

China / Hong Kong Company Guide

Tsingtao Brewery

Version 1 | Bloomberg: 168 HK EQUITY | 600600 CH Equity | Reuters: 168.HK | 600600.SS

Refer to important disclosures at the end of this report

DBS Group Research . Equity

19 Jul 2018

H: BUY (Re-Initiate coverage)

Last Traded Price (H) (18 Jul 2018): HK\$42.65 (HSI : 28,117)

Price Target 12-mth (H): HK\$50.23 (17.8% upside)

A: HOLD (Re-Initiate coverage)

Last Traded Price (A) (18 Jul 2018): RMB47.65 (CSI300 Index: 3,431)

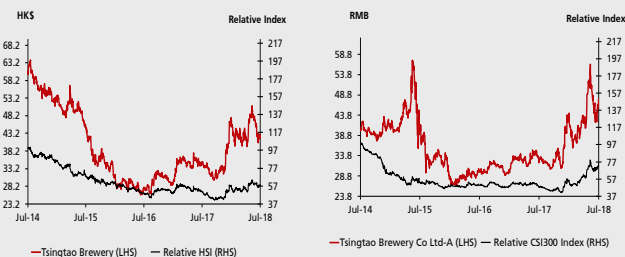
Price Target 12-mth (A): RMB42.21 (-11.4% downside)

Analyst

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Price Relative



Forecasts and Valuation (H Shares)

FY Dec (RMB m)	2017A	2018F	2019F	2020F
Turnover	26,277	27,630	29,479	31,474
EBITDA	1,897	2,117	2,544	3,224
Pre-tax Profit	2,105	2,477	2,945	3,683
Net Profit	1,263	1,634	1,962	2,478
Core Profit	975	1,243	1,572	2,091
EPS (RMB)	0.93	1.21	1.45	1.83
EPS (HK\$)	1.09	1.41	1.70	2.14
Core EPS (HK\$)	0.84	1.07	1.36	1.81
Core EPS (RMB)	0.72	0.92	1.16	1.55
EPS Gth (%)	21.0	29.4	20.0	26.3
Core EPS Gth (%)	19.0	27.5	26.4	33.0
Diluted EPS (HK\$)	1.09	1.41	1.70	2.14
DPS (HK\$)	0.49	0.64	0.76	0.96
BV Per Share (HK\$)	14.82	15.27	15.91	16.87
PE (X)	39.0	30.1	25.1	19.9
Core PE (X)	50.5	39.6	31.3	23.5
P/Cash Flow (X)	22.1	27.2	23.7	17.2
P/Free CF (X)	36.9	39.1	32.2	21.7
EV/EBITDA (X)	21.3	18.9	15.5	11.8
Net Div Yield (%)	1.2	1.5	1.8	2.3
P/Book Value (X)	2.9	2.8	2.7	2.5
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	7.5	9.4	10.9	13.1

Earnings Rev (%)	New	New	New
Consensus EPS (RMB)	1.19	1.38	1.58
Other Broker Recs:	B:5	S:5	H:7

Source of all data on this page: Company, DBS Bank (Hong Kong) Limited ("DBS HK"), Thomson Reuters, Bloomberg Finance L.P., HKEX

Strong comeback of Chinese premium beer

- **Positive medium-term outlook: a good proxy to ride on consumption upgrade**
- **Collaboration with Fosun to drive market expansion and strengthen customer know-how**
- **With ongoing operational improvement and sales recovery, we resume coverage with TP of HK\$50.23. BUY**

Resume coverage with BUY rating. With its Tsingtao Beer brand well-known to the public, we believe Tsingtao Brewery should benefit from the ongoing consumption upgrade, given the company's effort to strengthen its market position in mid-priced and premium markets. Along with the company's gradual recovery in sales volume and close collaboration with Fosun, we are positive on the company's medium-term outlook.

Tsingtao Brewery in recovery mode. Tsingtao Brewery has seen profit deterioration over 2015-16, due to sales volume decline and brand strategy misstep. Supported by the company's excellent marketing campaigns, smart packaging, and more agile strategy towards distributors, we have seen its products well-received among young customers. We expect its sales volume to increase by 1.3% in FY18, with ex-factory price up 6.1% benefiting from improving product-mix and industry-wide price hike.

Strategic partner with Fosun. Asahi's exit has helped to remove the conflict of interests hurdle for Tsingtao Brewery's premiumization strategy. We are positive about Tsingtao Brewery's alliance with Fosun, which might help the brewer to understand customers better and accelerate market expansion in overseas markets. New management incentive plan might also indicate the brewer's strategic change towards profitability and returns, as peers are now entering a race of operating efficiency, such as production capacity management, cost control.

Valuation:

Our target of HK\$50.23 is based on 16x FY19F EV/EBITDA, equivalent to the company's 5-year average

Key Risks to Our View:

Rising competition; sales volume decline due to adverse weather conditions; lower than expected ASP hikes

At a Glance

Issued Capital - H shares (m shs)	655
- Non H shrs (m shs)	696
H shs as a % of Total	48
Total Mkt Cap (HK\$m/US\$m)	66,676 / 8,589
Major Shareholders (%)	
Tsingtao Brewery Group Company Limited	58.2
Major H Shareholders (As % of H shares)	0
Fosun International Ltd	37.1
Baillie Gifford & Co.	9.0
Tsingtao Brewery Group Company Limited	5.9
H Shares-Free Float (%)	48.0
3m Avg. Daily Val. (US\$m)	13.1
ICB Industry: Consumer Goods / Beverages	



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SWOT Analysis

Strengths	Weaknesses
• Strong brand heritage and well-poised for premiumization growth • Second largest Chinese brewery in terms of sales volume • Good operating efficiency in terms of capacity utilization, sales per employee, etc.	• Fewer dominating markets compared to market leader CR Beer, especially in the Eastern and Southern China
Opportunities	Threats
• Improve product mix leveraging on brand advantages • Achieve synergies via multifaceted corporation with current second largest shareholder – Fosun International • Industry-wide ASP hike to lift margins • Further margin improvement via cost control and potential plant closures	• Sluggish beer industry sales volume • Potentially higher raw material prices that could lay pressure on gross margin • Head-to-head competition with global brands when tapping into the premium beer market of China • Consumers' preference for other alcoholic drinks

Source: DBS HK

Valuation

We resume coverage with BUY/HOLD rating on Tsingtao Brewery's H/A share, with TP of HK\$50.23/RMB42.31, implying 16x FY19F EV/EBITDA. We believe EV/EBITDA should be the most appropriate valuation method for brewers given their asset-heavy nature; corresponding depreciation and amortization costs of factories & production equipment could result in significant earnings fluctuation. An EV/EBITDA multiple of 16x FY19F was determined, equivalent to Tsingtao Brewery's 5-year average. Given the changes in industry dynamics, the company's brand advantages and better operational efficiency compared to peers regarding capacity management, we believe the company's current H-share valuation remains undemanding.

EV/EBITDA Band – Tsingtao Brewery



Source: Company, DBS HK

Peers valuation

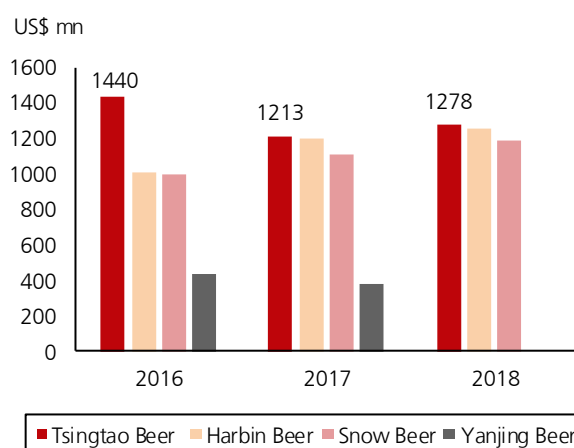
Company Name	Currency Code	Price Local\$	Mkt Cap US\$m	PE 18F	PE 19F	Yield 18F	Yield 19F	P/Bk 18F	P/Bk 19F	EV/EBITDA 18F	EV/EBITDA 19F	ROE 18F	ROE 19F	
				x	x	%	%	x	x	x	x	%	%	
A-share listed														
Beijing Yanjing Brew. 'A'	000729 CH	CNY	6.98	2,975	48.5	35.6	0.8	0.9	1.5	1.4	14.2	12.7	3.2	4.0
Tsingtao Brewery 'A'*	600600 CH	CNY	47.65	17,107	39.4	32.8	1.1	1.4	3.6	3.5	26.1	21.5	9.4	10.9
Chongqing Brew. 'A'	600132 CH	CNY	30.82	15,626	35.4	29.8	2.2	2.6	11.3	9.9	18.8	16.1	32.1	34.2
Average					41.1	32.7	1.4	1.6	5.5	4.9	19.7	16.7	14.9	16.4
H-share listed														
Tsingtao Brewery 'H'*	168 HK	HKD	42.65	17,107	30.1	25.1	1.5	1.8	2.8	2.7	18.9	15.5	9.4	10.9
China Resources Beer Holdings*	291 HK	HKD	37.65	15,626	53.6	41.4	0.7	1.0	5.3	4.8	22.5	18.7	10.2	12.2
Average					41.9	33.2	1.1	1.4	4.0	3.8	20.7	17.1	9.8	11.5
Multinational Companies														
Anheuser-Busch Inbev	ABI BB	EUR	88.3	176,813	21.9	19.3	3.8	3.8	2.7	2.6	14.1	13.3	13.2	14.5
Heineken Holding	HEIO NA	EUR	88.2	30,043	21.1	19.3	1.6	1.6	3.2	2.8	n.a.	n.a.	16.4	16.6
Carlsberg 'B'	CARLB DC	DKK	782.4	18,645	23.0	21.2	2.2	2.4	2.4	2.3	9.5	9.1	10.6	11.1
Kirin Holdings	2503 JP	JPY	2987	24,246	16.8	16.8	1.6	1.8	2.8	2.5	11.0	10.4	16.5	15.8
Asahi Group Holdings	2502 JP	JPY	5652	24,274	17.2	16.2	1.6	1.8	2.1	2.0	11.3	10.8	12.7	12.5
Molson Coors Brewing 'B'	TAP US	USD	64.35	13,881	13.2	12.5	2.6	3.1	1.0	0.9	9.7	9.6	7.9	7.9
Boston Beer 'A'	SAM US	USD	314.5	3,701	40.5	36.7	0.0	0.0	8.6	8.2	13.9	12.9	19.8	22.3
Sapporo Holdings	2501 JP	JPY	2740	1,917	21.9	20.6	1.5	1.5	1.2	1.1	9.4	9.2	5.6	5.8
Average					31.2	28.7	0.7	0.8	4.9	4.7	11.7	11.0	12.7	14.0

Source: Thomson Reuters, *DBS HK

Premiumization leveraging on brand heritage

Strong brand heritage. Tsingtao Brewery is the second largest brewer in China in terms of sales volume, according to Euromonitor. Thanks to its perseverance to strict quality standards and a long history that dates back to 1903, its primary brand, Tsingtao Beer, has long been recognized as the No.1 Chinese beer brand, according to BrandZ, followed by Harbin Beer (an AB-InBev brand, established since 1900) and Snow Beer (the key brand of CR Beer that was first released in 1993).

Tsingtao Beer brand value

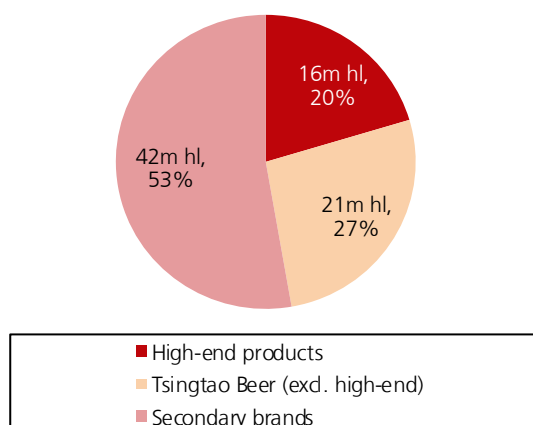


Source: BrandZ (Top 100 in China)

Brand strategy. Tsingtao beer brand is well-poised to capture mid-priced and high-end beer market, and the company also deploys secondary brands such as Laoshan in the mass consumption market. In terms of sales volume, the company recorded 79.7m hectoliter (7,970 million Liter) beer sales in 2017, among which 20% were high-end products under its major brand, e.g., Tsingtao draft beer, Tsingtao Augerta, 27% were non-high-end products under major brand, and the remaining 53% were under secondary brands. As such, sales of major brand – “Tsingtao Beer” took up c. 60% of the company’s total sales in 2017 and the brand mix has long been stable during the last few years, which would likely sustain over the next few years.

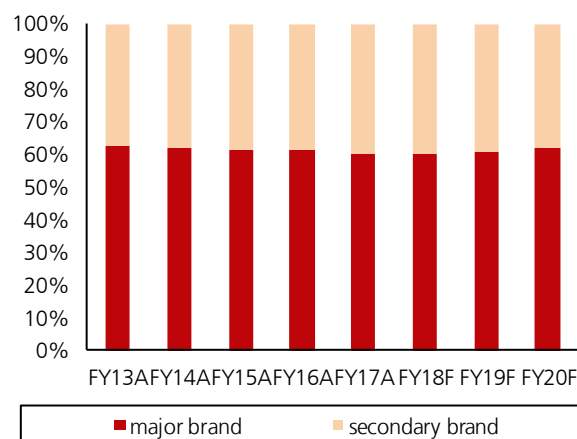
Better brand image translating into higher margin. By leveraging on the company’s brand advantage, we have seen Tsingtao Brewery’s ex-factory price being maintained among the leading positions in 2017, standing at RMB3,297 per tonne. Its ex-factory price remained largely steady in the past few years, as the company tried to keep its price competitiveness. This was further evidenced by its moderate retail price changes at the retail end. As such, despite rapid raw material price hikes, Tsingtao Brewery’s gross margin stayed resilient at c. 40% in 2017, the highest among Chinese peers.

Tsingtao Brewery's sales volume mix (FY17)



Source: Company, DBS HK

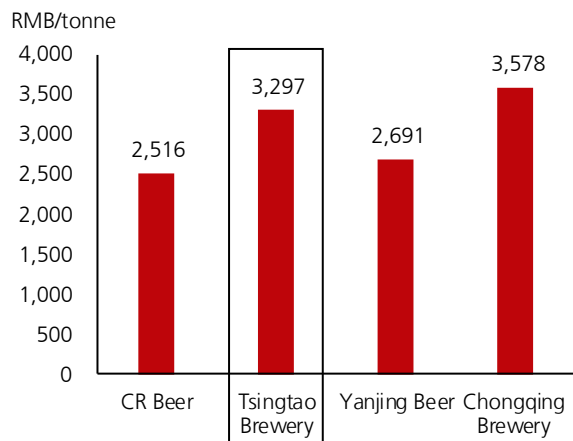
Tsingtao Brewery sales breakdown by brand



Source: Company, DBS HK

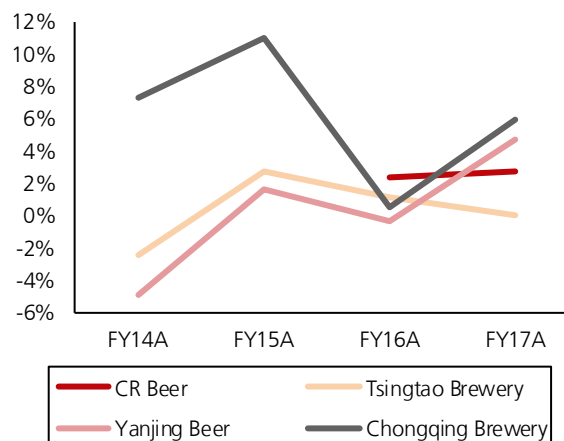
Tsingtao Brewery

Brewery ex-factory price comparison (2017)



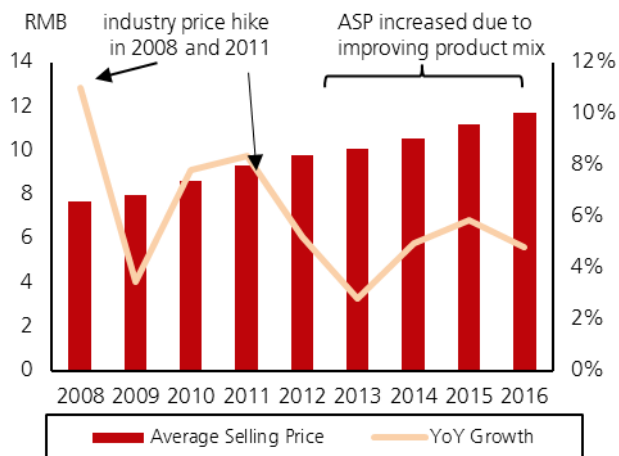
Source: Company, DBS HK

Breweries ex-factory price growth



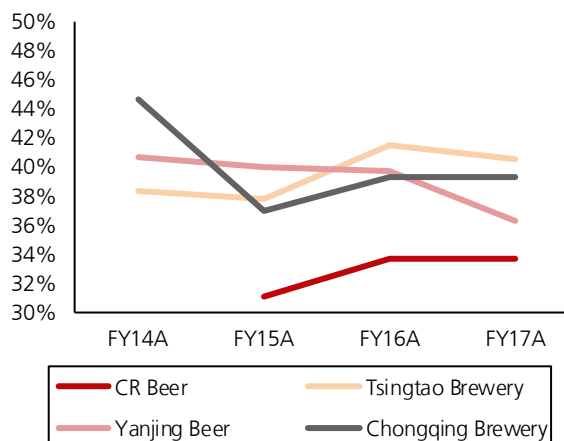
Source: Company, DBS HK

Tsingtao Brewery average retail selling price change



Source: Euromonitor

Gross profit margin of Chinese breweries



Source: Company, DBS HK

Good experience to support high-end image. With a well-recognized beer brand globally, Tsingtao Brewery's premiumization story stands on multiple fronts, including good experience associated with celebrity and football. Since 2016, the company has hired Chinese celebrity Huang Xiaoming(黄晓明) as the spokesperson of Tsingtao Beer brand to target at

mature male consumers. Tsingtao Beer's recent world cup campaigns also received a warm welcome by the customers, thanks to its high quality commercials which strongly connected and echoed with the audience.

Tsingtao Beer x football



Source: Company

Well-poised for wheat beer and stout growth. While sales of dominating lager should remain sluggish in the coming years, wheat beer and stout might enjoy a double-digit growth in term of sales over the same period, as customers try to diversify their tastes, according to Euromonitor. By 2022, the retail sales value of wheat beer and stout would likely take up 8% and 4% of total beer sales in China, respectively, versus 3% and 3% in

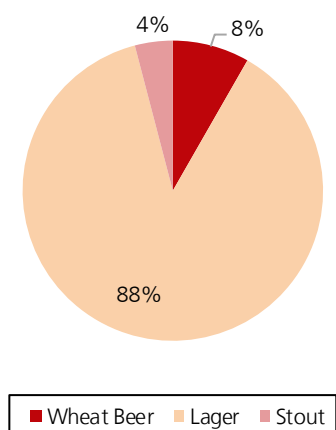
Tsingtao Beer x celebrity



Source: Company

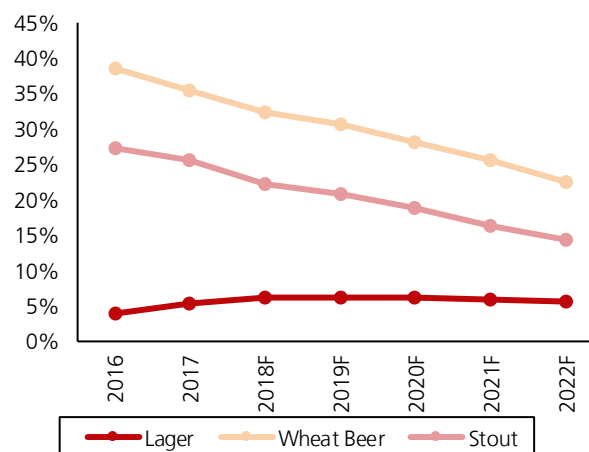
2017. As such, Tsingtao Brewery has been well prepared for the more trendy products and received good response from customers. Enhanced by its brand awareness and good marketing, we believe the company should continue to take up more market share, thanks to the fragmented sub-segment markets.

Beer market breakdown by sales (RPC, 2022F)



Source: Euromonitor

Faster growth of wheat beer and stout (RPC)



Source: Euromonitor

Tsingtao Brewery's wheat beer and stout

Special packaging to enhance premiumization experience



Source: Company

Source: Company

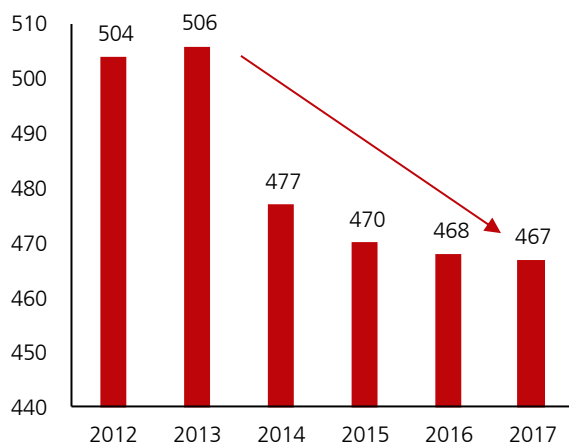
Special packaging to enhance premiumization experience.

According to a survey from Ipsos Marketing (1,000 interviewees), customers are most likely to be attracted by personalized packaging. We understand that Tsingtao Brewery should have an edge in this perspective, as proven by fashionable aluminum bottle packaging. Given its series of different packaging associated with various themes, such as Chinese New Year, World Cup, etc., we believe the company should continue to benefit from the ingenious packaging designs.

Consolidation on the way

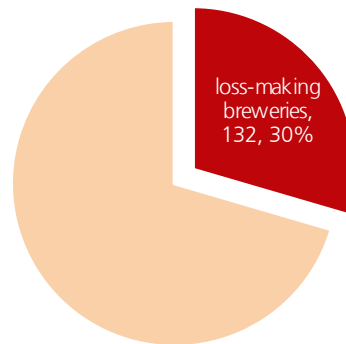
Winners take it all. According to Euromonitor, the number of Chinese breweries has decreased from 504 in 2012 to 467 in 2017, due to stagnant sales volume, intense competition, and rising raw material cost pressure. Among the 447 existing breweries that are above designated size, c.30% of them made a loss in 2017, according to National Bureau of Statistics of China. We believe the Chinese brewery industry has speeded up consolidation as small breweries found it challenging to sustain business operations while leading players continue to take more market share.

Number of brewers in China



Source: Euromonitor

Chinese breweries: profits vs. losses (2017)



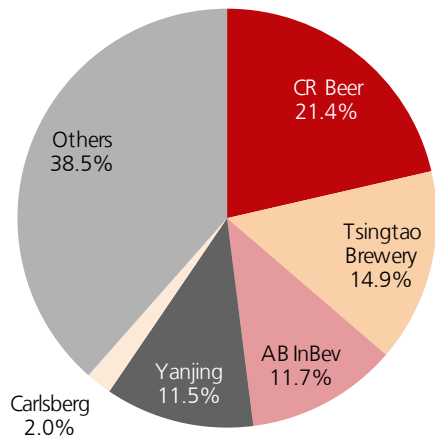
Source: National Bureau of Statistics of China

Tsingtao Brewery

Tsingtao Brewery as a market share winner. We have seen a clear consolidation trend in the beer industry, when Tsingtao Brewery's retail volume share increased from 14.9% in 2011 to 17.5% in 2017. While Tsingtao Beer remains popular in the mid-priced and high-end segments, the company's secondary

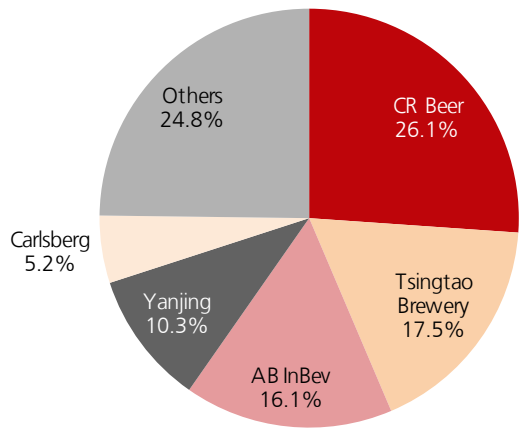
brands such as Laoshan helped to gain c. 4ppt market share over the same period. As the consolidation trend is largely on the cards, the industry dynamics could be very much similar to Japan, where the top 4 breweries took up as much as 95% of overall sales volume during the last ten years.

Beer market share by sales volume (PRC, 2011)



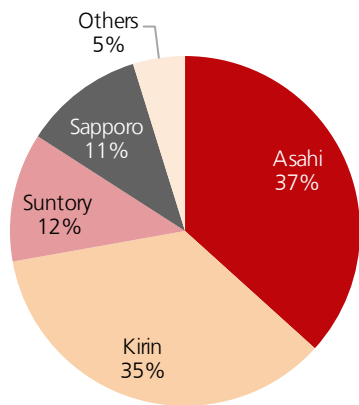
Source: Euromonitor

Beer market share by sales volume (PRC, 2017)



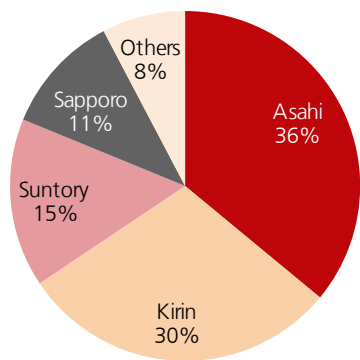
Source: Euromonitor

Beer market share by sales volume (Japan, 2008)



Source: Euromonitor

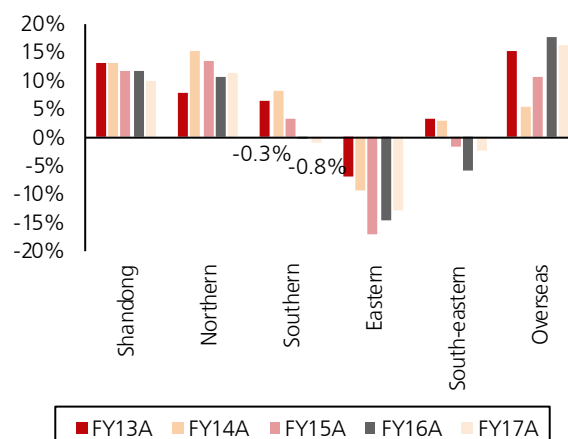
Beer market share by sales volume (Japan, 2017)



Source: Euromonitor

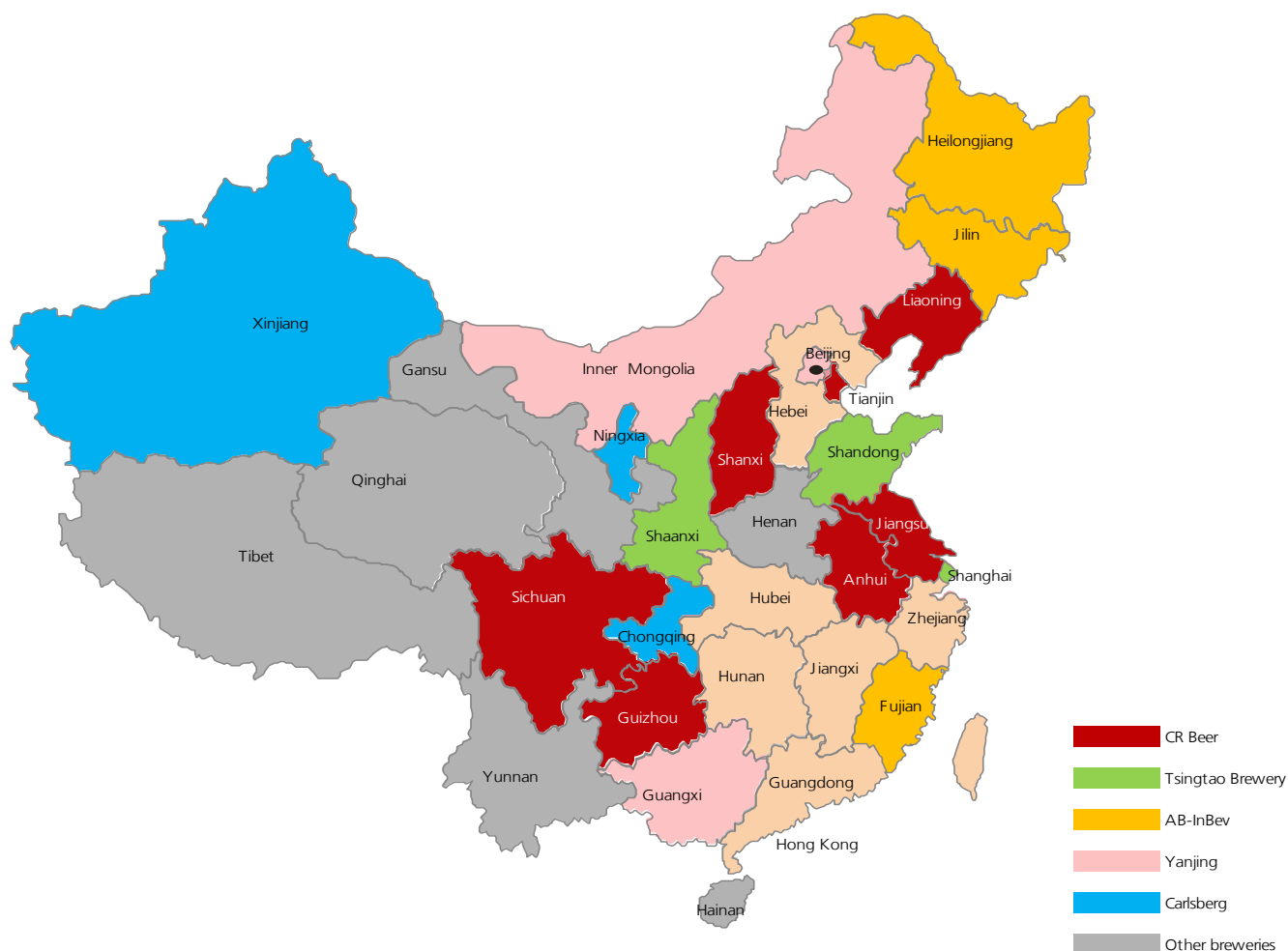
Dominating in Shandong, Shaanxi markets. Tsingtao Brewery has been very prevalent in Shandong and Shaanxi markets. After acquiring Sapporo's business in Shanghai in 2015, Shanghai also becomes an important market of Tsingtao Brewery with local market share achieving roughly 50%. By and large, Tsingtao Brewery is better off in the northern markets of China, as indicated by its higher regional PBT margins in Northern China (11.3%) and its home market Shandong (10.1%) in 2017. The company continued to make losses in Southern, Eastern and South-Eastern markets in 2017. However, we also see narrowing losses over the years, which might turn into the black in the coming years. The company also recorded a sales volume of c.100 million liters in overseas markets with remarkable net margin of 12.6% in 2017.

Tsingtao Brewery regional PBT margin



Source: : Company, DBS HK

Major breweris dominating markets (market share >50%)



Source: China Beer Association, Zhiyan Consulting, Company, DBS HK

Tsingtao Brewery

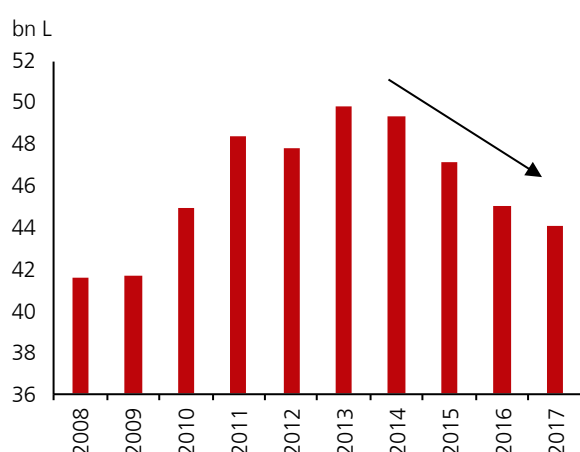
Efficiency Race

Essentials: Capacity management. Chinese beer production has declined in the fifth consecutive years since 2013. Hence, it is essential for breweries to further manage their production capacity. During the last five years, we have seen declining CAPEX among leading breweries, indicating minimal amount of new capacity. In fact, in recent years, leading Chinese breweries have entered into a race of plant closures to boost capacity utilization rate. Foreign players or their subsidiaries have taken radical moves to increase efficiency, as AB-InBev shut down 8 factories and Carlsberg-owned Chongqing Brewery closed 7 plants over 2016-2017. CR Beer also followed the same strategy

as it closed down two and five plants in 2016 and 2017, respectively.

Tsingtao Brewery currently has relatively higher utilization rate (71% in 2017) compared to its close peers. In the context of production and sales volume declines, we might still see the company to start driving up efficiency via cutting excessive capacity and closing loss-making plants in the near future.

National annual beer production (PRC)



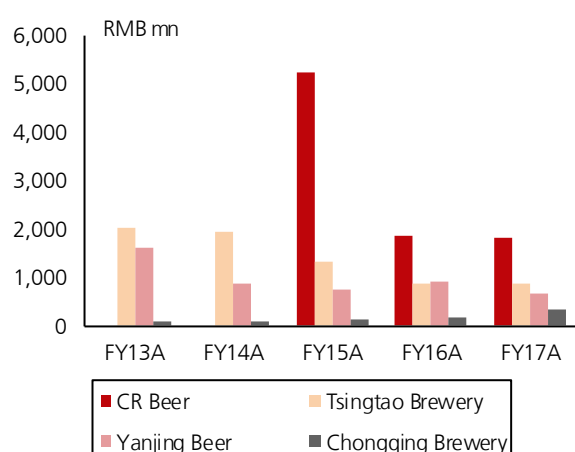
Source: CEIC

Breweries' utilization comparison

Company	Production Capacity ('000 kL) & Utilization rate	FY15A	FY16A	FY17A
CR Beer	Production Capacity	22,000	22,000	22,000
	utilization rate	53.1%	53.3%	53.7%
Tsingtao Brewery	Production Capacity		15,660	14,820
	utilization rate		72.7%	71.4%
Chongqing Brewery	Production Capacity		1,710	1,790
	utilization rate		70.8%	65.5% *

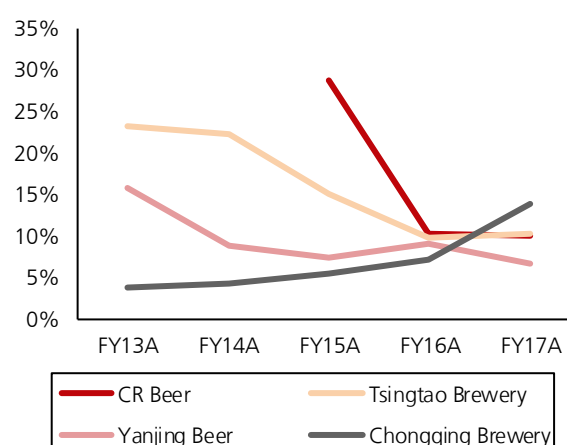
Source: National Bureau of Statistics of China, Company,
*utilization rate declined due to newly opened Yibin plant in Sichuan province

Capex Trend



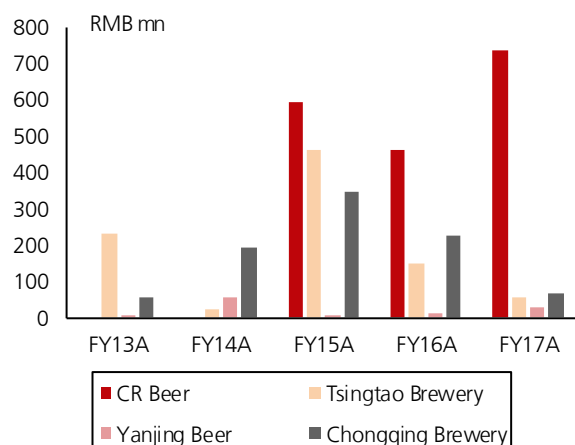
Source: Company, DBS HK

Capex as a % of PP&E



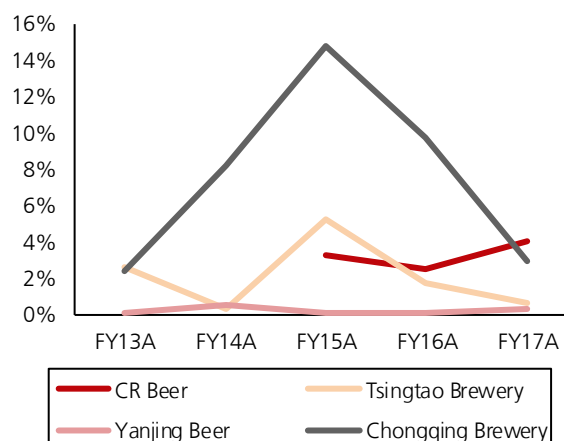
Source: Company, DBS HK

Impairments trend due to plant closure



Source: Company, DBS HK

Impairments as a % of PP&E



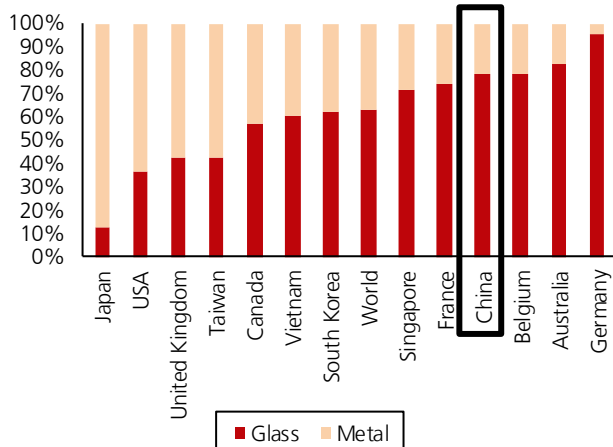
Source: Company, DBS HK

Aluminum packaging sustains rapid growth. Aluminum packaging is enjoying an industry-wide rapid growth, thanks to multiple advantages compared to glass packaging: 1) easy to recycle hence price advantage 2) automatic/semi-automatic mass production 3) lower packaging damage risk 4) better beer preservation 5) more units per shipment. Overall, the aluminum packaging could significantly reduce production and logistics costs, which also enables easier e-commerce distribution.

Unlike Germany, Australia, and Belgium, China does not have an enforced policy of glass bottle deposit to encourage recycling. This could result in lower glass bottle supplies and drive up prices. Overall, it is estimated that metal beer packaging could account for 26% of total beer packaging by 2021F in China (vs. 22% in 2017).

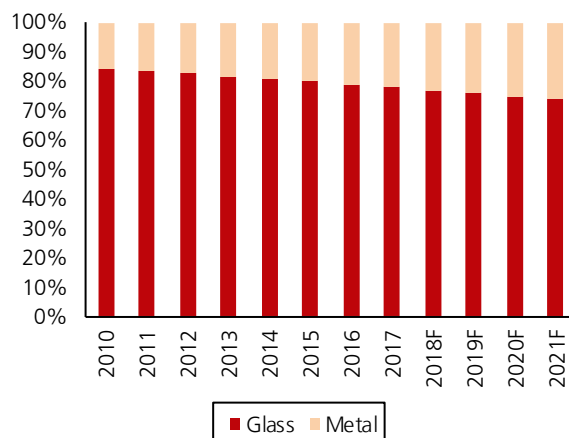
Packaging focal points: glass packaging on-trade and metal packing off-trade. Across the board, we should see beer glass packaging to decline over the years while metal packaging to post a solid growth. The preference for different packaging further diverges in the on-trade and off-trade channels. Glass packaging remains prevalent in the on-trade channel, while metal packaging has been gaining momentum in the off-trade channel, partly due to the more convenient bulk package. We understand via interviews with packaging players that Tsingtao Brewery has also placed orders of aluminum bottles for its high-end products, which has been popular among customers. As aluminum price starts to show weakening signs while glass price continues to rally recently, we believe the packaging shift should sustain into the medium-to long-term, which could further lift breweries' margins.

Beer packaging breakdown worldwide (2017)



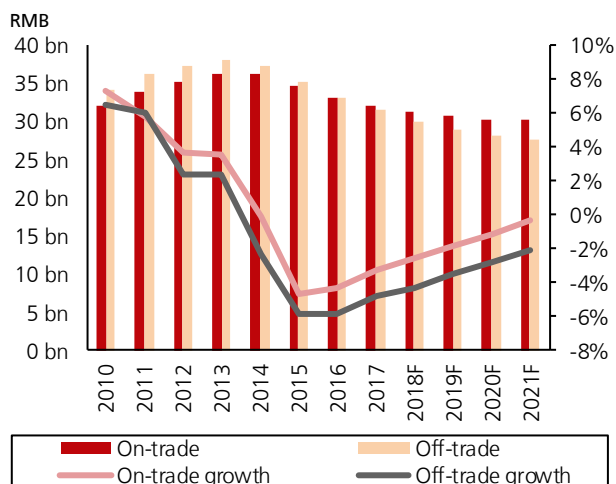
Source: Euromonitor

Beer packaging breakdown (PRC, 2010-2021F)



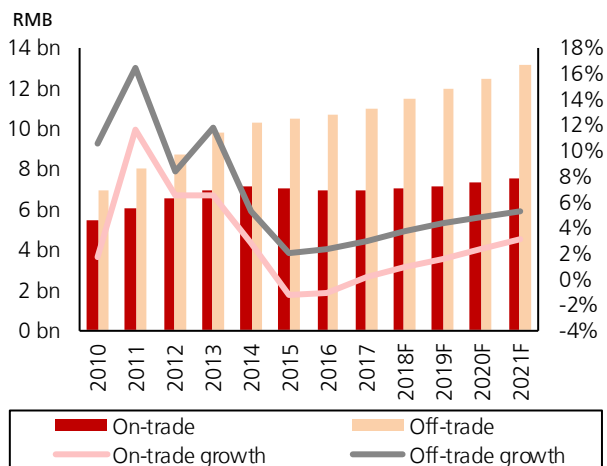
Source: Euromonitor

Beer glass packaging in different channels (PRC)



Source: Euromonitor

Beer metal packaging in different channels (PRC)

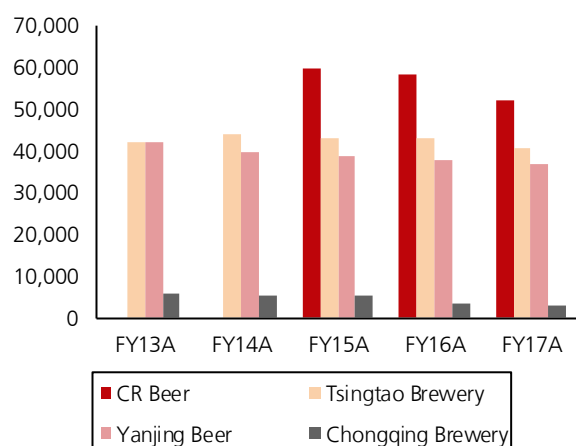


Source: Euromonitor

Supply chain digitalization: partner with Alibaba. As a leading brewery covering the nation-wide market with more than 1,500 store keeping units (SKU), Tsingtao Brewery has been actively seeking for better supply chain management solutions. We understand that Tsingtao Brewery has partnered with Alibaba to embrace the future “new retail” possibilities. By leveraging on Alibaba’s technology, we believe Tsingtao Brewery might boost its internal sales and inventory management efficiency, and reach out to more customers via Alibaba’s network, especially to the tiny stores in lower-tier cities.

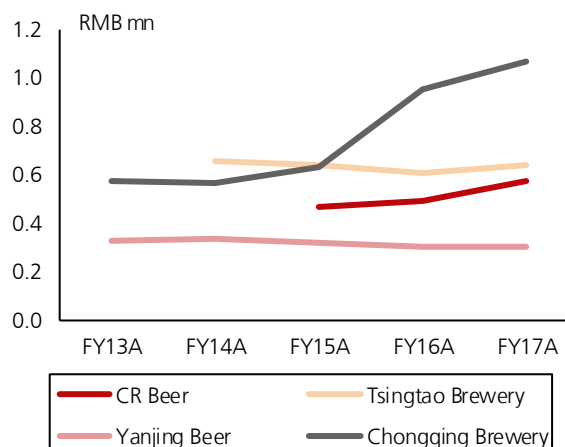
Operation efficiency matters. Compared to CR Beer and Chongqing Brewery, Tsingtao Brewery’s employee number as well as its sales per employee had remained stable in the last few years. Given its better product-mix and higher ex-factory prices, Tsingtao Brewery’s sales per employee had also remained higher than CR Beer and Yanjing during the last few years. However, CR Beer’s radical plant closures might boost its sales per employee rapidly ahead and surpass Tsingtao Brewery’s current level. On the other hand, Tsingtao Brewery could also trim its excess capacity or exit loss-making markets to better its operation. As for the SG&A expenses ratio (excluding impairment losses), Tsingtao Brewery remained largely stable (24-26%) in the past few years. Its FY17’s declines due to the company’s cost control efforts to offset rapidly increased raw material costs.

No. of employees



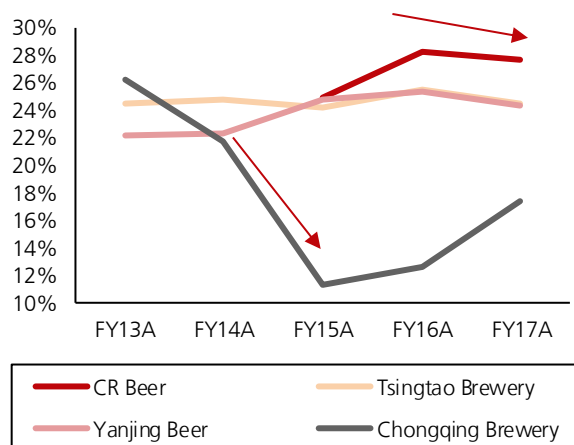
Source: Company, DBS HK

Sales per employee



Source: Company, DBS HK

SG&A as a % of sales(excl. impairment)



Source: : Company, DBS HK

Synergies between Fosun and Tsingtao Brewery. In Oct 2017, Fosun (656.HK) has taken a 17.99% stake as Asahi Group sold its entire shareholding in the company, at a price of HK\$27.22 per share. Later in June 2018, Tsingtao Brewery also entered into a strategic cooperation agreement with Fosun, which would cap Fosun's shareholding at 19.99%. We believe Tsingtao Brewery could benefit from the cooperation as the company could leverage on Fosun's resources in the areas of culture, sports, and entertainment marketing. Particularly, Fosun would actively pair up its hotels and entertainment venues with Tsingtao Brewery to accelerate local markets expansion as seen in Hainan. Other synergies might also include potential overseas market expansion, global brand acquisitions and integration, and innovative management incentives, etc.

Tsingtao Brewery

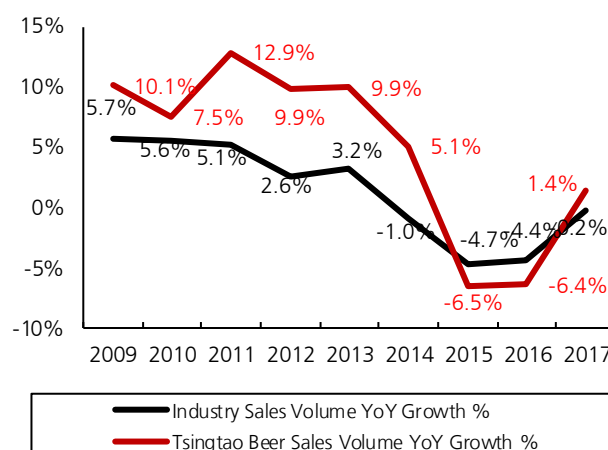
Stagnant beer sales volume

Sluggish beer consumption. We continue to see beer consumption declining from its peak since 2012, due to several reasons:

- Demographic changes leading to a decreasing youth population, the dominant consumption group of beer
- Shrinking number of migrant workers, who used to contribute significantly to the consumption of economy beer
- Anti-drunk driving and anti-extravagance campaigns result in less on premise consumption
- Growing interest amongst Chinese customers in other premium alcoholic drinks, e.g., wine and spirits

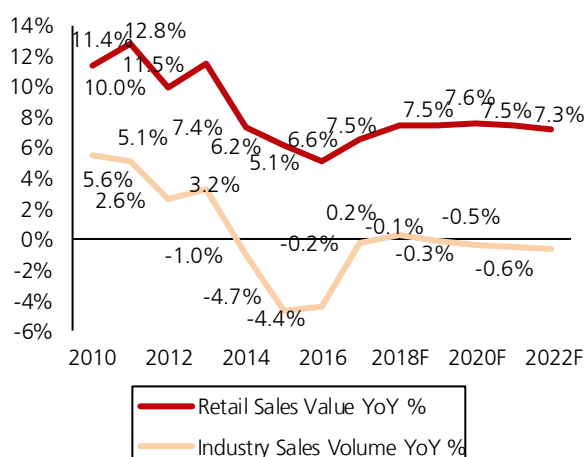
Tsingtao Brewery: a recovery mode. Beer consumption volume in China is estimated to decrease or remain stable, in the next few years, according to Euromonitor. However, Tsingtao Brewery has gradually recovered from sales volume drop during 2015-2016, and we believe it should be able to sustain a 1-2% sales volume growth, as the beer market stands to consolidate further and benefit market leaders. Besides, sports events and the favorable weather conditions should also support sales volume of beer. We also like Tsingtao Brewery's recent advertising and promotional campaigns during the 2018 FIFA World Cup, which should further gain customer loyalty via a better brand image.

Sales recovery of Tsingtao Brewery

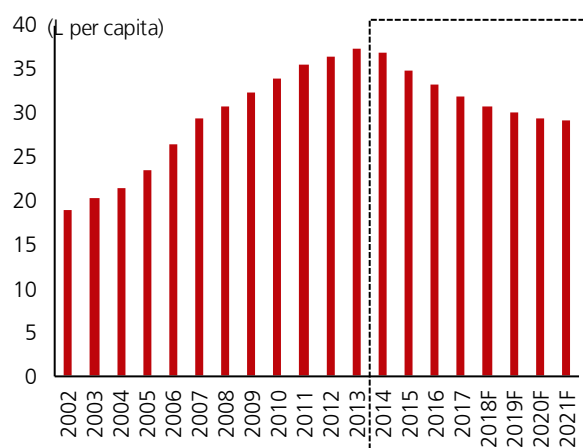


Source: Euromonitor

China beer production



Declining beer consumption per capita in China



Source: National Bureau of Statistics of China, Euromonitor

Raw material challenge

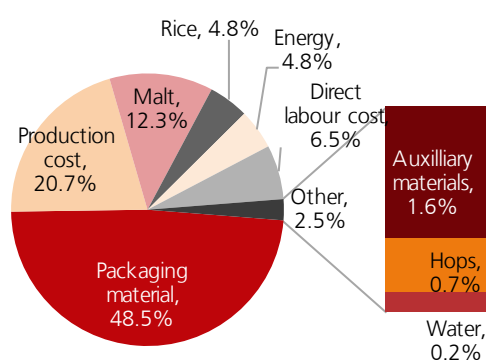
Raw materials headwind. The prices of most packaging materials have remained relatively stable compared to FY17 year-end prices, except for paper prices that went up more than 20% y-o-y. Imported barley price has also increased more than 15% during 1H18. However, given Tsingtao Brewery's bargaining power over upstream providers and barley malt's small contribution in COGS (12.28% in FY17), we believe the per unit cost of beer production should see a moderate increase of c.3%, which should be covered by the beer price uplift and improving product-mix, in our view.

Cost pressure still manageable. At this stage, we believe the industry-wide beer price increase in 2018 could be sufficient for Tsingtao Brewery to pass on the pressure to end-consumers.

Besides, the company has a reasonably steady control over raw material prices, thanks to its long-standing collaboration with its suppliers and its vast operating scale in China. We notice that smaller packaging (e.g., glass bottle with 314mL) also contributes to the company's cost savings. The capacity reallocation (e.g., from the city center to the suburban area) could also help increasing production and logistics efficiency, given larger plant size, advanced automation production lines and less traffic time.

Increasing market share of Tsingtao Brewery also enhances its pricing power over distributors and end-customers, especially in its dominating cities/regions. This should give ample room for margin enhancement via further optimization of its distribution channels.

Tsingtao Brewery COGS Breakdown (2017)



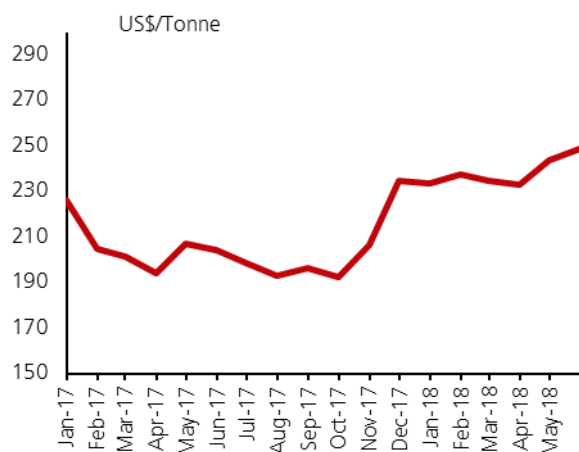
Source: Company, DBS HK

Glass price index (PRC)



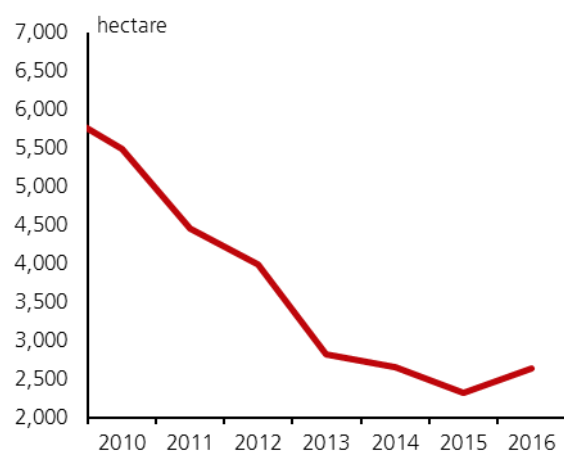
Source: Nanhua Commodity

Barley import price (PRC)



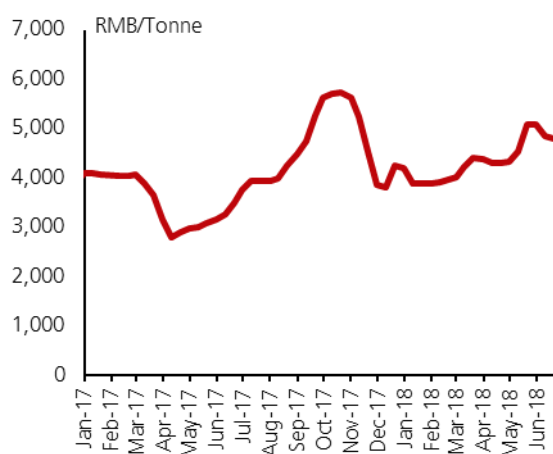
Source: China Customs

Hop plant area (PRC)



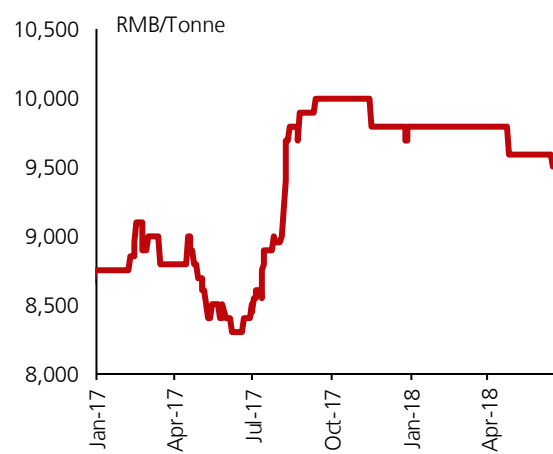
Source: Barth-Hass Group

Packaging paper price (PRC)



Source: Wind

Metal can recycle price in Shanghai (PRC)



Source: Wind

Price hike to offset raw material cost pressure. Due to global raw material price hikes, major breweries have all increased their beer prices to offset cost pressure. Tsingtao Brewery also announced that it had raised prices of some products by an average of no more than 5 percent. Given the rapid premiumization upgrade trend and the company's ongoing efforts to promote its high-end products, we estimated that Tsingtao Brewery's blended ex-factory prices could increase in the magnitude of 6.1% this year, which should be sufficient to cover the raw material cost pressure.

We understand the ex-factory price varies by region, given Tsingtao Brewery's different market positioning and pricing power in various markets. Overall, we would likely see a higher price hike in its dominant markets, while the company could probably keep its competitive pricing strategy in its less exposed regions to grab market share.

World-wide beer price hike (2018)

Region	Company	Remarks
China	CR Beer	Moderately adjusting the prices of some of its products in certain regions to mitigate the heightened costs pressure
	Tsingtao Brewery	Increase prices of some products by an average of no more than 5 per cent
	Yanjing	Increase the price of its best selling mass market product by more than 20 per cent
U.K.	AB-InBev	Pints will increase in price by around 3.9% from 1 Feb 2018
	Molson Coors	Prices up by 3.2%
Japan	Asahi, Kirin, Suntory and Sapporo	Wholesale prices of bottled beer are expected to rise by about 10%.

Source: Company, Bloomberg Finance L.P., DBS HK

Breweries' retail price hike summaries

CR Beer	Volume (ml)/unit	Package unit	JD		change %
			Retail Price as of 1 July 2017	Retail Price as of 1 July 2018 (RMB/unit)	
Snow Premium (冰酷)	330	24	1.75	2.00	14.6%
Snow Refreshing (清爽)	330	24	2.08	2.33	12.2%
	500	12	3.24	3.67	13.1%
Snow - Brave the World Series (勇闯天涯)	330	24	4.00	4.00	0.0%
	330	6	3.75	3.83	2.2%
	500	12	4.49	4.67	3.9%
Snow - New Brave the World (勇闯天涯概念系列) Debut in Nov 2017	500	12		5.83	n.a.
Snow Draft Beer (纯生)	330	24	5.42	5.42	0.0%
	500	12	7.20	7.25	0.7%
Snow New Draft Beer (纯生概念系列) Debut in Nov 2017	500	12	n.a.	10.00	n.a.
Snow Opera Mask (脸谱)	500	12	15.00	15.00	0.0%

c. **24.8%** price increase after new series debut

c. **38%** price increase after new series debut

Tsingtao Brewery

Laoshan Beer (崂山啤酒)	330	24	2.04	2.50	22.2%
	500	12	5.17	6.58	27.4%
Tsingtao Classic (青岛经典)	330	24	4.00	3.95	-1.1%
	500	12	4.67	4.83	3.6%
Tsingtao Draught Beer (青岛纯生)	330	24	4.54	4.54	0.0%
	500	12	5.67	6.25	10.3%
Tsingtao Draft Beer 1908 (青岛啤酒精酿)	500	12	6.5	6.5	0
	(Aluminum bottle)	473	12.08	10.83	-10.3%
Augerta Beer (奥古特)	500	12	9.00	9.00	0.0%

AB InBev

Harbin Beer Bingchun Ice (哈尔滨啤酒冰纯Ice)	330	24	3.25	3.90	20.2%
Harbin Beer Xiaomaiwang (哈尔滨啤酒小麦王)	330	24	2.16	2.83	31.0%
Budweiser (百威啤酒)	330	24	5.38	5.21	-3.1%
	500	18	6.61	6.33	-4.2%
Budweiser Draft (百威纯生)	330	24	5.75	5.79	0.7%

Yanjing

Yanjing Beer (燕京啤酒)	330	24	1.83	2.08	13.4%
Yanjing Fresh Beer (燕京鲜啤)	330	24	3.71	4.00	7.9%
Yanjing Draft Beer (燕京纯生)	500	12	5.42	5.75	6.2%
Yanjing Original Weissbier (燕京原浆白啤)	500	12	9.83	10.42	5.9%

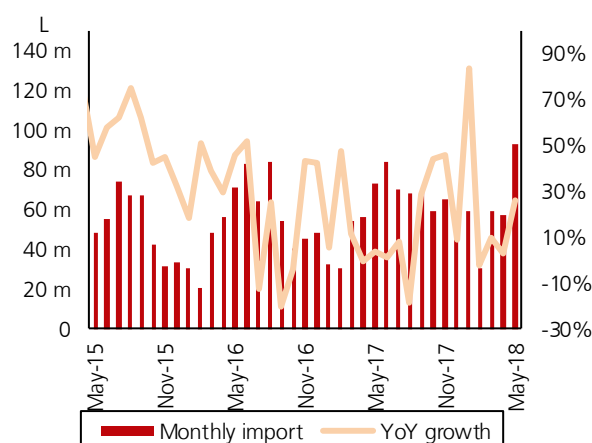
Source: JD.com

Competition with foreign players

Competition from imported beers. We have seen imported beers' rapid growth over the last decade, and now imported beer is becoming increasingly accessible in China, fuelled by the convenient online distribution. However, we also observe the slowdown momentum of sales volume growth across imported beers in China, along with their ASP declines. The ASP decline might be attributable to the changing strategy of selected foreign brands in the PRC, e.g., AB-InBev decided to produce its craft beer Goose Island in Wuhan factory, rather than to import into China. Parallel imports from other countries with lower prices might also reduce overall ASP for imported beers. Nevertheless, we believe imported beer will still have a minimal impact on Tsingtao Brewery for now, given that the sales volume of imported beers was merely accounted for 1.5% of domestic production in 2017 (source: National Bureau of Statistics of China).

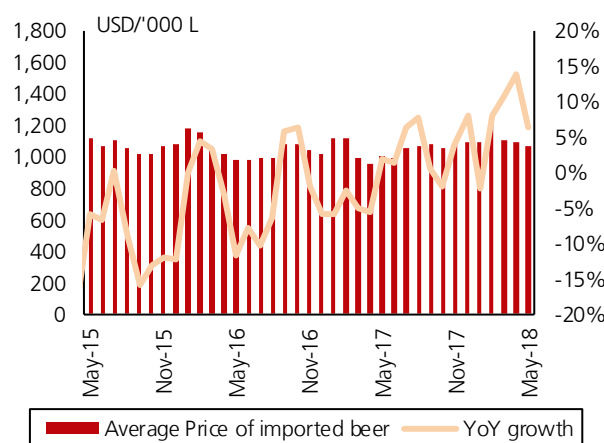
Foreign players as a threat. Foreign players are taking advantage of China's favorable policies to grow their influence on pubs and clubs, and obtain the exclusive selling rights in these on-premise venues. During 2011-2016, major foreign players (Ab-InBev and Carlsberg) gained as much as 5.7ppt retail sales volume market share in China, with the help of their appealing brand images. However, we realize that Tsingtao Brewery also continues to benefit from its brand heritage, which is the best proxy in the mid-to high-end segment compared to other Chinese peers. The company is also trying to energize its brand among youngsters via more association with sports and music.

Imported beer growth rate (PRC)



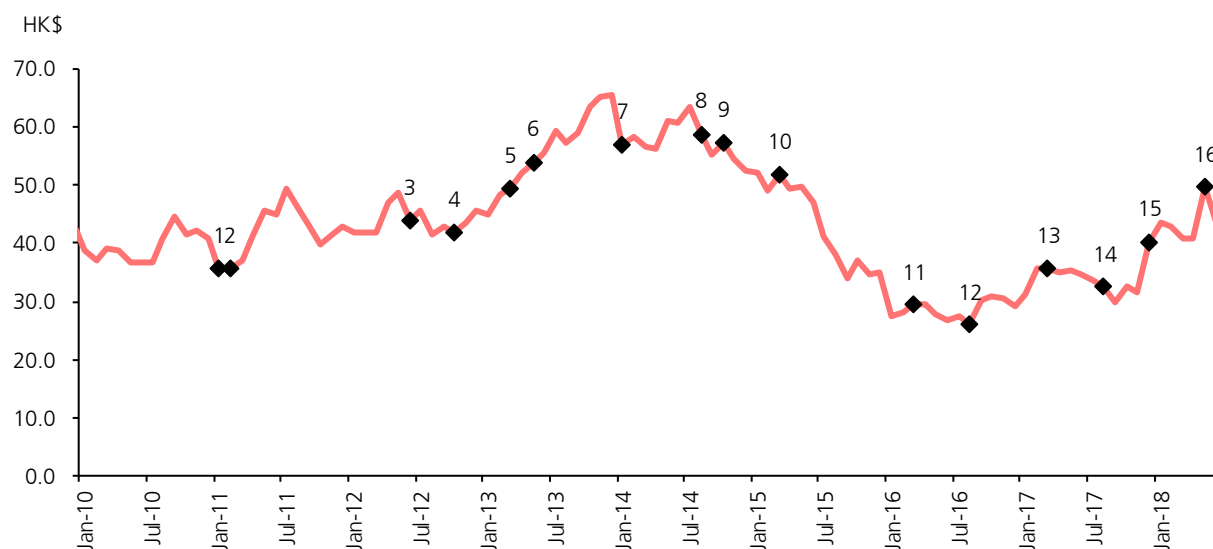
Source: China Customs

Average selling prices (ASP) of imported beer (PRC)



Source: China Customs

Tsingtao Brewery's Share Price Performance (Jan 2010 - 2018)



Date	Events
1 Jan-11	Yan Xu resigned as Vice President and President of Marketing Center
2 Feb-11	Tsingtao Beer raised ex-factory price, in a matitude of lower than 10%
3 Jun-12	Jin Zhiguo resigned as President
4 Oct-12	Tsingtao Brewery announced 3Q12 results, market-share-oriented strategy boosted strong topline growth
5 Mar-13	Tsingtao Brewery announced FY12 results, in line with expectations with higher dividend payout
6 May-13	Tsingtao Brewery set up JV with Suntory in Shanghai
7 Jan-14	Barley price dropped since 3Q13
8 Aug-14	Tsingtao Brewery announced 1H14 results, sales volume growth slowed down compared to previous years
9 Oct-14	Tsingtao Brewery announced 3Q14 results, sales volume growth declined
10 Mar-15	Tsingtao Brewery announced FY14 results, sales volume growth remained weak
11 Mar-16	Tsingtao Brewery reported FY15 results below expectation with net profit declined 14%
12 Aug-16	Tsingtao Brewery reported 1H16 results with net profit declined c.11%
13 Mar-17	Tsingtao Brewery reported FY17 results with sales and net profit both declined
14 Aug-17	Tsingtao Brewery reported 1H17 results, with sales volume, sales and net profit all increased
15 Dec-17	Tsingtao Brewery raised ex-factory price of some products in a matitude of lower than 5%
16 May-18	Tsingtao Brewery reported 1H18 results, with net profit increased by c.15%

Source: Thomson Reuters, DBS HK

CRITICAL FACTORS TO WATCH

Critical Factors

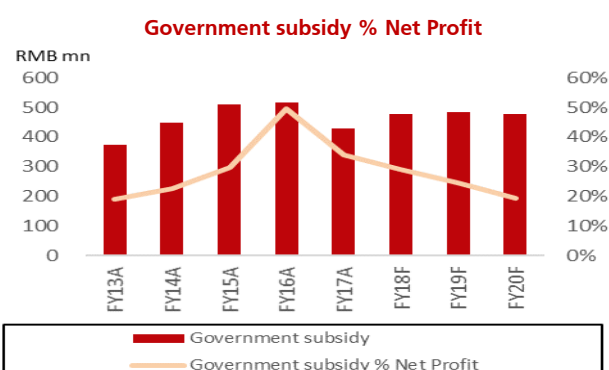
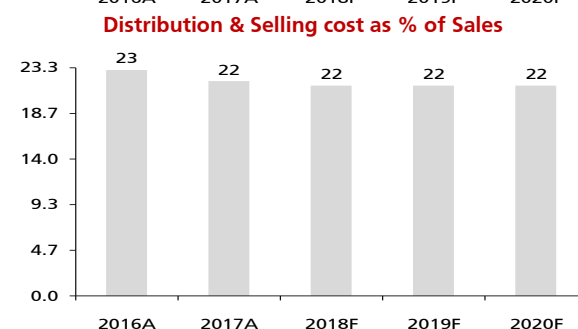
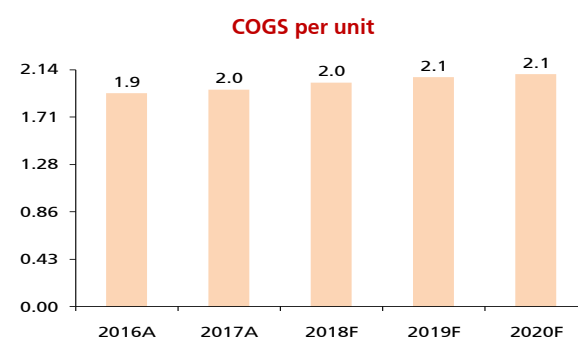
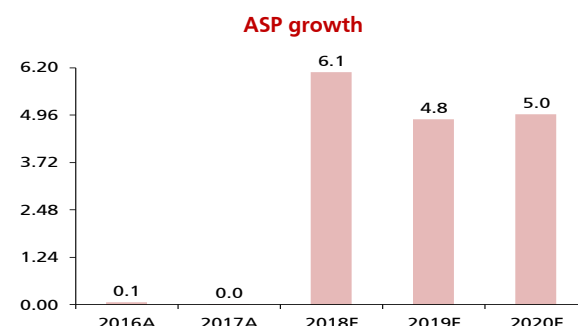
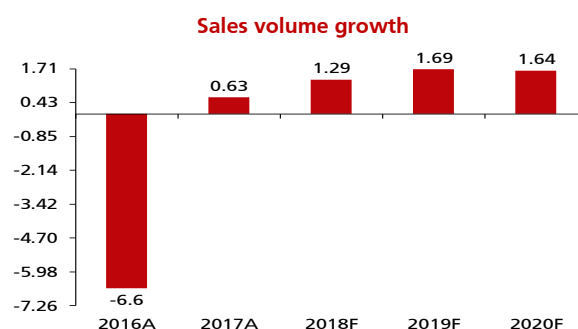
Industry volume growth: a critical foundation. China beer industry volume has been declining for the last four years (-1.0% in 2014, -4.7% in 2015, -4.4% in 2016 and -0.2% in 2017) thanks to declining young population, anti-corruption campaigns, weather reasons, etc. Tsingtao Brewery has experienced rapid sales volume backdrop during FY15-16, recording sales volume decline of 7.4% and 6.6%. However, the company has gradually recovered from sales volume decline and reported 0.6% sales volume growth, better than industry average. We opine that any recovery of beer sales volume could help Tsingtao Brewery to perform better.

Continuing market expansion: the recipe to success. The company's major brand Tsingtao Beer has long been recognized by the public with a long history which dates back to 1903. As one of leading brewers, the company has gradually expanded its market share from 14.9% in 2011 to 17.5% in 2017. We believe further market share gains within the mid-to high-end segment could further drive up the group's market share.

Premiumisation to drive ex-factory price increase. Amidst flattish industry volume growth, premiumisation should help Tsingtao Brewery move up a gear, given its ongoing effort to market its premium products and to build up strong connection with consumers. Currently, contribution from its major brand – Tsingtao Beer, only stands at c.50% of the company's total sales, which we believe still have ample room to upgrade. We opine Asahi's exit in the company's shareholding could eliminate the company's conflicts of interest concerns and go further with the premiumization strategy.

Raw materials could swing margin. The company's gross margin decreased c. 1ppt to 40.5% in 2017. This is mainly due to raw material price rallies, especially packaging materials, i.e. glass, aluminium, paper, which accounted for 48.5% of total COGS (Cost of goods sold). Further uplift in raw material prices could weigh on Tsingtao Brewery's margins although we believe the industry-wide beer price hike and improving product-mix could help offset some of the impacts.

Government subsidy plays an important part. Over the past few years, the company has received more than RMB300m government subsidies each year. We forecast the government grant to remain steady at roughly c. RMB400-500m, which should still have a sizable impact on the company's net profit.



Source: Company, DBS HK

Tsingtao Brewery

Balance Sheet:

Solid net cash position. Thanks to strong operating cash inflow, low capex and small amount of debt over the years, Tsingtao Brewery ended FY17 with c. RMB9.5bn net cash. We believe the strong net cash position would likely to sustain over the next few years, and such a strong balance sheet could be helpful for suitable overseas expansion opportunities, hence improving the company's business outlook.

Share Price Drivers:

Potential industry volume recovery. China beer industry volume has been declining for the last four years (-1.0% in 2014, -4.7% in 2015, -4.4% in 2016 and -0.2% in 2017) thanks to declining young population, anti-corruption campaigns, weather reasons, etc. Tsingtao Brewery has experienced rapid sales volume backdrop during FY15-16, recording sales volume decline of 7.4% and 6.6%. However, the company has gradually recovered from sales volume decline and reported 0.6% sales volume growth, better than industry average. We opine that any recovery of beer sales volume could help Tsingtao Brewery to perform better

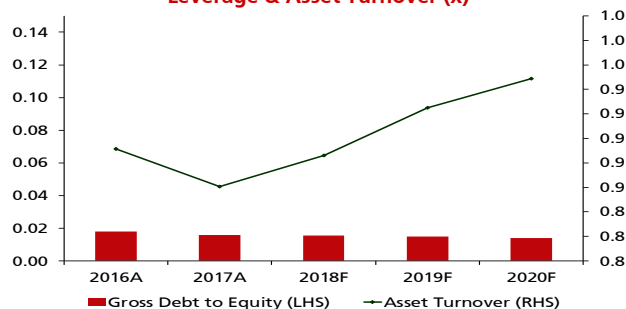
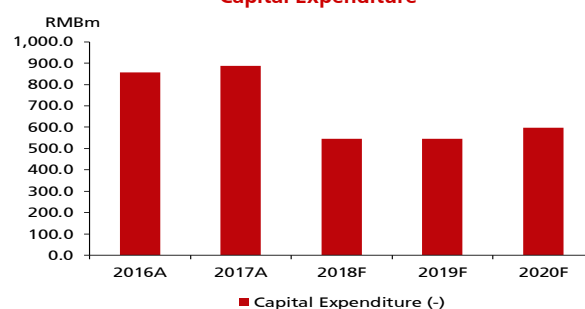
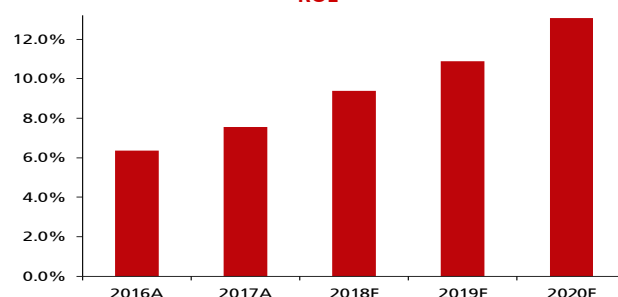
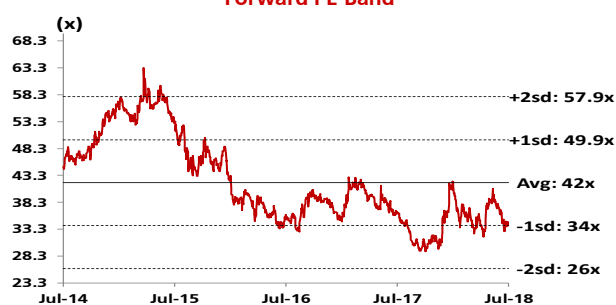
Major brand sales growth. Tsingtao Brewery's major brand, Tsingtao Beer, targets at mid-to high-end markets. Hence, the improvement of product-mix heavily relies on the major brand sales growth, which decides the margin levels.

Key Risks:

Key downside risks include further industry volume decline due to bad weather, potential market share loss, as well as intense competition against global peers in the high-end segment.

Company Background:

Tsingtao Brewery is the second largest brewer (in terms of sales volume) in China, with sales volume of 7.97 m kl (million kiloliters) in FY17, accounting for 17.5% of market share in the country. As of 2017 year end, the company runs on production capacity of 14.82 m kl per year. In 2017, about 47% of the company's beer sales was contributed by its major band - Tsingtao Beer, while the remaining was from Laoshan ("崂山") brand, which targets on mass markets.

Leverage & Asset Turnover (x)**Capital Expenditure****ROE****Forward PE Band****PB Band**

Source: Company, DBS HK

Key Assumptions

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Sales volume growth	(7.4)	(6.6)	0.6	1.3	1.7	1.6
ASP growth	2.7	0.1	0.0	6.1	4.8	5.0
COGS per unit	0.0	1.9	2.0	2.0	2.1	2.1
Distribution & Selling cost as % of Sales	21.4	23.1	22.0	21.5	21.5	21.5
Admin cost as % of Sales	5.1	5.1	4.7	4.7	4.7	4.7

Source: Company, DBS HK

Income Statement (RMB m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Revenue	27,635	26,106	26,277	27,630	29,479	31,474
Cost of Goods Sold	(17,192)	(15,265)	(15,622)	(16,327)	(17,085)	(17,684)
Gross Profit	10,443	10,841	10,655	11,303	12,394	13,790
Other Opng (Exp)/Inc	(7,121)	(6,963)	(6,616)	(6,851)	(7,336)	(7,860)
Operating Profit	1,291	1,647	1,427	1,658	2,104	2,806
Associates & JV Inc	(5)	(5)	20	20	20	20
Net Interest (Exp)/Inc	300	257	370	408	431	470
Exceptional Gain/(Loss)	660	224	288	391	390	387
Pre-tax Profit	2,247	2,123	2,105	2,477	2,945	3,683
Tax	(663)	(1,018)	(723)	(743)	(884)	(1,105)
Minority Interest	101	(62)	(119)	(100)	(100)	(100)
Net Profit	1,685	1,043	1,263	1,634	1,962	2,478
Net Profit before Except.	1,025	819	975	1,243	1,572	2,091
EBITDA	2,441	2,087	1,897	2,117	2,544	3,224
Growth						
Revenue Gth (%)	(4.9)	(5.5)	0.7	5.1	6.7	6.8
EBITDA Gth (%)	(24.7)	(14.5)	(9.1)	11.6	20.2	26.7
Opg Profit Gth (%)	(43.4)	27.6	(13.4)	16.2	26.9	33.4
Net Profit Gth (%)	(27.0)	(38.1)	21.0	29.4	20.0	26.3
Margins & Ratio						
Gross Margins (%)	37.8	41.5	40.5	40.9	42.0	43.8
Opg Profit Margin (%)	4.7	6.3	5.4	6.0	7.1	8.9
Net Profit Margin (%)	6.1	4.0	4.8	5.9	6.7	7.9
ROAE (%)	10.6	6.4	7.5	9.4	10.9	13.1
ROA (%)	6.1	3.6	4.1	5.2	6.2	7.5
ROCE (%)	4.8	4.3	4.6	5.5	6.8	8.7
Div Payout Ratio (%)	31.3	45.6	44.9	45.0	45.0	45.0

Source: Company, DBS HK

Balance Sheet (RMB m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Net Fixed Assets	9,897	11,448	10,991	11,383	11,776	12,175
Invts in Associates & JVs	0	0	0	0	0	0
Other LT Assets	6,716	6,020	5,910	5,619	5,394	5,183
Cash & ST Invts	8,402	8,573	9,805	10,096	10,695	11,987
Inventory	2,182	2,412	2,393	2,484	2,599	2,691
Debtors	118	125	141	134	143	153
Other Current Assets	1,185	1,500	1,733	1,675	1,751	1,811
Total Assets	28,501	30,077	30,975	31,391	32,358	34,000
ST Debt	810	302	283	283	283	283
Creditors	2,591	2,049	2,084	2,314	2,469	2,636
Other Current Liab	6,352	7,933	8,086	7,761	7,777	8,176
LT Debt	2	1	1	1	1	1
Other LT Liabilities	2,580	2,912	2,747	2,746	2,802	2,765
Shareholder's Equity	16,458	16,314	17,145	17,667	18,407	19,519
Minority Interests	(292)	565	629	620	620	620
Total Cap. & Liab.	28,501	30,077	30,975	31,391	32,358	34,000
Non-Cash Wkg. Capital	(5,457)	(5,946)	(5,902)	(5,782)	(5,753)	(6,158)
Net Cash/(Debt)	7,590	8,269	9,522	9,813	10,412	11,703
Debtors Turn (avg days)	1.6	1.7	1.8	1.8	1.8	1.8
Creditors Turn (avg days)	33.6	32.4	28.7	30.6	30.6	30.6
Inventory Turn (avg days)	49.6	54.9	56.1	55.5	55.5	55.5
Asset Turnover (x)	1.0	0.9	0.9	0.9	0.9	0.9
Current Ratio (x)	1.2	1.2	1.3	1.4	1.4	1.5
Quick Ratio (x)	0.9	0.8	1.0	1.0	1.0	1.1
Net Debt/Equity (X)	CASH	CASH	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)
Capex to Debt (%)	161.9	281.8	313.2	192.8	192.9	210.5
Z-Score (X)	4.3	4.2	4.1	4.1	4.0	4.0

Source: Company, DBS HK

Cash Flow Statement (RMB m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Pre-Tax Profit	2,247	2,123	2,105	2,477	2,945	3,683
Dep. & Amort.	1,154	1,179	N/A	438	420	397
Tax Paid	(663)	(663)	(1,018)	(723)	(743)	(884)
Assoc. & JV Inc/(loss)	5	5	(20)	(20)	(20)	(20)
(Pft)/ Loss on disposal of FAs	504	0	0	0	0	0
Chg in Wkg.Cap.	(205)	354	(48)	(141)	(169)	184
Other Operating CF	(467)	(28)	N/A	(224)	(358)	(496)
Net Operating CF	2,575	2,971	2,224	1,807	2,074	2,864
Capital Exp.(net)	(1,314)	(856)	(888)	(547)	(547)	(597)
Other Invt.(net)	574	(308)	385	(300)	(100)	0
Invt in Assoc. & JV	0	0	0	0	0	0
Div from Assoc & JV	0	0	0	0	0	0
Other Investing CF	504	0	0	0	0	0
Net Investing CF	(237)	(1,164)	(504)	(847)	(647)	(597)
Div Paid	(572)	(597)	(535)	(677)	(835)	(983)
Chg in Gross Debt	0	(873)	0	0	0	0
Capital Issues	0	0	0	0	0	0
Other Financing CF	247	(184)	62	(10)	(10)	(10)
Net Financing CF	(325)	(1,654)	(473)	(687)	(846)	(993)
Currency Adjustments	0	18	(14)	18	18	18
Chg in Cash	2,013	171	1,233	291	599	1,292
Opg CFPS (RMB)	2.06	1.94	1.68	1.44	1.66	1.98
Free CFPS (RMB)	0.93	1.57	0.99	0.93	1.13	1.68

Source: Company, DBS HK

DBS HK recommendations are based on Absolute Total Return* Rating system, defined as follows:

STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

BUY (>15% total return over the next 12 months for small caps, >10% for large caps)

HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

FULLY VALUED (negative total return i.e. > -10% over the next 12 months)

SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 19 Jul 2018 14:25:27 (HKT)

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