China Aviation Oil (Singapore)

Lift-off in international flights

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SINGAPORE | TRANSPORT | INITIATION

- International passenger traffic in China is up 18 fold YTD September 2023 and only 33% of pre-pandemic levels. We expect international travel volume recovery to gain pace in FY24e, fuelling demand for jet fuel at international airports.
- China's jet fuel consumption has risen by CAGR of 8.4% over the last 10 years. More airports have been added over the years to cope with the rise in air travel demand. We think CAO could potentially expand its footprint to international airports in other Chinese cities.
- We initiate coverage with a BUY recommendation and discounted cash flow TP of S$1.01. We expect earnings to double over the next two years and around 64% of the market cap is in net cash of US$308mn (as at end 2022).

Background

China Aviation Oil (Singapore) Corporation Ltd (CAO) supplies imported jet fuel to the civil aviation industry in China. CAO is 51.3%-owned by state-owned China National Aviation Fuel Group Limited, which holds the mandate to supply all jet fuel requirements in China. CAO also markets jet fuel to airports outside China, and engages in international trading of jet fuel and other oil products, as well as carbon credits. It has a 33% stake in Shanghai Pudong International Airport (SPIA). SPIA accounted for 62% of net profit in FY22.

Highlights

- **China air travel demand rebounded after borders re-opened in early 2023.** Air travel volume surged by 80% YoY in the first eight months of 2023, after the lifting of Covid mobility restrictions, thereby pushing up consumption of jet fuel. The recovery is led by domestic travel. International flights are still at 20-30% of pre-Covid levels. As more international flights are restored, we expect jet fuel demand at the major international airports in China to return to pre-Covid levels by FY25e. About 60% of petroleum and refined products are imported.
- **CAO could potentially supply jet fuel to more international airports in China.** China's jet fuel consumption has risen at a 10-year CAGR of 8.4% from 2011-2021, and 9.7% if year 2020 were excluded, mirroring the growth in air travel demand. Correspondingly, China has been adding airports at a CAGR of 3.4% over the last 10 years. CAO mainly supplies to the five key international airports currently, but we think it has potential to expand its footprint to international airports in other Chinese cities.
- **The three major Chinese carriers plan to grow their fleet by 6-18.5% in the next three years.** Air China, China Eastern Air and China Southern Airlines together account for two-thirds of China air transport volume. We think the fleet expansion plan signals optimism that rising affluence and mobility and increased urbanization will underpin demand for air transport.

Initiate coverage with a Buy recommendation and TP of S$1.01.

Our TP is based on the discounted cash flow model. Its operations are asset-light. The balance sheet comprises mainly cash (as at Dec 22: S$0.49/share), investments in associates and working capital. We expect ROIC to rise to 10% in FY23e and 14.4% in FY24e (FY22: 5.6%).

30 October 2023

BUY (INITIATION)

LAST CLOSE PRICE	SGD 0.765
FORECAST DIV	SGD 0.017
TARGET PRICE	SGD 1.010
TOTAL RETURN	34.2%

COMPANY DATA

BLOOMBERG CODE:	CAO SP
O/S SHARES (MN) :	860
MARKET CAP (USD mn / SGD mn) :	480 / 658
52 - WK HI/LO (SGD) :	1.1 / 0.65
3M Average Daily T/O (mn) :	0.39

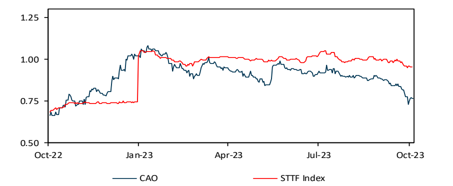
MAJOR SHAREHOLDERS (%)

CHINA NATIONAL AVIATION FUEL GROUP	51.3%
BP INVESTMENTS ASIA LTD	20.2%

PRICE PERFORMANCE (%)

	1MTH	3MTH	1YR
COMPANY	(13.1)	(16.8)	13.7
STTF RETURN	(4.3)	(6.6)	6.6

PRICE VS. STTF



Source: Bloomberg, PSR

KEY FINANCIALS

Y/E Dec (US$, 'mn)	FY21	FY22	FY23e	FY24e
Revenue	17,637	16,464	15,641	25,025
Gross Profit	31	35	34	54
EBIT	46	39	55	77
NPAT	40	34	48	67
P/NAV (x)	0.5	0.5	0.5	0.5
P/E (x)	11.9	14.3	9.9	7.2
ROE (%)	4.5%	3.7%	5.2%	6.8%

Source: Company, PSR

VALUATION METHOD

Discounted cash flow method

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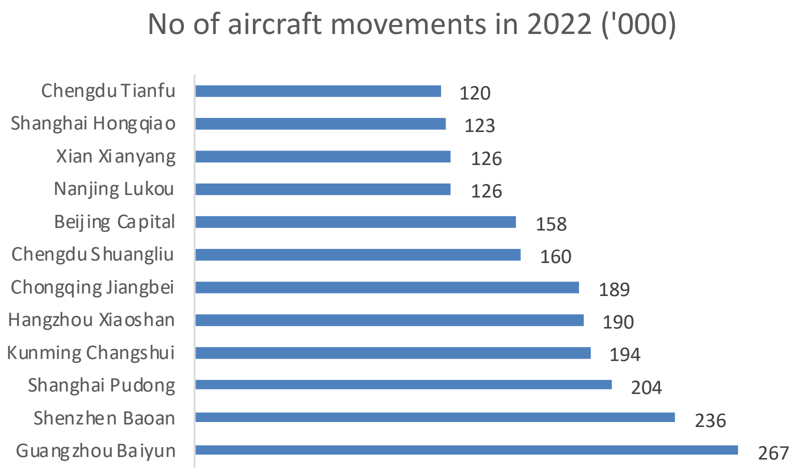
Background

China Aviation Oil (Singapore) Corporation Ltd (CAO) supplies imported jet fuel to the civil aviation industry in China. It buys and sells physical products to the major international aiports, including Guanzhou Baiyun International Airport, Shenzhen Baoan International Airport, Shanghai Pudong International Airport, Beijing Capital International Airport and Shanghai Hongqiao International Airport, which are amongst the busiest airports in terms of aircraft movements in China in 2022. (Figure 1)

Figure 1: CAO supplies jet fuel to some of the busiest airports in China

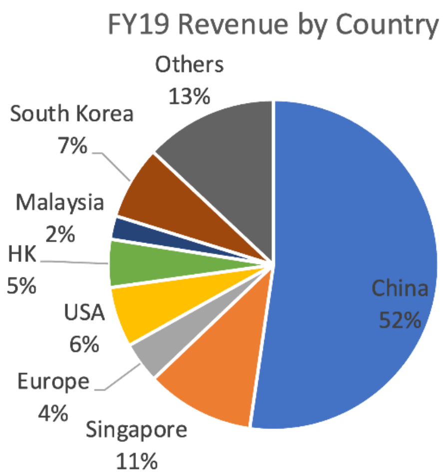


Source: China civil aviation authority

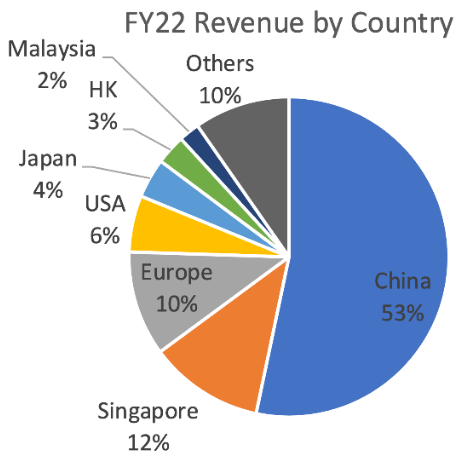
The supply contracts with the airlines are on a cost-plus basis. The fuel is sourced mainly from Asian markets such as Japan, South Korea and Taiwan.

CAO also markets and supplies jet fuel to airports outside China. While China accounts for the lion's share of 53% of revenue, the share of the European markets have been rising steadily as it steps up its presence through a trading arm in the UK and a 12.5% stake in a concession holder at the Amsterdam Schipol Airport. The breakdown in revenue by geography is as shown in Figure 2.

Figure 2: China is the largest market, but the share of European markets have risen steadily.



Source: Company, PSR



Source: Company, PSR

Associates and joint ventures

Through associates and joint ventures, it owns a portfolio of assets that provide storage, pipeline transportation, and re-refuelling facilities to manage the storage and distribution of jet fuel. (Figure 3). These assets are the critical infrastructure that underpin CAO's entrenched position as the largest physical jet fuel trader in Asia Pacific. The investments in associates account for 28.7% of net assets of the group.

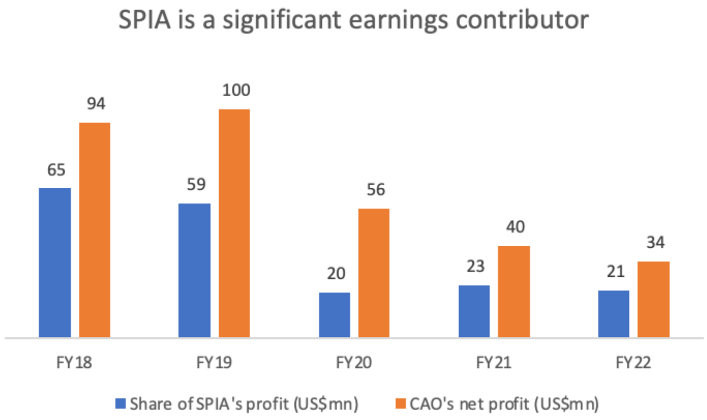
Figure 3: Associates and joint ventures

Name	Stake	Country	Operations
Shanghai Pudong International Airport Aviation Fuel Supply Company Ltd	33%	PRC	Exclusive supplier of jet fuel at Shanghai Pudong International Airport
Shenzhen Zhenghe Petrochemicals Co., Ltd	39%	PRC	Storage tank leasing and trading of products. Owns a storage tank farm in Guangdong Province with a capacity of 79,000 cu m
Oilhub Korea Yeosu Co., Ltd	26%	Republic of Korea	Largest independent storage tank terminal in Yeosu, South Korea with a capacity of 1.3mn cu m
Aircraft Fuel Supply B.V.	12.5%	Netherlands	Holds the concession from Schipol Airport to manage the storage and distribution of jet fuel
China National Aviation Fuel TSN-PEK Pipeline Transportation Corporation Ltd	49%	PRC	Pipeline transportation

Source: Company, PSR

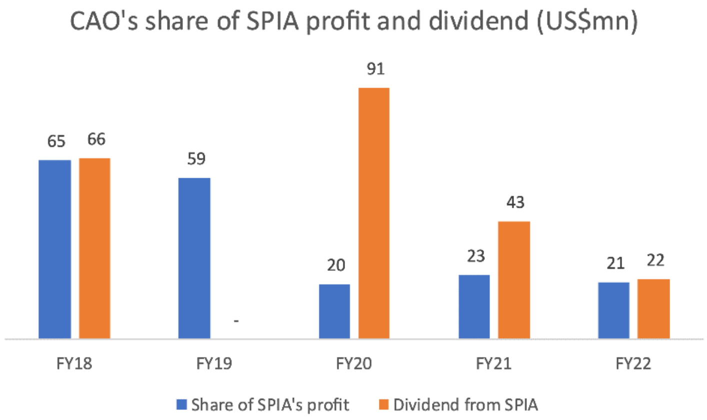
33%-owned Shanghai Pudong International Airport Aviation Fuel Supply Co., Ltd (SPIA) is the key earnings contributor (Figure 4) and cash cow (Figure 5). SPIA is the exclusive refuelling operator for all flights at the Shanghai Pudong International Airport. It has generated an average ROE of 13.5% in the last two years in spite of the lull in the aviation market.

Figure 4: SPIA contributes significantly to CAO's earnings



Source: Company, PSR

Figure 5: SPIA pays out substantially all its profits



Source: Company, PSR

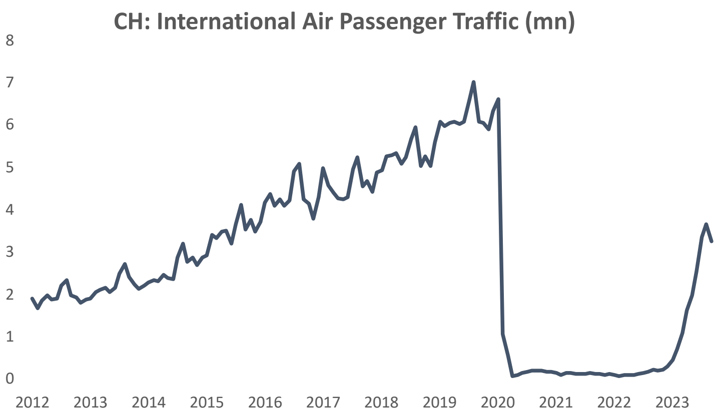
CAO also engages in international trading of jet fuel and other oil products, as well as in carbon credits trading.

It is also involved in sourcing of sustainable aviation fuel, a cleaner and direct replacement for fossil jet fuel. According to Acumen Research and Consulting, the global sustainable aviation fuel market is expected to reach US$27.4bn by 2032, from US$430mn in 2022, buoyed by regulatory measures to reduce aviation emissions and increasing industry investments in decarbonization.

Investment Highlights

More international flights to be restored. International passenger traffic in China is up 18 fold YTD September 2023 and only 33% of pre-pandemic levels. (Figure 6)

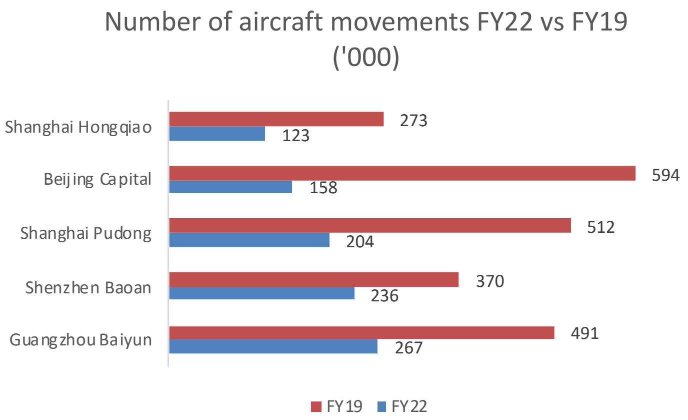
Figure 6: China international air passenger traffic rebounded



Source: CEIC

Covid curbs in 2020 to 2022 have cut mobility worldwide. The closure of borders had decimated international air travel. Aircraft movements at the five key international airports in China which CAO serviced fell by as much as 70% in 2022 from the pre-Covid level in 2019. (Figure 7). We expect recovery in FY24e with more international flights restored.

Figure 7: The number of aircraft movements fell sharply in 2022

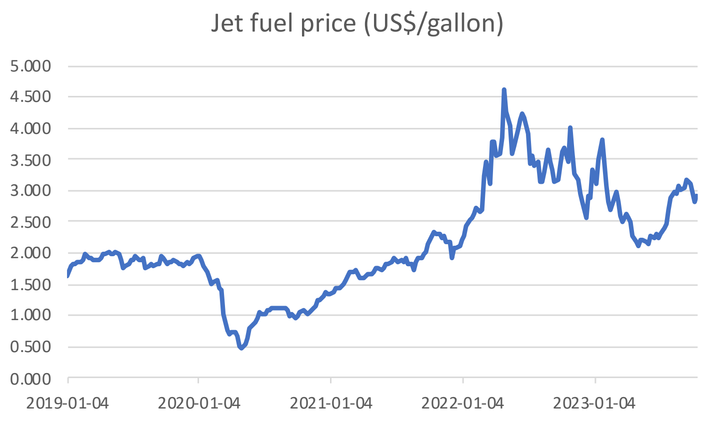


Source: China Civil Aviation Authority

Supply margins are not affected by jet fuel price movements. Jet fuel price had climbed along with crude oil prices, due to supply concerns (Figure 8). As CAO earns a pre-determined spread over the input cost, movements in jet fuel price do not have a direct impact on its bottomline.

However, we believe it could potentially benefit when the market is in contango, when the forward price is higher than the spot price. It has a cash hoard of US$534mn as at end June 2023, which is an added advantage to lock in favourable price opportunities.

Figure 8: Jet fuel price has recovered



Source: Federal Reserve Economic Data

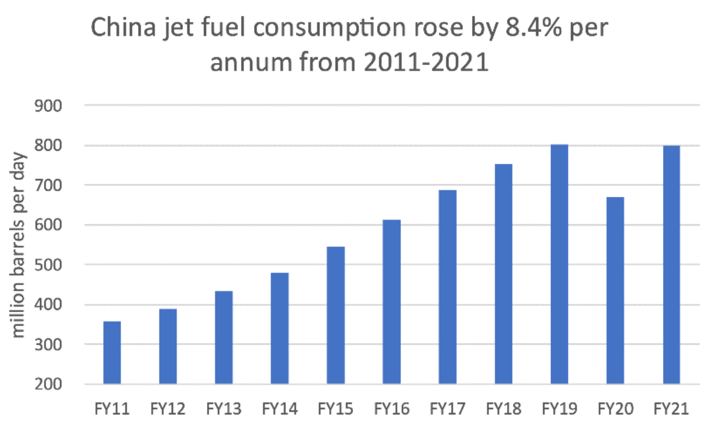
China has been adding airports. The rise in affluence and mobility has fuelled demand for air travel. The number of airports in China has risen at at CAGR of 3.4% over the last 10 years (Figure 9).

Figure 9: China has been adding airports

Source: China civil aviation authority

China jet fuel consumption has grown at 10-year CAGR of 8.4% from 2011 to 2021. If we exclude the impact of Covid in FY20, growth averaged 9.7% per annum. (Figure 10). Given that every new generation of aircraft is improving in fuel efficiency, this points to even stronger growth for passenger travel and cargo volume.

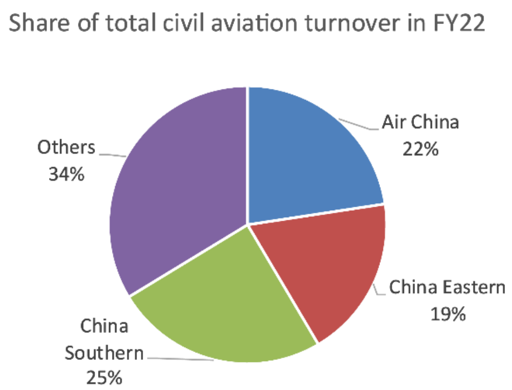
Figure 10: China consumption of jet fuel



Source: US Energy Information Administration

China's civil aviation industry is dominated by the three carriers, Air China, China Eastern Air and China Southern Airlines. The three carriers have a lion's share of 66.3%. (Figure 11)

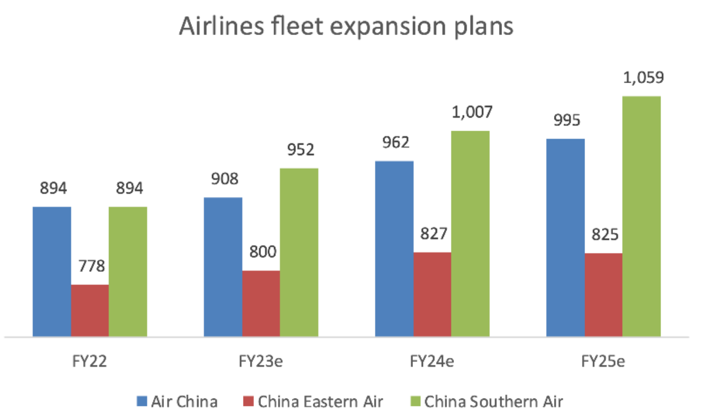
Figure 11: The three airlines dominate China's civil aviation sector



Source: China civil aviation authority

These carriers have plans to expand their fleet by 2.0% to 5.8% per annum in the next three years (Figure 12)

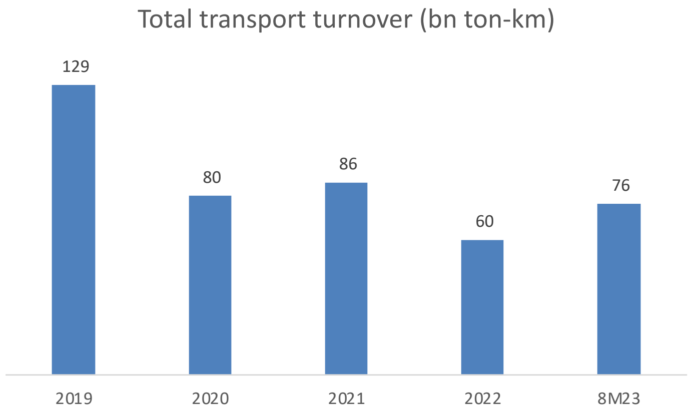
Figure 12: Fleet expansion plans of the three carriers



Source: Respective airlines

We expect CAO's supply and trading volume to return to pre-Covid level in FY25e. With the lifting of Covid restrictions in early 2023, total air transport turnover in China rebounded by 80% YoY in the first eight months of this year. However, this is still 41% below the level in FY19. (Figure 13).

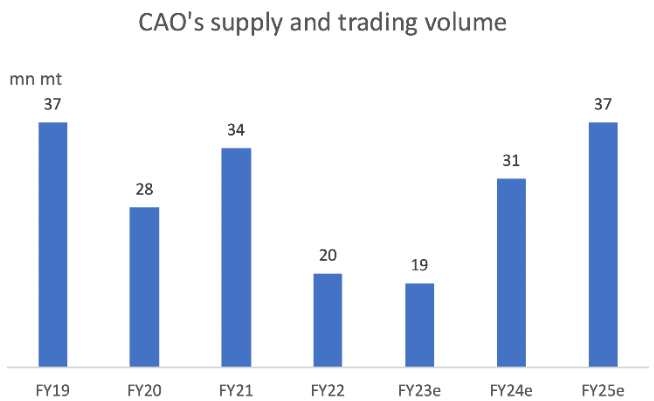
Figure 13: Total civil aviation transport volume on recovery path



Source: China civil aviation authority

The recovery is led by domestic travel. International travel only accounted for 24.6% of total volume, versus 42.3% in FY19, as the restoration of these routes have been slower due to geopolitical tensions and capacity constraints. However, demand and capacity have been climbing steadily, and we expect total transport volume to return to the pre-Covid level in FY25e. CAO's supply volume of jet fuel should rise in tandem. (Figure 14)

Figure 14: CAO's supply and trading volume to rebound with higher demand for jet fuel and oil products



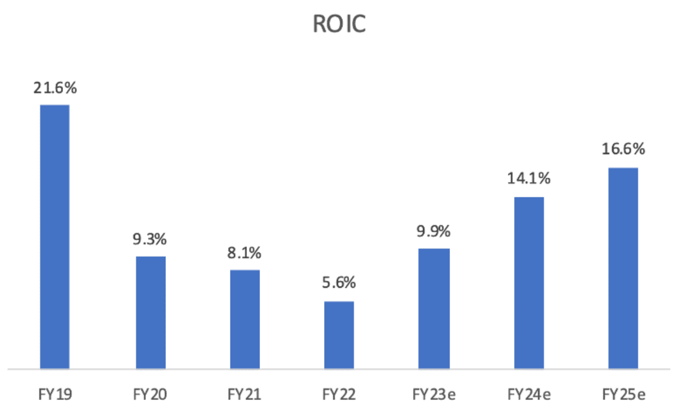
Source: Company, PSR

Financials

We expect ROIC to improve as supply volume picks up (Figure 15). The balance sheet is asset-light with no borrowings. Net assets comprise mainly cash (34%), associates (25%) and working capital. SPIA accounted for 19% of net assets and 62% of net profit in FY22.

The operations have generated strong ROIC of above 20% pre-Covid. We expect ROIC to recover in the next few years as demand for jet fuel in China rises in tandem with the resumption of flights.

Figure 15: High returns on invested capital



Source: Company, PSR

Financials

Income Statement

Y/E Dec, (US$'mn)	FY20	FY21	FY22	FY23e	FY24e
Revenue	**10,517**	**17,637**	**16,464**	**15,641**	**25,025**
Cost of sales	(10,471)	(17,606)	(16,429)	(15,607)	(24,972)
Gross Profit	**46**	**31**	**35**	**34**	**54**
Other operating income	7	2	1	18	14
Administration	(14)	(11)	(14)	(14)	(22)
Other expenses	(2)	1	(1)	(1)	(1)
Share of results of associates an	25	24	18	18	32
EBIT	**61**	**46**	**39**	**55**	**77**
Net finance expenses	(1)	(2)	(1)	(1)	(1)
Profit before tax	**60**	**44**	**38**	**54**	**76**
Taxation	(4)	(4)	(5)	(5)	(8)
Net Profit	**56**	**40**	**33**	**48**	**68**
Minority interests	-	-	0	-	(1)
Profit attributable to owners	**56**	**40**	**34**	**48**	**67**

Per share data (US$ cents)

Y/E Dec	FY20	FY21	FY22	FY23e	FY24e
BVPS	101.9	104.8	105.0	108.9	114.4
DPS (S$ cents)	4.7	2.6	1.6	1.7	2.3
EPS	6.5	4.7	3.9	5.6	7.8

Cash Flow

Y/E Dec, (US$'mn)	FY20	FY21	FY22	FY23e	FY24e
CFO					
Pretax profit	**60**	**44**	**38**	**54**	**76**
Adjustments	3	(27)	(11)	(12)	(26)
WC changes	(228)	96	(114)	96	(5)
Cash generated from ops	**(164)**	**113**	**(87)**	**138**	**45**
Others	94	44	23	31	43
Cashflow from ops	**(70)**	**157**	**(65)**	**169**	**87**
CFI					
CAPEX, net	(0)	(0)	(0)	(2)	(2)
Others	(0)	(0)	1	-	-
Cashflow from investments	**(0)**	**(0)**	**0**	**(2)**	**(2)**
CFF					
Dividends paid to owners	(29)	(17)	(12)	(15)	(20)
Proceeds from borrowings, net	(11)	(8)	(15)	-	-
Others	-	-	-	-	-
Cashflow from financing	(40)	(25)	(26)	(15)	(20)
Net change in cash	(110)	132	(91)	153	65
Cash at the start of the period	379	269	401	308	461
Currency translation	0	(0)	(2)	-	-
Ending cash	**269**	**401**	**308**	**461**	**526**

Source: Company, Phillip Securities Research (Singapore) Estimates

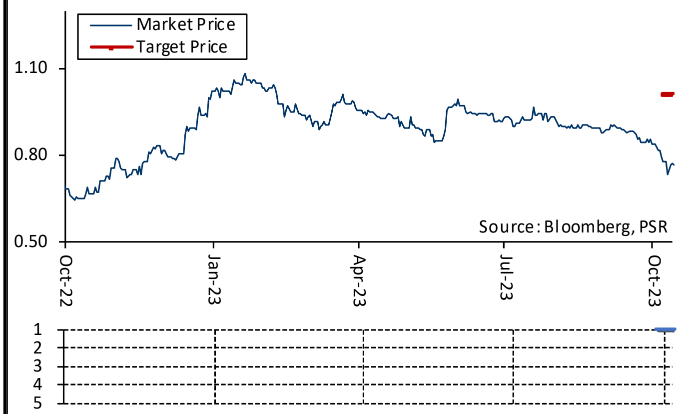
Balance Sheet

Y/E Dec, (US$'mn)	FY20	FY21	FY22	FY23e	FY24e
ASSETS					
PPE & Investment Properties	4	4	5	4	3
Others	316	304	288	270	255
Total non-current assets	**321**	**308**	**294**	**274**	**258**
Cash and cash equivalents	269	401	308	461	526
Inventories	91	43	182	128	205
Trade and other receivables	1,207	784	716	643	891
Others	-	-	-	-	-
Total current assets	**1,567**	**1,228**	**1,206**	**1,232**	**1,623**
Total Assets	**1,888**	**1,536**	**1,500**	**1,506**	**1,881**
LIABILITIES					
Trade and other payables	989	605	565	534	855
ST borrowings	-	-	-	-	-
Others	15	15	16	19	25
Total current liabilities	**1,004**	**620**	**580**	**553**	**880**
LT borrowings	-	-	-	-	-
Others	7	14	12	12	12
Total non-current liabilities	**7**	**14**	**12**	**12**	**12**
Total liabilities	**1,011**	**634**	**592**	**565**	**892**
EQUITY					
Share Capital	216	216	216	216	216
Retained profits	661	686	687	721	768
Others	-	-	-	-	-
Total equity	**877**	**901**	**903**	**937**	**984**
Minority interests			4	4	5
Total equity and liabilities	**1,888**	**1,536**	**1,500**	**1,506**	**1,881**

Valuation Ratios

Y/E Dec	FY20	FY21	FY22	FY23e	FY24e
P/E (x)	8.5	11.9	14.3	9.9	7.2
P/B (x)	0.5	0.5	0.5	0.5	0.5
EV/EBITDA (x)	4.3	2.5	5.6	0.4	-0.9
Dividend yield (%)	6.1	3.4	2.1	2.2	3.1
Growth & Margins (%)					
Growth					
Revenue	-48.3%	67.7%	-6.6%	-5.0%	60.0%
Gross profit	-21.5%	-33.1%	15.3%	-5.0%	60.0%
EBIT	-43.8%	-24.9%	-15.8%	41.4%	39.3%
PBT	-43.4%	-26.2%	-15.1%	42.7%	40.4%
Margins					
Gross profit margin	0.4%	0.2%	0.2%	0.2%	0.2%
EBIT margin	0.6%	0.3%	0.2%	0.4%	0.3%
Net profit margin	0.5%	0.2%	0.2%	0.3%	0.3%
Key Ratios					
ROE	6.4%	4.5%	3.7%	5.2%	6.8%
ROA	2.6%	2.1%	2.1%	3.1%	2.9%
Net Gearing	0.0%	0.0%	0.0%	0.0%	0.0%

Ratings History



PSR Rating System

Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

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