



Brewing in New Zealand

The economic contribution of the brewing industry 2022

NZIER report to Brewers Association of New Zealand

20 December 2022

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1 Economic setting

1.1 Global landscape

The COVID-19 pandemic has had extensive impacts on the brewing industry and the economy as a whole. The strained international relations due to Russia's invasion of Ukraine are compounding the issues brought up by the pandemic. Despite a mild recovery in 2021, the International Monetary Fund has found that the economic landscape in 2022 and the forecasted growth in 2023 have a sombre outlook. Global output expanded by 6.1% in 2021 but is anticipated to grow by a much more modest 3.2% and 2.9% in 2022 and 2023, respectively.¹

New Zealand trade has proven to be relatively resilient in the wake of extreme supply chain pressures (Nixon, 2022).² However, spiking food and energy costs, fractured supply lines, and the continued impact of climate disasters pose a significant concern to long-term economic health. These are reflected in our consensus forecasts that suggest weaker global economic standing will dampen exports (NZIER, 2022).³ New Zealand brewers can support a quick recovery and sustained growth in their industry through product innovation and appealing to the rapidly shifting domestic consumer preferences.

2 The economic contribution of brewing

2.1 Contribution to the New Zealand economy

The New Zealand brewing industry is valued at \$3.3 billion in the year to September 2022. On-licence sales account for 64% of the estimated value of \$2.1 billion, and off-licence sales account for the remaining 36% at \$1.2 billion.

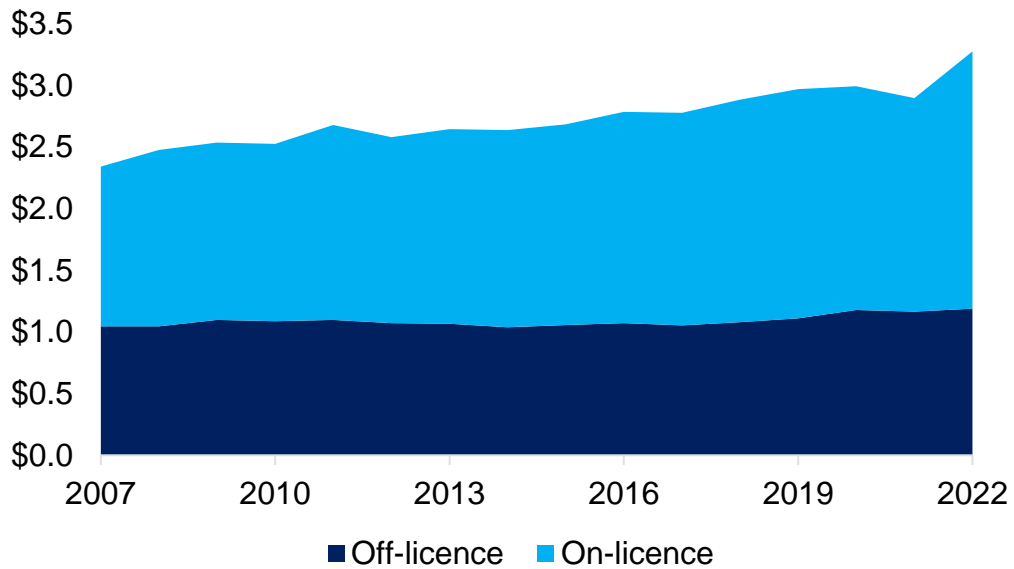
¹ <https://www.imf.org/en/Publications/WEO/Issues/2022/07/26/world-economic-outlook-update-july-2022>

² <https://www.nzier.org.nz/publications/celebrate-resilience-supply-chains-have-passed-the-test-nzier-insight-104>

³ <https://www.nzier.org.nz/publications/nzier-consensus-forecasts-show-a-weaker-economic-outlook-for-years-beyond-2024>

Figure 1 Value of beer sales over time

Year to September 2022, NZ\$ (billions)

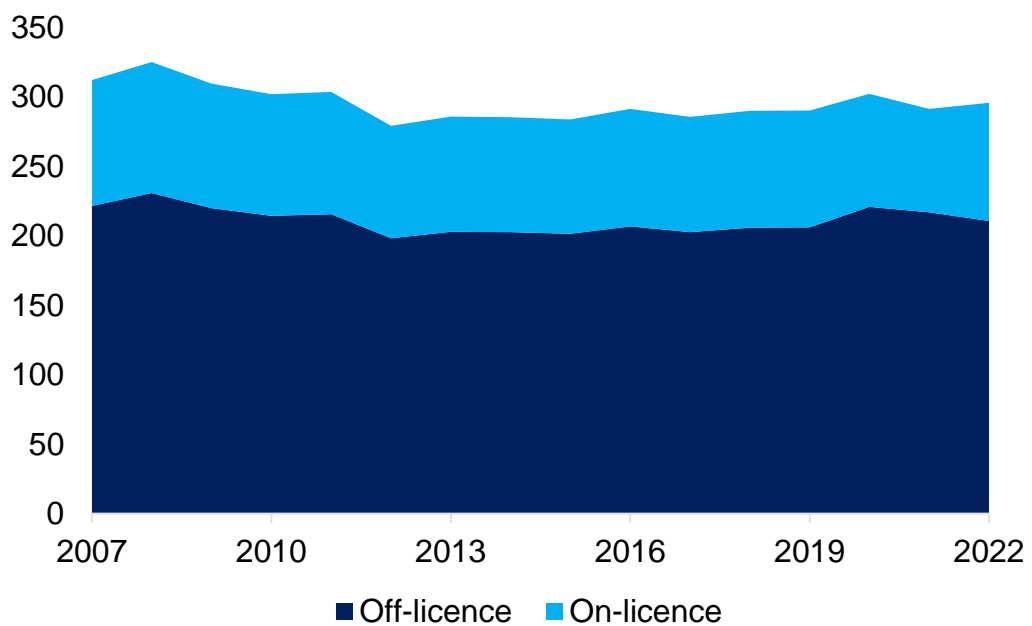


Source: Stats NZ, NZIER

The significant portion of value that on-licence beer provides – especially given that it only comprises approximately 29% of the total volume – indicates some concerns that the prolonged pandemic lockdowns caused.

Figure 2 Volume of beer sales over time

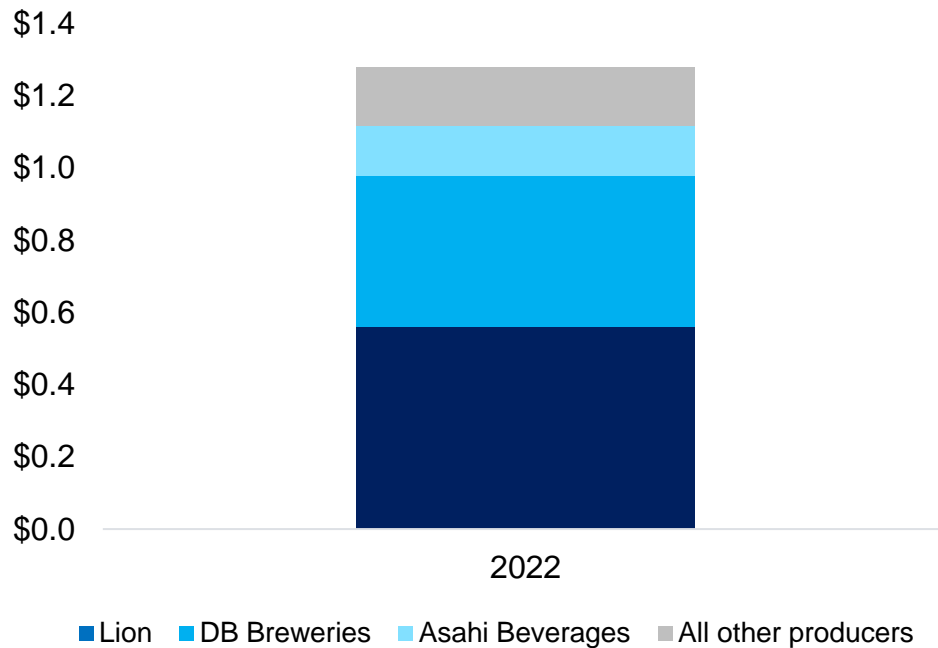
Year to September 2022, litres (millions)



Source: Stats NZ, NZIER

Figure 3 Beer sales by producer

Year to November 2022, NZ\$ (billions)



Source: Nielsen, NZIER

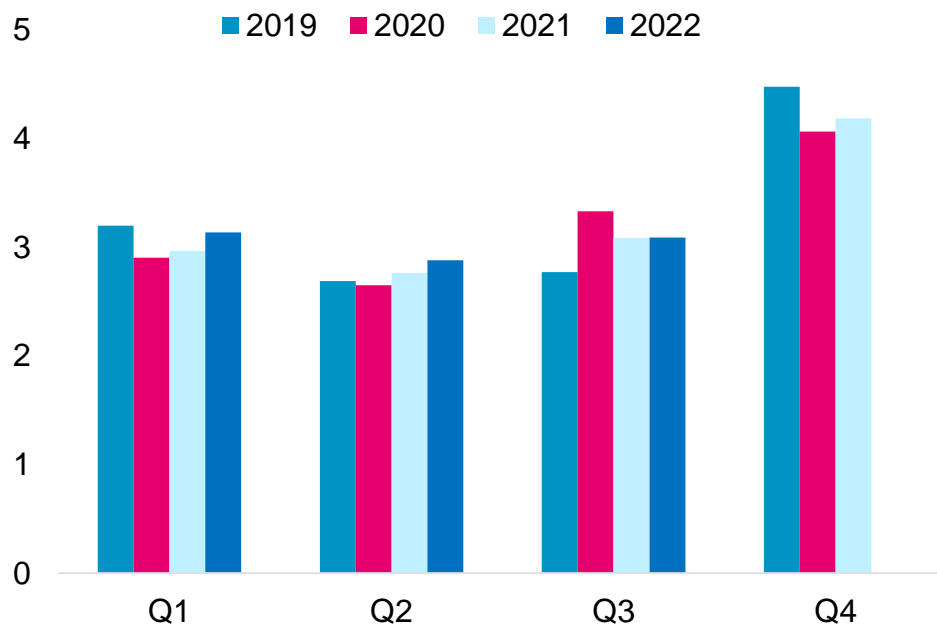
Nielsen data for the year to November 2022 reveals beer sales totalled a value of \$1.3 billion in supermarket and liquor store sales. Lion's share of this value increased by 5% in the past year, resulting in a \$560 million contribution to the total. DB Breweries and Asahi Beverages both experienced minor decreases in value contribution, respectively comprising 32% and 11% of the total.

2.2 Post-pandemic trends

New Zealand beer consumption experienced a mild decline in total litres drunk in the immediate quarters following the lockdowns relative to pre-COVID. In 2022, despite Auckland still being in traffic-light orange for Q1, drinking consumption had returned to pre-COVID levels. The gradual decline in litres consumed annually has returned as consumer preferences shift.

Figure 4 Quarterly beer consumption

Year to September 2022, litres (millions)



Source: Stats NZ, NZIER

2.3 Trade taxes

In the year to November 2022, alcohol was responsible for \$1.22 billion of excise taxes and duties. Domestic alcohol production netted the government \$680 million in excise duty. Of that amount, \$324 million or 48%, came from domestic beer production. Compared to the \$511 million of import duty on alcohol in the same period. Beer comprises a much smaller proportion of the total amount, reflecting \$77 million or 15% of the import duty.

2.4 Number of breweries

Over the past couple of decades, the industry has seen a boom in the number of breweries. Depending on your classification of a New Zealand brewery, this number is around 200, with just under two-thirds residing in the North Island and one-third in the South.⁴

3 Supply chain concerns

3.1 Barley

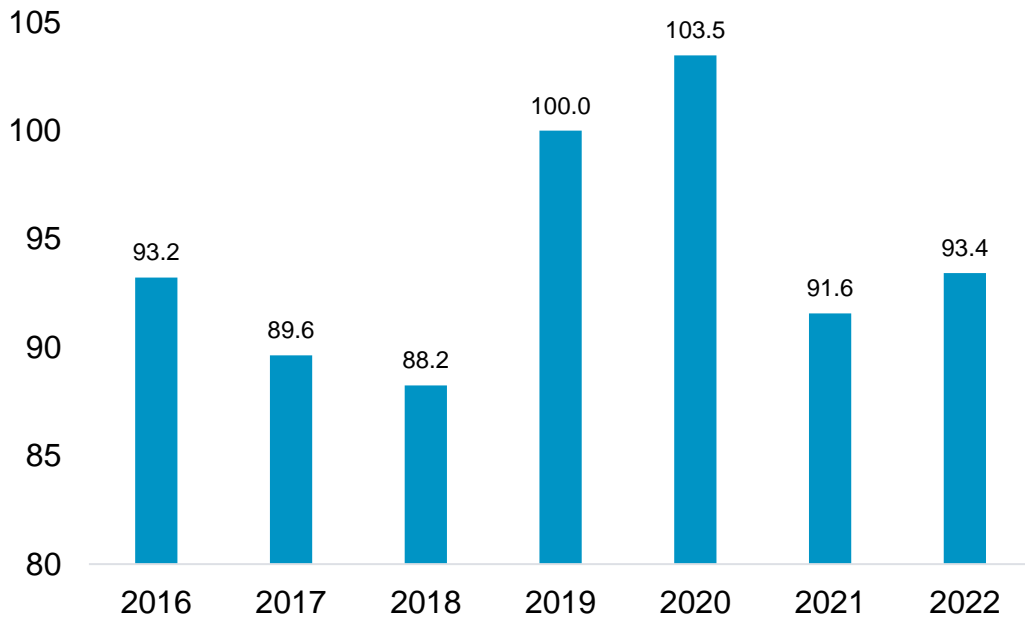
The global supply of barley did not experience an obvious decline in total production due to the pandemic, with an increase of 3500 metric tonnes across the major producing countries when comparing 2019 and 2020. There has been a significant decline in global production in 2021 and 2022 due to the Russian threatening and later invasion of Ukraine. Russia is the world's top barley producer, and Ukraine is the fifth largest. A continued conflict will see

⁴ Michael Donaldson, publisher of the Pursuit of Hoppiness, compiled information from Stats NZ, various literature, and industry members to reach total of 206 breweries throughout New Zealand.

Ukraine’s production capabilities greatly hindered, and with trade sanctions remaining on Russian exports, this could lead to an acute shortage in barley supply.

Figure 5 Barley produced by major global producers

Year to September 2022, metric tonnes (thousands)



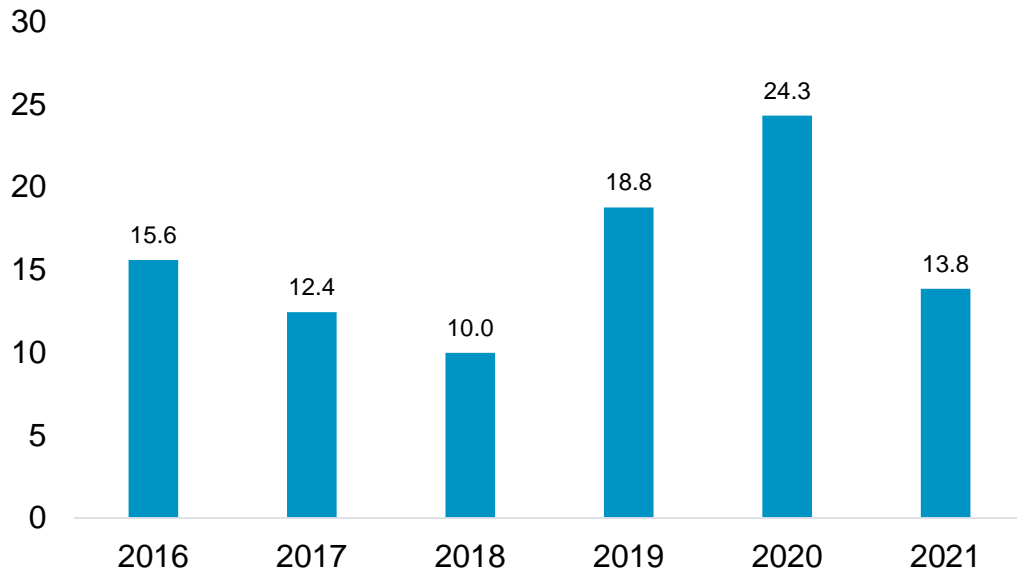
Source: US FAO, NZIER

3.2 Hops

New Zealand’s imports of hops have fluctuated over the past six years, with an increase leading into 2020. Growing hops necessitate fairly strict environmental conditions. Increasingly irregular weather due to climate change is placing further stress on the production and supply of hops, compounding supply chain issues brought on by COVID-19. Hops is a crop in which New Zealand has proven that its innovation offers a competitive advantage, cultivating new varieties and high-quality crops. Utilising this can lead to industry growth and circumvent current and future supply chain concerns.

Figure 6 New Zealand's gross imports of hops

Calendar year to 2021, kilograms (thousands)

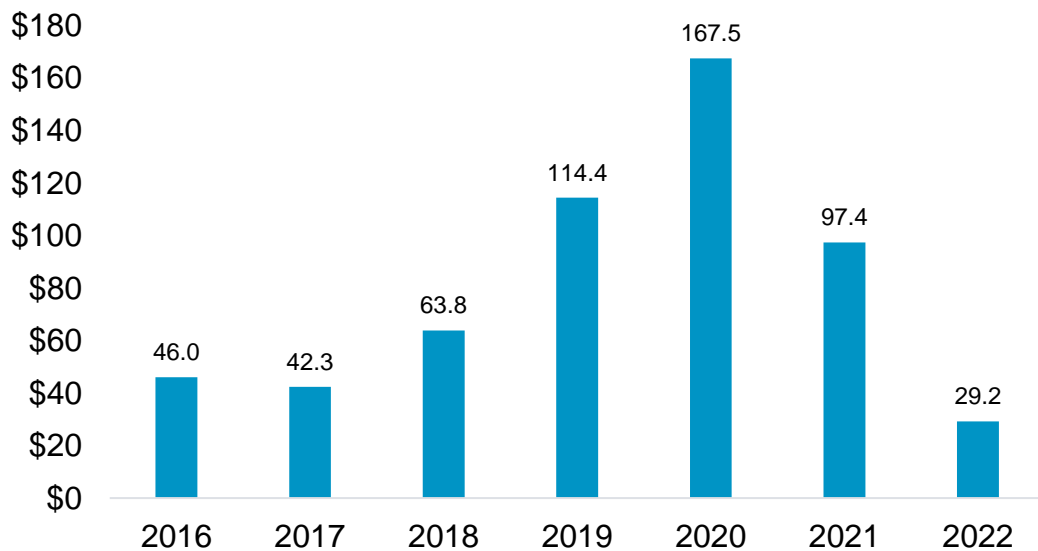


Source: WITS World Bank, NZIER

While New Zealand's exporting of hops was rising rapidly prior to the large supply chain disruptions caused by the pandemic, recent data has seen this growth decline. The expected value of hops exported by New Zealand in 2022 is around 2016 to 2017 levels.

Figure 7 New Zealand's value of gross exports of hops

Year to September 2022, free on-board NZ\$ (millions)



Source: Stats NZ, NZIER

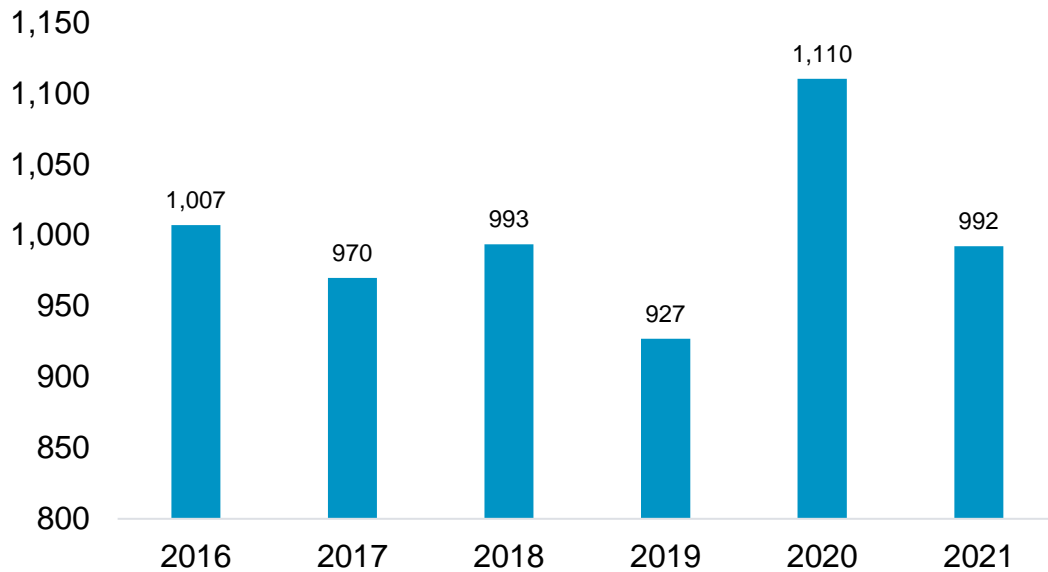
3.3 Yeast

New Zealand yeast imports experienced a significant spike in 2020 to compensate for the below-trend levels in 2019 due to COVID-19. This quantity returned to pre-COVID levels in

2021. New Zealand typically imports active yeast from Australia and Europe. Identifying a gap in the domestic brewing industry, Wellington start-up Froth Technologies are producing local industry-grade yeast for New Zealand breweries. Innovations such as this are vital for the recovery and expansion of brewing in New Zealand. Locally sourced high-quality inputs minimise supply chain issues and support sustainability measures.

Figure 8 New Zealand’s gross imports of yeast

Calendar year to 2021, kilograms (thousands)



Source: WITS World Bank, NZIER

4 Environmental sustainability and brewing

4.1 Supply strains

Climate change and rising global temperatures put future beer production at risk. Irregular and intense weather trends add costly risks to the production of vital crops and strain the water supply. Introducing environmental measures into the brewing industry can spur necessary innovation when accounting for supply chain concerns.

4.2 Commitment to sustainability

DB Breweries:

DB Breweries continue to support the decarbonising of the New Zealand brewing industry through their commitment to using 100% renewable energy by 2030. They have forecasted that the switch to biomass for process heat requirement in their Timaru brewery will result in a reduction of 2,500 tonnes of carbon dioxide equivalent emissions.⁵

⁵ <https://www.db.co.nz/brewing-a-better-nz/sustainability-report/brewing-lower-carbon-emissions#:~:text=HEINEKEN%20has%20set%20a%20global,DB%20Draught%20Brewery's%20purchased%20steam.>

Lion:

Lion New Zealand has gained a carbon zero certification from Toitū, an independent environmental auditing business. Lion is leveraging their focus on emission monitoring to identify areas of the supply chain and production process that can benefit from optimisation.

In aspects where carbon emissions cannot be currently avoided, Lion has offset 106,000 tonnes of carbon dioxide equivalent emissions through Climate Active and Toitū.⁶

Asahi Beverages:

Asahi has identified efficient energy usage and resource management – particularly pertaining to water – as the core of its sustainable initiatives. In 2021, 3.4m³ of water was required to produce a kilolitre of beer. By 2030, they aim to reduce this to 3.2m³ or less.⁷

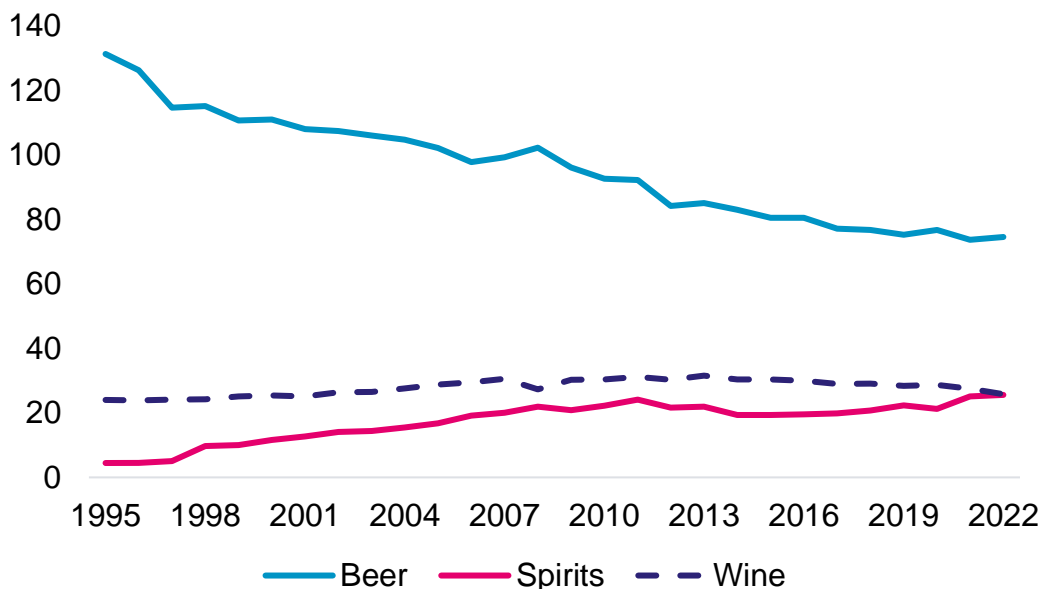
5 Consumer-specific trends

5.1 Beer consumption remains steady

Beer sales volumes data from Stats NZ indicated that New Zealanders consumed over 296 million litres of beer for the year to September 2022, up 5 million litres from the same period in 2021. Total consumption has remained around 290 million litres annually since 2016; however, the amount consumed per adult has gradually declined.

Figure 9 Annual litres consumed per adult

Year to September 2022, litres



⁶ <https://lionco.com/app/uploads/2022/07/2021-Sustainability-Report.pdf>

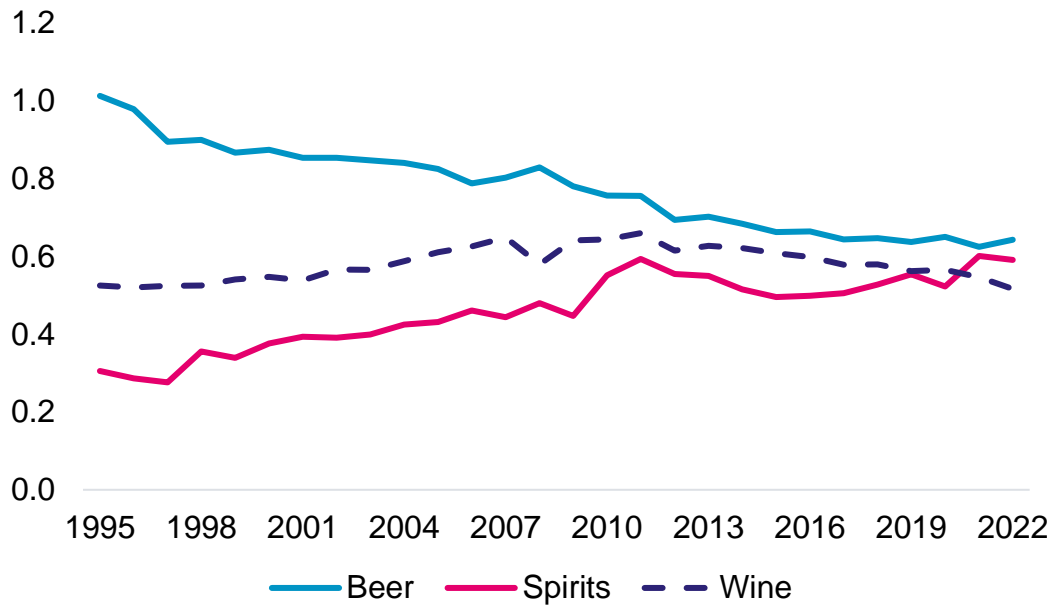
⁷ <https://www.asahigroup-holdings.com/en/sustainability/environment/#:~:text=The%20Asahi%20Group%20has%20set,for%20Scope%203%20by%202030.>

Source: Stats NZ, NZIER

New Zealand adults, on average, consume 1.75 standards per week, with beer comprising 0.65 standards. A steady decline in standards consumed reflects New Zealanders' shifting attitude towards low and alcohol-free beverages and health in general.

Figure 10 Weekly standards consumed per adult

Year to September 2022



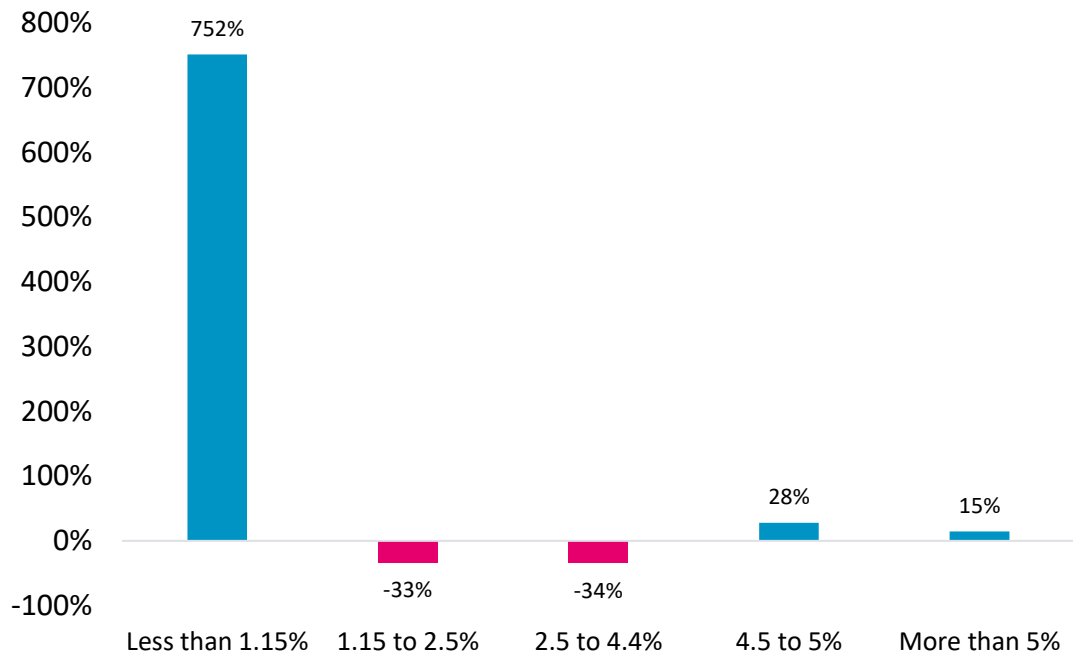
Source: Stats NZ, NZIER

5.2 Consumer preferences

Since pre-COVID-19 (start of 2019), we have seen a 750% increase in the litres of non- and low-alcohol beer consumed by New Zealanders. Higher alcohol content beers have also experienced an increase in consumption relative to pre-COVID levels, with 15% more litres of beer being consumed annually for beers with an alcohol content of more than 5%.

Figure 11 Change in volume consumed since 2019 by alcohol content

Year to November 2022

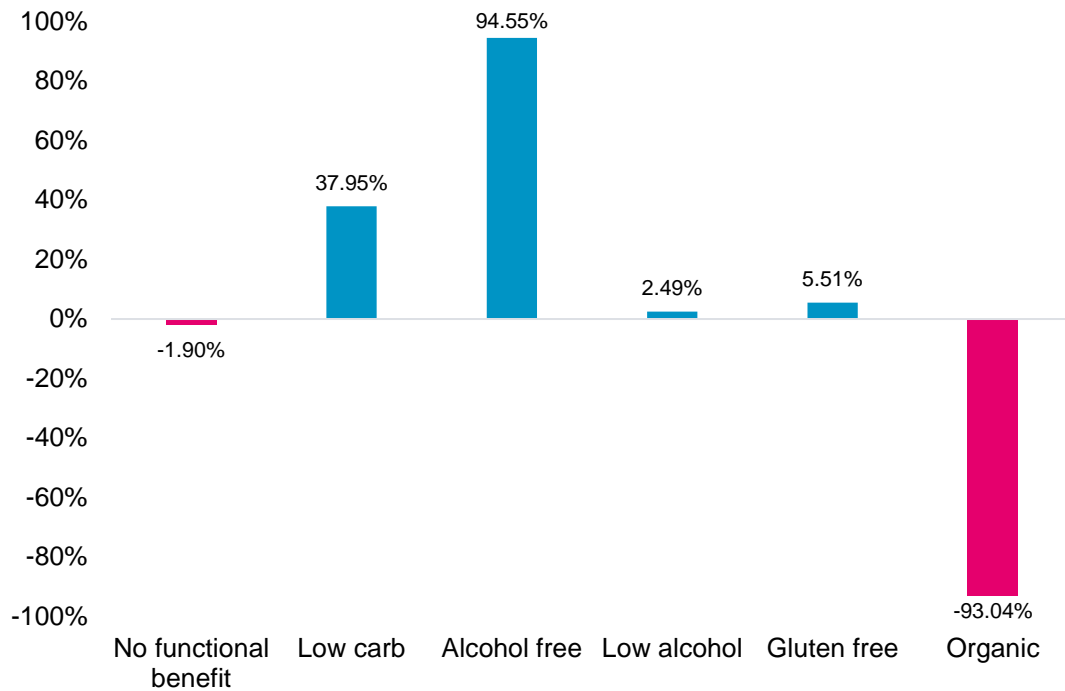


Source: Stats NZ, NZIER

The amount of zero-alcohol beer that is being consumed can be seen in the 95% annual increase in the value of alcohol-free beers compared to the same period in 2021. Similarly, the market share of low-carb beers experienced significant growth in the year to November 2022. The change in the value of low-carb beer consumed in this period is up 38%. Comprising 12% of the total market value and 13% of the total volume produced. The continued and rapid growth these types of beers are experiencing is again reflective of changing consumer preferences.

Figure 12 Annual change in value of beer sales by variety

Year to November 2022

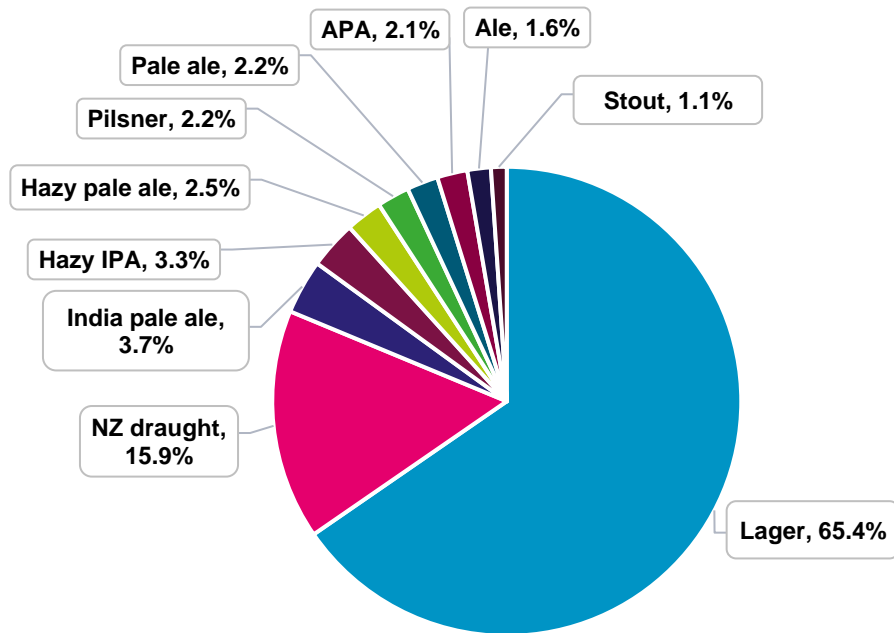


Source: Nielsen, NZIER

5.3 Beer sales in supermarkets and liquor stores

Lager still dominates beer sales in supermarkets and liquor stores in terms of flavour; however, it is the lighter hazy beers that are experiencing growth in the market. In the year to November 2022, hazy beers have seen about a 40% increase in the proportion of value they contribute to beer sales.

Figure 13 Supermarket beer variety by share of market value
Year to November 2022



Source: Nielsen, NZIER

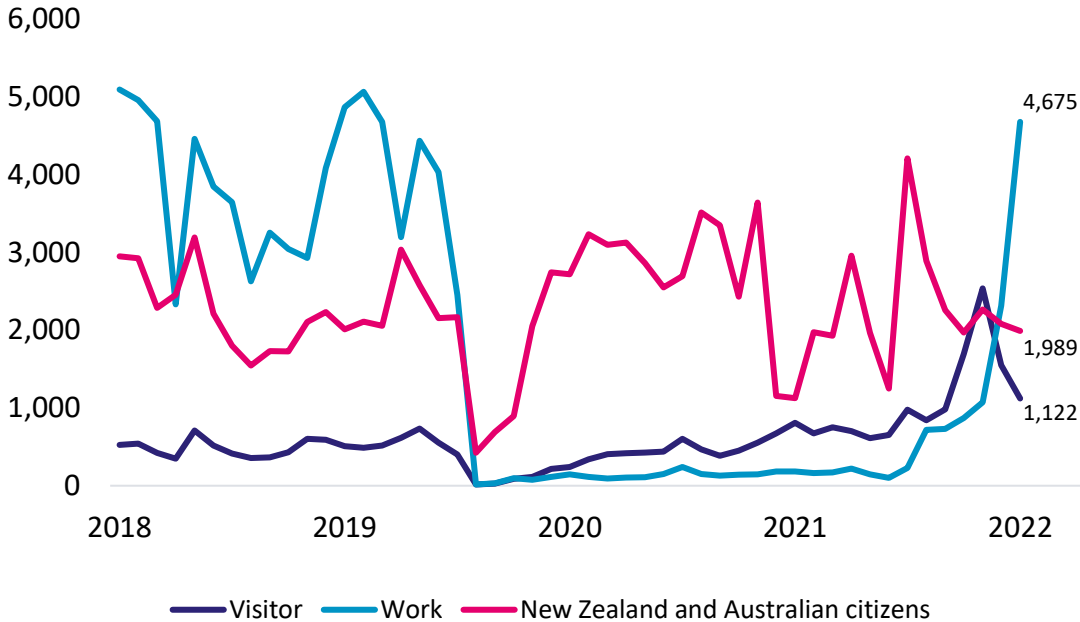
Appendix A Brewery tourism

A.1 Permanent and long-term arrivals data

The most recent figures offer a positive outlook as the New Zealand economy strives to recover from the COVID-19 pandemic. While long-term arrivals plummeted through the multiple lockdowns and international travel restrictions, these numbers have returned to pre-COVID levels, with the number of migrants arriving on work visas trending sharply upwards. The brewing industry can take advantage of the returning visitor and tourist market to expand revenue and in making the brewing industry appealing to new migrants, labour shortage concerns can be eased.

Figure 14 Monthly arrivals into New Zealand by visa type

Year to September 2022



Source: Stats NZ, NZIER