In Vino Veritas: We Don't Expect Treasury Wine's Growth Will Live Up to Its Inflated Share Price

Treasury's premium portfolio a boon, but shares look overripe.

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Adam Fleck, CFA
Director of Equity Research, Australia and NZ

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Executive Summary

Treasury Wine has proved to be one of Australia's great recent turnaround stories, but the market's glass looks more than half full. We credit management for restructuring the winemaker's focus on the rapidly growing premium wine market since CEO Michael Clarke joined in 2014. However, the market has priced the stock at an increasingly high multiple to earnings, and shares now look substantially overvalued. We applaud the company for walking away from low-priced commercial bulk wine production that led to distributor inventory problems, write-offs, and wine destruction in prior years, focusing instead on higher-quality and higher-priced wine, which has improved profitability and returns on invested capital. But we expect earnings to slow and the high earnings multiple to ultimately collapse, and recommend a much lower price before considering long-term investment in Treasury Wine's shares.

Despite a rosy valuation, the future for Treasury Wine remains solid, especially overseas. Although many of the firm's most well-known and highest-priced wines, such as the iconic Penfolds brand, are produced in Australia, the majority of earnings stem from Asia and North America. We expect these two regions to drive the bulk of income growth over the next five years, rising to 78% of operating income by fiscal 2022 from 68% in fiscal 2017. These gains will be driven by outsize economic growth in China, continued end-market premiumization, and positive profitability mix shift, albeit at a slower rate than the robust gains seen in recent years.

Key Takeaways

- China has driven the bulk of Treasury's recent volume growth, and the company should benefit from rising imports, particularly from Australia. But the market overestimates the medium-term volume growth potential, which we expect to slow because of cultural limitations and more-limited GDP gains.
- Treasury should enjoy the U.S. trend of increasing demand for higher-priced wines, boosting revenue growth and profitability. We forecast margins rising in this segment to 23% from 18% in fiscal 2017.
- Despite rising margins and above-market top-line growth, we don't think Treasury has carved an economic moat. The firm faces competition from both larger, global players and smaller, fragmented wine producers. Meanwhile, customer switching costs are low, and consumers are often price-sensitive.

Companies Mentioned

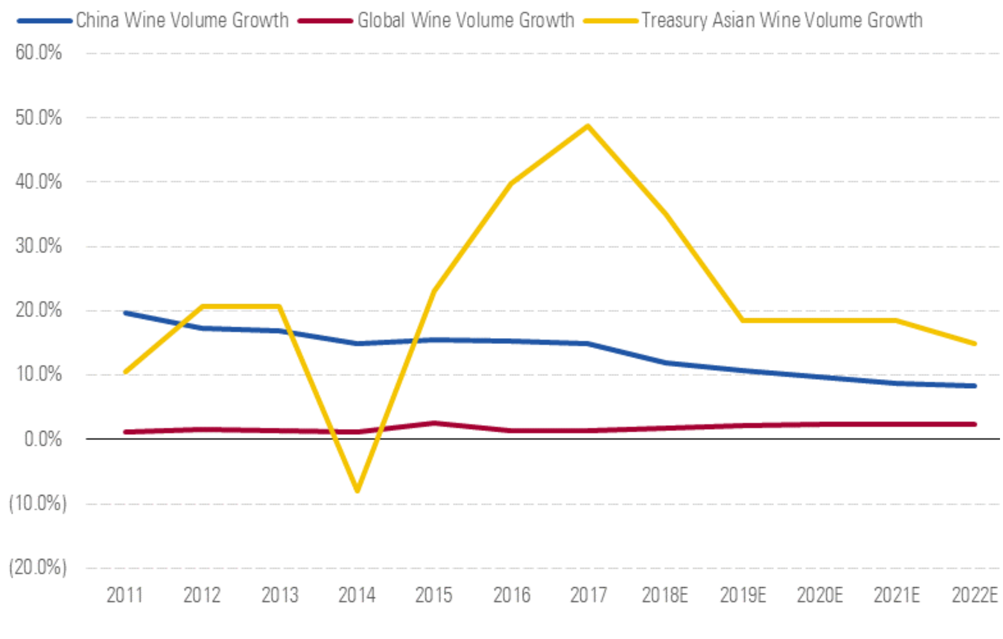
Name/Ticker	Economic Moat	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Morningstar Rating	Market Cap(Bil)
Treasury Wine Estates TWE	None	AUD	10.50	16.59	High	★	11.8
Constellation Brands STZ	Narrow	USD	192.00	224.84	Medium	★★	42.9
LVMH MC	Wide	EUR	201.00	299.55	Medium	★	150.2

Treasury's Growth Opportunity Remains Solid in Asia, but at a Slowing Rate Too Low to Underwrite the Lofty P/E

No discussion about Treasury Wine would be complete without focusing on the company's future in China. Although the country made up only 5% to 10% of consolidated revenue in fiscal 2017, by our estimate, it has helped drive substantial top-line growth for the company, as consumers have flocked to brands such as Treasury's Penfolds and other high-end wines. The outlook remains bright, with further wealth creation in China likely leading to continued strong gains in wine consumption, with imports rising at an even faster clip. But we caution that growth rates look to slow from recent levels—a view the market doesn't seem to fully appreciate.

We expect Treasury's volumes in its Asian segment to grow at a 21% CAGR over the next five years, substantially slower than the 40% seen in the past three years. While the company imports wine to many countries in the region, China is the main driver of the segment's future. We estimate roughly a third of the segment's volume stems from Chinese sales, and we forecast nearly 25% annual volume growth for Treasury over the next five years, outstripping the country's total wine market gains of 11% yearly as the company picks up share. However, while we see the near term as particularly strong, we expect slowing GDP growth, increasing competition, and a cultural limit to the upside of wine consumption as factors that will lead to more-muted gains in the latter years of our five-year forecast. Nonetheless, China's growth looks to remain significantly above the global rate, estimated by GlobalData at low single digits through 2022.

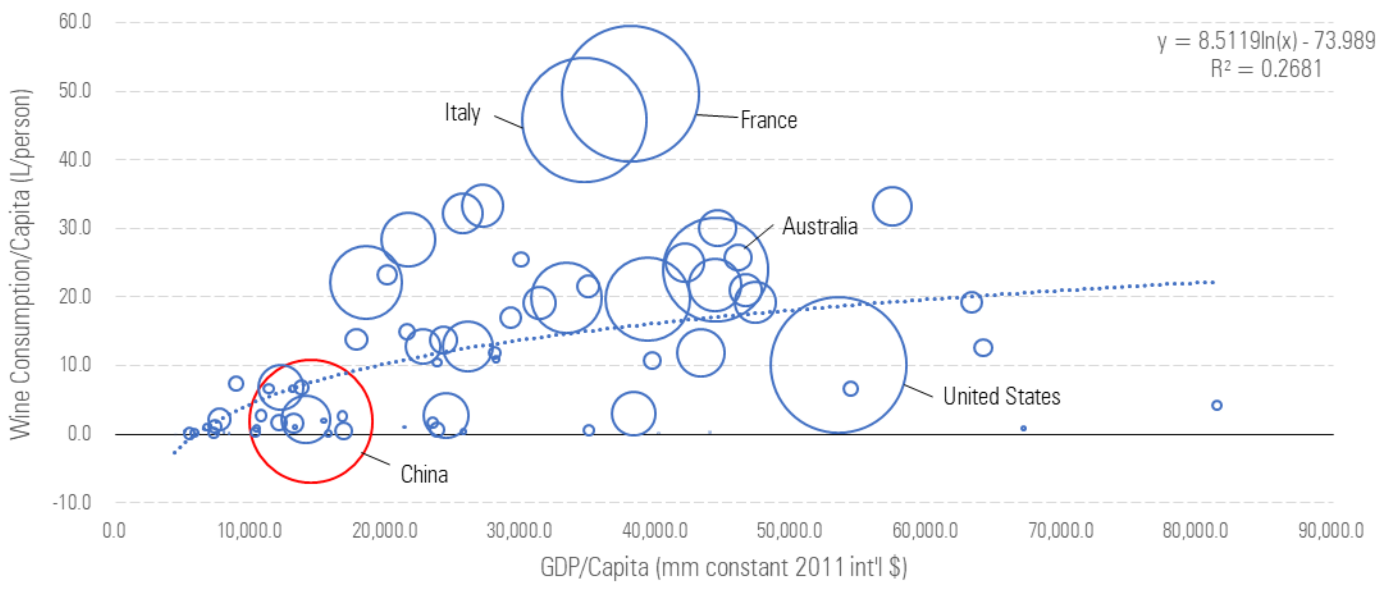
Exhibit 1 Treasury's Asian Volume Growth Should Remain Robust, but the Slowing Trend Continues



Source: GlobalData, company filings, Morningstar. China and Treasury projections are Morningstar; global projections by GlobalData.

The main driver of China's outsize wine volume growth outlook is continued wealth creation within the country. Rising GDP per capita tends to positively correlate with wine consumption per person, albeit with substantial cultural effects that drive differences from the expected rate across countries. As shown in Exhibit 2, the R-squared was 27%, based on 2016 data. This reflects a positive, but weak, correlation, as countries like France and Italy are well above where their respective income levels would normally suggest.

Exhibit 2 China's 2016 Wine Consumption Versus Income Sat Below the Global Trend Line



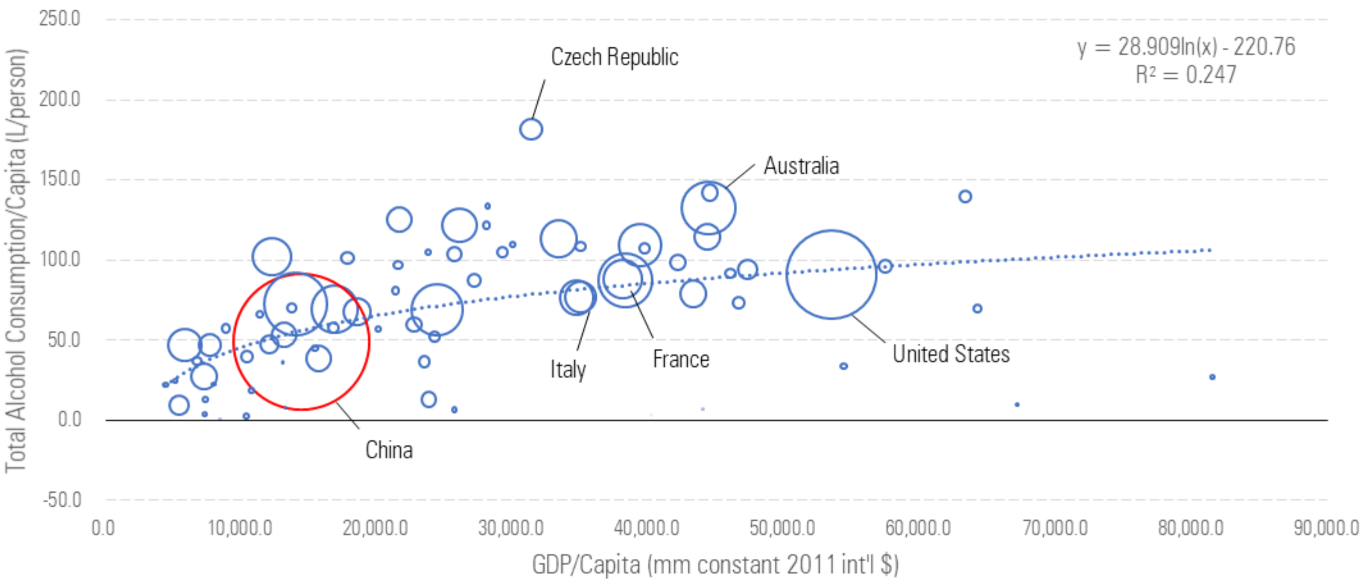
Source: World Bank, GlobalData, Morningstar. Bubble size = total volume of wine market.

China, the large red bubble in Exhibit 2, sits below the global trend line. But again, this gap is heavily influenced by several upper- and middle-income countries that both consume and produce a large amount of wine. Beyond the aforementioned France and Italy, other outliers include Argentina, Australia, Austria, and Germany, which also sit above the calculated trend line. Conversely, wealthier regional neighbors, such as Japan and South Korea, sit well below the line.

So the question becomes: As China increases its GDP per capita, will it look more like the global average, incorporating a perspective that looks outward to the rest of the world? Or will China's wine consumption remain constrained by cultural norms, as in other Asian countries?

We think the truth will be somewhere in the middle. To arrive at this conclusion, we've broken down each country's wine consumption per capita into two parts: total alcohol consumption and the percentage of drinks that are wine versus beer or spirits. By total alcohol consumption, China is much closer to the trend line in Exhibit 3, although again, correlation is relatively low (an R-squared of 25%). We also see a lower income elasticity for alcohol consumption as countries become wealthier; at a certain point, a population will only demand so much alcohol, no matter how wealthy. But China's development to date has largely followed this trend line, and we expect total alcohol consumption will continue to follow this trajectory as GDP per capita increases over the next five years.

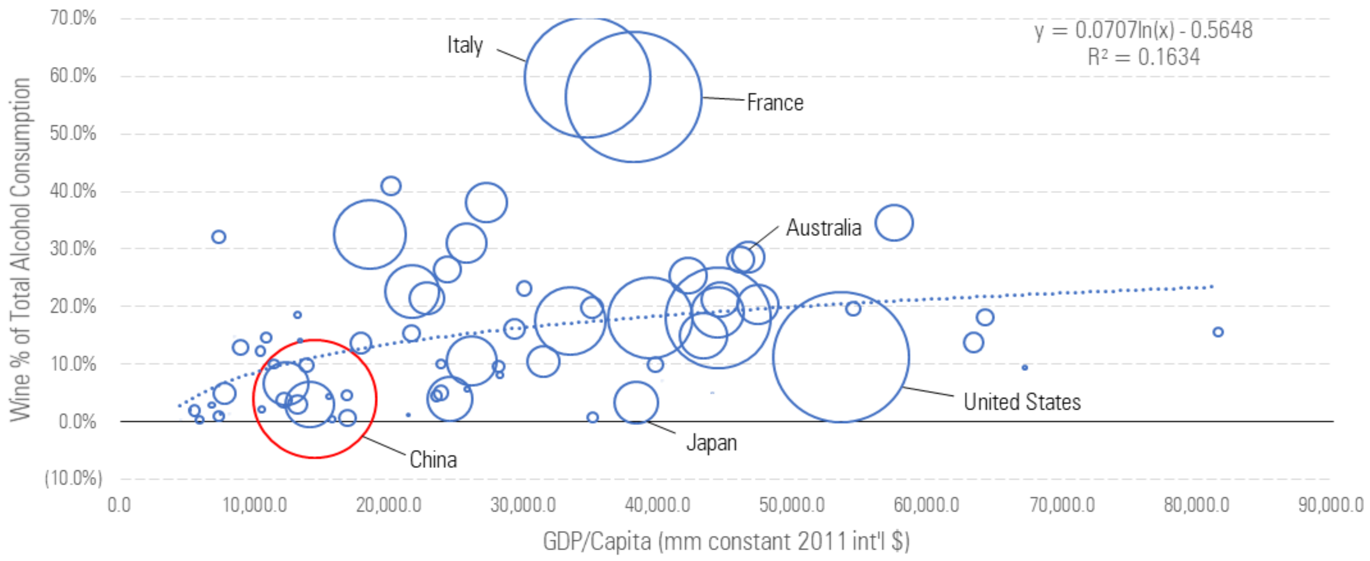
Exhibit 3 China's Total Alcohol Consumption Is Closer to Where We'd Expect Based on Income



Source: World Bank, GlobalData, Morningstar. Bubble size = total volume of alcohol market.

The second factor to consider is how much wine a country drinks as a percentage of total alcohol consumption—or product mix, and it's here where we see the most uncertainty. As shown in Exhibit 4, the correlation between GDP per capita and wine consumption as a percentage of total alcohol demand is low, with outliers all over the world. Like wine consumption data itself, we expect that substantial cultural factors are responsible for these divergences. Here, China's wine demand sits below the global trend line, at about 4% of total alcohol consumed.

Exhibit 4 China's Wine Consumption as a Percentage of Total Alcohol Is Also Low



Source: World Bank, GlobalData, Morningstar. Bubble size = total volume of wine market.

In all, China getting richer creates a potential for higher wine demand, but we don't anticipate the country will become a global leader in per capita consumption given these sizable cultural factors. However, in projecting future wine consumption for China, we can attempt to bracket the upside and downside potential for wine as a percentage of total alcohol demand in the country using these cases.

The simplest exercise would be to assume that China catches up to the global trend lines in exhibits 2 and 3 over the next five years, ultimately leading to wine consumption per person growing at a 30% annual clip—a substantial acceleration from the 15% yearly rate since 2011. However, we think this is unlikely. For one, it would put wine consumption at about 15% of total alcohol consumption, well beyond Japan (3.4%) and South Korea (0.7%), higher than the U.S. in 2016 (11.2%), and approaching the levels of major global wine-producing areas, such as Spain (17.5%) and Australia (19%). While we expect a climbing portion of Chinese drinkers to consume wine more regularly, the prevalence of alternative products such as baijiu, which is akin to the popularity of sake in Japan and Soju in South Korea, probably puts a lid on near-term wine consumption. In the latter two countries, spirits account for more than 40% of total alcohol consumption compared with about 24% for China, 12% in Australia, and a slim 8% in the U.S., according to GlobalData.

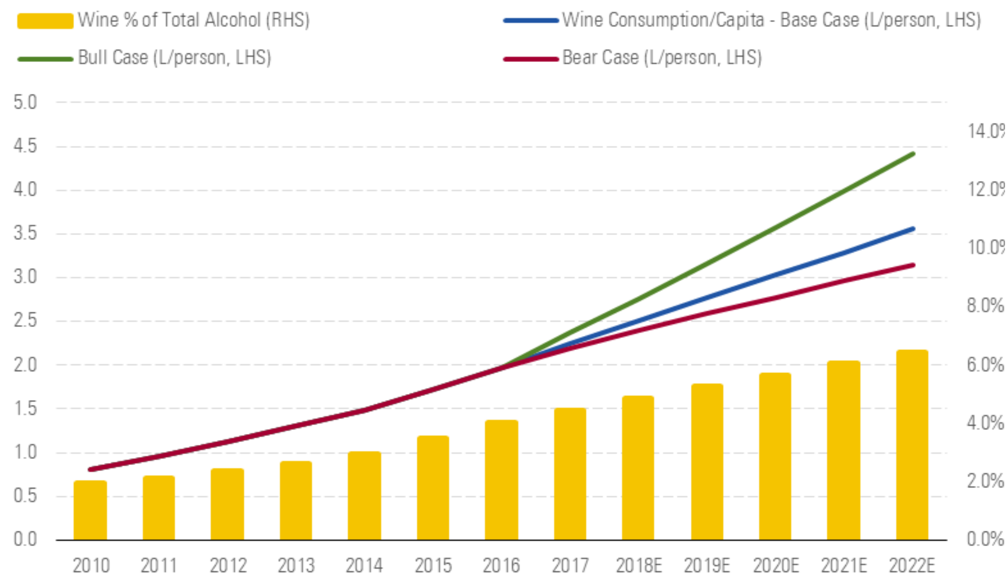
Second, such high growth rates would far outstrip the historical multiple at which wine consumption has outpaced GDP gains in China. Since 2000, per capita wine consumption has grown at an average close to double GDP per person, only recently ticking up to about 2.2 times GDP in 2017. Given our outlook for GDP per person to slow to about 3.5% annually through 2022, wine demand at this rate would grow at an unrealistic 7 times our GDP forecast.

We think there are two more likely scenarios than unbridled growth for wine consumption in China. Both suggest slowing growth rates, but at different degrees. The first scenario is a more reasonable bull-case outlook in which wine consumption as a percentage of total alcohol doubles to 8% by 2022, similar to the doubling of wine penetration over the prior five years, while total alcohol consumption continues to grow at a 2% clip, tracking historical levels. Per capita growth in wine demand in this scenario increases at a 14.5% annual rate, outstripping GDP growth by 3.4 times — still higher than any single year's multiple of GDP growth over the past 15 years.

On the downside, we see wine demand continuing to grow at about double the rate of a slowing GDP growth level, climbing about 8.5% annually per person. Wine would still climb in penetration of the overall alcohol market in China, to about 6%, but this scenario recognizes the potential cultural forces in the country that could see wine's gains capped by rising spirits consumption.

In our fair value estimate for Treasury Wine, we split the difference, suggesting about 10.5% annual growth in wine consumption per capita through 2022, or about 11% annual volume growth in China's total wine market volume when including population growth. This implies that wine consumption rises to 6.5% of total alcohol demand, and per capita wine consumption grows at about 2.5 times our outlook for GDP per capita, slightly ahead of the five-year historical average of 2.3 times.

Exhibit 5 China's Wine Consumption Should Rise Further, but at a More Limited Rate



Source: World Bank, GlobalData, Morningstar.

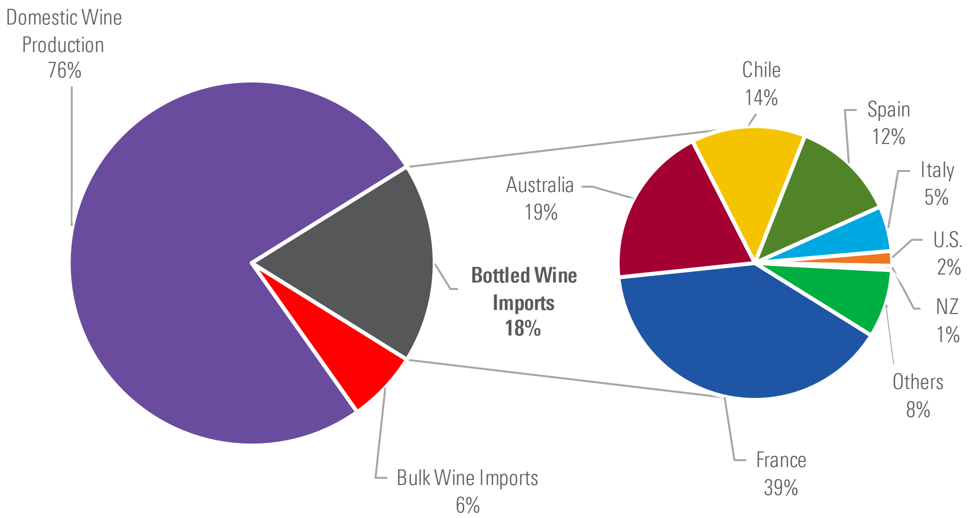
Treasury's Market Share Gains in China Driven by Import Growth and Market Premiumization

The massive growth of wine consumption in China has been further spurred by climbing imports in recent years. Importantly for Treasury, while France continues to dominate Chinese consumers' palates for foreign wines, Australia has also grown rapidly to maintain a second overall position.

We expect further growth in imports at a faster clip than the overall wine market, with Australian wines, and Treasury within that category, continuing to gain market share as well.

Imported wine made up about 24% of China's wine consumption in 2017, according to GlobalData and Chinese customs data, up from 19% in 2014 as the country's anti-corruption drive flowed through and curtailed expensive gift giving of luxury products. This has led to a volume CAGR of 25% for imports, versus about 15% for total wine consumption. While we expect volumes to slow for total wine consumption, we anticipate further import penetration in the market. We think imports can rise to 27% of total wine consumption, surpassing 2012 levels, driving a 13% annual growth rate for imported wine volume over the next five years. We expect imports to take share because of China's continued middle-class development and further cultural Westernization, leading consumers to increase their demand for foreign products. While Chinese-produced wine makes up a large portion of the country's consumption, the quality of popular varietals such as cabernet sauvignon faces weather-related challenges and limited track records, and we expect local wineries are still many years away from recapturing market share from their overseas counterparts.

Exhibit 6 China's 2017 Imports of Bottled Wine Were Dominated by France, Australia, and Chile



Sources: China Customs, GlobalData, Morningstar.

Australian wine is particularly well-positioned to grow share in the Chinese import market. The region's high-quality wines, particularly in red varietals that have proved popular with Chinese drinkers, meet local demand. On top of this, more-favorable tariff laws put in place have helped spur massive growth rates in recent periods. According to Chinese customs data, Australian wine volume imported by China climbed 33% in 2017 to 14% of total imports, up from 12% of imports in 2016, as tariffs were dropped from their prior 14% for bottled wine to 8.4% in January 2016, and again to 5.6% in January 2017. The rate fell further starting in 2018 to 2.4%, and will be completely eliminated in early 2019.

Continued premiumization in China is another factor benefiting Australian wines, and by proxy Treasury Wine. Across the world, volume demand growth for wine and alcohol tends to slip as economies mature, as shown in exhibits 2 and 3, but total value growth can still be buoyed by consumers shifting their preference toward higher-priced premium products. This trend has been occurring in China, with inexpensive wines growing at a lower rate than higher-priced bottles, according to GlobalData. And Australian wines are at the forefront of this trend. In 2017, while Australian wine exports to China grew 33% by volume, total value jumped more than 60%, according to Wine Australia.

Continued share gains in China's import market by Australian wine is of course a positive for Treasury. While the firm has enjoyed solid growth in the region, it still only holds market share in the low single digits as a percentage of total imports, estimated by the company at its 2017 investor day as 1.5%. However, we expect this share to double by fiscal 2021, tracking management's own projections. Beyond Treasury gaining market share from continued overall growth of Australian imports, we also expect that further premiumization in the Chinese wine industry will drive demand for the company's wide range of both high-end and midpriced brands. We expect Treasury's volume to grow at a nearly 25% annual clip in China over the next five years.

We caution that this forecast relies on Treasury's ability to increase its product range beyond the successful premium Penfolds label, despite recent reports suggesting some challenges in this regard. According to the *Australian Financial Review*,[1] several of the company's Chinese wholesalers have complained that they were forced to purchase Treasury's midrange wine brands, such as Wolf Blass and Rawson's Retreat, to gain access to the popular and growing high-end Penfolds range. However, according to the wholesalers quoted, the demand for these non-Penfolds wines is substantially lower, leading to up to half a million cases of Treasury wine sitting in warehouses and sizable price discounting to move stock. This is equal to about 10% of the total volume we project for the firm's Asia segment in fiscal 2018, and Treasury could face near-term selling and revenue pressure should oversupply in the distribution chain lead to limited demand or continued price discounts.

The Rest of Asia a Solid Growth Story for Treasury, Too

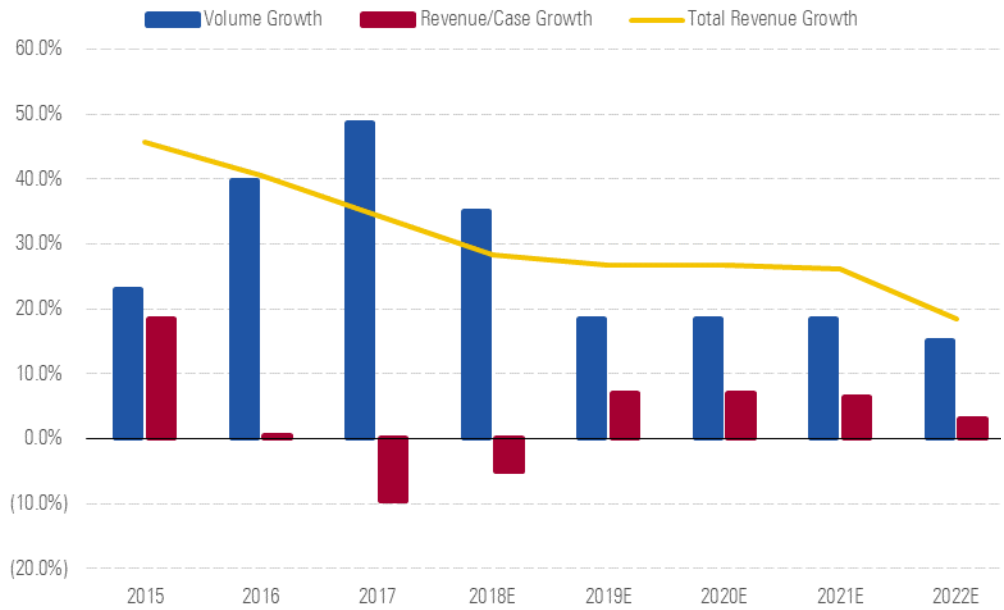
China is a critical growth engine in Treasury's Asian segment, but Japan and other countries in the region make up a sizable piece of the pie as well. Although the company doesn't disclose the details, we estimate the volume split is roughly a third China, 21% Japan, and 45% other Asia (although the revenue split likely pushes China higher given the focus on premium-priced wines).

1 Grigg, Angus. 2018. "Treasury Wine Estates Facing China Glut." *The Australian Financial Review*. 16 May 2018. https://www.afr.com/business/retail/fmcg/treasury-wine-estates-facing-china-glut-20180516-h104xz.

Nonetheless, we see similar volume growth opportunities in the regions outside China, as well. Japan remains a significant growth opportunity for Treasury. GlobalData estimates the Japanese wine market growing at about a 2% annual clip through 2022, but Treasury believes it can triple the slim 1.5% share of wine imports into Japan it held in 2016. This outlook translates to more than 20% annual volume growth. Similarly, we forecast Treasury's volume in other Asian markets growing about 20% per year, owing to rising incomes, import growth, and premiumization, driving volume share higher for the company from the mid-single-digit level estimated by management in early 2017.

In all, we project 21% annual volume gains in the Asian segment over the next five years, with 35% growth in fiscal 2018 tapering to about 15% growth in fiscal 2022. On top of this robust volume performance, we also expect pricing gains to average nearly 4% annually, outpacing inflation because of continued positive mix shift toward higher-priced wines, and the entire wine industry's ability to increase price in this rapidly growing market segment. Together, these assumptions drive a 25% annual revenue CAGR for the segment over the next five years, slowing from the 40% rate from fiscal 2014 through fiscal 2017.

Exhibit 7 Positive Pricing and Further Strong Volume Gains to Drive Growth in Treasury's Asian Segment



Sources: Company filings, Morningstar.

China Gets the Headlines, but U.S. Premiumization Another Near-Term Revenue Driver

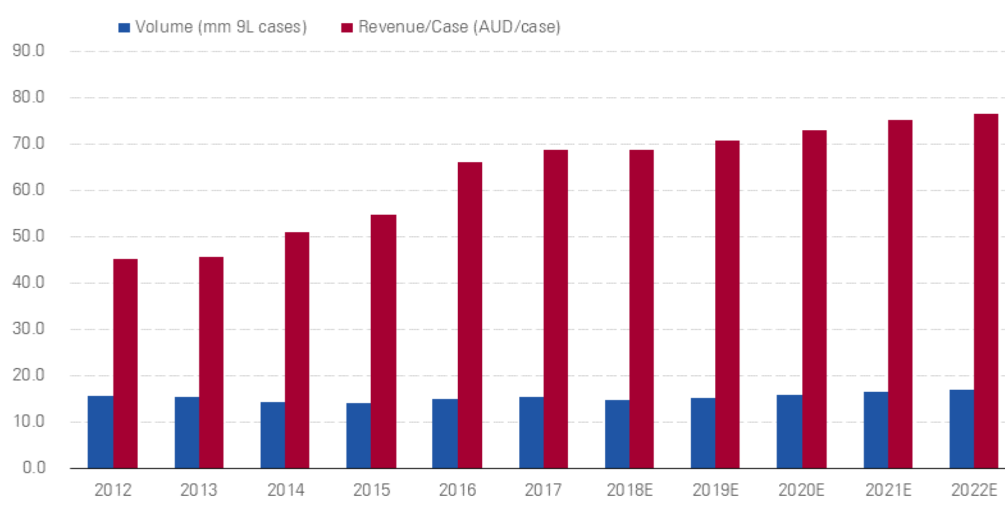
We expect North American wine consumption to climb at a more muted clip over the next five years than China. However, Treasury should still see solid growth, owing to consumers trading up for more-premium products, which aligns well with the company's refocused high-end product portfolio. We caution that intense competition in the wine industry—particularly in midrange wines priced USD 10 to USD 20 per bottle—will probably limit substantial comparable price increases for individual brands, but we nonetheless expect positive mix shifts to drive average revenue per bottle above inflation for Treasury.

Wine consumption in the U.S. has grown at slightly above a 2% clip over the past five years, according to GlobalData, but has accelerated in recent years, rising to more than 11% of total alcohol consumption in 2016 from 10% in 2010, taking share from beer. During this period, overall alcohol consumption has remained flat, given lower income elasticity, health concerns, and already-high consumption levels.

But premiumization has taken hold in the country. We've seen this across all alcohol sectors, including wine. Luxury (bottles greater than USD 20) and "masstige," a portmanteau of "mass prestige" (USD 10 to USD 20 per bottle) wine volumes have risen sharply, at the expense of low-end commercial wine, driving value growth above volume growth by about 50 basis points annually, according to GlobalData.

Treasury's past in the U.S. is spotty, with a historical focus on low-end commercial wine leading to periods of oversupply and inventory write-offs as recently as 2014. But the company has refocused its operations on higher-end wines. As a result, while Treasury's total volume (including the 2016 acquisition of Diageo's wine portfolio) has remained roughly flat in North America since 2012, total revenue has climbed more than 50% as average revenue per case has skyrocketed.

Exhibit 8 North American Volumes Have Been Mostly Flat for Treasury, but Positive Mix-Shift Improved Revenue



Source: Company filings, Morningstar.

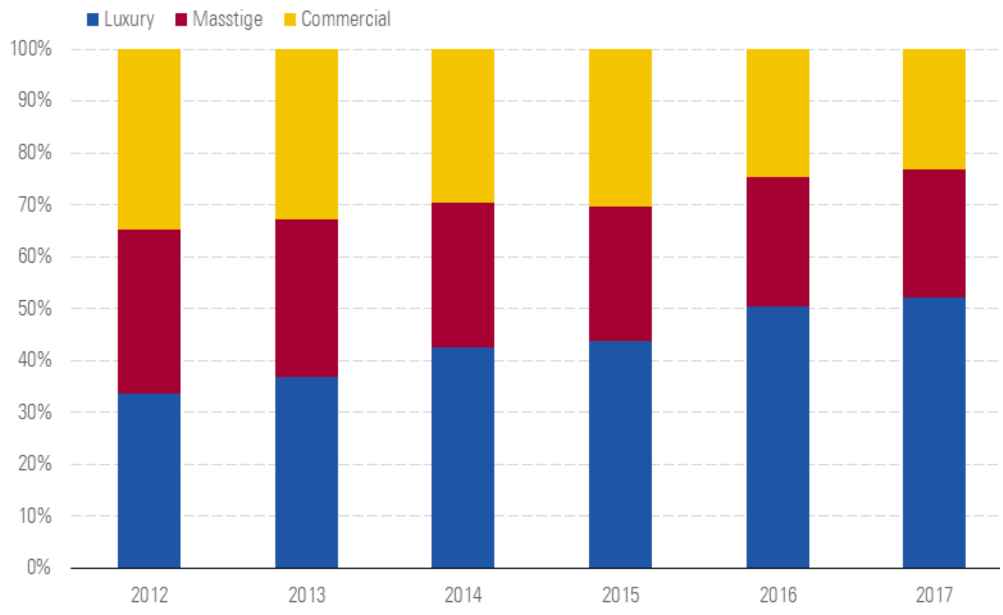
Going forward, we expect continued premiumization to benefit Treasury's top line. The firm doesn't explicitly disclose its sales by price point, but based on the firm's past presentations and filings, including its 2017 analyst day, we estimate the company's 2017 revenue in the region was split about 8% luxury, 70% masstige, and 22% commercial. This is substantially changed from the first half of fiscal 2014, when Treasury noted that more than half of its total company revenue stemmed from commercial wine.

We expect total wine consumption in the U.S. to grow at roughly 2.5% to 3.0% annually, continuing recent trends. However, we expect luxury volume growing high single digits (we estimate 8%) and masstige growing midsingle digits (6%). This implies commercial wine grows only 1% through 2021, falling to 65% of total off-premises volume from 70% in 2016.

We anticipate that Treasury should be able to hold on to its market share in luxury and masstige wines, despite a fragmented and competitive market. The firm has proved an ability to launch new brands, and increased high-quality grape sourcing as a result of its 2016 acquisition of Diageo's wine brands ensures the company can produce wines in these categories at a stable quality and quantity year after year. But we also expect the firm to continue to walk away from share in commercial wines, which feature extremely price-sensitive consumer bases and lower profitability. In all, we see Treasury's volume growing in North America at roughly a 2% clip, trailing overall market growth, but only because of the intentional declining volume in commercial wine.

Our outlook is supported by an increasing amount of inventory in the luxury and masstige segment. As shown in Exhibit 9, Treasury should enjoy a tailwind of luxury and masstige wine coming to market over the next several years, given its concerted effort to stock its inventory with the product. Luxury and masstige wines in both current and noncurrent inventory have risen to 77% of total from 65% five years ago, growing at a 12% annual rate versus a slight decline in commercial inventory. This higher-end wine typically has to age in cellars before being released to market, meaning this tailwind will continue for several years.

Exhibit 9 Treasury's Inventory Has Increasingly Skewed Luxury and Masstige, and Away From Commercial Wine



Source: Company filings.

However, while this increasing portion of higher-end wine should benefit average revenue per case sold, we don't see much pricing power at the individual product level in most of Treasury's product portfolio. Wine pricing is extremely competitive at the low to midrange prices, according to industry commentators, and as a result, we forecast the majority of Treasury's higher price per bottle going forward stemming from positive mix shift rather than substantial price hikes on each individual brand. We anticipate average prices in the commercial and masstige ranges increasing at about 1% annually, trailing cost inflation of about 2%.

The firm's luxury wines—particularly those priced about USD 50 per bottle—are the exception, in our opinion. We believe consumers in this category are less price sensitive, more brand loyal, and often purchase with intent to store long term or collect, enabling Treasury to pass through price hikes at a considerably higher rate. This is evident by the past few years of pricing in the Penfolds range, where the most premium Grange brand saw pricing increase to a recommended retail AUD 850 per bottle from AUD 550 in 2010, a CAGR of roughly 6%. Penfolds Bin 389 has similarly risen to AUD 90 from about AUD 65 in 2011, a 5.5% average annual hike. We see average pricing in Treasury's luxury segment increasingly ahead of general inflation—about 5% per bottle annually.

In total, we forecast Treasury's North American revenue growing at about 4% to 5% annually, split roughly evenly between volume and price, and roughly in line with total market growth. This growth rate is higher in the middle stages of our forecast rather than in the near term, however, given efforts in 2018 to walk away from a large amount of low-margin commercial wine.

Margin Improvement Driven by North American Mix Shift, Efficiency Gains, and Distribution

A continued consumer shift toward premium wines not only supports Treasury's top line as it sheds commercial wine sales, but also significantly improves profitability. Treasury generated roughly 18% operating margins in the segment in 2017, but the profitability profile across different wine price points differs materially.

We estimate that Treasury's luxury wine currently garners EBITS (that is, earnings before interest, taxes, and expenses associated with the valuation of self-generating and regenerating assets) margins of about 35%, masstige around 20%, and commercial wines a slim 5%. Operating costs per bottle of high-end wine are higher than their lower-priced counterparts, owing to higher labor intensity, more-volatile suitable quality grape harvests, and reduced potential for automation, but the difference is more than compensated in the higher price per bottle. We arrive at these estimates by squaring against luxury- and masstige-focused competitors such as Constellation Brands (which has operating margins in its wine segment north of 30%, by our estimate) and LVMH (margins nearing 30%), as well as Treasury's own Asia segment, which has a strongly luxury focus and operating margins near 40%.

By our approximation, Treasury's profitability across price points has only changed slightly in the past several years; positive mix shift has driven most of the North American segment's operating margin improvement to 18% in fiscal 2017 from 10% in 2014, as shown in Exhibit 10.

Exhibit 10 North American Margin Improvement Driven Mostly by Mix Shift, and We Expect Further Expansion

	2014	2015	2016	2017	2022E
Approx. Revenue Split					
Luxury	3.0%	4.0%	6.0%	8.0%	10.0%
Masstige	41.0%	46.0%	65.0%	70.0%	74.0%
Commercial	56.0%	50.0%	29.0%	22.0%	16.0%
Assumed EBITS Margin					
Luxury	35%	35%	35%	35%	40%
Masstige	15%	15%	15%	20%	25%
Commercial	5%	5%	5%	5%	6%
Implied Revenue (AUD, mm)					
Luxury	22.0	31.0	59.5	85.0	130.3
Masstige	300.1	357.1	644.2	743.4	964.1
Commercial	409.9	388.1	287.4	233.6	208.5
Total (as reported)	731.9	776.2	991.0	1,062.0	1,302.9
Implied EBITS (AUD, mm)					
Luxury	7.7	10.9	20.8	29.7	52.1
Masstige	45.0	53.6	96.6	148.7	241.0
Commercial	20.5	19.4	14.4	11.7	12.5
Total Implied EBITS	73.2	83.8	131.8	190.1	305.7
EBITS Margin	10.0%	10.8%	13.3%	17.9%	**23.5%**
Check: Reported Adjusted EBITS	*74.9*	*83.2*	*131.5*	*189.0*	
Adjusted EBITS Margin	*10.2%*	*10.7%*	*13.3%*	*17.8%*	

Source: Company filings, Morningstar.

We expect luxury wine revenue to grow to about 10% of North American segment sales by fiscal 2022, while commercial falls to 17% from 22%, continuing this positive mix trend. Nonetheless, we also expect greater margin expansion within each category, owing to further leverage of selling and administrative expenses, improved cross-purchasing opportunities for grapes, and restructured distribution arrangements in the U.S.

Selling and administrative expenses have already fallen to 16% of consolidated revenue in fiscal 2017 from more than 17%, on average, from fiscal 2014 through 2016. We expect continued declines across all geographies, including North America, as the company is able to spread fixed costs across a greater sales base and drive efficiencies. As such, we forecast these expenses dropping to about 14.5% of Treasury's total sales by fiscal 2022.

Treasury's multiregional grape sourcing should also help reduce costs and improve profitability. The company can optimize its grape sourcing and production within its many geographies, directing fruit to the highest return-on-investment opportunities in any given year. This also helps alleviate periods of low global production harvest, since Treasury still purchases a large amount of its fruit on contract from growers (for luxury and masstige wines) or from third parties on bulk wines—the firm owned less than 20% of its Californian production in fiscal 2017, for instance. The acquisition of Diageo's wine business in 2016, which focused on grapes in these categories, should continue to flow through over the next several years and benefit the firm.

We're optimistic about Treasury's new distribution plan in the U.S. The company will move to direct-to-retailer distribution in two large states—California and Washington—and a partial direct model in Florida. And the firm will shift to new distributors in about a dozen other states in an effort to expand wine availability and drive increased growth. While there could be short-term hiccups as Treasury reallocates inventory and begins working directly with retailers, we anticipate higher profitability and improving top-line growth to result as the company cuts out the middle man in states where such an arrangement is legal (most U.S. states are subject to laws that prevent self distribution).

In all, we see luxury wine margins rising to 40% from 35% by fiscal 2022, masstige to 25% from 20%, and commercial ticking up slightly to 6% in North America. These forecasts imply that luxury costs per bottle will continue to rise slightly above inflation, owing to a more limited ability to cross-source grape supply in superpremium wine (particularly for single-vineyard products) and rising labor costs. Conversely, for masstige and commercial, we see operating costs per case falling slightly, given a more industrial focus in the lower end of wine making and therefore opportunities for greater efficiency gains in production.

Together, this outlook for positive mix shift and improving category profitability leads to North American operating margins rising to 23.5% by fiscal 2022 from 17.8% in fiscal 2017.

Limited Upside in Asian Profitability, but Treasury's on Track for 25% Consolidated Margin

Treasury's Asian segment already operates at a high level of profitability, owing to the company's focus on premium wines rather than commercial product. The business posted 38.1% operating margins in fiscal 2017, and management has outlined a range of 32% to 37% going forward, likely anticipating masstige wines taking share in the region (as we previously discussed). We're more optimistic, and forecast 40% long-term margins given further rapid growth in high-end Penfolds, and rising market share and associated scalability in mainstream products.

On a consolidated basis, Treasury has publicly stated its goal of a 25% EBITS margin, increased from 18% in fiscal 2017. We expect the company to prove successful in this endeavor. We forecast margins surpassing 25% by fiscal 2022, reaching 25.3%.

Despite Solid Margins and Growth, We Don't See an Economic Moat

We expect rapid top-line growth and expanding margins for Treasury Wine, but we don't yet believe the firm has carved an economic moat. The company's historical return on invested capital has been poor, by our estimates, averaging 5.2% since fiscal 2013 and substantially trailing our approximate 8.7% weighted average cost of capital.

We forecast a sharp improvement in ROIC over the next five years, with the metric rising to nearly 13% by fiscal 2022. But despite this positive economic profitability, we don't yet have the confidence that these ROICs will remain above the cost of capital for a full decade, the minimum time frame we require to assign a narrow economic moat rating. There are two main factors that drive this opinion.

First, we don't think Treasury's global scale sufficiently separates it from other major wine producers. We applaud the company for its improving financial results and refocused activity on high-end wines, but Treasury isn't the only winemaker pursuing premiumization of its portfolio, multiregional sourcing, or enjoying economies of scale. Both E & J Gallo (private) and Constellation Brands are larger, for instance, and in the case of Constellation, already enjoying higher margins. We don't think Treasury can hold enough sway over retailers, suppliers, or distributors to differentiate itself from these other large players, and sharp increases in raw material costs, labor, or marketing needs could crimp profitability.

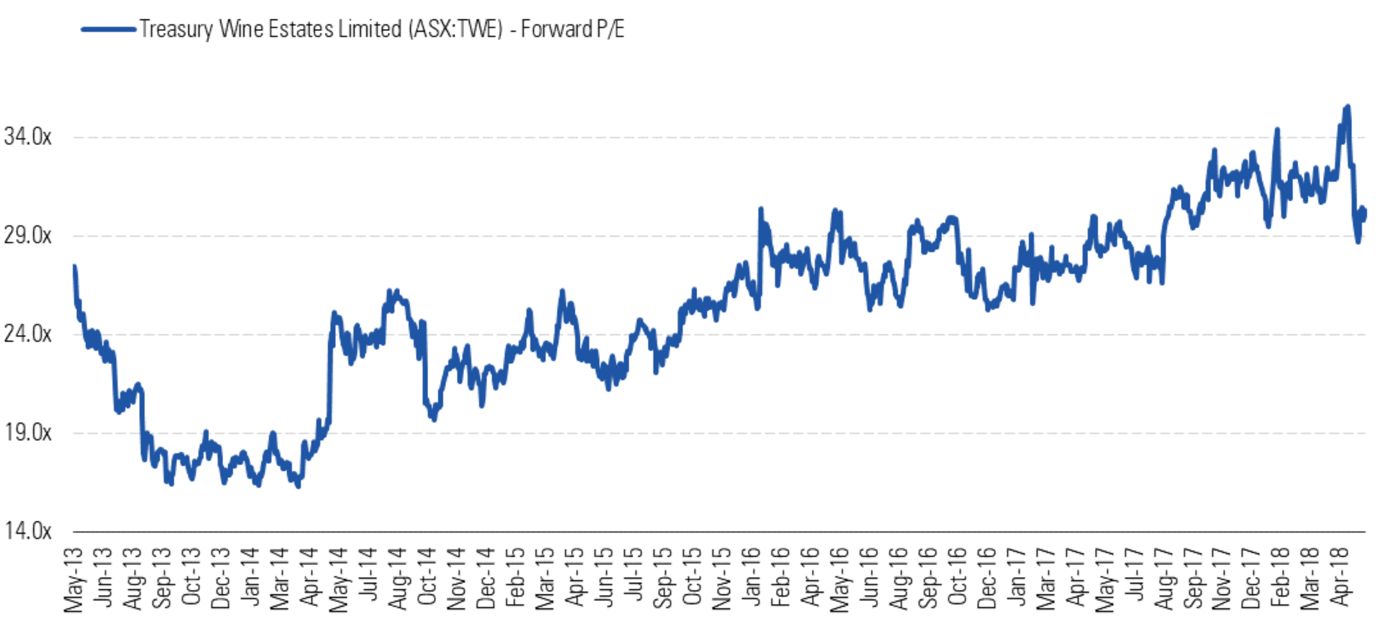
Second, the wine industry is highly fragmented outside of these large players, and consumers face minimal switching costs among brands. Despite its size, for instance, Treasury estimates it holds less than 10% of market share in the U.S., with participants outside the top five controlling roughly 50% of the industry. This metric is similar in Australia; while Treasury is the largest player in its home market, with north of 20% market share by company estimates, smaller players make up 40% of total value. As evidenced by our price forecasts, although we think the upper end of wine is a true luxury good with substantial pricing power, we expect most wine consumers at the lower end tend to be more brand-agnostic, and much more devoted to price rather than label. We estimate that by fiscal 2022, luxury wine will make up roughly a third of Treasury's consolidated operating income, suggesting the majority of earnings will still stem from these competitively challenged, and almost commoditized, sources.

Treasury Wine Priced for Perfection

In our opinion, the market has already recognized Treasury's strong future earnings growth, and then some. We think shares are substantially overvalued at the current level and priced for perfection in execution, end-market development, and consumer preferences.

The market has shown a willingness to pay an increasingly high multiple of earnings for Treasury's shares over the past several years. Exhibit 11 shows that since the firm's new management team was brought on in 2014, the 12-month forward price/earnings ratio has risen to north of 30 times from about 25 times. During that time, the firm has admittedly transformed its product portfolio, increased profitability, and gained market share in the rapidly growing Chinese market. But as described in this report, we anticipate the highest growth is now behind the company, and without a moat protecting its business, we think Treasury should be trading at a lower multiple, not a higher one.

Exhibit 11 Treasury Wine's Forward PE Multiple Has Expanded Substantially



Source: S&P CapitalIQ. Data as of 1 June 2018.

Our fair value estimate prices the company at 19 times the average of fiscal 2018 and 2019 earnings (year ending in June), recognizing growth slowing from historical levels. At the current value of about AUD 16.60 per share, and a 9% required rate of return (equal to our estimated cost of equity for the company), shares would still be trading at more than 24 times our estimated fiscal 2022 earnings per share of AUD 0.93, despite EPS growth slowing to low double digits from a 25% average in fiscal years 2018 and 2019. By a similar metric, our AUD 10.50 fair value estimate, grossed up at the same 9% cost of equity, suggests an earnings multiple of 15 times our forecast 2022 EPS.

As such, there are several more-optimistic assumptions we'd need to make for our valuation to reach the market price and justify the current multiple. In a bull case for the company's North American segment, we assume luxury wine rises to 16% of sales versus 10% in our base case, helping drive further positive mix shift for profitability, while per-category margins increase further as well. Together, this drives the segment's top line at a 6% compound annual growth rate and operating margins to 29%. While this is not outside the realm of possibility, it would require Treasury to both gain share in luxury and masstige wines, while also being able to increase prices at faster than competitors and further leverage marketing expenses—a combination we view as less likely than our base-case assumptions.

Similarly, to arrive at our upside case for Treasury's Asian segment, we either need to assume that Chinese wine consumption rises faster (as noted earlier in this report), or that Treasury is able to more than double its market share over the next several years. Such a scenario leads to this business growing revenue at a 31% CAGR versus 25% in our base case, while operating margins climb to 45%, substantially outstripping most luxury wines' profitability and smashing management's own forecast.

In this upside case, we value Treasury at AUD 14.70 per share. Alongside the bullish forecasts in North America and Asia, we forecast similarly strong results in Treasury's Australian and European businesses, leading to consolidated revenue climbing at an 11% annual rate versus 8% in our base case, and operating margins nearing 31% compared to 25%. Our EPS forecast in this scenario would jump to AUD 1.33 from AUD 0.93 in our fair value estimate.

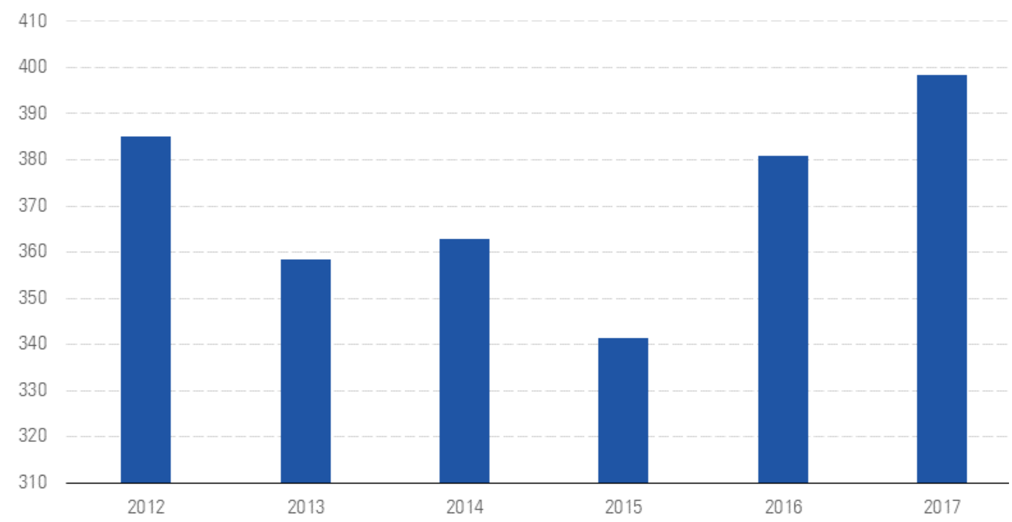
However, this bullish outlook still doesn’t reach the current market price. We'd also have to assume that Treasury has carved a wide economic moat, extending the period over which it can enjoy economic profits to 20 years versus fewer than the 10 years we assume in our base case. Only then would our fair value estimate rise to AUD 16.80, mirroring the market's valuation.

Risks Beyond Just Valuation

However, this bull-case scenario doesn't fully account for the considerable risks Treasury faces over the next several years. Beyond the competitive challenges and execution risks outlined previously, we see two other sizable risks that could pressure the company over the next few years.

The first key risk is managing cash flow, particularly around inventory levels. Treasury's push toward selling more premium wine has resulted in a greater amount of wine sitting on its books in inventory, as these higher-quality products typically need to be aged longer than their commercial counterparts. As a result, total days of inventory on hand, in combined current and noncurrent inventory, has risen to almost 400 from 358 in fiscal 2013. Combined with a higher amount of capital expenditures over the period, free cash flow (cash from operations less capex) has averaged 83% of adjusted net profit after tax since fiscal 2014.

Exhibit 12 Treasury Wine's Increasing Inventory Days Are a Drag on Free Cash Flow



Source: Company filings.

The firm should recoup these investments through the market share gains, price increases, and rising profitability, as outlined in this report. But we still expect days of inventory to continue to rise over the next five years, leading to free cash flow averaging 81% of net income, near the low end of management's outlined goal of 80% to 100% cash conversion. And we note that in three of the past four years, free cash conversation has trailed this level, suggesting lumpiness that could increase volatility and risk.

Nonetheless, Treasury's strong balance sheet should prevent any sizable financing concerns. Net debt/EBITDA finished fiscal 2017 at less than 0.7 times, while adjusted EBITDA covered interest expense a healthy 12 times. We expect this healthy interest coverage to remain, averaging nearly 20 times over the next five years.

But this solid financial position also introduces a second key risk: the potential to overpay for acquisitions. While Treasury has converted about 83% of its net income to free cash in the last four years, totaling AUD 686 million over that time frame, the entirety of this amount has been filtered into net acquisitions, including the AUD 760 million purchase of Diageo's wine business in fiscal 2016. We think this purchase has proved successful to date, but the firm plans to pursue additional bolt-on acquisitions that introduce execution, valuation, and timing risk.

Highlighting this risk, valuations have increased in the wine industry. The most recent transactional example is Australian company Accolade Wines, purchased by private equity for AUD 1 billion, representing an 80% increase in value versus the acquisition price seven years earlier—a 17% annual increase in value. While purchases could push Treasury further along the premium price curve, price paid will be an important consideration to the firm's valuation.

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Email: help.au@morningstar.com	Email: helpdesk.au@morningstar.com

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