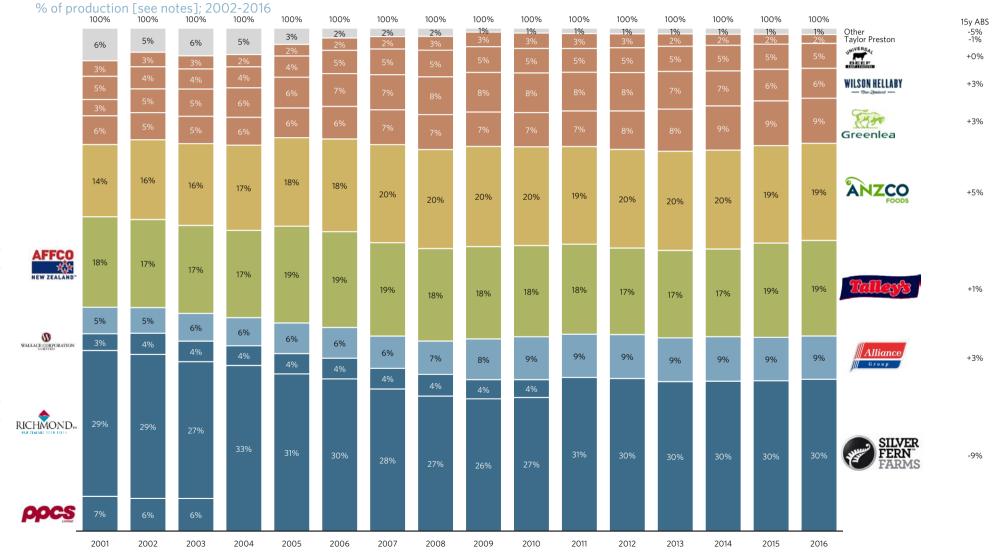


Note: The NZ Meat Board allocates access to quota market on the basis of production history for the three prior seasons; the data here can therefore be seen as a moving average for the three previous years; Source: New Zealand Meat Board EU Sheepmeat and Goatmeat TRQ Allocation data; Coriolis analysis

CORIOLIS () 71

### Beef processing share continues to change across the industry

NEW ZEALAND BEEF PRODUCTION MARKET SHARE



Note: The NZ Meat Board allocates access to quota market on the basis of production history for the three prior seasons; the data here can therefore be seen as a moving average for the three previous years; Source: New Zealand Meat Board US Beef TRQ Allocation data; Coriolis analysis

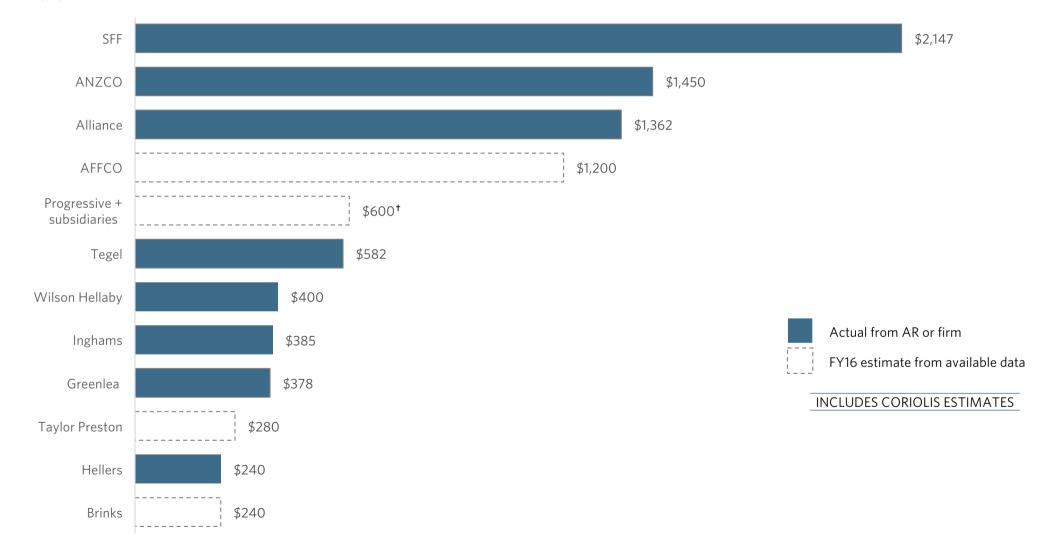
CORIOLIS () 72

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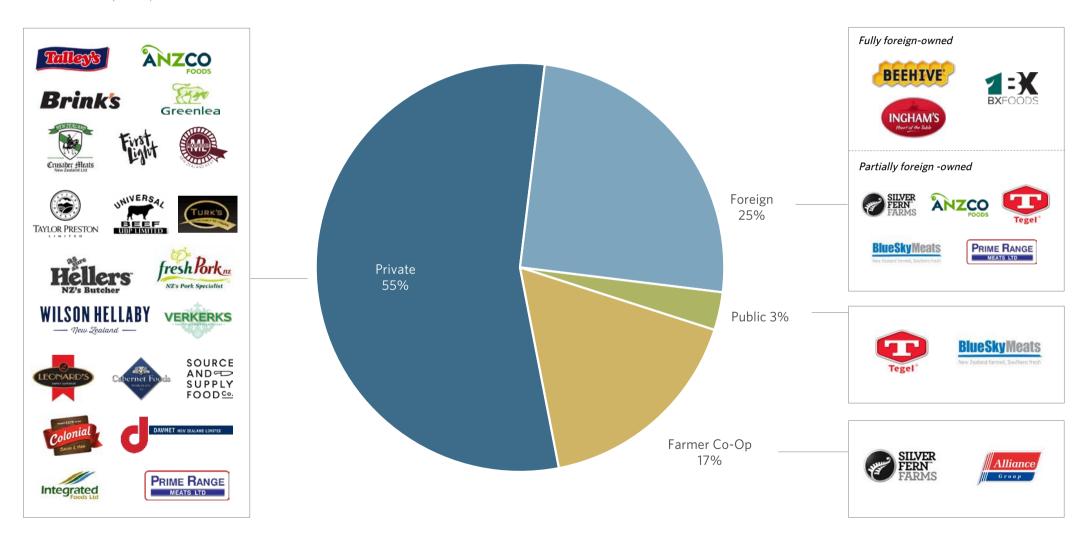
## Silver Fern Farms continues to be the largest meat firm in New Zealand by turnover

### ANNUAL TURNOVER BY KEY FIRMS: NEW ZEALAND MEAT INDUSTRY

NZ\$; m; FY2016 or as available



The New Zealand meat industry has a wide range of owners; the largest two firms are farmer co-operatives



## ESTIMATED PROPORTIONAL SHARE OF TOTAL INDUSTRY TURNOVER BY OWNERSHIP % of turnover/sales; 2016

*Source: New Zealand Companies Office; various annual reports; Coriolis estimates and analysis* 

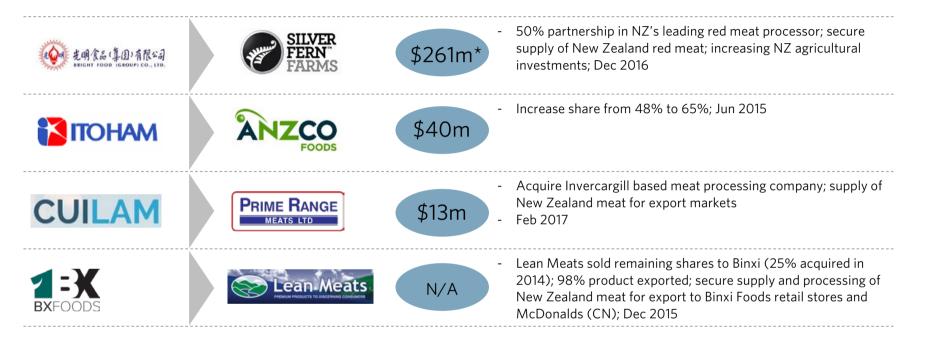
The New Zealand meat industry has attracted international investment, primarily from China and Japan



## New foreign firms continue to invest in the New Zealand meat industry



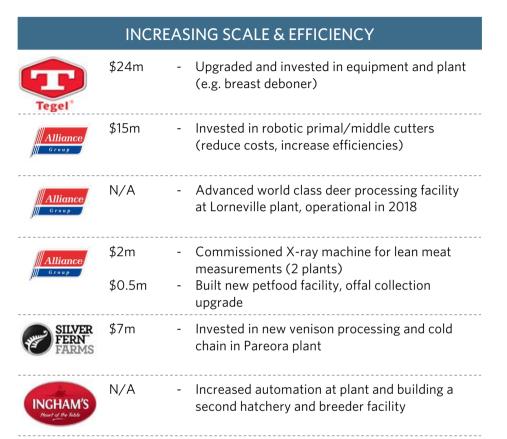
Over \$300m of acquisitions occurred over the last 18 months; overseas firms are looking to secure New Zealand beef and lamb to strengthen their global agrifood position





## Firms are continuing to invest in plant and equipment

I	EXTENDING V	ALUE ADDED CATEGORIES
Tegel'	\$3.5m -	Relaunched brand and developed new products
AFFCO	\$1m -	Developed new retail ready skin packaging technology, support move into value added retailing
SILVER FERN- FARMS	N/A -	Developed numerous value added products to export to China; discussing new value added plant



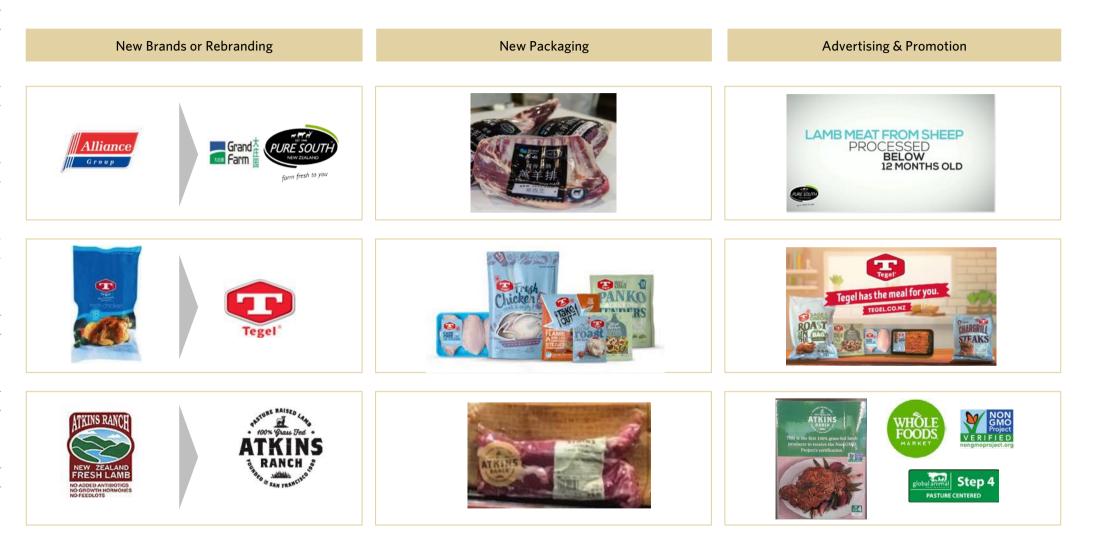
### SECURING SUPPLY

\$6-8m

 Announced upgrade to Oamaru Meats (formerly Lean Meats) facility over the next two years

Source: Annual reports, articles, interviews

## New Zealand meat firms are also investing in new and improved marketing



# New Zealand Meat Firm Profiles

Note: Firms are listed in alphabetical order; some firms appear in multiple sector reports; inclusion of profile in this report does not necessarily mean the firm's metrics are included in the sector's analysis

05

A VERKERK LTD			BINXI FOODS NZ LTD BXFOODS
Terry Pierson Chief Executive Officer	David Surveyor Chief Executive Officer	Peter Conley Chief Executive Officer	Richard Thorp Chief Operating Officer/Director
DESCRIPTION: Producers of European continental smallgoods and meat products; supplies supermarket, foodservice and convenience channels	DESCRIPTION: 100% NZ farmer owned and supplied meat processor and exporter of lamb, beef and venison to 65 countries; 5,000 farmer shareholders and 8 processing sites; world's largest processor and exporter of sheep meat; "Pure South" premium brand	DESCRIPTION: Vertically integrated farming and manufacturing facilities; leading exporter of beef and sheep meat over 11 sites; 3 retail stores, 'Westmeat' and innovation centre; exports to over 80 countries; 8 offshore offices	DESCRIPTION: NZ subsidiary of Chinese vertically integrated beef business, feedlots, meat processing plants, fertiliser production and 100 retail stores; processing through Oamaru Meats Limited (OML), formerly Lean Meats; source from over 500 farms; exports to 50 countries
KEY PRODUCTS: Salami, continental sausages, gourmet meats, bacon, ham, protein snacks	KEY PRODUCTS: Lamb, sheep, beef and venison meat cuts, by-products and co-products; 1,600 products	KEY PRODUCTS: Beef, lamb, sheep meat, healthcare solutions, offal and co-products, prepared and gourmet foods	KEY PRODUCTS: Beef, lamb, veal, skins, pelts
OWNERSHIP: NZ; Private (Sundstrum, Mills, Verkerk)	OWNERSHIP: NZ; Co-operative (5,000 farmers)	OWNERSHIP: Japan; Public (Itoham 65%, Nippon Suisan Kaisha 17%); NZ; Private (Harrison 10%, JANZ 8%)	OWNERSHIP: China; Private (Heilongjiang Binxi Cattle Industry Co. Ltd)
COMPANY NUMBER: 125112	COMPANY NUMBER: 154786	COMPANY NUMBER: 656378	COMPANY NUMBER: 5526405
ADDRESS: 94 Vagues Road, Papanui, Christchurch	ADDRESS: 51 Don Street, Invercargill	ADDRESS: 1 Sir William Pickering Drive, Harewood, Christchurch	ADDRESS: 7 Redcastle Road, Oamaru North, Oamaru
PHONE: +64 3 375 0560	PHONE: +64 3 214 2700	PHONE: +64 3 358 2200	PHONE: +64 3 433 0078
WEBSITE: www.verkerks.co.nz	WEBSITE: www.alliance.co.nz; www.puresouth.com	WEBSITE: www.anzcofoods.com; www.westmeat.co.nz	WEBSITE: www.bxfoods.co.nz
YEAR FORMED: 1957	YEAR FORMED: 1948	YEAR FORMED: 1984/1995	YEAR FORMED: 2014
STAFF EMPLOYED: 120	STAFF EMPLOYED: 4,700	STAFF EMPLOYED: 3,000	STAFF EMPLOYED: 200
REVENUE: \$70-80m* (FY14)	REVENUE: \$1,362m (FY16)	REVENUE: \$1,450m (CY16)	REVENUE: \$80m
COMPANY HIGHLIGHTS: Currently launching new range of protein snacks	COMPANY HIGHLIGHTS: New strategy to maximise operational efficiency and capture more value from market in'15; \$15m investment in robotic primal/middle cutters online '16; new "Pure South" product lines for China, India '16; cobranding with GrandFarm; invested \$500,000+ to upgrade offal collection in '17; \$10.6 million processing upgrade at Dannevirke in '17	COMPANY HIGHLIGHTS: Acquired Itoham's half stake in Five Star Beef feedlot to take full control in '14; increased foreign owership to 82% approved in '15; plans to expand to meet growing Asian demand; continued investment into value added products, e.g. range of Angel Bay, Aria Farm, Nourish, Butcher's Hook etc. in '16	COMPANY HIGHLIGHTS: Acquired 100% of Lean Meats Oamaru in '15; looking to invest \$6-8m from '16-'18; acquired land next to Oamaru Meats for head office and staff accommodation, \$580,000 in '17

BLUE SKY MEATS	CABERNET FOODS	COASTAL LAMB TRADING	COLONIAL BACON & HAM CO
BlueSkyMeats New Zesland farmed, Southern fresh	Cabernet For da		Colonial Example Analy
Todd Grave Chief Executive Officer	Lyndon Everton Managing Director	Richard Redmayne Managing Director	Robert Corbett Managing Director
DESCRIPTION: Processor of lamb, veal, goat based in Invercargill; "Horizon" and 'Star" international brands; sheep processing plant in Morton Mains near Invercargill, capacity of 1.3m sheep/year; cattle processing plant in Gore, 35,000 cattle/year; Horizon Meats marketing subsidiary	DESCRIPTION: Meat wholesalers, processor, marketer; processes 120,000 sheep, 10,000 cattle, 30,000 pigs and others to distributors, processors and retailers throughout NZ annually; meat processing plants in Gladstone (Kintyre Meats), Wellington (TPL), Hastings (PML), Waikato	DESCRIPTION: Producer/marketers of lamb; 20 family farm suppliers in NI; retail and food service; exports to Hong Kong, Macau, China, Vietnam, Singapore, Thailand, Dubai, Belgium, Rarotonga; 30,000 lambs for domestic, 60,000 for export; Ovation toll processing for export, AFFCO domestic	DESCRIPTION: Bacon and ham manufacturer; retail and foodservice
KEY PRODUCTS: Lamb, beef, venison, veal, goat	KEY PRODUCTS: Carcass and boxed meat; sheep, beef, pork, other under "Pirongia", "Coldstream" "Hereford Prime"brands	KEY PRODUCTS: Lamb; Coastal Spring Lamb and Coastal Lamb	KEY PRODUCTS: Bacon, ham
OWNERSHIP: NZ; Public Unlisted (Lowe, Richardson, Zheng, Binxi Foods, others)	OWNERSHIP: NZ; Private (Everton, Richards)	OWNERSHIP: NZ; Private (Redmayne)	OWNERSHIP: NZ; Private (Corbett)
COMPANY NUMBER: 315886	COMPANY NUMBER: 1205992	COMPANY NUMBER: 6199007	COMPANY NUMBER: 909303
ADDRESS: 729 Woodlands-Morton Mains Road, Invercargill	ADDRESS: 530 Gladstone Road, Carterton	ADDRESS: Tunnel Hill, Beach Road, Turakina, Wanganui	ADDRESS: 109 Cavendish Drive, Manukau, Auckland
PHONE: +64 3 231 3421	PHONE: +64 6 372 7882	PHONE: +64 27 483 3660	PHONE: +64 9 278 3420
WEBSITE: www.bluesky.co.nz	WEBSITE: www.cabernet.co.nz	WEBSITE: www.coastalspringlamb.co.nz; www.coastallamb.com	WEBSITE: www.colonialbacon.co.nz
YEAR FORMED: 1986	YEAR FORMED: 2002	YEAR FORMED: 2010	YEAR FORMED: 1998
STAFF EMPLOYED: 350	STAFF EMPLOYED: 55	STAFF EMPLOYED: 2	STAFF EMPLOYED: 30
REVENUE: \$124m (FY16)	REVENUE: \$15-20m (FY16)	REVENUE: \$5-10m (FY16)	REVENUE: \$15-20m*
COMPANY HIGHLIGHTS: Acquired Clover Meats, sales of-\$12m, for \$3m Dec '14, renamed to Blue Sky Meats (Gore), adding beef and venison processing capabilities; built chilled meat facility at Morton Mains plant in '15; NZ Binxi (Oamaru) Foods, subsidiary of Heilongjiang Binxi Cattle Industry Co withdrew \$25.3m, 100% takeover bid in Mar '17	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Started exporting in '15, 60,000 lambs; won Supreme Winner award and two other category wins at NZ Food Awards in '16; cobranding working relationship with Heller's, starting with Coastal Lamb Hotpot sausages	COMPANY HIGHLIGHTS:



CRUSADER MEATS NEW ZEALAND LTD	DAVMET NEW ZEALAND LTD	FIRST LIGHT FOODS	FIVE STAR PORK (NZ) LTD
Cristor Heats New Sealant List		First	Five Star <u>Pork</u>
John Ramsey Managing Director	lan McGarvie Managing Director	Gerard Hickey Managing Director	Kevin Monks Acting General Manager
DESCRIPTION: Processor and exporter of lamb, sheep, venison and goat; LANZ Supreme, LANZ Finest, King Country Meats brand; exports to Europe, UK, USA, Canada, Japan, Mexico, Pacific Rim	DESCRIPTION: Lamb broker and wholesaler; export chilled and frozen lamb cuts; Hawke's Bay Natural Lamb brand; toll processed by Progressive Meats	DESCRIPTION: Producers and marketers of venison and grass fed wagyu beef; sales team in NZ, USA & UK; 200 farmer suppliers; out sources processing to third party operators	DESCRIPTION: Supplier of fresh pork to food service across upper North Island; specialist pork only cutting room
KEY PRODUCTS: Lamb, mutton, venison, goat, pelts, wool	KEY PRODUCTS: Chilled lamb cuts, frozen lamb cuts	KEY PRODUCTS: Wagyu beef, venison	KEY PRODUCTS: Whole and split carcasses, primal and custom cuts
OWNERSHIP: NZ; Private (Ramsey)	OWNERSHIP: NZ; Private (Francis, McGarvie)	OWNERSHIP: NZ; Private (Hickey 64%, Ross 25%, Evans 11%)	OWNERSHIP: NZ; Private (37 pig farmer suppliers)
COMPANY NUMBER: 711318	COMPANY NUMBER: 404292	COMPANY NUMBER: 1549391	COMPANY NUMBER: 981924
ADDRESS: 979 State Highway 30, Benneydale, Te Kuiti	ADDRESS: 74 Station Street, Napier	ADDRESS: 211 Market St, South Hastings	ADDRESS: 3 Andromeda Crescent, East Tamaki, Auckland
PHONE: +64 7 878 7077	PHONE: +64 6 835 8288	PHONE: +64 6 878 2712	PHONE: +64 9 253 9001
WEBSITE: www.crusadermeats.co.nz	WEBSITE: www.davmet.co.nz	WEBSITE: www.firstlight.farm	WEBSITE: www.fivestarpork.co.nz
YEAR FORMED: 1967	YEAR FORMED: 1989	YEAR FORMED: 2004	YEAR FORMED: 1999
STAFF EMPLOYED: 170	STAFF EMPLOYED: 8	STAFF EMPLOYED: 30	STAFF EMPLOYED: 21
REVENUE: \$90-\$100m* (FY14)	REVENUE: \$50-60m (FY16)	REVENUE: \$50m (FY16)	REVENUE: N/A
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Recent company rebrand; NZ FMCG product launch in '16; First Light Wagyu and LIC partnership as part of a PGP program to increase quality of dairy beef in '17	COMPANY HIGHLIGHTS:



FRESH PORK NEW ZEALAND	GREENLEA GROUP Creenlea Tony Egan Managing Director	HELLERS LTD FRANCATIRA John McWhirter Chief Executive Officer	Adrian Revell Managing Director NZ
DESCRIPTION: Nationwide specialist in NZ pork processing and marketing, one third of NZ pig production; vertically integrated with operations in Timaru, Burnham, Christchurch, Levin and Auckland	DESCRIPTION: Meat processor based in the Waikato, two plants in Morrinsville & Hamilton; farm operations; exports 90% to 40 countries, primarily USA, Korea, Indonesia, Canada, Malaysia, Taiwan; 100% grass fed and antibiotic and hormone free	DESCRIPTION: Bacon, ham and smallgoods manufacturer; 600t/week manufacturing; Santa Rosa Poultry operation; ready meals via "My Main Course" brand plus sauces and marinades via new acquisition of "Flavour House"; exporting sausages to Australia	DESCRIPTION: Fully owned subsidiary of Inghams Australia, #2 chicken processor in NZ; vertically integrated with 'Mega' primary plant & 2 further processing plants; distribution hubs in North & South Island; 37 broiler farms, 14 breeding farms separate dairy and horse feed businesses
KEY PRODUCTS: Pork carcass to consumer ready packs; "Freshpork" wholesale, "Freedom Farms", "Bees Knees", "Perfect Pork" consumer brands	KEY PRODUCTS: Beef, veal, offal, plasma, serum	KEY PRODUCTS: Bacon, ham, smallgoods (Hellers); poultry: meats, deli and retail ready (Santa Rosa); sauces, marinades, jams, vinegars (Flavour House)	KEY PRODUCTS: Chicken meat (whole, cuts, deli, ready meals; fresh and frozen), Waitoa Free Range chicken, high end dairy nutrition & horse feed
OWNERSHIP: NZ; Private (Glass)	OWNERSHIP: NZ; Private (Egan)	OWNERSHIP: NZ; PE (Rangatira Ltd 62%); NZ; Private (Heller, Harris)	OWNERSHIP: AU; Public (ASX:ING) (TPG Private Equity (USA; PE), others)
COMPANY NUMBER: 264663	COMPANY NUMBER: 152816	COMPANY NUMBER: 386096	COMPANY NUMBER: 464829
ADDRESS: Unit A2, 92 Russley Road, Christchurch	ADDRESS: Greenlea Lane, Hamilton, Waikato	ADDRESS: 67 Main North Road, Kaiapoi, Canterbury	ADDRESS: 624 Waihekau Road, Ngarua Waitoa
PHONE: +64 348 8525	PHONE: +64 7 957 8125	PHONE: +64 3 375 5017	PHONE: +64 7 884 6549
WEBSITE: www.freshpork.co.nz; www.perfectpork.co.nz	WEBSITE: www.greenlea.co.nz	WEBSITE: www.hellers.co.nz; www.santarosa.co.nz; www.rangatira.co.nz	WEBSITE: www.inghams.co.nz
YEAR FORMED: 1985	YEAR FORMED: 1992	YEAR FORMED: 1988	YEAR FORMED: 1990
STAFF EMPLOYED: 160	STAFF EMPLOYED: 450	STAFF EMPLOYED: 600+	STAFF EMPLOYED: 1,000
REVENUE: \$100-120m (FY16)	REVENUE: \$378m ('16)	REVENUE: \$240m ('16)	REVENUE: \$385m (FY16)
COMPANY HIGHLIGHTS: State of the art packaging technology in place, re-investment in processing facilities at Timaru and Levin plants in '17	COMPANY HIGHLIGHTS: Investment in Morrinsville, \$10m & Hamilton plants in '14, added new 900m <sup>2</sup> coolstore to support expansion plans; expanded into high value blood serum in '14; strong rise in bull beef to USA and China in '15, process 55,000 bulls a year; invested \$1m in new value added processing in '16, stronger retail ready focus	COMPANY HIGHLIGHTS: Acquired Goodman Fielder's meat business, Kiwibacon, Brooks, Hutton, Sizzlers & Milano, in '14; acquired Santa Rosa Poultry brands in Jun '15; launched 'My Main Course' range of ready made meals in late '16; launch vegetarian product in '16; acquired Gramart Foods 'Flavour House' after 5 year relationship in Jan '17, 12 staff	COMPANY HIGHLIGHTS: Profit of \$25m in '16; transition to Ross 308 chicken stock in NZ; TPG \$1.2b IPO on ASX in Nov '16; increased automation at Te Aroha facility in '16; increasing capacity over '17/'18 with second hatchery, new breeder facilities

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INTEGRATED FOODS LIMITED	LEONARDS SUPERIOR SMALLGOODS	PREMIER BEEHIVE NZ LTD	PRIME RANGE MEATS LTD
Integrated Fresh MEATS NZ	LEONARD'S	BEEHIVE (JBS)	
Gary Alexander Managing Director	Doug Leonard Managing Director	Dene McKay General Manager	Paul Hamilton General Manager
DESCRIPTION: Vertically integrated lamb processor; Integrated Foods manages 16,000ha of farmland; Fresh Meats NZ is processing division; process 200,000 lambs; Integrated Foods Marketing does sales and export; Lamb Club brand; Mangatu Blocks agribusiness division	DESCRIPTION: Bacon, ham and smallgoods manufacturer	DESCRIPTION: Vertically integrated bacon, ham and smallgoods company; Freedom Farms exclusive licencee; importer of Primo smallgoods; manufactures over 12,000t of pork products, worth over \$100m annually	DESCRIPTION: Meat processors based in Southland; primarily exporting to China through distribution contacts of new Chinese owners; some private processing and local food service and wholesale supply for Foodstuffs South Island
KEY PRODUCTS: Lamb	KEY PRODUCTS: Christmas hams, ham, bacon, cooked meats, sausages	KEY PRODUCTS: Bacon, ham, shaved and sliced meats, smallgoods	KEY PRODUCTS: Lamb, sheep, prime beef, manufactured beef, bobby calves
OWNERSHIP: NZ; Maori Corp (Mangatu)	OWNERSHIP: NZ; Private (Leonard, Kornman)	OWNERSHIP: Brazil; Private (JBS Foods) via Premier Beehive Holdco (AU)	OWNERSHIP: China; Private (Shenzhen MingShengDuLing Commercial and Trading Co via Cuilam Industry 75%); NZ; Private (Forde, Tulloch)
COMPANY NUMBER: 1266164	COMPANY NUMBER: 411722	COMPANY NUMBER: 3820621	COMPANY NUMBER: 549378
ADDRESS: 266 Chiders Road, Gisborne	ADDRESS: 22 Harris Road, East Tamaki, Auckland	ADDRESS: 36 Moreton Road, Carterton, Wairarapa	ADDRESS: 1 Sussex Street, Gladstone, Invercargill
PHONE: +64 6 869 0952	PHONE: +64 9 274 1254	PHONE: +64 6 379 6701	PHONE: +64 3 215 9079
WEBSITE: www.mangatu.co.nz; www.freshmeatsnz.co.nz; www.lambclub.co.nz	WEBSITE: www.leonards.co.nz	WEBSITE: www.premierbeehive.co.nz	WEBSITE: www.primerange.co.nz; www.cuilam.com
YEAR FORMED: 1989	YEAR FORMED: 1989	YEAR FORMED: 1991	YEAR FORMED: 1992
STAFF EMPLOYED: 130	STAFF EMPLOYED: 60	STAFF EMPLOYED: 300	STAFF EMPLOYED: 160
REVENUE: \$25-30m*	REVENUE: ~\$15m	REVENUE: \$105m (FY16)	REVENUE: \$30-40m*
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: JBS (Brazil) acquired Primo Smallgoods (AU) for \$1.45b in '15, ultimate parent of Premier Beehive in NZ; total assets in NZ\$75m; plans to launch into Asia and new categories in '16	COMPANY HIGHLIGHTS: Chinese majority owner, Lianhua Trading sold to Chinese owned company, Cuilam Industry for \$13.4m in '17



PROGRESSIVE MEATS         Image: Craig Hickson Owner and Managing Director	SILVER FERN FARMS LIMITED	SOURCE AND SUPPLY FOOD CO (formerly HOBSON'S CHOICE) SOURCE AND SUPPLY FOOD <u>Co.</u> William Curd General Manager	TALLEY'S GROUP
DESCRIPTION: Processors, marketers of lamb, venison; 6 locations in the NI; Progressive Meats (100%); Hawkes Bay Meat (50%) with 100% subsidiaries Ovation NZ, Te Kuiti Meats, Lamb Packers Fielding; Venison Packers (50%); Pasture Petfoods NZ, Progressive Leathers, Atkins Ranch	DESCRIPTION: Leading processor, marketer and exporter of lamb, beef, venison; produces 30% of all NZ lamb, beef and venison; 16,000 farmer suppliers; 16 processing sites	DESCRIPTION: Bacon, ham and smallgoods manufacturer; retail and food service; Hobson's Choice, Grandpa's Meat and Bacon Co brands	DESCRIPTION: Family owned food business; four main divisions: seafood (Talley's, Amaltal), meat (AFFCO, 9 plants, SPM), frozen vegetables (Logan Farm, Talley's) and dairy (75% Open Country Dairy, 3 plants, Crème de la Crème brand); total of 18 processing facilities
KEY PRODUCTS: Lamb cuts, co-products, ingredients, mechanically deboned meat (MDM), petfood ingredients; further processing in USA	KEY PRODUCTS: Meat (lamb, beef, venison, mutton), co-products	KEY PRODUCTS: Hams, bacon, sausages, specialty meats	KEY PRODUCTS: Meat cuts, frozen vegetables, frozen seafood, marinated mussels, seafood by products, ice cream, dairy ingredients
OWNERSHIP: NZ; Private (Hickson)	OWNERSHIP: NZ; Private (Silver Fern Co-operative (6,200 shareholders) 50%, Shanghai Maling Aquarius Co (China; Public) 50%)	OWNERSHIP: NZ; Private (Curd)	OWNERSHIP: NZ; Private (Talley)
COMPANY NUMBER: 36215	COMPANY NUMBER: 5474064	COMPANY NUMBER: 806615	COMPANY NUMBER: 168346/3342490
ADDRESS: 118 Kelfield Place, Hasting	ADDRESS: 283 Princes Street, Dunedin	ADDRESS: 5 Autumn Place, Penrose, Auckland	ADDRESS: 1 Ward Street, Motueka
PHONE: +64 6 873 9090	PHONE: +64 3 477 3980	PHONE: +64 9 570 1912	PHONE: +64 3 528 2800
WEBSITE: www.progressivemeats.co.nz; www.ovation.co.nz; www.tkmeats.co.nz	WEBSITE: www.silverfernfarms.com	WEBSITE: www.hobsonschoice.co.nz; www.grandpasbacon.co.nz	WEBSITE: www.talleys.co.nz; www.affco.co.nz; www.opencountry.co.nz
YEAR FORMED: 1981	YEAR FORMED: 1948	YEAR FORMED: 1980	YEAR FORMED: 1936/1904
STAFF EMPLOYED: 1,900	STAFF EMPLOYED: 7,000 (peak)	STAFF EMPLOYED: 66	STAFF EMPLOYED: 2,760-4,600 seas (OCD 310)
REVENUE: -\$500-\$700m	REVENUE: \$2,147m (FY16)	REVENUE: \$15-20m ('16)	REVENUE: \$2,000 - 2,500m* (OCD \$819m (FY16))
COMPANY HIGHLIGHTS: Leans Meats Limited sold remaining shares in Lean Meats Oamaru plant to Binxi Foods Oamaru in Dec '15, Leans Meats Limited renamed to Atkins Ranch, relaunched in USA, toll processed by Progressive; Atkins Ranch certified GAP step 4 sheep programme, around traceability and animal welfare in Oct '16; beef plant in Wales, lamb further processing facility in San Francisco	COMPANY HIGHLIGHTS: 50% partnership with Shanghai Maling (Bright, China) for \$267m cash, finalised Dec '16; ended JV with NZ Merino in '16; launched Silver Fern Farms branded retail range in Germany Mar '16; processed and sold 15m stock units in '16; invested \$7m in venison processing and cold chain expansion at Pareora plant in '16; closed Islington, Mossburn, Wairoa plants in '16	COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Open Country Dairy revenue of \$819m (FY16); -\$260m invested at OCD FY15; acquired 3 coal mines from Solid Energy as investor with Bathurst Resources in order to diversify in '16; first kale crop in '16; shift into retail ready and value added cut packs using new skin pack technology in '17 * See further detail in associated Seafood report

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

TAYLOR PRESTON	TEGEL FOODS	TURK'S POULTRY FARM LTD	
Simon Gatenby Chief Executive Officer	Phil Hand Chief Executive Officer	Ron Turk Managing Director	Roger Stewart Managing Director
DESCRIPTION: Meat processors processing 1.5m animals annually; based in Wellington; exporting to 60 countries under brands Taylor Preston, Natural Farm NZ, Natural Farm Angus, Natural Farm Hereford; subsidiary Taylored Foods value added products domestic; JV NZ Direct into France	DESCRIPTION: Leading fully integrated poultry processor in New Zealand; 3 feed mills, 39 breeder farms, 3 hatcheries, 3 processing plants manufacturing 1,200 product lines; processing 58m broilers annually; exports to 17 countries; AU, Pacific Islands, UAE, HK, 18% of revenue	DESCRIPTION: Vertically integrated poultry processor of corn fed chicken at 5 locations; process 25,000 birds a day; sold mainly in North Island, exports to Japan and other countries; part of egg co- operative; part owner of Le Poulet Fabuleux free range chicken farm	DESCRIPTION: Beef processors
KEY PRODUCTS: Sheep and beef meat cuts, offal	KEY PRODUCTS: Free range and barn raised chicken (fresh, frozen, smoked, processed), turkey; Tegel, Rangitikei, Top Hat brands	KEY PRODUCTS: Chicken, turkey, eggs, smallgoods	KEY PRODUCTS: Beef, beef jerky (Mountain Beef)
OWNERSHIP: NZ; Private (Taylor 80%, Preston 16%)	OWNERSHIP: NZ; Public (NZX,ASX:TGH) (Affinity Equity Partners (Singapore; PE) 45%)	OWNERSHIP: NZ; Private (Turk)	OWNERSHIP: NZ; Private (Lin)
COMPANY NUMBER: 519868	COMPANY NUMBER: 99660	COMPANY NUMBER: 20802	COMPANY NUMBER: 945877
ADDRESS: 131 Centennial Highway, Ngauranga Gorge, Johnsonville, Wellington	ADDRESS: 100 Carlton Gore Road, Newmarket, Auckland	ADDRESS: 8 Purcell Street West, Foxton	ADDRESS: 18 Waitete Road, Te Kuiti
PHONE: +64 4 472 7987	PHONE: +64 9 977 9000	PHONE: +64 6 363 0013	PHONE: +64 7 878 8926
WEBSITE: www.taylorpreston.co.nz	WEBSITE: www.tegel.co.nz	WEBSITE:. www.turkspoultry.com	WEBSITE: www.ubp.co.nz
YEAR FORMED: 1991	YEAR FORMED: 1961	YEAR FORMED: 1966	YEAR FORMED: 1995
STAFF EMPLOYED: 850 (peak)	STAFF EMPLOYED: 2,200+	STAFF EMPLOYED: 220	STAFF EMPLOYED: 240
REVENUE: \$260m (FY14)	REVENUE: \$582m (FY16)	REVENUE: \$85m* (FY14)	REVENUE: \$190m ('16)
COMPANY HIGHLIGHTS: Natural Farm Brand chilled lamb the preferred brand (imported) for Metro France; multi million investment in beef boning room winter 2016; establishment of further processing department under the brand Taylored Foods (cooking, slicing, dicing etc.); French JV company NZ Direct offering online home delivery service for chilled NZ lamb and beef in France	COMPANY HIGHLIGHTS: Listed on NZX and ASX May '16; 29 new products incl. expansion of free range launched in '16; record revenue forecast in FY17 \$625m; EBITDA \$74.9m in FY16; facilities in Taranaki being built '16; capex investment of \$28m in '17; brand refresh with new brand imagery, packaging and products \$3.5m in '17; expanding export markets in '17; all cage free, hormone free	COMPANY HIGHLIGHTS: Established Le Poulet Fabuleux, producing 30,000 chickens a week in 7 new free range sheds near Foxton, 4 staff Jan '16; 30 new jobs created at Turks Poultry; aiming to increase free range chicken, currently 65% in '16; phasing out egg production over next few years from '16	COMPANY HIGHLIGHTS: Received China approval for meat exports in Dec '16

VAN DEN BRINK POULTRY	WILSON HELLABY
Brinks	WILSON HELLABY
Karl van den Brink Managing Director	Fred Hellaby Managing Director
DESCRIPTION: Vertically integrated poultry processor in New Zealand; third largest; four processing sites; cage free, halal	DESCRIPTION: Processing and further manufacturing of meat products at two plants, AMP in Auckland, RMP in Hamilton; rendering business (PVL); significant presence in domestic meat market & selected chilled export markets; Hellaby, Grasslands, Saleyards Rd brands
KEY PRODUCTS: Chicken products primarily for domestic retail and foodservice; Brinks, Best Bird, Good-to-Go brands	KEY PRODUCTS: Prime beef, lamb, pork and goat; frozen, chilled, cured (smoked, cured, marinated), offal, hides, blood
OWNERSHIP: NZ; Private (van den Brink, Foster)	OWNERSHIP: NZ; Private (Syminton, Hellaby)
COMPANY NUMBER: 66969	COMPANY NUMBER: 900980
ADDRESS: 652 Great South Road, Manukau, Auckland	ADDRESS: 851 Great South Road, Mt Wellington, Auckland
PHONE: +64 9 262 0903	PHONE: +64 9 276 3800
WEBSITE: www.brinks.co.nz	WEBSITE: www.wilsonhellaby.co.nz
YEAR FORMED: 1954	YEAR FORMED: 1873/1998
STAFF EMPLOYED: ~400	STAFF EMPLOYED: 500
REVENUE: \$220m* (FY14)	REVENUE: \$400m (FY16)
COMPANY HIGHLIGHTS:	COMPANY HIGHLIGHTS: Redeveloped RMP into modern pig processing facility; AMP now fully halal; AMP China listing approved in '16; weekly requirements 3,000 steers, 10,000+ lambs, 2,500 pigs, 800 goats

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

# Appendices

+ Industry bodies

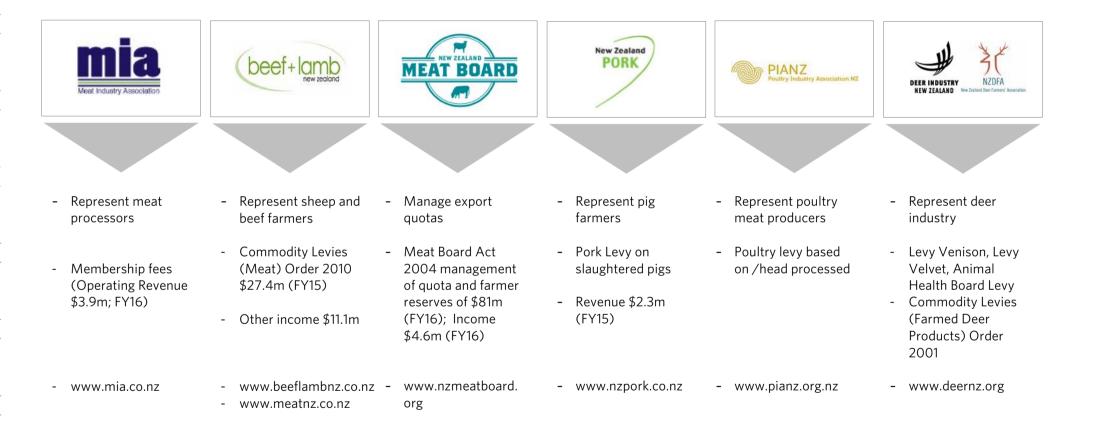
+ Trade codes

+ Glossary of terms

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## INDUSTRY ORGANISATIONS

As a major meat producer, New Zealand has a strong range of meat related industry organisations



## TRADE CODES

## GLOBAL HARMONISED SYSTEM (HS) TRADE CODES DEFINED AS MEAT HS2002

HS Code	Short Description	Longer official description	HS Code	Short Description	Longer official description
20110	Beef, chilled carcass	Fresh or chilled bovine carcasses and half carcass	20711	Chicken, whole chilled	Fowls, domestic, not cut (FROZEN)
20120	Beef, chilled bone-in	Fresh or chilled unboned bovine meat (excl. carcasses)	20712	Chicken, whole frozen	Meat of fowls of species Gallus domesticus, not cut in pieces, frozen
20130	Beef, chilled boneless	Fresh or chilled boneless bovine meat	20713	Chicken, cuts chilled	Fowls, cuts & offal, fresh
20210	Beef, frozen carcass	Frozen bovine carcasses and half carcasses	20714	Chicken, frozen	Fowls, cuts & offal, frozen
20220	Beef, frozen bone-in	Frozen unboned bovine meat (excl. carcasses)	20724	Turkey, whole chilled	Turkeys, not cut, fresh
20230	Beef, frozen boneless	Frozen boneless bovine meat	20725	Turkey, whole frozen	Turkeys, not cut, frozen
20200	Pork, chilled carcass	Fresh or chilled swine carcasses and half carcasses	20726	Turkey, cuts chilled	Turkey cuts & offal fresh
20312		Fresh or chilled unboned hams, shoulders and cuts thereof	20727	Turkey, cuts frozen	Turkey cuts & offal frozen
	Pork, chilled cuts		20732	Ducks, whole chilled	Ducks, geese, not cut fresh
20319	Pork, chilled nes	Fresh or chilled swine meat, nes (unboned)	20733	Ducks, whole frozen	Ducks, geese, not cut frozen
20321	Pork, frozen carcass	Frozen swine carcasses and half carcasses	20734 20735	Goose/duck liver chilled Poultry, cuts fresh	Fatty livers of geese or ducks, fresh or chilled Poultry cuts&offal, fresh
20322	Pork, frozen cuts	Frozen unboned hams, shoulders and cuts thereof	20735	Poultry, cuts frozen	Poultry cuts&onal, iresn Poultry cuts&offal, frozen
20329	Pork, frozen nes	Frozen swine meat, nes	20730	Rabbit	Rabbit or hare meat. offal. fresh. chilled or frozen
20410	Sheep, chilled carcass	Fresh or chilled lamb carcasses and half carcasses	20810	Deer, fresh & frozen	Meat and edible offal nes fresh, chilled or frozen (includes deer meat)
20421	Sheep, chilled carcass	Fresh or chilled sheep carcasses and half carcasses	20900	Fat, pig & poultry	Pig and poultry fat, fresh, chilled, frozen, sa
20422	Sheep, chilled bone-in	Fresh or chilled unboned meat of sheep	21011	Pork, bone-in hams	Unboned swine hams, shoulders and cuts thereof,
20423	Sheep, chilled boneless	Fresh or chilled boneless meat of sheep	21012	Pork bellies	Bellies and cuts thereof of swine, salted, dried or smoked streaky cuts thereof
20430	Lamb, frozen carcass	Frozen lamb carcasses and half carcasses	21019	Pork, smoked	Meat of swine, salted or smoked, nes
20441	Sheep, frozen carcass	Frozen sheep carcasses and half carcasses (excluding carcasses and half carcasses of lamb)	21020	Beef, salted/smoked	Meat of bovine animals, salted or smoked
20442	Sheep, frozen bone-in	Frozen unboned meat of sheep (including lamb) - excluding carcasses and half carcasses	21092	Dolphin & whale, smoked	Meat & edible meat offal of whales/dolphins/porpoises (order Cetacea)/manatees & dugongs (order Sirenia), salted/in brine/dried/smoked, incl. edible flours/meals
20443	Sheep, frozen boneless	Frozen boned meat of sheep	21099	Deer, salted/dried	Meat & edible meat offal, nes., salted/in brine/dried/smoked, incl. edible flours/meals
20450	Goat, chilled or frozen	Fresh, chilled or frozen goat meat	150200	Animal fats	Fats of bovine animals, sheep or goats, raw
20500	Horse	Meat of horses/asses/mules/hinnies, fresh/chilled/frozen	150300	Lard stearin, etc.	Lard stearin, lardoil, oleostearin, oleo-oil
20610	Beef, chilled offal	Fresh or chilled edible bovine offal	160100	Sausages	Sausages and similar products; food preparation
20621	Beef, frozen tongues	Frozen bovine tongues	160210	Baby food?	Homogenized preparations of meat and meat offal
20622	Beef, frozen livers	Frozen bovine livers	160220	Pate & prepared livers	Livers of any animal prepared or preserved
20629	Beef, frozen offal	Frozen edible bovine offal (excl. tongues and livers)	160231	Processed turkey	Preparations of turkey meat
20630	Pork, offal chilled	Fresh or chilled edible swine offal	160232	Canned chicken	Fowls meat and meat offal of poultry
20641	Pork, frozen livers	Frozen swine livers	160239	Canned chicken	Preparations of poultry (excl. turkey)
20649	Pork, offal frozen	Frozen edible swine offal (excl. livers)	160241	Swine, hams	Swine hams & cuts thereof, prepared or preserved
			160242	Swine, shoulder cuts	Swine shoulders & cuts thereof, prepared or preserved
20680	Sheep, chilled offal	Sheep, goat, ass, mule, hinnie offal, fresh or chilled	160249	Swine, prepared nes	Swine meat or offal nes, prepared, preserved, not liver
20690	Sheep, frozen offal	Sheep, goat, ass, mule, hinnie edible offal, frozen	160250	Canned beef	Bovine meat, offal nes, not livers, prepared/preserved
			160290	Canned sheep	Meat, meat offal and blood, prepared or preserved, nes
			350300	Gelatin	Gelatin and derivatives; isinglass; glues of animal origin

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Source: United Nations trade codes; Coriolis definitions in conjunction with project steering group

## 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
НК	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/O	Turnover
UHT	Ultra-high temperature
US/USA	United States of America
US\$/USD	United States dollar
UK	United Kingdom
YE	Year ending
YTD	Year to date

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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.

#### 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 work is grounded in the real world. Our style is practical and down-toearth. 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.

#### 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, competition and channel point-of-view. Following this we assist in market entry planning & 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.

