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COVID's Influences on Australia's Wine Markets and Regions

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COVID's Influences on Australia's Wine Markets and Regions

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Early estimates of possible impacts of the coronavirus COVID-19 on the Australian wine sector were provided in the Winter 2020 issue of this journal, using a new model of global beverage markets (Anderson and Wittwer 2020). Those estimates were based on the IMF's first projections of the shocks to national incomes, which assumed there would be a sharp V-shaped recovery in most parts of the world. It is now clear that the global recovery will be more prolonged, more like a Nike 'tick' lasting beyond 2021. This article revisits the issue (while leaving aside other adverse influences this year on the wine sector, notably bushfires and Chinese tariffs). It does so using the latest IMF projections of national incomes, and it also draws on a new model of the Australian economy to focus on the varying extent to which the country's wine regions are adversely affected.

Consumer sales of wine have been affected during the COVID period not only by the temporary decline in incomes but also by the social distancing measures and self-isolation that have led to the closure of restaurants, bars, cafes and clubs, plus the decline in international travel and tourism and hence also in duty-free sales, consumption on airlines and cruise ships, and visits to cellar doors. Certainly there has been some offsetting off-premise sales and, for small producers, direct e-commerce sales; and there were some increases in consumer-held stocks in anticipation of a period of self-isolation at home. Off-premise wine sales typically are less expensive than on-premise purchases, allowing consumers to upgrade in the absence of spending in restaurants. In particular, the quantity and quality of sparkling wine sales has plummeted because of far fewer opportunities to celebrate in large groups. Wine production, on the other hand, was initially affected relatively little by COVID-19: even though the 2020 vintage timing coincided with when the coronavirus struck, exemptions were made, including to labour movements, to allow the industry to complete its crush.

Revised global beverage market modelling: Australian results

Analysis of markets for the three main alcoholic beverage groups (grape wine, beer and spirits) requires a global economic model of national beverage markets connected through international trade, in which the interactions between each nation's producers and consumers of these three beverages are explicitly recognized. Wittwer and Anderson (2020) recently generated such a model, the GLOBAL-BEV model. It is calibrated to 2019 and projected to 2020 and beyond. Results are reported each year relative to a no-COVID business-as-usual

baseline simulation that reflects a medium-term global income growth slowdown that was expected in the absence of COVID-19.

The differences between the COVID and no-COVID scenarios in aggregate household expenditure globally are -7.5% in 2020 and -5.5% in 2021. For Australia those differences are -6.2% and -5.5%. There is of course a huge amount of uncertainty around these ‘best guesses’ by the IMF, particularly on how rapidly economies will recover after 2020. We assume that consumers move away from high-quality sparkling wines (fewer celebratory events) and slightly toward high-quality still wine in 2020 (closure of restaurants, cafes, pubs and clubs meant consumers were able to afford better wines to drink at home).

In the GLOBAL-BEV model, wine markets have been disaggregated into four types, namely non-premium (including bulk), commercial-premium, and super-premium still wines, plus sparkling wine. Commercial-premium still wines are defined to be those between US\$2.50 and \$7.50 per litre pre-tax at a country’s border or wholesale.

The results for Australia of the 2020 recession due to COVID-19 and the subsequent incomplete recovery in 2021 are as follows, beginning with domestic producer prices. The expected drops in aggregate national expenditure are projected to lower real producer prices of Australia’s still wine by between 4% and 8% in 2020, and by only slightly less than that in 2021. The estimated fall in the producer price of sparkling wine is one-quarter in 2020, but by 2021 it is projected to be just 8% below what it would have been without COVID as socializing becomes more normal.

The world’s wine consumption is projected to be 7% less in 2020 and 4% less in 2021 in volume terms in the COVID scenario compared with business as usual. Within the wine group, sales of super-premium still wine drop less than lower-priced wine, due to a taste swing towards consuming higher-price wines off-premise as expenditure on-premise falls markedly. The volume of sparkling wine is projected to be down by more than a quarter compared with business-as-usual in 2020, again a reflection of the widespread cancellation of large celebratory activities in 2020, but by only 8% in 2021. Australia’s domestic consumption is projected to be dampened less than the rest of the world’s (by 4% in 2020 and 3% in 2021). The value of those sales is depressed even more, thanks to the dampening of prices: real expenditure on wine globally is 13% lower in 2020 and still 8% lower in 2021.

The volumes of world trade in the various wine categories alter by percentages slightly smaller in size to those for the volume of global consumption, but their values alter by somewhat larger percentages than changes in consumer expenditure because of the changes also in unit values of traded wines. In particular, the value of wine exports falls short by three times as much as their volume in both 2020 and 2021 (Tables 1 and 2). Australia is affected a little less adversely than other exporters of wine, but still harmed. Their exports are hurt less because sparkling wine – the wine type hit hardest by the COVID lockdowns – is a smaller share of their exports than of the rest of the world’s.

[Insert Tables 1 and 2 about here]

Caveats

The above results depend heavily on numerous assumptions about the extent to which economies go into recession in 2020 and the extent and speed of recovery in the years to follow. The V-shaped projection in April 2020 by the IMF, implying a near-return to 2019 incomes by 2021, was more optimistic than many commentators suggested at the time, and also than the IMF's October 2020 projections (IMF 2020). It may still be too optimistic. The International Wine and Spirits Research group, for example, projects it will take five years for global alcohol consumption to return to 2019 levels after the slump of 2020.

The projected impact of COVID in 2021 also depends on our assumed return to premiumization on the part of consumers (a reversal of our assumed taste swing away from fine wines in 2020), which is based on the assumption that consumers will return fully to eating out, pubbing, clubbing and cellar-door visiting in 2021. Again that may be too optimistic, at least in terms of start date and speed if not also on the eventual extent of recovery.

Also assumed throughout is that wine-specific national policies affecting production, consumption and trade are unchanged. Yet several are already in train or being contemplated. The most notable is China's temporary tariffs of between 113% and 218% on bottled still wine imported from Australia, pending dumping and subsidy enquiries that are expected to be completed in August 2021, at which time similar-sized anti-dumping and countervail duties may be applied for a further five years. A GLOBAL-BEV model simulation of those new Chinese tariffs suggests their magnitude is sufficient to wipe out Australian exports of wine to China, a sales loss of US\$690 million per year. While that will be partly offset by greater sales to other export markets and to Australia's domestic market, Australia's global exports are projected to be depressed by about one-sixth (\$420 million) and producer prices by one-twelfth.

Australian wine region model results

The above model results are only national aggregate estimates. To examine the impacts of COVID-19 restrictions on regions within Australia, we use a new model of the Australian economy called TERM-Wine. It is a multi-regional model that includes three grape and three wine types: non-premium *NPwine*, commercial-premium *CPwine* and super-premium (including sparkling) *SPwine*. It is based on official data that are projected forward to provide a baseline for each financial year over the next decade assuming no COVID. We then compare the alternative COVID simulation each financial year with that business-as-usual baseline scenario. The above GLOBAL-BEV model results are used to calibrate the shock to wine exports in TERM-Wine.

The model's sectoral dimension for this application involves 28 sectors, including three grape and three wine types plus other sectors relevant to the industry. The latter include *HotelsCafes* (restaurants, bars, cafes, hotels), *Tourism* (domestic tourism by citizens) and

ExpTourism (inbound tourism by foreigners). Each of these sectors includes wine inputs, so downturns or booms in demand in these sectors result in changes in demand for wine and hence winegrapes. By including both off-premise (direct consumption by households) and on-premise (consumption in restaurants, bars, cafes, hotels), the model reveals whether the impacts of altered consumption patterns are in opposite directions for those two forms of imbibing. For example, reductions in dining out and travelling will have a negative effect on on-premise consumption and a positive effect on off-premise consumption of wine.

During lockdown, which lasted several months, tourism (domestic and imported *Tourism*) and *ExpTourism* activities virtually ceased. Domestic tourism is projected to recover first, with a slower recovery over several years for *Foreign holidays* by local citizens and *ExpTourism* within Australia by foreigners. Travel restrictions also reduce Australia's population,. Even if immigration resumes in 2021, the national population and labour supply will be more than 2% below a no-COVID base in 2021-22 and beyond because of that loss of net immigration.

Lockdowns and restrictions on activity and travel also reduce capital utilisation and labour productivity to varying extents across sectors, and alter consumer demands. Restaurants, for example, by being restricted to takeaways, either close down or reduce turnover hugely. We assume a swing away from spending associated with social activities, then a recovery in 2021-22 except in sectors involving international travel.

Table 3 shows the pre-COVID breakdown between intermediate users (*HotelsCafes*, *Tourism* and *ExpTourism*) and final users, namely households and exports. The share of non-premium wine sold to *HotelsCafes* is smaller than the corresponding shares for the other two wine types; a larger share of super-premium wine is sold to households and a smaller share of super-premium wine is exported.

[Insert Table 3 about here]

With restrictions enforced in response to COVID-19, we expect off-premise consumption of wine to increase. Since there is a slowdown in consumption of *HotelCafes* and domestic tourism, there is an accompanying slowdown in sales of wines to these domestic users.

Until the COVID-19 crisis, export values had grown steadily since 2015 at around 10% per annum. The drop in wine exports is relative to a base that assumes ongoing export growth (including no changes in the zero tariff on China's imports of Australian still bottled wine). Tourism exports are projected to take beyond 2026 to fully recover, hence wine sales may not recover for several years relative to a no-COVID base.

Table 4 has estimates of the contribution of each sales point to 2020-21 wine sales deviations. Rows (1), (2) and (4) use the modelled deviation in domestic household consumption shown in columns (1) to (3), multiplied by sales point shares in Table 3, to calculate the contributions shown in columns (4) to (7). Rows (3) and (4) use export volume deviations, as presented above, and row (6), the deviation in national real GDP, to calculate contributions involving users other than households. The reason tourism makes a positive contribution to

sales is because we assume that local consumers substitute domestic tourism for foreign tourism in response to international travel restrictions. Domestic tourism and households make the only positive contributions to sales. A virtual temporary cessation of tourism exports are estimated to have similar negative impacts on total sales as do direct exports.

[Insert Table 4 about here]

Figure 1 shows the deviation in real producer prices from base (deflated by the GDP price deviation). The non-premium and commercial-premium grapes sectors suffer the largest producer price falls relative to base of any commodity in the aggregation in 2020-21. This reflects the downturn in demand for wine due to the temporary closure of restaurants and tourism activity.

[Insert Figure 1 about here]

Figure 2 shows the regional impacts on the volume of wine production and its average price in Australia's key wine regions. Gross winery earnings are projected to be 7-8% lower in 2020-21 than they would have been in the absence of COVID, with the biggest declines in the warmest winegrape-growing areas.

[Insert Figure 2 about here]

Conclusion

This study shows that COVID-19 restrictions and income losses alter the pattern of consumer spending on wine, as wine is both a retail commodity for off-premise consumption and part of a bundle consumed in social activities and travel. In the short term, the industry has followed other retail activities in increasing online and phone sales in response to cellar doors, restaurants and pubs temporarily closing or being partly restricted. Overall, increased off-premise consumption is projected in the above modelling to only partly compensate for diminution of sales due to restrictions on social activities, tourism and travel.

The Australian wine industry has faced the pandemic in the wake of successive dry years in key winegrape regions that had reduced Australian supply in the 2019 and 2020 vintages. Lower sales in 2020 to some extent alleviated concerns of reduced supply. Around mid-2020, given the high share of Australian exports sold to China (39% by value in 2019-20) and the relatively quick recovery of the Chinese economy from the pandemic, the pandemic itself has not had a marked impact on Australian wine exports in 2020. A graver concern emerged late in the year however, namely the imposition of very high temporary tariffs (up to 218%) on China's imports of Australian bottled still wine, pending dumping and subsidy enquiries that are expected to be completed in August 2021 – at which time similar-sized anti-dumping and countervail duties may apply for anything up to a further five years. The hope is that an amicable solution to this development will be found, but in the meantime many wineries no doubt will seek to diversify their exports to other emerging markets to reduce the risk of this and any future trade disruptions.

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Table 1: Changes in volume of wine exports, 2020 and 2021 (% , relative to no-COVID baseline)

(a) 2020

	AUS	NZL	WEur	US&Can	LatAmer	SthAfr	WORLD
All wine	-4	-2	-6	-3	-7	-3	-5
NPWine	-4	-3	-1	-2	-6	-3	-2
CPWine	-3	-2	-1	0	-8	-2	-2
SPWine	-4	-2	0	-3	-6	-1	-1
Sparkling	-26	-20	-28	-22	-37	-34	-28

(b) 2021

	AUS	NZL	WEur	US&Can	LatAmer	SthAfr	WORLD
All wine	-1	-2	-3	1	-6	-1	-3
NPWine	-2	-1	-1	0	-4	-2	-2
CPWine	-1	-1	-1	2	-5	0	-1
SPWine	-1	-2	-1	0	-9	-2	-2
Sparkling	-3	-2	-9	-1	-9	0	-9

Source: Authors' Global Bev model results.

Table 2: Changes in real^a value of wine exports, 2019 to 2021 (% relative to no-COVID baseline)

(a) 2020							
	AUS	NZL	WEur	US&Can	LatAmer	SthAfr	WORLD
All wine	-11	-7	-16	-9	-13	-11	-15
NPWine	-9	-7	-6	-7	-10	-9	-7
CPWine	-10	-12	-10	-9	-14	-11	-11
SPWine	-8	-6	-5	-9	-10	-6	-6
Sparkling	-46	-41	-47	-43	-49	-52	-47
(b) 2021							
	AUS	NZL	WEur	US&Can	LatAmer	SthAfr	WORLD
All wine	-7	-9	-10	-7	-11	-7	-9
NPWine	-6	-5	-5	-5	-7	-7	-6
CPWine	-7	-8	-7	-5	-10	-7	-8
SPWine	-9	-9	-9	-9	-15	-10	-9
Sparkling	-11	-10	-15	-10	-14	-11	-15

^a Expressed in US dollars but in these simulations both exchange rates and overall national CPIs are assumed not to change so these are the same as nominal national currency changes.

Source: Authors' Global Bev model results.

Table 3: Sales of Australian wine by destination, 2019-20 base
(using value shares at producer prices)

	NPWine	CPWine	SPWine	All wine
HotelsCafes	4.7	14.3	11.6	11.2
Tourism	10.4	16.5	7.5	11.7
ExpTourism	3.3	5.2	2.4	3.7
Households	18.0	36.2	43.0	35.2
Exports	60.7	23.4	31.7	34.4
Other	3.0	4.3	3.8	3.9
Total	100.0	100.0	100.0	100.0

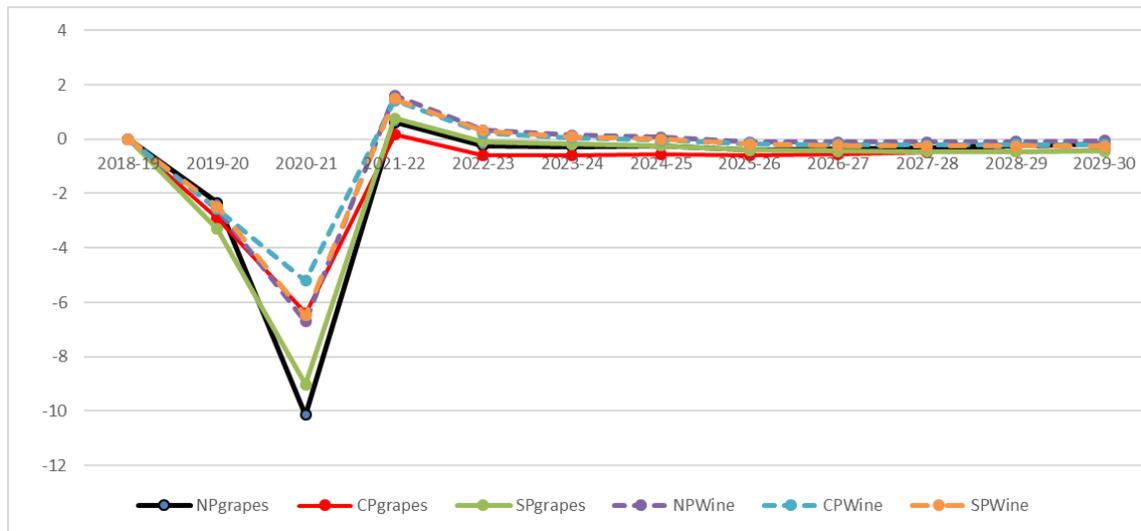
Source: Wine Australia; ABS National Accounts; estimates based on Tourism Research Australia, *Tourism Satellite Accounts*

Table 4: Back-of-the-envelope impact of COVID on national sales, Australia, 2020-21
(% contribution to total sales deviation)

	NPWine (1)	CPWine (2)	SPWine (3)	NPWine (4)	CPWine (5)	SPWine (6)	AllWine (7)
	% domestic deviation from business-as-usual (BAU)			Percentage point contribution to sales deviation			
(1) HotelsCafes	-15.6	-15.6	-15.6	-0.7	-2.2	-1.8	-1.8
(2) Tourism	4.8	4.8	4.8	0.5	0.8	0.4	0.6
(3) ExpTourism	-82.7	-82.7	-82.7	-2.7	-4.3	-2.0	-3.1
(4) Households	7.4	3.1	2.3	1.3	1.1	1.0	2.6
(5) Exports	-8.1	-12.8	-10.6	-4.9	-3.0	-3.4	-3.8
(6) Other	-8.1	-8.1	-8.1	-0.2	-0.4	-0.3	-0.3
(7) BoTE %				-6.8	-8.0	-6.1	-5.8
(8) Modelled %				-6.4	-8.1	-6.0	-5.6

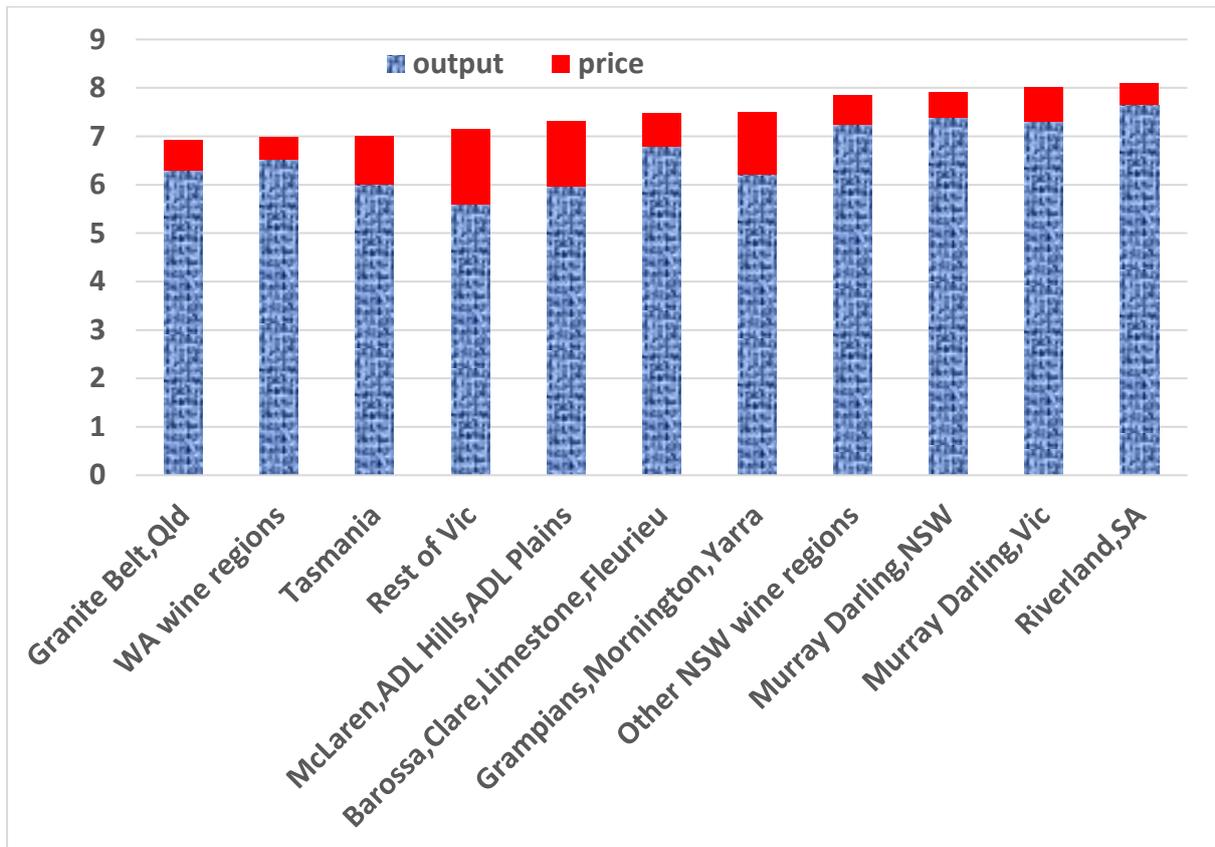
Source: Authors' TERM-Wine model results

Figure 1: COVID impact on Australia's grape and wine real producer prices (% deviation from base)



Source: Authors' TERM-Wine model results

Figure 2: Decline in gross winery earnings (volume plus price falls) due to COVID, by wine region, Australia, 2020-21



Source: Authors' TERM-Wine model results