Effects on competition of a fisheries quota lease

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Definitions

ACE	Annual Catch Entitlement
AFM	Auckland Fish Market
BPLP	Bay Packers Limited Partnership
EEZ	Exclusive Economic Zone
Finfish	Wild catch fish species (differentiated from other species groupings in the QMS such as crayfish/lobster, pāua/abalone and shellfish)
FSNI	Foodstuffs North Island
FY	Financial Year (ending 30 September)
Green fish	Unprocessed whole fish
GWT	Green Weight Tonnes
HMS	Highly Migratory Species
ICP	Iwi Collective Partnership
JV	Joint Venture
Kg	Kilogram
MPI	Ministry for Primary Industries
QMA	Quota Management Area
QMS	Quota Management System
SSNIP	Small but Significant and Non-transitory Increase in Price
TAC	Total Allowable Catch
TACC	Total Allowable Commercial Catch

Executive summary

Moana New Zealand (Moana) and Sanford Limited (Sanford) are proposing to enter into an agreement (the Proposed Agreement) under which Moana would lease North Island inshore quota (that is, acquire associated Annual Catch Entitlement (ACE))[1] from Sanford Limited (Sanford). [ ] Moana would also acquire some fishing and processing equipment from Sanford. This report considers whether the Proposed Agreement is likely to result in a substantial lessening of competition in a relevant market.

The parties to the agreement

Moana is an iwi-owned fisheries company based in Auckland that has an inshore fishing and processing business. Moana contracts fish harvesting to independent fishers and owns a large processing plant in Auckland and smaller facilities in Wellington and on the Chatham Islands.

In addition to its finfish operations, Moana harvests wild pāua and has aquaculture operations. Moana also has a small retail presence in Wellington and has a 50 percent interest in a retail franchisor that has five franchised stores in Auckland. Moana also has a 50 percent share of the holdings company that owns Sealord.

Moana owns 1.7 percent of quota for finfish in New Zealand waters and leases an additional [ ] of finfish quota.

Sanford has inshore and deepwater fishing and processing operations, and also has mussel farming and processing operations in Marlborough, Coromandel, and Tauranga. It contracts some inshore finfish harvesting to independent fishers but also owns a number of fishing vessels. Sanford has fish processing plants in Auckland, Timaru and Bluff. It also farms salmon at Big Glory Bay on Stewart Island.

Sanford owns 19.7 percent of New Zealand's finfish quota.[2]

New Zealand has a large and diverse range of fishing industry participants

The industry has many diverse companies with a range of business models. According to the Ministry for Primary Industries (MPI), New Zealand has 239 licensed fish receivers and processors.

Across the fishing industry, companies are facing increased fuel, labour, and compliance costs. Diverse business models and strategies are used to operate in the face of these challenges. Some companies rely on catching and processing large volumes of fish to achieve scale efficiencies, some have a strong focus on premium export seafood products, which enables them to have low incremental costs of supplying finfish domestically, and others have a very small scale but are highly vertically integrated across the supply chain.

[1] "Lease" and "sell" used interchangeably in this report. ACE can be sold and quota can be leased. I note that the words "lease" and "sell" are used as colloquial terms throughout this report, and do not necessarily to reflect the technical legal position.

[2] https://www.sanford.co.nz/sustainability/fisheries-management/#:~:text=Sanford%20is%20New%20Zealand's%20largest,of%20the%20country's%20fishing%20quota.

Rationale for the agreement

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The relevant counterfactual

Without the Proposed Agreement, potential scenarios include Sanford either entering a term lease for the quota with another party or selling its ACE annually. I consider both counterfactuals, but find that my conclusions are not sensitive to the choice of the counterfactual.

I find that the markets that are relevant to assessing the Proposed Agreement are broadly consistent with markets previously defined by the Commerce Commission

I have identified the following markets relevant to the Proposed Agreements by examining the functional, product and geographic market dimensions:

- A national market for finfish harvesting services
- A national market for the wholesale supply of unprocessed finfish
- A national market for the supply of toll processing services
- A national market for the wholesale supply of processed finfish, and
- A market or markets in which processed finfish products are supplied to retail customers, including in-shore wild and farmed finfish, and both saltwater and fresh-water species, noting that retail processed finfish products are likely also part of a broader market for supermarket goods.

The key findings of my market definition analysis are:

- Individual species are not in individual markets and instead lie in a single market for the following reasons:

  - Fishing companies catch and sell a range of different finfish species—even if they target one or more specific species, they will have a bycatch of other species that also needs to be sold.
  - Customers (including end consumers and wholesale customers) have a general preference for freshness when purchasing finfish, indicating that, in general, customers will select from a range of available substitutable finfish options.
  - While an individual customer may have a preferred species or set of species, all species are likely linked through a chain of substitution.
- Chilled and frozen finfish lie in the same market, with frozen products forming part of the variety of options available to customers. This finding reflects my analysis of how frozen and fresh finfish prices compare, and the practice by some supermarkets of thawing frozen finfish and selling it alongside other fresh finfish products.
- The geographic dimension of the wholesale markets is national because fishing vessels can choose to berth at different locations to land whole finfish, and processed finfish can be freighted around the country at a transportation cost that is low relative to the price of finfish. A survey of prices at supermarkets across the country was consistent with a national market dimension. I note that the two previous decisions by the Commission on seafood markets (Decision No. 388 and No. 544) also concluded that the geographic dimension of the relevant markets was national.

The Proposed Agreement is unlikely to give Moana strong buyer power in acquiring finfish harvesting services

Moana does not own fishing vessels but contracts with independent fishers to harvest finfish and supplies ACE to match their catch, whereas Sanford is currently largely vertically integrated with its own vessels catching the majority of its inshore volumes. [

] Therefore, I find that the Proposed Agreement is unlikely to place Moana in a materially stronger position of buyer power relative to the status quo given Sanford is largely not currently a competing buyer of finfish harvesting services in this market. Furthermore, given Moana operates as a non-vertically integrated purchaser of these services, the Proposed Agreement potentially provides finfish harvesters with greater access to out-sourced ACE (because the vertically integrated Sanford will be catching less, there will be greater volumes available for independent fish harvesters to compete for).

Similarly, compared to counterfactuals in which Sanford either sells the ACE on an annual basis or leases quota on a multi-year term basis to a vertically integrated company, the Proposed Agreement may serve to increase the opportunities for independent fish harvesters. More generally, the certainty under the Proposed Agreement of having a larger catch plan may result in better outcomes for vessel owners, particularly with increasing costs of fuel and the prospect of investing in alternative zero emission vessels as well as cost increases for staff and compliance.

The Proposed Agreement is unlikely to lead to a substantial lessening of competition in the wholesale market for whole finfish

Using share of quota as a proxy for market share, I find market shares and concentration ratios do not indicate that the Proposed Agreement is likely to result in a substantial lessening of competition.

When viewed across all fishing regions in New Zealand's EEZ, under the Proposed Agreement Moana's share of total finfish quota increases from [ ], including all of Moana's existing leases. Moana has ownership interests in Sealord and Westfleet, though these companies all operate independently. However, even if the share of the three companies is viewed in aggregate, then their group share of finfish quota following the Proposed Agreement is [ ], and the finfish quota share of the three largest holders is [ ]. In other words, even aggregating the quota shares of Moana, Sealord and Westfleet does not indicate that the Proposed Agreement is likely to result in a substantial lessening of competition under the market share and concentration indicators described in the Merger Guidelines.

I find that it is unlikely the Proposed Agreement would result in a substantial lessening of competition in the supply of wholesale unprocessed finfish because a number of competitive forces places strong constraint on Moana's behaviour, both with and without the Proposed Agreement:

- Moana faces competition from a range of different sized firms with a variety of specialities and strategies. Competitors in the market for wholesale unprocessed fish include not only quota holders, but also many wholesalers who purchase fish, aggregate supply and then sell to wholesale customers.
- Quota that is currently used for exported catch could be diverted to supply the domestic market if domestic prices materially rise as a result of the Proposed Agreement. New Zealand's finfish exports are significantly greater than the size of domestic sales—I estimate that more than 75 percent of the volume of finfish caught in New Zealand (measured in Green Weight Tonnes) are exported.
- The large number of market participants with a wide range of sizes and business models implies that coordinated effects are highly unlikely due to the fragmented nature of the market.
- In the supermarket segment, customers have strong countervailing buyer power due to their scale and can choose to self-supply. For example, FSNI owns Leigh Fisheries.
- Retail consumers have an option to catch their own fish, especially species such as snapper and kahawai that can be caught in shallow waters. We estimate that more than half of snapper consumed domestically is caught through recreational catch.
- In the counterfactual where ACE is sold on an annual basis, inshore catch may well be lower than it would be under the Proposed Agreement because companies may need to make significant investments to increase their catch to use the available quota. However, without a term lease, companies may be unwilling to make those required investments. As a result, efficiency may be lower than under the Proposed Agreement because of a loss of scale.

Toll processing

I find that the Proposed Agreement is unlikely to result in a substantial lessening of competition for toll processing relative to the counterfactual because:

- Large toll processing customers, such as supermarkets, have strong countervailing power as a result of their scale and broader protein processing options. For example, Woolworths has a partnership arrangement with Hilton Foods, which has purpose-built a large protein processing plant that processes meat as well as finfish. FSNI self-

supplies some processing through Leigh Fisheries, which it owns. The national supermarket chains also have options around whether to aggregate processing in certain locations or use multiple suppliers around the country.

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- Toll processing is primarily a service required by supermarkets. However, for smaller businesses requiring processing services, there is a large number of other processors aside from Moana that could process the volumes of such businesses. This processing could also be self-supplied on a small-scale basis (small-scale manual filleting).

Wholesale supply of processed finfish

For reasons similar to those identified above in the discussion of the wholesale supply of whole finfish, I find that the Proposed Agreement is unlikely to result in a substantial lessening of competition in the wholesale market for the supply of processed finfish.

Large wholesale customers have countervailing buyer power and options for self-supply. More generally, Moana would face competitive pressure from a number of other processed finfish suppliers, import competition, and the potential for export diversion. Examples of imported fish species include tuna, salmon, Vietnamese basa, and Alaskan pollock. The volume of fish imported is significant [

], with potential for the imported volume to increase substantially given the huge size of fish stocks such as Alaskan pollock.

Prices of finfish products also face constraints from other proteins— if the price of finfish increases, end consumers have the option to switch to other types of seafood, other proteins such as chicken, or plant-based proteins.

Retail supply of finfish products

I find that the Proposed Agreement is unlikely to result in a substantial lessening of competition in the markets in which finfish is supplied to retail customers because:

- Moana has a limited presence in retailing.
- [

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- There are a large number of competing specialty finfish retailers.
- Supermarkets provide a key retail channel and allow consumers to purchase all of their groceries in one place. A 2019 survey by MPI found that 50 percent of all seafood purchases by New Zealand respondents occurred via supermarkets and grocery stores compared with 15 percent from specialty seafood stores.

1 Introduction

Aotearoa Fisheries Limited, trading as Moana New Zealand (Moana), and Sanford Limited (Sanford) are proposing to enter into an agreement (the Proposed Agreement) under which Moana would lease North Island inshore fishing rights from Sanford and also acquire some fishing and processing assets.

This report has been prepared by Emma Ihaia. Moana and Sanford have instructed me to provide a view on whether the Proposed Agreement would have the effect, or likely effect, of substantially lessening competition in any New Zealand market. Alex Sundakov has peer reviewed this report.

In this report:

- In Section 2, I summarise the relevant industry context, including the Quota Management System (QMS), types of fishing and fish habitats, and the range of participants in the fisheries industry
- In Section 3, I describe my understanding of the Proposed Agreement and discuss the relevant counterfactual scenarios
- In Section 4, I define the relevant markets by examining the relevant functional, product, and geographic dimensions of the markets, and
- In Section 5, I examine market share proxies to assess whether the Proposed Agreement is likely to exceed the concentration indicators identified by the Commerce Commission in the Mergers and Acquisitions Guidelines[3] and examine whether the acquisition would be likely to lead to a substantial lessening of competition in any New Zealand market.

2 Industry context

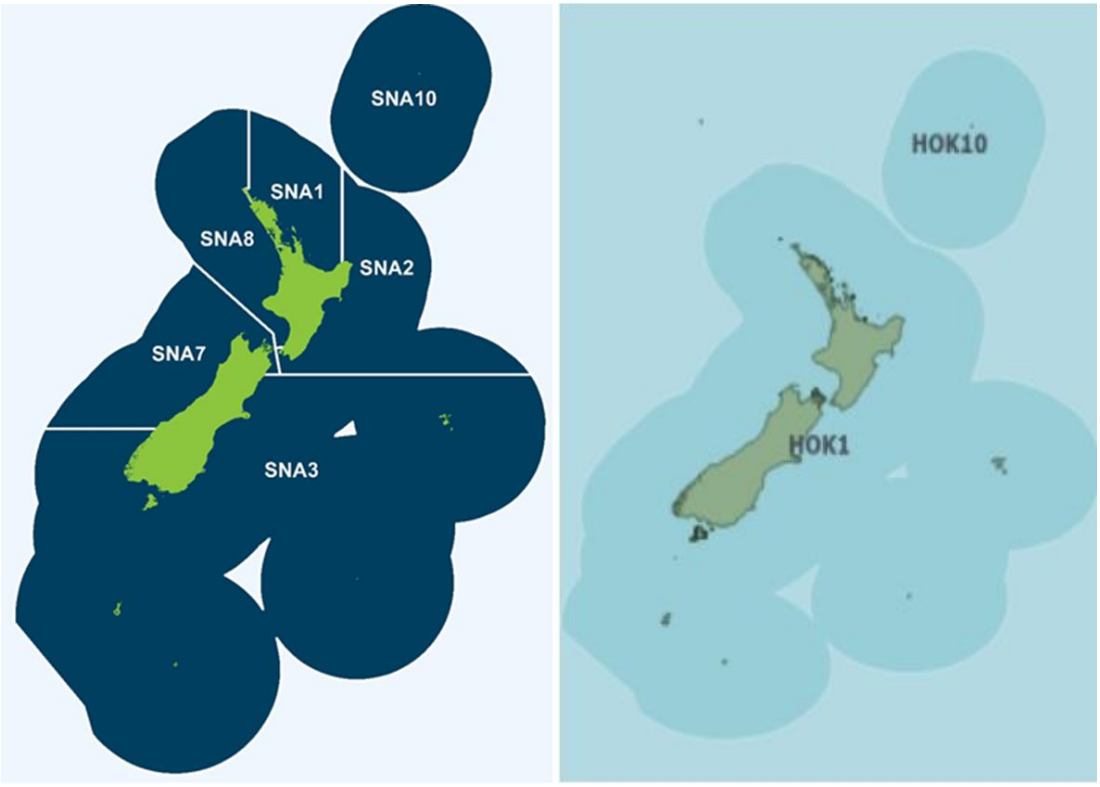
Before examining the Proposed Agreement and how it may affect competition in the relevant markets, I first provide context on the system that is used to manage fishing rights, the parties to the Proposed Agreement, and the fisheries industry structure.

2.1 The Quota Management System (QMS) sets commercial fishing limits and allocations by species and area

The QMS sets commercial fishing limits on 98 species within New Zealand waters. Individual species are divided into separate fish stocks, which are defined by Quota Management Areas (QMAs). For example, there are six QMAs for snapper and two for hoki—see Figure 2.1.

[3] Commerce Commission (May 2022), Mergers and Acquisitions Guidelines, p. 23.

Figure 2.1: Fishery management areas for snapper and hoki



Sources:
MPI website, https://www.mpi.govt.nz/fishing-aquaculture/recreational-fishing/information-on-popular-fish-in-nz/snapper-status-and-information/
Fisheries New Zealand – Fisheries Infosite https://fs.fish.govt.nz/Page.aspx?pk=7&sc=HOK

Under the QMS, the Minister of Oceans and Fisheries sets a Total Allowable Catch (TAC) each year for each of the 642 fish stocks. A non-commercial allowance for recreational and customary catch is deducted from the TAC to derive the Total Allowable Commercial Catch (TACC). For many species, the TACC accounts for the vast majority of the TAC, and overall, the TACC accounts for 97 percent of the TAC. However, some species are an exception—for example, TACC accounts for 59 percent of TAC for snapper, and 48 percent of TAC for kahawai.[4]

Under the settlement reached with the Crown in 1992, 10 percent of the TACC at that time was allocated to Iwi and any further species introduced to the QMS after that time 20 percent was reserved for Iwi.

Quota provides the owner with a share of a fish stock (each fish stock has 100 million shares allocated). Quota shares generate an amount of Annual Catch Entitlement (ACE) at the beginning of each year, which is a factor of the TACC for that stock. The ACE can be transferred to another party (commonly referred to as leasing quota or purchasing ACE), with transfers

[4] The recreational allowance for Snapper is 4,595,000, the customary allowance is 194,000, and the TACC is 6,907,300. https://fs.fish.govt.nz/Page.aspx?pk=7&sc=SNA The recreational allowance for kahawai is 2,293,000, the customary allowance is 617,000, and the TACC is 2,728,000. https://fs.fish.govt.nz/Page.aspx?pk=7&tk=100&sc=KAH

being registered through Fish Serve.[5] Commercial fishers have until the fifteenth of the following month to match their reported catch with ACE or face a financial penalty if they do not have sufficient ACE to cover their actual catch (referred to as 'deemed value').

According to the Ministry for Primary Industries (MPI), around 2,200 individuals and companies own quota.[6]

2.2 Overview of fishing types, species locations and harvesting methods

Deepwater and inshore fishing

The New Zealand commercial fishing industry is often categorised into inshore and deepwater fisheries. Inshore fishing focusses on those species that can be harvested and returned to shore for further processing, with a single fishing trip lasting one to seven days. Fish is kept chilled on ice for the duration of the trip. Conversely, deepwater is typically where species are caught on longer trips (of up to six weeks duration) and mainly processed on board into frozen formats. Deepwater fishing accounts for most of the industry catch.

Inshore fishing vessels typically operate within approximately 12 nautical miles of the New Zealand coast. Examples of finfish species that inshore vessels harvest include alfonsino, blue nose, blue cod, flatfish or flounder (key sub species include sand flounder and yellow belly founder), gurnard, hāpuku, ling, school shark, snapper, tarakihi, trevally, and rig.

The primary species targeted by deepwater operators (Tier 1) are: hake, hoki, jack mackerel, ling, orange roughy, oreo, southern blue whiting, scampi and squid. Other species caught (Tier 2) are bycatch or targeted at specific times of the year. Hoki is by far the most significant species caught in New Zealand waters (92,000 tonnes caught in 2021/22 or 29 percent of total industry catch). The majority of New Zealand's deepwater fisheries harvest is exported.

Habitat and location of species

The habitat of fish species varies, with some fish preferring to occupy the surface (sometimes referred to as pelagic, which includes tuna) and others found in the 'mid water' and deepwater (including close to the sea floor). Due to feed preferences, some species are found closer to land and in shallower water, while other species are only found in deeper water and far offshore.

There is a geographic spread of species due to habitat – for example, among the inshore species, snapper is predominately found off the North Island with very little off the South Island, and conversely, blue cod is more predominant off the South Island rather than North Island. Species of tuna (for example, albacore, southern blue fin tuna and swordfish) are categorised as highly migratory species (HMS) as they follow the warmer water down from outside the New Zealand Exclusive Economic Zone (EEZ), and consequently, tuna has quite a seasonal harvesting pattern.

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[5] Fish Serve is owned by the seafood industry and provides statutory registry-based services to support the operation of the Quota Management System.

[6] https://fs.fish.govt.nz/Page.aspx?pk=130&tk=523#:~:text=There%20are%20over%201%2C500%20commercial,licensed%20fish%20receivers%20and%20processors.

There is no clear delineation of inshore and deepwater species, with some species targeted by both inshore (for processing on land) and deepwater (on board and on land processing) operators.

Catching methods

Catching methods vary—trawlers (and a variation called seiners) catch the greatest volume of fish in New Zealand and are used for both inshore and deepwater (although naturally, the deepwater trawlers are far larger than those used for inshore fishing), with nets towed behind the vessel for hours at a time. By implication, trawl-caught fish is landed onboard dead. Another common harvest method is long lining (three variations being long-lining, bottom long-lining and surface lining) which uses multiple lines with baited hooks attached at intervals—under this method, the fish is often pulled on board live, but catch volumes are far smaller than by trawling. Due to the catch method, the quality of long line caught fish is generally better than trawl caught fish.

By volume, most inshore fish is caught by trawling, which is primarily sold domestically. Longlining is also prevalent and targets the export markets (mainly chilled and sold mainly in whole or headed and gutted format). Purse seine fishing is a further method that is particularly used to catch single specie schooling fish such as the pelagic species (such as mackerel, kahawai, trevally) that swim near the surface, with the majority of this catch destined to be exported frozen.

2.3 New Zealand fishing companies

New Zealand's fisheries industry contains a diverse range of fishing companies, including a small number of large companies and many medium and small companies, particularly for inshore fisheries. MPI states that there are over 1,500 commercial fishing vessels registered in New Zealand and 239 licensed fish receivers and processors.[7]

Companies in the industry have adopted a diverse range of business models to stay competitive in the context of increasing costs. Some companies have a business model based on very large volumes to gain scale efficiencies, some achieve economies of scope by focusing on non-finfish products (such as supplying export lobster or shellfish, reducing the incremental costs of supplying finfish domestically), while others are vertically integrated (such as owning quota, having a small fish harvesting operation and owning a store that sells fresh fish as well as fish and chips/takeaway food).

I first discuss the operations of Moana and Sanford, and then provide short summaries of some of the other larger fishing companies.

[7] https://fs.fish.govt.nz/Page.aspx?pk=130&tk=523#:~:text=There%20are%20over%201%2C500%20commercial,licensed%20fish%20receivers%20and%20processors.

2.3.1 Moana

Moana is an iwi-owned inshore fisheries company

Moana has 58 iwi shareholders,[8] with individual shareholdings ranging from 0.06 percent up to 12.63 percent (Ngāpuhi).[9]

Moana harvests wild finfish and pāua within New Zealand's inshore waters—all fishing activity is undertaken by independent fishers and divers who own the vessels and are provided ACE by Moana to cover the catch. Moana also has an aquaculture operation that involves farming pacific oysters and pāua. Moana is a significant owner of lobster quota, which is leased to a pan iwi specialist operator (Port Nicholson Fisheries Limited Partnership).

Moana owns quota and leases additional quota

Moana owns 1.7 percent of quota for finfish in New Zealand waters (including deepwater), and currently leases an additional [ ] percent. For inshore areas, Moana owns 7.2 percent of finfish quota, and leases a further [ ] percent.

As can be seen from Figure 2.2 [

[8] Moana refer to having 58 iwi shareholders. Currently the Companies Register shows 57 shareholders, consisting of 56 entities owned by individual iwi as well as Te Ohu Kai Moana, which is a charitable trust that was established by the Māori Fisheries Act 2004. Te Ohu Kai Moana hold in trust for two iwi shareholders who are yet to be allocated their shares as they do not meet the Mandated Iwi Organisation test. Once the legislative changes to the Maori Fisheries Act are passed (which are in the select committee process at the moment) TOKM will no longer be a shareholder (except as trustee for the 2 pending).

[9] Companies Register

Figure 2.2: Source of total finfish ACE held by Moana in FY2023 [ ]

Source: Information provided by Moana

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Figure 2.3: Remaining tenure of quota leases for finfish (excluding ICP JV) [ ]

Source: Moana

While some iwi-owned fishing companies choose to lease their quota to Moana, others do not. Some use the quota to provide ACE to their own fishing operations. Others lease the ACE to third parties: for example, Ngāi Tahu leases its inshore and deepwater ACE to Talley's. [

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Moana supplies domestic and export markets

Moana's operations are primarily based in the North Island. Moana's primary processing factory for finfish is in Auckland, while its factory in Palmerston North processes wild pāua. It also has a smaller fish processing operation in Wellington and on the Chatham Islands, while it has depot operations at various locations around the North Island.

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Domestically, Moana supplies fish to supermarkets, specialist retailers, food service businesses (restaurants, cafes, hotels), online suppliers and wholesalers. [

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Figure 2.4: Moana's finfish sales revenue by channel, 2019/20-2021/22 [ ]

Figure 2.5: Moana NZ's export revenue, 2020-21 [ ]

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Interests in other companies

Moana operates two food retailing outlets (situated within Moore Wilsons supermarkets in Wellington City and Porirua). Moana also holds a 50 percent shareholding in Oceanz Seafood Licensing Limited, which is the franchisor for six Oceanz branded retail stores across Auckland.

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Moana and four iwi entities own 20 percent each of the Bay Packers Limited Partnership (BPLP), which is a seafood business based in Mt Manganui. BPLP's key business is export tuna, but also processes fish for domestic sale and [

]. BPLP own a small parcel of quota (mainly southern bluefin tuna) and purchase ACE from other parties (including Moana). Moana used to undertake contract tuna harvesting but exited that business and now has no direct involvement in the tuna fishery.

Moana indirectly owns 50 percent of Sealord, a deepwater business that also farms salmon in Australia. The 50 percent shareholding in the holdings company that owns Sealord was acquired through the Crown as part of the 1992 settlement with Iwi arising from the introduction of the QMS in 1986. Sealord exports 90 percent of its catch in various frozen forms.

2.3.2 Sanford

Sanford runs inshore and deepwater fisheries operations

Sanford runs both inshore and deepwater operations. The company owns 15 fishing vessels (4 inshore and 11 deepwater) and contracts a further 28 vessels (24 inshore and 4 deepwater vessels).[10] Sanford farms salmon at Big Glory Bay at Stewart Island, where it harvests approximately 3,000 tonnes of King Salmon each year.[11]

Sanford holds 18 percent of inshore finfish quota (summed across all finfish species) and 22 percent of deepwater finfish quota.

Sanford has three fish processing plants: in Auckland, Timaru and Bluff.[12] Sanford's Auckland processing plant processes fish caught in North Island inshore areas, including fish harvested in the Wellington region. The Auckland processing plant is reaching the point where it needs to be replaced and relocated to continue operating. Sanford's Timaru processing plant processes the catch of South Island trawlers that land a variety of species such as red cod, ling, hoki and elephant fish. Orange roughy and smooth dory are also processed at the Timaru plant. King Salmon harvested from the farms in Big Glory Bay are processed in Bluff.

Sanford farms Greenshell mussels in the Coromandel area and the Marlborough Sounds and operates 22 aquaculture vessels.

Sanford has a five-year sales processing and partnership deal with Foodstuffs North Island (FSNI), which accounts for approximately 20 percent of Sanford's domestic sales value.[13]

In the year ending 30 September 2022, Sanford earned sales revenue of $531.9m and EBIT of $40.2 million. [14] In the same year, exports accounted for 63% of Sanford's sales.[15] [

] Sanford's 2022 Annual Report explains that the inshore business has not been performing to expectation and states that implementing a strategy to turn around the inshore wild catch business is a priority.[16]

The Auckland Fish Market provides a platform for buyers and sellers to trade fish

Sanford owns the Auckland Fish Market (AFM), which includes fish retailing and wholesaling operations and enables buyers and sellers to trade fresh fish through an auction. The auction is run as a reverse auction (also referred to as a dutch auction). [

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10 https://www.sanford.co.nz/operations/fishing/

11 https://www.sanford.co.nz/operations/processing/#:~:text=We%20harvest%20approximately%203%2C000%20tonnes,frozen%20for%20shipping%20by%20containers.

12 https://www.sanford.co.nz/operations/processing/

13 *Sanford Integrated Report 2021*, page 22.

14 https://www.sanford.co.nz/2022-annual-report/

15 https://www.sanford.co.nz/2022-annual-report/

16 *Sanford Integrated Report 2022*, page 11.

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Figure 2.6: Overview of the Auckland Fish Market [ ]

Source: Provided by Sanford

Sanford's North Island inshore sales by channel

Sanford sells its North Island inshore catch both directly to business customers and through the AFM. Sanford's North Island inshore finfish sales and revenue by channel are as follows:

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2.3.3 Other market participants

Sealord

Sealord has deepwater operations, with seven vessels in New Zealand waters, and one in the southern Indian Ocean. Sealord's New Zealand operations are based in Nelson.

Species caught by Sealord include hoki, southern blue whiting, squid, orange roughy, alfonsino, and jack mackerel. Sealord exports 90 percent of its catch in various frozen forms.

Sealord's wet[17] fish factory in Nelson processes hoki from May to September and other species such as orange roughy, dory and ling throughout the year. A number of Sealord's fishing vessels have onboard processing capacity and produce frozen-at-sea products. Sealord's coated factory produces crumbed and battered products all year round. To produce canned tuna, Sealord obtains supply of skipjack tuna from an international fishing company.

Sealord has access to around [ ] tonnes of quota through long-term leasing arrangements.

Moana and global seafood company Nippon Suisan Kaisha (Nissui) own equal shares in Sealord. Sealord owns 50 percent of Westfleet, 100 percent of Petuna Aquaculture (an Australian salmon farming company), and 50 percent of Australian Longline.

Talley's/Amaltal

Talley's Group Limited produces deepwater frozen-at-sea products under its Amaltal brand, and inshore fish products under its Talley's brand. Talley's owns 15 percent of total finfish quota.

The Amaltal deepwater fleet of eight vessels is based in Port Nelson and includes:

- three factory trawlers that have automated processing facilities onboard
- two specialist head-and-gut vessels
- a longliner producing frozen-at-sea product
- a large fresh fish vessel landing chilled fish to land-based processing plants, and
- a purse seiner landing brine-frozen tuna for canning.

For inshore fisheries, Talleys contracts with 80 independent inshore fishing vessels. Talley's has receiving depots at key ports around the South Island for the unloading and processing of fresh fish, and airfreights fresh fish to key markets around the world and into New Zealand's domestic markets.

Talley's also grows, harvests and processes greenshell mussels.

United Fisheries

United Fisheries is located in Christchurch and utilises company-owned and operated fishing vessels, as well as a number of chartered deep-sea factory trawlers.

The company owns several established mussel farms, as well as having contracts with other farms to provide a secure supply of greenshell mussels and pacific oysters.

United Fisheries owns six percent of New Zealand's inshore finfish quota.

Takitimu Seafoods

Takitimu Seafoods operations have primarily consisted of inshore fisheries and supplies seafood domestically through retail stores in Hawkes Bay and an online store. Takitimu Seafoods is owned by Ngāti Kahungunu Iwi Inc and is based in the Hawkes Bay. It has had a

[17] "Wet" fish refers to fish that hasn't been frozen or cooked.

processing operation and retail shop in Napier and an online store. However, the company has recently made the decision to close due to suffering ongoing losses.[18] Takitimu stated that it had: "tried everything from a restructure last year, to cutting back on operational costs but the business is unlikely to return a profit for some time."

Takitimu Seafoods has stated that the closure does no affect the fishing quota partnerships with Moana and Sealord. [

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Ngāi Tahu Seafood

Ngāi Tahu Seafood is a wholly owned subsidiary of Ngāi Tahu Holdings Corporation. Ngāi Tahu Seafood supplies seafood to international and domestic markets under its TAHU brand. Key species are crayfish, pāua, scampi, Bluff oysters, and Greenshell mussels. Ngāi Tahu Seafood also holds substantial inshore and deepwater finfish quota which is leased to Talley's.

Ngāi Tahu Seafood is headquartered in Christchurch and owns facilities in Bluff, Christchurch, Kaikōura and Picton.

Independent Fisheries

Based in Christchurch, Independent Fisheries is a deepwater fishing company that harvests and processes fish. Independent Fisheries harvests a range of varieties, but its main products are hoki, southern blue whiting and arrow squid. The company's products include frozen fillets, smoked fillets, frozen battered fillets, and frozen crumbed fillets.

Independent Fisheries owns eight percent of New Zealand's finfish quota, and one percent of inshore finfish quota.

Foodstuffs/Leigh Fisheries

Foodstuffs owns three percent of New Zealand's inshore finfish quota, through its 2019 purchase of Leigh Fisheries. Leigh Fisheries has 45 independent boats fishing for the company.[19]

Foodstuffs has a processing arrangement with Sanford.

Pelco

Pelco is a wild capture fishing and processing company that specialises in pelagic species, such as blue mackerel, jack mackerel, kahawai, trevally and tuna. Pelco is based in Mount Maunganui. Pelco owns significant pelagic quota as well as some inshore quota.

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[18] Article published on Stuff.co.nz (4 April 2023) "Big Hawke's Bay seafood company to close with loss of 33 jobs." https://www.stuff.co.nz/business/131674579/big-hawkes-bay-seafood-company-to-close-with-loss-of-33-jobs#:~:text=Takitimu%20Seafoods%2C%20Napier%2C%20has%20been,over%20the%20past%20three%20years

[19] https://www.fmcgbusiness.co.nz/foodstuffs-supports-lee-fisheries-to-help-combat-rising-fuel-costs/

A range of wholesalers

There is a large number of wholesalers, including KiwiFish, Fresko, Scott Seafoods, Seafood Harbour, Bounty Seafoods, Crystal Bay, South City Seafoods, Mega Foods, Dahua Supermarkets, Tai Ping Supermarkets, and Takanini Fish Mart.

New Zealand King Salmon

New Zealand King Salmon (NZKS) is based in Nelson and farms king salmon in the Marlborough Sounds. NZKS currently has an annual harvest capacity of around 6,500 tonnes.[20] It has recently received resource consent for a new farm in Cook Strait that would provide a potential 10,000 tonnes of capacity.[21]

3 The proposed agreement and what would occur without it

In this section, I outline the Proposed Agreement, examine the rationale behind it, and consider a range of potential counterfactual scenarios (that is, what would occur without the Proposed Agreement).

3.1 Moana is proposing to lease Sanford's inshore quota

3.1.1 The Proposed Agreement

Moana and Sanford are proposing to enter into an agreement (the Proposed Agreement) where Moana would lease a parcel of Sanford's quota. [

] The ACE parcel involves species that are described by the parties as North Island inshore ACE. [

[22]] The relevant ACE includes only finfish species and does not include shellfish.

I understand that the arrangement between Sanford and Moana also means that Moana would:

- acquire two of the inshore vessels owned by Sanford, [

  ]
- acquire some of Sanford's processing equipment,

[20] New Zealand King Salmon Annual Report 2023, p. 6.

[21] *Ibid*, p.7.

[22] [

]

- purchase an unused marine farm (which can be used for mussel or oyster farming) and

[

]

The AFM is not affected by the proposed agreement and will continue to be operated by Sanford. [

]

3.1.2 Moana's rationale for engaging in the Proposed Agreement

I understand from section 3.3 of Moana's clearance application that Moana's motivation for the Proposed Agreement is to achieve economies of scale and improve the utilisation of its existing assets as well as gaining scale to support further investment in innovation (including mechanisation and reduction of their carbon footprint), and fisheries research.

As Moana explains in the clearance application, along with many commercial fishing operators Moana and its contract fishers are facing increasing costs and challenging labour conditions. The Proposed Agreement will enable Moana to increase the volumes that are caught and processed through existing infrastructure (including fishing vessels) to help offset the effects of cost increases, and maintain sustainable economic returns. It will also allow further investment in innovation (including mechanisation to improve productivity and mitigate the changing workforce dynamics as it is becoming increasing difficult to attract processing staff in particular).

Being able to fish larger volumes will also bring efficiencies to Moana's independent fishers. The fleet of fishing vessels that Moana relies on is aging and will need to adapt away from diesel, so independent fishers will need to make significant investments. Long-term catch plans and certainty of access to ACE at volume lowers the risk associated with these investments. (The independent fishers meet the cost of these investments, though Moana helped in the past with underwriting the financing).

Moana has some capacity in its existing plant but will be investing more to reconfigure it and enable night shift to accommodate the extra volume that will result from the Proposed Agreement. For example, Moana does not currently have enough space in its existing chiller to accommodate fish volumes and will need to accommodate more staff. Moana's clearance application also states that the Proposed Agreement will provide additional volume to support investment in a new facility in Porirua that will increase the volumes available to be processed

through Wellington. The facility will be export certified (the existing facility is domestic only) which will enable the company to better manage risk and business continuity (especially if the Auckland plant was unable, for what ever reason, to operate even for a short period of time).

[

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3.1.3 Sanford's rationale for engaging in the Proposed Agreement

[

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3.2 Relevant counterfactual

To consider whether the transaction is likely to cause a substantial lessening of competition, it is necessary to identify the most likely scenario or scenarios that would occur without the Proposed Agreement—that is, the counterfactual.

Possible counterfactual scenarios include:

a. *The status quo prevails, and Sanford continues to operate essentially as it currently does,* [

].

b. *Sanford continues its inshore fishing operations* ***[***

[23]

].

c. *Sanford* ***[***

] *leases its quota on a long-term basis to a party other than Moana:* **[**

[23] [

]

]

d. *Sanford [ ] sells its ACE on an annual basis. [ ]*

In the remainder of this report, I consider both counterfactual (c), which I refer to as the Term Lease Counterfactual, and (d), which I refer to as the Annual Lease Counterfactual. However, due to the competitive constraints on Moana, I do not find that the conclusions on the effects of the Proposed Agreement on competition are reliant on the choice of counterfactual.

4 Defining the relevant markets

I have identified the following potential markets for assessing the effect of the Proposed Agreement on competition:[24]

- A national market for the supply of finfish harvesting services
- A national market for the wholesale supply of unprocessed finfish

[24] These market definitions are broadly consistent with the Commerce Commission's approach in Decision No 388, where it identified the following markets:

- the market for the harvesting and supply of finfish in New Zealand (the 'harvesting market');
- the market for the processing and wholesale supply of fresh finfish in New Zealand (the 'processing market'); and
- the market for the processing and wholesale supply of value-added finfish products in New Zealand (the 'value-added market').

- A national market for the wholesale supply of processed finfish (including, for example, gutted, filleted with skin on, and filleted with skin off)
- A national market for toll processing, and
- A market or markets in which processed finfish products are supplied to retail customers, including in-shore wild and farmed fish and both saltwater and fresh-water species, noting that retail processed fish products are likely also part of a broader market for supermarket goods.

I note that I have not defined a market for fisheries rights as nothing is being produced in that market—quota/ACE is simply an input to another market. What matters is whether there is a substantial lessening of competition in a market which the quota is used. I also note that my analysis of competition in the market for the wholesale supply of unprocessed finfish examines quota outcomes.

In the following analysis, I start by identifying the levels of supply chain and what that means for the functional dimension of the markets, and then examine the product dimension and the geographic dimension.

4.1 Functional market dimension

Sector participants have varying levels of vertical integration across layers of the supply chain. However, there appear to be distinct functional markets at different levels of the supply chain for:

- Finfish harvesting services, a market in which Moana only participates as a buyer
- Wholesale supply of whole unprocessed finfish
- Toll processing of finfish
- Wholesale supply of processed finfish (such as gutted, filleted with skin on, and filleted with skin off)
- Retail supply of chilled finfish, a market in which Moana has only a minimal presence.

4.1.1 Fish harvesting services

While some companies own fishing vessels and harvest fish themselves, a significant proportion of inshore fish is harvested by independent fishing boats that contract to companies that process the fish:

- Some fishing companies procure all fish harvesting services and then carry out the fish processing and wholesaling activities themselves. For example, Moana does not own any fishing vessels and instead contracts with fishing boat owners and transfers ACE monthly to them.
- A number of companies harvest some fish themselves using their own vessels as well as procuring harvesting services for some of their catch – for example, Sanford owns some deepwater and inshore vessels and also procures fish harvesting services from others, and Talley's operates its own deep-water vessels under its Amaltal subsidiary but uses an independent fleet for inshore fishing.

As Moana is not vertically integrated into fish harvesting, it is only a buyer of fish harvesting services. I identify this market for the purposes of assessing whether the Proposed Agreement

places Moana in a position of having strong buyer power, as compared with the relevant counterfactual.

4.1.2 Wholesale supply of unprocessed fish

A significant proportion of fish that is sold domestically is sold in an unprocessed form. [

].

Wholesale customers of unprocessed fish include:

- Retailers (some specialist fish shops and other food retailers, including supermarkets)
- Restaurants that prefer to process fish themselves
- Distributors who are on-selling to other businesses, and
- Other wholesalers—for example, if a wholesaler is short of overall volumes or particular species required to supply its customers (for example, due to weather conditions where its fleet is operating), then it may purchase the required volume of unprocessed fish from another wholesaler.

The functions that suppliers in this market carry out include managing the fleet of fishers (whether vertically integrated or independent) and matching supply with demand. Wholesalers of unprocessed fish have established sales channels, wholesale customer relationships and, in some cases, explicit contracts.

4.1.3 Toll processing

Some retailers that purchase wholesale unprocessed fish choose to acquire toll processing services to transform green fish into processed products (such as fillets, or gutted fish), rather than processing the fish themselves. The main customers of toll processing services are Foodstuffs and Woolworths.

4.1.4 Wholesale supply of processed fish

Wholesalers with processing facilities process green finfish to prepare a range of products, according to customer needs—for example, gutted fish, headed and gutted fish, or fillets (skin on or skin off). While the broad customer groups in this market are similar to those who purchase unprocessed finfish, customers of wholesale processed finfish generally do not have access to the facilities or inhouse expertise to process the finfish themselves or the volumes and capability to purchase unprocessed fish and manage a toll processing arrangement. [

]

Given the significance of wholesale processed finfish volumes, this appears to be a separate functional market from the wholesale supply of unprocessed finfish.

4.1.5 A market, or markets, in which finfish is sold to retail customers

I do not examine this market in detail as Moana has a limited presence in retailing. However, I note that finfish retailing occurs through supermarkets, specialist fish shops and online

seafood retailers. It seems highly likely that fish retailers compete in a retail market for groceries that is broader than only finfish—if a hypothetical monopolist of specialist seafood retailing attempted to implement a Small but Significant and Non-transitory Increase in Price (SSNIP), the price increase would most likely be defeated by demand-side substitution to finfish sold by supermarkets.

4.2 Product markets

When examining the relevant product markets, I find that a range of finfish species lies in a single product market, including salmon, and that both fresh and frozen fish lie in a single product market.

I note that although I do not specifically examine whether there are separate customer markets, when looking at the effects of the Proposed Agreement on competition I do consider the implications for supermarkets as the scale of their requirements means that their supply options may differ from other customers.

4.2.1 A range of finfish species lie in a single product market

I find that individual finfish species lie in a single market, rather than in separate species-specific product markets for a number of reasons:

- Fishing companies catch and sell a range of different species—even if they target one or more specific species, they will have bycatch of other species that also needs to be sold.
- Customers (including end consumers and wholesale customers) have a general preference for freshness when purchasing fish, indicating that, in general, customers will select from a range of available substitutable fish options.
- While an individual customer may have a preferred species or set of species, all species are likely linked through a chain of substitution.

I also find that the relevant product market for finfish is not limited to wild-harvested or saltwater fish and includes salmon, which has grown in popularity over time.

My finding that a range of finfish species form a single market is broadly consistent with the conclusion in NZCC Decision No 388 where the Commission found all wild finfish species lie in a single market through a chain of substitution.[25] One difference is that in Decision No 388, the Commission found that salmon did not lie in the same market as wild harvested fish because salmon appeared to be a specialist niche market, that it was farmed, and that there would be no aggregation in salmon-related activities. I note that in the 20 years since that decision salmon sales have increased significantly and consumer tastes have changed. For example, an MPI study published in 2019 found generational changes in fish preferences with customers in the 18 to 29 year-old category being several times more likely to purchase freshwater fish than customers with an age of more than 60.[26]

[25] I note that two Commissioners had dissenting opinions on the basis that the timeframe within which the decision needed to be made did not provide them sufficient time to be satisfied on all the issues

[26] See MPI (2019), *New Zealand Seafood Consumer Preferences*, slide 5.

Fishing companies catch and sell a range of different species

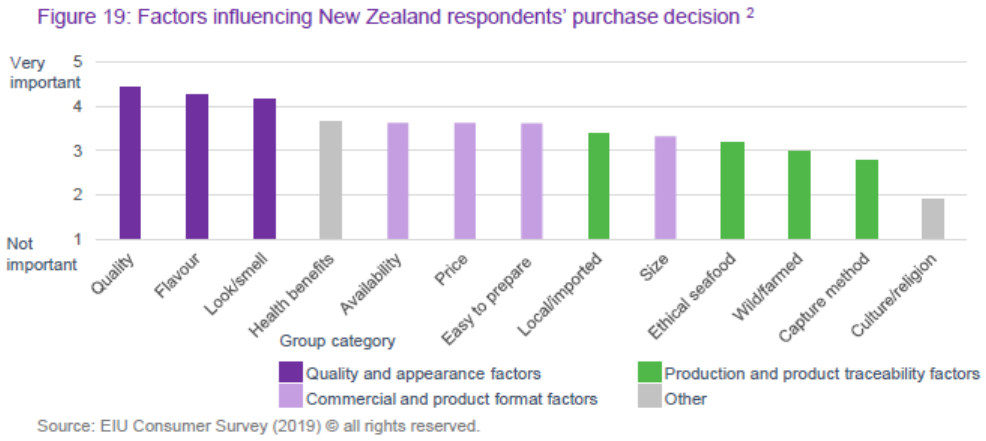
The commercial reality of the way in which wholesale fish are sold is that a range of species is sold together. Fishing boats catch multiple species—even if they are targeting some specific species, they typically also have bycatch of other species. [

]

Quality and observed freshness rank high in consumer preferences – this is consistent with a willingness to switch across species

A 2019 survey found that customers rank factors such as quality, flavour, look and smell most highly when making purchase decisions on fish products, which is likely consistent with a willingness to switch across species.

Figure 4.1: Factors influencing purchase decisions



Source: MPI (2019), New Zealand Seafood Consumer Preferences, slide 12.

Restaurants often have a "fish of the day" dish, which changes according to availability. Similarly, fish and chips shops offer fish of the day.

A chain of substitution likely links species of finfish

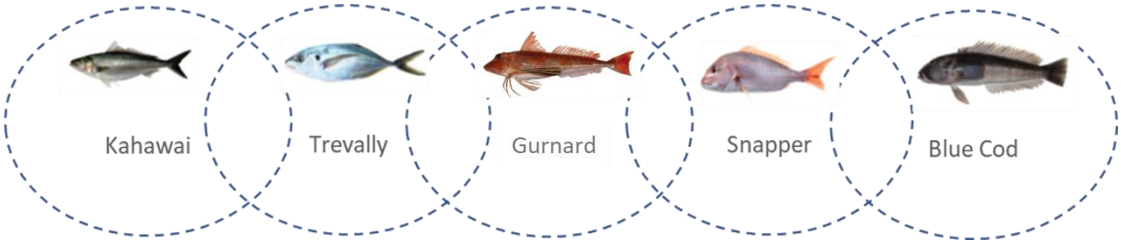
When purchasing chilled finfish, consumers can select from a range of fish species at a range of prices. For example, in supermarkets, retail consumers can purchase cheaper species such as hoki and red cod through to higher-priced species such as snapper, blue cod and john dory, with a number of mid-priced species such as trevally.

While a cheaper species such as kahawai may not be sufficiently substitutable for a higher-value species such as blue cod that the two species would fall into the same market through direct substitution, I find that a chain of substitution links a range of fish species and that the species in that chain constitute the relevant product market.

In a chain of substitution, the price of one product (A) constrains the price of another product (B), and that in turn constrains the price of a further product (C), which constrains the price of another product (D), and this can lead to the definition of a relevant market which includes products A, B, C, and D even though some products (such as A and D) may not be directly substitutable.

Some consumers who have a strong preference for snapper, for example, may consider that gurnard or blue cod is a reasonable substitute, but view kahawai as a poorer substitute. However, consumers that prefer trevally may consider that gurnard or kahawai are reasonable substitutes.

Figure 4.2: Illustrative chain of substitution between species



While we do not have have empirical estimates of the relationships between prices of each of the species fished in New Zealand, an Australian empirical study published in 2021 illustrates how these can look. The 2021 study used time series data from the Sydney fish markets examined cointegration relationships.[27] Cointegration analysis provide tests of whether two price series share a long-term relationship, but avoids the pitfall of spurious relationships in price correlation analysis. As described by Michaels and deVany (1995) in the context of how conintegration analysis can be used to assess geographic market definition:

> *If two areas are in the same competitive market, their prices will inhabit a band whose width reflects the cost of arbitrage. Those costs include transportation, risk exposure, and information about profitable opportunities. If competition exists, it will quickly bring disparate prices back within their arbitrage limits. If, for example, bad weather increases price in area i while price at area j and transmission cost are unchanged, transactions in a competitive market will restore an equilibrium at which the two prices again differ by no more than the arbitrage limits. If the cost of arbitrage varies little over time, two areas are in the same market if the difference between their prices is relatively constant. The statistical technique known as cointegration provides a criterion under which to determine the relative constancy of such a difference. If the prices are not cointegrated, there are no welldefined bounds on the difference between them. If prices in two areas are cointegrated, the areas are in the same economic market. Although the difference between the prices varies with some randomness, there is a high probability that it will remain within arbitrage bounds.*[28]

The findings of the Australian empirical study on cointegration relationships between fish species are summarised in Figure 4.3. Of the domestically-caught finfish in the study, john dory had the highest average price (A$10.98/kg), followed by blue-eyed trevalla (A$10.00/kg), with the cheapest species including the common saw shark (A$1.69/kg) and silver warehou (A$1.97). As can be seen from the diagram, although john dory is not cointegrated with the cheapest species, john dory and blue trevalla are cointegrated (with prices following the Law

[27] Schrobback, P., Hoshino, E., Pascoe, S., and Curtotti, R. (2021), "Market integration of domestic and imported seafood: Insights from the Sydney Fish Markets" *Australian Journal of Agricultural and Resource Economics, Volume 66, Issue 1*.

[28] Michaels, R.J. and A.S. deVany, (1995) "Market-based rates for interstate gas pipelines: The relevant market and the real market," 16 EnergyL.J. 299–345, at page 327.

of One Price), and blue trevalla is cointegrated with several of the cheaper species, including silver warehou. Silver warehou is linked through a chain to the common saw shark (see the lower part of the following diagram).

Figure 4.3: Australian cointegration relationships between species

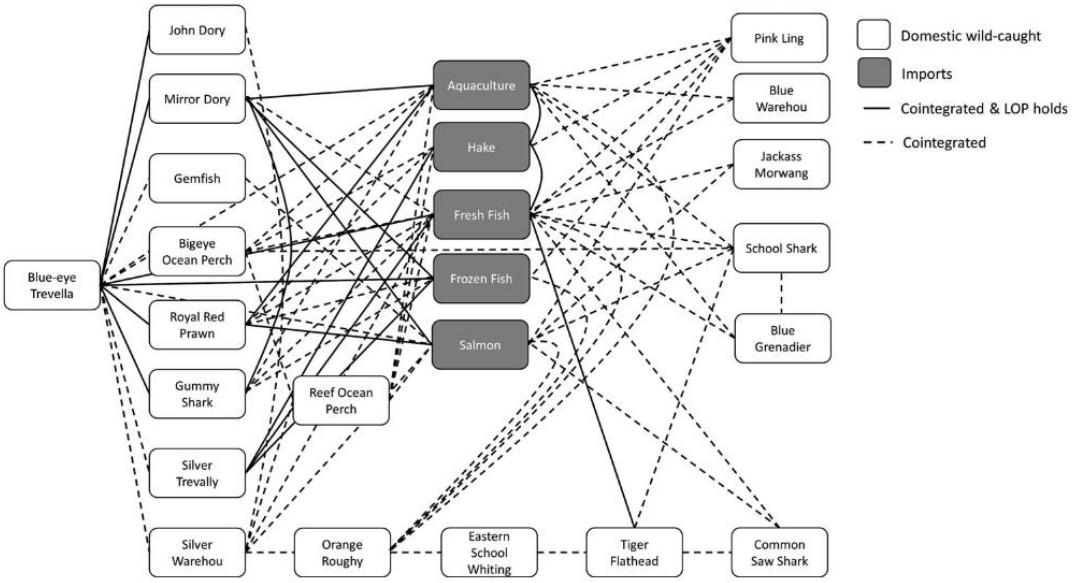


Figure 3 Co-integration relationships for domestic wild-caught and imported fish. Notes: A line (dashed or full) between two boxes (species) signifies a cointegrating relationship among two fish species. Detailed results for cointegrated price pairs are presented in Table 2. Source: Derived from authors' analysis (Table 2)

Retail and wholesale prices show a continuum across fish species

To investigate the likelihood of a chain of substitution in New Zealand, I have examined retail prices observed in supermarkets as well as the prices that Moana charges its wholesale customers. I have found that there is a fairly smooth continuum of prices from the lowest- to highest-priced fish.

Figure 4.3 below shows retail prices for chilled fish observed in a Pak 'N Save Supermarket. The prices for fillets range from around $17 per kg for hoki and $20 for red cod to $41 per kg for blue cod and $45 per kg for snapper, with many price points in between. There are no obviously significant break points between, say, budget and premium fish species.

[

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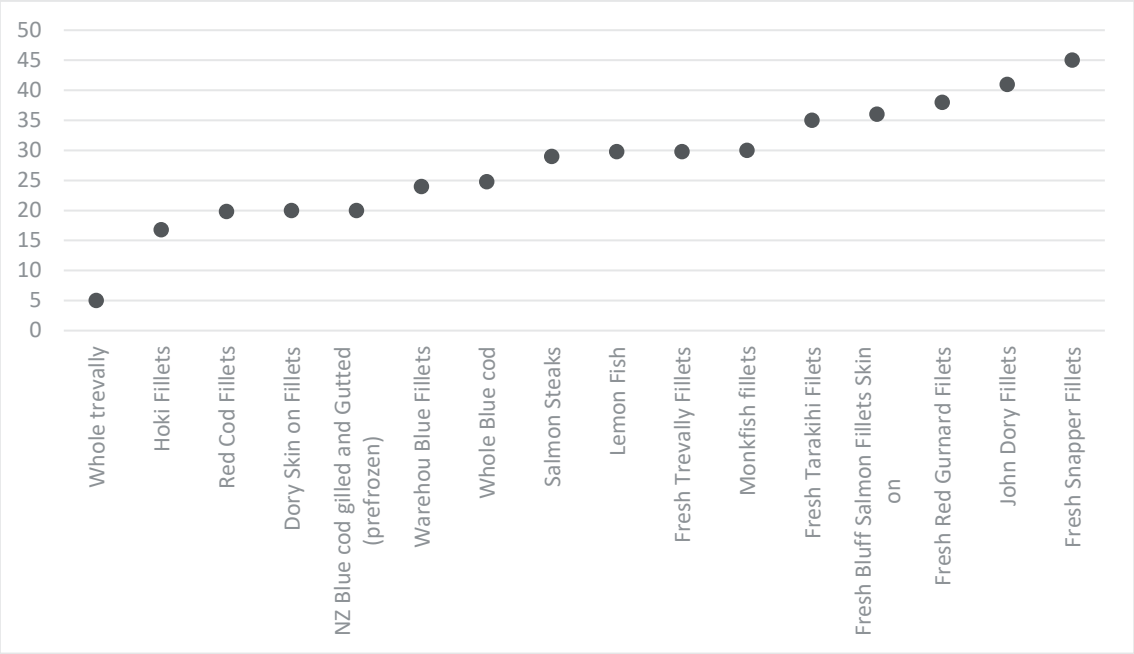
Figure 4.4: Retail price per kilogram of fresh fish in Royal Oak Pak 'N Save supermarket ($ per kg)



Source: Survey of online prices as at 25 January 2022, Pak and Save Royal Oak Auckland

Figure 4.5: Moana's price to supermarkets for skinned fish fillets by species, $/kg [ ]

Source: Castalia analysis of data provided by Moana

While most of the catch from deepwater fishing is frozen (including frozen at sea), some are landed chilled and sold as fresh produce. For example, hoki caught in Cook Strait can be supplied fresh during the hoki season (June to September). Similarly, highly migratory species (such as numerous varieties of tuna, as well as swordfish) would also be supplied as other chilled fish. A lot of tuna, for example, yellowfin is imported from the Pacific Islands.

Salmon prices sit as part of the continuum of finfish prices

Also evident from the Pak 'N Save price survey in Figure 4.3 is that the price of salmon fits within the range of fish fillet prices. Similar surveys of other supermarkets show that fresh salmon fillets appear at various points across the overall fresh fillet price range, with New Zealand salmon fillets sitting towards the upper end of the range and thawed, imported salmon fillets at a lower price point. For example, I found in a January 2022 survey of Countdown prices that New Zealand salmon fillets were priced at $38 per kg, while thawed Atlantic salmon fillets that were imported from Norway were priced at $30 per kg (which is towards the middle of the range of chilled fish prices displayed in Figure 4.4).

Published Australian empirical analysis indicates salmon is in the same market as wild-caught species

A recent Australian study found that growth of Australian-farmed Atlantic salmon production has had a significant negative impact on the prices received for Australian wild-caught species.[29] Using a dynamic Inverse Almost Ideal Demand System (IAIDS) model, the study estimated cross-price flexibilities between salmon and wildcaught species. While noting some caveats in the analysis, the authors of that study found that:

> *Changes in the quantity of salmon were found to have a proportionate impact on the price of the high-valued species group on the SFM, with long-run cross-price flexibilities of −0.997, and a greater than proportionate impact on the lower-valued species, with a cross-price flexibility of −1.209 (Table 4).*

While there may be some difference between the Australian and New Zealand markets (including species and demand preferences), the Australian findings are consistent with our view that salmon is likely to form part of the same market as wild-caught species in New Zealand.

Critical loss analysis

Critical loss analysis can be used to implement the hypothetical monopolist test to help identify the relevant market definition. Critical loss is calculated as SSNIP/(SSNIP + M), where M is the price-cost margin in percentage terms. M = ((initial (average) price – initial (average) variable cost)/initial (average) price)*100.

Cost structures and contribution margins may vary significantly across fishing companies according to their business model and quota ownership. Those that own fishing vessels will have lower average variable costs than others, such as Moana, that have contract fishers.

The following statement made by the Commission would seem to indicate that the costs should represent wider market costs:

> *If the candidate set of products is expanded to include the next best substitutes, then the merging parties' costs are often used to proxy for the costs of those candidate substitute products if the products are similar. The method for cost estimation should be explained, as there can be complexities depending on usefulness of the data available and whether merging parties' costs are an appropriate proxy for wider market costs.*[30]

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[29] Pascoe, S., Schrobback, P., Hoshino, E., and Curtotti, R. (2023), "Impact of changes in imports and farmed salmon on wild-caught fish prices in Australia," *European Review of Agricultural Economics Vol 50 (2),* pp. 335–359

[30] Commerce Commission (December 2018), "How to use quantitative analysis in your merger analysis" paragraph 19.

[

]

For inshore fishing, Talley's uses contract fishers, Sanford owns vessels as well as having some contract fishers, and other companies have a variety of arrangements. Taking an average contribution margin across the industry would result in a higher contribution margin and lower critical loss than estimated above using Moana's costs.

The critical loss can be compared with the actual loss that would occur in response to a SSNIP by a hypothetical monopolist. As described by the Commission: "Actual losses can be estimated, qualitatively or quantitatively, on the basis of customer reactions to past price increases, or some other source of information on how sensitive consumers might be to a price increase and their switching behaviour."[31]

Qualitative information (discussed above) indicates that customers are likely to view adjacent species in the chain of substitution as close substitutes. However, we do not have quantitative estimates such as cross-elasticities or consumer survey information to fully assess empirically whether substitution between species would exceed the critical loss estimates above.

4.2.2 Fresh and frozen products appear likely to be in the same market

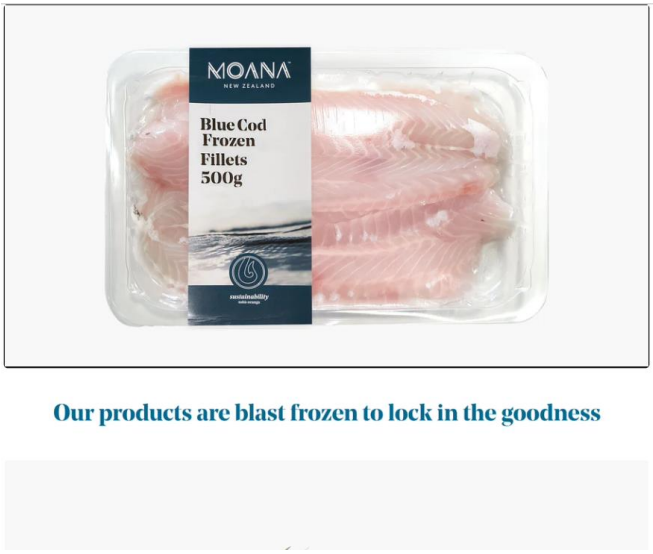
Suppliers across the different functional layers of the markets supply fish in multiple formats, including both chilled and frozen, to meet a variety of customer needs. While some customers have a strong preference for fresh, chilled products, others may be satisfied with snap-frozen products.

The price of frozen products sits lower than the fresh product of the same species—for example, comparing the price in December 2022 of Moana's blast frozen blue cod fillets ($42.00 per kg) with Sanford and Sons' fresh blue cod fillets ($57.78 per kg) shows a difference of 38 per cent.[32] However, the price of the frozen blue cod fillets is comparable with the price of fresh gurnard ($44.44 per kg) and fresh tarakihi ($45.56 per kg), and is higher than fresh ling ($32.22 per kg)—see Figure 4.8.

[31] Commerce Commission (December 2018), "How to use quantitative analysis in your merger analysis" paragraph 22.

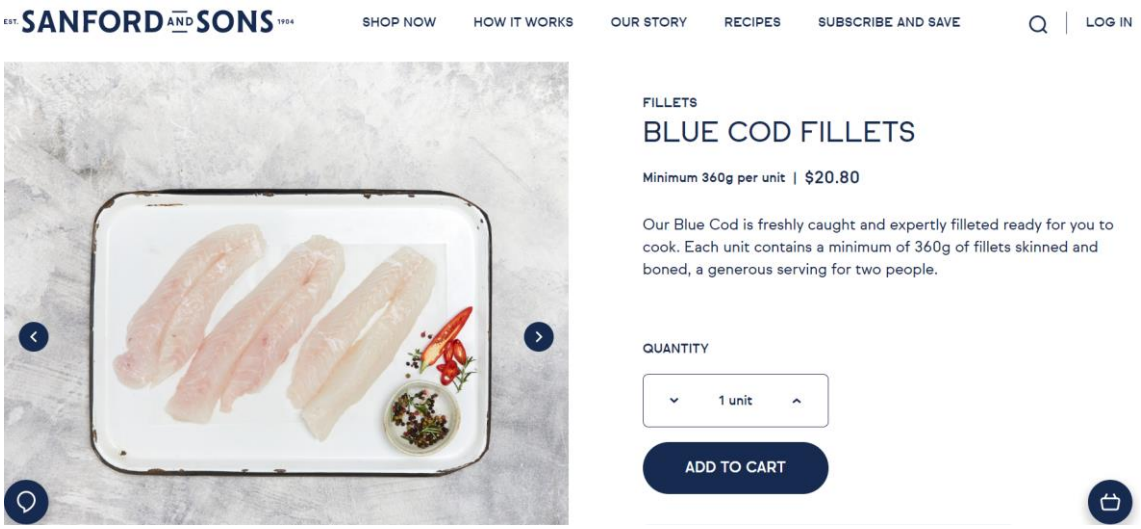
[32] Sanford and Sons' price of $20.80 per 360 grams of fresh blue cod fillets is equivalent to $57.78 per kg. Moana's price of $21.00 per 500 grams of frozen blue cod fillets is equivalent to $42.00 per kg. As a result, the price of the fresh fillets is approximately 38 percent more than the frozen fillets.

Figure 4.6: Blast-frozen blue cod fillets



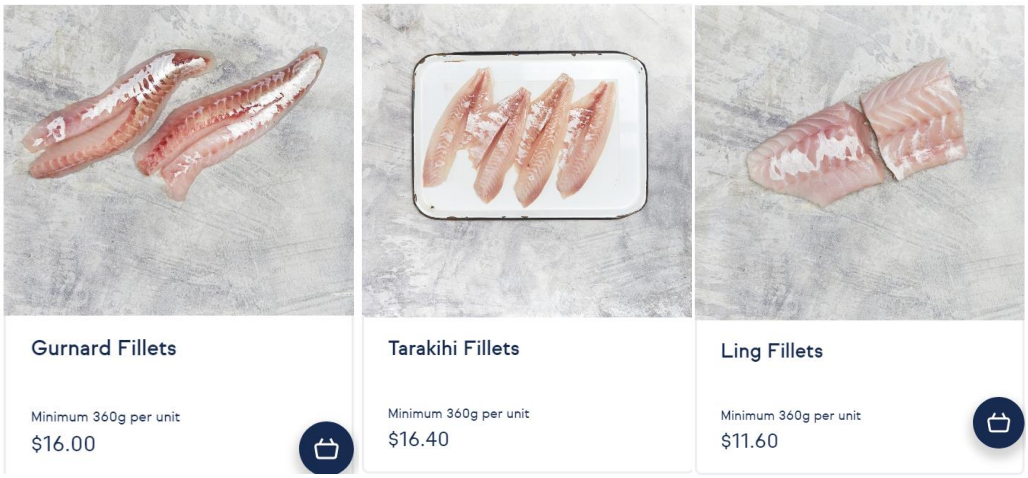
https://shop.moana.co.nz/products/blue-cod Viewed 5 December 2022

Figure 4.7: Sanford fresh blue cod fillets



https://sanfordandsons.co.nz/product/blue-cod-fillets Viewed 5 December 2022

Figure 4.8: Sanford and Sons fresh fillets

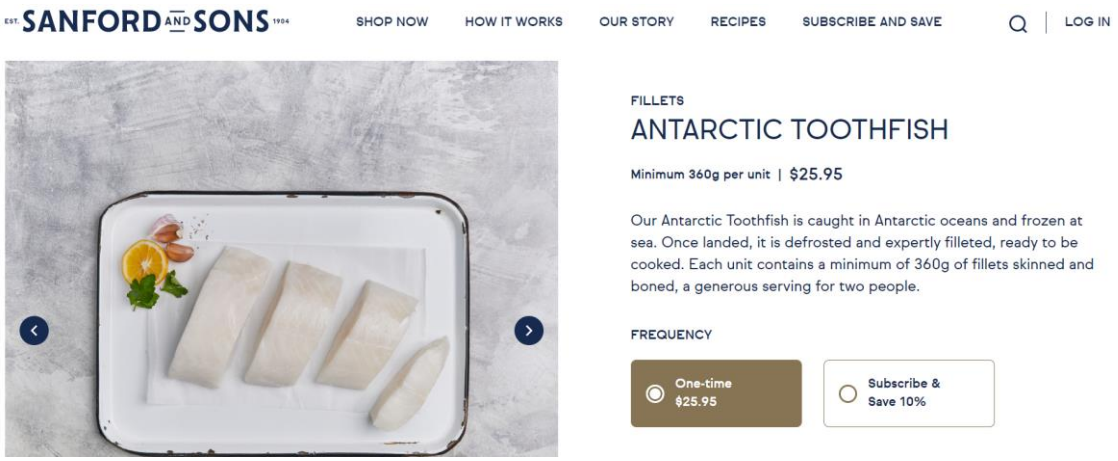


https://sanfordandsons.co.nz/buy-fish-and-seafood?category=Fillets *Viewed 5 December 2022*

Other premium fish, such as Antarctic toothfish, which is necessarily frozen at sea due to the catch location, is defrosted and filleted when it is landed (see Figure 4.9). Antarctic toothfish sells for $72.08 per kg, which is more than any of the fillets of fresh species listed on the Sanford and Sons website, including bluenose, which is $69.17 per kg.

These observations on prices indicate that frozen fish is simply part of the variety of options available to customers and sit on the continuum of prices.

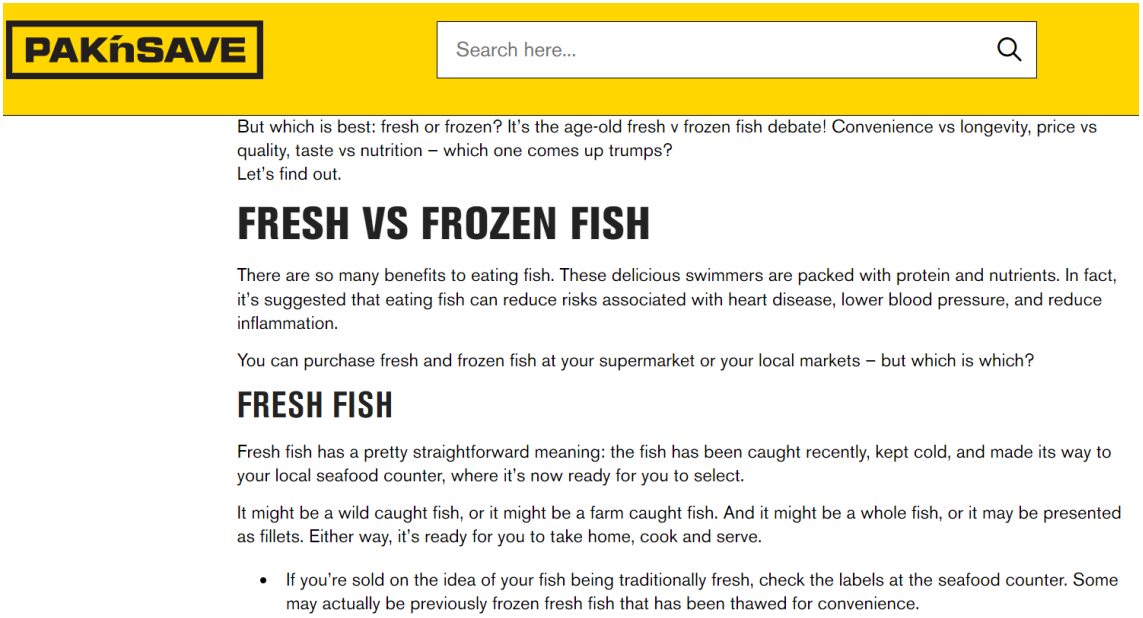
Figure 4.9: Example of a premium product that has been frozen at sea, defrosted, and filleted



https://sanfordandsons.co.nz/product/antarctic-toothfish *(Viewed 5 December 2022)*

Supermarkets sell thawed products alongside fresh products. Pak 'N Save's website explains that if customers require "traditionally fresh" fish that they should check the labels at the seafood counter as some may actually be previously frozen fish that has been thawed for convenience (Figure 4.10).

Figure 4.10: Pak 'n Save information on fresh and frozen fish



https://www.paknsave.co.nz/saving-ideas/fresh-vs-frozen-seafood Viewed 5 December 2022

Given the above observations on the pricing of frozen and fresh fish and supermarket practices of selling thawed fish alongside fresh fish, I find that fresh fish and frozen fish are likely to be in the same market.

4.3 Geographic markets

I find that the geographic dimension of all relevant wholesale markets is national.

4.3.1 Wholesale unprocessed finfish is likely supplied in a national market, rather than in separate regional markets

While the quota management system operates on a regional basis, a number of reasons suggest that the wholesale market for unprocessed fish is national.

First, operators of vessels can base themselves where they choose and unload at multiple wharves. This flexibility means that if a hypothetical monopolist in geographic location A attempted an increase in wholesale prices of unprocessed fish by 5 to 10 percent, vessels from other regions could choose to unload and sell their fish in location A and defeat the attempted SSNIP. In other words, the price increase would be unprofitable for the hypothetical monopolist because it would lose significant sales to suppliers from other areas.

Second, from a demand-side perspective, some large customers (such as supermarkets) purchase across localities. These large customers account for a significant share of domestic sales.

Third, companies freight fish around the country according to demand and supply. [

].

Fourth, as discussed in the previous section, I find that fresh and frozen fish are in the same market. Since frozen fish can be shipped nationally, that itself would likely make the overall market national, due to the price effects of the frozen product.

To further test the geographic market boundaries, I examined the retail pricing practices of supermarkets. I focussed on the pricing of stores with New World and PAK'nSAVE banners by looking at the online shopping prices for a sample of stores across the country.[33] I focused on the four most commonly sold fish species, [ ]. I found that although the price of some individual species differs between the North and South Island within an individual banner, this appears to reflect discounting practices and likely also a range of other factors (for example, consumer preferences) rather than different costs. For example, in the case of Tarakihi, prices are generally lower at the South Island New World stores and at the PAK'nSAVE North Island stores, and generally highest at North Island New World and South Island PAK'nSAVE stores.

More specifically, the price survey found that:

- Within each of the two Foodstuffs banners, the price of gurnard was reasonably consistent across the country. Twelve of the 13 New World stores surveyed sold gurnard for $44.99 per kilo (New World Westport was the exception at $49.99). Of the nine PAK'nSAVE stores that sold gurnard online, all four North Island stores plus two South Island stores (Dunedin and Invercargill) had a price of $43.99 per kilo, while two other South Island stores had prices of $45.99 and one (Timaru) had a price of $48.99.
- For Snapper, New World stores in the North Island sold fillets for $44.99 (a Super Saver discount), with the price in South Island stores being higher at $52.99. Auckland stores offered both the cheapest and most expensive online price of the surveyed PAK'nSAVE stores: $48.99 at the Manukau store and $52.99 at the Royal Oak store (three other North Island stores and one South Island store also had a price of $52.99).
- For Tarakihi, the South Island New World and the North Island PAK'nSAVE stores sold fillets at $39.99 (a Super Saver discount at New World),[34] while most of the North Island New World stores had a higher price of $42.99 and the three South Island PAK'nSAVE stores that sell Tarakihi fillets online had prices of either $41.99 or $43.99.
- For Trevally, all but one of the North Island New World stores price fillets at $32.99, while the only South Island store that sells them has a lower price of $30.99. In contrast, PAK'nSAVE's North Island stores have a cheaper price ($25.99) than the South Island stores ($28.99 to $30.99).

Given that I have not observed a consistent pattern of price differentials between North and South Island (or other regional differentials) for each of the four most commonly sold species, the results of the analysis are consistent with my view that the relevant geographic market dimension is national.

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[33] I repeated the survey for Countdown online stores, however I found that Countdown does not sell fish online in the South Island locations that I surveyed. In the North Island, Countdown supplies a small number of species online—the prices of all these species were the same across all North Island stores that I surveyed.

[34] New World describes Super Saver discounts as providing "big discounts for a limited time" https://www.newworld.co.nz/promotions/everyday-low-price

Table 4.1: Online prices at New World stores

Banner	Island	Store	Price per kg of Gurnard Fillets ($)	Price per kg of Snapper Fillets ($)	Price per kg of Tarakihi Fillets ($)	Price per kg of Trevally Fillets ($)
New World	North	Whangarei	$44.99	$44.99	$42.99	$32.99
New World	North	Auckland - Birkenhead	$44.99	$44.99	$42.99	$32.99
New World	North	Auckland - Papatoetoe	$44.99	$44.99	$35.99	$32.99
New World	North	Hamilton - Hillcrest	$44.99	$44.99	$42.99	n.a
New World	North	New Plymouth	$44.99	$44.99	$42.99	n.a
New World	North	Mt Maunganui	$44.99	$44.99	$42.99	$32.99
New World	North	Wellington - Porirua	$44.99	$44.99	$41.99	n.a
New World	North	Wellington - Wellington City	$44.99	$44.99	$42.99	$29.99
New World	South	Nelson - Stoke	$44.99	$52.99	$39.99	n.a
New World	South	Christchurch - Durham Street	$44.99	$52.99	$39.99	n.a
New World	South	Westport	$49.99	n.a	$39.99	$30.99
New World	South	Dunedin-Centre City	$44.99	n.a	$39.99	n.a
New World	South	Invercargill-Elles Road	$44.99	$52.99	$39.99	n.a

Source: New World websites, viewed on 14 March 2023
Note: See Appendix A for more detailed information on the price survey

Table 4.2: Online prices at PAK'nSAVE stores

Banner	Island	Store	Price per kg of Gurnard Fillets ($)	Price per kg of Snapper Fillets ($)	Price per kg of Tarakihi Fillets ($)	Price per kg of Tarakihi Fillets ($)
PAK'nSAVE	North	Whangarei	n.a.	$50.99	n.a.	$25.99
PAK'nSAVE	North	Royal Oak	$43.99	$52.99	$39.99	$25.99
PAK'nSAVE	North	Manukau	n.a.	$48.99	$39.99	$25.99
PAK'nSAVE	North	Hamilton-Clarence St	$43.99	$52.99	$39.99	$25.99
PAK'nSAVE	North	Whakatane	$43.99	$52.99	$39.99	$25.99

PAK'nSAVE	North	New Plymouth	$43.99	$52.99	$39.99	$25.99
PAK'nSAVE	North	Porirua	n.a.	n.a.	$39.99	$25.99
PAK'nSAVE	South	Christchurch-Northlands	$45.99	n.a.	n.a.	$30.99
PAK'nSAVE	South	Timaru	$48.99	$51.99	$43.99	n.a.
PAK'nSAVE	South	Dunedin	$43.99	$49.99	$41.99	$28.99
PAK'nSAVE	South	Queenstown	$45.99	$49.99	n.a.	n.a.
PAK'nSAVE	South	Invercargill	$43.99	$52.99	$43.99	n.a.

Source: PAK'nSAVE website, viewed on 14 March 2023
Note: See Appendix A for more detailed information on the price survey

Given that I have not observed a pattern of a price differential between North and South Island (or other regional differentials), the results of the analysis are consistent with my view that the relevant geographic market dimension is national.

My conclusion that the geographic market dimension is national is consistent with previous decisions by the Commerce Commission:

- In the Basuto Decision (388), the Commission concluded that, although certain types of seafood might be more common in different regions because they were caught nearby, it was appropriate to define a national market, since fisheries companies transport fish around the country for processing and supply.[35]
- In a decision on Scampi quota, the Commission adopted a national market dimension and noted that there was no evidence to suggest that consumers value catch in one region more or less than catch from another.[36]

I also note that an Australian study that looked at the relationship between prices of key species sold at the Melbourne Fish Market and the Sydney Fish Market through the use of cointegration analysis found that that the Sydney and Melbourne markets were highly integrated over the period of the available data.[37] The authors found that:

> *prices for a given species on each market tended to move together. Hence, the two markets can effectively be considered a single market, at least for the key Southern and Eastern Scalefish and Shark Fishery species examined.*

[35] Commerce Commission (23 March 2000), *Decision No. 388 Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving: New Zealand Seafood Investments Limited and Basuto Investments Limited*, Paras 104 to 107.

[36] Commerce Commission (26 January 2005), Decision No. 544 Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving: Sanford Limited and Simunovich Fisheries Limited, Paras 62 to 67.

[37] Pascoe, S., Schrobback, P., Hoshino, E., and Curtotti, R. (2021), "Demand Conditions and Dynamics in the SESSF

An Empirical Investigation," Fisheries Research and Development Corporation Project 2018-017. The study was a collaboration between economists at CSIRO, CQ University Australia, and ABARES.

Given the significant distance between Melbourne and Sydney, these findings seem consistent with my view that the wholesale market for unprocessed finfish has a national geographic dimension.

4.3.2 National wholesale market for processed fish

It seems highly likely that processed fish would be freighted from one area to another to overcome a SSNIP, and that the geographic dimension of the market is national.

[

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Given the relatively low cost of freight when compared to wholesale prices, it seems highly likely that customers would switch sufficient purchases from the hypothetical sole supplier in a region to suppliers located outside the region to make the SSNIP unprofitable.

Table 4.3: Freight costs as a percentage of Moana's wholesale fillet prices [ ]

Source: Castalia calculations using data provided by Moana

Suppliers of processed fish freight fish according to demand. BidFood is an example of a national distributor of chilled and frozen seafood, and imported seafood. [

]

4.3.3 The toll processing market is likely to be national

Given that whole fish can be unloaded at multiple locations and processed fish can be cheaply freighted, I find that the toll processing market is likely to be national. [

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4.3.4 Retail supply of fish products

Given that Moana has only a small retail presence, I do not focus in detail on the geographic boundaries of this market. From a demand perspective, the geographic dimension of the market may be largely determined by the geographic area that is accessible by shoppers in different localities. However, I note that the emergence of online meal box companies such as My Food Bag and Hello Fresh provide a national product.

Online fish sales, although fairly limited in size, allow retail customers to select from a range of suppliers outside their town or region. Online retailers, many of which deliver nation-wide, include:

- Guytons (Nelson-based, delivers nationwide) https://www.guytons.co.nz/
- Harbour Fish (Otago-based, delivers nationwide except Rural Delivery (RD)) https://harbourfish.co.nz/
- Kings Fish Market (Invercargill-based, delivers locally and to urban South Island addresses) http://kingsfish.co.nz/
- Moana (Auckland-based, North Island delivery) https://shop.moana.co.nz/
- Oceans North Seafood (Christchurch-based, delivers nationwide) https://www.oceansnorth.co.nz/
- Saltwater Seafoods (Hastings-based, delivers nationwide) https://www.saltwaterseafoods.co.nz/
- Sanford and Sons (Auckland-based, delivers nationwide aside from some rural areas) https://sanfordandsons.co.nz/
- Scott Seafood (Auckland only) https://scottseafood-orders.co.nz/

- Sea2Door (Canterbury only) https://www.sea2door.co.nz/
- Seafood Bazaar (Hamilton-based, nationwide delivery) https://www.seafoodbazaar.co.nz/
- Solander Gourmet Seafood (Nelson-based, nationwide delivery) https://www.gourmetseafood.co.nz/
- Takitimu Seafoods (Napier-based) https://www.takitimuseafoods.co.nz/

5 Would the acquisition lead to a substantial lessening of competition?

In this section, I consider whether the Proposed Agreement is likely to result in a substantial lessening of competition in any of the relevant markets that I have identified. I examine quota share as a proxy for market share and find that quota shares are not sufficiently high to indicate that the Proposed Agreement would raise competition concerns. I also examine the number and type of competitors, the extent of countervailing buyer power, the likelihood that export diversion would constrain behaviour of domestic suppliers, and the constraining effects of imports and other proteins and conclude that the Proposed Agreement is unlikely to substantially lessen competition in any domestic market as compared with either of the counterfactuals.

5.1 Market for the supply of finfish harvesting services

Moana does not operate finfish harvesting services and is instead a buyer in the market for the supply of finfish harvesting services. Sanford is a buyer, but also harvests finfish itself.

Finfish harvesters have the option to contract to fishing companies other than Moana that procure fish harvesting services (such as Leigh Fisheries and Talley's). Given that finfish harvesters have these options, it seems unlikely that Moana would have strong buyer power either with or without the Proposed Agreement.

Compared to outcomes under the Annual Lease Counterfactual, the certainty available under the Proposed Agreement of having a larger catch plan may result in better outcomes for vessel owners, particularly with increasing costs of fuel (and the prospect of investing in alternative zero emission vessels) as well as cost increases for staff and compliance.

Compared to the Term Lease Counterfactual:

- If the firm that Sanford leases the quota to in this counterfactual is a vertically integrated company that operates its own vessels, the Proposed Agreement may serve to increase the opportunities for independent finfish harvesters.
- If, instead, the firm that Sanford leases the ACE to contracts fishers, then it is not clear that outcomes for fishers (in terms of negotiating power) would be significantly different from under the Proposed Agreement.

5.2 Wholesale market for the supply of unprocessed finfish

I examine quota share as a proxy for market share and find that quota shares are not sufficiently high to indicate that the Proposed Agreement would raise competition concerns. I also examine the number and type of competitors, the extent of countervailing buyer power of large customers, the likelihood that export diversion would constrain behaviour of domestic suppliers, and the constraining effects of other proteins and conclude that the Proposed Agreement is unlikely to substantially lessen competition in any domestic market as compared with either of the two counterfactual (the Annual Lease Counterfactual or the Term Lease Counterfactual). Under the Term Lease Counterfactual, the market could potentially be more concentrated than under the Proposed Agreement.

5.2.1 Share and concentration of quota

I start my analysis of the effects of the Proposed Agreement on competition in the market for wholesale supply of unprocessed fish by looking at quota shares. Low shares, after accounting for the Proposed Agreement, would indicate that a substantial lessening of competition is unlikely. I find that, regardless of which measure of quota is used, market shares and concentration ratios do not indicate that the Proposed Agreement will result in a substantial lessening of competition.

I concluded above that salmon forms part of the same market as wild-catch fish. Market shares that are proxied by quota shares do not account for salmon supply and as a result, quota shares will overstate Moana's share of finfish supply. The capacity of NZKS and Sanford is approximately equal to around 9 percent of total inshore finfish quota, so the exclusion of salmon from the market share proxies could significantly overstate Moana's share.

Share of total finfish quota

Under the Proposed Agreement, Moana's share of the total finfish quota (including leases) remains very low. Moana owns 1.7 percent of the total finfish quota managed under the QMS. Term leases and annual leases result in Moana holding [ ] percent of quota for the remainder of FY2023. Under the Proposed Agreement, Moana's share of finfish quota, including all current leases, increases to [ ] percent.

Looking forward, some of Moana's leases will expire in the next few years, and there is no certainty that those leases would be renewed. Therefore, I also look at Moana's share of quota, excluding leases that terminate on or before 30 September 2025. That analysis shows that under the Proposed Agreement, Moana's share of finfish quota is [ ] percent.

To be conservative, I have also calculated shares that include quota of Moana, Sealord and Westfleet to account for Moana's 50 percent ownership of Sealord and Sealord's 50 percent ownership of Westfleet. However, I note such a measure is not necessarily meaningful in practice as the three companies are operated separately. Even with this aggregation, under the Proposed Agreement, the share of the total finfish quota for the group of three related firms would be [ ]. As mentioned above, I also looked at the share of quota, excluding Moana's leases that terminate on or before 30 September 2025. The share of the three entities would be [ ] percent.

Share of inshore finfish quota

It could be argued that the share of inshore finfish quota is more relevant when looking at the effects of the Proposed Agreement on domestic markets because a very substantial proportion of catch from deepwater fishing vessels is exported. I am also not convinced that inshore quota shares are the most appropriate measure because fish caught in deepwater areas can be sold domestically in competition to fish that are caught by inshore fishers. I also note that the delineation between inshore and deepwater quota is imprecise because a single QMA may be fished by both deepwater and inshore vessels. I have attempted to calculate inshore quota shares by classifying each QMA as deepwater or inshore by using definitions adopted by Moana and MPI, but note that overlap occurs in practice.

I estimate that Moana's share of inshore finfish quota for the remainder of the year ending September 2023 will increase from [ ] under the Proposed Agreement (including all of Moana's leases). Removing Moana's leases that expire on or before 30 September 2025 means that under the Proposed Agreement Moana's inshore quota share would be [ ] percent.

The Proposed Agreement will increase the aggregated share of inshore ACE of Moana, Sealord and Westfleet to [ ] percent (including all other ACE that is currently leased by Moana). Excluding Moana's leases that expire in or before September 2025, the aggregate share across the three entities would be [ ] percent.

Quota concentration

Given the large number of competitors and variety of business models, I consider that coordinated effects are unlikely and that concentration ratios are therefore, not relevant. However, as these are readily available in the quota information provided by Moana, I have presented the three-firm concentration ratios below in Table 5.1 and Table 5.2 for total finfish and inshore finfish, respectively. I note that these figures include all of Moana's leases, but do not include leases held by other parties, as that information is not disclosed.

Table 5.1: Post-transaction concentration ratio of total finfish quota [ ]

	Share of quota
Sealord	20%
Sanford	17%
Talley's	15%
Total	52%

Moana, Sealord, Westfleet	
Sanford	17%
Talley's	15%
Total	

Table 5.2: Post-transaction concentration ratio of inshore finfish quota [ ]

	Share
Talley's	18%
Moana	

Sanford	9%
Sum	

	Share
Moana, Sealord, Westfleet	
Talley's	18%
Sanford	9%
Sum	

Source: Castalia analysis of data provided by Moana

Assessment against Merger Guidelines indicators

The Commission's Merger Guidelines explain that two indicators that a merger is less likely to raise competition concerns are:

- the three largest firms in the market have a combined market share of less than 70 percent, and the merged firm's combined market share is less than 40 percent, and/or
- the three largest firms in the market have a combined market share of 70 percent or more, and the merged firm's combined market share is less than 20 percent.[38]

I note that regardless of whether total or inshore finfish shares are used, how Moana's leases are treated, or whether Moana's own share of quota or the aggregated share (Moana, Sealord and Westfleet) is used, the three-firm concentration ratio is below 70 percent and the post-transaction share of Moana is less than 40 percent.

5.2.2 Competitors and rivalry

Moana faces competition from a range of different sized firms with a variety of specialties and strategies (including different extents of vertical integration). Table 5.3, which identifies the largest quota holders and their share of inshore and total finfish quota, illustrates the variation in size and the large number of market participants. I note that the "Other" category accounts for a significant proportion of quota—[ ]—and includes a large number of small quota holders. Some of the quota in this "Other" category may be held by small fishing operators, and some may be leased to other companies. Similarly, some of the companies listed in Table 5.3 may lease out some or all of their quota (such as Ngāi Tahu and Vela).

With the Proposed Agreement, Table 5.3 Moana would be the fifth largest fisheries company as measured by total finfish quota holdings (assuming leases between other quota holders do not alter this ranking).[39] Before the Proposed Agreement, Moana had the third largest share of inshore quota at [ ] (including all leases), with Sanford largest at 18.2 percent and Talley's second largest at 17.9 percent (although the leased quota from Ngāi Tahu, which is not included, would increase Talley's quota holdings). The Proposed Agreement has the effect of reversing the inshore quota rankings of Sanford and Moana [

[38] Commerce Commission (May 2022), *Mergers and Acquisitions Guidelines*, p.6.

[39] The table includes Moana's leases, but not leases held by other parties as details of these leases are not publicly disclosed.

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Table 5.3: Estimated share of finfish quota

Company	Share of Inshore Finfish Quota	Share of Total Finfish Quota
Sealord	6.6%	19.7%
Sanford post-transaction	8.8%	17.4%
Talley's	17.9%	14.8%
Independent	1.2%	7.9%
Moana post-transaction (including leases)	[ ]	[ ]
Vela	1.6%	4.8%
Pelco	0.7%	3.7%
United Fisheries	6.4%	2.9%
Ngāi Tahu	5.0%	2.6%
Solander	0.1%	1.9%
Westfleet	2.5%	1.0%
Foodstuffs	2.6%	0.6%
Gisborne Fish	0.8%	0.2%
Egmont Seafoods	0.1%	0.0%
Other[40]	[ ]	[ ]
Total	100%	100%
Moana pre-transaction	[ ]	[ ]
Sanford pre-transaction	18.2%	19.1%

Competitors in the market for wholesale unprocessed fish include not only quota holders, but also many wholesalers who purchase fish, aggregate supply and then sell to wholesale customers. The large number of small quota holders (around 2,200 as discussed in section 2.1) and fishers support this model. Table 5.4 contains a non-exhaustive list provided by Moana of fishing companies and wholesalers of chilled fish. Moana has also identified the following other wholesalers that it knows of that buy from either Moana or other suppliers and compete in the upper North Island (for example, supplying food service customers): [

[40] This category includes a large number of small quota holders. Some of this quota could be leased to other companies.

]

Table 5.4: Suppliers of chilled fish

	Location	Business Type (Main)
Sanford/AFM	Auckland	Fishing company
Talley's	Nelson	Fishing company
United Fisheries	Christchurch	Fishing company
Lee Fish	Leigh/Auckland	Fishing company
Westfleet	Greymouth	Fishing company
Egmont Seafoods	Taranaki	Fishing company
Gisborne Fisheries	Gisborne	Fishing company
Waitangi Seafoods	Chatham Is	Fishing company
Saltwater Seafoods	Hastings	Seafood Wholesaler
KiwiFish	Auckland	Seafood Wholesaler
Becroft	Auckland	Seafood Wholesaler
Gilmours	Auckland	Wholesaler
Wellington Trawling	Wellington	Seafood Wholesaler
Fish Factory	Wellington	Seafood Wholesaler
Takitimu	Napier	Seafood Wholesaler
Solander	Port Nelson	Seafood Wholesaler
Wildfish	Wellington	Seafood Wholesaler
Deep Blue Seafoods	Wellington	Seafood Wholesaler
Fresko	Wellington	Seafood Wholesaler
Polynesian Seafoods	Wellington	Seafood Wholesaler
Yellow Brick Rd Various other wholesalers	Wellington	Seafood Wholesaler

The auction at the AFM provides a competitive platform for both small and large fishing companies to sell whole unprocessed fish. Table 5.5 provides a list of vendors of fish at the AFM and the volume and dollar value of sales over a four month period, and shows that the 64 vendors vary substantially in terms of size.

Table 5.5: AFM auction sales by vendors for the period 1 October 2022 to 3 February 2023
[]

Source: Provided by Sanford

Customers of wholesale unprocessed fish also vary substantially by size and type, as can be seen from Table 5.6, which contains a list of approximately 90 buyers at the AFM auction and the amounts they purchased over a 12-month period.

Table 5.6: AFM auction buyers by volume and dollar amount purchased 1 October 2021 to 30 September 2022 [ ]

Source: Provided by Sanford

5.2.3 Export diversion places a constraint on the domestic market

The majority of finfish harvested in New Zealand waters is exported. The quota that is currently used to catch fish for export could be diverted to supply the domestic market if domestic prices were to rise as a result of the Proposed Agreement, placing a further competitive constraint on Moana.

The majority of finfish catch is exported

While the proportion of fish that is exported varies by species, most fish caught in New Zealand waters is exported. I estimate that just over 75 percent of the total industry finfish catch is exported. Table 5.7 shows estimates of the proportion of total industry catch that is exported for each of Moana's top ten species. These species account for [

] percent of Moana's finfish revenue.[41] For these ten species, I estimate that 57 percent of total industry catch is exported, providing significant potential for quota that is currently used for exports to be diverted to the local market if domestic prices were to rise as a result of the Proposed Agreement.

Table 5.7: Estimated exports as a percent of industry catch

Species	Estimated Total Industry Export Sales (Greenweight kg)	Industry Catch (kgs)	Estimated percent of Industry Catch that is Exported	Percent of Moana's finfish sales revenue [ ]
Snapper	3,000,210	6,436,457	47%	
Tarakihi	261,384	4,681,131	6%	
Trevally	1,470,792	3,087,757	48%	
Hapuku & Bass	505,280	1,170,251	43%	
Orange Roughy	7,353,286	8,939,597	82%	
Bluenose	410,450	605,050	68%	

[41] I have identified Moana's top 10 species according to its annual sales.

Blue Cod	48,082	1,834,062	3%
Ling	13,147,673	16,642,949	79%
Gurnard	652,701	4,248,991	15%
John Dory	432,332	582,694	74%
Total for 10 species	27,282,189	48,228,938	57%
Total for all finfish species	273,698,013	355,482,287	77%

Notes: Industry greenweight sales were estimated by taking the product weight export sales published by MPI and adjusting for yield factors adopted by Moana. The resulting estimates of export percentages will not be precise but will provide a reasonable indication of whether or not a substantial proportion of the species is exported.

Export diversion is likely to occur if prices increase materially with the Proposed Agreement

To further examine the likelihood that export diversion would constrain behaviour in the domestic market, I have looked at Moana's margin differential between domestic and export sales for snapper. If export margins are similar to domestic margins then this would be consistent with the hypothesis that export diversion places a material constraint on Moana in the domestic market.

As Table 5.8 shows, Moana's average price (revenue divided by quantity) for domestic sales of green (whole unprocessed) snapper is [ ] than the average price of export sales to Australia and [ ] than the average price of export sales to the United States. However, the cost of supplying fish domestically is lower than that of export quality snapper. [

Table 5.8: Moana's average price of green snapper supplied internationally and domestically [ ]

Destination country	Product	Annual Quantity (kg)	Annual Revenue ($)	Price per kg
NZ	Green			
AU	Green			
US	Green			

Source: Moana

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]

5.2.4 Elastic demand will have a constraining effect on prices

Empirical analysis has shown the demand for seafood in New Zealand to be elastic. Research funded by the Health Research Council of New Zealand was published in 2013, which looked at own- and cross-price elasticities of 24 food groups using data from the New Zealand National Household Economic Surveys (2007/08 and 2009/10) and Food Price Index data from 2007 and 2010. The study used an Almost Ideal Demand System (AIDS) approach and found that the own-price elasticity of demand for the "fish & seafood" food group to be -1.27 with a standard error of 0.11. This implies that a 1 percent increase in the price of seafood would result in a reduction in demand by 1.27 percent.[42] As a result, with the Proposed Agreement (and regardless of counterfactual), the elasticity of demand could be expected to constrain Moana's pricing.

5.2.5 Under the Annual Lease Counterfactual, supply may reduce

In the Annual Lease Counterfactual, quota is leased out on a short-term basis which could mean that inshore catch is lower than it would be under the Proposed Agreement because companies may need to make significant investments to be able to increase their catch to use the available quota. However, without a long-term lease, companies may be unwilling to make the required investments. As a result, efficiency may be higher under the Proposed Agreement than in the Annual Lease Counterfactual. If supply is lower under the Annual Lease counterfactual, then prices faced by consumers could be higher in the counterfactual than with the Proposed Agreement.

5.2.6 A variety of different suppliers makes coordinated effects unlikely

The large number of market participants with a wide range of sizes and business models implies that coordinated effects are highly unlikely due to the very fragmented nature of the market. In addition, it is difficult for competitors to identify which competitors are making sales to which customers and what prices are being charged. These factors make coordinated behaviour among competitors very difficult and highly unlikely.

5.2.7 The behaviour of finfish suppliers is likely constrained by other proteins

Prices of finfish products face constraints from other proteins— if finfish is too expensive, end consumers can switch to other types of seafood, proteins such as chicken, or plant-based proteins. For example, if fish prices increase and restaurants face reduced margins on fish dishes, they may reduce the number of fish dishes on the menu or promote them less and substitute them with other seafood options or other proteins.

It is difficult for suppliers to know whether customers that reduce the volume of fish purchased have switched to purchasing from another supplier or have switched to another

[42] The study found that while demand for "fish & seafood" was elasticity, there was a low cross-elasticity with other food groups. This implies that when prices of seafood increase, customers consume less rather than switching to the purchase of other food groups. It is not clear whether this finding is due to consumers self-supplying seafood if prices increases, whether customers reduce food intake in response to increases in price, or whether the result is related to the data used – for example, the high-level of aggregation of food categories in the study.

protein. However, Moana has observed that over time [ ] has reduced the volume of fish purchased, and suspects that this could be a case of end consumers switching to alternative proteins (such as chicken or seafood other than finfish).

5.2.8 Countervailing buyer power and self-supply options

Large customers, such as supermarkets, have countervailing buyer power through large scale and self-supply options

Large customers, such as supermarkets, may be considered to have less supply options because of their size. In other words, while smaller retailers could acquire all of their fish volumes from one small wholesaler, the scale of demand by supermarkets precludes that option. However, in practice, they have strong countervailing buyer power due to their scale, because (1) they individually account for a significant proportion of domestic finfish sales, and (2) their large scale supports self-supply options. In addition, they are able to split their purchases across suppliers.

Supermarket customers are individually very important to suppliers, which would confer buyer power to the supermarket. Sanford's sales to FSNI in FY2022 were [ ] Green Weight Tonnes[43] which equates to [ ] percent of Sanford's total [ ] GWT sales of North Island inshore finfish. For Moana, annual finfish sales to FSNI are [ ] GWT, accounting for [ ] percent of Moana's finfish GWT volumes.

Supermarkets purchase both whole unprocessed fish and processed fish from a range of small and large suppliers (including fishing companies and wholesalers), and can switch suppliers readily. Table 5.9 provides Moana's view on key competing suppliers of chilled fish to supermarkets.

Table 5.9: Suppliers of chilled fish to supermarkets

	Location	Business Type (Main)	Supermarkets
Sanford/AFM	Auckland	Fishing company	√
Talley's	Nelson	Fishing company	√
United Fisheries	Christchurch	Fishing company	√
Lee Fish	Leigh/Auckland	Fishing company	√
Sea Treasure Seafoods	Hamilton	Seafood Wholesaler	√
Westfleet	Greymouth	Fishing company	√
Egmont Seafoods	Taranaki	Fishing company	√
KiwiFish	Auckland	Seafood Wholesaler	√
Wellington Trawling	Wellington	Seafood Wholesaler	√
Deep Blue Seafoods	Wellington	Seafood Wholesaler	√
Gisborne Fisheries	Gisborne	Fishing company	√

[43] Includes direct sales and sales through the AFM.

Source: Provided by Moana.

[

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[

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[

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With their large scale, supermarkets' demand is also big enough to justify self-supply of fish—for example, Foodstuffs owns Leigh Fisheries.

Supermarkets' size and buyer power mean that it is unlikely that the Proposed Agreement will result in a substantial lessening of competition in the supply of wholesale unprocessed fish to supermarkets.

Constraints from self-supply for end consumers

For some species, such as kahawai and snapper, that are reasonably easy to catch (even without a boat) self-supply is option for many consumers. The recreational catch allowance accounts for approximately 40 percent of total allowable catch for both snapper and kahawai.

I estimate that approximately 47 percent of commercial catch of snapper is exported (see Table 5.7). As a result, if the recreational catch allowance is taken as a reasonable estimate of actual recreational catch, this implies that more than half (54 percent) of domestic consumption of snapper is from recreational catch, 43 percent is from commercial catch, and 2 percent is from customary catch. In this context, self-supply seems likely to have a constraining effect on fish prices.

5.3 Toll processing market

The competitive effects may be best considered separately for very large customers (such as FSNI) for which a processor may need to make a significant investment to serve, and smaller

customers, such as small and specialist retailers that a processor can serve with its existing processing capacity.

However, some general observations on processing are:

- There appear to be two key sustainable models for fish processing—one has a high fixed cost structure (with a sophisticated production line, including automation) and requires very large scale to achieve low unit costs, and the other has very low fixed costs (for example, two to six staff doing manual processing) with small scale and high flexibility.
- A number of firms that lie somewhere between these two models have exited. For example, Woolworths previously operated a fish processing plant and closed this, with fish instead now being processed by Hilton Foods at a plant that also processes other types of protein (and benefits from economies of scope). BidFood previously operated its own processing plant, but this has now closed. Takitimu previously processed fish but the company is now exiting fishing.

Toll processing for large customers

Large toll processing customers are primarily the two major operators of nationwide supermarket chains: Woolworths New Zealand and Foodstuffs. These customers have strong countervailing power in the toll processing market as a result of their scale and broader protein processing options. For example, Woolworths has a partnership arrangement with Hilton Foods which has purpose-built a large protein processing plant that processes meat as well as finfish. FSNI self-supplies some processing through Leigh Fisheries, which it owns.

The national supermarket chains also have options around whether to aggregate processing in certain locations or use multiple suppliers around the country [

]

Supermarkets' toll processing volumes are so large that if a large processor such as Moana loses a supermarket customer, that loss will materially increase the processor's unit costs due to the high fixed costs of large automated processing plant. Put another way, if the Proposed Agreement proceeds and Moana takes on the remainder of Sanford's obligations to provide toll processing for FSNI, Moana will have a strong incentive to attempt to retain FSNI's customer by remaining competitive on price, service and innovation to utilise the capacity provided by its new processing plant.

Under the Proposed Agreement, [
] [

]. The Sanford-FSNI contract was negotiated in a context where FSNI had both Sanford and Moana as potential suppliers (as well as other options such as using a range of smaller suppliers or establishing an arrangement similar to what Woolworths has). [

] [

]

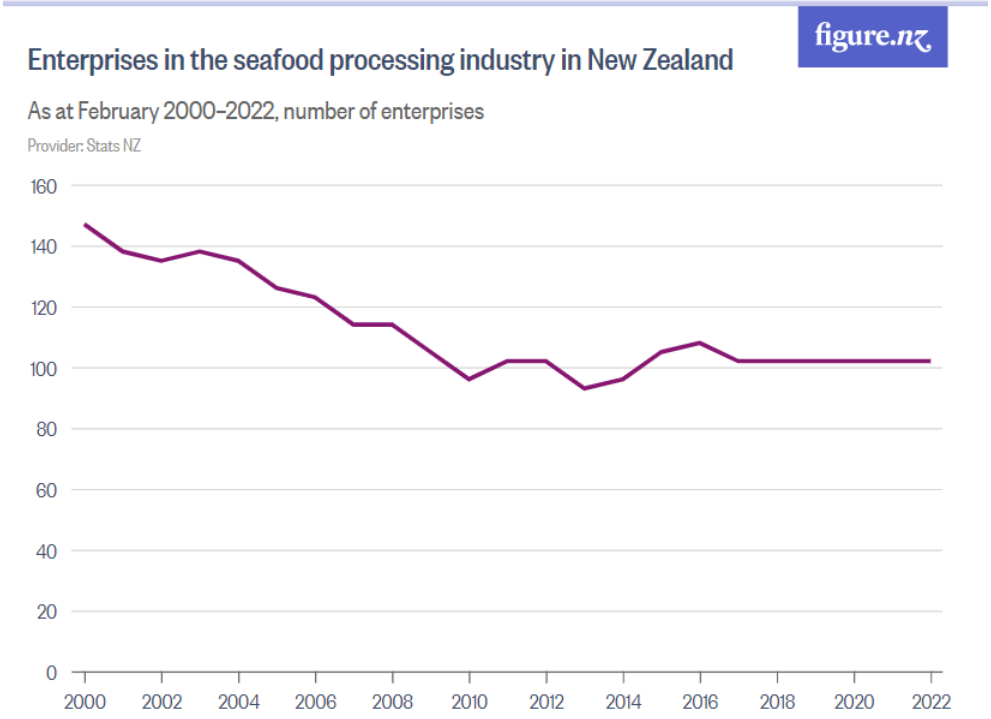
Processing options for small customers

Toll processing is primarily a service provided to the two large supermarket groups (Foodstuffs and Woolworths). For businesses with smaller volumes, there are a range of options for their processing requirements, such as:

- Specialist fresh-fish distributors
- Food service companies
- Restaurants commonly process back-of-house
- Speciality and international supermarkets
- Fish mongers, and
- Manual self-processing.

As the following chart shows, there are around 100 enterprises in New Zealand that are categorised as seafood processors.

Figure 5.1: Enterprises in the seafood processing industry



Source: https://figure.nz/chart/IW0xisEu03j4YW09-RpSd6ek9fXzNNPZn

Given the range of processing options, it seems unlikely that the agreement would result in a material lessening of options for processing for businesses with smaller volumes.

5.4 Wholesale market for processed finfish

For similar reasons to those discussed above in the context of wholesale unprocessed fish and toll processing, it seems unlikely a substantial lessening in competition would occur in the wholesale market for processed finfish.

Moana faces competition from a large number of processed finfish suppliers

With the Proposed Agreement, Moana would face competitive pressure from a large number of other processed finfish suppliers, including fishing companies and wholesalers, as well as facing import competition and the potential for export diversion. Large customers have countervailing buyer power and options for self-supply.

Customers for wholesale processed finfish would typically include specialty retail stores (such as independent fishmongers, fish and chip shops, and small grocery stores), food service (such as restaurants and cafes), online meal kit providers (such as My Food Bay and Hello Fresh, distributors, as well as the national supermarket chains.

Competitors in this market include: Lee Fish, Scott Seafood, Solander, Wild Fish, Oceans North, Sanford, Talley's, United Fisheries, Ngai Tahu Seafood, Independent Fisheries, Takitimu, plus a range of wholesalers. Moana notes that there are approximately [

]

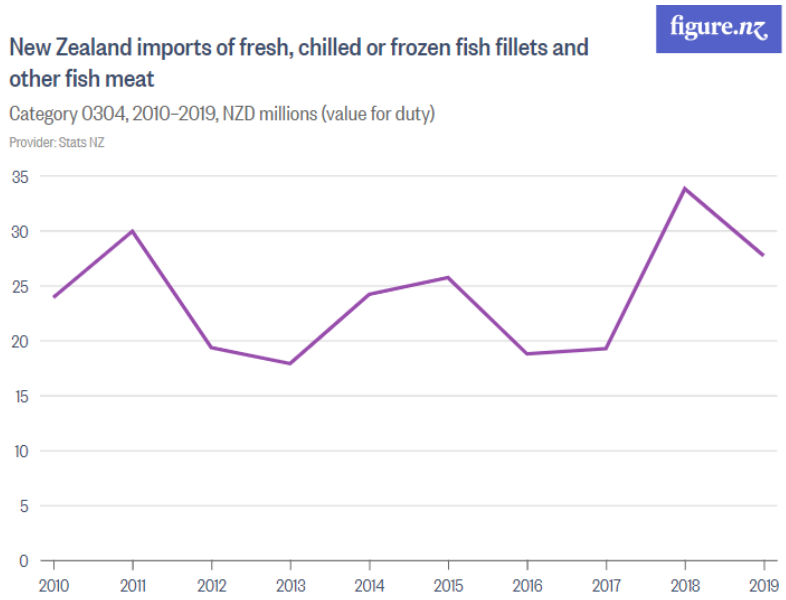
Imports provide consumers with other finfish options

Import competition places an additional competitive constraint on Moana and other participants in this market. Seafood imports to New Zealand in 2019 totalled $161 million, and had been steadily trending upwards.[44] As can be seen from Figure 5.2, in 2019 imports of fresh, chilled, or frozen fish fillets and other fish meat were approximately $28 million. [

] As can be seen from Figure 5.3, imports of fish that are not fillets are significantly smaller (around $4 million in 2019) but have grown rapidly.

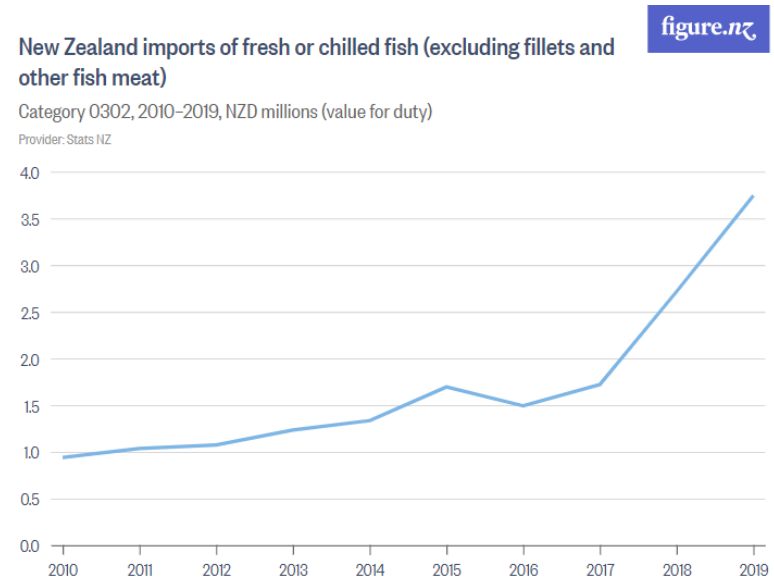
[44] https://figure.nz/chart/tErPPeXnWw9UlYtS-qQIpREhv0k7EKBMC

Figure 5.2: Imports of fresh, chilled or frozen fish fillets and other fish meat



Source: https://figure.nz/chart/ewoqE0D1CzwKry0e-tz9X41rbdSqWCRa0

Figure 5.3: Imports of fresh or chilled fish (excluding fillets and other fish meat)



Source: https://figure.nz/chart/ewoqE0D1CzwKry0e-tAFwoaQnV8x34MMy

Examples of imported fish include:

- **Tuna:** Tropical tuna species (especially Yellowfin, Big Eye, and Albacore) are imported to New Zealand, both fresh and frozen, including sashimi-grade. For example, Solander's long-line vessels in the Pacific catch tuna which is airfreighted to New

Zealand.[45] Other companies that sell imported tuna in New Zealand include Saltwater Seafoods, Ocean's North, and Sanford & Sons.[46]

- **Game fish:** For example, Solander catches marlin, swordfish, mahi mahi and wahoo in the Pacific Ocean and import this fish to New Zealand.[47]
- **Atlantic Salmon:** As well as selling New Zealand salmon, Countdown stocks frozen Norwegian salmon with the Ocean Blue brand[48] and under Countdown's own brand[49] Pak'n Save also stocks frozen Norwegian salmon.[50] Salmon is also imported from Australia.
- **Vietnamese basa:** Basa, which is a species of catfish, is farmed in Vietnam. Countdown sells both thawed and frozen imported basa fillets (Figure 5.4 and Figure 5.5).
- **Alaskan pollock:** Accounting for five percent of the world's marine finfish capture, Alaskan pollock is the world's second-most caught species in the world, with an estimated 3.4 million tonnes caught in 2018[51] (for comparison, the volume of Hoki caught in the same year was 135 thousand tonnes).[52] Foodstuffs sells frozen Alaskan pollock fillets supplied under the Pams brand.[53] McDonald's, which uses Alaskan pollock in the United States for Filet-o-Fish, also lists Alaskan pollock (in addition to hoki) as an ingredient for Filet-o-Fish on its New Zealand website.[54] The huge scale of the Alaskan pollock market overseas, provides the potential for much greater import volumes in future.

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45 https://solander.com/pacific-rim-fish/ https://solander.com.fj/fiji-products/

46 Saltwater Seafoods (https://www.saltwaterseafoods.co.nz/shop/p/yellowfin-saku-block-chilled), Ocean's North (https://www.oceansnorth.co.nz/products/tuna-saku-nz), Sanford and Sons (https://sanfordandsons.co.nz/product/yellowfin-tuna-steaks)

47 https://solander.com/

48 https://www.countdown.co.nz/shop/productdetails?stockcode=943436&store=9427&gad=1&gclid=CjwKCAjw36GjBhAkEiwAKwIWyY4-iCEM23io86-3TDtzgodrTf_IwiXvkZSvsQpH5G9TL9_stBA8uhoCUGsQAvD_BwE&gclsrc=aw.ds

49 https://www.countdown.co.nz/shop/productdetails?stockcode=839618&gad=1&gclid=CjwKCAjw36GjBhAkEiwAKwIWyRo1Rnc76yuCJV_6kyjqYG86Ki5NCwQiopkKF63cj2dZC8HnfKmkbxoCFSkQAvD_BwE&gclsrc=aw.ds

50 https://www.paknsave.co.nz/shop/product/5240523_kgm_000pns?name=salmon-tail-fillets-frozen

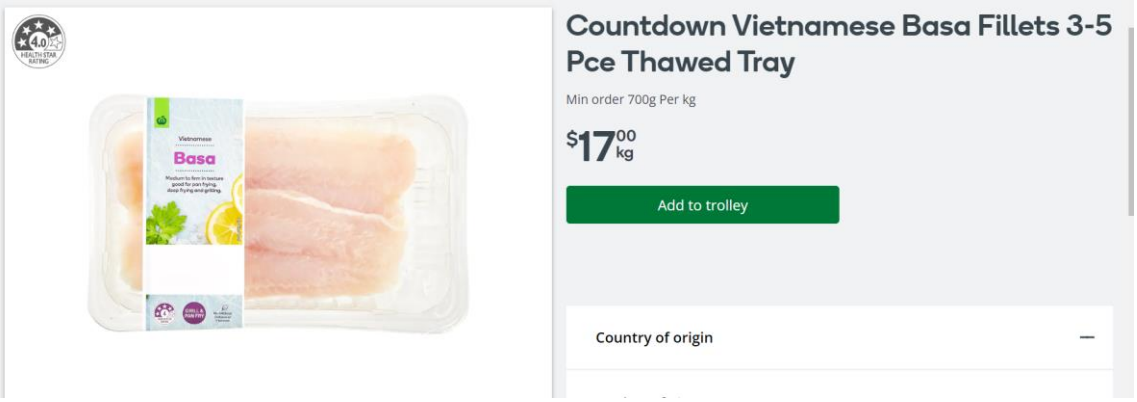
51 Food and Agriculture Organization of the United Nations (2020), *The State of World Fisheries and Aquaculture*, p. 14.

52 TACC for hoki has reduced in 2020, with the catch in 2021/22 being 92,000 tonnes. https://fs.fish.govt.nz/Page.aspx?pk=7&sc=HOK

53 https://www.pams.co.nz/product-finder/5294962-EA-000

54 https://mcdonalds.co.nz/sites/mcdonalds.co.nz/files/NZ%20Core%20Menu_January%202023%20V3.pdf

Figure 5.4: Countdown thawed Vietnamese basa fillets



https://www.countdown.co.nz/shop/productdetails?stockcode=98236&name=countdown-vietnamese-basa-fillets-3-5-pce-thawed-tray Viewed 5 December 2022

Figure 5.5: Countdown frozen Vietnamese basa fillets

https://www.countdown.co.nz/shop/productdetails?stockcode=445352&gclid=CjwKCAiAp7GcBhA0EiwA9U0mtstSao15ssuz2G9GUCSvp8o94AXZHBFVmkpbEStlpahptvA1mzqDNxoCq70QAvD_BwE&gclsrc=aw.ds Viewed 5 December 2022

These products form substitutes at various points across the range of prices charged for domestic species. For example, sashimi-grade yellowfin tuna loin is priced by Solander at around $50 per kilogram while thawed basa (above) is sold by Countdown at $17 per kilogram.

A recent empirical study that looked at the impact of an increased supply of imported fish products on the price of domestically caught fish products in Australia, found that imports of fresh fish (including most aquaculture species) have a substantial negative impact on the prices of lower-valued domestically caught species over both the short- and long-term.[55] The same study found a a small but significant negative impact in the long-term of an increased supply of imported fish on higher-valued domestically caught fish. An earlier study published in 2021, which performed cointegration analysis, found substitution relationships between fresh

[55] Pascoe, S. et al (2023).

imports and several high value and low value domestically-caught Australia species that are sold at the Sydney Fish Market.[56]

5.5 Supply of retail finfish products

Moana's retail sales compete with supermarkets, numerous retail stores (many independently owned), and online suppliers from around the country (as described in section 4.1.5). I consider it highly unlikely that there would be a substantial lessening of competition in the retailing of fish, regardless of the precise market definition, because:

- Supermarkets provide a key retail channel and allow consumers to purchase all of their groceries in one place. A 2019 survey by MPI found that 50 percent of all seafood purchases by New Zealand respondents occurred via supermarkets and grocery stores compared with 15 percent from specialty seafood stores. The remainder was primarily from fast food/takeaway shops and restaurants.[57]
- The Proposed Agreement does not result in the transfer to Moana of the Auckland Fish Market, or Sanford's retail fishmonger business (Sanford and Sons), and under the Proposed Agreement, Moana will provide Sanford and Sons with a supply of processed fish so that Sanford can have the certainty of supply to continue its retailing operations.
- Moana has only a very small presence in retailing through the two food retailing outlets situated within Moore Wilsons supermarkets in Wellington City and Porirua, and a 50 percent shareholding in Oceanz Seafood Licensing Limited, which is the franchisor for five Oceanz branded retail stores across Auckland.
- There are a large number of competing specialty fish retailers. Auckland examples include: Scott Seafood (1 store and online), Toby's Seafood (5 stores and online), Manukau City Seafoods (1 store), Takanini Fish Market (1 store), Marsic Fish Shop (1 store), Premium Seafoods Retailers and Wholesalers (1 store), Hunter Fish (1 store), Kiwifish (1 store), Seafood Collective (2 stores in Auckland, and 2 in Tauranga). Wellington examples include: Wellington Sea Market (2 stores), Fresko Supplies (1 store), Ninos at Harbourside Market.

[56] Schrobback, P., Hoshino, E., Pascoe, S. and Curtotti, R. (2021), "Market integration of domestic and imported seafood: insights from the Sydney Fish Market," *Australian Journal of Agricultural and Resource Economics 66*, pp. 216–236.

[57] MPI (2019), New Zealand Seafood Consumer Preferences, slide 8.

Appendix A: Grocery price survey

New World	Gurnard Fillets	Tarakihi Fillets NZ	Fresh Snapper Fillets	Monkfish Fillets	Fresh Trevally Fillets	Hoki Fillets	Ling Fillets	Red Cod Fillets	Blue Warehou Fillets	Lemon Fish	Orange Roughy	Kaha wai
Whangarei	$44.99	$42.99	$44.99	$28.99	$32.99	$23.99	n.a	n.a	$26.99	$34.99	$43.99	$22.99
Auckland - Birkenhead	$44.99	$42.99	$44.99	$28.99	$32.99	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Auckland - Papatoetoe	$44.99	$35.99	$44.99	$28.99	$32.99	n.a	$31.99	$25.99	n.a	$34.99	n.a	n.a
Hamilton - Hillcrest	$44.99	$42.99	$44.99	$28.99	n.a	n.a	n.a	n.a	n.a	$34.99	n.a	n.a
New Plymouth	$44.99	$42.99	$44.99	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mt Maunganui	$44.99	$42.99	$44.99	$28.99	$32.99	$23.99	n.a	n.a	n.a	n.a	n.a	n.a
Wellington - Porirua	$44.99	$41.99	$44.99	$28.99	n.a	$23.99	n.a	n.a	n.a	n.a	n.a	n.a
Wellington - Wellington City	$44.99	$42.99	$44.99	$28.99	$29.99	$23.99	$31.99	$25.99	$26.99	$34.99	$43.99	
Nelson - Stoke	$44.99	$39.99	$52.99	$32.99	n.a	n.a	$30.99	$24.49	n.a	n.a	n.a	n.a
Christchurch - Durham Street	$44.99	$39.99	$52.99	$32.99	n.a	n.a	n.a	n.a	$27.99	n.a	n.a	n.a
Westport	$49.99	$39.99	n.a	$32.99	$30.99	n.a	$32.99	n.a	$28.99	n.a	n.a	n.a
Dunedin-Centre City	$44.99	$39.99	n.a	$32.99	n.a	n.a	n.a	$24.49	n.a	n.a	n.a	n.a
Invercargill-Elles Road	$44.99	$39.99	$52.99	$32.99	n.a	n.a	$30.99	$24.49	$27.99	n.a	n.a	n.a

Note: New World Super Saver discounts are highlighted in yellow.

New World	John Dory	Ribaldo/Deep Sea Cod	Pearl Ghost Shark Fillets	Elephant Fish Fillets	Blue Moki Fillets	Yellowfin Tuna Steaks	Pearl Ghost Shark Fillets	Blue Cod Fillet	Mullet Steaks	NZ Brill Fillets	NZ Sole Fillets
Whangarei	$39.90	$34.99	n.a	n.a	n.a	$48.99	n.a	n.a	n.a	n.a	n.a
Auckland - Birkenhead	n.a	n.a	n.a	n.a	n.a	$48.99	n.a	n.a	n.a	n.a	n.a
Auckland - Papatoetoe	n.a	n.a	n.a	n.a	n.a	$48.99	n.a	n.a	n.a	n.a	n.a
Hamilton - Hillcrest	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
New Plymouth	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mt Maunganui	$49.99	n.a	n.a	n.a	n.a	$48.99	n.a	n.a	n.a	n.a	n.a
Wellington - Porirua	n.a	n.a	n.a	n.a	$25.99	$48.99	n.a	n.a	$16.99	n.a	n.a
Wellington - Wellington City	$49.99	$34.99		n.a	n.a	$48.99	$14.99	n.a	n.a	n.a	n.a
Nelson - Stoke	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Christchurch - Durham Street	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Westport	n.a	n.a	n.a	$28.99	n.a	n.a	$19.99	$64.99	n.a	$42.99	n.a
Dunedin-Centre City	n.a	n.a	n.a	n.a	n.a	n.a	n.a	$68.99	n.a	n.a	$39.99
Invercargill-Elles Road	n.a	n.a	$18.99	$26.99	n.a	n.a	n.a	$64.99	n.a	n.a	n.a

Pak n Save	Gurnard Fillets	Tarakihi Fillets NZ	Fresh Snapper Fillets	Monkfish Fillets	Fresh Trevally Fillets	Hoki Fillets	Ling Fillets	Red Cod Fillets	Blue Warehou Fillets	Lemon Fish	Orange Roughy	Kahawai	Ribaldo/Deep Sea Cod	Pearl Ghost Shark Fillets	Blue Moki Fillets
Whangarei			$50.99	$28.99	$25.99	$20.99		$21.79		$25.99					$25.99
Royal Oak	**$43.99**	$39.99	$52.99	$32.99	$25.99	$22.99	$29.99	$24.99		$34.79			$28.99		$25.99
Manukau		$39.99	$48.99		$25.99										
Hamilton-Clarence St	**$43.99**	$39.99	$52.99		$25.99					$34.79					
Whakatane	**$43.99**	$39.99	$52.99		$25.99				$24.99			$21.99			
New Plymouth	**$43.99**	$39.99	$52.99		$25.99			$24.49	$24.99	$34.79					
Porirua		$39.99			$25.99	$22.99			$24.99	$34.99		$21.99			$25.99
Christchurch-Northlands	**$45.99**			$30.49	$30.99			$19.99							
Christchurch-Moorhouse				$31.99			$29.99	$19.99			$41.99		$21.99	$16.99	$27.99
Timaru	**$48.99**	$43.99	$51.99	$31.99	$28.99		$38.49								
Dunedin	**$43.99**	$41.99	$49.99												
Queenstown	$45.99		$49.99	$31.99											
Invercargill	**$43.99**	$43.99	$52.99	$33.99			$29.99	$19.99						$17.99	

Note: PAK'n'SAVE "Extra Low Deal" promotional prices are highlighted in red.

Pak n Save	Yellowfin Tuna Steaks	Yellowfin Tuna Loin	Pearl Ghost Shark Fillets	Blue Cod Fillet	Mullet Steaks	Kahawai Fillets Skin On	NZ Brill Fillets	NZ Sole Fillets	Spotted Gurnard	Gurnard fillets - Skin on	Dory fillets - skin on	Skate Wings	Kingfish Steaks	Hapuka Steaks	Silver Warehou
Whangarei	$44.99														
Royal Oak	$48.79									$21.99	$22.99				
Manukau															
Hamilton-Clarence St	$48.79		$13.99		$16.79	$19.79									
Whakatane															
New Plymouth															
Porirua		$48.79							$32.99						
Christchurch-Northlands															
Christchurch-Moorhouse												$6.99	$35.99	$39.99	
Timaru				$69.99										$59.99	$25.99
Dunedin				$54.99				$29.99							
Queenstown															
Invercargill				$63.99			$38.99	$38.99							

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