



NEW ZEALAND WINE  
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# Viticulture Gross Margin Report

Central Otago | 2019



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# Variety

# Gross Margin Benchmarking

## Central Otago | 2019

In collaboration with

**Ministry for Primary Industries**  
Manatū Ahu Matua



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#### Gross Margin Definition:

The gross margin in this report provides an indication of Pinot Noir profitability per producing hectare in Central Otago. It is calculated by subtracting operating costs [labour and other direct expenses] from gross revenue. The gross margin varies annually based on prevailing market and climatic conditions.

New Zealand Winegrowers and the Ministry for Primary Industries would like to express our thanks to contract and winery growers in June and July for their participation in our variety gross margin benchmarking programme.

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#### Disclaimer

The information in this report by the Ministry for Primary Industries is based on the best information available to the Ministry at the time it was drawn up and all due care was exercised in its preparation. As it is not possible to foresee all uses of this information or to predict all future developments and trends, any subsequent action that relies on the accuracy of the information in this report is the sole commercial decision of the user and is taken at his/her own risk. Accordingly, the Ministry for Primary Industries disclaims any liability whatsoever for any losses or damages arising out of the use of this information, or in respect of any actions taken.



# Central Otago

# Key Parameters and Financial Results

Pinot Noir	2019	2018	2017
<b>Total Production<sup>1</sup> (t/ha)</b>	7.0	7.3	4.0
Average return (\$/t)	\$4,220	\$3,845	\$3,985
Grape income (\$/ha)	\$29,360	\$28,075	\$16,105
<b>Vineyard direct expenses (\$/ha)</b>	\$18,040	\$17,430	\$13,770
Gross Margin (\$/ha)	\$11,320	\$10,645	\$2,335
Gross Margin (\$/t)	\$1,625	\$1,460	\$580

<sup>1</sup> Figures may not add to totals due to rounding

## Background

The MPI viticulture monitoring programme was reviewed in 2013 and the decision to develop gross margins of dominant grape varieties in the main growing regions was trialled for the 2015 season. The success of the trial has led to the continuation of the gross margin format and has also seen the expansion of the programme to Otago in 2017.

Ten vineyards provided data for a total of 14 blocks representing 243 hectares of a total 1,495 hectares in Pinot Noir in Central Otago. The majority of participants were winery growers, growing for the premium or super-premium market.

The gross margin calculates the revenue less direct expenses for growing, harvesting and marketing the crop. It does not take account of overheads such as administration, debt servicing, tax, drawings or development and capital spending.

## Blocks in Survey



## Key Points

Central Otago Pinot Noir achieved a gross margin of \$11,320 per hectare, up six percent on 2018. This, despite an increase in labour expenses, was due to similar yields as 2018 combined with a reported increase in price within the survey group.

Average yields for the survey group were 7.0 tonnes per hectare, down slightly on the survey group from 2018.

Average price reported by this grower group was \$4,220 per tonne, which is \$495 higher than the 2018 industry average price for Pinot Noir.<sup>1</sup>

<sup>1</sup>New Zealand Winegrowers Average Grape Prices 2018 Final

## Gross Margin

**\$11,320**  
per hectare  
↑ from 2018 

## Production

**7.0**  
tonnes  
per hectare 

## Central Otago weather data

Month	Growing degree days <sup>1</sup> (GDD)			Rainfall (mm)		
	2018 <sup>2</sup>	2019	Long Term Average	2018	2019	Long Term Average
June	0	0	2	22	7	29
July	0	0	1	28	31	26
August	12	0	5	16	6	18
September	43	17	28	18	45	25
October	122	79	66	6	31	34
November	221	106	131	36	94	34
December	286	225	215	9	38	30
January	375	271	254	47	54	43
February	173	207	221	97	15	42
March	161	216	170	49	55	28
April	54	29	60	64	50	29
May	10	9	12	33	50	46
<b>Total</b>	<b>1457</b>	<b>1157</b>	<b>1165</b>	<b>425</b>	<b>475</b>	<b>384</b>

<sup>1</sup> GDD – growing degree days. GDDs are a temperature index, calculated by taking the average of the daily high and low temperatures compared with a baseline (10°C). They help predict the date that a flower will bloom or a crop reach maturity.

<sup>2</sup> Year refers to year of harvest.

Source Niwa (Cromwell)

## Pinot Noir Gross Margin

The Central Otago Pinot Noir gross margin was \$11,320 per producing hectare, equal to \$1,625 per tonne. This is \$675 per hectare up on the 2018 survey group.

The 2018/19 growing season in Central Otago was extremely variable with frosts occurring in both Spring and Autumn but overall growing degree days were near average with above average summer rainfall.

Flowering was patchy across the district but overall better than average due to very warm 2017 flower initiation conditions. Powdery Mildew pressure was high through the December to early January period and growers are becoming increasingly vigilant for this disease.

Regular rainfall through January and particularly March increased berry size and improved yields for many growers compared to their earlier forecasts.

The gross margin shows an average yield of 7.0 tonnes per hectare for the survey group, similar to the group's 2018 yield of 7.3 tonnes per hectare. New Zealand Winegrowers reported Central Otago average<sup>2</sup> yields up 2 percent on 2018.

There was a range of yields, from 3.8 to 8.3 tonnes per hectare and prices from \$3,700 to \$4,400 per tonne, reflecting the high-end market most Central Otago growers are producing for.

Average price received for the survey blocks, at \$4,220, was up \$375 from the 2018 survey group. Comparing just those blocks that provided data in both years of the survey reports no change in prices from 2018 to 2019.

The reported price was also significantly higher than the 2019 New Zealand Winegrowers reported contract price of \$3,734. The difference is due to the predominance of winery growers in this survey producing premium and super-premium fruit and placing a greater value on it than contract growers.

Using the New Zealand Winegrowers average Pinot Noir price and the gross margin survey expense data would generate a gross margin of \$7,940 per hectare for 2019 and \$9,770 for 2018.

Vineyard direct expenses were \$18,040 in 2019 up 3 percent, primarily due to increased labour costs.

Central Otago labour expenses, \$13,980 per hectare, up \$650 per hectare. Wages were higher across all categories due to the increase in minimum wages in both 2018 (5 percent) and 2019 (7 percent).

Pruning costs were up \$225 per hectare from the previous year and are expected to continue to rise in 2019.

None of the 14 blocks in this year's survey were machine harvested, with average hand harvesting cost \$358 per tonne in 2019.

## Working Expenses

**\$18,040**  
per hectare ↑ 3%



<sup>2</sup> Vintage Survey yield compared to Vineyard Register area

# Vineyard Gross Margin Benchmarking

Region: Central Otago

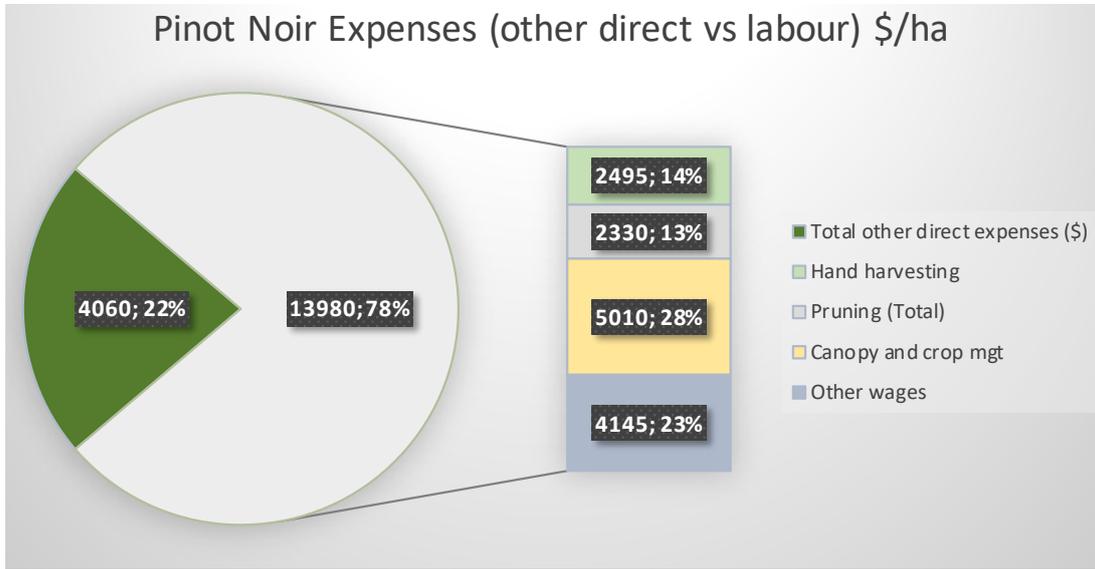
Year: 2019

Variety: Pinot Noir

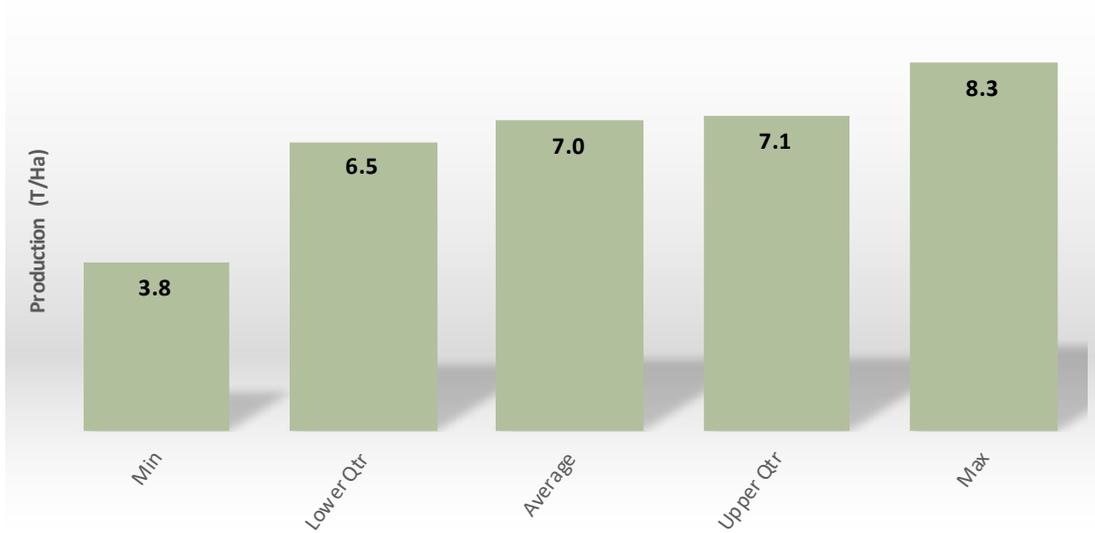
	Average			\$ per producing ha		Quartile by Gross Margin <sup>1</sup>	
	2019 per Ha	per vine	per row metre	2018 per Ha		Upper	Lower
Unpaid FTE - number	0.0			0.1			
Unpaid FTE - hours/ha	1			9			
Vines/ha	3,141			2,867		2,639	2,500
Row metres/ha	4,183			4,103			
<b>Yield (Tonnes)</b>	<b>7.0</b>	<b>2.2kg</b>	<b>1.7kg</b>	<b>7.3</b>		<b>7.1</b>	<b>6.5</b>
<b>Income \$/tonne</b>	<b>\$4,220</b>			<b>\$3,845</b>		<b>\$3,780</b>	<b>\$4,485</b>
<b>Income (\$)</b>	<b>\$29,360</b>	<b>9.35</b>	<b>7.02</b>	<b>\$28,075</b>		<b>\$26,510</b>	<b>\$27,645</b>
<b>Labour expenses (\$)</b>							
Hand harvesting	\$2,495	0.79	0.60	\$2,460		\$2,486	\$2,717
Pruning (Total)	\$2,330	0.74	0.56	\$2,105		\$1,794	\$1,883
Canopy and crop mgt	\$5,010	1.60	1.20	\$4,800		\$3,424	\$4,799
Other wages	\$4,145	1.32	0.99	\$3,955		\$3,686	\$6,165
<b>Total labour expenses</b>	<b>\$13,980</b>	<b>4.45</b>	<b>3.34</b>	<b>\$13,330</b>		<b>\$11,390</b>	<b>\$15,565</b>
<b>Other direct expenses (\$)</b>							
Weed and pest control	\$522	0.17	0.12	\$607		\$341	\$624
Fertiliser and lime	\$239	0.08	0.06	\$376		\$115	\$338
Electricity	\$364	0.12	0.09	\$255		\$184	\$428
Vehicle	\$574	0.18	0.14	\$448		\$174	\$1,409
Fuel	\$615	0.20	0.15	\$357		\$210	\$1,558
Repairs & maintenance	\$774	0.25	0.19	\$941		\$430	\$1,605
General	\$969	0.31	0.23	\$769		\$38	\$2,726
Machine harvesting	\$0	0.00	0.00	\$347		\$0	\$0
<b>Total other direct expenses (\$)</b>	<b>\$4,060</b>	<b>1.29</b>	<b>0.97</b>	<b>\$4,100</b>		<b>\$1,490</b>	<b>\$8,690</b>
<b>Total direct expenses (\$)</b>	<b>\$18,040</b>	<b>5.74</b>	<b>4.31</b>	<b>\$17,430</b>		<b>\$12,880</b>	<b>\$24,255</b>
<b>Gross Margin (\$/ha)</b>	<b>\$11,320</b>	<b>3.61</b>	<b>2.71</b>	<b>\$10,645</b>		<b>\$13,630</b>	<b>\$3,390</b>
<b>Gross Margin (\$/t)</b>	<b>\$1,630</b>			<b>\$1,460</b>		<b>\$1,930</b>	<b>\$525</b>
Number in model	14			35		14	14

<sup>1</sup> Quartile analysis shows the average figures where the gross margin is in the lower or upper quartile, ie. an indication of the features of higher and lower performance

### Pinot Noir Expenses (other direct vs labour) \$/ha



### Pinot Noir Production



## Industry Issues and Developments

Central Otago is a well-established wine growing region that has built a strong reputation for high quality Pinot Noir wine. Winery growers reported that this reputation, combined with strong distribution channels, are extremely important building blocks for their success. It is this reputation that has consistently allowed Pinot Noir grape prices to be the highest in New Zealand. Wineries also reported that they are experiencing good growth in demand from local and international markets.

The 2018/19 season experienced highly variable climatic conditions with frosts at both ends of the season and some warm wet periods in between. While the season was significantly cooler than the exceptional 2017/18 summer, growing degree days were near normal for the 2018/19 summer. The late summer rainfall increased berry size and both growers and winemakers are generally happy with the season's outcome in terms of yield and fruit quality.

There is strong demand for horticultural land in Central Otago with much interest from growers seeking to develop cherry or apple orchards. While some vineyard development is also occurring, this is at relatively low levels. The increased demand for other horticultural crops is one factor contributing to competition for resources such as water, accommodation and particularly labour for many vineyard tasks.

Several growers reported labour is an ongoing concern and are finding suitable workers hard to find. While a seasonal labour shortage wasn't declared in Central Otago this growing season, growers continue to be concerned about availability and the effect of the increasing minimum wage on their business.



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