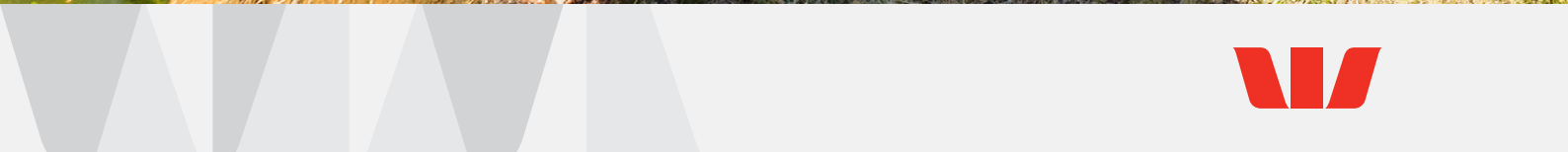


January 2019

Industry Insight

New Zealand Winemaking





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INDUSTRY INSIGHT
New Zealand Winemaking

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Summary

This report focuses on New Zealand's winemaking industry which is concerned with a range of activities, from the growing of grapes to the production, marketing and distribution of wine, both within New Zealand and in offshore markets.

The winemaking industry in New Zealand is pretty small. Turnover in 2017 was an estimated \$2.5bn, making it slightly smaller than the \$2.9bn accounting services industry. About three-quarters of this came from wine produced in the Marlborough region, most of which was Sauvignon Blanc destined for the export market.

However, despite its small size, the industry has been a real success story. From relatively humble beginnings the industry has more than quadrupled the volume of grapes it produces annually and currently pumps out five times the volume of wine it made at the turn of the century.

Much of this has to do with the growth in exports, which have accelerated as New Zealand's "new world" lighter bodied wines have gained favour with consumers in the UK, Australia and the US. The real action has been in the US with growth in that market easily outstripping all others to the point where it is now closing in on the UK's position as New Zealand's most important export market.

Success, however, has not gone unnoticed, and this has resulted in a significant proportion of the industry being owned by foreigners. Indeed, some of the world's largest producers of alcoholic beverages are heavily involved in a range of activities in New Zealand, from grape growing and winemaking all the way into distribution. They sit alongside some large New Zealand winemaking firms who operate along much the same lines.

The industry also hosts a large number of smaller to mid-sized winemaking firms. These include boutique wineries that produce limited wine volumes targeting the discerning customer. Most of these are New Zealand owned, and are often family run. While some are directly involved in many activities, smaller firms tend to specialise, outsourcing where they do not have required competencies or capabilities. The decision on where to specialise and what to outsource is often based on how to get the best return on capital employed.

In addition to wineries, the industry also hosts a large number of grape growers. Most are still independent

operators that deliver grapes to winemakers under contract. However, given the importance of grapes to the industry, winemakers have increasingly sought to ensure consistency of supply by acquiring their own grape growing operations.

In part, the success of the industry can be attributed to three factors that have underpinned demand globally.

The first relates to how globalisation and technology has shaped consumption patterns. The pervasiveness of the internet in an era marked by growing liberalisation has improved access to new products and new experiences. As a result, countries that have traditionally been large consumers of beer are now drinking more wine and spirits. The opposite is true for traditional wine drinking countries.

The second is demographics. Simply put, there are more people out there that are able to consume wine. But it's not just a numbers game. What also counts is the propensity of different age cohorts to consume. Key here is what happens with Gen-x and their growing appetite for wine. Gender is also important, with women not only drinking more alcohol than before, but being more likely to opt for wine over other alcoholic drinks when they do so.

The third focuses on the relative value proposition of wine compared to other beverages. By all accounts, exported New Zealand wines seem to have stood up pretty well compared to other beverages when flavour profile, drinking experience, health effects and affordability are considered.

The supply of wine is shaped by a number of factors, some of which are outside of the industry's control.

One of these relates to climate. The distinctive taste of New Zealand wines is largely a function of the cooler climate prevalent in this country. In some years the climate doesn't play ball and the grape harvest can be severely affected, with knock-on effects for downstream wine production. This creates volatility for the industry.

Another relates to the availability of land. There are limits to how much additional land with the requisite soil conditions is available, especially in a key producing region

like Marlborough. That said, there is significant scope for better utilising land already being used in that region, meaning that growth is perhaps not quite as constrained as it first seems.

Another key factor determining supply relates to the skill and competency of the viticulturists that grow the grapes and the winemakers that produce the wine. New Zealand has been acknowledged internationally as having world class technical expertise, often passed down through generations.

It is often said in the industry that producing wine is relatively easy, but selling it is hard. For the most part this is because there are literally thousands of wines from many different countries and regions each vying for the attention of the consumer.

The ability to differentiate is key. This is especially so given that the cost of producing wine in New Zealand is relatively high. Grapes in this country take a long time to grow and require a lot of care and attention. As a result, New Zealand wines tend to a bit pricier than those that they compete with.

However, creating a point of difference isn't easy. It requires the creation of a market presence, which in turn implies ongoing large-scale investment in marketing, from putting advertisements in glossy magazines to being a participant at wine fairs and tasting competitions. Successful marketing is often regarded within the industry as a key factor driving wine production on any significant scale.

A market presence is critical for attracting the attention of independent distributors that provide access to large retail networks. They are more likely to include a particular wine in their portfolios if it well known and thus more likely to find favour with consumers. Of course, for larger firms that have their own distribution network this is not a problem, but for those without, especially small wine firms producing limited volumes in New Zealand, gaining access to distribution channels is a major challenge.

Even if they are able to find a distributor or retailer, winemakers can often struggle. Distributors and retailers typically have bulk buying power, which they use to drive prices lower, resulting in squeezed margins for winemakers. This is the reality faced by many small wine firms in New Zealand, especially those that focus on the domestic market. Retailers and distributors in New Zealand not only have bulk buying power, but they can also dip into imports if required.



Outlook

Small wine producers focussed on the domestic market will continue to struggle, but there are big opportunities for exporting wineries and these will drive further growth in the industry.

On a per capita basis, wine consumption in New Zealand is set to continue falling. This means that local market sales will remain flat, despite population growth. The bulk buying power of retailers in New Zealand will also mean downward pressure on prices paid to winemakers and this will potentially threaten margins.

Most exposed will be small winemakers that have yet to make an inroad into export markets. A lack of economies of scale to help drive down unit costs of production is likely to mean a continued focus on cost cutting, with cheaper imported grapes becoming the “go to” option. On the face of it, this won’t be good news for local independent grape growers, although a loss of domestic market share could well be offset by growth in exports.

Indeed, it’s the export market that will continue to underpin the fortunes of the industry. The UK is likely to remain a key market, but its position as New Zealand’s largest wine export destination will be usurped by the US. Growth in that market has been significant and with US consumers now developing a taste for New Zealand wine, it’s only a matter of time before exports from New Zealand achieve a market share higher than the current 2%.

And it won’t stop there. The recent conclusion of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) could open up further opportunities for New Zealand’s wine producers in places like Canada, which is already New Zealand’s 4th largest export market. China may also offer growth opportunities, especially given the existence of a burgeoning middle class that has taken a liking to all things Western. China is a small market at the moment but could become a really big one in the future.

Limited opportunities in the domestic market and the potential for big gains in the export market are likely to reshape the local wine industry going forward. Two distinct sub-sectors can be identified. Both will operate in the local market, but the emphasis will be on exports.

One of these sub-sectors is small winemakers. They produce small volumes of premium quality wine and

compete by promoting the distinctiveness and exclusivity of their wines. Distinctiveness and exclusivity in this regard do not just refer to the flavour profile of the wines they produce, but also their bottling and packaging.

Structurally, small winemakers are likely to remain much like they are today, restricting themselves to just a few activities, most notably the winemaking process. They are also likely to invest heavily in marketing and promotional activities to attract the attention of distributors, especially in overseas markets. Because of their size, they are unlikely to backwardly integrate and will continue to rely on independent grape growers to deliver grapes.

Many of these small winemakers are dominated by an older generation of winemakers, who are now approaching retirement. While most will hand their wineries off to younger winemakers – typically family members – a number won’t and that will offer opportunities for mergers and acquisition activity in the future.

A lack of economies of scale coupled with high grape costs means that smaller winemakers will continue to produce high cost wine. Add on an extra margin for exclusivity and distinctiveness and they will also be high priced wines, competing for consumers who like to drink something a little different. These firms could become acquisition targets for others who might be looking not only for access to resources and capability, but also product to sell.

The second sub-sector is large volume producers. They will still produce good quality wines and, much like their smaller counterparts, will continue to differentiate their product from their competitors through various marketing and promotional activities.

Unlike smaller winemakers, large volume producers are likely to increase the scale of their operations. This is because achieving economies of scale to reduce unit costs of production will become increasingly important to preserve margin in an industry where downstream distribution in offshore markets is consolidating. Larger firms will tend to compete more on price than their smaller counterparts. Backward integration will be key and a

number of independent grape growers are likely to be acquired as firms look to gain better control over their costs.

Foreign investment, attracted by the potential for more success in export markets, is also expected to increase, mostly through acquisition. In part this will be driven by changes to the Overseas Investment Act, which will encourage international firms to purchase vineyards in New Zealand instead of just owning the rights to harvest them. They are also likely to buy wineries, especially those that already have an established market presence offshore.

These dynamics are likely to result in there being fewer independent grape growers in New Zealand. They will also result in fewer, but larger wineries. For locally owned wineries however, increased offshore interest does create some benefits, not least of which is better access to distribution channels.

However, whether this revamped industry remains successful will depend on whether it is able to supply growing demand offshore. Volume growth is just as likely to be achieved by optimising land already under cultivation as by expanding the area planted with grapes.

Adverse weather events in the future could become more frequent because of climate change, meaning that grape harvests could become even less predictable than before. In addition to this, climate change could affect growing conditions over time. This means the particular characteristics of grapes that have underpinned the success of the industry in New Zealand over the past couple of decades could change, posing both threats and opportunities for winemakers. Not least of these will be the chance to grow grapes at lower cost, which would improve the price competitiveness of different tasting New Zealand wines. Whether this translates into more sales will depend on how well they are marketed.

Introducing the winemaking industry

Defining the industry

This report focuses on various activities along the value chain that result in the production of wine in New Zealand, as well as the marketing and distribution of wine both domestically and in offshore markets.

As such, this report covers the following activities:

Viticulture

The science of growing grapes, which includes the monitoring and controlling of pests and diseases, canopy management, the monitoring of fruit development and characteristics, as well as decision making with respect to harvesting and vine pruning during the winter months. Viticulturists are often intimately involved with winemakers, because vineyard management and the resulting grape characteristics provide the basis from which winemaking can begin.

Harvesting

This is the first step in the winemaking process and an important part of ensuring the characteristics of a specific wine. The moment the grapes are picked determines the acidity, sweetness, and flavor of the wine. Determining when to harvest requires a touch of science along with old fashioned tasting. The acidity and sweetness of the grapes should be in perfect balance, but harvesting also heavily depends on weather conditions.

Processing

Once harvested, grapes are taken to the winery where they are sorted, crushed and pressed to produce 'must' or freshly pressed grape juice. Sugars in the 'must' are then fermented into alcohol (aided by wild yeasts in the air). Once fermentation is complete, dead yeast cells, tannings and proteins are removed from the wine.

Aging and Bottling

Once clarified, wine is then bottled or further aged. This depends on the wine varietal. Aging can be done in bottles, stainless steel tanks, or oak barrels, depending on how the winemaker wants the wine to taste.

Distribution

Once bottled, wine is then distributed through distribution channels, eventually ending up in supermarkets, the hospitality sector and specialised liquor outlets.

This report also covers the marketing and branding of wine. **Marketing** is about actively pushing out a message about a particular wine to get sales results. Advertising and promotional activities are typical marketing practice. By contrast, **branding** supports the marketing effort by communicating the characteristics, values and attributes of a particular brand of wine to prospective customers.

Figure 1: Summary of activities undertaken by winemakers



Source: Westpac

Size of the industry

Winemaking is a small, but fast growing industry that accommodates a large number of firms employing a range of different operating models.

Firms, Grape Growers and Wineries

An estimated 700 firms produce wine in New Zealand. They do so directly by owning and operating their own wineries and/or vineyards, or indirectly through contracting arrangements with wineries and/or vineyards. Some firms might operate a hybrid model that incorporates both aspects.

These firms either own, operate or have contractual supply arrangements with 697 local wineries and some 1,200 grape growers (about 700 of which are independent and operate on a contractual basis). Grape growers manage 2,031 vineyards across New Zealand, covering an area of almost 38,000 hectares.

Production, Export and Import Volumes

In the year ending June 2018, New Zealand's grape growers produced 419,000 tonnes of grapes, almost all of which was sold or distributed to local wineries. About 5% of grapes produced were sold to fruit processors, primarily to produce raisins. Small quantities were also sold to wholesalers and retailers.

During the same year, wineries operating in New Zealand produced about 308m litres of wine. This amounts to about 1.2% of global production, making the industry about the

same size of Hungary's, but slightly smaller than Brazil's. According to the International Organisation of Vine and Wine, New Zealand is the 16th largest wine producer in the world.

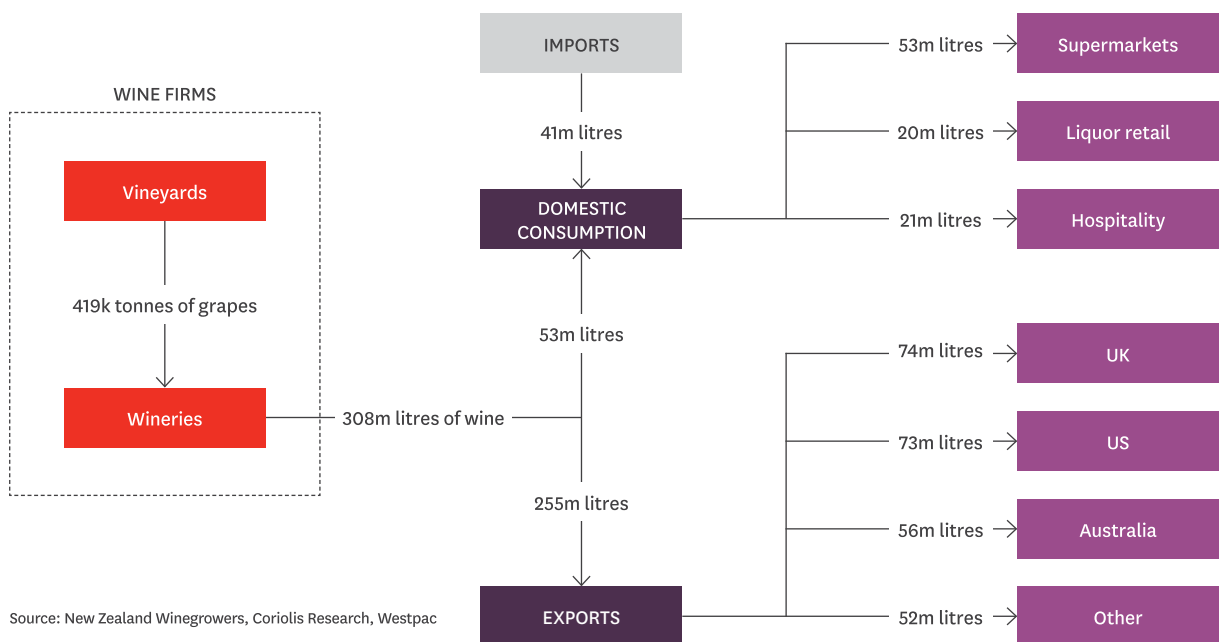
Most wine produced in New Zealand is exported. About 255m litres or 83% of production was exported in 2018, with the United States of America (US), United Kingdom (UK) and Australia collectively accounting for just over 200m litres.

An additional 53m litres of locally produced wine was sold into the domestic market. This was supplemented by an additional 41m litres of imported wine, most of which came from Australia and France. Most wine destined for the local market is sold by the major supermarket chains, with smaller amounts sold through specialised liquor outlets, hotels, restaurants and bars.

The volume of grapes produced by grape growers in New Zealand grew by a whopping 423% between 2000 and 2018, with growth in offshore demand for New Zealand wines being the main driver.

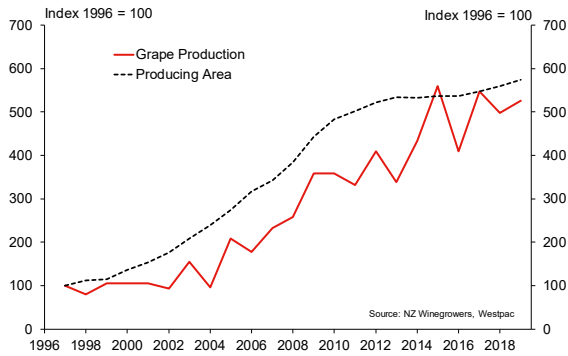
Increasing demand for grapes has, perhaps not surprisingly, resulted in an increase in the number of vineyards in existence as well as an expansion in the area of land used to produce grapes.

Figure 2: Production, export and import volumes - year to June 2018



Source: New Zealand Winegrowers, Coriolis Research, Westpac

Figure 3: Grape production vs producing area

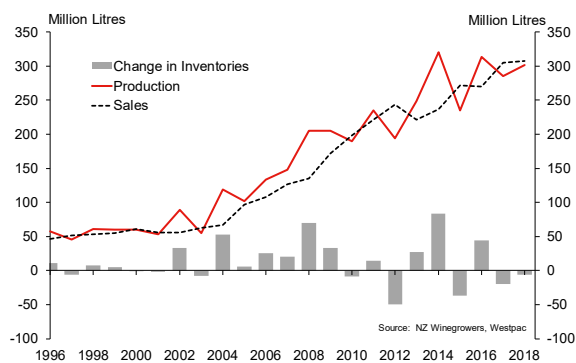


This was particularly evident prior to 2011. Since then, growth in the area of land used to produce grapes has eased, although grape production has continued to grow strongly. To a large extent this reflects efforts to improve the productivity of existing land. This includes the use of technology to mitigate the impact of temperature extremes, as well as provide better control over pests and diseases afflicting vines.

However, while grape production has grown, it has also been relatively volatile. To a large extent this reflects the impact of weather events during the grape growing season which normally starts in about September and ends in April. Grapevines typically need a cool period in winter when the plants are dormant, and a warm period in summer and early autumn so grapes can form on the vines. If these conditions are not met, there can be a significant impact on the grape harvest. Indeed, most of New Zealand is vulnerable to frost in spring and autumn and can experience cooler summers, which result in grapes not ripening properly.

Not surprisingly, considering the dependencies that exist, wine and grape production are closely correlated.

Figure 4: Wine production, sales & inventory levels



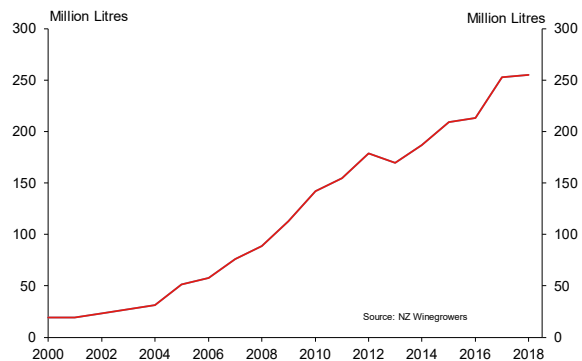
Not so wine sales, (both export and local) which tend to be subject to less volatility. This is likely to reflect the role of wine inventories, which are used to smooth out fluctuations in production in order to meet consumer

demand. Historically, production volumes in New Zealand have tended to exceed sales, implying a build-up in stock levels. However, more recently the opposite has been true, with strong offshore demand resulting in a drawdown in inventories.

Grape varieties have different juice characteristics which enable the production of different wines

The growth in wine sales largely reflects the performance of exports, which have grown from 19.2m litres in 2000 to 255.1m litres in 2018. Indeed, wine exports have grown so much, they now make up over 80% of all beverage exports from New Zealand. Success in this regard is likely to reflect the impact of ongoing marketing efforts, aimed not only at promoting New Zealand as a country that produces high quality wine, but also the characteristics of the individual wines that are produced.

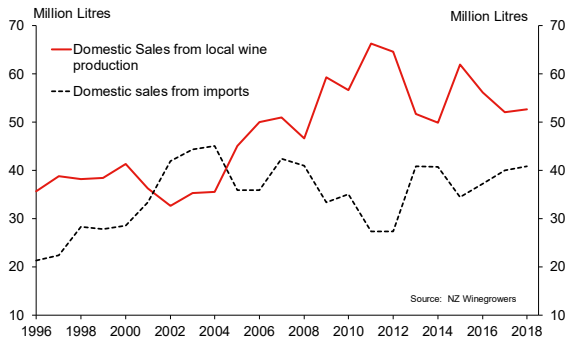
Figure 5: Wine export volumes



Domestic consumption of wine stands in stark contrast to the performance of exports. Annual per capita consumption of wine in New Zealand has fallen from about 22 litres about 10 years ago to 19 litres today. This is likely to reflect the availability of and accessibility to ready to drink alcoholic beverages.

Furthermore, the amount of locally produced wine sold in the domestic market has generally trended downwards over the last decade while that for imported wines has edged higher. The volume of domestically produced wine sold into the local market is quite lumpy and is often offset by changing import volumes. Industry sources have suggested that retailers, and in some cases winemakers, actively import wine to smooth fluctuations in local production sold into the domestic market.

Figure 6: Domestic wine sales by source



Retailers use imports to smooth the supply of wine into the local market

Turnover

Despite its success in global markets, the winemaking industry is not large. Revenues from grape growing were in the region of \$0.7bn in 2017, while wineries are estimated to have generated about \$2.5bn in turnover during the same year. This makes the industry slightly larger than the postal and courier service industry, which turned over about \$2.2bn in 2017, but smaller than the accounting services industry which posted sales of about \$2.9bn in the same period.

About 75% or \$1.7bn of this came from export earnings, most of which was generated from sales to the US, UK and Australia. Exports to other countries, the main ones being Canada, the Netherlands, China and Ireland, totalled about \$0.4bn.

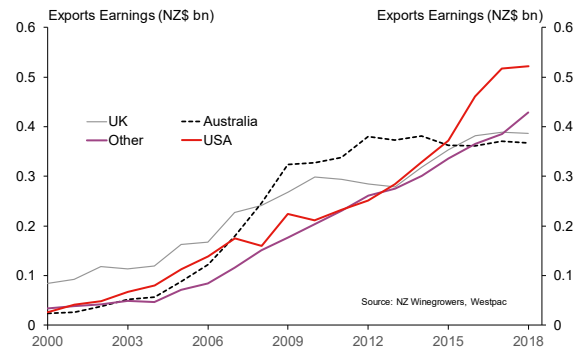
Wine exports only account for about 3% of New Zealand's total merchandise exports. However, they are our 6th largest export commodity

Not surprisingly, considering how volumes have been growing, export earnings from offshore wine sales have also grown strongly. Between 2000 and 2018, export sales grew by about 900%.

A large chunk of this was generated from sales to the US with growth in revenues easily outstripping that generated from other key markets. This strong export performance has been achieved despite a strong New Zealand dollar in recent years and speaks to the success of marketing campaigns and growing brand awareness, which has resulted in a greater appreciation in the US for premium wines with a distinctive

taste. A weakening of the New Zealand dollar in 2018 helped to offset a slight drop in export volumes resulting in further gains in export revenues.

Figure 7: Export earnings by key market



New Zealand wine is less than 2% of the US market so the opportunity remains immense

Despite generating lower earnings than the US, the UK is still New Zealand's largest export market by volume. To a large extent this is because a relatively large proportion of exports to this price sensitive market is sold in bulk and so attracts a lower unit price. Australia is another key market, although earnings have effectively tracked sideways for an extended period and fell in 2018, mainly because of the performance of the exchange rate.

By contrast, export earnings generated from outside of these key markets have grown strongly off the back of volume gains, with markets like Canada, the Netherlands, China and Ireland being key drivers of growth. The recently concluded Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) trade deal should create significant growth opportunities into Canada, which is already New Zealand's 4th largest export destination for wine. China, with its large burgeoning middle class, also offers growth opportunities.

New Zealand's cool climate wine styles and premium positioning remain very much in favour in most markets

However, while export earnings have trended higher, average earnings per litre of wine exported has moved downwards over time. This is particularly true of the larger wineries in New Zealand that produce big volumes. Indeed, according to an industry benchmarking survey undertaken

by Deloitte in 2017, revenues per litre sold by wineries with annual sales in excess of \$20m per annum was only NZ\$7.67 per litre. By contrast, small wineries, often referred to as boutique, managed a more respectable \$17.49 per litre sold.

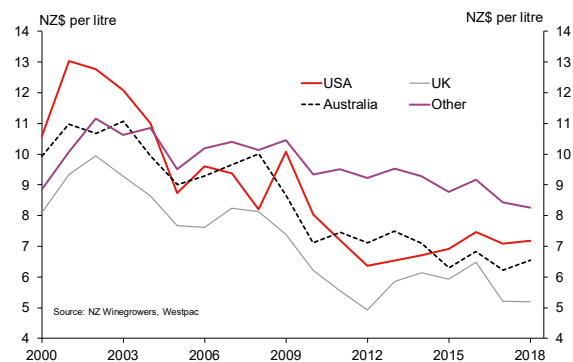
Figure 8: Average export earnings per litre wine



In part this reflects the relative strength of the New Zealand dollar. Another minor factor is the imposition of taxes and levies in key source markets.

But the main reason for the decline in average prices is an increase in bulk wine sales. Typically this involves transporting wine in 24,000 to 26,000 litre polypropylene bladders to export markets where it is then bottled and distributed. In 2017, about 100m litres (or just under 40% of wine exports) was exported from New Zealand in bulk form. This compares to about 60m litres (or about 34% of wine exports) in 2012.

Figure 9: Average export earnings per litre of wine by key market



Buyers of bulk wine typically include importers, bottling facilities, and retail stores that sell “private label” wines i.e. home brand wines created and sold by supermarkets and grocery chain stores. Industry sources suggest that as much as 30% of bulk wine is marketed on this basis. The remaining 70% is marketed under the winemaker’s label.

There are a number of motivations for exporting wine in bulk form. The most obvious is that it reduces unit transport costs and increases price competitiveness in key export markets. A single bulk container carrying 24,000 litres of wine takes up far less space than bottles containing the same amount of wine. It is also possible that the cost of bottling in key markets might be less, especially where a dedicated bottler is involved and economies of

scale are present. It is common practice for bottling to be undertaken by a third party that specialises in this activity.

Bulk wine exports are becoming an increasingly popular option for wineries looking to cut costs and offer a price competitive product, especially in mature markets where there are many different wines for sale

Other motivations might include disposing of wine that might not have the flavour profile associated with a particular label. This can happen if the quality of grapes used to produce wine have been adversely affected by poor weather conditions. Under such circumstances, a winemaker, looking to protect its label/brand, may opt to sell wine in bulk through a distributor to a retailer who would then bottle and on sell it under its own private label. This wine may or may not have been blended with others prior to transportation.

Wine sold in bulk is typically inferior to bottled wine, but that is not always the case

Shape of the industry

The wine industry in New Zealand is characterised by a large number of firms, wineries and vineyards that differ in terms of their size and scale. As a result, concentration levels in this industry are low.

Firms

No winemaker in New Zealand has a greater than 10% share of the industry. However, in 2017, the four largest winemakers operating in New Zealand (Delegat, Treasury Wines Estate, Pernod Richard and Constellation Brands) collectively accounted for about \$1bn or almost 40% of industry turnover.

Industry sources suggest that foreign owned firms control around 40% of wine production in New Zealand, although there is some disagreement on this, with others suggesting this is closer to 60%.

Foreign investors provide capital, technical and management capability, overseas distribution channels, and help fill gaps in the New Zealand industry value chain

The next tier of firms operating in the winemaking industry are mostly locally based companies. They would include household names like Villa Maria, Yealands, Indevin and Giesen. Also included in this group would be Australian based Lion, which is New Zealand's largest manufacturer of alcoholic beverages. Collectively, these firms account for about \$500m or about 20% of industry turnover.

Underneath this group are a relatively large number of medium sized firms, each of whom generate more than \$10m in turnover per year, collectively contributing another 20% to industry turnover.

In addition to these are an estimated 350 small winemakers that generate less than \$10m individually. Unlike larger players that are volume driven, these small boutique producers focus heavily on the distinctiveness of the wine they produce. An industry source suggested that some small boutique wine producers are owned by well-heeled individuals that operate them almost as hobby projects.

Business Models

A number of different business models are evident in this industry. Some firms operate within vertically integrated structures and participate in many activities along the

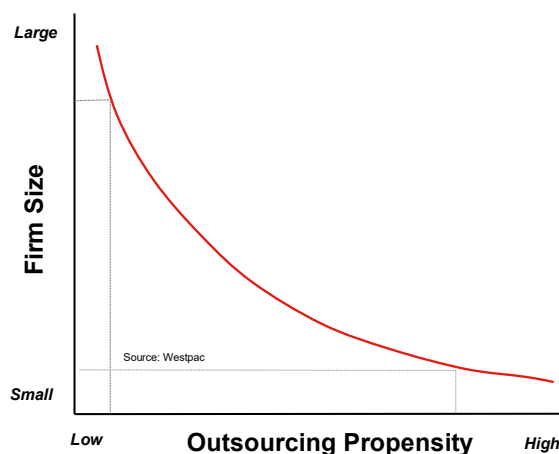
value chain. These range from developing, operating and maintaining vineyards to producing, marketing and distributing wine.

Other firms have a looser, less integrated structure, and have a direct participation in selected activities. Some firms may be involved in just one activity, such as downstream marketing, relying on those that specialise in the production of wine to produce a product that meets the expectations created by the promotional activities that they undertake. An industry source suggested that such firms run "virtual wineries".

Some firms may opt to run a hybrid model where they undertake a portion of the work associated with a particular activity themselves, but outsource other parts of it. For example, firms will often own and operate vineyards to produce grapes, but they will also purchase grapes from others (often from other regions) on a contract basis (specifying cost, quality and quantity). They will also look to lease land that has existing vines on it and/or lease virgin land for the purpose of planting new vines.

Motivations for outsourcing differ. Smaller firms often lack the capital to invest in productive capacity such as a winery. In other cases, firms may find that outsourcing improves their return on equity. Industry sources suggest that some firms have invested heavily in the marketing of their wine rather than in the physical assets required to produce wine as a way to improve returns.

Figure 10: Organisational structure



Although a gross generalisation, larger firms are more likely to be involved in more activities because it provides them with greater control over cost, quantity and quality along the value chain.

The decision to outsource or restrict activities is really about how to get the best return on capital employed

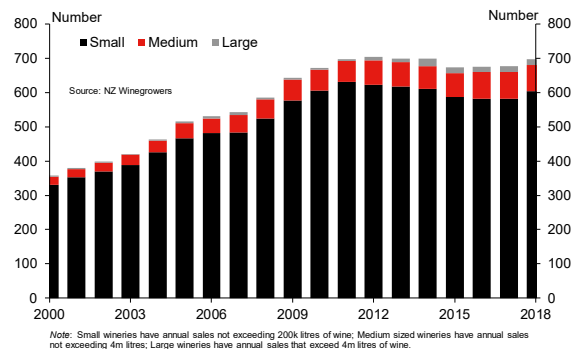
Wineries

Larger firms tend to own more than one winery. By contrast, smaller firms will generally own just one winery, although there are quite a few that don't own any. About 40% of vineyards are owned and managed by firms that operate their own wineries. The remaining 60% are owned by grape growers that produce grapes on a contract basis. An industry source has suggested that it is common for winemakers to start out as contract grape growers before moving up the value chain.

Following a period of sustained growth from 2000 to 2011, the number of wineries operating in New Zealand has remained relatively flat. Growth had been driven by the emergence of smaller wineries encouraged by perceived opportunities in this fast growing industry. However, since 2011, growth has moderated as some smaller wineries, struggling to make a profit, have gone out of business or have been acquired by existing market participants and/or new entrants. The net result has been an increase in the number of medium and large-sized wineries in the industry.

The demise of some of the smaller wineries might reflect a lack of economies of scale which are needed to drive down unit costs of production. Small wineries also tend to rely more on others to supply their grapes, which also pushes up costs.

Figure 11: Wineries by size category



Furthermore, smaller wineries typically sell a bigger proportion of their production into the local market than their larger counterparts. Although this offers easier access to distribution channels, shorter cash cycles and zero currency risk, smaller wineries typically lack the negotiating power needed to deal with large oligopolistic retailers, who are by far the biggest domestic distribution channel in New Zealand. A lack of negotiating power is inevitably seen

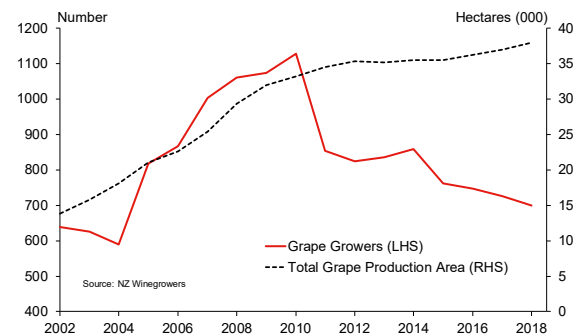
in tighter profit margins, especially for those that cannot reduce their costs.

Winemakers of all sizes focus on the export market. However, smaller producers will tend to sell a higher proportion of their production into the local market

Grape Growers

The grape growing industry has consolidated recently with the number of independent grape growers falling sharply since 2011. In part this reflects the impact of bumper grape harvests in prior years, which had led to a ramp up in wine production and higher inventory levels. By 2011, wine inventory levels had accumulated to the point where demand for grapes fell, resulting in sharply lower prices, which for many grape growers, particularly those that had borrowed heavily in anticipation of better times ahead, proved to be unsustainable.

Figure 12: Grape growers vs grape production

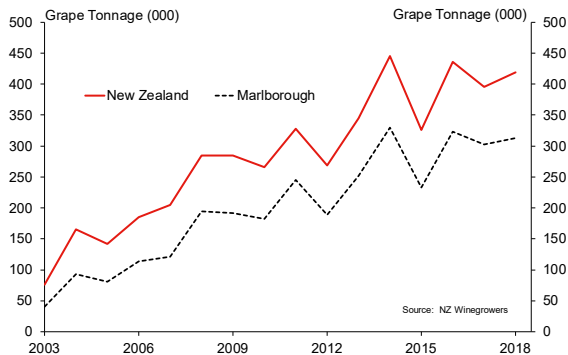


Since then, the number of independent grape growers has continued to fall, as winemakers looking to exert greater control over the supply of grapes into their wineries, have increasingly acquired grape growing operations. Access to a consistent supply of grapes of an appropriate quality is critical to the success of winemakers, especially when competing in key export markets.

Grape growers needed to be cautious to avoid flooding the market with grapes and dropping prices

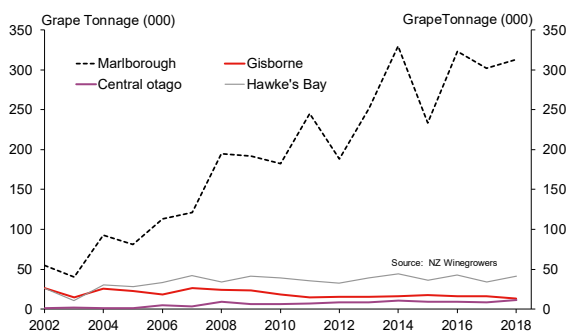
Just under 70% of the area used for growing grapes is located in Marlborough. The region also hosts 73% of the country's grape growers, but only 20% of its wineries. Given that the region makes up 75% of New Zealand's wine production, most of which is Sauvignon Blanc, this suggests that the region is home to New Zealand's largest wineries.

Figure 13: Regional wine production



The reliance the industry places on the Marlborough region is something of a risk. Should weather conditions result in a poor harvest in the region, the whole industry is likely to be adversely affected. Indeed, with climate change increasing the frequency of more adverse weather events, this risk is getting bigger.

Figure 14: Growth in regional wine production



That said, while Marlborough is by far the largest wine producing region in New Zealand, it isn't the only one. Indeed, most regions in New Zealand produce wine, although it's only really Gisborne, Hawke's Bay, central Otago and Canterbury/Waipara that produce significant quantities. The Wairarapa is also a notable producer despite producing less than half the volume that is produced in central Otago. Output growth has also been achieved in most regions, but this pales into insignificance when compared to that of Marlborough.

The growth story for New Zealand wine is mainly about Sauvignon Blanc exports out of Marlborough to the US

Cost breakdown

Input cost breakdowns for this industry highlight differences in labour intensity between grape growing and winemaking activities. They also reflect the significant emphasis that winemakers place on the marketing and distribution of wine.

Grape Growing

Cost breakdowns for grape growers are shown in *Figure 15*. They are based on estimates from a 2017 Vineyard Benchmarking Report for the Marlborough region which was produced by the Ministry of Primary Industries (MPI) in conjunction with New Zealand Winegrowers.

These estimates suggest that grape growing is a relatively labour intensive activity, with the cost of labour accounting for just over a third of total operating costs. The industry relies heavily on semi-skilled/unskilled labour to carry out most of the manual work in vineyards. By contrast, the highly skilled labour component, which focuses on the science and process of growing grapes to a consistent quantity and quality is relatively small, despite being critical to the success of the industry. Most manual labour activities relate to the pruning of vines, ongoing crop/canopy management of the vineyard, general work relating to upkeep as well as weed and pest control. Labour costs relating to harvesting, which is seasonal, are relatively minor.

Other major costs incurred by grape growers relate to weed and pest control, the purchase of fertilisers and pesticides as well as repairs and maintenance of equipment. Interestingly, harvesting, which is typically viewed as a labour intensive process, depends heavily on the use of machinery. Grape growers spend around four times more on machine harvesting than harvesting by hand, presumably because of seasonal labour shortages.

Overheads are relatively minor and are spread across a number of different services, from repairs and maintenance services to legal and consultancy, administration, insurance, utilities and municipal services.

By contrast, other expenses are significant, with interest expenses being particularly noteworthy. Most of this is likely to reflect high debt levels relating to the purchase of land. A buoyant winemaking industry has boosted demand for grapes, which in turn has pushed up land prices, especially in regions where land is increasingly in short supply. With long-term debt accounting for about 30% of total assets, wine firms are not particularly vulnerable to interest rate movements. However, wine firms are exposed to changing land prices, especially smaller ones where land accounts for a larger percentage of total assets.

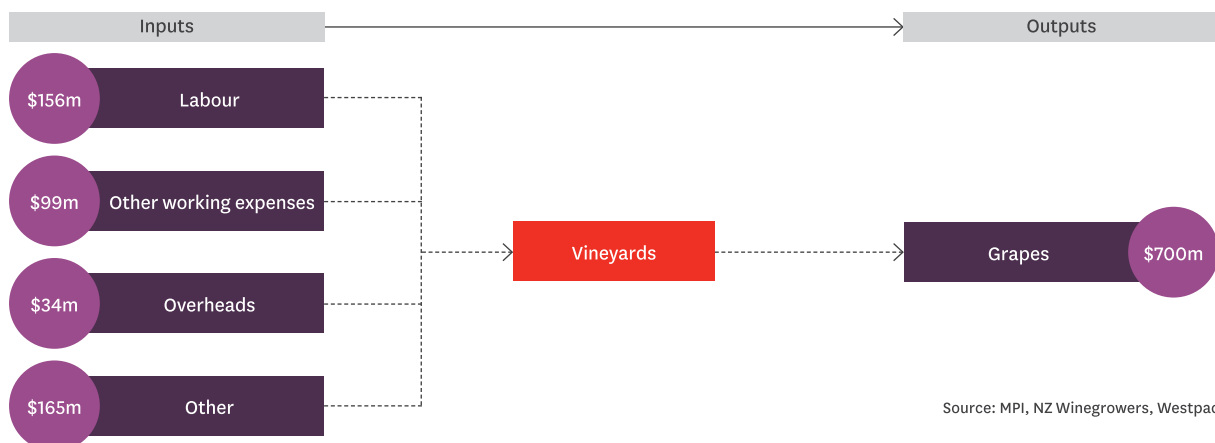
Winemaking

Input cost breakdowns for winemakers in New Zealand were based on cost of sales proportions from a 2016 Winery Benchmarking report produced by Deloitte.

Estimates shown in *Figure 16* suggest that the production, marketing and distribution of wine is far less labour intensive than grape growing. Although wineries spend slightly more than grape growers, labour only accounts for about 10% of total incurred costs. About 60% of labour costs relate to sales and marketing (including brand management). This includes salaries paid to people that sell at cellar doors (wine tasting venues normally located close to the wineries).

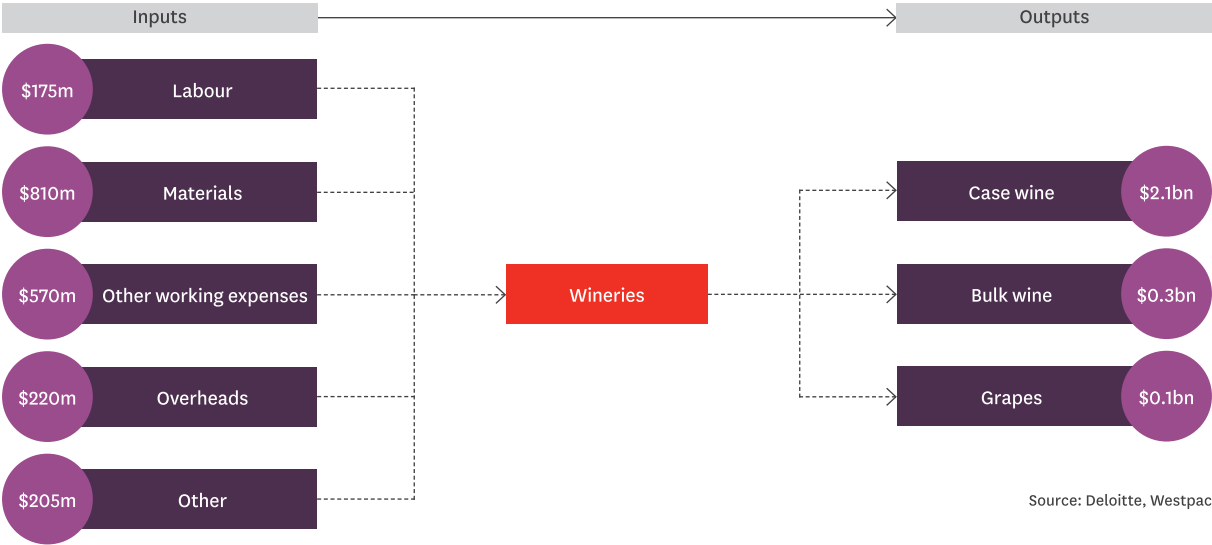
The emphasis on sales and marketing is also reflected in other working expenses. Packaging costs, which a key part of the marketing and sales effort, are huge, and are the second largest cost item after grapes. The costs of promotional activities and advertising are also significant. So too the cost of bottling, which contributes almost 9% to total costs.

Figure 15: Estimated input costs – grape growers, 2017



Source: MPI, NZ Winegrowers, Westpac

Figure 16: Estimated input costs – winemaking, 2017



Source: Deloitte, Westpac

In terms of overheads, the industry incurs significant administration expenses and other overheads. A large chunk of this is likely to be compliance related. Other significant costs include professional services, such as legal, accounting and finance.

Other notable costs include vineyard supplies and bulk wine purchased from other wine producers, which is typically blended with other wines.

Legislative framework

The legislative framework that applies to this industry is concerned with ensuring compliance to standards. Its objective is to ensure that wine produced in this country maintains its well-earned reputation for quality.

Key pieces of legislation are the Wine Act 2003, the Geographical Indications (Wine and Spirits) Registration Amendment Act 2016, the Overseas Investment Amendment Act 2018, and the Customs and Excise Act 1996.

The **Wine Act 2003** sets the rules for producing, exporting and importing wine in New Zealand. Specific areas include the setting of and ensuring compliance with wine labelling and wine safety standards, setting up and monitoring compliance to meet export eligibility requirements, as well as fostering efforts to improve the efficiency of the industry.

The Act also requires that grape growers ensure that the grapes they supply to winemakers are free from food safety hazards. They need to keep information relating to the source of grapes produced, and provide a description of the grapes produced, including where they were grown (which is particularly important as the source of origin must be shown on the wine label).

for consumption in New Zealand, making sure that local producers are not put in a disadvantaged position.

In addition to legislation, vineyards and wineries can opt to be accredited members of **Sustainable Winegrowing New Zealand (SWNZ)**, a voluntary, industry-wide programme developed to provide an environmental “best practice” model for vineyards and wineries. SWNZ includes standards that cover soil, water, air, energy use, pest and diseases, bio-diversity, by-products and human resources. Because sustainability credentials are important when competing in the export market, over 98% of New Zealand’s vineyard area is certified under SWNZ.

Wine sold in New Zealand must meet strict labelling and composition requirements

The **Geographical Indications (Wine and Spirits) Registration Amendment Act 2016**, which came into force in July 2017, allows winemakers to formally register that their wines come from a specific region and as a result possess certain qualities or characteristics. For winemakers, this provides some protection for their wine brands. For consumers, it provides a guarantee with respect to the qualities of a specific wine.

The new **Overseas Investment Amendment Act 2018**, which became effective on the 22 October 2018, expands the definition of what constitutes “sensitive land” to include rights to harvest. This means that foreign investors looking to purchase the rights to harvest grapes on leased land over 5 hectares will be subject to approval from New Zealand’s Overseas Investment Office (OIO). Greater scrutiny could prompt some foreign investors to purchase land outright rather than just the rights to harvest – the opposite of what the Government is looking to achieve from changes to the Act.

The wine industry is also subject to the **Customs and Excise Act 1996**, which governs how much excise duty must be paid on the production of wine in New Zealand. An excise duty equivalent is also levied on wine imported

Summary of competitive forces

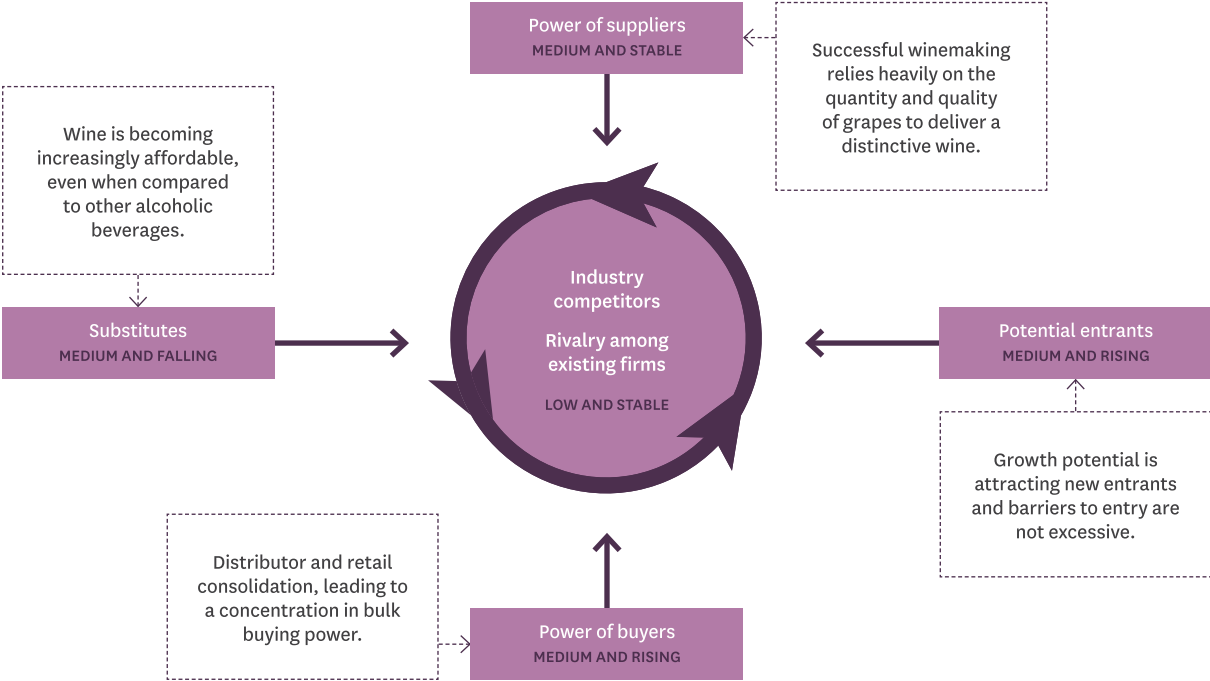
The competitive forces affecting the wine industry are not particularly intense. The key to prosperity lies in the ability to deliver a flavour profile that meets the expectations of consumers at the lowest possible cost. Ongoing marketing creates a market presence that provides winemakers with a customer base and a degree of negotiating power with respect to price setting. However, price setting power really lies with large distributors and retailers that are able to move large volumes through their networks.

Figure 17 summarises the magnitude of the competitive forces shaping the winemaking industry in New Zealand and provides a high level assessment of where they are heading in the future. Specifically it assesses where a competitive force currently has a 'high', 'medium' or 'low' impact on winemakers and whether this impact will be 'rising', 'stable' or 'falling' in the future.

The figure uses a framework developed by Professor Michael E Porter from Harvard Business School. It includes three forces that relate to "horizontal" competition: the threat of substitutes, which in this case refers to the

demand for beer, spirits and ready to drink "alcopops"; competition between winemakers, and the threats posed by new entrants that are attracted to the growth potential of this industry. It also includes two other forces that relate to "vertical" competition, namely the relative negotiating position of those that supply inputs to winemakers, ranging from materials such as grapes, to viticulture and vintner expertise, and the bargaining power of customers, which is underpinned by forces of globalisation, technology, population demographics and relative value gained from consuming wine.

Figure 17: Porter's 5 Forces Framework

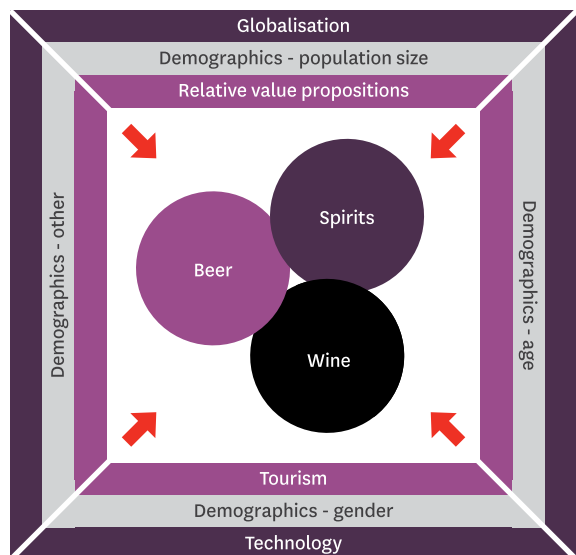


Source: Westpac

Demand side drivers

Wine consumption globally is being driven by a range of factors. These include national boundaries, demographic change, and the value gained from consuming wine relative to other alcoholic beverages.

Figure 18: Summary of Demand Drivers



Source: Westpac

Globalisation & Technology

Globalisation, evidenced by the liberalisation of trade and lower barriers to migration, has resulted in more people having a greater exposure to different cultures, lifestyles and products, including a wider range of alcoholic beverages.

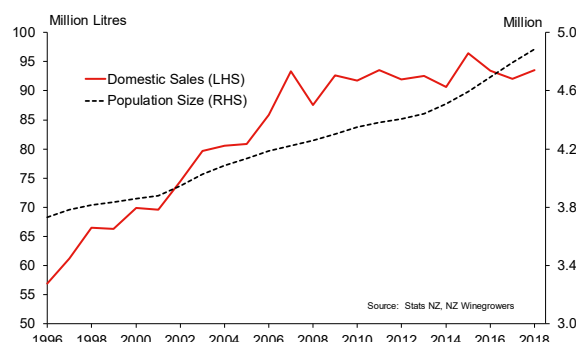
Add to this the growing influence of the internet on purchasing behaviour, and it is perhaps not surprising that customer preferences have shifted, resulting in a convergence in alcohol consumption patterns across national borders. Traditional beer drinking countries, such as the UK, Germany, and Australia, for example, now consume less beer as a percentage of total consumption than they used to, with more people in these countries opting for wine instead. This is also true of New Zealand and to a lesser extent, Canada and the US. Conversely, a number of traditional wine consuming countries, such as Portugal, France, Italy and Argentina have begun to consume less wine, opting instead for either beer or spirits. That's not to say that on an aggregated basis they consume less wine than they did before, it's just that as a percentage of total alcoholic beverage consumption, they consume less. The same applies for predominantly spirit drinking countries in Eastern Europe, Russia, and countries in South East Asia. People in these countries are now consuming proportionately less spirits than they used to and more wine and/or beer.

Population Size

Demand for wine (as well as other alcoholic beverages) is partly a function of how many people there are. However, while an increase in the number of people that might

potentially consume alcohol is likely to support demand for wine, impacts in this regard are evolutionary rather than transformative, providing structural support over an extended period of time.

Figure 19: New Zealand population vs wine sales

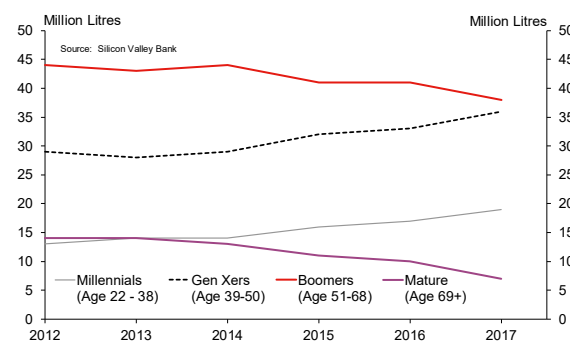


Age Profile

Baby boomers and Gen X tend to consume more wine than other generations. Older people as a group tend to consume less. The same is true of millennials. However, things are beginning to change. Consumption by baby boomers has fallen steadily over the past five years. The opposite is true for both millennials and Gen X, which suggests that these two generations will become increasingly more important target markets for the industry in the future.

Changes in population age profile can also have a significant impact on demand for wine, although again, these tend to be incremental and take place over a long period of time. In the US, people aged 65 and above generally consume less alcohol overall than other age cohorts, but when they do, they mainly opt for wine and beer.

Figure 20: Wine consumption by age group in the US



By contrast, baby boomers, usually the most affluent age cohort in the US (and other developed countries), continue

to be the biggest consumers of wine. As they age, they are more likely to consume less wine, but at a higher price point. As retirement becomes imminent and they have to face the reality of living off a fixed income, the propensity of baby boomers to consume at higher prices diminishes and consumption patterns start to reflect those of the older cohort.

Younger age cohorts such as Gen-x, which have relatively high discretionary incomes, are increasingly becoming wine drinkers and it is likely that they will replace baby boomers as the leading consumers of wines in the near future. Others, such as millennials, have a higher propensity to experiment with alcoholic beverages and in the past have opted for ready to drink “alcopops”, beer (especially craft beer) and spirits. The power of substitutes for this age-cohort has, at least in the past, been significant. However this seems to be changing, with millennials perhaps influenced by targeted advertisements and promotions, beginning to consume more wine.

Gender

Gender is also a driver of demand for wine. There has been an increase in the consumption of alcohol by females, and a slowdown in levels consumed by males. In Australia, for example, there has been decline in alcohol consumption among males over the last five years, from 76.5% to 73.9% of men indicating they are consumers. By contrast, the percentage of women consuming alcohol has increased from 64.1% to 64.8% over the same period. An industry source suggested that these trends are also evident in New Zealand, with just over 70% of females in this country having consumed alcohol in the past year.

Not only are more women drinking alcohol, but most of this is wine. About 60% of wine in New Zealand is consumed by females, with baby boomers and the elderly more likely to opt for this beverage than others. For men, beer reigns supreme in most age groups, except for the elderly who are almost as likely to opt for wine as their female counterparts.

Increased alcohol consumption by females has several implications for the wine industry, ranging from how wine is marketed to what type of wine is produced. Women in general, tend to prefer lighter bodied wines and are more likely to purchase low alcohol and low calorie wines than their male counterparts.

Value Proposition

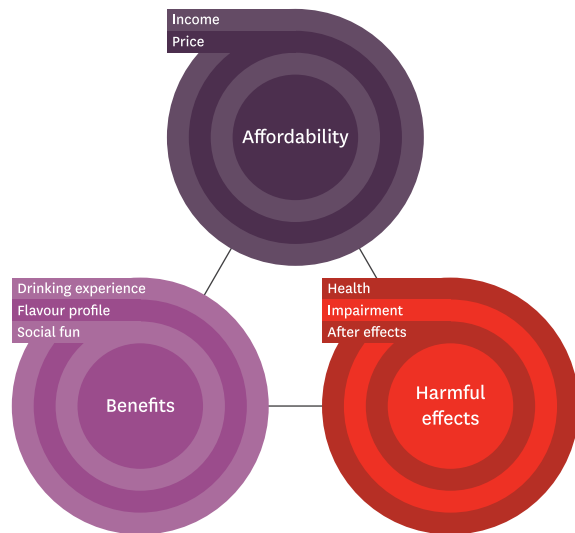
Consumers consider the affordability, harmful effects and the benefits of consuming wine relative to other alcoholic drinks when making their purchasing decisions. Benefits in this regard relate mostly to the taste and enjoyment of consuming wine.

However, despite being more affordable (when measured on a standard drink basis) and less harmful to health than other alcoholic beverages, per capita consumption of wine in New Zealand has trended downwards over a number of years.

This suggests that the taste or flavour profile of wine (and associated enjoyment aspects) has not encouraged more people in New Zealand to drink it. Indeed, New Zealanders

seem to have taken a bigger liking to the taste of spirits. Unlike wine, and for that matter beer, consumption per head of spirits has remained relatively constant in recent years, despite being more expensive and harmful to health.

Figure 21: Value proposition components

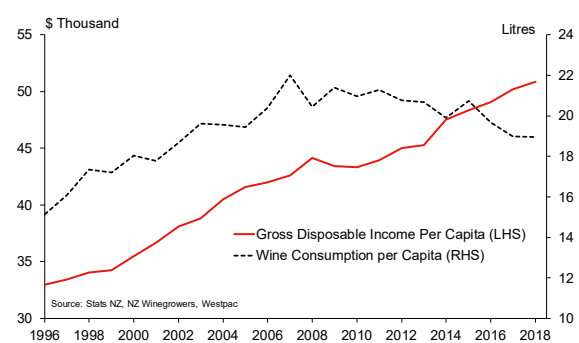


Source: Westpac

Income

Globally there is no relationship between income and wine consumption. Despite growth in per capita disposable income over time, wine consumption in New Zealand has fallen. Less so in the US, where wine consumption continues to outstrip population growth, mainly because of an improvement in the financial circumstances of consumers, supported by a strong labour market and positive wealth effects associated with higher equity and house prices.

Figure 22: Income vs wine consumption in New Zealand

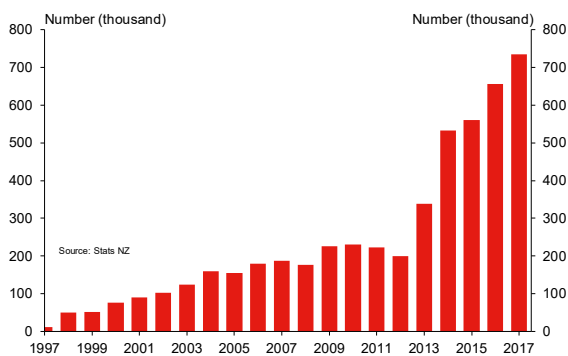


Demand for wine is largely determined by relative benefit cost ratios, which consumers unconsciously calculate when making decisions on the type of alcoholic beverage they choose to consume

Tourism

One factor supporting demand for wine in New Zealand is the rapid growth in tourists looking for a wine experience. Just over 710,000 visitors to New Zealand in 2017 visited wineries, cellar doors (tasting rooms usually linked to the wineries), and/or stayed at vineyard accommodation. Over 210 wineries in New Zealand now offer a wine tasting experience with many offering a range of activities, including tours and accommodation and food services. While visitors mainly came from the UK and the US, most of the growth in tourist numbers since 2012 has been driven by people from China.

Figure 23: Wine experience tourist numbers



Tourism has been noted as a particular growth area and an opportunity for many wineries, especially some of the smaller ones who may have not have access to export markets

Tourism and wine exports can be complementary in many ways, especially when wineries are able to provide tourists with a memorable experience that results in a continued connection to their brands once their visitors have returned home.

Supply side drivers

The volume of wine produced in New Zealand in a given year is a function of climate, the availability of suitable land, processing capacity and the highly developed skills of viticulturists and winemakers.

Climate and Soil Conditions

The quantity, quality and type of grapes varieties produced for winemaking is largely a function of climate and soil conditions in a particular area.

Average local temperatures, daily temperature variations, sun exposure, rainfall levels, and the type of soil in which vines are planted go a long way to determining the type of grape varieties grown in a particular area, and by extension, the type of wine that will be produced. For example, grapes used to produce Pinot Noir, New Zealand's second largest wine by output volume, are typically grown in cooler dryer parts of the country. By contrast, grapes used to produce Sauvignon Blanc are usually grown in warmer, but still dry climates, most notably at the top of the South Island.

Climatic conditions also go a long way to determining the length of time it takes to produce grapes. A temperate maritime climate means that it typically takes longer to produce grapes in New Zealand than in other wine producing countries. More work and care over a longer period of time implies more factor inputs (about 50% of which is labour when management is included), higher production costs, and for winemakers, higher grape prices. Industry sources have suggested that grape prices in New Zealand are considerably higher than in other wine producing countries. Between 40% and 45% of total wine production costs are accounted for by grapes.

While grape growers face a number of environmental issues, from pest and disease to frost, none pose a major threat or are unique to the country

Adverse weather conditions can have a significant impact on grape volumes which in turn can affect wine production. Indeed, in lean years, such as in 2012 and 2015, the volume of grapes produced in most growing regions fell sharply, in part because of lower average spring and summer temperatures.

There is some concern that in the future adverse weather events could become more frequent because of climate change, meaning that the grape harvests could become even less predictable than at present.

In addition to this, climate change could well affect growing conditions over time, meaning that the particular characteristics of the grapes that have underpinned the success of the industry in New Zealand over the past couple of decades might change slowly over time. While this could pose a threat to the industry it could also open up some opportunities, especially considering that other wine producing countries are also likely to be affected by climate change, perhaps even more so than New Zealand. One opportunity might be the chance to grow grapes at lower cost, which would improve the price competitiveness of wines coming out of New Zealand, although they might have a slightly different taste.

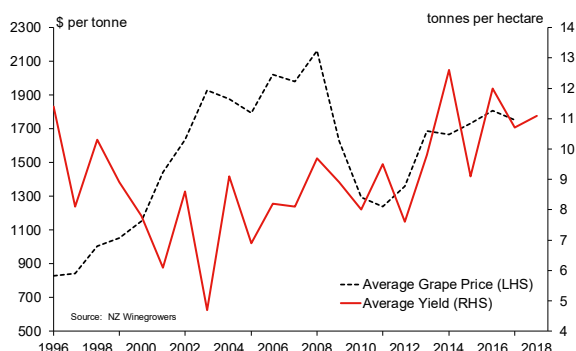
Viticulture Practices

Grape yields (and total production) are also affected by viticulture practices, which might cover how the vines are spaced, the varietal and age of the vines, as well as soil conditions that exist. According to an industry source, grape yields are low in New Zealand because of the relatively small-scale nature of most New Zealand operations.

Low grape yields are sometimes seen as a measure of quality, although industry opinion differs on this. The theory is that when a vine has to concentrate its energy on fewer grapes, those individual grapes tend to be more packed with sugar and thus have more alcohol content (as measured by their Brix level). Some winemakers, especially at high-end boutique wineries, will intentionally slice off bunches of healthy, immature grapes and leave them on the ground, cutting the size of the potential crop, while simultaneously raising the costs of production.

It is common practice in this industry for wineries to specify yield caps when entering into contractual arrangements with grape growers. Effectively these determine the quantity of grapes that they will purchase from individual grape growers on a per hectare basis. If the volume of grapes goes above the cap then the grape grower can either harvest the extra grapes, sell to another winery, or dispose of them. Sometimes the contractual arrangement between a grape grower and winery will cover how to deal with grape production that is in excess of the yield cap.

Figure 24: Grape yields vs grape prices



It is also usual for wineries to establish and agree the quality specifications of the grapes that they are purchasing from their grape growers. If a grape grower (or viticulturist) is not able to meet these specifications, for example because weather conditions have not been suitable, a winery may refuse to take the grapes from the grape grower. Alternatively the winery may take the grapes at a discounted price but produce and market the wine under a different label. Under both scenarios, the risks are borne by the contracted grape grower rather than the winery.

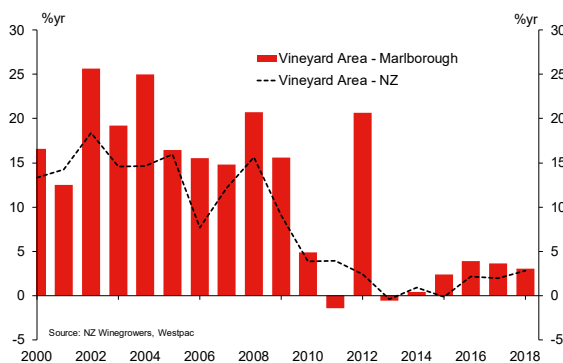
Premium grapes make premium wine and they cost more to grow. Anything done by hand costs more than doing it with machinery

The amount of wine that can be produced from a bunch of grapes also differs, depending on the type of wine being produced, the viticulture practices that have been employed and the winemaking methods that have been used. This can often result in very different unit production costs for wines that on the face of it may seem very similar. This might help explain why prices for different wines derived from Sauvignon Blanc grapes can differ markedly.

Availability of Land

The supply of grapes and therefore wine is ultimately linked to the land that is available for growing them. The price of land reflects demand and supply dynamics. Demand is driven by the returns on investment that can be generated. Supply is a function of land available to support grape production.

Figure 25: Change in vineyard area



Some industry sources suggest that the availability of land in key producing areas in the Marlborough region could be a constraint to growth. They also suggest that grape growers are already moving onto land that is increasingly marginal, often with negative implications for the cost of producing grapes and in some cases the quality of fruit produced. The fear is that this could have knock-on effects for New Zealand's reputation as a premium producer of wines.

Others, however, argue strongly that this characterisation is not entirely accurate. According to one industry source there are about 5,000 hectares in the region that could still be exploited. They also suggest that there is considerable scope within this region to optimise land already used for growing grapes by, for example, reducing the gap between vines and phasing in the replanting of new vines.

Viticulture land prices in New Zealand reflect the growth in demand for grapes from the downstream winemaking industry

Labour

Grape growing is a labour intensive process with most physical work on established vineyards being undertaken by hand.

A viticulturist, who is tasked with maximising grape yields and maintaining grape quality, oversees most of this work, contracting labour when necessary to undertake these tasks. Industry sources have suggested that periodic labour shortages are an issue for grape growers, who are sometimes forced to rely on migrant labour during peak periods.

They also suggest that there have been past instances of labour exploitation by contracting firms. Examples include breaching minimum wage standards, not providing holiday pay and not complying with record keeping requirements. This is particularly so where contracting firms, facing strong competition, have lowered their prices in order to secure work.

Breaching employment standards means that the New Zealand wine industry is exposing itself to reputational damage

A key feature of the industry is that it is dominated by an older generation of winemakers, who are now approaching retirement. While most will hand off their wineries to younger winemakers – typically family members – a number won't and that will offer opportunities for mergers and acquisition activity.

Production Capacity

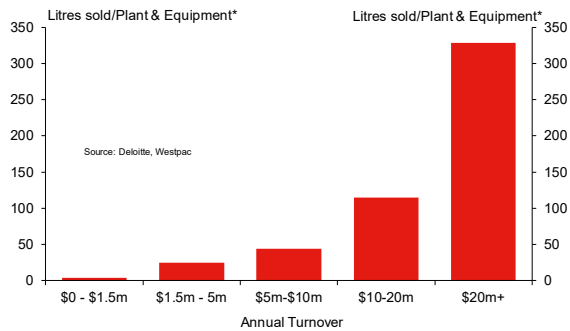
In contrast to vineyards, winery operations tend to be more capital intensive.

Larger wineries tend to be more capital intensive than smaller ones. This is mainly because they need more equipment to produce bigger volumes.

They also produce more wine per unit of capital employed, reaffirming the idea that larger wineries are able to generate economies of scale by moving large volumes over a fixed cost structure. Investment made in capital equipment also enables wineries to alter production at short notice.

This industry has a very long cashflow cycle and high fixed costs

Figure 26: Capital intensity of wineries

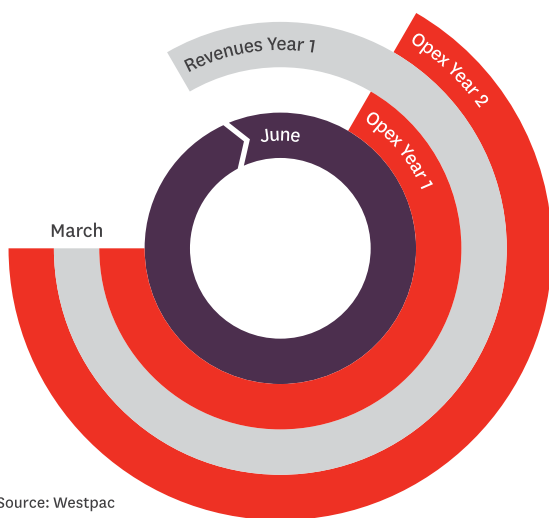


*Expressed as litres of wine sold divided by the ratio of plant and equipment to total assets

Cashflow Cycle

Wineries, especially smaller operations, are often cashflow dependent and rely heavily on revenues generated from the previous season's harvest to fund operational expenditure in the following year. Should those revenues fall, say because the available harvest was smaller than anticipated, wineries can find themselves in a situation where they are not able to fund the following year's operational expenditure, negatively impacting on their ability to produce wine. Such firms become targets for mergers and acquisition activity, especially for larger players looking to add to their wine portfolios.

Figure 27: Expenditure vs cash flow



Industry rivalry

The industry is developing in two distinct areas. One is dominated by large winemakers, increasingly owned by foreign multinationals, who push volume. The other is characterised by a large number of small producers who realise they can't compete on volume, but rather on the distinctiveness of their product offering.

National

One of the strengths of the New Zealand's wine industry is its unified approach to promoting the New Zealand brand, which helps to re-affirm the country's reputation as a producer of exceptional "new world" wines. Reputation is a key asset which all wine producers in New Zealand that target the export market leverage off.

Horizontal competition

Wineries compete by differentiating their product rather than taking each other on head to head. For the most part this is because there are literally thousands of wines from many different countries and regions catering to a wide range of tastes and preferences in key export markets.

Wineries operate along a spectrum. At the one end of the spectrum there are a large number of small boutique winemakers that produce limited volumes. They trade off the exclusivity of their product, focusing on taste, experience, and packaging rather than on price. They also place heavy emphasis on the "hands-on" nature of their business and how intimately involved they are in the wine production process.

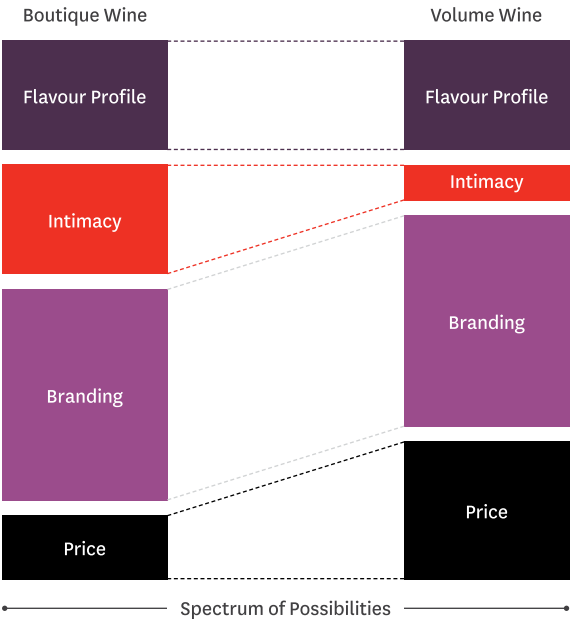
characteristics of the wine they produce. However, unlike their smaller counterparts, large winemakers are not able to trade off how intimately they are involved in the production of their wines, mainly because they are volume producers.

Large winemakers are also more price sensitive than their boutique wine producing counterparts. They rely heavily on being able to reduce unit costs of production through economies of scale as well as their ability to negotiate favourable terms with distributors and/or retailers that market their product.

However this is only part of the story. A number of these large volume producers also produce boutique wines on a limited volume basis and as such compete very much on the same basis as their smaller counterparts.

Most large volume producing wineries in New Zealand also produce boutique wines

Figure 28: Basis of competition - wineries



Source: Westpac

At the other end of the spectrum are a relatively small number of large winemakers that produce significant volumes across a range of different labels. Like boutique winemakers, they also compete on the particular

in between there are a number of wineries that produce limited volumes when compared to their larger counterparts, but are not boutique wine producers. Despite lacking scale they compete very much on the same basis as larger wineries.

Boutique and volume wine producers both rely on marketing and branding to differentiate their product offerings from others in the market. Indeed, successful marketing is probably the key force driving wine production of any significant scale. Without it, there are no sales, and by extension, no production.

Marketing efforts primarily focus on the flavour profile of wine and where it comes from. Awards received at judging events also help to differentiate a particular wine from its competition. So too innovations like screw on caps instead of cork, packaging (cellar casks and cans), low calorie and low alcohol wines.

Marketing efforts might also try to differentiate a particular wine on how it was produced. Sustainability credentials, and whether or not a wine has been organically produced, are becoming increasingly important points of distinction. Other environmental achievements, such as carbon neutral certification are also being incorporated within winery promotions.

About 10% of New Zealand's winemakers market organically certified wines

Interdependencies

There is a co-dependency between winemakers and grape growers in New Zealand.

Grape growers can only really sell their product to local winemakers. Wineries and vineyards are often located close to each other to minimise transportation costs and maximise the freshness of harvested grapes. Grapes have a very limited window of value: the fruit is at optimum ripeness for 24 hours, after which its value drops precipitously. Grapes grown for wine production are also not suitable for consumption as a table grape – they tend to have thicker skins and larger seeds, are usually a lot smaller and have concentrated flavours. Because of this, wine grape growers find it difficult to sell to other processors.

Similarly, winemakers depend heavily on their local grape growers. For those that focus on exports, this is because locally produced grapes deliver distinctive wines that have been well received in offshore markets. For those winemakers that focus on the domestic market, this dependency largely reflects established relationships developed over many generations.

Unfortunately though, locally produced grapes are more expensive than those in other countries, mainly because it takes longer for them to grow in our cooler climate. For winemakers, a high dependency implies higher input costs, a lack of price competitiveness and potentially squeezed profit margins.

The dependence of the winemaking industry on local grape growers means that New Zealand wines compete in export markets at the premium end of the market

Winemakers have responded in a number of ways.

Some have done nothing. A large number of these are boutique winemakers that produce small volumes of wine, marketed and packaged as premium products, often through cellar doors/tasting room sales. They compete on exclusivity rather than price and as such are less sensitive to the higher cost of locally produced grapes.

Other firms have gone the acquisition route, purchasing their own grape growing operations, and then vertically

integrating them into their existing organisational structures to create operational synergies and cost savings.

Some firms, who may already have their own grape growing operations but still need to source grapes from independent grape growers, have opted to use their bulk buying power to extract favourable contractual conditions (relating to cost, quantity, quality and timeliness of delivery) from their grape suppliers. An industry source has indicated that there have been instances in the past where some of the larger wine firms have used their negotiating power to the detriment of grape growers, resulting in a number going out of business.

Then there are others, who have attempted to get around higher domestic grape costs by importing cheaper grapes, primarily from Australia, much to the irritation of local grape producers.

Some of these grapes have been included in wines designated for exports. However there are limits to this and strict country of origin and labelling rules apply when trying to market this wine as a product of New Zealand.

Country of origin rules specify that a minimum of 85% of grape content in wine must come from the region where it is produced. The remaining 15% can be imported from another country. This practice is common in New Zealand and in other countries, especially in large volume producing wineries. Countries of origin must be specified on the wine label that is affixed to the wine bottle. An industry source has suggested that some winemakers will include New Zealand as the source country on the front label on a bottle of wine and then put the country's name from where grapes were imported on the back label.

Most of these imported grapes have been used to produce wine destined for the domestic market. To a large extent, this reflects the bulk buying power of the large retail chains operating in New Zealand. Heavily discounted prices for wine at a retail level means that it is often difficult for local wine producers to make a profit producing wines from more expensive locally produced grapes. They can, however, make a profit using cheaper grapes from abroad. Of course, using imported grapes is not without risk, especially when the New Zealand dollar weakens. And even when conditions are good, margins are often wafer thin as wine producers still have to pay retailers for shelf space. An industry source suggests that for every \$100 of product produced, as much as \$30 to \$40 is spent on shelf space.

The power of the retailers raises a question mark over the viability of the local market for larger wineries

Research & Development

The wine industry and related associations are heavily involved in research projects aimed primarily at reducing

the high costs of producing grapes and improving the profitability of the industry. Focus areas include ensuring the authenticity and distinctive taste of wines produced in New Zealand, the development of high quality low alcohol and low calorie wines to meet the growing demands of a more health conscious consumer, grape genetic improvements, enhancing the international competitiveness of viticulture practices including sustainability and organics, and improving the longevity of vineyards in New Zealand with specific attention being paid to pests and diseases.

New Zealand's wine industry is continually developing fresh new ideas to make better wine using technology

Distribution Channels

Having access to distribution channels is critical to success in both domestic and export markets. One of the catchphrases in the wine industry is that it's easy to grow grapes and make wine, but it's really hard to sell it. This is especially true given the myriad of competing products, some of which are other beverages.

A distributor is an intermediary that operates between the winemaker and other entities in the supply chain. These entities typically include retailers such as supermarket and liquor outlets as well as hospitality providers, such as hotels and restaurants. The value they offer to winemakers is access to retail networks. Some of the larger winemakers in New Zealand operate their own extensive distribution networks. They might also have direct access to particular retailers, having developed relationships over a long period of time.

Distributors are much more likely to include a particular wine within their portfolios if the quantities involved are large enough to generate economies of scale in distribution, which enables them to compete effectively with other distributors (that are distributing other wines) for retail shelf space.

Powerful distribution networks enable local wineries to maintain shelf-space and brand awareness in new and existing export markets

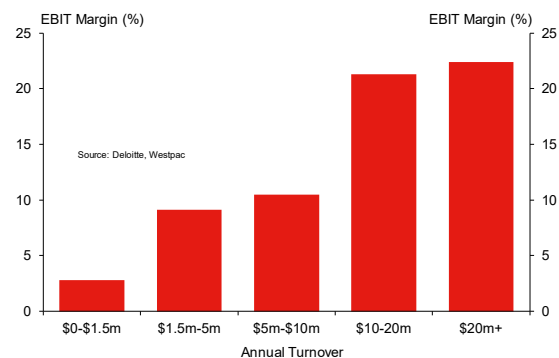
This does not mean that small volume wine producers cannot access distribution channels. Indeed, distributors will still include a particular wine in their portfolios if it is

well known and as such is more likely to find favour with end consumers. Distributors also know their wines and employ experienced wine buyers or sommeliers to select wines that they think will be accepted by customers.

However, it is more difficult for them. Establishing a market presence is really hard work. Indeed, it takes many years to develop and nurture a brand, with wine firms often having to spend large amounts on advertising and promotional activities over an extended period of time. Advertising in print, electronic and online media is standard fare. So too, reviews that highlight a wine's particular characteristics, wine fairs, exhibitions and celebrity endorsements. Receiving awards at wine tasting competitions is also important, although these are highly subjective. Nevertheless, the awarding of badges provides a seal of approval which can attract sales and higher prices.

Because of the scale of the investment required, it is often more difficult for smaller firms to access cost-competitive distribution channels. This, together with the fact that they lack economies of scale, is likely to be a key reason why smaller wineries are often far less profitable than their larger counterparts, despite generating more than double the revenue per litre sold. A lack of profitability among smaller players could encourage mergers and acquisition activity in the future as larger winemakers look to employ the assets and technical know-how of smaller firms more profitably.

Figure 29: Profit margin by winery size



Finding distributors who are willing to give the products of smaller wineries a position in their portfolios remains a big challenge for the industry

Having established brands can also attract investment by major global wine and beverage firms. In New Zealand, as in other countries, this investment has proved to be profitable for both the investor and wineries alike. The investor has usually benefited from the premium prices that New Zealand winemakers have been able to achieve in offshore markets. For their part, local wineries have benefited from the extensive

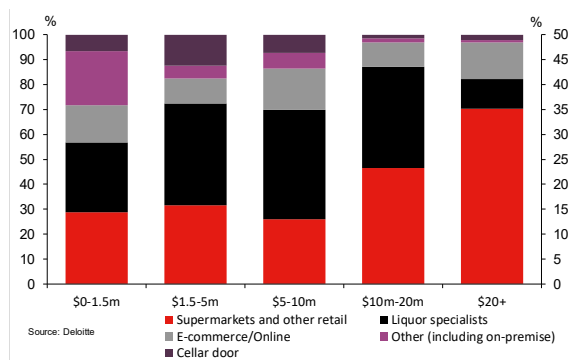
distribution networks of these multinational companies. In short, foreign investment has helped local companies grow into major players in the wine market.

The situation is slightly different in the US where a three tier distribution channel exists. The three tiers are importers, distributors, and retailers. The basic structure of the system is that winemakers in New Zealand can only sell their products to importers who then sell to distributors who then on sell to retailers, and then to consumers. An industry source suggested that in order to exploit opportunities, New Zealand winemakers will typically notify retailers operating in the US that they are selling their wine through a particular importer/distributor combination.

The domestic distribution channel is equally diverse. Although dominated by retail supermarkets, it would also include liquor stores, hospitality or direct to public sales through cellar doors (or wine tasting rooms) and online channels.

However, which distribution channels are used in the domestic market differs depending on the size of the winery. A 2017 survey undertaken by Deloitte shows that about 70% of the wine sold locally by larger wineries was sold to supermarkets. However, for smaller wineries this figure was closer to 30%, with far more going to the hospitality industry and directly through cellar doors.

Figure 30: Distribution channel by winery size

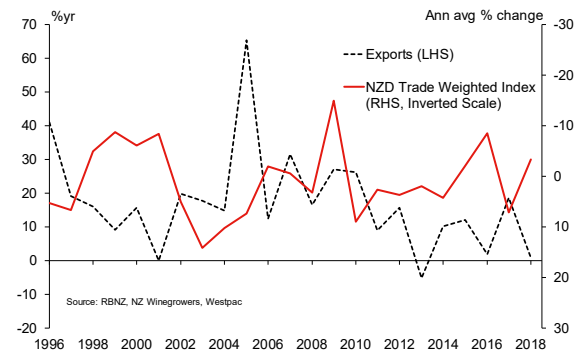


Limited access to distribution channels as well as higher input costs is placing pressure on the profitability of smaller wineries

Exchange Rates

Exchange rates are a major factor driving profitability in the industry. Given that most wine produced in New Zealand is exported, changes in the value of the New Zealand dollar can have an impact on off-the shelf prices in export markets. A weaker New Zealand dollar provides firms with the flexibility to reduce their prices but still maintain margin, thus making them more competitive in key export markets.

Figure 31: Exchange rate vs wine exports



The opposite is true when the New Zealand dollar is strong. Under such circumstances, winemakers would look to increase prices in export markets to maintain profitability. Whether they can do so depends on the strength of the relative negotiating positions of winemakers and distributors. In most cases, negotiating power will lie with the distributor because they have access to the retail network. This means that when the currency strengthens, winemakers will have to compensate for lower revenues by cutting costs. Given the long cash cycles facing this industry, failure to do so means that they will go out of business.

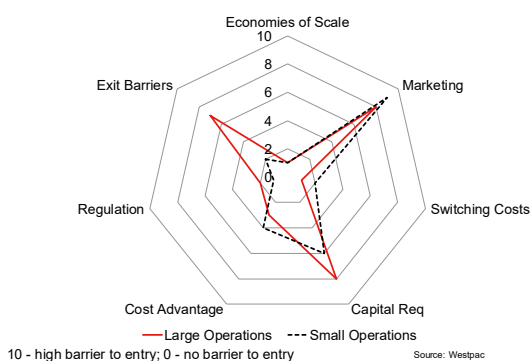
Offshore price points for wine are impacted by exchange rates

Potential entrants

Barriers to entry in the winemaking industry are of medium magnitude, but are rising. They are of a medium magnitude because the capital and skills requirements associated with grape and wine production can be significant, but not prohibitively so. They are rising because consolidation in downstream distribution is making it more difficult for some wine producers to gain access into key export markets.

The ease with which firms are able to enter is whether they are able to generate **cost advantages through economies of scale**. The theory goes that having economies of scale reduces the unit cost of producing and distributing wine thus enabling an incumbent firm to charge a lower price than a new entrant that might not enjoy this advantage.

Figure 32: Assessment of barriers to entry



However, this is only true to the extent that products from different firms are homogenous and directly comparable with each other. This is not the case with wine. Differences in production techniques, flavour profiles and other wine characteristics means that price points can differ quite markedly, even for wines of the same variety. Furthermore, the industry is already characterised by a large number of small boutique wineries attached to small vineyards, who do not enjoy cost advantages through economies of scale.

The second relates to **marketing and brand loyalty**. Existing winemakers have invested heavily in marketing and promotional activity over a long period of time to generate market presence and attract the attention of distributors and retailers. New entrants would have to invest heavily in their product over a period of time just to get noticed and even then access to distribution networks is not guaranteed.

The third is **switching costs**. If the costs faced by customers to switch between different wines is high, new entrants may find it more difficult to compete. However, switching costs in this industry are very low, with consumers able to easily purchase wines made by other winemakers when they go to the supermarket or liquor retailer. They could even buy substitute products, such as beer and spirits. Having said that, wine marketers typically focus on creating a “love bite” effect when marketing wine,

which encourages consumers to make repeat purchases of the same wine, effectively creating a small switching cost.

Capital requirements are also a barrier to entry, although they differ depending on the size, complexity and maturity of the operation. As a general rule, the capital requirements for larger vineyards and wineries are significantly higher than for smaller ones. However, even smaller vineyards and wineries can be expensive, especially when starting off afresh. Vines, for example, can take up to 4 years to get to the point where they produce fruit, which is a long time for no reward.

But it’s not just the physical assets where capital investment is required. Investment in marketing and distributing wine requires significant capital outlay, especially for wineries that focus on the export market.

Costs advantages that are independent of scale are a low barrier to entry for this industry. That said, there may be some cost advantages for established wineries that have long standing relationships with vineyards. There may even be cost advantages associated with existing wineries being in close proximity to vineyards, but these are unlikely to be real barrier for new entrants.

The **legislative environment** can also be a barrier to entry especially if it significantly raises the costs of production. In New Zealand, legislative controls, which generally focus on aspects such as grape/wine safety and being able to prove source of origin for factor inputs, are not particularly restrictive or burdensome. Levies on production are low and unlikely to act as a barrier to entry.

Barriers to exit for this industry differ depending on the size of wine firm and the activities that they might be involved in. For smaller firms, the costs of exiting the industry are relatively small, even for family owned business that might have been operating for a while. However, for larger firms, especially those that have an established reputation abroad, pulling out of a fast growing New Zealand industry could have severe reputational repercussions.

Critical success factors

Irrespective of whether a winemaker produces a limited number of boutique wines or is a volume producer of many different wines, there are number of common factors that collectively determine success in this industry.

Figure 33: Critical success factors



Source: Westpac

The first of these success factors is having access to the required quantity and quality of factor inputs. This would include labour (skilled, semi- and unskilled) as well as plant and equipment for processing grapes into wine.

It would also include having access to the required quantity of grapes, either directly through ownership and/or leasing of land or indirectly by contractual arrangement. The grape varietal produced must also have the characteristics that result in wine that has a flavour profile that meets the expectations of downstream consumers. In this regard, the working relationship between the grape grower and winemaker is key.

The second relates to internal capability, or the ability to optimise the combination of factor inputs to deliver a given volume of output at lowest possible cost. While economies of scale might not apply for low volume boutique winemakers, minimising costs of production for a given level of output is still an important determinant of profitability. The ability to analyse and manage costs by optimising logistics, work organisation methods, factory layouts, and minimising distances between vineyards and wineries are key considerations.

Successful winemakers and grape growers also need to be entrepreneurial and adaptable to changing market conditions. Customer preferences change, not only in terms of their consumption habits, but how they purchase wine. These preferences are also changing at a faster pace than before, mainly because of increased use of the internet

and greater social networking. Winemakers must not only understand and respond to these changes, but proactively anticipate them, introducing new innovations, as well as cannibalising and even replacing existing product offerings to ensure they remain relevant to the consumer.

Included within internal capability is the ability of grape growers and winemakers to handle stress. Vulnerable to uncontrollable factors, such as the weather and downstream market conditions, people working within this industry operate in a highly uncertain environment. An industry source has suggested, much like in other primary industries, mental health issues are prevalent, particularly in grape growing where cashflow cycles are often long and the weather can play such a significant role in success or failure of a venture.

The fourth critical success factor focuses on being able to access customers. To succeed, winemakers in New Zealand need to be able to differentiate their product offering through heavy investment in marketing and promotion over an extended period of time. Establishing a market presence through effective marketing and brand management is more likely to catch the attention of distributors looking to add wines to their portfolios that are more likely to find favour with customers. Understanding how to sell wine directly to consumers, effectively reducing the number of intermediaries between production and consumption is becoming more important. This is particularly true for smaller wineries that often struggle to gain access to distributors in overseas markets.

The final critical success factor relates to having a clear vision of the markets being targeted and aligning the other critical success factors to exploit any opportunities that exist. For New Zealand producers with high input costs, focusing on niche markets which are willing to pay premium prices, is a successful strategy.

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