

COMMENTS ON THE BENDIGO-OPHIR GOLD PROJECT FAST TRACK APPLICATION

Economic opinion supporting Central Otago Winegrowers Association's (COWA) submission

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Purpose

1. This document offers the Fast Track Expert Panel (**Panel**) expert evidence on economic matters raised by the proposed Bendigo-Ophir gold mine; specifically:
 - a. To bring before the Panel an assessment of the economic importance of the Central Otago (CO) grape growing and wine making sector (the CO wine industry), in the context of claimed risks of the Mine to the performance of the wine industry.
 - b. To evaluate claims for economic benefits of the Mine placed before the panel in October 2025 in a report by Mr Benje Patterson, an independent consultant.

Summary

2. My findings can be summarised as follows:
 - a. The Central Otago wine industry is an important and prestigious contributor to the regional economy.
 - b. The most important industry in Central Otago is tourism.
 - c. The local wine industry both benefits from and contributes to success in tourism.
 - d. The continued success of the wine industry, in particular as producer of a premium product, is at risk from environmental and landscape damage, such as might be generated by the proposed Bendigo-Ophir gold mine.
 - e. Central Otago tourism is similarly at risk.
 - f. Economic benefits to New Zealand from the mine are likely but the benefits have been exaggerated by the sponsors of the mine and will only arise for the duration of the mine 15-20 years i.e. medium term.
 - g. Economic benefits from the CO Wine Industry will endure for the long term, assuming no damage from mining.

Statement of Credentials and Interests

3. My full name is Timothy John Hazledine. I am an Emeritus Professor in the Economics Department of the University of Auckland.
4. I have Masters Degrees in Economics from the Universities of Canterbury and Otago and a PhD in Economics from Warwick University.
5. I have held teaching positions at Otago University, the University of Warwick, Balliol College – University of Oxford, Queen's University (Ontario) and the University of British Columbia. From 1975

to 1977 I was an economist at the Federal Department of Agriculture in Ottawa. From 1983 to 1992 I was first an Associate then Full Professor in the Department of Agricultural Economics at the University of British Columbia. Since 1992 I have been a Professor at the University of Auckland. I have more than one hundred and twenty refereed and peer reviewed scientific publications in various areas of applied economics.

6. I have consulted on resource management and related issues for the Electricity Commission, the NZ Institute of Economic Research (NZIER), the former Waitakere City and North Shore City councils, the former Auckland Regional Council, Environment Canterbury and private parties. In 2012, I gave evidence before the Board of Inquiry appointed to consider The New Zealand King Salmon Co Ltd's private plan change and resource consent application, in 2012. As an Expert Witness, I have appeared before the Environment Court and other authorities on numerous occasions since 2006.
7. I am a Queenstown and Lakes District (QLDC) ratepayer, owning a property in the country a few kilometres south of Wanaka township. I and family members (originally from Dunedin) have had houses in or near Wanaka for seventy-five years. We certainly have a strong emotional attachment to the Wanaka area and Central Otago in general.
8. My Wanaka property is the site of a very small (0.4ha) vineyard, from which, in partnership with my brother Sandy Hazledine, we produce Pinot Noir and Chardonnay wines, sold under the Hazledine Bros label to a quite limited coterie of mostly regular customers.
9. It is my view that our vineyard and wines will not be subject to any significant detrimental (or positive) effects if the proposed Bendigo Mine goes ahead, due to our location, small scale and secure market position.
10. In February 2026 I published in the Otago Daily Times an opinion piece opposed to mining the Bendigo gold at this time. This short piece contained some economic analysis, which I stand by. It also reflected my opinion that the mine would be an eyesore in the landscape, although I accept that I am not a landscape expert. This evidence is focused on my area of expertise, ie economic assessment .
11. I note that it would indeed have been helpful, from a wider community perspective, if a more extended evaluation process could have included a proper survey of local (Central Otago) residents about their position for or against the mine. Media stories are usually able to find voices both in strong support and in strong opposition to the Santana proposal – what does the silent majority think?¹ I note that I have seen a draft of what will be a submission to the FTA panel by Professor James Higham, which, among other things, reports results from a 2023 large scale survey of Central Otago residents indicating considerable support for propositions to the effect that the landscape and natural beauty of the region is important.
12. I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's 2023 Practice Note. While this is not an Environment Court hearing, I have

¹ Most recently, for example, 'Enemy Mine', by Ben Tomsett, *NZ Herald*, March 28, 2026.

read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

13. My expert evidence, below, will give an overview of the Central Otago economy and the part played in it by tourism and the wine industry, and will discuss the possible implications for the economy of the proposed Bendigo-Ophir Gold Project.

The Central Otago Economy

14. Central Otago² is growing, driven by internal and external migration into what New Zealanders and others are increasingly seeing as a relatively attractive region to live in. This means that any ‘snapshot’ of the regional economy at a point in time will lose accuracy over time. With this *caveat* noted, I show some summary statistics of the economic structure of CO as it was around 2024, in the Table below.³

CATEGORY	Central Otago District		Queenstown & Lakes District		"CENTRAL"		New Zealand
		%NZ		%NZ		%NZ	
Gross Domestic Product (GDP), \$ billions	1.8	0.42	4.65	1.08	6.45	1.50	430
Population	26,000	0.49	53,800	1.02	79800	1.51	5,300,000
GDP/POP, \$	69231	85.3	86431	106.5	80827	99.6	81132
Employment	14,629	0.50	34,570	1.19	49199	1.70	2,900,000
Jobs in Tourism	1,760		11,576		13336		
Tourism jobs as percent of total jobs	12.0		33.5		27.1		6.9
Expenditure by visitors to the region, \$billions	0.28		2.80		3.08		
Vineyard area, hectares					2163		42519
Wine produced, tonnes					11519		382554
wine yield, tonnes per hectare					5.3		9.0

² By ‘Central Otago’ or ‘Central’ I will usually mean the Central Otago Administrative District, and the Queenstown and Lakes Administrative District, taken together as a whole

³ There is some variation in the time period reported for the data in the Table. There are also variations in the precision – or claimed precision – of data, as represented in the number of significant digits shown after or before the decimal point of numbers. I have chosen to not standardise the claimed precision of numbers in order to make it easier to document the sources of the data. Data are sourced from *New Zealand Winegrowers Annual Report 2025*, Benje Patterson, *Central Otago economic and social context*, June 2024, and Google.

15. The Central Otago region is quite small, economically contributing just one and a half percent of New Zealand's GDP (total economic output), and since this is also the share of the country's population (though a rising share, as noted), we see that the productivity (per capita GDP) matches the national average.
16. However, the internal structure of the CO economy is strikingly distinctive. More than a quarter (27.1%) of the jobs are judged to be in serving visitors – nearly four times the national figure of 6.9 percent.⁴
17. To put this in context: the construction industry that is very busy building houses, shops, etc for the growing population accounts for about 16 percent of Central Otago employment (Google AI Overview data).
18. Implications to be drawn are:
 - a. Anything that significantly affects tourism will significantly affect the overall performance of the Central economy, and the well-being of its residents.
 - b. Given the links between tourism and the local wine industry (see below), events affecting tourism may also be of consequence for wine, and *vice versa*.

The Central Otago Grape and Wine sector

19. If one of those tourist visitors to CO were to ask a local: “You’ve got this lovely place – but what do you *do* with it that’s special, apart from feeding and ferrying us around?” – what would be the response?
20. A first answer might be : “Well, doing nothing with it is the point. Most of the region is an official Outstanding Natural Landscape and we want to keep it that way.”
21. Fair enough, but then the local could continue: “But we don’t just lie back and enjoy the view. We have in Central successfully developed an industry which actually enhances the landscape and its appeal to tourists, is environmentally benign, provides good jobs across the region, produces a premium product that we can all be proud of, and which enhances ‘Brand Central’ generally, including its attraction to very welcome visitors like you”.
22. That industry is wine: specifically – growing grapes, turning grapes into wine, and selling the wine to the country and the world at a profitable price. There now are 233 vineyards and wineries, employing, I am told, more than a thousand people, spread through all the sub-regions of Central

⁴ I have information (from Benje Patterson and QLDC) to the effect that total annual spending in the region by visitors was around \$3.1 billion. Since visitor spending is ‘exports’ which are added in to get the GDP number, and as such comprise nearly one half of the GDP number (\$6.45 billion), an acute observer might ask why the share servicing visitors (tourists) makes of total employment is ‘only’ 27.1 percent. I have not dug into all the calculations that produced these data but I expect the reconciliation will involve noting that not all visitor spending is in fact true exports, since much of it -- for example petrol – is actually imported into the region.

Otago – from Lake Hayes to Lake Dunstan to Lake Wanaka; on the banks of the Kawerau and Clutha rivers, and elsewhere.⁵

23. How much capital is tied up in the Central Otago vineyards and wineries? I have received estimates from an industry participant that put the value of the investments in the sector-- not counting the value of the land, which does have alternative uses -- at around \$600 million, nearly all of which are 'stranded assets', meaning that little or no value could be obtained by selling them in the event of a downturn in the industry's economic viability.
24. This figure is made up of: (1) development costs of the 2163 planted hectares, at \$110,000/ha = \$240million [all number rounded off]; (2) machinery costs - \$20million [most of which could be re-sold]; (3) construction of wineries – 30 at an average cost of \$5million = \$150million; (4) 7 winery restaurants at around \$7million each = \$50million; (5) 50 cellar doors at around \$600K - \$30million; (6) cultivation for three years before first crop = \$120million.
25. And many of the tourists will not need to be told about our wine sector. It is reported that 27 percent of tourists in NZ visit a 'cellar door' (of which there are around sixty in CO). Since some popular tourist destinations don't have any cellar door to visit (eg Taupo, Rotorua), the proportion visiting a vineyard or winery in a region like Central Otago is likely to be even higher.⁶
26. The situation was not inevitable. Wine in Central is something that didn't have to happen and indeed didn't exist here commercially until the 1980s. It is the result of determined efforts by far-sighted farmers, land-owners and entrepreneurs to create an industry that actually makes the best of its natural disadvantages for pastoral and some other agricultural pursuits (stony soils; harsh climate), to focus on low-yielding grape varieties -- especially pinot noir -- that delivers a premium in the New Zealand and international wine markets.
27. How large is the premium? I asked CO winery owners and received a quite detailed listing of the pricing practices in the industry. In summary, the average retail price of CO wine was estimated to typically be in the range of \$30-\$60 per bottle for Pinot Noir; \$25-\$35 for Pinot Gris; \$30-\$45 for Chardonnay; \$35-\$55 for Methode Traditionnelle, and \$28-\$40 for Riesling. These overall average figures are all well above prices what is called 'value-driven' or 'entry level' wine. The premium prices increasingly achieved as the CO wine industry matures are noted as well above this average.
28. A 2020 analysis for COWA by a then member of its board, Mark Weldon (who is an Economics graduate of the University of Auckland) calculated the value of the premium to the wineries (that is, relative to average pricing in other NZ wine regions) to be \$36 million/year.⁷

⁵ New Zealand Wine, 'A Snapshot 2026: Central Otago'.

⁶ The 27% cellar door visit statistic is given in the Chair's Report to the New Zealand Winegrowers Inc.'s *Annual Report 2025*, page 5.

⁷ 'Introductory Paper' prepared for the COWA Special Members Meeting, September 4, 2020.

29. Adjusted by inflation, this is about \$47 million/year⁸. Adding to this a distribution/wholesaling/retail markup of two thirds, brings the value of the premium at the point where the wine passes out of the economy and into the end-use household to about \$78 million annually.⁹ The premium represents real value added, contributing directly to “New Zealand Inc’s” GDP.

30. It is this premium that the CO industry, and New Zealand, can legitimately worry about losing, for the reasons set out in COWA’s resubmission to the Fast Track panel:

The “Central Otago” and “Bendigo” names are globally associated with premium wine, sustainability, and pristine landscape values that underpin both the regional economy and New Zealand’s wider wine and tourism brands.

Given the scale, proximity and operational characteristics of the proposed gold mine, there is a credible risk of direct and indirect effects on vineyard productivity, soil health, water security, export confidence, tourism value, and long-term investment certainty in viticulture. These matters go directly to the Panel’s assessment of environmental, economic and cumulative effects under the FTA.¹⁰

Central Otago wine in the national setting

31. Statistically, wine production in New Zealand is dominated by one region and one variety: Marlborough and Sauvignon Blanc. Of the 500,000 tonnes of grapes harvested in NZ in 2025, close to 80 percent were sauvignon and a similar proportion were from Marlborough.¹¹

32. Obviously, then, Marlborough specialises in particular in this white wine variety, although the region’s size is such that it is also our biggest grower of chardonnay, pinot noir and pinot gris grapes, though these in much smaller quantities. This diversity is essential to NZ’s brand position in the global wine industry and arguably now weighted too far to sauvignon supply.

33. What happens to the wine? It is mostly exported. Over the decade to 2025, just 15 percent of NZ wine was sold internally – 85 percent exported. Not surprisingly, sauvignon blanc, and, therefore, Marlborough, dominate the export totals, accounting for close to ninety percent by volume.

34. And within the country, our wines compete with imports – the market share internally of NZ wines averaged 54 percent, 2016-25. Imports are spread across white, red and sparkling varieties.

⁸ The Reserve Bank CPI inflation index increased by 30% from 2019 to end-2025.

⁹ This figure for the typical mark-up from winery door to wine stores and supermarket shelf was given to me by local winery proprietors and is consistent with what I believe to be typical practice in the grocery sector. The mark-up, of course, reflects the real costs that go into bringing a product forward to the retail market, But the point is that these costs are the same for a \$20 bottle of wine as for a \$200 bottle (except insurance). So the mark-up on the winery door premium is also a true premium -- real profit for the participants in the supply chain.

¹⁰ Carolyn Murray *on behalf of the Board of Directors*, Central Otago Winegrowers Association, ‘Resubmission of prior correspondence and request to be invited to comment’, to the Fast Track Export Consenting Panel, 27 February, 2026.

¹¹ Source: NZ Winegrowers *Statistics: Summary of New Zealand wine (2016-2025)*.

35. So, how does Central Otago wine fit in to the national picture? There are many differences. Sauvignon vines are no more than two percent of total plantings.¹² Pinot noir dominates, with plantings accounting for 81 percent of the total, with pinot gris (8 percent) and chardonnay (5 percent). It also bolsters the brand value of wine in NZ as it establishes a premium product offering that is critical for establishing wine markets offshore and for attracting wine tourism and related writing and promotion.
36. The focus on lower-yielding varieties is reflected in average tonnage of grapes harvested per hectare, which I calculate to be (in 2025) 13.4 in Marlborough, 7.7 in Hawkes Bay, and just 5.3 in Central, in 2024 (cropping practices may be a factor here).¹³
37. On the selling side, the Marlborough-led export focus is not found in Central. A 2024 COWA survey of members yielded the figure of 73 percent as their average percent of sales made domestically (ie not directly exported).
38. However, this must be an underestimate, because it does not allow for foreign tourists visiting Central and purchasing local wine at the cellar door, in shops, and in restaurants. Any purchase of a NZ-made good or service by a non-resident is an export, even though only those purchases made for physically exported goods turn up in the official export statistics.
39. It is worth noting here that the glamour that seems to be attached to 'exporting' - selling our products into overseas markets in competition there with foreign suppliers, should really be granted also to selling domestically, when this too is in an open market in competition with foreign suppliers, who do indeed, as noted, supply approximately one half of the wines sold in New Zealand.

Vines in the landscape

40. The landscape value of CO vineyards should be acknowledged. I have never heard anyone complain of a vineyard spoiling the view. To the contrary, in Central, while I am not a landscape architect, the neat rows of a well-ordered vineyard are an attractive complement to the wilder beauty of the surrounding countryside. In New Zealand, it is common to see tourist publicity photos centered on a vineyard in the foreground. Of iconic status here, as perhaps the most frequently copied New Zealand landscape image¹⁴, is the view taken from the top of Rippon Vineyard in Wanaka, with the vines below, looking out to Ruby Island and beyond to the Minarets and the other great mountains that feed and protect Lake Wanaka.

¹² This and the following are derived from data supplied to me by COWA on March 24, 2026.

¹³ There are large year-to-year fluctuations in yield – 2024 was a bad year for Marlborough; 2025 a bad year in Central.

¹⁴ Although perhaps a competitor for most frequently copied NZ publicity photo would be the telephoto image of Mt Cook looking over Lake Pukaki.



The Bendigo-Ophir Gold Project and impact on employment

41. An Australian company, Santana Minerals Limited, is seeking approval to go ahead with an open cast gold mine in the Bendigo-Ophir mountains, east of Tarras, in Central Otago.
42. The Fast Track Panel has received an economic analysis of the proposed mine commissioned by Santana, and prepared by Mr Benje Patterson, an independent consultant trading as 'People & Places'.¹⁵
43. I believe that the Fast Track Panel will receive comprehensive submissions on the mine from at least three further economists, or groups of economists, whom I believe to be competent: the New Zealand Institute of Economic Research (NZIER), Dr Geoff Bertram, and Dr Richard Meade, an academic, and principal consultant with Cognitus Economic Insight.
44. I have been shown drafts of the possible submissions to the Fast-track panel by Drs Bertram and Meade, and I am in agreement with the points made therein. I note that Dr Bertram's extensive experience with assessing mining projects leads him to express doubts about Santana Minerals' claims made in their Prospectus.¹⁶

¹⁵ Benje Patterson, 'Economic impacts of the Bendigo-Ophir Gold Project – October 2025 update', Report commissioned by Santana Minerals Ltd

¹⁶ Santana Minerals Limited, 'Bendigo-Ophir Gold Project – Updated Pre-Feasibility Study', 1 July 2025

45. I have also seen a draft of another possible submission, by Mr Edward Miller, who apparently believes that the Santana Prospectus overstates the likely public revenues to be expected from the mine.
46. My primary concern in my evidence is to bring forward issues particularly relevant to wine and tourism in Central Otago, as I have done above. However, I have read closely the Santana Prospectus and other relevant documents, and have some observations on the matter, from an expert perspective.
47. Given that the Prospectus is aimed at attracting investors to the project, and probably also at attracting approval from the NZ government and/or its delegated agent in the matter (this now being the Fast Track Approvals Panel), I consider it prudent to allow for something that could politely be called an 'optimism bias' in the claims made for the project by its sponsors.
48. However, I do expect that the Gold Mine would bring economic benefits to New Zealand, through royalties paid to the Crown, corporate tax paid, and profits received by any local shareholders in Santana Minerals Limited.
49. On the matter of local shareholding, I note that in its current dual listing with the ASX (Australian Stock Exchange) and NZX (New Zealand Stock Exchange), the nineteen 'top' holders of its stock are, so far as I can see, all Australian or other foreign companies or institutions. Of course, this could change if Santana's Prospectus proves attractive to the financial sector in New Zealand.
50. I firmly reject, as do the competent economists named above, whose Drafts I have read, Mr Patterson's use of a 'multiplier model' to bring forward as additional claimed economic benefits jobs created directly and indirectly by the project.
51. Especially in the setting of a regional economy (Otago province) with an unemployment rate below three percent, the appropriate assumption to make is not as the multiplier approach implicitly assumes – that the workers hired will have previously been unemployed, but rather that they will already be in gainful employment, so there are no net job gains and thus no benefit to be thereby expected.
52. This is standard economics, and codified as such in NZ Treasury's *Guide to Social Cost-Benefit Analysis*.
53. However, Treasury's approach to the matter is perhaps too austere, because it fails to acknowledge that, in order to persuade already employed workers to change jobs, the Mine (in this case) will have to offer a premium on their current wage.
54. How big a premium? In previous evidence (e.g. in NZ King Salmon 2012) I have suggested that a premium of 10-20 percent might do the job, in most settings.

55. However, Mr Patterson has suggested that the mine would pay, on average, about \$140,000/year to workers who might be expected to currently be on the Otago region average wage, which is about \$70,000.
56. I consider it wise to assume that Santana will not pay more than it has to, to attract workers. So, if doubling their wage is what it takes, one would expect that this is because working in the mine is going to be particularly unpleasant, perhaps because of twelve-hour shift working, for example, or inherent health and safety risk. If so, the benefit credited to the wage premium should be discounted somewhat.

Selling off the Crown Jewels on a Fast Track

57. I conclude my evidence to the Fast Track Expert Panel with some observations on the gold mine project in the context of the speeded-up process within which the Panel is required to work.
58. In New Zealand, all unmined minerals – gold, silver, uranium, oil and gas - are owned by the Crown – an entity interchangeable here with the Government and People of NZ.
59. In addition, the Crown also owns (according to AI Overview) around \$600 billion of other assets, including roads, schools, hospitals, half an airline, and a sovereign wealth fund often called the NZ Super Fund, which is currently worth around \$90 billion.
60. The Crown is also carrying around \$500 billion of debt, much owed overseas. At any time, the Crown could reduce its debt by selling assets, for which it would normally expect to receive full market value, net of selling costs. But such asset sales are quite uncommon and often politically controversial.
61. I believe that the only major assets which the Crown routinely makes available for sale, subject to regulatory approval, are those minerals. But in this case, the Crown does not attempt to realise full market value of the asset for the country, but rather charges a fixed ‘royalty’ payment, currently set at the greater of 2% of the sales value of the asset or 10% of the profit yielded by the mine, after extraction and other costs are netted out of sales value.
62. Perhaps because of sensitivity about rather limited financial return to the public from mining royalties, and undoubtedly because of the environmental effects of, in particular, open-cast mining, the government delegates the decision to approve or decline a mining application to a formal regulatory process.
63. The present matter of an application for approval by the sponsors of a proposed gold mine in the hills of the Bendigo region of CO (the Bendigo Mine) has been referred by the government to a panel of experts convened under the Fast-track Approvals Act 2024 (the FTA) of which the purpose is “to facilitate the delivery of infrastructure and development projects with significant regional or national benefits” (s3 of the Act).
64. It is my understanding that ‘facilitation’ is not supposed to imply entire relaxation of the standard of net benefits required to justify a project – that is, biasing the assessment process towards approval -

but rather speeding up and simplifying the process of reaching a decision on those net benefits. This is effected by limiting the time allowed for a decision to be made, and delegating this decision to the expert panel, thereby bypassing the usual, and often lengthy processes of implementing resource management legislation through the courts, such as the Environment Court. That said, I understand that, approval *may* be declined if adverse impacts out of proportion to regional or national benefit, specifically where:

those adverse impacts are sufficiently significant to be out of proportion to the project's regional or national benefits that the panel has considered under section 81(4), even after taking into account—

(i) any conditions that the panel may set in relation to those adverse impacts; and

(ii) any conditions or modifications that the applicant may agree to or propose to avoid, remedy, mitigate, offset, or compensate for those adverse impacts.

65. I also note that a more traditional view is that particularly large or significant projects such as this one should be subjected to the most rigorous, and if necessary lengthy evaluation .
66. "Facilitating" regulatory decisions runs the risk of facilitating the approval of bad projects that would have significant net dis-benefits to the nation. I can find no justification for the view that dealing with this project application is a matter of great urgency. The gold will still be there, whenever the mining begins. The difficulties the Panel will face within the constraint of the fast-track timetable are considerable, and run the risk of criticism of the process, or even appeal . That said, this is the reality of the current Fast Track process. I trust the Panel will carefully consider all the economic and other evidence before it - if not call for conferencing between experts to better assist the Panel in understanding the issues and points of difference.