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## INTRO
- Purpose
- Situation summary
- Drivers of success
- Investment opportunities
- SWOT
- Supply chain

## 01 Market Overview
- Global situation
- Consumption
- Production
- Import demand
- Key markets
- Market growth

## 02 Production
- Number of firms
- Employment
- Yield/productivity
- Production
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## 03 Categories
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## 04 Growth & Innovation
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- Innovation & new products

## 05 Firms Performance
- Enterprises
- Employment
- Turnover
- Ownership
- Foreign investors
- Acquisitions
- Investments
- Firm Profiles
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 & 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 (including export and investment) strategies
- 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
SITUATION SUMMARY: WILD CAPTURE  While New Zealand has a large and sustainably managed wild catch fishery, there is little likelihood of significant volume or throughput increases going forward.

ALL SEAFOOD: CONSUMERS/MARKETS

Per capita consumption of wild capture seafood has been flat-to-declining globally, due to overfishing and population growing faster than capture quantity. This “deficiency” is being made up for by a massive expansion in aquaculture.

Increased consumer demand for seafood across most developed countries is being driven by (1) scientific research showing health benefits and (2) changing diets. At the same time, key seafood consuming countries (e.g. South East Asia (SEA), China) are experiencing growing incomes leading to increased ability to pay for (or demand) more seafood. This situation has supported prices.

The majority of fish consumption globally occurs in restaurants and other foodservice outlets. Supermarkets underperform in seafood (relative to other proteins); significant sales occur in more traditional channels (e.g. fishmongers and wet markets).

Demand for sustainable product varies by market. There is increasing demand in Western markets (Europe/North America), for sustainable products often driven by retailers (and vocal activists). However, there is currently low/no demand in Asian and developing markets for sustainability.

NZ exports seafood to over a hundred countries. Broadly speaking Western markets account for about half of value and the growing Asian market the other half.

Fresh seafood is a highly perishable product and the highest value products are often those sold fresh (unlike some other foods). Bulk fish for further processing is also a key channel for NZ.

WILD CAPTURE: NEW ZEALAND

New Zealand has access to a strong set of natural resources for wild capture fishing. The country is an isolated island nation in the middle of the South Pacific, 2,100 kilometres from Australia. It has the ninth largest exclusive fishing zone (EEZ) and the tenth longest coastline of any country in the world.

Multiple sources suggest New Zealand’s fisheries are among the most sustainable fisheries in the world (on a par with Alaska and Iceland). New Zealand uses effectively the same catch management system as Iceland. However sustainable management has led to a decline in total wild capture over the past 15 years and there is low potential for substantial future growth. Precision Harvesting research over recent years is driving towards increasing the quality and therefore value of the catch.

New Zealand has an efficient, modern seafood industry with large modern boats, in particular the deep sea freezer trawlers. More than 130 species are commercially fished in New Zealand’s EEZ, a similar species mix to Australia, Chile, Argentina, etc. The main catch by volume is hoki, followed by mackerel and squid. Rock Lobster are a major export that have shown strong growth on rapidly growing demand from China.

Wild capture fishing is reasonably consolidated, with a handful of major firms and a range of secondary firms. Consolidation is more pronounced in deep water fishing, less so in closer waters.

The industry has mixed ownership, with New Zealand Maori tribal interests predominating, but with one listed firm (Sanford) and strong private ownership and foreign investment (primarily Japanese).

WILD CAPTURE: COMPETITORS

NZ achieves a 7% share of the temperate Southern Hemisphere (S.H.) wild catch.2 New Zealand competes in the first instance with other colder water Southern Hemisphere countries, primarily Australia, Chile, Argentina, and South Africa. Secondarily, this group compete with Northern Hemisphere colder water fisheries, including Norway, Canada, Iceland, USA/Alaska, UK/Scotland.

Globally the wild capture seafood industry is fragmented with a huge number of medium to small sized firms competing. Around the world in-shore fishing is highly fragmented and primarily local around the world. Deepwater fishing is more consolidated due to capital requirements for large boats, but still fragmented globally.

1. EEZ = Exclusive Economic Zone; 2. defined as Chile, Argentina, Brazil, South Africa, NZ & AU; Source: Coriolis
SITUATION SUMMARY: AQUACULTURE  Aquaculture has huge theoretical growth potential for New Zealand, however this is unlikely to be realised in practice

AQUACULTURE: NEW ZEALAND

New Zealand has huge theoretical potential in aquaculture production. New Zealand has the 10th longest coastline of any country in the world, more than China and 180 other countries on the world. Currently only a tiny fraction of this is farmed; the total area in New Zealand in aquaculture is similar to the area in onions or a single high country sheep farm.

Aquaculture is a global growth story, supplying growing seafood consumption in the place of flat wild capture. Globally aquaculture has increased its share to about half of total seafood volume. In New Zealand it is about a fifth.

However, New Zealand’s strong theoretical potential for aquaculture is unlikely to be fully realised. There is often a conflict with the proposed location of aquaculture operations and other non-commercial uses.

The fundamental issue is that NZ, as a society, has yet to come to a consensus on aquaculture, particularly salmon, with the proponents arguing for it to become a billion dollar industry, while a wide ranging opposition of recreational fisherman, inshore fishing companies, holiday home owners and environmental advocates oppose its growth.

New Zealand farms three species in any quantity (mussels, salmon and oysters); these make up ~99% of the total exports.

Aquaculture is more consolidated than wild capture; the top five companies account for approximately three quarters of the industry

AQUACULTURE: COMPETITORS – SHELLFISH

On a global basis, most shellfish are produced and consumed locally and very little crosses borders. New Zealand produces mussels and oysters in quantity, and smaller amounts of abalone/paua.

MUSSELS  Globally only about one in eight mussels produced crosses a national borders. New Zealand competes with a wide range of regional players by market; Chile is an emerging multi-regional threat.

OYSTERS  1% of global oyster production crosses borders; global production is flat except for China which is increasing production massively.

AQUACULTURE: COMPETITORS – SALMON

Where New Zealand farms King/Chinook Salmon (Oncorhynchus tshawytscha), effectively all other salmon aquaculture in the world farm Atlantic salmon (Salmo salar), due to its faster growth rates and disease resistance.

Salmon aquaculture is highly consolidated globally. The top 3 firms account for ~40% of global production (the top 10, ~65%). None of the top 25 global salmon producers currently operate in NZ. Consolidation is driven by clear economies of scale in production systems, marketing, processing, skills, genetics and capital.

New Zealand biosecurity effectively prevents imports of almost all fresh salmon.
**DRIVERS OF SUCCESS**  New Zealand’s success in seafood has three key drivers

**IDEAL WATER & CLIMATE**  
- Strong natural resources for wild capture fishing
- Resources available for aquaculture
- Substantial exclusive fishing zone (EEZ) available for fishing
- Isolated location protected by natural barriers

**EFFICIENT PEOPLE & SYSTEMS**  
- Long history of seafood production
- Industry focused on export for over 100 years
- Large pool of skilled people
- Strong Quota Management System and support networks
- Well-organised, cohesive industry

**LOCATION & MARKETS**  
- Excellent proximity to East & South-East Asian markets
- CER agreement with Australia
- Excellent market access across Asia
- NZ was the first developed country to sign a free trade deal with China (2008)

Source: photo credit (purchased or creative commons (freenzphotos.com))
INVESTMENT OPPORTUNITIES There are limited opportunities for new external investment in wild capture; regulatory change and fundamental drivers create more opportunities in aquaculture.

OVERALL There are limited entry vehicles for new investors into seafood, as industry ownership of larger firms is locked up by:

- Maori interests (unlikely to sell),
- Family businesses (Talleys, United, Independent, Solander, Vela) unlikely to sell without generational change.
- Cornerstone shareholdings of large global seafood companies (e.g. Nissui in Sealord)
- Long-term cornerstone shareholders in both publicly-listed firms: Sanford (Amalgamated) and New Zealand King Salmon (Oregon Group)

Investors seeking smaller opportunities will find a wide range of opportunities among the second tier of interesting and innovative firms, many of which are seeking capital.

WILD CAPTURE The industry has a strong and effective sustainability management system. This system implies that New Zealand will have relatively more fish in the future compared with overfished countries and regions.

Main source of value creation in wild capture is in cost reductions via consolidation. This consolidation is on-going, but progress is slow due to the ownership issues discussed above. There are also opportunities in value creation through delivering a greater percent of the catch to the market in a more fresh/less damaged form (see the Precision Seafood Harvesting Primary Growth Partnership programme, which is a partnership between industry and the Crown).

There are opportunities for growth and certain opportunities to find new markets for by-products and fish species that are not currently processed or retained.

AQUACULTURE The attractiveness of New Zealand aquaculture varies by species:

OYSTERS Pacific oysters have low growth potential, due to risks with potential new viral breakouts and global market structure/situation.

MUSSELS The industry is mature and consolidating rapidly. Mussels are relatively low value use of space. Returns over the past twenty years have been mixed and cyclical, particularly for smaller operators (driving industry consolidation).

The SpatNZ Primary Growth Partnership programme is a partnership between industry and the Crown which is supporting selective breeding. The programme is on target to deliver hatchery grown mussel spat and will likely deliver constant incremental gains in the future. However these are more likely to maintain New Zealand’s relative competitiveness (e.g. vs. Chile) rather than translate into dramatically increased profitability.

SALMON Theoretically New Zealand has huge potential in salmon aquaculture; in practice regulations and competing interests will likely constrain success. Industry is showing on-going consolidation. The largest salmon producer - New Zealand King Salmon - listed on the NZX/ASX sharemarket in late 2016.

NEW SPECIES New Zealand scientists are working on a wide range of new species, however these are all highly speculative and unproven commercially to date. Only investors with transferable capabilities or strong appetite for risk should participate. Recent preliminary success in scampi aquaculture stands out.

FURTHER PROCESSING There are opportunities for investment in further processing of New Zealand bulk ingredients (e.g. “white fish”) into consumer ready products, however this is primarily a greenfields opportunity for firms with transferrable skills.

There are clear opportunities for investment in seafood derived products (e.g. nutraceuticals, supplements, petfood).
**SWOT ANALYSIS** New Zealand has a stable and sustainable position in the global seafood industry

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Clean water and generally healthy aquatic environment</td>
<td>- Most industry wild capture growth metrics negative (Quota system)</td>
</tr>
<tr>
<td>- Unsubsidised industry</td>
<td>- Wild catch volume has fallen since 1998 leading to reduced throughput</td>
</tr>
<tr>
<td>- Early introduction of quota management system prevented collapse of stocks through overfishing</td>
<td>- Relatively small producer on a global scale</td>
</tr>
<tr>
<td>- Stocks generally at sustainable levels or rebuilding</td>
<td>- Supply fluctuates year-to-year with availability of wild capture fish</td>
</tr>
<tr>
<td>- Regularly ranked in top three sustainable regions</td>
<td>- Mussels and oysters have low value per hectare; salmon development limited by regulatory challenges</td>
</tr>
<tr>
<td>- Efficient, modern industry with large modern boats, in particular the deep sea freezer trawlers</td>
<td>- Most EEZ space low productivity deep water</td>
</tr>
<tr>
<td>- Stable, long-term ownership in place across most major firms</td>
<td>- Industry is bulk supply driven, rather than specialised/consumer focused</td>
</tr>
<tr>
<td>- Only country farming green lipped mussels (Perna canaliculus); others farm a different green shelled species (Perna viridis, etc.) or blue mussels (Mytilus sp.)</td>
<td>- Firms primarily small/sub-scale with limited access to capital</td>
</tr>
<tr>
<td>- Limited presence of disease in aquaculture species</td>
<td>- Competing users of coastal space for aquaculture (e.g. holiday houses)</td>
</tr>
<tr>
<td>- Unique access to some bio-secure markets (particularly Australia &amp; Japan)</td>
<td>- Highly regulated</td>
</tr>
<tr>
<td>- Parts of domestic industry protected from imports by biosecurity measures</td>
<td>- No competitive advantage around aquaculture feed production due to low scale</td>
</tr>
<tr>
<td>- Government support of industry R&amp;D</td>
<td>- Lack of market integration, not capturing in-market value</td>
</tr>
<tr>
<td></td>
<td>- Limited in-market knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>ISSUES/THREATS/RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Consumer perceptions of health benefits of seafood</td>
<td>- New Zealand's wild capture continues to decline</td>
</tr>
<tr>
<td>- Large amounts of fish body currently going to meal and waste</td>
<td>- Other countries “catching up” on sustainability (e.g. Argentina)</td>
</tr>
<tr>
<td>- Use of by-products for nutraceuticals /cosmetics sector</td>
<td>- Low cost competitors in low wage/low regulation/higher productivity warm waters</td>
</tr>
<tr>
<td>- Growing interest by some more wealthy consumers in Western markets for eco-labelling and environmental certification (driven by retailers)</td>
<td>- NIMBY (not in my back yard) attitudes limiting industry activity</td>
</tr>
<tr>
<td>- Growing middle class in China and SE Asia</td>
<td>- Single issue special interest groups driving domestic regulatory agenda</td>
</tr>
<tr>
<td>- Gradual removal of global fishing subsidies</td>
<td>- Rising costs of airfreight reducing feasibility of fresh exports</td>
</tr>
<tr>
<td>- Ongoing removal of trade barriers and negotiation of new free trade agreements</td>
<td></td>
</tr>
<tr>
<td>- Streamline regulations</td>
<td></td>
</tr>
<tr>
<td>- New/improved supply chain technology</td>
<td></td>
</tr>
</tbody>
</table>
SUPPLY CHAIN  New Zealand has a robust seafood supply chain that produces seafood products from wild capture and aquaculture.

1. There may be one or more layers of wholesaling, depending on product or market; some wholesale functions maybe captive inside retailers or foodservice operators; 2. Includes product for housebrands, canners, fish meal manufacturers; Source: Coriolis analysis
Global Market Overview

- Global situation
- Consumption
- Production
- Import demand
- Key markets
- Market growth
Fundamental demographic and production shifts have led to the global seafood market experiencing ongoing changes in both supply and demand.

**CONSUMPTION**
- Global seafood consumption is concentrated in E/SE Asia (particularly China), Europe and the Americas
- Global per capita seafood consumption (all forms) is showing moderate growth (1.4% per year)

**PRODUCTION**
- Global production is 200m tons of seafood
- Wild capture stalled around 1990, while aquaculture continues to grow
- As a result of the stall in wild capture, particularly of marine fish, the global production mix is shifting dramatically to aquaculture production of freshwater fish, aquatic plants and molluscs
- Global seafood production (capture and aquaculture) is concentrated in E/SE Asia; New Zealand is a smaller, second tier producer overall

**GLOBAL TRADE**
- Global cross-border seafood trade volumes are growing (10y CAGR 4%) with moderate price gains across the cycle leading to solid export value growth (10y CAGR 6%)

**DEMAND: PRODUCT CATEGORIES**
- Total global cross-border seafood trade is spread across a wide range of products
- White fish (US$38b), processed seafood ($23.9b), salmon ($15.1b) and prawns ($14.7b) stand out for size
- Squid, salmon, lobster and processed seafood stand out for their growth in demand over the past five years; white fish has shown slight growth in overall value despite declining volumes

**DEMAND: IMPORT MARKETS**
- Total global cross-border demand for seafood was US$122b in 2015; the key markets are Europe ($48.2b), the US ($17.8b), Japan ($11.7b) and China/HK (~$10b)
- Vietnam, Thailand, South Korea, China and a wide range of other smaller markets stand out for import market growth; Japan and Russia shrank over the period
- Markets vary in average seafood import price, with Hong Kong, the USA, Canada and Japan, followed by the “Big 4” Europeans, standing out as high value markets

**SUPPLY: EXPORTERS**
- China is the largest seafood exporter overall; New Zealand is a second tier exporter, similar in size to Australia and Argentina
- New Zealand is achieving moderate export price gains but no increase in volume
- Exporters vary in their average seafood export price, driven largely by product mix; New Zealand achieves a similar return to the US and Norway
Global seafood consumption is concentrated in E/SE Asia (particularly China), Europe and the Americas; global per capita seafood consumption (all forms) is showing moderate growth (1.4%)
Global production is 200m tons of seafood; wild capture stalled around 1990, while aquaculture continues to grow.

**GLOBAL SEAFOOD PRODUCTION BY TYPE & METHOD**

<table>
<thead>
<tr>
<th>Type</th>
<th>2015 Production</th>
<th>Total = 200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine fishes</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Freshwater fishes</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Crustaceans</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Molluscs</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Diadromous fishes*</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Aquatic plants</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Other misc.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Capture</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>Aquaculture</td>
<td>94</td>
<td></td>
</tr>
</tbody>
</table>

* Diadromous fishes (migrate between fresh and salt water (e.g. salmon, eels) Note: 2015 is latest data available for all countries globally in UN FISHStat as of April 2017; Source: UN database; Coriolis
As a result of the stall in wild capture (particularly of marine fish), the global production mix is shifting dramatically to aquaculture production of freshwater fish, aquatic plants and molluscs.

**40 YEAR GLOBAL SEAFOOD PRODUCTION BY TYPE & METHOD**
Tonnes; million; 1975-2015

**GLOBAL SEAFOOD PRODUCTION SHARE BY TYPE & METHOD**
% of tonnes; 1975-2015

Source: UN FAOstat database; Coriolis analysis
Global seafood production (capture and aquaculture) is concentrated in E/SE Asia; New Zealand is a smaller, second tier producer overall.

**GLOBAL SEAFOOD PRODUCTION BY KEY COUNTRIES & REGION**
Tonnes; million; 2015

**GLOBAL SEAFOOD PRODUCTION BY KEY REGION**
Tonnes; million; 1975-2015

Note: 2015 is latest data available for all countries globally in UN FISHStat as of April 2017; Source: UN database; Coriolis analysis
Global cross-border seafood trade volumes are growing (10y CAGR 3%) with moderate price gains across the cycle leading to solid export value growth (10y CAGR 6%)

GLOBAL EXPORT VOLUME
KG; b; 2005-2015

GLOBAL AVERAGE EXPORT PRICE
US$/kg; actual; 2005-2015

GLOBAL EXPORT VALUE
US$; b; 2005-2015

Note: data is as reported sender FOB; Source: UN FAO database; Coriolis classification and analysis
Global cross-border seafood trade is spread across a wide range of products, though white fish (US$38b), processed seafood ($23.9b), salmon ($15.1b) and prawns ($14.7b) stand out for size.

**GLOBAL SEAFOOD EXPORT VALUE BY PRODUCT CLASS/TYPE**

US$, b; FOB; 2015

- **Live fish**
  - White fish: $38.0
  - Tuna: $3.5
  - Salmon: $15.1
  - Squid, etc.: $9.4
  - Lobster: $3.6
  - Fish, dry/salt: $3.7
  - Fish oils & fats: $1.7
  - Processed seafood: $23.9
  - Total = $121.8

**Source:** UN Comtrade database; Coriolis analysis

Note: “Squid, etc.” uses trade codes under HS03047-03079; Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis
Squid, salmon, lobster and processed seafood stand out for their growth in demand over the past five years; white fish has shown slight growth in overall value despite declining volumes.

**5Y GROWTH MATRIX: 5Y VOLUME VS. 5Y CAGR VALUE VS. VALUE 2015 BY PRODUCT**

<table>
<thead>
<tr>
<th>Product</th>
<th>5Y Change in volume (t) of exported; 10-15</th>
<th>5Y CAGR value US$; 10-15</th>
<th>% of US$; US$b; FOB; 2010 vs. 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>White fish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squid, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processed seafood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live fish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Crustaceans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scallops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oysters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish, dry/salt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis.
Total global cross-border demand for seafood was US$122b in 2015; the key markets are Europe ($48.2b), the US ($17.8b), Japan ($11.7b) and China/HK (~$10b)

GLOBAL SEAFOOD IMPORT VALUE BY RECEIVING COUNTRY/REGION
US$: b; FOB; 2015

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis
Vietnam, Thailand, South Korea, China and a wide range of other smaller markets stand out for import market growth; Japan and Russia shrank over the period.

5Y GROWTH MATRIX: 5Y VOLUME VS. 5Y CAGR VALUE VS. VALUE 2015 BY RECEIVING COUNTRY/REGION

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis.
Markets vary in average seafood import price, with Hong Kong, the USA, Canada and Japan, followed by the “Big 4” Europeans, standing out as high value markets.

**TOTAL GLOBAL SEAFOOD IMPORT VOLUME VS. AVERAGE IMPORT PRICE BY KEY MARKET**

**KG; millions; US$/kg; actual; 2015**

Note: therefore area under chart is proportional to import value (volume x $/kg); Source: UN Comtrade data; Coriolis analysis and classifications
China is the largest seafood exporter overall; New Zealand is a second tier exporter, similar in size to Australia and Argentina.

**GLOBAL SEAFOOD EXPORT VALUE BY SENDING COUNTRY/REGION**

US$, b; FOB; 2015

<table>
<thead>
<tr>
<th>Region</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Americas</td>
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<tr>
<td>Australasia</td>
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<td>E/SE Asia</td>
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<td>NA/ME/CA</td>
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<td>Indonesia</td>
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<td>Japan</td>
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<td>SAC</td>
<td>$4,456</td>
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<td>Other E/SE Asia</td>
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<td>Peru</td>
<td>$1,193</td>
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<td>Mexico</td>
<td>$986</td>
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<td>Other S Asia</td>
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<td>S Asia</td>
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<td>Thailand</td>
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<tr>
<td>Vietnam</td>
<td>$6,573</td>
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<tr>
<td>Russia</td>
<td>$2,824</td>
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<tr>
<td>Belarus</td>
<td>$258</td>
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<tr>
<td>Turkey</td>
<td>$270</td>
</tr>
<tr>
<td>Other Pacific</td>
<td>$152</td>
</tr>
</tbody>
</table>

Total = $121,840

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis
New Zealand’s seafood trade share is drifting lower, similar to other Southern Hemisphere cool water peers other than Chile (which has a strong aquaculture sector).

GLOBAL EXPORT MARKET SHARE: KEY SOUTHERN HEMISPHERE COOL WATER SEAFOOD EXPORTERS
% of value; US$; 2005-2015

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis
New Zealand is achieving moderate export price gains but no increase in volume

5Y GROWTH MATRIX: 5Y VOLUME VS. 5Y CAGR VALUE VS. VALUE 2015 BY EXPORTING COUNTRY/REGION

Note: 2015 is latest available globally; data is as reported sender FOB; Source: UN Comtrade database; Coriolis analysis
Exporters vary in their average seafood export price, driven largely by product mix; New Zealand achieves a similar return to the US and Norway.

**SEAFOOD EXPORT VOLUME VS. AVERAGE EXPORT PRICE ACHIEVED BY EXPORTING COUNTRY/REGION**

KG; millions; US$/kg; actual; 2015

![Chart showing seafood export volume vs. average export price achieved by exporting country/region.](chart)

- **Note:** Therefore area under chart is proportional to import value (volume x $/kg).
- **Source:** UN Comtrade data; Coriolis analysis and classifications.

---

**Average export value per kilogram US$/kg 2015**

- **Rock Lobster**
- **Proportional to export volume in 2015**

- **Weighted average $4.13**
New Zealand Seafood Production

+ Number of firms
+ Employment
+ Yield/productivity
+ Production
+ Regional activity
+ Growth upside
New Zealand produces sustainable quantities of seafood through wild capture and aquaculture.

- New Zealand has the 10th largest coastline of any country and 6.7m km² of controlled ocean space - the ninth largest claimed ocean space of any country - however most of this claim is deep water with low productivity.

- New Zealand produces significant amounts of seafood under both wild capture and aquaculture.

- Wild capture volumes have benefited from the increase in the allowed Hoki (Blue Grenadier) catch, while aquaculture production has achieved long-term growth.
New Zealand has the 10th largest coastline of any country and 6.7m km² of controlled ocean space - the ninth largest claimed ocean space of any country - however most of this claim is deep water with low productivity.
New Zealand produces significant amounts of seafood under both wild capture and aquaculture.

**TOTAL NZ WILD CAPTURE SEAFOOD PRODUCTION**
Tonnes; 000; 1950-2015

**AQUACULTURE PRODUCTION PER KILOMETRE OF COAST**
Tonnes; actual; 1950-2015

**NZ WILD CAPTURE PER PERSON**
KG/capita; actual; 1950-2015

**SHARE OF TOTAL SEAFOOD PRODUCTION BY TYPE**
% of tonnes; 1950-2015

---

Note: 2015 data latest available as of April 2017; Source: UN FAO FishStat database; MFish/MAF/MIPI; Coriolis analysis.
Wild capture volumes have benefited from the increase in the allowed Hoki (Blue Grenadier) catch, while aquaculture production has achieved long-term growth.
New Zealand Category Performance

+ Segmentation
+ Key products
+ Exports by product
New Zealand has a solid position in select seafood products where it has real strengths

OVERVIEW

- New Zealand has a stable wild seafood catch, is a leader in rock lobster and is innovating in mussel and salmon products
- Exports are spread across six categories
- however wild capture (54%), rock lobster (20%), and mussels (14%) are the largest
- Export value is growing across the cycle
- Average export price varies by category, with rock lobster standing out for dramatically higher prices and wild capture accounting for the bulk of export volume
- Mussels, salmon, oysters and lobster are shifting to value (higher prices at lower volumes), while wild capture is experiencing falling volumes and price pressure

BY CATEGORY

- **WILD CAPTURE**  Thanks to pioneering quota management systems, New Zealand has a long-term, sustainable supply of ~450k tonnes of wild capture seafood available
- **ROCK LOBSTER**  New Zealand has a long-term, sustainable supply of rock lobster available; export value growing strongly, with almost all volume now going to China/Hong Kong
- **MUSSELS**  New Zealand has a strong position in green shelled mussel aquaculture, producing a third of global green supply; export value growing strongly
- **SALMON**  New Zealand is the global market leader in King/Chinook Salmon aquaculture, a small but premium species; there is potential for further strong growth

* Rock Lobster: While rock lobster is a “wild capture” seafood in New Zealand, this project considers it separately, due to its significance and growth
New Zealand has a stable wild seafood catch, is a leader in rock lobster and is innovating in mussel and salmon products.

**Key High-Level Categories**

**Wild Capture**
- Stable, predictable, secure long term supply of fish
- NZ pioneering of wild catch quota management has prevented collapse of fish stocks (unlike competitors)

**Rock Lobster**
- Well managed fishery
- Stable supplies
- One of two major global suppliers of spiny red rock lobster (rest of world primarily clawed lobster)
- Growing strongly into China and wider Asia

**Mussels**
- Modern and consolidated industry
- Proven supply chain, track record in in-store merchandising systems
- Recently implemented breeding program driving productivity gains

**Salmon**
- Highly consolidated and at scale
- Effectively only global supplier of farmed Chinook; others hampered by disease
- Lack of key salmon diseases (e.g. ISA)
- Huge potential for growth (5x/10x)

Source: photo credit (purchased, courtesy of firms or fair use; low resolution; complete product/brand for illustrative purposes); Coriolis classifications and analysis
Exports are spread across six categories, however wild capture (54%), rock lobster (20%), and mussels (14%) are the largest; exports are growing across the cycle.

NOTE: "processed seafood is seafood relevant global trade codes under HS 1603-1605 (see page 80 for details); oysters includes wild catch and export (inseparable at source); Source: UN Comtrade database (from NZ Customs data); Coriolis classifications and analysis"
Average export price varies by category, with rock lobster standing out for dramatically higher prices and wild capture accounting for the bulk of export volume; mussels, salmon, oysters and lobster shifting to value (higher prices at lower volumes), while wild capture is experiencing falling volumes and price pressure.

**NEW ZEALAND EXPORT VOLUME VS. AVG $/KG: BY SEGMENT**  
**KG; millions; US$/kg; actual; 2015**

<table>
<thead>
<tr>
<th>Product</th>
<th>2015</th>
<th>Kg</th>
<th>US$/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed</td>
<td>$5.35</td>
<td>68.67</td>
<td></td>
</tr>
<tr>
<td>Lobster</td>
<td>$2.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mussels</td>
<td>$7.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oysters</td>
<td>$10.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild capture</td>
<td>$68.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Weighted average $2.84**

**GROWTH MATRIX: 5Y # VS. 5Y CAGR $/KG VS. $/2015**  
**Kg; US$/kg; US$; 2010-2015**

**5Y CAGR of average NZ export value per kilogram US$/kg 10-15**

**Weighted average $2.84**

**5Y growth in export volume; kg, m; 2010-2015**

**Bubble size is proportional to export value in 2015; a bubble this size is US$100m**

**NOTE:** Oysters includes wild catch and export (inseparable at source); Source: UN Comtrade database (from NZ Customs data); Coriolis classifications and analysis
WILD CAPTURE  Thanks to pioneering quota management systems, New Zealand has a long-term, sustainable supply of ~450k tonnes of wild capture seafood available.

WILD CAPTURE OF SEAFOOD IN NZ WATERS
T; 000; 1950-2015

NZ WILD CAPTURE SEAFOOD EXPORTS
US$m; 2005-2015

Source: US FishStat database; UN Comtrade database; photo credit (CC BY-SA 1.0); Coriolis classifications and analysis
ROCK LOBSTER  New Zealand has a long-term, sustainable supply of rock lobster available; export value growing strongly, with almost all volume now going to China/Hong Kong.

### NEW ZEALAND SPINY RED ROCK LOBSTER CATCH VOLUME
T; 000; 1950-2015

![Chart showing the catch volume of New Zealand spiny red rock lobster from 1950 to 2015.](chart1.png)

### GLOBAL CHILLED ROCK LOBSTER EXPORT VALUE BY REGION
US$m; 2005 vs. 2015

![Bar chart showing the global chilled rock lobster export value by region for 2005 and 2015.](chart2.png)

### NZ CHILLED/FROZEN LOBSTER EXPORT VALUE BY DESTINATION
US$m; 2005-2015

![Chart showing the chilled/frozen lobster export value by destination from 2005 to 2015.](chart3.png)

### EXAMPLE PRODUCTS: KIWI LOBSTER
2017

![Example products with their values.](chart4.png)

Source: US FishStat database; UN Comtrade database; Coriolis classifications and analysis
MUSSELS  New Zealand has a strong position in green shelled mussel aquaculture, producing a third of global green supply; export value growing strongly

NEW ZEALAND MUSSEL EXPORT VALUE
US$m; 2005-2015

CAGR 2%

NZ MUSSEL AQUACULTURE PRODUCTION
Tonnes; 1950-2015

NZ SHARE OF GLOBAL MUSSEL EXPORT VALUE BY TYPE
% of US$; share of tonnage; 2015

EXAMPLE PRODUCTS: SEALORD
2017

Source: US FishStat database; UN Comtrade database; photo credit (courtesy Sealord); Coriolis classifications and analysis
SALMON  New Zealand is the global market leader in King/Chinook Salmon aquaculture, a premium species produced by aquaculture in New Zealand

NEW ZEALAND SALMON EXPORT VALUE
US$m; 2005 vs. 2015

AGGREGATE GLOBAL SALMON EXPORT GROWTH
US$b; 2005 vs. 2015

AVERAGE EXPORT PRICE: WHOLE CHILLED SALMON: NZ & PEERS
US$/kg; FOB; 2016

EXAMPLE PRODUCTS: MT COOK ALPINE SALMON
2017

Source: UN FishStat database; UN Comtrade database; photo credit (courtesy the great people at Mt Cook Salmon); Coriolis classifications and analysis
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 seafood 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 seafood products emerge as “growth stars” – fish extracts and whole salmon – from an evaluation of ten years of product-level trade growth
- Fish extract exports are growing and the product plays to New Zealand strengths in nutraceuticals
- New Zealand whole chilled salmon exports are growing, with the US market as the key success, having grown from US$2m to US$15m in a decade

**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 seafood 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 seafood 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).

**THREE HORIZONS OF GROWTH FRAMEWORK: NEW ZEALAND SEAFOOD INDUSTRY**  
*Model; 2017*

<table>
<thead>
<tr>
<th>Strategic Focus</th>
<th>HORIZON 1: Mature export categories &amp; products</th>
<th>HORIZON 2: Build emerging export products</th>
<th>HORIZON 3: Create viable export options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key success factors</td>
<td>- Defend and extend profitability of core business</td>
<td>- Expand and grow emerging businesses &amp; products</td>
<td>- Develop and discover new options for growth</td>
</tr>
<tr>
<td>Key metrics</td>
<td>- Efficiency &amp; cost control</td>
<td>- Customer acquisition</td>
<td>- Risk taking</td>
</tr>
<tr>
<td></td>
<td>- Process innovation</td>
<td>- Speed &amp; flexibility</td>
<td>- Market insight</td>
</tr>
<tr>
<td></td>
<td>- Scale</td>
<td>- Execution</td>
<td>- Business model innovation</td>
</tr>
<tr>
<td></td>
<td>- Supply chain</td>
<td>- Resources/funding</td>
<td>- Culture &amp; incentives</td>
</tr>
<tr>
<td>Example products</td>
<td>- Profits, margins, costs</td>
<td>- Market share, growth</td>
<td>- Milestones</td>
</tr>
<tr>
<td></td>
<td>- Frozen white fish</td>
<td>- Fish extracts</td>
<td>- New aquaculture species</td>
</tr>
<tr>
<td></td>
<td>- Lobster</td>
<td>- Salmon</td>
<td>- Seafood based petfood</td>
</tr>
</tbody>
</table>

Source: McKinsey & Co.; Coriolis analysis
In Horizon 2, New Zealand is building a range of emerging export products

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

<table>
<thead>
<tr>
<th>Strategic Focus</th>
<th>HORIZON 1</th>
<th>HORIZON 2</th>
<th>HORIZON 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mature export categories &amp; products</td>
<td>Build emerging export products</td>
<td>Create viable export options</td>
</tr>
</tbody>
</table>

#### HORIZON 1
**Defend and extend profitability of core business**
- Efficiency & cost control
- Process innovation
- Scale
- Supply chain

#### HORIZON 2
**Expand and grow emerging businesses & products**
- Customer acquisition
- Speed & flexibility
- Execution
- Resources/funding

#### HORIZON 3
**Develop and discover new options for growth**
- Risk taking
- Market insight
- Business model innovation
- Culture & incentives

<table>
<thead>
<tr>
<th>Key success factors</th>
<th>Key metrics</th>
<th>Example products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Profits, margins, costs</td>
<td>Frozen white fish, Lobster, Mussels</td>
</tr>
<tr>
<td></td>
<td>Market share, growth</td>
<td>Fish extracts, Salmon</td>
</tr>
<tr>
<td></td>
<td>Milestones</td>
<td>New aquaculture species, Seafood based petfood</td>
</tr>
</tbody>
</table>

*Source: McKinsey & Co.; Coriolis analysis*
Two seafood products emerge as “growth stars” – fish extracts and whole salmon – 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.
Fish extract exports are growing and the product plays to New Zealand strengths in nutraceuticals

FISH EXTRACT EXPORT VALUE BY MARKET
US$, m; 2005-2015

EXAMPLE: RECENT INVESTMENT IN NEW ZEALAND
2016

- Invested $10.8m in new fish oil processing facility, Nelson, New Zealand
- Fully commissioned August 2016
- Capacity to refine up to 5,000t of Omega-3 fish oil
- Oil sourced from sustainable and traceable Marine Stewardship Council certified species

Source: UN Comtrade database (from NZ Customs data); photo credit (courtesy Seadragon); Coriolis classifications and analysis
New Zealand whole chilled salmon exports are growing, with the US market as the key success, having grown from US$2m to US$15m in a decade.

### CHILLED WHOLE SALMON EXPORT VALUE BY MARKET

**US$; m; 2005-2015**

**CAGR 9%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>North America</th>
<th>Australia</th>
<th>Other E/SE Asia</th>
<th>Other</th>
<th>Japan</th>
<th>Other E/SE Asia</th>
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</thead>
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<td>2005</td>
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<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
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<tr>
<td>2006</td>
<td>$14.7</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2007</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2008</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2009</td>
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<td>$3.2</td>
<td>$2.1</td>
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<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2010</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2011</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2012</td>
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<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2013</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2014</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
<tr>
<td>2015</td>
<td>$17.2</td>
<td>$3.2</td>
<td>$2.1</td>
<td>$0.4</td>
<td>$0.6</td>
<td>$0.4</td>
<td>$0.3</td>
</tr>
</tbody>
</table>

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

### EXAMPLE: RECENT NZ FIRM ACTIVITIES IN THE US MARKET

**Select activities; 2016**

- “Seafood Watch” the globally respected consumer seafood guide on sustainable seafood gives New Zealand Chinook salmon a “Best Choice” 2016
- Ora launched in USA in 2012
- Ora raised specifically for the restaurant trade, targeting high value and highly discerning customers
In Horizon 3, New Zealand is creating and nurturing a wide range of viable options for future export success.

### THREE HORIZONS OF GROWTH FRAMEWORK: NEW ZEALAND SEAFOOD INDUSTRY

**Model: 2017**

<table>
<thead>
<tr>
<th>Strategic Focus</th>
<th>Horizon 1: Mature export categories &amp; products</th>
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<td>Key success factors</td>
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</tr>
<tr>
<td>Example products</td>
<td>Frozen white fish</td>
<td>Fish extracts</td>
<td>New aquaculture species</td>
</tr>
</tbody>
</table>

**Note:**
- HORIZON 1:
  - Defend and extend profitability of core business

- Key success factors:
  - Efficiency & cost control
  - Process innovation
  - Scale
  - Supply chain

- Key metrics:
  - Profits, margins, costs

- Example products:
  - Frozen white fish
  - Lobster
  - Mussels

**Source:** McKinsey & Co.; Coriolis analysis
Four broad global consumer mega-trends are driving growth and new product development in the food & beverage industry

**Four Consumer Food & Beverage Mega-Trends**

<table>
<thead>
<tr>
<th>HEALTH &amp; WELLNESS</th>
<th>AUTHENTIC &amp; RESPONSIBLE</th>
<th>EASY &amp; CONVENIENT</th>
<th>SENSORY &amp; INDULGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am concerned about my health and am trying to live a healthy lifestyle</td>
<td>I am mindful of where my food comes from and how it is produced</td>
<td>I am trying to achieve work-life balance and need quick-and-easy meal solutions</td>
<td>I like to indulge in rich and sumptuous living beyond the bare necessities</td>
</tr>
</tbody>
</table>

- Mid-high income countries experiencing an aging population
- Spread of Western lifestyle and Western diseases of affluence (e.g. obesity)
- Ongoing waves of media hype around fad diets and new “superfoods”
- Food presented and viewed as both the problem and the solution

- 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

- Dramatic increase in female participation on 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)

- 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 be addressing specific conditions (e.g. weight management; cholesterol)
- May target specific foods perceived as high risk, unethical or visible (e.g. unsustainable fish species)
- May reflect wider “healthy living” worldview

- May range from “everyday luxury” to an occasional “treat”
- May be used to demonstrate social status, taste or style (e.g. fresh lobster for Chinese banquets)

- May target specific family member (e.g. omega 3 for joint pain in grandparents)
- May target a specific family member (e.g. mercury levels for children)

- May represent an easy solution to a future challenge (e.g. prepared seafood canapes for easy entertaining)

Source: Boston Consulting Group; Datamonitor; Coriolis research and analysis; Photo credit: Image(s) used under license from Shutterstock.com
New Zealand seafood products succeeding on-shelf in export markets are aligned with these trends

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>Singapore</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>![Coles Logo]</td>
<td>![FairPrice Logo]</td>
<td>![Redmart Logo]</td>
</tr>
<tr>
<td>H&amp;W</td>
<td>Natural mussels</td>
<td>H&amp;W</td>
<td>H&amp;W</td>
</tr>
<tr>
<td>A&amp;R</td>
<td>Trusted brand</td>
<td>H&amp;W</td>
<td>Manuka smoked</td>
</tr>
<tr>
<td>A&amp;R</td>
<td>NZ mussels</td>
<td>A&amp;R</td>
<td>NZ King Salmon</td>
</tr>
<tr>
<td>A&amp;R</td>
<td>Sustainable certifications</td>
<td>A&amp;R</td>
<td>Kosher Kiwi</td>
</tr>
<tr>
<td>E&amp;C</td>
<td>Cooked, shelled, ready-to-eat</td>
<td>E&amp;C</td>
<td>Ready-to-eat</td>
</tr>
<tr>
<td>E&amp;C</td>
<td>Ready-to-eat</td>
<td>S&amp;I</td>
<td>Ready-to-eat</td>
</tr>
<tr>
<td>S&amp;I</td>
<td>Secret marinade</td>
<td></td>
<td>“Artisan range”</td>
</tr>
</tbody>
</table>

Source: various online websites; Coriolis research and analysis
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 PRODUCT DEVELOPMENT**

1. **PACKAGING INNOVATION**
   - Usage (e.g. ready-to-eat)
   - Shelf-life (e.g. foil pouch)
   - Convenience (e.g. multi-pack)
   - Appearance (e.g. foil pack)
   - Cost (e.g. plastic vs. glass)

2. **PRODUCT INNOVATION**
   - Flavour
   - Formulation/recipe
   - New/different ingredients
   - Source/origin
   - Production system
   - Manufacturing process

3. **CATEGORY INNOVATION**
   - Line extension
   - Creation of new category
   - New temperature state
   - New processes

4. **CHANNEL INNOVATION**
   - Foodservice offer
   - Non-foods retail offer
   - Vending
   - Internet/Home delivery
   - Own retail stores

**IMPLEMENTATION & EXECUTION**

*Source: Coriolis analysis*
New Zealand seafood firms are delivering on packaging-driven innovation

### SELECT EXAMPLES OF PACKAGING INNOVATION: NEW ZEALAND SEAFOOD FIRMS

#### 2017

<table>
<thead>
<tr>
<th>COMMENTARY</th>
<th>INSIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Packaging technology focuses on increasing shelf-life and ensuring food</td>
<td>- Sealord’s recycled pouch packaging developed Aug, 16</td>
</tr>
<tr>
<td>safety maintained</td>
<td>- Driven by consumer demand and feedback</td>
</tr>
<tr>
<td>- Opportunities to use packaging for messaging the NZ provenance story</td>
<td>- TerraCycle recycles the plastic</td>
</tr>
<tr>
<td>and sustainability story</td>
<td>- Collectors awarded or able to donate funds to their local charity</td>
</tr>
<tr>
<td>- Focus of many leading NZ companies to transition to “fresh” as a means</td>
<td></td>
</tr>
<tr>
<td>of adding value</td>
<td></td>
</tr>
<tr>
<td>- Wild capture quotas result in low volume growth; increasingly important</td>
<td></td>
</tr>
<tr>
<td>for seafood companies to add value to existing catch, innovative</td>
<td></td>
</tr>
<tr>
<td>packaging allows this</td>
<td></td>
</tr>
</tbody>
</table>

Source: Mt Cook Alpine Salmon, Sanford, Sealord; Coriolis analysis

---

- Sanford’s black range (e.g. scampi and snapper)
- High value, value-added, premium range for foodservice, B2B and B2C
- Increased contribution to overall revenue and profit

- Traceability – Each Mt Cook Alpine Salmon has a unique code
- The code details what farm it was caught from and when
- Documentation allows full traceability back to the batch of hatchery eggs and their parentage
New Zealand seafood firms are delivering on product-driven innovation

**SELECT EXAMPLES OF PRODUCT INNOVATION: NEW ZEALAND SEAFOOD 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 seafood, need for convenient snacking, gluten-free options)
- Innovative products target demand for sustainable, premium, authentic products
- Innovation is supported in New Zealand by government supported programs (e.g. MPI’s Primary Growth Partnership) and by research centres (e.g. Cawthron Institute)
- 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**

- Smoked on-trend - “Holy Smoke”, “The Smokehouse”, “Sealord” with ready to eat smoked salmon, smoked white fish and smoked shellfish ranges
- Products in line with convenience trends, and health and wellness
- Cawthron Institute, New Zealand’s preeminent seafood research centre assisting Smokehouse with packaging and shelf-life technology

- Sealord’s range of Gluten-free crumbed hoki fillets and crumbed hoki bites
- In-line with growth of gluten-free options
- In-line with sustainable, ethical harvesting

- Sanford’s “Big Glory Bay” brand is a high value, high margin, premium brand covering salmon, mussels and oyster categories
- Brand aims to achieve a 40% premium over commodity seafood products
- Brand messaging around provenance and story telling – from the pristine waters of NZ

*Source: Photo credit: Sanford*
New Zealand seafood firms are delivering on category and channel innovation

SELECT EXAMPLES OF CATEGORY & CHANNEL INNOVATION: NEW ZEALAND SEAFOOD FIRMS

2017

<table>
<thead>
<tr>
<th>Live Freshwater Crayfish</th>
<th>Tiaki Caught Seafood</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Live freshwater crayfish “Keewai” sustainably harvested in 1,800 ponds in the remote forests of the South Island, NZ</td>
<td>- Method of net fishing replacing trawling, utilising Precision Seafood Harvesting (PSH) technology</td>
</tr>
<tr>
<td>- Low impact aquaculture</td>
<td>- “Tiaki caught” seafood allows some fish to be landed on boats alive and allows some undersized fish to be released</td>
</tr>
<tr>
<td>- Promoting the clean-green messaging: nothing artificial in the water</td>
<td>- Focus on sustainably harvesting premium fish adds significant value to catch; fresh fish achieve higher premium</td>
</tr>
<tr>
<td>- Trials started in 2013</td>
<td>- A Primary Growth Partnership (PGP) between MPI, Sealord, Sanford and Moana Fisheries; programme worth $48m over 6 years</td>
</tr>
<tr>
<td>- Winner of the NZ Food Awards 2016 Bite Gourmet category</td>
<td>- Winner of NZ Hi-tech Awards 2016</td>
</tr>
<tr>
<td>- <a href="http://www.keewai.co.nz">www.keewai.co.nz</a></td>
<td>- <a href="http://www.tiaki.com">www.tiaki.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seafood maximising the “whole fish”</th>
<th>Embracing global sustainability standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Seafood companies move toward utilising the whole fish; see a drive to new and innovative products and categories</td>
<td>- Ethical decision-making is becoming more and more important in premium markets; demand from retailers and consumers</td>
</tr>
<tr>
<td>- Shellfish used as nutraceuticals key ingredient (e.g. Sanford greenshell mussel powder for joint support, United Fisheries Nutri Zing supplements)</td>
<td>- NZ industry is embracing sustainable certifications such as Marine Stewardship Council (six fisheries over 50% of all NZ seafood, starting with Hoki in 2001 and Orange Roughy most recently in 2016)</td>
</tr>
<tr>
<td>- Skins and mince used as key ingredient in petfoods (e.g. ZiwiPeak Mackerel and Lamb)</td>
<td>- NZ firms are also embracing responsible aquaculture and sustainable sourcing with “Best Aquaculture Practices Certification”; covers 18 sites in NZ (e.g. Mt Cook Alpine Salmon, Sanford, Sealord, NZ King Salmon)</td>
</tr>
<tr>
<td>- NZKS launch Omega Plus pet food utilising salmon-based omega-3</td>
<td></td>
</tr>
<tr>
<td>- <a href="http://www.omegaplus.co.nz">www.omegaplus.co.nz</a></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>FOCUS</th>
<th>CAPABILITIES</th>
</tr>
</thead>
</table>
| THE FOODBOWL | Processed/FMCG foods | - Extrusion & Milling/Blending  
- Liquids/Beverage  
- High pressure processing  
- Freeze drying  
- General processing  
- Multiple packaging styles  
- Product development kitchen |
| FOODWAIKATO | Dairy & Infant Formula | - Spray dryer  
- Evaporator  
- Other dairy equipment  
- Packing  
- Powder (vegetable) |
| HAWKES BAY | All Food and Beverage | Specialist expertise  
- business development  
- direct to other facilities |
| FOODPILOT | Dairy  
Fruit & vegetables  
All Food and Beverage | - Same equipment as Manukau (1/5th scale)  
- Same equipment as Waikato (1/20th scale)  
- Post harvest technologies  
- Meat and small goods pilot plant  
- Located at Massey University |
| FOODSOUTH | Processed/FMCG Foods  
Space/equipment for hire  
Export registrations  
20-200L batch size | - Mixing /Blending/Emulsifying  
- Extrusion  
- Freezing/Cooking/Baking  
- General Processing  
- Product Development Kitchen  
- Technical and Business development expertise |

Source: www.foodinnovationnetwork.co.nz; Coriolis
New Zealand Seafood Firms

- Enterprises
- Employment
- Turnover
- Ownership
- Foreign investors
- Acquisitions
- Investments
- Firm Profiles
New Zealand has a strong and growing seafood industry that continues to attract investment

OVERVIEW

- The number of firms in New Zealand’s seafood industry has stabilised over the last six years
- New Zealand now has a large and robust seafood industry with a range of participants of various sizes

KEY METRICS

- At the enterprise level, employment in the New Zealand seafood industry is relatively flat
- The seafood industry is spread across the country, however Nelson is the dominant region
- Industry employment is declining as the industry seeks productivity in the face of flat catch
- The three largest seafood companies account for almost 45% of the industry employment

FIRM PERFORMANCE

- Sanford, Sealord and Talley’s are clear New Zealand market leaders by turnover; however there is a strong tier two group
- New Zealand seafood industry has a range of owners; important industry for New Zealand iwi

INVESTMENT

- The New Zealand seafood industry has attracted international investment primarily from Asian countries
- New partial acquisitions in seafood are seeking to consolidate the industry and secure supply
- Existing and new firms are investing in the New Zealand seafood industry with new plant and equipment
- Three key drivers support the ongoing investments in the New Zealand seafood industry
- New Zealand seafood firms are also investing in new and improved marketing emphasising “premium” and sustainable themes
The number of firms in New Zealand’s seafood industry has stabilised over the last six years.

**NUMBER OF SEAFOOD INDUSTRY ENTERPRISES**

Enterprises; 2006-2016

**AVERAGE TONNES/PROCESSOR ENTERPRISE**

Tonnes/enterprise; 2006-2016

---

Note: Seafood tonnage lagged one year; Source: Statistics NZ business demographics database; Coriolis analysis
New Zealand has a large and robust seafood industry with a range of participants of various sizes.

**defined seafood**

**large wild capture seafood**
- Ngāi Tahu Seafood
- Moana
- Sanford
- Sealord
- Hawkes Bay Seafoods
- Fiordland Lobster Company
- Independent
- Amaltha

**medium/smaller wild capture seafood**
- Cloudy Bay Clams
- Solander
- Pauaco
- Ngati Porou Seafoods Group
- Pelco NZ
- Pike River
- Westfleets Seafoods

**large aquaculture**
- New Zealand King Salmon
- Sanford
- North Island Mussels Ltd.
- Talley’s
- United

**medium/small aquaculture**
- Cloudy Bay Seafood
- Kono
- Southern Clans Limited

**seafood marketer/exporters**
- Marine Foods Limited
- Bostock Exports
- Seafood Professionals
- Ikana
- Akaroa Salmon
- Oysters
- Keewai
- High Country Salmon
- Green Cell Oysters
- Kaipara Oysters
At the enterprise level, employment in the New Zealand seafood industry is relatively flat.

**TOTAL EMPLOYMENT BY SEAFOOD INDUSTRY ENTERPRISES¹**
Headcount; 2006-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Aquaculture</th>
<th>Fishing</th>
<th>Seafood Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2007</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2008</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2009</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2010</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2011</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2012</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2013</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2014</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2015</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
<tr>
<td>2016</td>
<td>7,490</td>
<td>1,750</td>
<td>9,010</td>
</tr>
</tbody>
</table>

**RECLASSIFICATION OF EMPLOYEES WITHIN INDUSTRY**

- Seafood Processing
- Fishing
- Aquaculture

**AVERAGE EMPLOYEES/PROCESSOR**
Head/unit; 2006-2016

Note: 2016 data latest available as of April 2017. ¹ Defined as A020 Aquaculture, A041 Fishing and C112 Seafood processing; classification is based on what 51% of the firm does; Source: Statistics NZ business demographics database; Coriolis analysis.
The seafood industry is spread across the country, however Nelson is the dominant region; industry employment is declining as the industry seeks productivity in the face of flat catch.

Note: data is geographic units (does not match enterprise units page prior); 2016 data latest available as of April 2017; 1. Defined as A020 Aquaculture, A041 Fishing and C112 Seafood processing; * includes Area Outside of Region; Source: Statistics NZ business demographics database; Coriolis analysis
The three largest seafood companies account for almost 45% of the industry employment.

**NUMBER OF PEOPLE EMPLOYED: NZ SEAFOOD INDUSTRY BY SELECT FIRM**

<table>
<thead>
<tr>
<th>FIRM</th>
<th>People</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanford</td>
<td>1,548</td>
<td>18%</td>
</tr>
<tr>
<td>Sealord</td>
<td>1,100</td>
<td>13%</td>
</tr>
<tr>
<td>Talley’s</td>
<td>1,000</td>
<td>12%</td>
</tr>
<tr>
<td>NZ King Salmon</td>
<td>450</td>
<td>5%</td>
</tr>
<tr>
<td>North Island Mussels</td>
<td>300</td>
<td>3%</td>
</tr>
<tr>
<td>Hawkes Bay Seafood</td>
<td>280</td>
<td>3%</td>
</tr>
<tr>
<td>Moana New Zealand</td>
<td>400</td>
<td>5%</td>
</tr>
<tr>
<td>Kono NZ</td>
<td>250</td>
<td>3%</td>
</tr>
<tr>
<td>Mount Cook Alpine Salmon</td>
<td>175</td>
<td>2%</td>
</tr>
<tr>
<td>United Fisheries</td>
<td>164</td>
<td>2%</td>
</tr>
<tr>
<td>Ngai Tahu Seafood</td>
<td>125</td>
<td>1%</td>
</tr>
<tr>
<td>Westfleet</td>
<td>100</td>
<td>1%</td>
</tr>
<tr>
<td>Independent Fisheries</td>
<td>100</td>
<td>1%</td>
</tr>
<tr>
<td>Cloudy Bay Group</td>
<td>100</td>
<td>1%</td>
</tr>
<tr>
<td>Fiordland Lobster Co</td>
<td>60</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>2,438</td>
<td>28%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8,590</td>
<td></td>
</tr>
</tbody>
</table>

**INCLUDES CORIOLIS ESTIMATES**

**COMMENTS/NOTES**

- Kono NZ is an estimate (from total employees across the whole business).
- Talley’s is an estimate (from total employees across the whole business), does not include seasonal workers.

*Source: SNZ business demographics (detailed industry for enterprise units); various firm websites; published articles; interviews; various other sources; Coriolis analysis*
Sanford, Sealord and Talley’s are clear New Zealand market leaders by turnover; however there is a strong tier two group.

ANNUAL TURNOVER BY TOP 10 FIRMS: NEW ZEALAND SEAFOOD INDUSTRY
NZ$; m; FY2016

INCLUDES CORIOLIS ESTIMATES

- Sanford: $463
- Sealord: $454
- Talley’s: $450* (estimate from available data)
- Moana NZ: $170
- Fiordland Lobster Co: $155
- NZ King Salmon: $114
- Ngai Tahu Seafood: $85
- Independent Fisheries: $80
- United Fisheries: $75
- Kono NZ: $55

* Estimate of seafood operations only, see Talley’s profile for more detail; Source: various company annual reports; NZCO; Coriolis estimates and analysis
New Zealand seafood industry has a range of owners; important industry for New Zealand iwi.

**ESTIMATED SHARE OF TOTAL INDUSTRY TURNOVER BY OWNERSHIP**

% of turnover/sales; 2016

- **Iwi**: 23%
- **Private**: 44%
- **Public**: 21%
- **Foreign**: 12%

**Source**: New Zealand Companies Office; various annual reports; Coriolis estimates and analysis.
The New Zealand seafood industry has attracted international investment primarily from Asian countries.

- **Japan’s largest seafood company**
- **Leading NZ seafood company**
- **Large Japanese trading company (F&B)**
- **Invested in Cedenco Aquaculture**
- **Malaysian-based Tiong Group**
- **NZ leading Salmon company**
- **Large Japanese trading company (F&B)**
- **Leading NZ seafood company**

*Source: Coriolis from a wide range of published articles, annual reports and other sources*
New partial acquisitions in seafood are seeking to consolidate the industry and secure supply

<table>
<thead>
<tr>
<th>Company 1</th>
<th>Company 2</th>
<th>Acquired Interest</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maruha Nichiro</td>
<td>Sanford</td>
<td>4.7% stake</td>
<td>$25m</td>
<td>Japanese company acquired a 4.7% stake in Sanford (shares bought from Avalon Investment Trust, (a Goodfellow vehicle reducing their share from 14% to 9.2%); Mar '16</td>
</tr>
<tr>
<td>Cedenco Foods (Imanaka, Japan)</td>
<td>North Island Mussels</td>
<td>50% share of processing and farming interests</td>
<td>N/A</td>
<td>Cedenco Foods (Imanaka, Japan) acquires 50% share of North Island Mussels (processing and farming interests) from Sealord; JV with Sanford “North Island Mussel Processors” in Tauranga; Oct '15</td>
</tr>
<tr>
<td>Mt Cook Alpine Salmon</td>
<td>Aoraki Smokehouse Salmon</td>
<td>100% of Aoraki Smokehouse Salmon</td>
<td>N/A</td>
<td>Mt Cook Alpine Salmon acquires 100% of Aoraki Smokehouse Salmon, both freshwater canal seafood companies; Aoraki specialises in smoked salmon for the domestic market; consolidating the canal production gaining scale to meet international demand; Sept 16</td>
</tr>
</tbody>
</table>

Source: Coriolis from a wide range of published articles, annual reports and other sources
Existing and new firms are investing in the New Zealand seafood industry, with new plant and equipment.

SELECT SEAFOOD INVESTMENT IN PLANT AND EQUIPMENT
Identified; announced; NZ$m; 2015-2017

- Sealord: $76
- Sanford: $28
- New Zealand King Salmon: $20
- Kahungunu Asset Holding Company: $6
- Total: $130

Note: KAHC lease plant to Fiordland Lobster Co, see Firm Profile page; Source: Coriolis from a wide range of published articles, annual reports and other sources; image courtesy NZ King Salmon

NZ King Salmon – New farm in Pelorus Sound
NZ King Salmon – Cuddon’s designed new barge
Three key drivers support the ongoing investments in the New Zealand seafood industry

<table>
<thead>
<tr>
<th>Investment in Vessels; Increasing Efficiencies</th>
<th>Increasing Processing Scale &amp; Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$70m</strong> - Investing $70m in new 82.9m vessel; announced Aug 2016; for delivery 2018</td>
<td><strong>N/A</strong> - New purpose built seafood facility over 1,650 m² in Bluff for live fish, crustaceans, shellfish, chilled and frozen (28 staff, oyster openers; 30 fishers); Apr ‘16</td>
</tr>
<tr>
<td><strong>$6m</strong> - Invested in fishing vessel refit; Dec 16</td>
<td><strong>$18m</strong> - Investment in three new salmon farms</td>
</tr>
<tr>
<td><strong>$28m</strong> - Invested in new fishing vessels, 2016</td>
<td><strong>$6m</strong> - New lobster processing factory in East Tamaki, leased by Fiordland Lobster Company; Apr ‘16</td>
</tr>
<tr>
<td><strong>$2m</strong> - Invested in new barge for feed storage and accommodation in Marlborough; Aug ‘17</td>
<td><strong>N/A</strong> - Replacement seafood processing facility on the Chatham Islands, commissioned Nov ‘15</td>
</tr>
</tbody>
</table>

**Investment in Sustainable Harvesting**

| **$24m** - Primary Growth Partnership joint investment in “Precision Seafood Harvesting” - 6 year project commenced 2012 | **$24m** - Primary Growth Partnership joint investment in “Precision Seafood Harvesting” - 6 year project commenced 2012 |
| **$24m** - New wild fish harvesting technology that results in more precise catches, species and size - Tiaki brand launched 2016 | **$2m** - Invested in new barge for feed storage and accommodation in Marlborough; Aug ‘17 |

Sealord’s new $70m vessel (via CGI)

Source: Coriolis from a wide range of published articles, annual reports and other sources; image courtesy Sealord
New Zealand seafood firms are also investing in new and improved marketing emphasising “premium” and sustainable themes

**Premium Brand**

**Ora King** is NZ King Salmon’s premium brand; targeting ‘discerning chefs’

This message is reinforced through unique looking, premium packaging

Website video emphases pristine environment and exclusivity of breed

**Rebranding**

AFL renamed Moana NZ; signals move from ‘fisheries and processing’ to premium seafood and direct connections with consumers

This message is reinforced through rebranded, more premium packaging

Website video reinforces story of “true connection, true provenance, true to nature and true for generations”

Source: Coriolis from a wide range of published articles, annual reports and other sources; photo source: NZ King Salmon, Moana, Kono
New Zealand Seafood Firm Profiles
## CLOUDY BAY GROUP

**Isaac Piper**
Managing Director

**DESCRIPTION:** Seafood processor and exporter; Cloudy Bay Clams; wild surf clams in Clifford Bay; three harvesting areas; export to Australia, Hong Kong, China, Singapore, USA; Cloudy Bay Seafood; farmed mussels in Marlborough, processing factory in Nelson

**KEY PRODUCTS:** Diamond shell, tua tua, storm clam, moon shell clams, mussels; blanched chilled or frozen, live chilled

**OWNERSHIP:** NZ; Private (Piper)

**COMPANY NUMBER:** 3955443

**ADDRESS:** 24 Henry Street, Blenheim

**PHONE:** +64 3 578 4487

**WEBSITE:** www.cloudybayclams.co.nz

**YEAR FORMED:** 1990

**STAFF EMPLOYED:** 100

**REVENUE:** $15-20m*

**COMPANY HIGHLIGHTS:** Achieved Friend of the Sea sustainability status in ’13; featured on Masterchef NZ in ’15; launched two new products, IQF pre-coated Popcorn Clam and frozen 1kg Diamond Shell clam meat in ’16; R&D projects with Auckland University of Technology to research sustainability and opportunities for industry in ’16

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## FIORDLAND LOBSTER CO

**Alan Buckner**
Chief Executive Officer

**DESCRIPTION:** NZ’s largest exporter of live lobster; operations in Fiordland, Te Anau, Riverton, Jackson Bay, Christchurch; South Australian Lobster Co, SA, TAS, VIC; 800t from NZ, 500t from AU via 5 export packing facilities; agreement with Ngati Kahungunu (KAHC) to access quota

**KEY PRODUCTS:** Live lobster

**OWNERSHIP:** NZ; Private (Hutchins, Wilson 18%, Rowe, Burkhart 16%, Iwi, others)

**COMPANY NUMBER:** 861866

**ADDRESS:** 17 Caswell Rd, Te Anau

**PHONE:** +64 3 249 0023

**WEBSITE:** www.lobster.co.nz

**YEAR FORMED:** 1989

**STAFF EMPLOYED:** 45 (15-20 casual)

**REVENUE:** $155m (FY16)

**COMPANY HIGHLIGHTS:** Invested $7-8m in Australia ’15; South Australia Lobster Company (SA, Tas & Vic) formed to increase supplies; 90% of exports to China; currently 35% of NZ’s live lobster exports; leased new $6m lobster processing plant owned by Kahungunu Asset Holding Co (4th largest shareholder in Fiordland Lobster Co, who lease quota) ’16, largest in Australasia

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## HAWKES BAY SEAFOODS

**Nino D’Esposito**
Managing Director

**DESCRIPTION:** Vertically integrated seafood company in Hawkes Bay; fish, seafood, shellfish; domestic and export markets; 16 vessels; long term lease agreement with Ngati Kahungunu (KAHC)

**KEY PRODUCTS:** Seafood

**OWNERSHIP:** NZ; Private (D’Esposito)

**COMPANY NUMBER:** 407182

**ADDRESS:** Cnr Pandora and West Quay, Ahuriri, Napier

**PHONE:** +64 6 835 5533

**WEBSITE:** www.hawkesbayseafoods.co.nz

**YEAR FORMED:** 1998

**STAFF EMPLOYED:** 280

**REVENUE:** $40-50m (FY16)

**COMPANY HIGHLIGHTS:** New $3m cool store and office development in ’14

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## INDEPENDENT FISHERIES

**Mark Allison**
Director and General Manager

**DESCRIPTION:** Deep sea fishing company, 3 vessels, off-shore processing, supplier of whole & dressed fish and squid; 79,000t of annual catch entitlement

**KEY PRODUCTS:** Whole and dressed fish; hoki, southern blue whiting, mackerel, barracuda, arrow squid

**OWNERSHIP:** NZ; Private (Shadbolt 60%, others)

**COMPANY NUMBER:** 125989

**ADDRESS:** 64 Broad Street, Woolston, Christchurch

**PHONE:** +64 3 384 2344

**WEBSITE:** www.indfish.co.nz

**YEAR FORMED:** 1959

**STAFF EMPLOYED:** 100

**REVENUE:** $80m (’16)

**COMPANY HIGHLIGHTS:**
<p>| Company Name                          | CEO Name          | CEO Title               | Description | Key Products | Ownership       | Company Number | Address                      | Phone           | Website                                      | Year Formed | Staff Employed | Revenue (FY16) | Company Highlights                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------|-------------------|-------------------------|--------------|--------------|----------------|----------------|----------------|-------------------------------|----------------|----------------------------------------------|-------------|----------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KONO NZ LP                           | Rachel Taulelei   | Chief Executive Officer | DESCRIPTION: Kono NZ is the food and beverage business of Wakatu Inc; over 530ha of land and sea; seafood based in Blenheim, producers of wine brands under the Tohu and Aronui brands, horticulture based in Motueka, food distribution; exports to 30 countries | Mussels, oysters, lobster, wine, apples, kiwifruit, pears, hops, honey, cider (Tutu), Annies fruit bars | NZ; Private (Wakatu Incorporation, 4,000 shareholders) | 3438072        | 10 Pakari Road, Leigh              | +64 9 422 6424 | <a href="http://www.wakatu.org.nz">www.wakatu.org.nz</a>; <a href="http://www.kono.co.nz">www.kono.co.nz</a>               | 1977/2011   | 450             | $70-90m (FY16) | COMPANY HIGHLIGHTS: Rebranded to Moana New Zealand Jun '16, moves to premium products and sustainability; joint $52m investment in Precision Seafood Harvesting; new 24m state of the art fishing vessel built in Nelson, first of 6 inshore boats, Seabird Smart training; opened new lobster plant in partnership with Port Nicholson Fisheries for live export to Asia ('16); profit of $19.4m for '16                                                                 |
| LEIGH FISHERIES/LEE FISH GROUP        | Gregory Bishop    | Chief Executive Officer | DESCRIPTION: Vertically integrated seafood company, NZ and SEA; long line inshore, mid water, migratory species; 70t lobster, 12t packhorse lobster; contract fishers; 40 fishing vessels; factory in Leigh; export 2,500t of chilled product globally; associate companies in USA, EU | Snapper, bluenose, groper, by-catch species, live lobster, packhorse lobster, bigeye, bluefin, swordfish. | NZ; Private (Cunningham, Ngati Whataua Moana Holdings, others); | 56407          | 1-3 Bell Ave, Mt Wellington, Auckland       | +64 9 302 1520 | <a href="http://www.lee.fish">www.lee.fish</a>; <a href="http://www.chathamislandfood.com">www.chathamislandfood.com</a>           | 1958        | 28              | $45-50m (FY16) | COMPANY HIGHLIGHTS: Lee USA turnover is ~US$30m; Lee Europe turnover is ~CH18m; set up Chatham Food Co.; processing and exporting finfish caught around island; labelling is GS1 barcoded with Ftrace, giving how, where and by whom the fish is caught; finalised Auckland Export Award '16; Brussels, Boston Seafood Shows in '16; also owns 50% of Leigh Lobster (300t/year live lobster)                                                                 |
| MOANA NEW ZEALAND (formerly AOTEAROA FISHERIES) | Carl Carrington | Chief Executive Officer | DESCRIPTION: Pan iwi organisation with 50% ownership in Sealord; largest Maori owned fisheries company in New Zealand; JV with Multi-Pack Ltd “Prepack” produce combat ration packs for Australian Defence Forces | Blue abalone, wild abalone, fish, lobster, oysters. | NZ; Iwi (various iwi holdings) | 1581332        | 1-3 Bell Ave, Mt Wellington, Auckland       | +64 9 302 1520 | <a href="http://www.moana.co.nz">www.moana.co.nz</a>                                | 2004        | 400             | ~$170m (FY16)  | COMPANY HIGHLIGHTS: State of art processing facilities in Timaru. Continued support from Callaghan Innovations and NZTE. Consents in place for further expansion to meet high demand for its unique Freshwater King Salmon product. Acquired Aoraki Smokehouse Salmon in '16, to boost annual production                                                                                                                                 |
| MOUNT COOK ALPINE SALMON             | David Cole        | Chief Executive Officer | DESCRIPTION: Vertically integrated salmon farmers and processors; 4 farms in Mackenzie Basin; multiple hatcheries around Canterbury; new modern processing plant in Timaru; 1,500t annual production with strong CAGS; certified Global Food Safety Initiative standards | Fresh, smoked, frozen salmon, other value added products | NZ; Private (Sinclair Investments 31%, Wale 31%, others) | 2225082        | 13 Yewlett Crescent, Queenstown             | +64 3 929 2526 | <a href="http://www.alpinesalmon.co.nz">www.alpinesalmon.co.nz</a>                        | 1992        | 175             | $20-40m (FY16) | COMPANY HIGHLIGHTS: Acquired Annies (fruit bars) in '14; established trading entity in Shanghai in '15, 4 staff; acquired Yellow Brick Road food distribution company in '15; Tutu cider released in '15; expanded wine production onsite in '15; acquires remaining shares of Pure NZ Greenshell Co., Shanghai                                                                 |</p>
<table>
<thead>
<tr>
<th>Company Name</th>
<th>CEO Name</th>
<th>CEO Position</th>
<th>Company Description</th>
<th>Key Products</th>
<th>Ownership</th>
<th>Company Number</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
<th>Year Formed</th>
<th>Staff Employed</th>
<th>Revenue (FY16)</th>
<th>Company Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW ZEALAND KING SALMON CO</strong></td>
<td>Grant Rosewarne</td>
<td>Chief Executive and Managing Director</td>
<td>Vertically integrated king salmon farming, processing, marketing company; 50% of world’s aquaculture king salmon production; 6,000t of king salmon per year; 7 sea farms in Marlborough; Ora King, Regal Marlborough King Salmon, Southern Ocean brands; 45% volume exported</td>
<td>Fresh, frozen, cold smoked and wood roasted King salmon</td>
<td>NZ; Public (NZX, ASX: NZK) (Oregon Group (Malaysia) 40%; NZ Central Securities 20%; China Resources Ng Fung 10%, others)</td>
<td>287485</td>
<td>93 Beatty Street, Tahunanui, Nelson</td>
<td>+64 3 548 5714</td>
<td><a href="http://www.kingsalmon.co.nz">www.kingsalmon.co.nz</a></td>
<td>1985</td>
<td>450</td>
<td>$114m (FY16)</td>
<td>COMPANY HIGHLIGHTS: Opened 3 new farms in Marlborough Sounds in ’16, $18m capex to complete phased build out, allowing doubling in production to 12,000 t over time; IPO Oct ’16 on NZX and ASX, allowing Direct Capital to exit; investing $15.3m by ’18 to increase production ultimately to 12,000t; launched pet food products “Omega Plus” in ’16</td>
</tr>
<tr>
<td><strong>NGAI TAHU SEAFOOD LTD</strong></td>
<td>Joseph Thomas</td>
<td>Chief Executive</td>
<td>Vertically integrated seafood company with facilities in Bluff, Christchurch, Kaikoura and Picton; supports 50 Ngai Tahu fishing businesses; parent group also includes Ngai Tahu farming, dairy, meat and forestry</td>
<td>Lobster, paua, blue cod, Bluff oysters, mussels, fin fish (Tahu brand)</td>
<td>NZ; Iwi (Ngai Tahu Charitable Trust)</td>
<td>386544</td>
<td>6 Bolt Place, Christchurch Airport, Christchurch</td>
<td>+64 3 358 2761</td>
<td><a href="http://www.ngaitahuseafood.com">www.ngaitahuseafood.com</a></td>
<td>1988</td>
<td>100 - 150</td>
<td>$81m (FY14) $85m (FY15)</td>
<td>COMPANY HIGHLIGHTS: EBIT $24.6m (FY16); investigating selling live blue cod into export markets Nov ’15; acquired mussel farm in Golden Bay in Sep ’15; opened new fish processing facility in Bluff in April ’16; all product now exported under Tahu brand since ’16</td>
</tr>
<tr>
<td><strong>NGATI POROU SEAFOODS GROUP</strong></td>
<td>Mark Ngata</td>
<td>Chief Executive Officer</td>
<td>Vertically integrated seafood business; contract fishing; processing facility and marketing; live lobster holding tanks; exports to Europe, Asia, AU, USA; lobster quota caught through Port Nicholson Fisheries and Moana NZ partnership; Reai Fresh, Off the Hook retail stores</td>
<td>Live lobster, fish, oysters, mussels, kina, cockles, smoked whitefish; Ahia brand</td>
<td>NZ; Iwi (Te Runanganui O Ngati Porou)</td>
<td>1778412</td>
<td>47-53 The Esplanade, Gisborne</td>
<td>+64 6 868 1644</td>
<td><a href="http://www.ngatiporou.com">www.ngatiporou.com</a></td>
<td>2002</td>
<td>100-150</td>
<td>$5.2m (FY16)</td>
<td>COMPANY HIGHLIGHTS:</td>
</tr>
<tr>
<td><strong>NORTH ISLAND MUSSELS LTD</strong></td>
<td>Daniel Ramsey</td>
<td>General Manager</td>
<td>Mussel farming, processing and sales; 900 long lines over 2,000ha of coastal waters in Coromandel; 5 vessels; 30,001t of mussels processed annually at Tauranga facility; 28 automated mussel opening machines, a world first; 50% of NZ marinated mussels, number of brands</td>
<td>Mussels; IQF meat, half shell, marinated mussels</td>
<td>Japan; Private (via Cedenco Foods 50%); NZ; Public (via Sanford 50%)</td>
<td>3995838</td>
<td>25 Glenlyon Ave, Greerton, Tauranga</td>
<td>+64 7 571 3917</td>
<td><a href="http://www.niml.co.nz">www.niml.co.nz</a></td>
<td>2012</td>
<td>300</td>
<td>$20-30m*</td>
<td>COMPANY HIGHLIGHTS: Cedenco Foods acquired Sealords 50% stake in ’15</td>
</tr>
</tbody>
</table>

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles; Coriolis analysis
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Director/General Manager</th>
<th>Description</th>
<th>Key Products</th>
<th>Ownership</th>
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<tr>
<td>PAKIHI MARINE FARMS</td>
<td>Callum McCallum</td>
<td>Cultivator, harvester and processor of oysters; based in Hauraki Gulf; two farming areas on Clevedon Coast and Waiheke Island; bulk of production is fresh half shell for domestic market</td>
<td>Oysters; chilled live, chilled and frozen half shell, chilled and frozen oyster meat</td>
<td>NZ; Private (McCallum, Gill)</td>
<td>113952</td>
<td>914 Clevedon-Kawakawa Bay Road, Papakura</td>
<td>+64 9 292 8017</td>
<td><a href="http://www.clevedonoysters.com">www.clevedonoysters.com</a></td>
<td>1982</td>
<td>40 PT</td>
<td>$2-5m*</td>
<td></td>
</tr>
<tr>
<td>PAUACO LTD</td>
<td>Jamie McKay</td>
<td>Paua processing and marketing to South East Asia; result of consolidation of smaller paua fishing and processing companies; significant markets in Hong Kong, Singapore, Malaysia</td>
<td>Live, chilled, canned wild paua</td>
<td>NZ; Private (Pacific Canneries 30%, Te Anau Fishing Co. 8%, others)</td>
<td>3962059</td>
<td>172 Ruru Road, Bromley, Christchurch</td>
<td>+64 3 982 3008</td>
<td><a href="http://www.pauaco.co.nz">www.pauaco.co.nz</a></td>
<td>2012</td>
<td>13</td>
<td>$10-15m ('16)</td>
<td></td>
</tr>
<tr>
<td>PELCO NEW ZEALAND</td>
<td>Andy Rolleston</td>
<td>Wild capture fishing and processing company specialising in pelagic species; based in Mount Maunganui; Pelcold Storage coolstore subsidiary</td>
<td>Mackerel, kahawai, tuna, trevally</td>
<td>NZ; Private (Rolleston)</td>
<td>499562</td>
<td>32 Portside Drive, Mount Maunganui</td>
<td>+64 7 574 9335</td>
<td>www_pelco-nz.com</td>
<td>1995</td>
<td>25</td>
<td>$25-35m*</td>
<td></td>
</tr>
<tr>
<td>SANFORD</td>
<td>Volker Kuntzsch</td>
<td>NZ’s largest diversified seafood fishing, aquaculture and marketing company with exports 82% of revenue; NZ’s largest quota holder of fishing rights, 23%; largest Green Lipped Mussel producer; 2nd largest King Salmon producer in NZ; 50 vessels, 210 farms, 7 processing sites</td>
<td>Chilled and frozen fish, squid, mussels, salmon, oysters, scallops</td>
<td>NZ; Public (NZX:SAN) (Amalgamated Dairies Ltd 27%, Avalon Investment 9%, Maruha Nichiro 4%, others)</td>
<td>40963</td>
<td>22 Jellicoe Street, Freemans Bay, Auckland</td>
<td>+64 9 379 4720</td>
<td><a href="http://www.sanford.co.nz">www.sanford.co.nz</a></td>
<td>1881/1904</td>
<td>1,548</td>
<td>$463m (FY16)</td>
<td>Exit from Pacific tuna fishing business, moving from commodity fishing company to value added seafood company in '16; wanting to restrict foreign ownership under 25% to protect quota in '16; invested $27.8m in fishing vessels in '16; moved into pet food market, supplying ingredients to industry '16; research into ocean mussel feasibility with Cawthron Institute</td>
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<tr>
<td>Company</td>
<td>CEO/Managing Director</td>
<td>Description</td>
<td>Ownership</td>
<td>Company Number</td>
<td>Address</td>
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<tr>
<td>SEALORD</td>
<td>Steve Yung</td>
<td>Vertically integrated seafood company comprising fishing, aquaculture,</td>
<td>NZ; Iwi (Moana New Zealand 50%); Public (Nippon Suisan Kaisha 50%) via Kura Limited</td>
<td>168963</td>
<td>666 Central Park, Penrose, Auckland</td>
<td>+64 9 589 5359</td>
<td><a href="http://www.sealord.com">www.sealord.com</a>; <a href="http://www.shellfish.co.nz">www.shellfish.co.nz</a></td>
<td>1961</td>
<td>1,100</td>
<td>$454m (FY16)</td>
<td>Sold 50% stake in North Island Mussels to Cedenco Foods in Oct '15; invested $70m in new purpose built deep sea vessel in '16, to be built in Norway, delivered in mid '18, at sea production with 20,000t capacity; profit more than doubled to $22.9m in FY16; gained Coles account for supply of fresh salmon</td>
<td></td>
</tr>
<tr>
<td>SOLANDER GROUP</td>
<td>Charles Hufflett</td>
<td>Seafood company; NZ and Fiji operations; exporting and wholesaling</td>
<td>NZ; Private (Hufflett)</td>
<td>167871/229781</td>
<td>4 Cross Quay, Port Nelson, Nelson</td>
<td>+64 3 545 9650</td>
<td><a href="http://www.solander.com">www.solander.com</a>; <a href="http://www.slipway.com.fj">www.slipway.com.fj</a>; <a href="http://www.gourmetseafood.co.nz">www.gourmetseafood.co.nz</a>; <a href="http://www.solander.com.fj">www.solander.com.fj</a></td>
<td>1988</td>
<td>83</td>
<td>$30-50m (FY16)</td>
<td></td>
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</tr>
<tr>
<td>SOUTHERN CLAMS LTD</td>
<td>Roger Belton</td>
<td>Clam fishing company based in Otago; Southern Rainbow export company;</td>
<td>NZ; Private (Belton, De Pennart, Witten, Flavell)</td>
<td>209636</td>
<td>ADDRESS: 16 Bombay Street, Dunedin</td>
<td>+64 3 477 1505</td>
<td><a href="http://WWW.nzclams.com">WWW.nzclams.com</a>; <a href="http://WWW.shellfish.co.nz">WWW.shellfish.co.nz</a></td>
<td>1984</td>
<td>30</td>
<td>$5-10m ('16)</td>
<td>COMPANY HIGHLIGHTS: Collaboration with Emerson’s to make Southern Clam Stout</td>
<td></td>
</tr>
<tr>
<td>STAR FISH SUPPLY LTD/</td>
<td>Andy Claudatos</td>
<td>Fish processors, wholesalers and exporters; based in Hawke’s Bay;</td>
<td>NZ; Private (Claudatos, McGoverin)</td>
<td>926592</td>
<td>ADDRESS: 27 Dunlop Road, Onekawa, Napier</td>
<td>+64 6 843 0662</td>
<td><a href="http://www.starfoods.co.nz">www.starfoods.co.nz</a></td>
<td>1966</td>
<td>35</td>
<td>$30-40m*</td>
<td></td>
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</tr>
<tr>
<td>STAR FOOD SERVICE LTD</td>
<td></td>
<td>fishing vessels; onsite fish processing factory; Claudatos and McGoverin co-</td>
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<tr>
<td>Company Name</td>
<td>Key Contact(s)</td>
<td>Company Description</td>
<td>Key Products</td>
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<tr>
<td>Talley's Group</td>
<td>Michael &amp; Peter Talley Joint Managing Directors</td>
<td>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</td>
<td>Meat cuts, frozen vegetables, frozen seafood, marinated mussels, seafood by products, ice cream, dairy ingredients</td>
<td>NZ; Private (Talley)</td>
<td>168346/3342490</td>
<td>1 Ward Street, Motueka</td>
<td>+64 3 528 2800</td>
<td><a href="http://www.talleys.co.nz">www.talleys.co.nz</a>; <a href="http://www.affco.co.nz">www.affco.co.nz</a>; <a href="http://www.opencountry.co.nz">www.opencountry.co.nz</a></td>
<td>1936/1904</td>
<td>2,760-4,600 seas (OCD 310)</td>
<td>$2,000 - 2,500m* (OCD $819m (FY16))</td>
<td>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 at end of firm profiles</td>
</tr>
<tr>
<td>United Fisheries</td>
<td>Andre Kotzikas Chief Executive Officer/Owner</td>
<td>Seafood fishing, aquaculture, processing and marketing company based in Christchurch, seafood value added products, nutraceutical products (Nutri Zing); owns several mussel farms</td>
<td>Frozen and fresh fish, mussels, oysters, fish fertilisers (Bio Marinus), nutraceutical products (Nutri Zing)</td>
<td>NZ; Private (Keys, Jones, Kotzikas)</td>
<td>126455</td>
<td>50-58 Parkhouse Road, Sockburn, Christchurch</td>
<td>+64 3 343 0587</td>
<td><a href="http://www.unitedfisheries.co.nz">www.unitedfisheries.co.nz</a>; <a href="http://www.biomarinus.co.nz">www.biomarinus.co.nz</a>; <a href="http://www.nutrizing.co.nz">www.nutrizing.co.nz</a></td>
<td>1974</td>
<td>164</td>
<td>REVENUE: $70-80m (FY16)</td>
<td>COMPANY HIGHLIGHTS: Developed a fish silage for feeding livestock and a fertiliser; recently developed nutraceutical range from co-products, own manufacturing facility</td>
</tr>
<tr>
<td>Vela Fishing Limited</td>
<td>Geoff Burgess Director</td>
<td>One of NZ’s largest privately owned fishing quota owners, and exporters of frozen fish and mussels</td>
<td>Fish, squid, mussels; Vela and private label brands</td>
<td>NZ; Private (Vela)</td>
<td>923611</td>
<td>12 Sir Tristram Avenue, Te Rapa, Hamilton</td>
<td>+64 7 849 2376</td>
<td><a href="http://www.velafishing.co.nz">www.velafishing.co.nz</a></td>
<td>1929</td>
<td>15</td>
<td>REVENUE: $40-50m*</td>
<td>COMPANY HIGHLIGHTS:</td>
</tr>
<tr>
<td>Westfleet Seafoods</td>
<td>Craig Boote Managing Director</td>
<td>Wild capture fishing, processing, exporting company; 6 trawler and longline vessels; 1 fresh fish processing facility; based on West Coast</td>
<td>Inshore and deep sea fish; frozen and fresh</td>
<td>NZ; Private (Sealord Group 50%, Boote 50%)</td>
<td>154071</td>
<td>84 Gresson Street, Greymouth</td>
<td>+64 3 768 5370</td>
<td><a href="http://www.westfleet.co.nz">www.westfleet.co.nz</a></td>
<td>1979</td>
<td>100</td>
<td>REVENUE: $45-50m*</td>
<td>COMPANY HIGHLIGHTS: Built new multi million dollar factory in ’14, 3,000 m²</td>
</tr>
</tbody>
</table>
Staff: 2,760 FTE (+ 4,600 seasonal)
Revenue: $2,000 - $2,500m estimate

SEAFOOD
Staff: 1,000 FTE + 600 seasonal
Revenue: $400-500m estimate
- Deepsea fleet (9 vessels)
- Staff: 800
- Sites: 4 processing
- North Island
- 100 vessels supply
- Sites: Blenheim, Timaru, Westport, Motueka, Havelock
- Subsidiaries
  100%: Greenshell GLM9
  50%: Clearwater Mussels Ltd (90 farms 470ha) + others

PROCESSED/VEGETABLE
Staff: 700
Revenue: $350-450m estimate
- Staff: 650-700
- Sites: 2
- Own farms + growers
- Logan Farms
- Snapped frozen range
- Peas, beans, corn, spinach
- Corn carrots, mixed
- Sites: Blenheim, Ashburton

MEAT
Staff: 800 + 4,000 seasonal
Revenue: $1,000-1,500m estimate
- AFFCO
- Sites: 11 (9 plants)
- Staff: 800 + 4,000 seasonal
- South Pacific Meats
- North Island
- Sites: 1
- Ownership: Olam 15% (Singapore), Dairy Investment Fund 7%

DAIRY
Staff: 260
Revenue: $620-650m estimate
- Sites: 1 Motueka
- Staff: 26
- Ice cream
- Domestic: 1m L
- Japan: 5m L own brands
- Total 6m L

Source: Talley’s employment site, interviews, published articles, Coriolis estimates and analysis; as at 15 March, 2017
Appendices

+ Industry bodies
+ Trade codes
+ Glossary of terms
INDUSTRY ORGANISATIONS
New Zealand has a broad range of organisations that support the seafood industry

- **Seafood New Zealand**
  - Represent all members of the seafood industry
  - Peak body for NZ seafood industry
  - www.seafood.org.nz

- **Aquaculture New Zealand**
  - Represents aquaculture industry
  - Greenshell mussels
  - Pacific oysters,
  - King salmon
  - Industry levy funding
  - www.aquaculture.org.nz

- **FISHERIES INSHORE NEW ZEALAND**
  - Represent commercial inshore fishers
  - Annual contributions by quota owners + ACE holders
  - www.inshore.co.nz

- **Deepwater Group**
  - Represent deepwater fishing quota holders (~50 seafood companies)
  - Fees based on quota
  - www.deepwatergroup.org

- **New Zealand Federation of Commercial Fishermen**
  - Represent interests of owner operator commercial fishermen
  - Fee based membership
  - www.nzfishfed.co.nz

- **New Zealand Rock Lobster Industry Council**
  - Represent nine regional rock lobster fisheries commercial stakeholder organisations
  - www.nzrocklobster.co.nz
### TRADE CODES

#### GLOBAL HARMONISED SYSTEM (HS) TRADE CODES DEFINED AS SEAFOOD

**HS2002**

<table>
<thead>
<tr>
<th>HS Code</th>
<th>Short Description</th>
<th>Longer official description</th>
</tr>
</thead>
<tbody>
<tr>
<td>030192</td>
<td>Live eels</td>
<td>Live eels</td>
</tr>
<tr>
<td>030212</td>
<td>Salmon, chilled whole</td>
<td>Fresh or chilled Pacific, Atlantic and Danube salmon</td>
</tr>
<tr>
<td>030229</td>
<td>Chilled flat fish</td>
<td>Fresh or chilled flat fish (excl. halibut, pla)</td>
</tr>
<tr>
<td>030234</td>
<td>Bigeye tuna, chilled</td>
<td>Bigeye tunas (Thunnus obesus), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030235</td>
<td>Bluefin tuna, chilled</td>
<td>Bluefin tunas (Thunnus thynnus), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030236</td>
<td>Bluefin tuna, chilled whole</td>
<td>Southern bluefin tunas (Thunnus maccocyii), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030265</td>
<td>Sharks, whole chilled</td>
<td>Fresh or chilled dogfish and other sharks</td>
</tr>
<tr>
<td>030269</td>
<td>Chilled fish, nes.</td>
<td>Fresh or chilled fish, nes</td>
</tr>
<tr>
<td>030311</td>
<td>Sockeye salmon, frozen</td>
<td>Sockeye salmon (red salmon) (Oncorhynchus nerka), frozen (excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030319</td>
<td>Salmon, frozen whole</td>
<td>Pacific salmon (Oncorhynchus gorbuscha/keta/tschawytscha/kisutch/masou/rhodurus), frozen (excl. of 0303.11; excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030339</td>
<td>Flat fish, frozen whole</td>
<td>Frozen flat fish (excl. halibut, plaice and so)</td>
</tr>
<tr>
<td>030341</td>
<td>Longfin tuna, frozen whole</td>
<td>Frozen albacore or longfinned tunas</td>
</tr>
<tr>
<td>030343</td>
<td>Skipjack tuna, frozen whole</td>
<td>Frozen skipjack or stripe-bellied bonito</td>
</tr>
<tr>
<td>030346</td>
<td>Bluefin tuna, frozen whole</td>
<td>Southern bluefin tunas (Thunnus maccocyii), frozen (excl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030349</td>
<td>Tuna nes, frozen</td>
<td>Frozen tunas, nes</td>
</tr>
<tr>
<td>030374</td>
<td>Mackerel, frozen</td>
<td>Frozen mackerel</td>
</tr>
<tr>
<td>030375</td>
<td>Sharks, whole frozen</td>
<td>Frozen dogfish and sharks</td>
</tr>
<tr>
<td>030376</td>
<td>Eels, frozen</td>
<td>Frozen eels</td>
</tr>
<tr>
<td>030378</td>
<td>Hake, frozen</td>
<td>Frozen hake</td>
</tr>
<tr>
<td>030379</td>
<td>Frozen fish, nes</td>
<td>Frozen fish, nes</td>
</tr>
<tr>
<td>030380</td>
<td>Frozen fish livers and roes</td>
<td>Frozen fish livers and roes</td>
</tr>
<tr>
<td>030410</td>
<td>Chilled fish fillets</td>
<td>Fresh or chilled fish fillets</td>
</tr>
<tr>
<td>030420</td>
<td>Frozen fish fillets</td>
<td>Frozen fish fillets</td>
</tr>
<tr>
<td>030490</td>
<td>Frozen fish meat</td>
<td>Frozen fish meat (excl. fillets)</td>
</tr>
<tr>
<td>030541</td>
<td>Salmon, smoked</td>
<td>Smoked Pacific, Atlantic and Danube salmon (incl. fillets/oth. fish meat of 03.04/livers &amp; roes)</td>
</tr>
<tr>
<td>030559</td>
<td>Dried fish</td>
<td>Dried fish, not smoked (excl. cod)</td>
</tr>
<tr>
<td>030611</td>
<td>Frozen rock lobster</td>
<td>Frozen rock lobster and other sea cragfish</td>
</tr>
<tr>
<td>030613</td>
<td>Prawns, frozen</td>
<td>Frozen shrimps and prawns</td>
</tr>
<tr>
<td>030619</td>
<td>Crustaceans nes, frozen</td>
<td>Frozen crustaceans, nes, including flours, meals &amp; pates</td>
</tr>
<tr>
<td>030621</td>
<td>Rock Lobster, fresh</td>
<td>Rock lobster and other sea cragfish (excl. frozen)</td>
</tr>
<tr>
<td>030710</td>
<td>Oysters</td>
<td>Oysters</td>
</tr>
<tr>
<td>030739</td>
<td>Mussels (not-live)</td>
<td>Mussels (excl. live, fresh or chilled)</td>
</tr>
<tr>
<td>030749</td>
<td>Squid (non-chilled)</td>
<td>Cuttlefish and squid (excl. live, fresh or chilled)</td>
</tr>
<tr>
<td>030791</td>
<td>Invertebrates nes, fresh</td>
<td>Aquatic invertebrates, nes, fresh or chilled</td>
</tr>
<tr>
<td>030799</td>
<td>Invertebrates nes</td>
<td>Aquatic invertebrates, nes, including flours, meals, pates</td>
</tr>
<tr>
<td>150410</td>
<td>Fish-liver oils</td>
<td>Fish-liver oils and their fractions</td>
</tr>
<tr>
<td>150420</td>
<td>Fish oils</td>
<td>Fish fats, oils and fractions (excl. fish liver)</td>
</tr>
<tr>
<td>160300</td>
<td>Fish extracts</td>
<td>Extracts and juices of meat, fish and aquatic i nvertebrates</td>
</tr>
<tr>
<td>160419</td>
<td>Pre/pres fish nes</td>
<td>Prepared or preserved fish (excl. minced), nes</td>
</tr>
<tr>
<td>160420</td>
<td>Other pre/pres fish</td>
<td>Other prepared or preserved fish, nes</td>
</tr>
<tr>
<td>160590</td>
<td>Mussels, prepared</td>
<td>Molluscs and other aquatic invertebrates, prepared</td>
</tr>
</tbody>
</table>

**Source:** United Nations trade codes; Coriolis definitions in conjunction with project steering group
GLOSSARY OF TERMS

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

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.