

Food for thought:

Export potential
from the
Top of the South

EMF
EXPORT MARKET FINDER


Infometrics
Economics put simply



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Finding new export markets to grow and diversify



Te Taihū, or the top of New Zealand's South Island, produces a rich bounty of exportable goods. The region is world renowned for its premium wines, seafood, and other top quality food products.

Te Taihū covers the Nelson, Tasman and Marlborough districts. Like many regions in New Zealand its economy has performed well. Over the past 20 years GDP growth in the region has exceeded growth in the national economy. Exports have grown rapidly and have been a major contributor to its economic success. Given New Zealand's small domestic market, the region will need to continue growing its exports to expand its economy, create jobs, and lift incomes.

While growing the volume and value of exports is important, it is equally critical to consider where this growth takes place. Te Taihū needs to be careful of becoming too reliant on any single market. The recent imposition by China of various tariffs and import bans on Australian products including wine, seafood, barley and timber has demonstrated the importance of securing and maintaining a range of international markets. By diversifying its export markets, Te Taihū will become

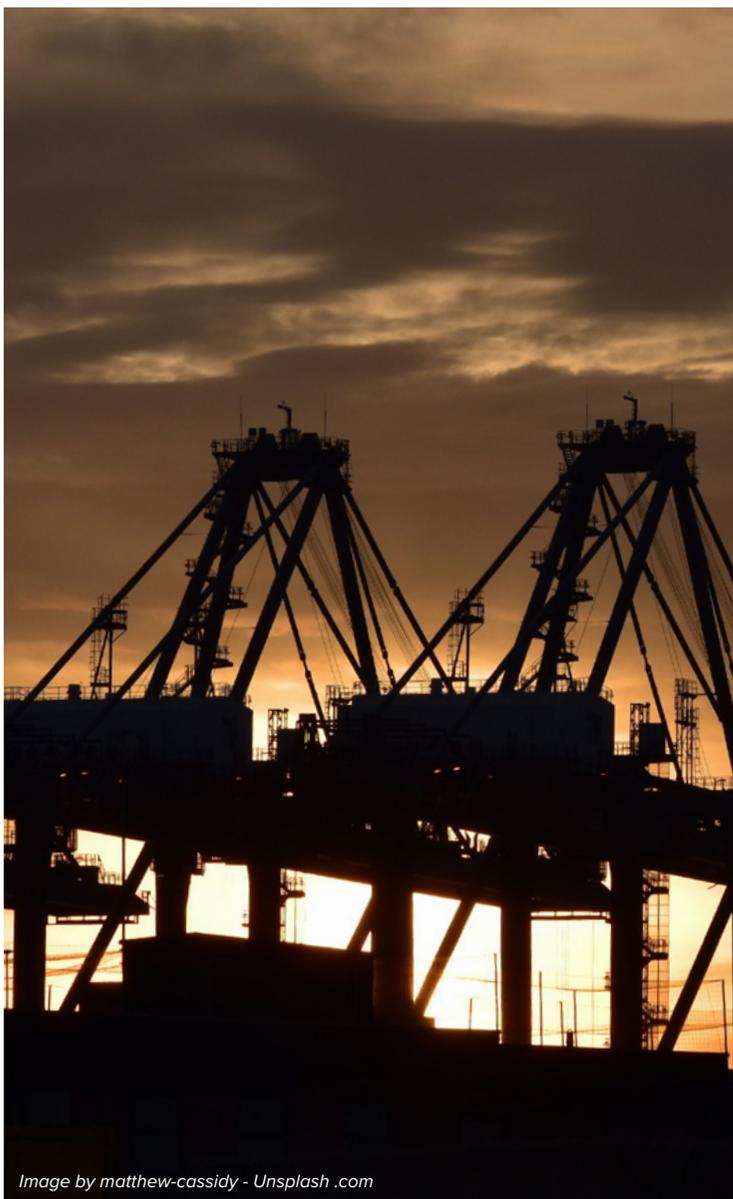
economically more resilient.

Finding new markets with untapped potential opens a pathway for businesses to grow exports and diversify their products and markets. This report investigates some of the opportunities that might be explored by exporters from Te Taihū.

In compiling the report, we draw on a new big data approach to identify untapped export markets. We acknowledge that businesses in Te Taihū are experts in their products and existing markets, and we don't presume to tell businesses how they should approach their export activities. Our analysis of untapped export markets is a purely quantitative one, based on historic global trade and economic data, and is not intended to capture or include many of the nuances of these markets, with which exporters may already be familiar.

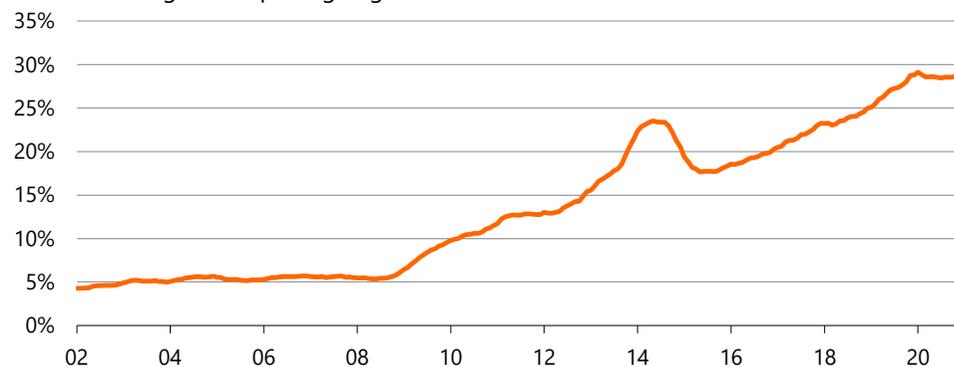
However, our approach holds the advantage of being based on a big picture view of global trade flows. It provides a data-driven, evidence-based approach to identifying new markets. We can help businesses challenge conventional wisdoms and identify some of the "unusual suspect" markets that might not have been previously considered.

The case for export diversification



China gobbles up New Zealand's exports

Share of NZ's goods exports going to China



Source: Infometrics, Stats NZ

During the past two years, a record 29% of New Zealand's goods exports went to China. Graph 1 shows that this figure has increased substantially since the free trade agreement between the two countries came into force in late 2008 – at that point, just 6% of New Zealand's exports went to China.

New Zealand's trade links with the fast-growing Chinese economy have been a significant contributor to our economy's growth throughout the last decade. But China now represents the biggest single market for our exports since the UK took 31% of our exports in 1972. It is well known how that reliance on a single market ended; the UK's entry to the European Economic Community in 1973 had massive effects on New Zealand's exporters. The economic fallout for New Zealand

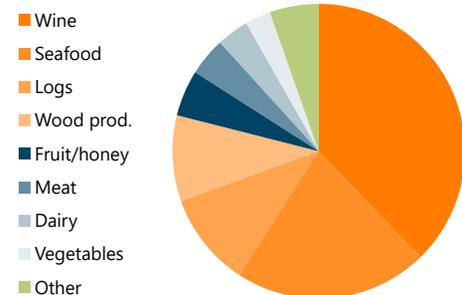
persisted throughout the next decade and provides a salutary lesson on the risks posed by a lack of diversification across different markets.

The mix of products being exported also provides scope for diversification. In its export history, New Zealand has at times had a very heavy reliance on commodities such as butter, milk powder, meat, or wool. To some extent, these outcomes have been influenced by international demand and prices – wool represented an incredible 52% of New Zealand's total exports in 1951 as demand boomed! But becoming overly reliant on one commodity leaves New Zealand's economy, and its regions' economies, exposed to the whims of global demand and supply.

Te Taihu punches above its weight as an exporter

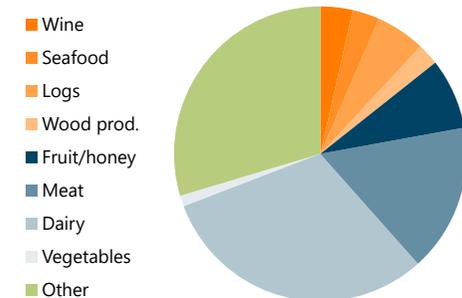
Te Taihu

Top 8 exports, 2020



New Zealand

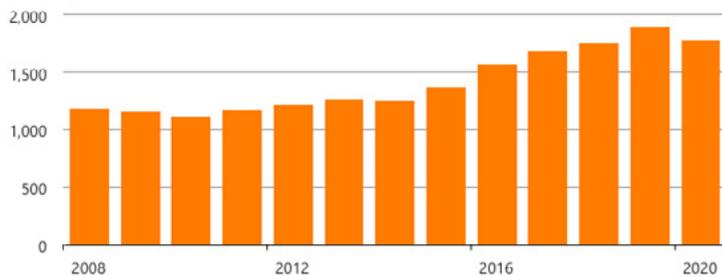
Top 8 exports, 2020



Source: Infometrics, Stats NZ

Te Taihu

Total exports, \$m



Source: Infometrics, Stats NZ

Infometrics regional export model estimates that merchandise exports from the top of the south were valued at over \$1.8b in 2020. The export profile of the region is quite different from the rest of New Zealand. While exports from the rest of the country are dominated by dairy, meat and food processing, the top of the south is dominated by wine, seafood and aquaculture, and forestry and wood products. Te Taihu punches above its weight as an exporting region. In 2020 the region accounted for 3.0% of total New Zealand exports in 2020 which is higher than its share of GDP at 2.7%.

EXPORTS HAVE GROWN RAPIDLY SINCE 2015

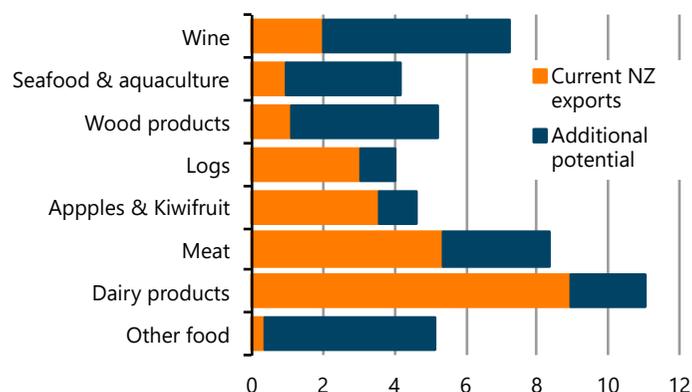
Merchandise exports from the top of the south plateaued between 2008 and 2015 but have since gained momentum, growing at an annual average of 9.0% since 2015, much faster than annual export growth of 4.2% for the rest of New Zealand. Wine production in the region has skyrocketed. Our regional estimates show wine exports growing three-fold between 2008 and 2020. Seafood and aquaculture exports such as fish fillets and mussels have fluctuated between \$280m and \$500m since 2008. Changes to the total allowable catch will affect these exports. Finding the highest paying importers should be a priority for stock-limited exports.

Te Taihu's manufactured wood product exports, consisting of mainly medium density fibreboard (MDF) and some timber products, have grown steadily over the past decade. This is in contrast to the rest of New Zealand where manufactured wood exports have stayed more or less constant since 2008. Log exports from the region have been more dynamic, having quadrupled since 2009. Growing raw logs exports to China has been of huge benefit to the forestry sector. Exports of other food products, such as vegetables, have grown impressively in recent years. Like horticulture and wine exports, these products appear to have benefited from COVID-19, as overseas consumers with excess savings substituted towards consuming healthy and high-quality produce at home. Although dairy and meat products are relatively small contributors to Te Taihu's export profile, they still generated nearly \$150m of export revenue in 2020.

The big picture: untapped export potential for Te Taihū's products

Additional export potential

Te Taihū's major exports, \$b



Source: Infometrics Export Market Finder, Stats NZ

Having examined Te Taihū's export profile, we now turn our attention to the potential that exists for increasing the exports of these products in global markets. We focus on the eight broad export categories identified above, which make up the majority of the region's exports.

This analysis is intended to demonstrate the magnitude of untapped global demand that exists for these products in international markets. It does not attempt to account for any supply-side considerations such as the existence or lack of additional export capacity, or constraints to future growth in production levels in New Zealand.

Specific export opportunities and markets for certain products within these eight broad product categories are described in detail below.

For the eight product categories that make up the bulk of Te Taihū's exports, total untapped export potential globally exceeds \$24b. We are not suggesting that New Zealand or Te Taihū would be able to produce anywhere near enough to meet this global demand. Instead, our analysis seeks to identify the most realistic export opportunities for exporters within these eight categories.

For Te Taihū's major export product, wine, the current level of New Zealand exports (\$1.96b in 2020) is dwarfed by the untapped global market potential of \$5.28b. This confirms that New Zealand wine does not lack for overseas markets. The challenge for the industry is to optimise its export profile between bulk and bottled wine,

and between established and relatively untapped markets.

In seafood and aquaculture, the potential value of untapped export opportunities (\$3.2b) also exceeds the current export level of \$981m¹. While wild-caught seafood remains subject to supply constraints in the form of quotas and catch limits, this suggests an opportunity for the expansion of the aquaculture industry in line with the New Zealand government's 2019 Aquaculture Strategy.

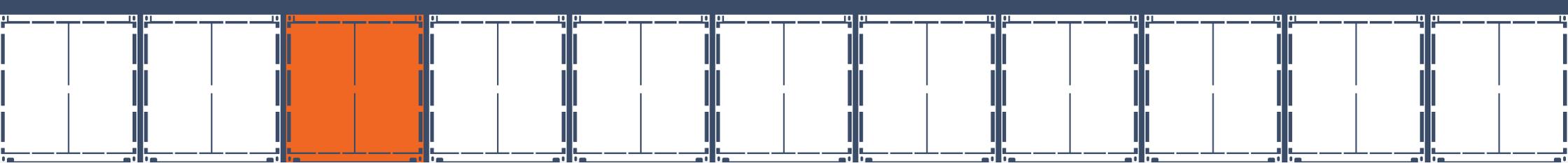
In the forestry and wood sector, the additional potential for log exports appears highly constrained, at \$965m compared to current exports of more than \$3b. By contrast, considerable scope exists for increasing exports of value-added wood products from the current level of \$1.1b², with untapped potential estimated at more than \$4b.

Te Taihū's horticulture products, most notably apples and kiwifruit, might conceivably take advantage of the more than \$1b of additional export potential that exists in global markets. More than three-quarters of this untapped potential is for apples, a fact which points to New Zealand's existing global dominance as an exporter of kiwifruit.

As noted above, exports of meat and dairy products from Te Taihū are relatively small compared to those of New Zealand as a whole. However, these products provide a meaningful contribution to the region's export basket. Furthermore, the global untapped export potential

¹ These figures represent the value of New Zealand exports for a selection of products relevant to Te Taihū, rather than the total value of national exports for each product category. For further information on the specific products included in our analysis, please refer to the Appendix to this report.

² As for 1



of more than \$5b in these product categories suggests that considerable scope exists for increasing exports from New Zealand (and Te Taihuhu) from their current levels. At the same time, various supply-side constraints might limit the ability of New Zealand producers to take advantage of this potential.

Finally, the untapped global potential of close to \$5b that exists across a range of food products suggest that a range of export opportunities exist for local speciality food producers.

IDENTIFYING OPPORTUNITIES FOR EXPORTERS IN TE TAIHUHU

The opportunities identified for exporters in are typically influenced and informed by the mix of goods currently produced within the region. For example, our analysis of the dairy sector only captures whole milk powder, skim milk powder, and ice cream, because these are the three export categories that make up the bulk of Te Taihuhu's dairy exports. We recognise that other commodities such as butter and cheese are also important components of New Zealand's broader dairy industry and, in this light, we also explore the export potential for cheese, despite it not currently being a significant

contributor to exports from Nelson.

The detailed definitions of the specific product codes included in each broad export grouping are contained in the Appendix.

Factors such as climate, land use, and pre-existing industry also influence the sectors where Te Taihuhu enjoys a competitive advantage in production and exporting. In this regard, it is unrealistic to expect significant diversification within Te Taihuhu away from dominant export industries such as viticulture, horticulture and seafood. However, within these industries, there are potential opportunities to target sales to countries other than the current dominant markets – for example, as Australia and the UK currently are for wine exports. For other industries, there could be investment opportunities for further processing to open up new export markets for higher-value products, such as ice cream.

Many of the conclusions about potential export opportunities within Te Taihuhu will be relevant for other regions where the industries we have identified also have a strong presence, such as wine or apples from Hawke's Bay. However, these potential opportunities for other regions will also be affected

by the specific mix of production and exports already taking place, the scope for additional processing of existing commodities, and existing shipping routes and trade linkages that might make it easier to focus on some markets rather than others.

WE USE A NEW TOOL CALLED EXPORT MARKET FINDER

Export Market Finder (EMF) is a tool for identifying realistic export opportunities for New Zealand products. It helps organisations grow their exports by prioritising countries that offer the most untapped potential. The tool attempts to move the identification of new markets based on anecdote and gut feel to a data-driven, evidence-based approach.

It enables businesses and organisations involved with exporting to narrow down their potential markets and pursue new export opportunities based on quantitative analysis rather than anecdotes or gut feel.

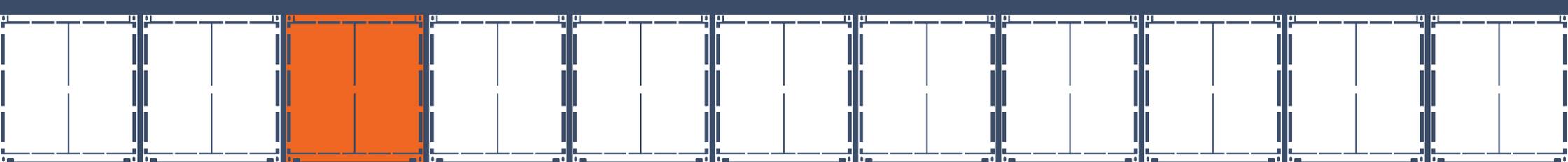
Any opportunity identified by EMF will require further in-depth exploration and due diligence on that market's potential. We refer to this as "last-mile" research. The role of EMF is to help organisations focus their research efforts on the

potential markets with the greatest untapped export potential and chances of success.

Infometrics' EMF provides an in-depth and systematic approach to identifying export opportunities from a broad range of perspectives.

- Where is there scope to expand existing markets?
- What opportunities are there to diversify existing export products into new markets?
- What new or current niche products could potentially be targeted to open up new export areas?
- Can we build on existing trade relationships to develop new export product opportunities?

EMF has been developed by [Trade Research Advisory Ltd](#), a commercial subsidiary of the University of North West in South Africa. Infometrics has funded the development of a specific model for New Zealand exports.



How Export Market Finder identifies realistic export opportunities

EMF uses a sophisticated methodology to identify which countries offer realistic opportunities for export expansion.

We start with a comprehensive global trade database covering over 5,000 products and 180 countries, to identify countries that import the product we are considering. To this long list of possible importer countries, we apply a series of filters to remove unsuitable markets. For the remaining countries, we measure the untapped export potential within each realistic market and rank the countries accordingly.

It's easiest to explain the methodology using a simple example. Below we use fresh apples as an example of how we identify and rank countries with the greatest potential to expand exports from NZ. We can apply the same methodology for all products and countries.

Step one: Identify all countries that import apples

At the heart of EMF is a database which measures the value of flows of goods exports between all countries in the world. The data shows that 180 countries imported apples to the value of nearly \$11bn in 2019. These countries represent

all potential opportunities for NZ apple exporters.

Step two: Filter out unsuitable countries
We iteratively remove unsuitable countries from the list of 180 using a series of filters.

The first set of filters remove countries that are politically or commercially risky, have small economies, have poor economic performance, or have other macroeconomic problems. After this filter is applied, we are left with 134 markets.

The next filter removes countries that either import a very small quantity of apples or that show a declining demand for imported apples, among other market related factors. We might also exclude countries to which NZ is already an overwhelmingly dominant supplier of apples, and in which limited scope exists for further expansion of our exports. After this filter is applied 77 countries are left.

The last set of filters remove countries that are not easily accessible to NZ exporters due to factors such as tariff barriers or logistical and transport constraints, or that are dominated by a single exporting country. After these filters are applied, we are left with

35 countries which are regarded as “realistic opportunities”.

Step three: Calculate untapped export potential for each remaining country and rank them

For each of the 35 remaining countries we calculate the potential market for NZ apples, based on the average value of apple exports to the country by the top six exporting countries (which may or may not include NZ). The untapped potential is the difference between the potential market and the value of NZ's apple exports to the country. The top six exporting countries are chosen as a benchmark as international evidence shows that the top six supplying countries supply more than 80% of a country's imports in value terms for 94% of country-product import lines.

For example, Saudia Arabia imported an average of \$38m of apples from the top six exporting countries in 2019. NZ only exported \$1m of apples to Saudia Arabia meaning that NZ's “untapped potential” is \$37m (\$38m less \$1m).

We rank the 35 countries according to their untapped potential to arrive at our list of markets with the greatest potential to expand apple exports.

Focusing on key export goods

In this report we don't try and identify all new export opportunities from Te Taihū. Rather we focus on selected groups of export goods which are of importance to the region and goods which present some interesting opportunities.

For most of the products discussed below, data relating to current exports from Te Taihū refers to direct exports via Port Nelson. As a result, goods transported via Nelson to other international ports in New Zealand is excluded from this data.

In the case of logs, the data refers to direct exports from both Nelson and Picton ports.

Key export goods

WINE	Bottled wine; Bulk wine; Wine technology
SEAFOOD & AQUACULTURE	Hoki; Mussels; Salmon
WOOD PRODUCTS	MDF; Plywood; Sawn pine timber
LOGS	
FRUIT	Apples; Kiwifruit; Applejuice
MEAT	Sheep; Beef
DAIRY PRODUCTS	Milk powder; Ice cream; Cheese
OTHER FOODS	Peanut butter; Frozen peas; Jam



WINE

Although port data shows that 17% of New Zealand's wine exports left the country via Port Nelson, we know this figure grossly underestimates the importance of the viticulture industry to Te Taihū. Data from New Zealand Winegrowers shows that 75% of the country's grape harvest in 2020 came from Marlborough, with another 2% coming from the Nelson-Tasman area³. These figures suggest that Te Taihū's export revenue from wine is likely to be closer to \$1.5b than the \$381m shipped directly from Nelson.

Looking at the mix of New Zealand's wine exports, 71% of the \$2b total in 2020 was made up of bottled wine, and 27% was bulk wine. Although bulk wine's share of exports is considerably smaller than the share of bottled wine, it is an area that has grown considerably since

2007, when it made up just 1.7% of total wine exports.

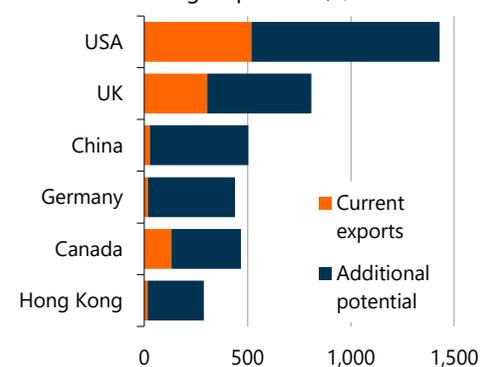
The growth in bulk wine exports hints at some of the environmental and logistical issues faced by wine exporters in Te Taihū. The costs and negative environmental effects associated with transporting bottled wine are significantly higher than for bulk wine, particularly given container requirements around empty and full bottles and the road or rail distances from Marlborough to port. Bulk wine exports have become more common to reduce these costs, with winegrowers realising that brand reputation can still be protected as long as the overseas bottling and distribution process is managed appropriately.

There also seems to be an increasing demand for bulk wine exports from within existing markets such as the UK, while the price differential between bulk and bottled wine appears to be shrinking slowly. This, along with the avoided costs of bottling, appears to be making bulk exports more financially viable for producers.

COVID-19 has also shaken up the consumption landscape, with reduced sales in the high-end restaurant space and more drinking taking place at home. This shift in consumer behaviour also suggests potential for bulk wine to continue expanding its market share.

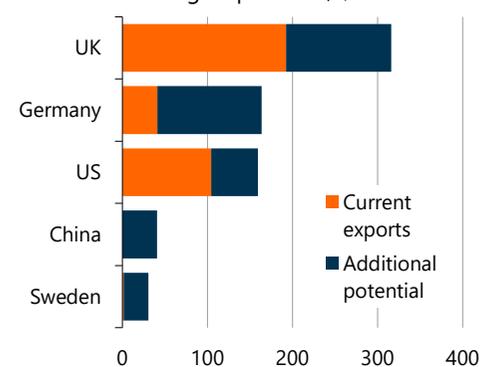
Bottled wine exports

Markets with largest potential, \$m



Bulk wine exports

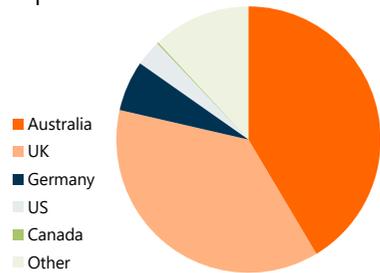
Markets with largest potential, \$m



Source: Infometrics Export Market Finder, Stats NZ

³ Based on an estimated total harvest figure of 457,000 tonnes in 2020 <https://www.nzwine.com/media/16296/vintage-indicators2020regions.pdf>

Nelson's current wine export markets



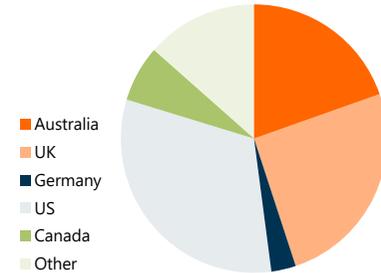
\$43.1b
Total international trade

\$1.96b
NZ exports in 2020

17%
Leave from Nelson

\$5.28b
Additional export demand potential

NZ's current wine export markets



Source: Infometrics, Stats NZ

In assessing wine's export potential, we note that the industry in New Zealand does not lack for overseas markets. Apart from the downturn following the Global Financial Crisis, New Zealand has generally been able to sell its production at increasing returns. However, exploring the export potential gives scope for diversification, and it also provides a rationale for investment in additional growing or processing capacity. Regarding the potential for increasing production, we also recognise that the industry faces resource constraints, such as the availability of land and water, or the environmental effects of more viticulture. Our focus is on identifying untapped export opportunities, rather than providing in-depth analysis of these other issues that affect production decisions.

BOTTLED WINE

Although bottled wine's share of exports has decreased throughout the last decade, it still offers a massive \$4.8b of

export opportunities for New Zealand. Interestingly, the biggest opportunities are provided by the two largest markets: exports to the US could climb from \$519m to over \$1.4b, while exports to the UK could increase from \$304m to more than \$800m. New Zealand currently supplies about 8% of total wine imported by each of these two countries, so our wine is far from saturating either market. Less established markets with potential for significant export growth include China (\$478m), Germany (\$421m), Hong Kong (\$273m), and Japan (\$220m).

BULK WINE

Our analysis of global trade data over the past five years suggests there is less scope for growth in bulk wine exports. However, there is still potential for bulk wine exports to increase by almost \$600m, which would represent more than a doubling from the 2020 export figure.

The UK (\$124m), Germany (\$123m), and the US (\$55m) offer more than half

the potential growth in bulk wine exports. The UK and US markets are already well established – for example, New Zealand is the third-largest supplier of bulk wine to the UK, which takes 36% of our bulk wine exports. But Germany offers significant scope for growth, with smaller opportunities available in other European Union (EU) members including Sweden, Belgium, Denmark, and the Netherlands. We note a 12% effective tariff that is currently applied to New Zealand's bulk wine exports to both the UK and the EU. This points to an opportunity for New Zealand's trade negotiators to target reductions to these tariffs as part of the ongoing Free Trade Agreement (FTA) negotiations with the UK and EU.

WINE TECHNOLOGY

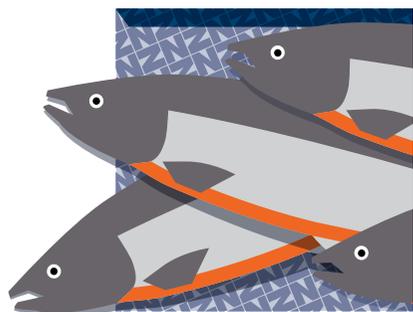
Capitalising on New Zealand's viticulture industry and technological expertise has the potential to create other export opportunities. For example, our analysis suggests there could be as much as \$539m of export potential in exports of thermostats. This is a reasonably broad category, but it would include examples of locally-developed wine technology such as wine tank temperature control systems.

Although more detailed examination of the potential export markets for the exact products in question would be necessary, the biggest key possible markets include the US, Germany, China, and France.



Image by Brett Jordan - Unsplash .com

SEAFOOD AND AQUACULTURE



Te Taihu accounts for 31% of New Zealand's economic activity in the fishing and aquaculture and seafood processing industries, despite the area only making up 2.7% of the overall nationwide economy. This concentration of activity means that seafood and aquaculture is the region's second-largest export earner after wine.

Within the fishing area, we have limited our analysis to focus on frozen hoki, but there is a wide range of other seafood exports including squid, tuna, and ling. More detailed analysis across the various export categories could be undertaken to understand more fully the options for potential growth or diversification of our seafood export markets.

We recognise that potential growth in exports will also be affected by limits to catch sizes and other environmental considerations. However, our analysis offers insights into possible opportunities to diversify away from current markets.

HOKI

Te Taihu exported approximately \$38m of frozen hoki fillets and meat last year, representing almost 30% of the product being shipped out of New Zealand. Australia is our largest export market and also received most of the hoki being sent via Port Nelson.

Our analysis suggests that the greatest potential for export growth is centred around Japan, the US, France, and Poland. These countries are generally among our largest markets

already (behind Australia), with Japan and France offering scope to double our current export levels, while an increase of 30% appears to be viable for exports to Poland. The US stands out as a relatively untapped market, with potential to increase exports from under \$3m currently to over \$14m.

This potential for growth is obviously based on analysis of demand for fish internationally. However, management of the fishing industry and fishing quotas means that there are clear limits to catch sizes. These supply constraints suggest that the US is best viewed as a possible area for export market diversification.

MUSSELS

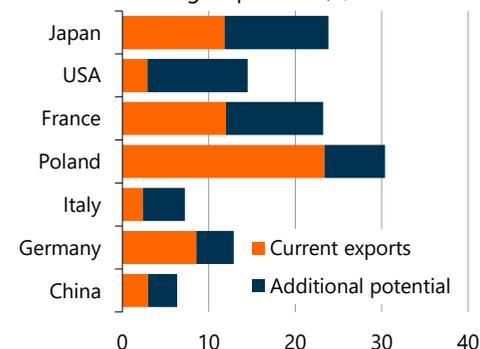
The bulk of New Zealand's \$332m of mussel exports in 2020 were frozen mussels. Outside the \$246m of frozen mussels, the other main contributors to the export total were mussel oil (\$44m), processed mussel powder (\$14m), and fresh or chilled mussels (\$12m).

Aquaculture NZ estimates ⁴ that mussel production in Te Taihu accounts for 64% of New Zealand's total production, implying the industry currently generates about \$212m of export revenue for Te Taihu. However, the majority of mussel exports leave the country via Tauranga, with only \$32m of frozen mussels shipped out of Port Nelson last year.

Additional export opportunities for frozen mussels are very limited, totalling just \$16m. In theory, live mussel exports offer much more scope for growth and

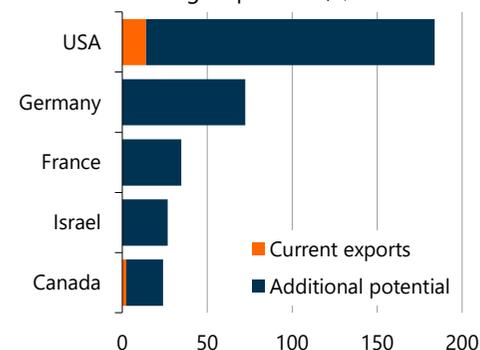
Hoki exports

Markets with largest potential, \$m



Frozen salmon exports

Markets with largest potential, \$m



Source: Infometrics Export Market Finder, Stats NZ

⁴ New Zealand Aquaculture Sector Overview 2019
<https://drive.google.com/file/d/1dowG0hRGV4HzWCbjvErYEFc5x5pT99Y/view>

could theoretically be increased by up to \$43m across various markets. However, higher transport costs and lower prices for live mussels, due to perishability and wastage, mean that exporters are unlikely to materially shift their focus towards live exports.

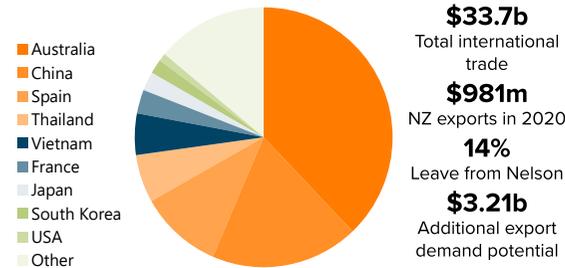
Mussel oil is an extremely high-value product, with exports currently dominated by the US and South Korea. Japan, Germany, and Hong Kong shape as the largest potential growth markets, dependent on precise consumer preferences and demand.

SALMON

New Zealand's salmon exports totalled \$103m in 2020. About two-thirds of these exports were for fresh or chilled salmon, with 23% frozen and the remaining 10% smoked.

Aquaculture NZ estimates⁵ that

Nelson's current seafood and aquaculture export markets



Source: Infometrics, Stats NZ

production in the Marlborough Sounds represents about 60% of New Zealand's total salmon production. However, the nature of the product means that the bulk of it leaves the country through either Auckland or Christchurch Airports and is not picked up in our calculations of exports directly through Port Nelson.

NZ's current seafood and aquaculture export markets



\$33.7b
Total international trade
\$981m
NZ exports in 2020
14%
Leave from Nelson
\$3.21b
Additional export demand potential

Although fresh fish makes up the biggest share of salmon exports, our modelling suggests there is limited additional export potential, totalling about \$25m. In contrast, exports of frozen salmon could be increased by up to \$420m. The US presents a massive \$170m opportunity – a greater figure than the total of all

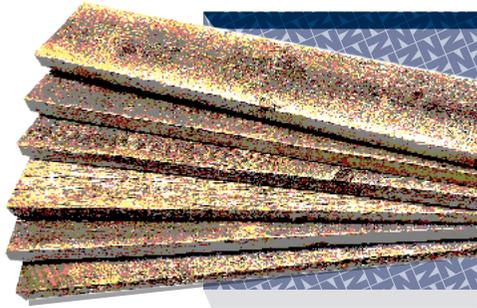
New Zealand's salmon exports last year. China, Norway, and Chile are currently the biggest suppliers of frozen salmon to the US.

Current capacity is obviously a constraint on this potential growth, while resource consent processes may also limit the speed of any industry expansion. We note that the upcoming revision of the Resource Management Act may result in changes to the resource consent regime applicable to aquaculture in general and to salmon farming in particular.

Nevertheless, the government's Aquaculture Strategy aims to achieve \$3b in annual export sales by 2035, so substantial growth will be required to achieve this goal. Deep water farming in Cook Strait and capacity expansion in Southland could be options for achieving increased export revenue from salmon.

5 New Zealand Aquaculture Sector Overview 2019 – <https://drive.google.com/file/d/1dowG0hRGV4HzWCbjvhErYEFC5x5pT99Y/view>

WOOD PRODUCTS



New Zealand's forestry exports have been increasingly dominated by shipping logs to China throughout the last decade. Discussion about this phenomenon has centred on the quality of New Zealand's logs, the efficiency and capacity of our sawmills, and the value-added tax differential between imports of logs and timber into China that helps to protect the Chinese processing industry.

This section focuses on the main processed timber products currently being exported from Te Taihū, while the following section examines log exports. The potential for further growth in the latter is shrinking, with New Zealand now supplying over 40% of Chinese log imports. Although the forestry industry has benefited enormously from growth in Chinese demand throughout the last decade, the industry is highly exposed to a single country's demand for a single product, and it would be prudent to identify viable opportunities for diversification in terms of export markets and the mix of products being sold offshore.

MDF

New Zealand's MDF exports totalled \$242m last year, with almost 40% of the product being shipped out of Port Nelson. After a period of strong growth between 2015 and 2019, annual MDF exports have slipped back to their lowest level in 5½ years.

Destinations for New Zealand's MDF exports are dominated by countries around the Pacific rim. Japan and Vietnam were the major drivers of the growth between 2015 and 2019, but

Japan's lift has reversed out even more rapidly than it occurred.

Our analysis shows that the US offers considerable potential for export growth, despite the presence of effective tariffs of 1.3-1.5% on MDF imports. The bulk of this potential is made up of demand for MDF over 9mm thick and, along with Canada, offers scope for exporters to diversify away from the Japanese market.

European countries feature heavily in the list of countries offering export potential for MDF. However, the combination of transport costs and the presence of a 7% tariff on imports to the EU make it difficult for New Zealand MDF to compete in this market. Once again, this suggests an opportunity for negotiating reductions in these tariffs during FTA negotiations with the EU.

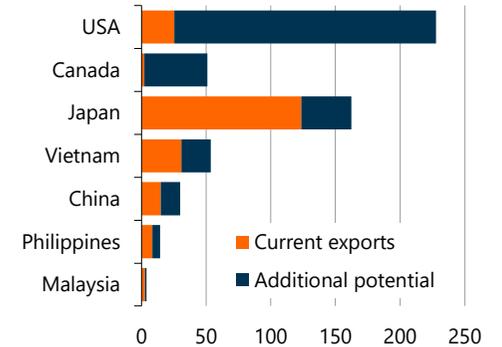
PLYWOOD

Port Nelson accounted for 25% of exports in New Zealand's main plywood export category in 2020. Almost all this \$18m of product from Nelson was shipped to Australia and Japan. Japan took 43% of Nelson's plywood exports, compared to less than 9% of plywood exports from the rest of the country.

Both the Australian and Japanese markets provide scope for potential further growth in exports from current levels, in the order of \$24m each. However, in the interests of diversification, the US and Canada offer significant opportunities as well. Growth of the US market could be limited by an effective 3% tariff currently in place, but exports to Canada do not face any

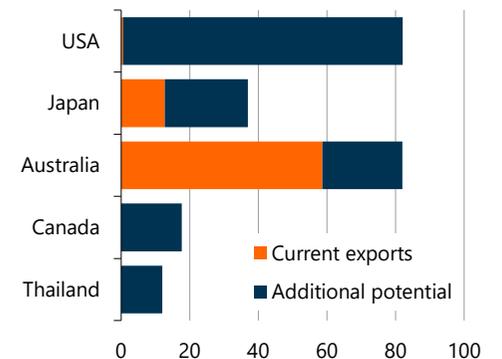
MDF exports

Markets with largest potential, \$m



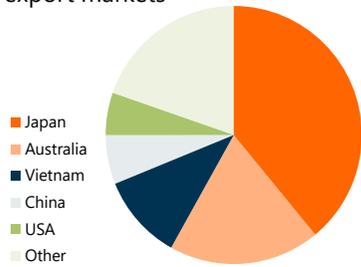
Plywood exports

Markets with largest potential, \$m

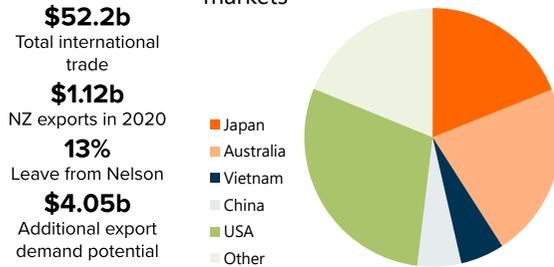


Source: Infometrics Export Market Finder, Stats NZ

Nelson's current timber export markets



NZ's current timber export markets



\$52.2b
Total international trade

\$1.12b
NZ exports in 2020

13%
Leave from Nelson

\$4.05b
Additional export demand potential

Source: Infometrics, Stats NZ

barriers apart from transport costs.

Although it offers less scope for growth than the markets mentioned above, we note that there are no tariffs in place for plywood entering Thailand. We estimate that the Thai market has potential for up to \$12m of plywood exports from New Zealand.

TIMBER

At \$34m, Nelson's sawn pine timber exports represent less than 5% of the \$809m of sawn pine exported from New Zealand during 2020. Despite almost 30% of this timber heading to the US, none of the product shipped from Port Nelson was headed in this direction. Instead, Australia accounted for more than half of Nelson's exports.

We estimate that the potential additional export opportunities for this wood total almost \$2.8b. China accounts for over 30% of this potential, and an \$870m increase in sawn timber exports heading to China would be a massive lift on last year's total value of \$106m. Russia is currently the dominant supplier of sawn timber to China, providing 53% of imports, with Canada supplying a

further 18%.

Russia's focus on supplying sawn timber is due to export tariffs that discourage the export of raw logs and encourage domestic processing instead. New Zealand's free trade agreement with China would not allow us to put similar measures in place, so it could prove difficult to shift our forestry exports further up the value chain.

Outside of China, Japan, South Korea, and several European countries offer significant export potential for sawn timber. At first glance, distance to market would suggest that Europe would be a difficult export proposition. However, the Netherlands currently represents a \$37m market for New Zealand timber, suggesting that exporting to Europe is not out of the question.

We have presented a graph showing the markets with the largest export potential for sawn timber at the end of the following section, which focuses on exports of logs.

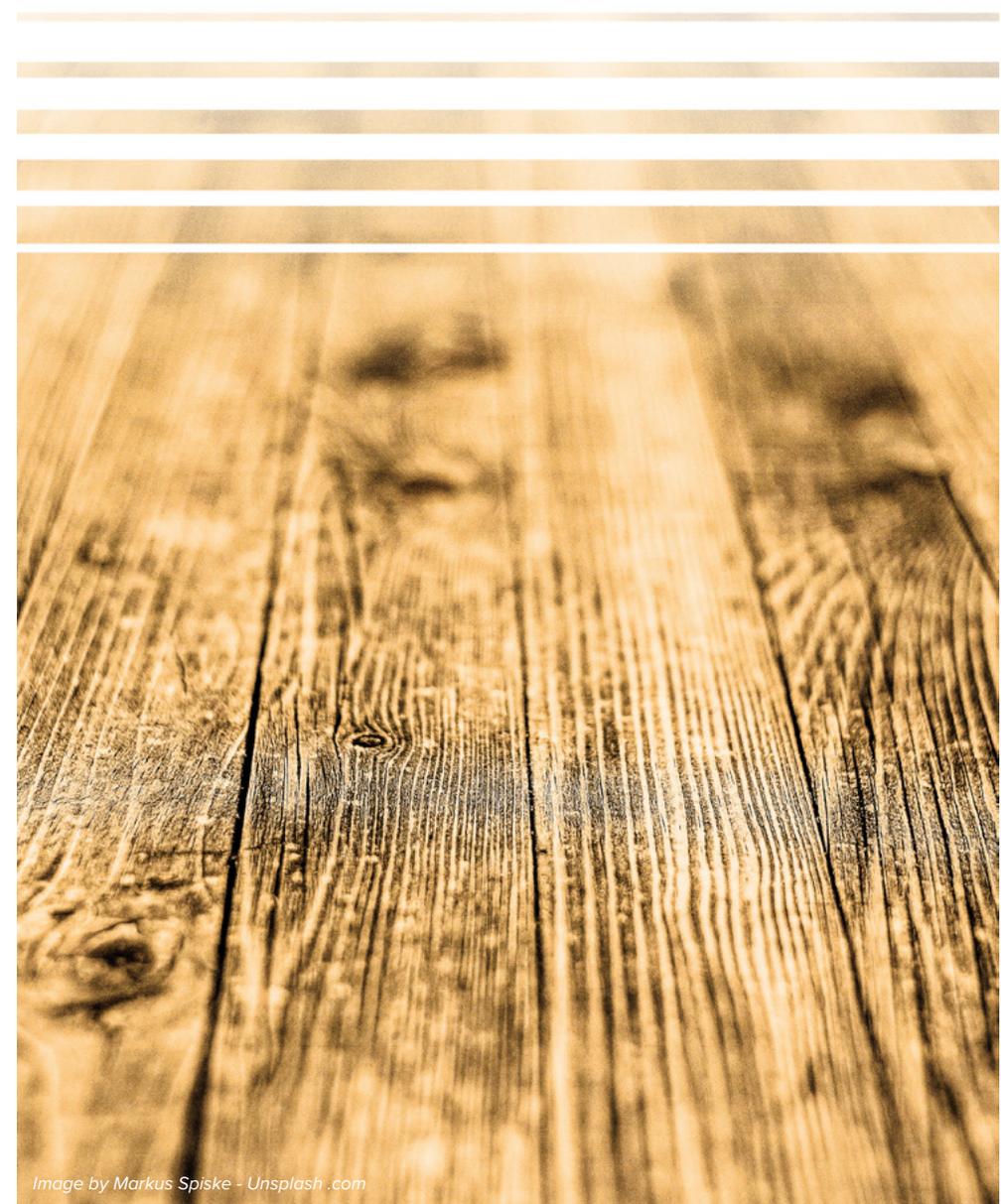


Image by Markus Spiske - Unsplash.com

LOGS



A massive 82% of New Zealand's log exports in 2020 headed to China, with South Korea, Hong Kong, India, and Japan each representing between 1% and 9% of the total. China's growth from a market share of just 20% of New Zealand's log exports in 2007 has mostly come at the expense of South Korea, which has seen its share of exports drop from 50% to 8.6% over the last 13 years. However, the South Korean market has not shrunk markedly, with exports generally holding in the \$250m-400m range during this period. China's exports have expanded from \$118m to \$2.5b of exports.

Unlike most of the other export categories covered in this report, there is little scope for diversification of New Zealand's log exports, because Chinese demand dwarfs almost all other potential export opportunities. Our analysis suggests there could be as much as

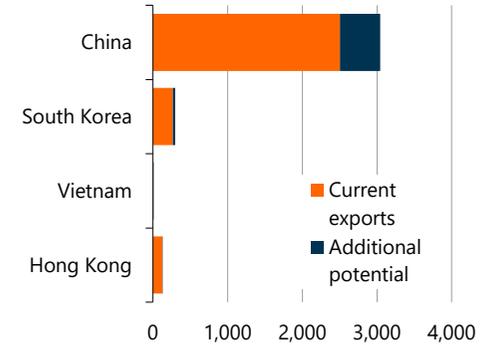
\$538m more log exports to China. This figure implies that although there is room for further increases in exports, most of the potential growth has already occurred over the last 13 years. South Korea offers the only other realistic potential growth of any size.

Several European countries, including Austria, Germany, and Sweden, appear on the radar as possible export markets. However, transport costs for logs to Europe are likely to be prohibitive, even in the absence of any import tariffs for these markets.

Concerns about the dominant role that China has as a log export market cannot be overcome by identifying other markets for logs. Instead, efforts are perhaps best focused on expanding markets for higher-value processed timber products, as noted in the previous section.

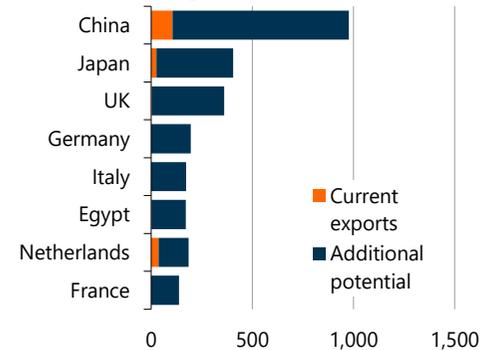
Log exports

Markets with largest potential, \$m



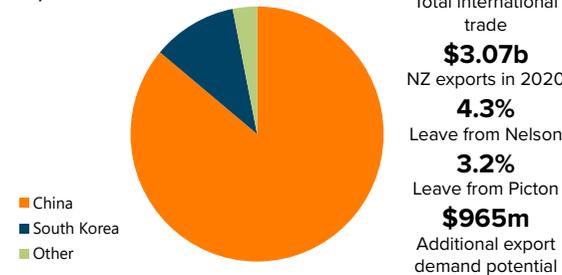
Sawn timber exports

Markets with largest potential, \$m

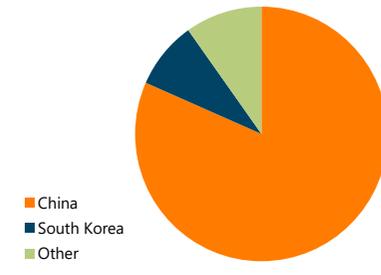


Source: Infometrics Export Market Finder, Stats NZ

Te Taihū's current log export markets*



NZ's current log export markets



* Includes log exports from both Nelson and Picton ports
Source: Infometrics, Stats NZ

APPLES AND KIWIFRUIT



Te Taihū contributed 9% (\$86m) of New Zealand's apple exports in 2020 and 1.2% (\$31m) of the country's kiwifruit exports.

Our graphs above show that New Zealand's export markets for these fruits are reasonably well diversified, with countries across Europe, Asia, North America, and the Middle East all represented. The EU takes 26% of our kiwifruit exports, with between 22% and 25% going to each of Japan and China. The destinations for apples are even more diverse, with China the largest single market at 14% of total exports, and 12 countries needed to account for 80% of fruit heading offshore.

This year's harvest has been particularly problematic across the horticultural industry due to the reduced availability of workers from overseas. Even with government assistance in place, growers have struggled to attract Kiwis to do the picking work. As a result of the labour shortages, the harvest is likely to be down and there is a significant risk that some fruit is left unpicked.

The disruption caused by COVID-19 is unlikely to persist beyond next summer, but these outcomes raise questions about the need for greater investment in labour-saving technology in the horticultural industry. There might also be a need to focus on higher-value products to allow for higher picking costs, although this summer's experience suggests that even significantly increased pay rates would still not be sufficient to entice New Zealanders to do the required work.

APPLES

In keeping with the diversified nature of New Zealand's current apple markets, the markets with the biggest export potential are also quite varied. European countries feature prominently on the list, with significant potential offered by Germany (\$107m), the UK (\$75m), Spain (\$39m), and the Netherlands (\$38m).

Apple exports to Europe were hampered during 2020 by COVID-19. However, putting these supply chain disruptions aside, these figures of export potential represent roughly a doubling of usual export volumes to the UK and the Netherlands and an even larger increase to Germany, where New Zealand apple exports totalled \$51m over the last year.

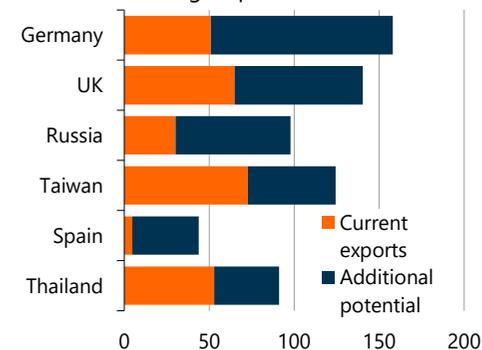
The Spanish market is one in which that New Zealand currently has relatively little penetration, in currently, with less than \$5m of exports over the last year. Our analysis suggests investment in growing this market for apples could yield considerable benefits.

We also note the 11% effective tariff currently in place in the EU. Any reduction in this tariff that can be achieved through the NZ-EU FTA negotiations would likely boost the viability of New Zealand apples in these markets.

Russia, Taiwan, Bangladesh, Thailand, and Vietnam also offer potential for significant growth from current export levels. The East Asian countries are reasonably established markets already but could be further expanded. A limited amount of New Zealand apples currently go to Russia or Bangladesh and there is scope for sizable gains to be made,

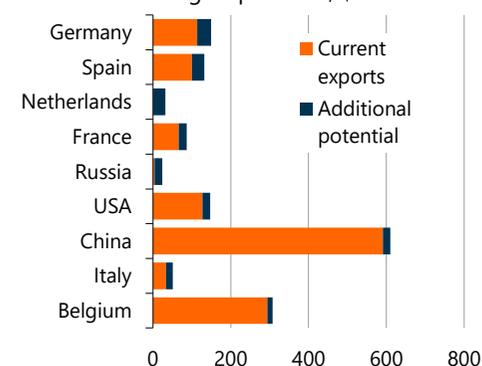
Apple exports

Markets with largest potential, \$m



Kiwifruit exports

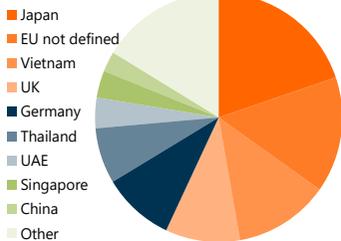
Markets with largest potential, \$m



Source: Infometrics Export Market Finder, Stats NZ

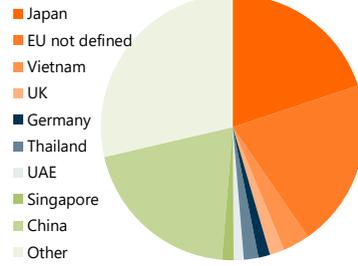


Nelson's current apple and kiwifruit export markets



\$15.4b
Total international trade
\$3.57b
NZ exports in 2020
3.3%
Leave from Nelson
\$1.02b
Additional export demand potential

NZ's current apple and kiwifruit export markets



Source: Infometrics, Stats NZ

although the Bangladesh market is currently heavily protected by a large import tariff.

KIWIFRUIT

The diversified nature of New Zealand's kiwifruit exports means that the export opportunities identified are primarily in established markets. brownfields options. There is scope for expanding our exports to several European countries by between \$13m and \$36m per annum, with only the Netherlands not currently a significant importer of New Zealand kiwifruit. Our kiwifruit exports to the EU are currently subject to an effective tariff of 8.8%.

Russia presents a significant untapped greenfields opportunity, with kiwifruit exports potentially able to increase from under \$4m to \$24m with appropriate investment and marketing.

We also note that the disruption caused by COVID-19 last year saw kiwifruit exports from Nelson switch from the EU to Japan. However, Japan offers very little potential for growth, with New Zealand already supplying over 9096% of total kiwifruit imports into Japan.

FRUIT JUICE

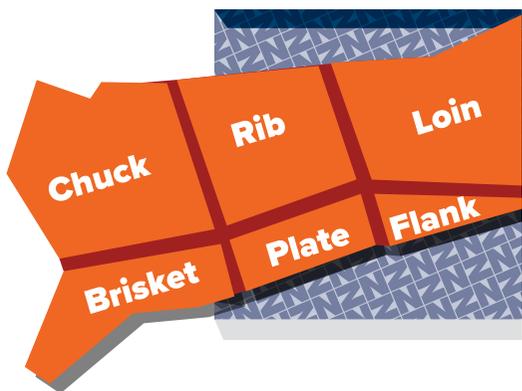
Nelson's fruit juice exports have been dominated by boysenberry concentrate, with the region producing 97% of the country's exports. However, the industry has been squeezed by poor weather conditions and the relatively strong New Zealand dollar.

Apart from a small amount of blackcurrant concentrate, no other juices are currently directly exported via Port Nelson, and the region's main apple juicing plant was shut down late last year. It is possible that some juice apples are transported to other regions for processing and export.

More recently, a major hailstorm on Boxing Day 2020 that resulted in significant damage to apple and other fruit crops, appears to have resulted in an increase in activity on the part of smaller fruit juice producers in the region.

Our analysis shows there is significant potential for apple juice exports to the US (\$98m) and Canada (\$15m). However, tapping into these markets is likely to require significant investment in facilities in Te Taihu. Most other major potential markets are currently subject to significant import tariffs.

MEAT



Frozen sheep meat and beef exports are the two largest meat exports that leave New Zealand via Port Nelson, with sheep meat making up the bulk of these exports. As with some of New Zealand's other major agricultural exports, Te Taihupo's share of nationwide activity is relatively low. However, the sheer volume of exports means that this industry, at \$56m, still represents an important component of overall export activity for the region.

China's growth as a market across these meat export categories over the last decade is nothing short of phenomenal. Its share of exports surged from 6% to 22% between 2011 and 2013, and then jumped again from 25% to 53% between 2016 and 2019. Some of this growth has partially crowded out exports to the US and some smaller markets, but much of the increase appears to have translated into expansion of New Zealand's export revenue.

Our analysis suggests that there is still major potential for growth to China across these export categories. Trends over the last decade show that New Zealand's free trade agreement, in tandem with rising incomes and changing demand patterns in China, have majorly benefited our sheep and beef exporters. The prices willing to be paid by Chinese buyers have also clearly been sufficiently high to drive this shift in export patterns.

However, it is questionable whether this approach is the best one over the long term. Recognising that land availability, farm stocking levels, and environmental concerns are likely

to constrain further growth in New Zealand's production capacity, we suggest it could now be prudent to focus export attention on other markets where there is still scope for expansion. This emphasis on diversification is likely to sacrifice some revenue in the short-term, but offers a degree of safeguard against swings in Chinese demand caused by changing tastes, political tension, or other factors.

SHEEP MEAT

Frozen cuts of sheep meat with the bone in represented \$45m of exports through Port Nelson in 2020. The bulk of this product was destined for China, which received almost \$1.4b of New Zealand's \$2.4b frozen bone-in sheep exports last year.

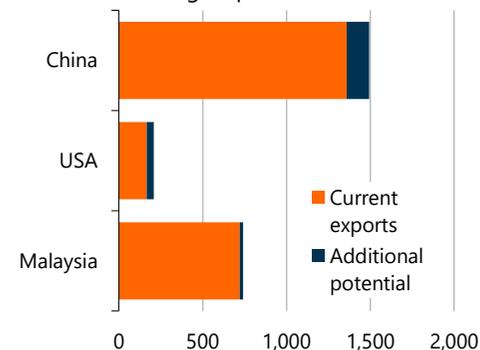
In absolute terms, China offers the greatest potential for further growth in these exports, at \$134m. However, the industry might be better served by focusing its attention on the limited number of other markets where exports could be expanded: the US (\$41m), Malaysia (\$20m), and Saudi Arabia (\$10m). Each of these markets is already well-established, but actively focusing on exporting to these countries would help reduce the industry's reliance on China.

BEEF

New Zealand exported over \$3.2b of frozen beef in 2020, with 90% of the total made up of boneless cuts. Nelson's share of these exports was about \$110m, with China taking almost two-thirds of this meat. At a nationwide level, however, the US (\$1.3b) has moved back ahead of

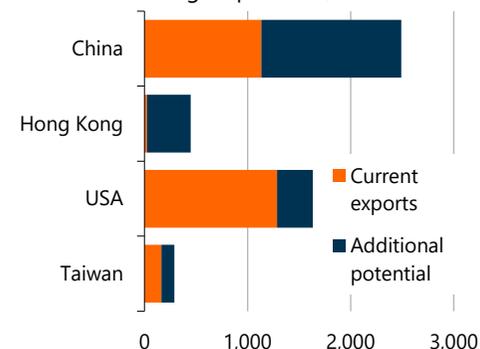
Sheep meat exports

Markets with largest potential, \$m



Frozen beef exports

Markets with largest potential, \$m



Source: Infometrics Export Market Finder, Stats NZ

Nelson's current meat export markets



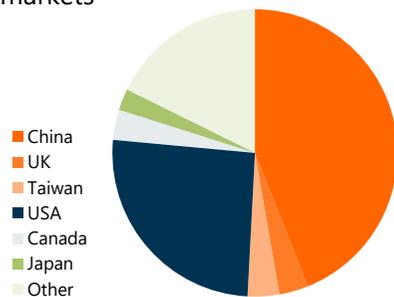
\$46.6b
Total international trade

\$5.66b
NZ exports in 2020

1.0%
Leave from Nelson

\$2.98b
Additional export demand potential

NZ's current meat export markets



Source: Infometrics, Stats NZ

China (\$1.1b) as the largest export market for New Zealand beef, having previously been overtaken during 2019.

Our market analysis shows that China still offers massive potential growth of \$1.4b on current frozen beef export levels. However, in the interests of diversification, New Zealand might be better served focusing on the export potential shown by the likes of Hong Kong and Indonesia. These two frozen beef export markets were worth \$24m-27m last year, but offer potential growth of \$424m and \$124m respectively. South Korea's effective 29% tariff on imports of our frozen beef shapes as a major impediment to realising the potential export growth of \$266m, although this barrier has not prevented New Zealand establishing a \$121m market to date.

We note that Indonesia currently receives 6.6% of frozen beef being shipped out of Port Nelson, indicating an existing trade relationship for Te Taihū. As long as the meat is prepared according to halal practices, there is scope to expand this relationship significantly.

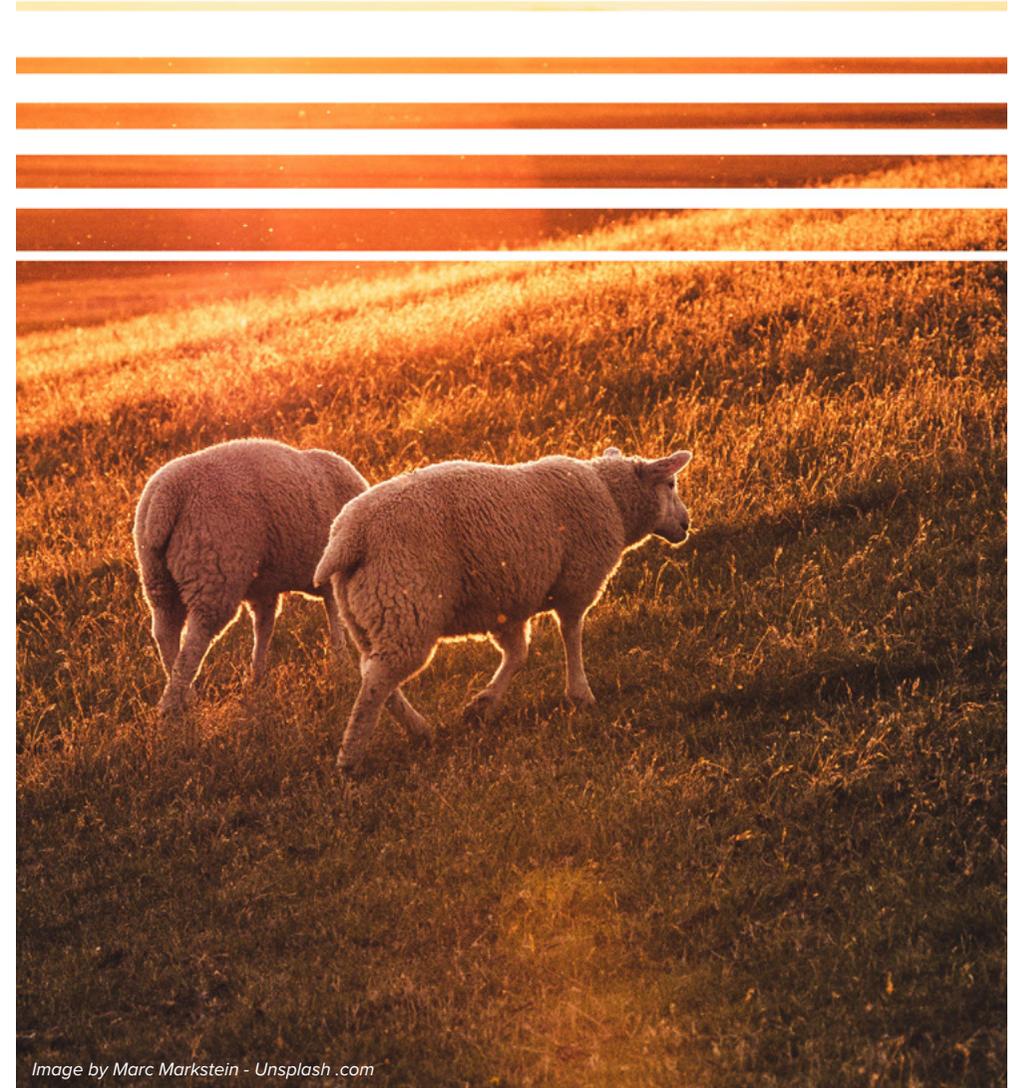


Image by Marc Markstein - Unsplash .com

DAIRY PRODUCTS



Te Taihū is not a major contributor to New Zealand's overall dairy production. We estimate that output from the region made up just 1.4% of New Zealand's total milk solids production in 2020. Nevertheless, dairy products still represent a significant proportion of exports leaving Port Nelson – even recognising the fact that the majority of the region's dairy produce is shipped out via other ports.

For the purposes of this report, our export data and analysis focuses on the three products exported directly out of Nelson: whole milk powder (\$26m), skim milk powder (\$6.8m), and ice cream (\$4.4m). At a nationwide level, other dairy exports totalled almost \$7b more on top of the \$8.9b captured in these categories, with another \$1.0b in export earnings generated by casein and caseinates.

New Zealand's dairy industry has historically found itself exposed to changes in industry protection measures by overseas governments, such as production subsidies and import tariffs. More recently, the growth in China's share of our dairy exports, up from 6% in 2008 to 30% currently, has also left New Zealand at risk of changes in demand within a single market – as the massive drop in dairy prices during 2014 and 2015 demonstrated.

Increasing attention is being given to the environmental effects of agricultural activity in New Zealand, with concerns about carbon emissions and freshwater quality particularly pertinent to the dairy sector. The trends of intensification and the conversion of land to dairy farming

that drove growth in dairy production between 2000 and 2015 are unlikely to be repeated, and reduced stocking levels are possible over the next decade as farmers adjust to tougher environmental standards. Bearing these factors in mind, it is likely that the dairy industry's focus will need to shift towards higher value-add products to boost revenue, as simple growth in production volumes becomes no longer viable.

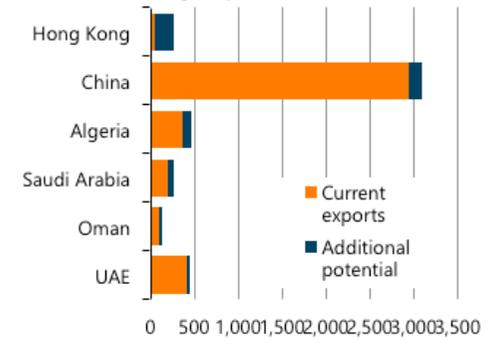
MILK POWDER

New Zealand's saturation of the international market for skim milk powder is demonstrated by the fact that our analysis sees just \$187m of additional export potential for this export category, mostly concentrated in Indonesia, the Philippines, and Vietnam. This figure represents potential growth of about 12% growth in skim milk powder exports from current levels.

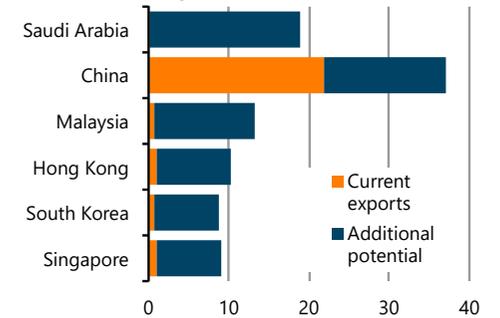
In percentage terms, the market for whole milk powder has even less scope for growth, with potential for additional exports sitting at 10% of current levels. However, the larger market size for whole milk powder means that this equates to \$738m of possible additional exports.

Perhaps most importantly, our analysis provides possibilities for diversifying New Zealand's whole milk powder exports away from China, with Hong Kong, Algeria, and several countries in the Middle East featuring strongly. In general, this potential growth is concentrated in already-established markets. Scope for growth in exports to European countries is severely

Whole milk powder exports
Markets with largest potential, \$m

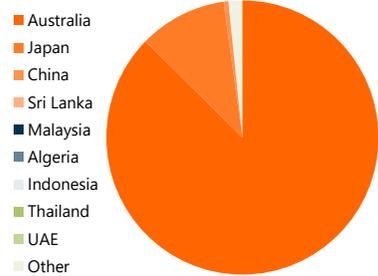


Ice cream exports
Markets with largest potential, \$m

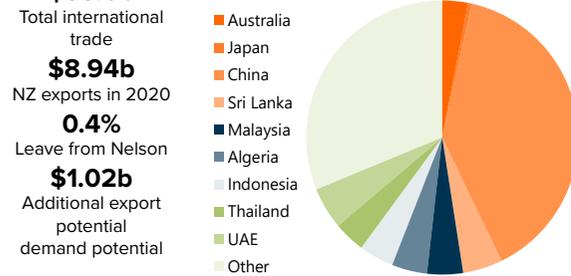


Source: Infometrics Export Market Finder, Stats NZ

Nelson's current dairy export markets



NZ's current dairy export markets



\$33.6b
Total international trade

\$8.94b
NZ exports in 2020

0.4%
Leave from Nelson

\$1.02b
Additional export potential demand potential

Source: Infometrics, Stats NZ

hampered by an effective 29% import tariff currently in place.

ICE CREAM

Nelson currently exports over \$4m of ice cream, with the bulk of it going to Japan. The region accounted for 8% of New Zealand's ice cream exports (\$55m) in 2020, with China, Australia, and Tonga the biggest other markets at present.

European countries dominate the largest potential markets for ice cream exports, filling 15 of the top 20 spots for potential exports. However, an effective import tariff of 17% is in place which, combined with transport costs, appears to be inhibiting the establishment of these export markets.

Outside the EU, there is scope for \$30m of exports across several Muslim countries including Saudi Arabia, Malaysia, and Kuwait. However, success in these markets would generally require the ice cream to be halal. Meeting this standard is likely to require adapted recipes, equipment or production techniques.

CHEESE

New Zealand's cheese exports totalled \$1.1b in 2020, with 75% being cheddar and a further 11% gouda. However, no cheese is currently exported via Port Nelson.

There is a massive \$2.9b of theoretical potential growth for cheese exports from current levels, providing an example of how the dairy industry could pivot towards higher-value products. However, apart from China, Jordan, and Hong Kong, almost all these potential markets have high tariffs in place, with particularly significant barriers in Europe preventing our cheese from being any more than a niche luxury product. Nevertheless, New Zealand has already established an export presence in several other markets with significant tariffs, including Japan, the US, and Mexico, demonstrating that this protection does not completely rule out the possibility of growing exports to the EU.



Image by Alexander Maasch - Unsplash .com

OTHER FOOD PRODUCTS



Other processed food captures an eclectic mix of foodstuffs that do not easily fit into other broad industries. Within Te Taihū, significant export goods within this category range from frozen vegetables and berries, where the processing is relatively limited, to higher-value products including peanut butter, jams, and crackers. Taken together, the overall value of these products that was shipped overseas directly from Port Nelson last year was about \$31m, with ten product categories making up about \$26m of this total.

In the case of some products, export volumes will be mostly determined by domestic growing capacity. We would not expect more exports of frozen vegetables such as peas, corn, or spinach (Nelson accounts for 75% of the latter) without significant expansion in New Zealand's production. Nevertheless, it can be worth canvassing the potential markets for these products to highlight opportunities for diversification or possible expansion.

PEANUT BUTTER

Te Taihū currently accounts for 27% of New Zealand's peanut butter exports. All of the \$3m of exports being shipped out of Port Nelson head to Australia, but the other largest export markets at a nationwide level are China (\$4.1m), Singapore (\$1.2m), and the UK (\$715,000, despite an effective EU tariff of 12%).

Europe's trade barriers mean that much of the estimated \$217m of additional export potential for peanut butter will be difficult to achieve. EU countries fill five of the six largest

potential markets, with the remaining spot taken by South Korea, which has an eye-wateringly high effective tariff of 42%. However, countries with low or no tariffs still offer significant opportunities for growth in what is currently a relatively small export product.

Te Taihū's production of high-value peanut butter suggests that it is unlikely to realise the full potential identified across these other export markets. Nevertheless, this positioning might also provide a relative advantage in trying to enter markets such as Saudi Arabia or Switzerland, because transport costs will make up a smaller proportion of the final sale price of the product.

FROZEN PEAS

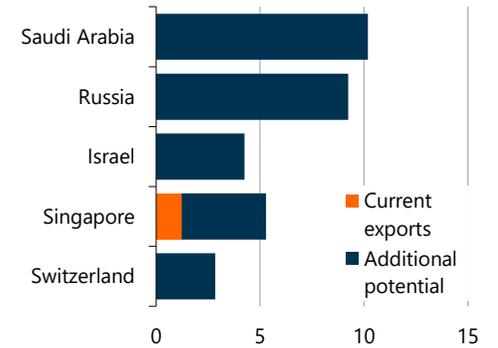
New Zealand's \$78m export markets for frozen peas are currently dominated by Australia, China, and Japan. As with other frozen vegetable exports being shipped out of Port Nelson, most of Te Taihū's \$7.1m of frozen peas last year were destined for Australia.

Domestic production capacity, import tariffs (particularly in Europe), and transportation costs shape as the main impediments to expanding New Zealand's frozen pea exports. Our modelling suggests potential growth of up to \$63m in pea exports, but much of this can currently be discounted due to European trade barriers.

Concentrating on countries without these barriers in place, opportunities for growth are spread across a mix of existing and new markets. Limited additional growth is possible in both Australia and China, but there is also

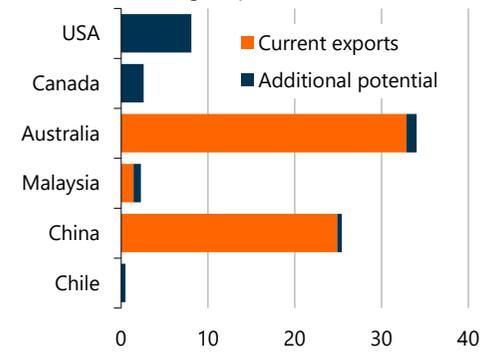
Peanut butter exports

Markets with largest potential, \$m



Frozen pea exports

Markets with largest potential, \$m



Source: Infometrics Export Market Finder, Stats NZ

interesting potential offered by the US and Canada. Further investigation of transportation costs to these countries would be necessary to understand whether these potential markets present viable export options.

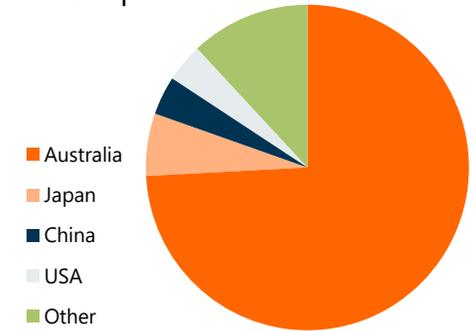
JAM

Of New Zealand's \$44m of jam exports, more than 90% currently head to Australia. Nelson accounts for about 6% of the country's exports.

The broad nature of this export category and the myriad flavours of jams that it might include mean that it is difficult to be precise about the export potential for any individual product. Other factors such as food standards and labelling requirements potentially also affect the ease of entering other export markets.

Bearing these issues in mind, our modelling suggests that North America, Russia, China, and Saudi Arabia are the largest potential markets worthy of further exploration. Australia also offers some scope to grow jam exports from current levels by about \$5m.

Nelson's current other food export markets



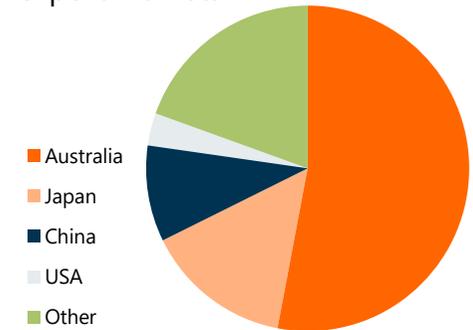
\$54.9b
Total international trade

\$316m
NZ exports in 2020

8.3%
Leave from Nelson

\$4.83b
Additional export potential

NZ's current other food export markets



Source: Infometrics, Stats NZ



Image by Markus Aila - Unsplash .com

Appendix – Export category definitions

The data and graphs for the broad export categories featured in this report are informed by the specific mix of exports leaving the country via Port Nelson. For some industries such as dairy, this selection means that our data only covers part of what would normally be identified as dairy exports. And for the seafood and aquaculture industry, the figures are therefore not able to fully capture Te Taiuhu's exports, with most chilled salmon and mussels being transported to market by plane.

The six-digit export categories from the Harmonised System included in our data and graphs are as follows:

Wine

- **220421** – Wine; still, in containers holding 2 litres or less
- **220429** – Wine; still, in containers holding more than 2 litres

Seafood and aquaculture:

- **030213** – Fish; fresh or chilled, Pacific salmon (*Oncorhynchus nerka*, *Oncorhynchus gorboscha*, *Oncorhynchus keta*, *Oncorhynchus tshawytscha*, *Oncorhynchus kisutch*, *Oncorhynchus masou*, *Oncorhynchus rhodurus*), not fillets, livers, roes, other fish meat of heading 0304
- **030341** – Fish; frozen, albacore or longfinned tunas (*Thunnus*

alalunga), excluding fillets, livers, roes, and other fish meat of heading 0304

- **030343** – Fish; frozen, skipjack or stripe-bellied bonito, excluding fillets, livers, roes, and other fish meat of heading 0304
- **030369** – Fish; frozen, of *Bregmacerotidae*, *Euclichthyidae*, *Gadidae*, *Macrouridae*, *Melanonidae*, *Merlucciidae*, *Moridae*, *Muraenolepididae*, other than cod, haddock, coalfish, hake, Alaska pollack, blue whittings, excluding fillets, livers, roes, other fish meat of 0304
- **030389** – Fish; frozen, n.e.c. in heading 0303, excluding fillets, livers, roes, and other fish meat of heading 0304
- **030479** – Fish fillets; frozen, of the families *Bregmacerotidae*, *Euclichthyidae*, *Gadidae*, *Macrouridae*, *Melanonidae*, *Merlucciidae*, *Moridae* and *Muraenolepididae* other than cod, haddock, coalfish, hake, and Alaska pollack
- **030489** – Fish fillets; frozen, of fish n.e.c. in heading 0304.8
- **030481** – Fish fillets; frozen, salmon, Pacific (*Oncorhynchus nerka*, *Oncorhynchus gorboscha*, *Oncorhynchus keta*, *Oncorhynchus tshawytscha*, *Oncorhynchus kisutch*, *Oncorhynchus masou*,

Oncorhynchus rhodurus), Atlantic (*Salmo salar*), and Danube (*Hucho hucho*)

- **030495** – Fish meat, excluding fillets, whether or not minced; frozen, of the families *Bregmacerotidae*, *Euclichthyidae*, *Gadidae*, *Macrouridae*, *Melanonidae*, *Merlucciidae*, *Moridae* and *Muraenolepididae*, other than Alaska Pollack (*Theragra chalcogramma*)
- **030731** – Molluscs; mussels (*Mytilus* spp., *Perna* spp.), whether in shell or not, live, fresh or chilled
- **030732** – Molluscs; mussels (*Mytilus* spp., *Perna* spp.), whether in shell or not, frozen
- **030739** – Molluscs; mussels (*Mytilus* spp., *Perna* spp.), whether in shell or not, frozen, dried, salted, in brine, or smoked, cooked or not before or during the smoking process
- **030743** – Molluscs; cuttle fish and squid, whether in shell or not, includes flours, meals, and pellets of molluscs, fit for human consumption, frozen
- **030749** – Molluscs; cuttle fish and squid, whether in shell or not, frozen, dried, salted, in brine, or smoked, cooked or not before or during the smoking process
- **160300** – Extracts and juices; of meat, fish or crustaceans, molluscs

or other aquatic invertebrates

- **160420** - Fish preparations; fish minced or in forms n.e.c. in heading no. 1604, prepared or preserved

Wood products

- **440710** – Wood, coniferous: sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness exceeding 6mm
- **440711** – Wood; coniferous species, of pine (*Pinus* spp.), sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or finger-jointed, of a thickness exceeding 6mm
- **441112** – Medium density fibreboard (MDF), of a thickness not exceeding 5mm
- **441113** – Medium density fibreboard (MDF), of a thickness exceeding 5mm but not exceeding 9mm
- **441114** – Medium density fibreboard (MDF), of a thickness exceeding 9mm
- **441299** – Plywood, veneered panels and similar laminated wood (other than blockboard, laminboard and battenboard, other than of bamboo, and other than plywood consisting only of sheets of wood each ply 6mm or thinner)

Appendix – Export category definitions

continued

Logs

- **440320** – Wood: coniferous, in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated
- **440321** – Wood; coniferous species, of pine (*Pinus* spp.), in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is 15cm or more
- **440322** – Wood; coniferous species, of pine (*Pinus* spp.), in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is less than 15cm
- **440323** – Wood; coniferous species, of fir (*Abies* spp.) and spruce (*Picea* spp.), in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is 15cm or more
- **440324** – Wood; coniferous species, of fir (*Abies* spp.) and spruce (*Picea* spp.), in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is less than 15cm
- **440325** – Wood; coniferous

species n.e.c in headings 4403.21 or 4403.23, in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is 15cm or more

- **440326** – Wood; coniferous species n.e.c in headings 4403.22 or 4403.24, in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, of which any cross-sectional dimension is less than 15cm

Apples and kiwifruit

- **080810** – Fruit, edible; apples, fresh
- **081050** – Fruit, edible; kiwifruit, fresh

Meat

- **020220** – Meat; of bovine animals, cuts with bone in (excluding carcasses and half-carcasses), frozen
- **020230** – Meat; of bovine animals, boneless cuts, frozen
- **020442** – Meat; of sheep (including lamb), cuts with bone in (excluding carcasses and half-carcasses), frozen

Dairy products

- **040210** – Dairy produce; milk and cream, concentrated or containing added sugar or other sweetening

matter, in powder, granules or other solid forms, of a fat content not exceeding 1.5% by weight

- **040221** – Dairy produce; milk and cream, concentrated, not containing added sugar or other sweetening matter, in powder, granules or other solid forms, of a fat content exceeding 1.5% by weight
- **210500** – Ice cream and other edible ice; whether or not containing cocoa

Other food products

- **071021** – Vegetables, leguminous; peas (*Pisum sativum*), shelled or unshelled, uncooked or cooked by steaming or boiling in water, frozen
- **071030** – Vegetables; spinach, New Zealand spinach and orache spinach (garden spinach), uncooked or cooked by steaming or boiling in water, frozen
- **071040** – Vegetables; sweetcorn, uncooked or cooked by steaming or boiling in water, frozen
- **081190** – Fruit, edible; fruit and nuts n.e.c. in heading no. 0811, uncooked or cooked, frozen whether or not containing added sugar or other sweetening matter
- **150420** – Fats and oils and their fractions; of fish, (excluding liver-oils)
- **190540** – Food preparations; rusks, toasted bread and similar toasted

products, whether or not containing cocoa

- **190590** – Food preparations; bakers' wares n.e.c. in heading no. 1605, whether or not containing cocoa; communion wafers, empty cachets suitable for pharmaceutical use, sealing wafers, rice papers and similar products
- **200799** – Jams, fruit jellies, marmalades, purees and pastes; of fruit or nuts n.e.c. in heading no. 2007, cooked preparations (excluding homogenised), whether or not containing added sugar or other sweetening matter
- **200811** – Nuts; ground-nuts, whether or not containing added sugar, other sweetening matter or spirit
- **200989** – Juice; of any single fruit or vegetable n.e.c. in heading no. 2009, unfermented, not containing added spirit, whether or not containing added sugar or other sweetening matter