

2017 WINE INDUSTRY

FINANCIAL BENCHMARKING REPORT









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Productivity

Sales and Marketing

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Introduction

FOREWORD

Moss Adams Releases Wine Industry Financial Benchmarking Report to Assist Businesses Impacted by COVID-19

The pandemic has forced companies to adapt to a new normal and assess their immediate cash flow and liquidity needs to support their business and retain their workforce.

For many, this meant reforecasting and exploring other ways to generate cash, including special sales and shifting sales channel strategies, collecting receivables, and securing financing. Companies also considered outting nonessential capital expenditures and operating expenses.

Fortunately, vineyards and wineries are classified as essential businesses, allowing for continued farming and winemaking operations, albeit with new protocols to promote social distancing and worker safety.

As businesses continue to navigate the changing landscape brought by the pandemic, we explore the major impacts on the industry as well as factors to consider as businesses look toward recovery.

WINE INDUSTRY IMPACTS

Accessing Financing

The **Coronavirus Aid, Relief, and Economic Security (CARES) Act**, passed on March 25, 2020, provided wineries access to an array of new financing options.

While the Paycheck Protection Program (PPP) has been the most popular of the CARES Act's programs, wineries also explored other financing options. These included the Economic Injury Disaster Loans (EIDLs), Main Street Lending Program, new payroll tax credits and payment deferrals, and favorable tax law changes that could allow companies to request quick refunds of previously paid income taxes.

Digital Transition

Digital and mobile technologies proved to be a lifeline for businesses, families, and communities as many adapted to remote setups. Businesses geared up to sell wine online and maintain communication with employees, suppliers, vendors, and customers. Many wineries began employing new social media platforms and technologies as well as utilizing telesales to reach customers. Wineries also started hosting virtual wine tastings and other events through YouTube videos, Zoom, and other virtual meeting platforms to connect with current and prospective customers in new ways.

Tough Decisions

Many businesses faced difficult decisions while weighing which business functions to maintain, furlough, or release.

In many cases, owners, management, and staff shared the economic hardships by taking compensations reductions to help companies.

Tasting room and hospitality functions were hit especially hard as visitor traffic paused during shutdowns and various phased re-openings. To pivot and reallocate staff, many wineries decided tasting room staff would make sales calls to their existing customers rather than proceeding with lay-offs. Innovation has been key to keeping teams intact and productive. Social distancing is now a consideration in the design, flow, and function of hospitality, production, and distribution facilities.

Tentative Sales Surge

As customers stocked their pantries to prepare for the pandemic, wine sales surged in off-premise locations, such as grocery and specialty retailers, membership-only warehouse clubs, and online retail channels.

Even as off-premise retail wine sales in the United States soared in early 2020, most wineries anticipate significant reductions in sales through the remainder of the year. The wines in greatest demand during this pantry-stocking stage were value wines rather than high-priced luxury wines. It's yet to be determined if that trend will continue.

Excess Grape Supply

Even before the March 2020 shelter-in-place orders, the wine and grape supply in California, Oregon, and Washington was in an excess position. The economic uncertainty created by the pandemic further slowed normal sales activity in the bulk wine and grape markets.

In June, however, grape and bulk wine sales activity picked up, encouraged by the rise in online and off-premise wine sales and the need for wineries to make room for the incoming 2020 harvest.

In 2019, most larger wineries were in an oversupply position, which caused some traditional buyers to become sellers. Since early 2019, wineries and growers made difficult choices to right-size inventories by:

- Realigning their cost of goods
- Removing or redeveloping acres
- Increasing sales through innovation
- Releasing new brands at lower price points or as private label wines

These business practices helped improve the oversupply situation, such that most of the large bulk wine sellers were in a more balanced market position in Q1 2020 compared to 2019, especially for those selling value-priced wine.

Following the closure of on-premise tasting rooms, markets for grapes and bulk wine slowed as buyers reevaluated needs. However, during the transition to the spring and summer of 2020, activity increased as prices for grapes and bulk wine lowered to move supply before the 2020 harvest.

How the market for grapes and wines evolve, and how fast businesses move from the excess phase of the cycle, will hinge on a few key points, including:

- The duration of off-premise retail sales growth and on-premise closures
- The ability of direct-to-consumer (DTC) and off-premise sales growth to capture enough supply to avoid a prolonged excess market

Hopefully the COVID-19 pandemic is under control by year-end 2020, but each individual company will be affected to a varying degree based on their region, size, varietals, and sales channel-mix.

LOOKING FORWARD

In the haze of economic uncertainty spurred by the pandemic, many wine industry business owners and executives are searching for ways to measure their business' performance, gauge progress, and identify areas to improve efficiencies or leverage opportunities.

As businesses face major decisions in this challenging environment, many grapple with questions such as:

- How is our winery performing compared to similar operations?
- How many people should we have on our staff?
- Are our profit margins and cost-of-goods-sold competitive?
- Is our sales channel mix right?

Working through these questions, the Wine Industry Financial Benchmarking Survey that we conduct—most recently in 2017 collecting 2016 financial data—contains information and benchmark metrics that remain relevant to owners and executives facing tough decisions.

For this reason, we've released our 2017 Wine Industry Financial Benchmarking Report[®] to the general public. Until now, this report was only available exclusively to survey participants and those who purchased the report.

With wine industry clients across the United States, including in California, Washington, Oregon, and Texas, we're committed to helping wine industry business owners move forward. Whether your business is a start-up, in growth mode, or succession mode—we're here to help you come out stronger on the other side of this pandemic.

2017 SURVEY INSIGHTS

We're pleased to present our 2017 Wine Industry Financial Benchmarking Report[®]. Moss Adams, Turrentine Brokerage, American AgCredit, and Heffernan Insurance Brokers are committed to continuing to provide insightful information. We view this report as an opportunity to deliver comparative and qualitative information that can be used to improve your business and strengthen operations.

Financial Performance

Overall, winery financial performance has improved since the 2013 survey, which focused on 2012 financial data, largely due to gradual improvements in the economy.

Prices and Production

Wineries are looking to increase wine prices and production volumes. And most are maintaining discounts and sales support at their current, relatively high levels.

LABOR SHORTAGE

A growing labor shortage is driving up labor cost and fueling an increase in automation and mechanization at both vineyards and wineries.

DISTRIBUTION

While three-tier distribution is the dominant sales channel across all winery groupings, most see the direct-to-consumer (DTC) sales channel as serving an increasingly significant and important role.

FIG. 1

Highly negative Grape/bulk wine supply 27% 50% 5% Moderately negative Production costs 45% 41% 6% Neutral 23% Direct-to-consumer 2% 47 289 Moderately beneficial Off-premises sales 3% 22% 35% 35% 5% Highly beneficial On-premises sales 32% 2% 16% 42% 8% Price erosion/margin compression 49% 9% 36% 6%

40%

50%

60%

70%

80%

90% 100%

IMPACT OF GENERAL ECONOMIC CONDITIONS IN 2016

10%

20%

30%

The majority of wineries in our survey ranked DTC as their top priority and emphasis for 2017 and beyond.

SALES AND MARKETING

Reflecting the challenges of selling wine in the hypercompetitive US market, wineries ranked increasing their sales and marketing budgets as the top two components of their strategy over the next three years. In our 2013 report, there was more emphasis on mergers and acquisitions, which respondents now rank as a much lower priority. Continuous fruit supply is still of high importance.

As shown in the table below, respondents indicated that general economic conditions in 2016 were highly beneficial to DTC sales and also moderately beneficial to on-premise sales. Conversely, conditions driving increases in wine production costs had a negative impact, which increased the potential for price erosion and margin compression.

We intend for the survey and report to be by the wine industry for the wine industry. In an industry where true financial benchmarking data is rare, there's incredible value in these numbers, which allow you to benchmark how your own business is doing compared with others in the industry.

The continuing success of this effort depends on increased participation by wine businesses in California, Oregon, and Washington. The greater the participation, the better and more useful the results are for everyone. We welcome your comments and suggestions at wine@mossadams.com.

ACKNOWLEDGMENTS

To prepare the survey and accompanying report, we consulted a number of wine industry professionals for their advice and counsel. In addition, team members from Moss Adams, Turrentine Brokerage, American AgCredit, and Heffernan Insurance provided their time and insights to assemble the final report.

A special thanks to:

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We would also like to acknowledge and thank all of those who completed the survey. We understand the time commitment involved in assembling and providing the sensitive information that enables the production of this report.

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OVERVIEW

Credible wine industry financial benchmarking data is scarce, which makes it a struggle for owners and managers to compare their business performance against their peers. While the industry consistently seeks more data, it's also difficult to find because most wine businesses are privately held.

To help bridge this information gap, Moss Adams has published industry financial information every four years since 2009 with relevant and comparable trends and data for wineries, grape growers, and producers. It provides benchmarks to help explore important questions about the performance of individual businesses as well as a high-level view of the industry.

The survey was conducted online between April 1, 2017, and June 15, 2017, with 79 respondents. Of the respondents, 62 were integrated wineries and growers, and 17 were producers and negociants primarily located throughout California, Oregon, and Washington. A total of 66 respondents produced wine (integrated wineries, producers, and negociants).

Operating and financial data was generally collected for the 2016 calendar year. Winery participants ranged in size from those that produce less than 5,000 cases to those with more than 700,000 in annual case sales volume, with an average of 79,000 cases. Participant average revenue per case varied from a low of \$69 to a high of \$795, with an average of \$222 per case—compared with \$176 in our 2013 report.

The Data

The operating criteria used to classify participants into meaningful groups included the following:

- Business model
- Annual case sales volume
- Average price per case

For quantitative measures, such as case sales and price, categories were defined based on the raw data after the survey was completed, balancing the natural breaks in the data with the need to maintain a reasonably even distribution of respondents across categories for statistical validity and confidentiality.

Financial data collected in the survey included summary balance sheet and income statement data. This information was used to calculate efficiency ratios, such as sales to inventory, and important performance measures, such as return on assets.

To maximize comparability across the participant population, gross margin was used as the primary measure of business profitability. Net income was also analyzed, although net income is impacted by some nonoperating factors, including discretionary general and administrative expenses, other income and expense, debt service, and income taxes.

This report provides common-size financial statements based on case volume, average price per case, and winery business models. Unless otherwise noted, average performance measures are used in the analysis.

Throughout the report, comparisons are made to the 2009 and 2013 surveys that were published based primarily on 2008 and 2012 data. Please note that only general comparisons are made between the data reported in past reports to the 2017 report. While the majority of the 2017 questions and responses are similar to those past surveys, the data sets and participant pools are unique to each period and aren't exactly correlated for full comparison purposes.



WINERIES

10

15

Location—Geographic Region

Type-Business Model

Size—Case Sales Volume Categories

Revenue—Price per Case Categories

Varietal Focus

GROWERS

Grower Locations

Grower Regions

Bearing Acreage by Varietals

Farming Practices

Farming Costs

SECTION ONE

Survey Participant Profile

Data supporting the results in this report was provided by 79 participants with wine businesses predominantly in California but also spanning Oregon and Washington. In addition to the West Coast, there were a handful of other participants from Colorado, Indiana, North Carolina, Arizona, Michigan, and Canada.

WINERIES

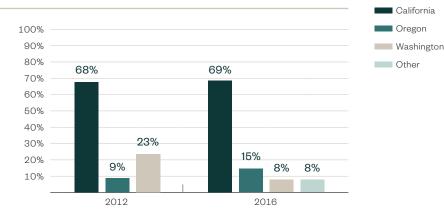
Winery participants ranged in size from those that produce less than 5,000 cases to those with over 700,000 in annual case sales.

Location—Geographic Region

For wine participants by region, we looked at the region that the grapes were sourced from. In addition to asking where wineries were geographically located, we asked where participants sourced their grapes and bulk wine.

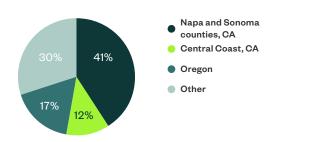
To be considered a grape source region, we used this threshold: at least 75% of the wine grapes and wine bottled needed to come from that region. Because a significant number of the Napa and Sonoma wineries bought grapes from both counties, they are shown as one combined grape source region. Combined, Sonoma and Napa counties made up 41% of respondents.





The majority of respondents by state—69%—are located in California, which is similar to previous surveys. Oregon had better representation this year at 15% of respondents, and Washington and other states contributed 8% each.





Winery Size by Region

The average winery participant's size based on cases sold, was largest in the Central Coast followed by Napa and Sonoma counties.

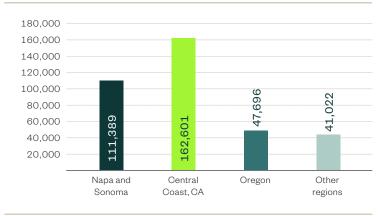


FIG. 4 AVERAGE WINERY SIZE (CASES SOLD) BY REGION (75% THRESHOLD)

Type—Business Model

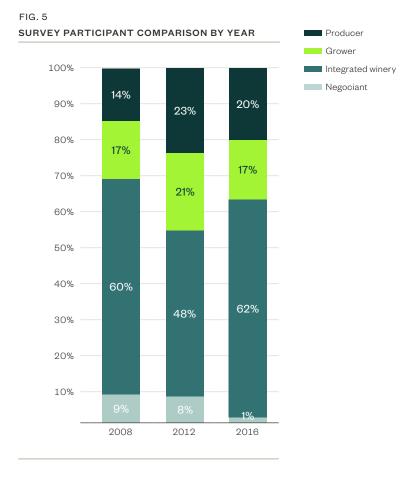
Respondents spanned four main business models:

- Producer—a winery that doesn't own any vineyards
- Grower—winegrape grower
- Integrated winery—a winery that owns vineyards and may also buy grapes
- Negociant—a wine brand without its own winery facility, also known as a virtual winery

In this survey, integrated wineries made up 62% of the respondents, followed by producers (20%), growers (17%), and negociants (1%). While the small number of negociant respondents are identified here, they've been grouped with producers throughout the report and in the analysis because no significant difference was observed in their responses. There also wasn't a significant difference between integrated wineries and producers, although integrated wineries were slightly more profitable than producers and negociants.

As shown in the following figure, the business model participant pool for this survey was very different compared with those from past surveys because the negociant participation percentage shrank significantly. In addition, the integrated winery participants increased by over 13 percentage points from the 2013 survey.

While the results reflect the pool of respondents—mostly higher-end, integrated wineries from the North Coast of California—that doesn't negate the strength of the report's information. It's still very much relevant and useful to the industry as a whole, particularly when considered in the context of previous surveys.

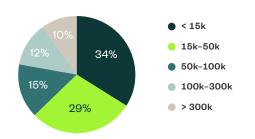


Size—Case Sales Volume Categories

We grouped wineries into five size categories according to natural breaks in the volume of cases sold in 2016. The categories are less than 15,000 cases, 15,000 up to 50,000, 50,000 up to 100,000, 100,000 up to 300,000, and more than 300,000.

Of the 58 winery respondents, which include integrated wineries, producers, and negociants that reported cases sold, 75% sold fewer than 86,000 cases per year. The overall spectrum of respondents ranged from less than 5,000 cases sold to 713,000 cases sold annually.

FIG. 6 COMPOSITION OF RESPONDENTS BY CASE SALES VOLUME CATEGORIES—2016 VINTAGE



Revenue—Price per Case Categories

For the analysis of price points, the winery data was divided into four categories around the natural breaks of up to \$150 per case, \$150 up to \$200, \$200 up to \$350, and greater than \$350 per case. Below is the breakout by region for average case price. Notably, the average case price in Napa and Sonoma counties was \$263, Oregon's was \$196, and California's Central Coast averaged \$167.

FIG. 7 AVERAGE CASE PRICE BY REGION OF PRODUCTION ORIGIN—2016 VINTAGE

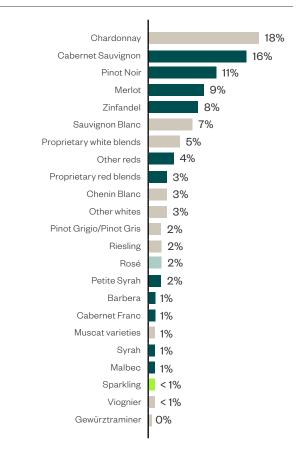


Varietal Focus

Wineries were asked to report the number of cases sold by varietal. To assess the total case sales breakdown by varietal, the median of case sales for each varietal was calculated, then the portion of that median amount to the grand total of the medians was calculated.

Given the current state of the industry, it's believed the survey respondents provided an accurate portrayal of the overall industry. Chardonnay represented the greatest proportion of all cases sold with 18% of all case sales, followed by Cabernet Sauvignon at 16%, Pinot Noir at 11%, Merlot at 9%, and Zinfandel at 8%.





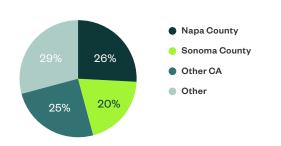


GROWERS

Grower Locations

Among the 62 respondents that identified as growers or integrated wineries with farming operations, Napa County was the region most represented with 26% of participants. Sonoma County followed at 20%. Twenty-five percent of respondents reported "other California regions" as their primary grape source, while 29% of respondents reported "regions outside of California" as their primary grape source.

FIG. 9 PARTICIPANT'S GROWING REGION-2016 VINTAGE



Grower Regions

This next figure shows tonnage derived from each region for integrated wineries and growers. California-sourced grapes made up 63% of the total tonnage reported by respondents. Twenty-five percent came from Napa County, 18% from Sonoma County, and 14% from Central Coast—Monterey.

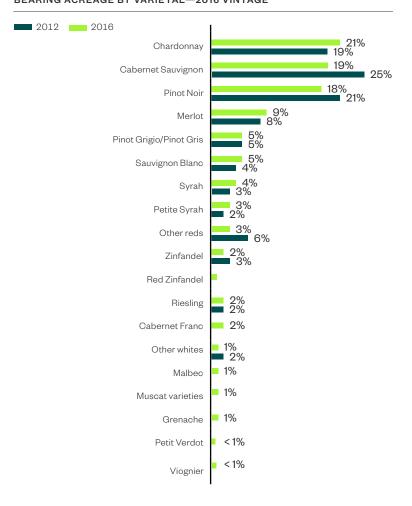
FIG. 10 TONNAGE DERIVED FROM EACH REGION—2016 VINTAGE



Bearing Acreage by Varietals

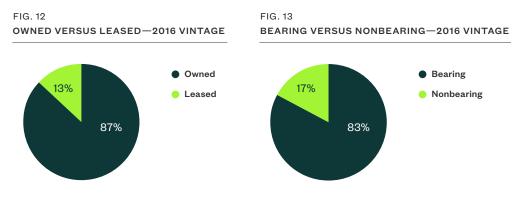
Overall, Chardonnay, Cabernet Sauvignon, and Pinot Noir maintained the top three positions. In terms of bearing acres for 2012 compared with 2016, variance between the surveys was attributed primarily to differences in the respective participant pools.

FIG. 11 BEARING ACREAGE BY VARIETAL—2016 VINTAGE



Farming Practices

Of the total number of acres that growers reported on, 87% are owned and 13% are leased.



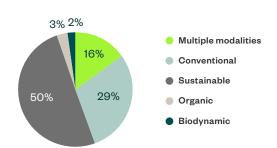
Eighty-three percent of acreage being farmed is bearing while 17% is nonbearing. Assuming the average lifespan of a vineyard is 25 years, then, theoretically, the annual replacement rate of the vineyard would be 4%.

Given that it typically takes a vineyard three years to bear fruit, on average one can expect 12% of the farmed acreage to be nonbearing for any given year. The reported 17% level of nonbearing acreage indicates a higher-than-average replanting rate over the past three years.

That higher-than-average rate can be attributed to planting amid tight supply to fuel growing retail sales and an increase in planting activity before the planting moratorium in Paso Robles. The nonbearing percentage will likely begin to lower with a slowdown in planting activity and nonbearing acres coming into production.

We asked growers to breakdown their acreage by growing practices and specify what proportion of their acreage was conventionally farmed, sustainable, organic or biodynamic. The majority (84%) reported only one method of farming; of these, half reported using sustainable farming practices. Only 3% and 2% reported exclusively using organic or biodynamic practices, respectively.

FIG. 14 GROWING PRACTICES—2016 VINTAGE



Farming Costs

Because of the participant pool, the following numbers are heavily weighted toward Sonoma and Napa counties.

FIG. 15

AVERAGE FARMING COSTS-2016 VINTAGE

	Cultural farming expenses per bearing acre	Overhead farming + expenses per bearing acre	Total farming = expenses per bearing acre
Integrated winery and grower	\$9,854	\$6,894	\$16,748
Integrated winery only	\$11,161	\$9,210	\$20,371
Grower only	\$7,004	\$2,454	\$9,458



COMMON-SIZE FINANCIAL STATEMENTS

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By Annual Case Sales Volume

By Average Case Price

Employees

FINANCIAL INDICATORS

Wineries

Growers

SECTION TWO

Financial & Operational Performance

COMMON-SIZE FINANCIAL STATEMENTS-2016 VINTAGE

A common-size financial statement displays all items as percentages of a common base. This type of financial statement allows for easy analysis between companies or between time periods of a company. The values on the common-size statement are expressed as percentages of a statement component, such as revenue. Individual balance sheet asset line items are presented as a percentage of total assets, individual liabilities and net worth are presented as a percentage of total liabilities plus net worth, and income statement individual revenue and expenses are presented as a percentage of total revenue basis.

By Annual Case Sales Volume

FIG. 16 COMMON-SIZE FINANCIAL STATEMENTS FOR 2016 BALANCE SHEET

	< 15k	15k-50k	50k-100k	100k-300k	>300k	Average of Participants
Cash	2%	4%	2%	10%	4%	4%
Accounts receivable	2%	5%	10%	5%	4%	5%
Inventory	55%	35%	26%	37%	31%	33%
Other current assets	-1%	7%	2%	1%	1%	2%
Total current assets	58%	51%	40%	53%	40%	44%
Other noncurrent assets	42%	49%	60%	47%	60%	56%
Total assets	100%	100%	100%	100%	100%	100%
Current liabilities	13%	25%	22%	21%	17%	19%
Noncurrent liabilities	56%	21%	46%	22%	33%	34%
Total liabilities	69%	46%	68%	43%	50%	53%
Total net worth	31%	54%	32%	57%	50%	47%

INCOME STATEMENT

	< 15k	15k-50k	50k-100k	100k-300k	>300k	Average of Participants
Total revenue	100%	100%	100%	100%	100%	100%
Total cost of good sold (COGS)	48%	48%	48%	53%	57%	53%
Gross margin	52%	52%	52%	47%	43%	47%
Sales and marketing	26%	16%	22%	14%	19%	19%
General and administrative (G&A)	38%	15%	10%	13%	8%	11%
Total operating expenses*	64%	31%	32%	27%	27%	30%
Operating income	-12%	21%	20%	20%	16%	17%
Other income (+)/ expenses (-)	0%	-5%	-3%	5%	-3%	-2%
Net income (loss)	-12%	16%	17%	25%	13%	15%
Depreciation	2%	1%	1%	0%	1%	2%
Interest expense	5%	1%	2%	2%	3%	2%
Taxes	0%	1%	1%	0%	2%	1%
Amortization	0%	0%	0%	0%	0%	0%
EBITDA	-5%	19%	21%	27%	19%	20%

*Total operating expenses = sales and marketing + G&A expenses

Note: The average case price typically decreases as winery size increases. Accordingly, COGS increases as a percentage of sales, and gross profit margin decreases as winery size increases. Alternatively, sales and marketing and G&A operating expenses as a percentage of sales typically decline as winery size increases. As a result, the net income as a percentage of sales, which is also called return on sales (ROS), was significantly better for the larger wineries, especially when compared to wineries with fewer than 15,000 cases in annual case sales. Totals may not foot due to rounding differences.

By Average Case Price

FIG. 17

COMMON-SIZE FINANCIAL STATEMENTS FOR 2016 BALANCE SHEET

	< \$150	\$150-\$200	\$200-\$350	>\$350	Average of Participants
Cash	2%	5%	6%	0%	4%
Accounts receivable	9%	3%	5%	5%	5%
Inventory	35%	30%	31%	39%	33%
Other current assets	2%	1%	3%	0%	2%
Total current assets	48%	40%	45%	44%	44%
Other noncurrent assets	52%	60%	55%	56%	56%
Total assets	100%	100%	100%	100%	100%
Current liabilities	24%	15%	21%	17%	19%
Noncurrent liabilities	31%	38%	26%	47%	34%
Total liabilities	54%	53%	47%	64%	53%
Total net worth	46%	47%	53%	34%	47%

INCOME STATEMENT

	< \$150	\$150-\$200	\$200-\$350	>\$350	Average of Participants
Total revenue	100%	100%	100%	100%	100%
Total COGS	59%	54%	49%	47%	52%
Gross margin	41%	46%	51%	53%	48%
Sales and marketing	20%	21%	16%	22%	20%
G&A	9%	9%	13%	13%	11%
Total operating expenses*	29%	30%	29%	35%	31%
Operating income	12%	17%	22%	18%	17%
Other income (+)/ expenses (-)	-2%	-3%	0%	-4%	-2%
Net income (loss)	9%	14%	22%	14%	15%
Depreciation	2%	3%	< 1%	1%	2%
Interest expense	3%	9%	< 2%	8%	5%
Taxes	0%	6%	< 1%	0%	2%
Amortization	0%	0%	0%	0%	0%
EBITDA	14%	19%	24%	23%	20%

*Total operating expenses = sales and marketing + G&A expenses

Note: Totals may not foot due to rounding differences

The highest-priced wine group had the highest gross profit margin but also the highest sales, marketing, and G&A costs. As a result, that group's net income as a percentage of total revenue (also called return on sales or ROS) came in at 14%.

However, the \$150-\$200 per case price group had a significantly larger amount of taxes, which indicates the ROS among the price categories may not be comparable—possibly due to a different composition of entity types among the respondents making up each price group.

Adjusting the ROS to exclude the effect of taxes results in the \$150-\$200 per case price group having the second-highest tax-adjusted ROS at 19% as compared to the top two price categories, which had similar EBITDA results.

Employees

Respondents were asked to report the number of full-time employees (worked 30 or more hours per week) and part-time employees (less than 30 hours per week) by business area to calculate a full-time equivalent for each area.

The average number of full-time employees increases with the size of the winery. This data may help you benchmark where you fit into financial and employee numbers—especially because labor is generally the number one cost in the industry.

This is the first year this survey asked respondents to report staffing levels. This was because winery owners are often interested in how they should be staffed and how many employees they should have within each functional area. It's very valuable data that may help you benchmark whether you're competitive and efficient when compared with the market from an employee standpoint.

	<15k	15k-50k	50k-100k	100k-300k	>300k	Average of
	< 15K	IOK-OOK	30K-100K	1008-3008	> 300K	Participants
Vineyard production	3.1	5.7	13.5	23.9	46.1	12.4
Wine production	2.7	6.2	18.7	18.0	59.6	13.9
Sales and marketing— DTC	2.9	14.1	11.2	10.8	44.3	12.7
Sales and marketing— three-tier	0.9	2.4	5.7	5.1	50.4	7.7
Admin/ financial	1.6	4.6	6.7	6.0	45.2	8.3
Average total	11.2	33.0	55.8	63.8	245.6	55.0

FIG. 18 NUMBER OF FULL-TIME EMPLOYEES BY CASE VOLUME-2016 VINTAGE

FIG. 19 REVENUE PER FULL-TIME EMPLOYEE BY CASE VOLUME—2016 VINTAGE

	< 15k	15k-50k	50k-100k	100k-300k	> 300k	Average of Participants
Revenue per employee	\$105,389	\$232,107	\$316,981	\$495,378	\$487,052	\$260,540

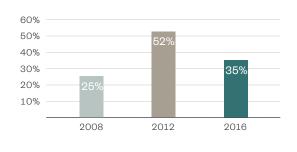
Revenue per full-time employee is another measure of efficiency; and as you can see in the table above, as winery size increased, respondents benefited from greater economies of scale.

FINANCIAL INDICATORS

Wineries

Due to economies of scale, you'd expect larger wineries to enjoy greater operational efficiency. Effective ways to measure this include comparing a company's sales revenue versus its asset base or inventory value. This is broken out in Fig. 21. The lowest efficiency measures were, unsurprisingly, reported by the smallest winery category. Another measure of how effectively a company is managing its cash and resources is to measure inventory level as a percentage of sales, which is shown below.

FIG. 20 INVENTORY AS PERCENTAGE OF SALES REVENUE—COMPARISON BY YEAR



The 2016 inventory makes up a smaller percentage of assets compared with 2012. This is because wineries are working through their inventory more now, while in 2012, there was a large harvest, which they've since worked through. Average case price is also higher in 2016, which likely had a lowering effect on this inventory-as-a-percentage-of-sales ratio.

SALES EFFICIENCY

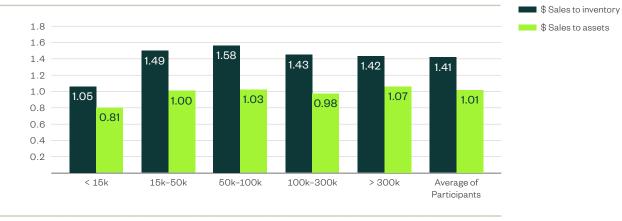


FIG. 21 SALES EFFICIENCY BY CASE SALES VOLUME

The smallest winery group had the lowest sales efficiency when measured as sales revenue to assets. In general, as winery size increased, sales efficiency improved as measured by the ratio of sales to assets. This makes sense, in part because the smaller wineries reported the lowest utilization of their facility capacity because they planned to grow into it.

Sales efficiency, when analyzed by case price, shows the lowest sales efficiency ratings were in the highest-price group. This makes sense because higher-priced wines tend to sell through into the market at a slower rate than cheaper wines. The \$200-\$350 price group is a bit of an anomaly within this survey pool, but the overall trend shows sale efficiency ratings becoming higher as the price per case becomes lower.



FIG. 22 SALES EFFICIENCY BY CASE SALES PRICE

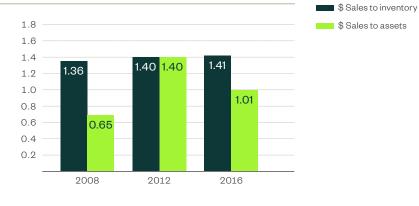
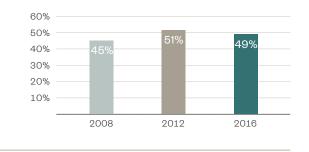


FIG. 23 MEDIAN SALES EFFICIENCY—COMPARISON BY YEAR

FIG. 24

MEDIAN GROSS MARGIN AS PERCENTAGE OF SALES REVENUE—COMPARISON BY YEAR



Gross margin as a percent of sales was relatively consistent, posting a slightly lower level in 2016 than in 2012, even though revenue per case was up. This indicates a higher COGS as a percentage of sales among the 2016 respondents. This may be attributed to variation between the respective pool of respondents, an increase in production costs between 2012 and 2016, or both.

RETURN ON ASSETS

The ROA as reported for 2016 was slightly up from 2012 but decreased for smaller wineries. Large and small wineries reported increased investment in DTC assets. While larger wineries invest more, smaller wineries generate relatively less sales revenue per dollar invested in assets, which results in a lower ROA.

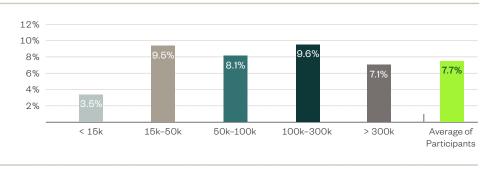
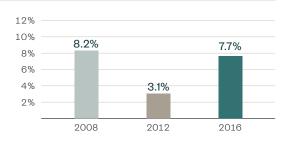


FIG. 25 AVERAGE RETURN ON ASSETS—2016 VINTAGE

The average return on assets (ROA) across all winery respondents came in at 7.7%. Note that the ROA for the less than 15,000 group is less than half of the overall average, in part because that group had the lowest reported facility capacity utilization.

FIG. 26 RETURN ON ASSETS—COMPARISON BY YEAR



In comparing the ROA above across the previous three survey years, the ROA for both 2008 and 2016 are very similar. The 3.1% ROA for 2012 came in at less than half of those in 2008 and 2016, largely because the 2012 survey pool of respondents contained a higher proportion of the lowest case sales volume group.

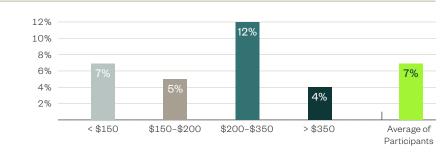
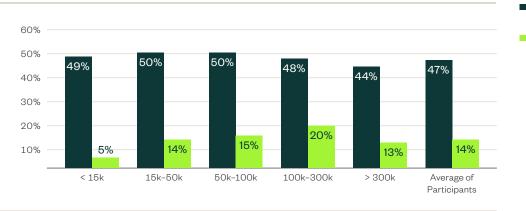


FIG. 27 RETURN ON ASSETS BY PRICE POINT—2016 VINTAGE

With the exception of the \$200-\$350 per case group, the ROA when compared by price point showed a downward trend as the average case sales price increased. This makes sense when considering most high-priced wine is produced by smaller, boutique wineries that are often more asset heavy per dollar sold than higher-volume production facilities that sell their wine at lower prices. The lower level of capacity utilization by the smaller winery group helps explain the lower ROA calculated for this group.

INCOME STATEMENTS RESULTS

FIG. 28 INCOME STATEMENT RESULTS BY SALES VOLUME—2016 VINTAGE



Gross margin as a % of sales revenue

Net income as a % of sales revenue

The results for gross margin as a percent of sales were similar to the 2012 survey; and both the 2012 and 2016 survey results trended lower as winery size increased. However, net income as a percentage of sales revenue was higher in the 2016 survey results, as expected given the lingering impact of the Great Recession in 2012.

In 2012, net income as a percentage of sales was 2%, and in 2016, it was 17%. Because the wine industry was coming out of the Great Recession during 2012, the improvement in net income as a percentage of sales could be attributed to several factors:

Total operating expenses as a %

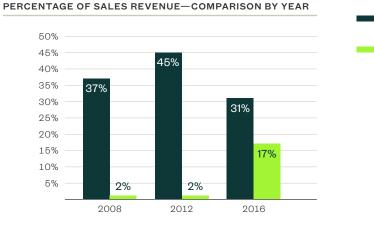
of sales revenue

Net income as a

% of sales revenue

- More efficient operations
- Reduced G&A expenses

FIG. 29





The below comparison of gross margins across different case-price groups shows a clear trend of higher-revenue-per-case groups recording better gross margins than wineries that sell at lower prices.

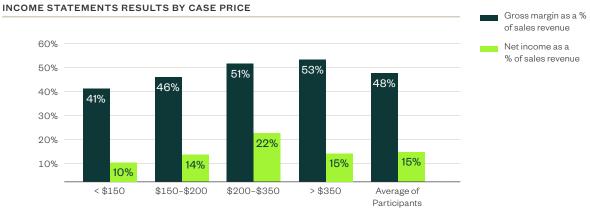


FIG. 30

Growers

When comparing actual capital expenditures by growers in 2016 to anticipated expenditures for 2017, there's a heavy emphasis on new vineyard development and replanting of existing vineyards.

Respondents expected the following to occur:

- Stay the same—proportion of capital expenditure for vineyard replanting
- Increase—proportion of funds earmarked for new vineyard development and spending for other capital improvements
- Slight decrease—capital expenditure on irrigation assets. This is attributed to the recordsetting rainfall in our region in 2016–2017 after four years of drought when spending was at extremely high levels for developing water resources and other irrigation-related assets.

Not shown on the graph below—but still reported by growers—was a major percentage increase in the use of optical sorting technology, which is frequently used both in the vineyard at harvest and at the winery crush pad to replace the hand sorting of grapes.

Respondents reported an over 100% increase in capital expenditures for optical sorting technology planned for 2017 over 2016, which, while a small proportion of overall spending, reflects the adoption of technology to counter the effects of a growing labor shortage while maintaining quality control.

Indeed, the mounting labor shortage means that investing in mechanical pruning, leaf pulling, grape harvesting, and other, more efficient mechanical methods will be increasingly relevant and produce as good or better quality.

For example, a small winery that used a crew of 11 people to sort grapes clusters and then berries at the crush pad could process approximately half a ton per hour. When they switched to an optical sorter, they found that four people could process five tons per hour—10 times the rate of hand sorting at a fraction of the labor cost. It's worth noting that the winery evaluated and determined the resultant wine quality was also better.

ANNUAL VINEYARD-RELATED CAPITAL EXPENDITURES

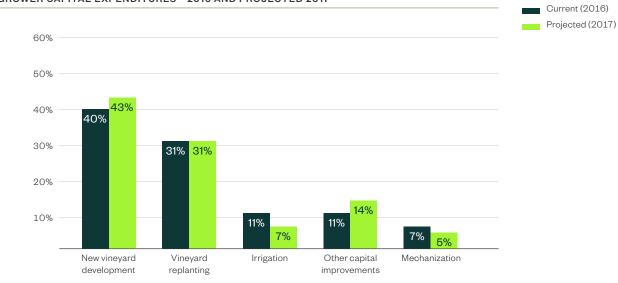


FIG. 31 GROWER CAPITAL EXPENDITURES—2016 AND PROJECTED 2017



PRICE POINTS: PREMIUMIZATION 32

Red Versus White

Case Sales Volume

Winery Performance

DISTRIBUTION	35
2.0	00

Direct to Consumer

Channel Strategy

MODERNIZATION: LABOR 39

Labor Changes

Mechanization

PRODUCTIVITY 41

43

Land: Real Estate and Grape Supply

Efficiency: Redevelopment of Acres

SALES AND MARKETING

Specialized DTC Sales Channels

Business Intelligence

SECTION THREE

Trends

PRICE POINTS: PREMIUMIZATION

Wineries are spending more to produce and sell their wines due to increasing sales and marketing expenses and the rising cost of grapes and labor. Without a raise in prices, higher operating costs would mean lower margins and income. To maintain profit margins and returns to investors, wineries are faced with increasing prices, which isn't an easy prospect, or decreasing the amount of discount they're offering.

Since the 2008–2009 recession, consumers have increasingly purchased higher-priced wines at above \$10 per bottle. While the survey results show an increase in the average case sales price, most wineries still find it challenging to raise bottle prices because of fierce competition in the market.

As a result, large wineries that have traditionally operated in the less than \$10 per bottle retail segment have been strategically acquiring successful wine brands in higher-priced categories and launching new, higher-priced brands of their own.

FIG. 32 DISTRIBUTION OF AVERAGE PRICE PER CASE CATEGORIES—2016 VINTAGE



As shown above, the largest share—37% of respondents—reported selling cases for less than \$150 at an average of \$103 per case. The next largest share—33% of respondents—had sales that averaged between \$200 to \$350 per case at an average of \$274 per case.

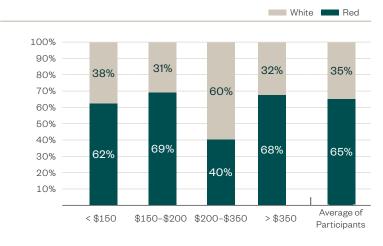


FIG. 33 AVERAGE CASE PRICE PER PRICE POINT—2016 VINTAGE

Red Versus White

The breakdown in sales volume of red and white wines by price point is summarized below, showcasing that red wine represents 68% of the most expensive group. Overall, 65% of the case sales volume are red wines and the remaining 35% are white wines.

FIG. 34 COLOR PERCENTAGE BY PRICE-2016 VINTAGE

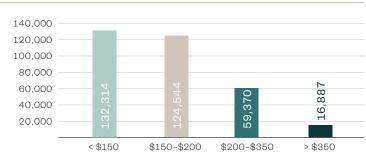


The 200-3350 group, where whites accounted for 60%, reflects an anomaly for this particular case price group.

Case Sales Volume

In looking at the average sales price per case groups, the lower price points have higher average case sales volumes compared to the higher price points, as expected.

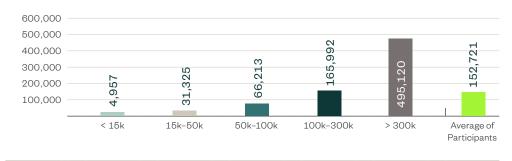




AVERAGE CASE SALES VOLUME BY CASE PRICE-2016 VINTAGE

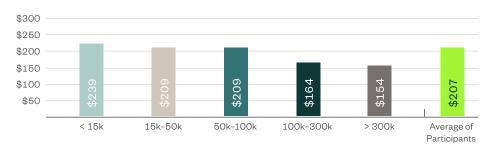
Winery Performance

FIG. 36 AVERAGE CASES SOLD BY WINERY SALES VOLUME—2016 VINTAGE



The highest average case price was reported by the smallest wineries. The average price trended downward as winery size increased.





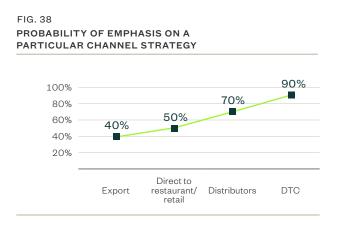
Domestic sales in the \$10-\$20 per bottle retail price group continue to grow, primarily for leading red varietals such as Cabernet Sauvignon and Pinot Noir. Chardonnay is still the most prevalent varietal produced among all varietals.

Geographically, Napa and Sonoma counties have the highest average case price compared to all other regions.

DISTRIBUTION

Direct to Consumer

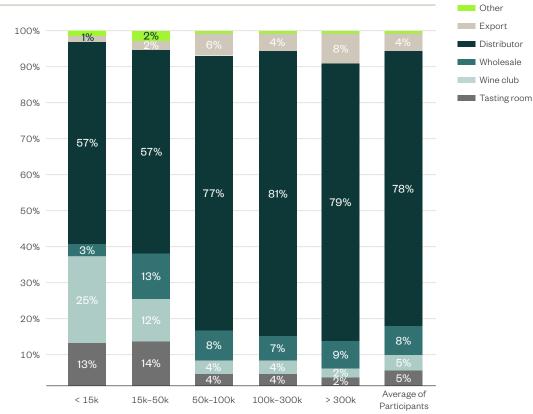
In addition to premiumization, the move to DTC sales continues. In fact, respondents reported there was a 90% probability that their greatest emphasis would be on DTC in 2017.



Unable to compete with larger wineries and find reliable, consistent representation due to the consolidation of retailers and distributors, smaller wineries remain focused on DTC sales by increasing investments in tasting rooms, wine clubs, and social media outreach with an emphasis on delivering a unique, memorable experience for their guests.

Channel Strategy

The results on the next page show there's a healthy aspect even for small wineries to sell wines through distributors and wholesalers, which combined make up 60.3% of all sales. Smaller wineries, namely those that sold less than 50,000 cases in 2016, are increasingly focusing on DTC sales compared to their larger counterparts.

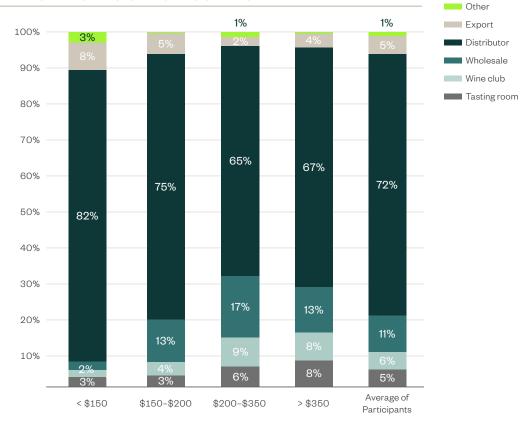




Smaller wineries reported a significantly higher percentage of case sales volume sold through tasting-room and wine-club DTC channels. As winery size increases, DTC volume trends downward.

Among all respondents, trade sales through distributors and wholesalers accounted for the majority of sales. The largest channel—the distributor sales channel—accounted for 82% of all case sales within the lowest price point of less than \$150 per case and 65% of sales volume in the \$200-\$350 price point range. The wholesale, wine club, and tasting room channels became more important as the wine price increased.

While the survey shows three-tier distribution and wholesale are still the predominant ways wine is sold—largely reflective of the survey participant pool—DTC is a significant part of the conversation and considered by both large and small wineries to be an important part of the future for the wine industry.





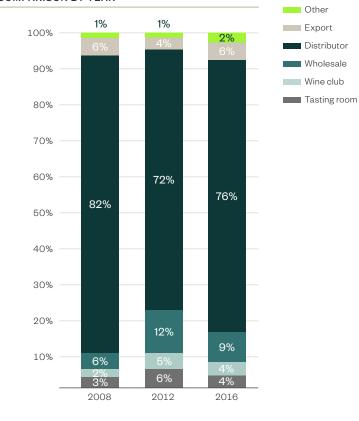


FIG. 41 OVERALL CHANNEL STRATEGY-COMPARISON BY YEAR

The above figure is based on percentage of cases sold. Comparing these finding to the overall 2008 and 2012 results from prior surveys, the distributor channel remains the dominant channel strategy for survey participants; however, DTC sales volume in 2008 accounted for only 5% of the sales volume—far below the 11% reported in 2012 and 8% in 2016.

DTC sales and investments in DTC assets and efforts continue to grow significantly for wineries large and small, particularly as they consider how to remain competitive as the internet changes the way consumers and wineries interact. If DTC sales represent 17% of 2016 case sales volume, that can mean 25%-30% in additional net revenue after accounting for the higher cost of selling wine DTC.

Large and small wineries all agree it's important to invest in the DTC channel to nurture loyal customers and to stay current with evolving buying habits and the use of new and emerging e-commerce technologies, particularly sales over mobile devices. The overall market share of DTC case sales in the United States is still small, but the rate of growth in DTC sales volume is strong at more than 10% growth per year in each of the past five years.

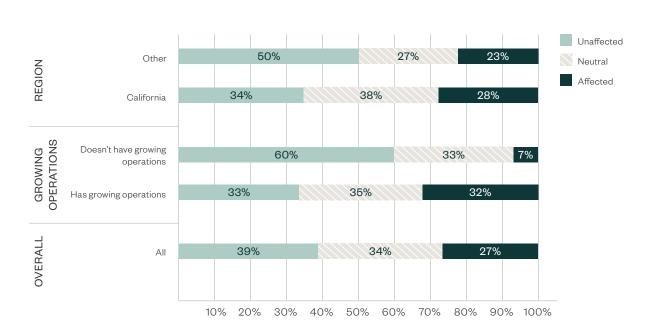
MODERNIZATION: LABOR SHORTAGE AND MECHANIZATION

Although the real economic impact of the 2017 fires isn't yet fully known, it's likely the fire will make labor more challenging within the Napa and Sonoma counties because of the lack of housing. Across the industry, a growing labor shortage has driven an increase in automation and mechanization. This shift to mechanization is being considered in the design and replant of vineyards as the labor supply tightens.

Labor Changes

Twenty-seven percent of respondents reported being impacted by labor shortages. This issue is particularly acute for those with growing operations—32% versus 7% of respondents with no growing operations. Labor shortages and changing labor laws are increasingly being managed with mechanization and higher employee wages.



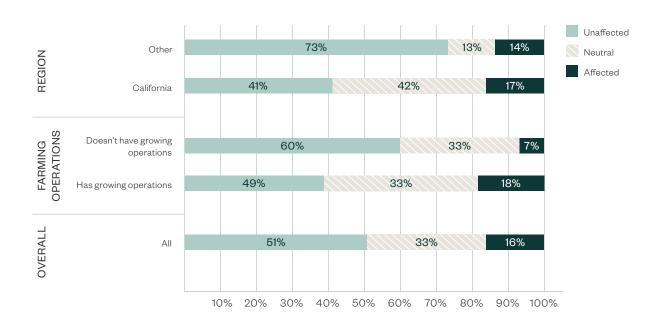


The move toward mechanization is already occurring and will most likely continue. The smaller vineyards will likely still use physical labor but may try to optimize with mechanization where they can.

Wine is historically a late adopter for new technologies because it's had access to reasonably priced labor, but that's rapidly changing. The wine industry will also need to compete for labor with other industries, such as construction while Sonoma, Napa, and Mendocino counties work to rebuild what was lost in the fires, and other agricultural crops in areas of the state that are more cost effective for laborers.

Respondents were asked how changes in labor laws, such as California's Assembly Bill 1066, which requires employers to pay their agricultural workers overtime, affected them. Overall, 16% of respondents said they were affected, and those from California reported slightly higher rates than those from other states. Those with growing operations were significantly more likely to be affected by the labor law changes.

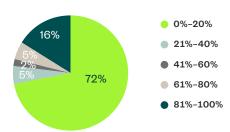




Mechanization

Planting an acre by machine can sometimes be 2.5 to five times less expensive and more efficient compared to planting an acre by hand. The percentage of acres being harvested by machine continues to rise, with 16% of those with vineyards reporting that over 80% of their bearing acres are now machine harvested. Meanwhile, 23% of respondents reported that over 40% of their bearing acreage is machine harvested. An increase in mechanization is anticipated as labor resources continue to tighten.

FIG. 44 PERCENTAGE OF TOTAL BEARING ACRES MACHINE HARVESTED-2016 VINTAGE



PRODUCTIVITY

The survey asked wineries at what capacity they were operating at. Overall, 63% of respondents reported operating at full or near full capacity, which is defined as more than 75% of capacity. Nineteen percent of winery respondents were operating between 51% and 75% of capacity, and 18% were operating at less than half capacity.

FIG. 45

LEVEL OF PRODUCTION CAPACITY UTILIZATION BY VOLUME OF CASES PRODUCED-2016 VINTAGE

LEVEL OF CAPACITY BY VOLUME	0%-50%	51%-75%	76%–100%
<15k	50%	22%	28%
15k-50k	6%	18%	76%
50k-100K	0%	33%	67%
100k-300k	0%	0%	100%
>300k	0%	17%	83%
All participants	18%	19%	63%

If you look at the capacity utilization breakout by winery size, wineries with more than 100,000 cases in annual sales volume reported the highest capacity-utilization levels: 83% of those selling more than 300,000 cases were in the full to near-full capacity range (76%–100%) and 100% of those selling between 100,000 and 300,000 cases were operating at the same full to near-full capacity. Conversely, 50% of the participants in the smallest group—under 15,000 cases—reported operating at or below 50% of facility capacity.

FIG. 46

PLANS OVER THE NEXT THREE YEARS (2017-2019), WITH REGARD TO CAPACITY, BY CURRENT CAPACITY LEVELS

CAPACITY THE RESPONDENT IS CURRENTLY OPERATING AT	Adding capacity	Growing into current capacity	Maintaining current capacity	Reducing capacity
0%-50%	0%	50%	30%	20%
51%-75%	0%	82%	18%	0%
76%-100%	34%	20%	46%	0%

The columns show what survey participants are expecting to do over the next three years in terms of capacity. Survey results show most wineries that aren't already operating in the full or near-full capacity expect to grow into their existing capacity.

Land: Real Estate and Grape Supply

The value of existing vineyards and land suitable for vineyards in Napa and Sonoma counties is at record levels. Some sales of high-quality Napa Valley vineyards have exceeded \$500,000 per acre.

Practically speaking, environmental protections and regulations mean there's little new suitable vineyard land remaining in Napa County. In Sonoma County, the supply of high-quality vineyard land is also limited. Accordingly, vineyard redevelopment is becoming the norm as opposed to developing new, previously unplanted sites.

The combined effects of the gradual economic recovery following the Great Recession, a small 2015 harvest, a moderate 2016 harvest, and the desire to expand sales in the DTC channel have fueled demand for grapes. This has pushed grape prices to record levels, especially for Cabernet Sauvignon, which now accounts for nearly half of the vineyard acreage in Napa County.

The big question is whether a winery will be able to sell the resulting wine at a sufficient profit margin to warrant the high grape prices. The answer to that question isn't often known for years due to a long production cycle—it could be five to 10 years before a vineyard owner figures out it planted the wrong variety, which often results in prices swinging the other way. It's a constant cycle of oversupply or underplanting. Nevertheless, wineries are buying more grapes every year at increased prices to boost production to meet tourism demand and DTC.

The demand for some of these varieties and increased grape prices also drive land value. The economics of record prices and the tight supply of California vineyards have increased interest in—and movement by—California wineries to invest in Oregon, Washington, and other coastal areas in California.

One benefit of the 2008 recession is that wineries and growers seem more measured and less speculative when planting. This will likely help moderate some volatility of supply shifts in the near future.

Strategically, successful wineries are looking to secure their future grape supply and mitigate risk. Nearly one-quarter of wineries—24%—reported they were likely to buy a vineyard over the next three years. In addition to Oregon and Washington, prospective buyers are looking at the Central Coast, Lake County, and Mendocino County.

Efficiency: Redevelopment of Acres

Even in Napa and Sonoma counties, where there's an absence of new, previously unplanted sites to develop, there's still an opportunity to increase production of a varietal from the existing vineyard land. Growers are redeveloping to higher-value varieties and planting to generate higher yields by increasing plant densities and choosing cleaner (disease free) and higher-yielding clonal selections from nurseries.

FIG. 47 REDEVELOPMENT ACTIVITIES

	Percentage of acres	Average acreage
New development and planting	23%	37
Replanting	39%	22
Machine harvesting	40%	57

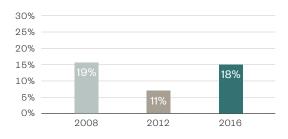
Survey participants could select more than one category in the above table. Approximately 39% of grape growers were focused on replanting and 23% planned to develop new acres in 2017.

Of those that carried out new development and planting or replanting of acreage, 41% reported increasing the density of the acreage and nearly half reported designing them to allow for mechanization.

SALES AND MARKETING

As national and international competition rises and the fight for consumer attention expands across categories, such as craft beer and spirits, sales and marketing budgets have increased as a percentage of sales revenue from the 2012 survey results. Rising almost to mid-recession levels, all eyes are on driving customer loyalty and increasing brand exposure.

FIG. 48 SALES AND MARKETING EXPENSES AS A PERCENTAGE OF SALES REVENUE—COMPARISON BY YEAR



Specialized DTC Sales Channels

Most winery respondents—95%—reported having at least one tasting room and 89% reported having a wine club. Allocated mailing lists were less common with 17% of respondents reporting this sales channel. The breakdown of these specific sales channels is consistent across integrated wineries and producers.

FIG. 49 DTC SALES CHANNELS

	Wine club	Tasting room	Allocated mailing list
All respondents	89%	95%	17%

The productivity of these different DTC sales channels varies with allocated mailing lists producing the highest yield per transaction at \$599, followed by wine clubs at \$261 and tasting rooms at \$138. Tasting rooms, however, engaged the largest number of potential clients with a reported average annual visitor count topping 28,000. Tasting rooms, while costlier to run than wine clubs, are often a winery's primary source for generating new wine club members.

FIG. 50 DTC SALES CHANNELS BY PRODUCTIVITY

	Mean annual shipments/ number of tasting rooms	Mean annual visitors/ active members	Average transaction amount
Tasting room	1	28,554	\$138
Allocated mailing list	2	6,137	\$599
Wine club	4	3,165	\$261

On average, respondents had one tasting room. Those with wine clubs averaged four wine club shipments per year with an average sale of \$261 per shipment. Wineries with allocated mailing lists on average made two offerings per year with an average purchase of \$599 per offering.

FIG. 51 NUMBER OF ACTIVE ACCOUNTS BY SALES CHANNEL

	Average
DTC: tasting room	11,576
DTC: allocated mailing list	5,632
DTC: wine club	2,463
Wholesale to restaurants/retailers	2,482
Other	1,011
Distributors	38
Exports	36

Winery respondents reported having, on average, 38 distributors. The average wine club contained 2,463 members and the average mailing list contained 5,632 members.

FIG. 52 AVERAGE DISCOUNTS BY SALES CHANNELS

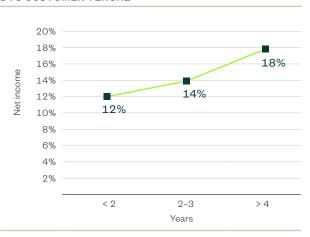
	Average discount
Wholesale to restaurants/retailers: discount off of wholesale price	14%
DTC: discount off of retail price	13%
Distributors: discount off of FOB price	8%
Exports: discount off of standard export price	4%

Business Intelligence

Typically, it's more profitable to retain current customers than acquire new customers—and that a company's profitability ratio increases with the length of time a customer is retained—however, there's variability in profitability across sectors.

The survey results show how profitability, defined as net income as a percentage of total revenue, increased significantly the longer someone has been a customer, also known as customer retention.

FIG. 53 NET INCOME PERCENTAGE BY AVERAGE DTC CUSTOMER TENURE



The survey results were also used to correlate how profitability is affected by the number of new wines introduced in the market. Wineries that introduced between four and eight new wines in the past three years had the highest net income to total revenue ratio at 20%, perhaps due to the inherent attraction of trying new things and the perception that the winery was staying innovative and fresh.

Wineries that introduced three or fewer new wines in the past three years had the lowest reported net income percentage, perhaps due to customer fatigue with the same wines. Those that introduced more than eight new wines in that period also reported a lower net income percentage, perhaps due to a lack of focus or the inherent confusion and difficulty in educating employees, salespeople, and customers about too many products.

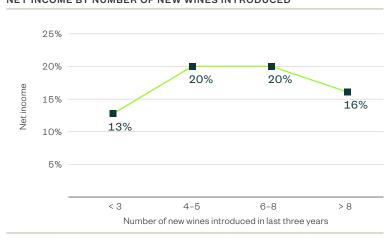


FIG. 54 NET INCOME BY NUMBER OF NEW WINES INTRODUCED



2017	48
NEXT THREE YEARS	49
Vineries	
Growers	

SECTION FOUR

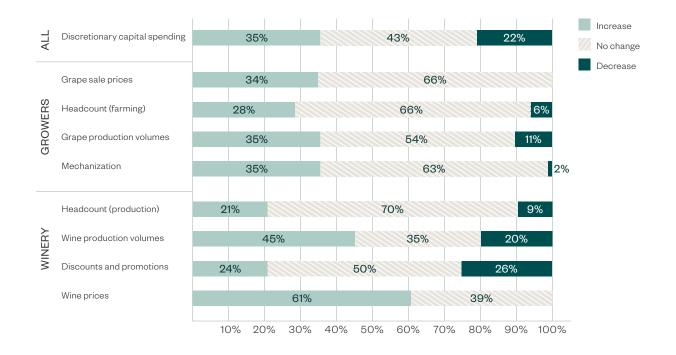
Strategies Going Forward

2017

Rising costs of production and sales and marketing are creating pressure on wineries to increase prices. Of our respondents, 61% reported they were inclined to increase wine prices in 2017. Half of all respondents planned to maintain current discount levels, 26% planned to decrease them, and 24% planned to increase discounts.

While consumers are trading up and buying more wine in the \$10-\$20 per bottle range and higher, the under-\$10 per bottle segment is still a dominant group that accounts for the vast majority—approximately 90%—of the volume of domestically produced wine sales in the United States, according to the Gomberg Fredrikson Report 2016 Annual Wine Industry Review.

FIG. 55 ACTIONS PLANNED FOR 2017



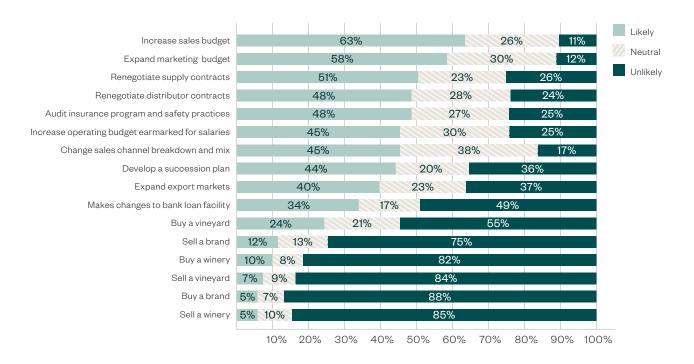
2017-2019

Wineries

Reflecting the challenges of selling wine in the hypercompetitive US market, wineries ranked increasing their sales and marketing budgets as the top two components of their strategies over the next three years.

FIG. 56

STRATEGIES OVER THE NEXT THREE YEARS (2017-2019)



Growers

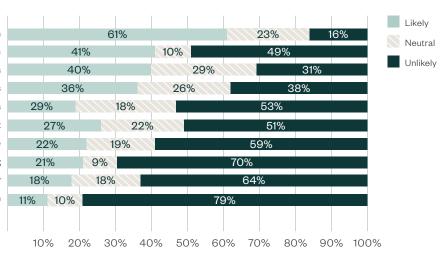
More than 60% of respondents are planning for farming costs to increase over the next three years. The next two most frequently rated strategies were to obtain sustainable certification (41%) and renegotiate vineyard management contracts (40%). Organic certification didn't garner as much interest. There are some industry consultants reporting more farmers turning to outside labor contractors to meet peak labor demands as the labor supply continues to tighten.

Among all grower respondents, 27% said they're likely to move toward mechanization in the next three years with 36% considering it for other agricultural tasks, such as leaf pulling and pruning.

FIG. 57

STRATEGIES FOR GROWERS AND INTEGRATED WINERIES OVER THE NEXT THREE YEARS (2017-2019)

Increase projected growing costs Obtain sustainable certification Renegotiate vineyard management contracts Move to mechanization of other agricultural tasks Renegotiate labor contracts Move to mechanization for vineyard harvest Move to mechanization for vineyard harvest Build/provide worker housing Move to outside contracting for farming labor Obtain organic certification



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