EDISON

China Aviation Oil (Singapore)

Traffic growth supporting demand

FY17 Results update

Aviation services

FY17 saw record core trading volumes, driven by continued strong demand in jet fuel markets and diversification into other oil products. While margin optimisation execution was more difficult in H217 as markets moved into backwardation, gross margins remained positive and partially recovered from the Q3 low by the year end. Combined with the improved associates' contribution driven by strong air transport growth in China, prospects for renewed progress in FY18 are encouraging. The healthy balance sheet also positions the group to pursue development of its supply chain infrastructure globally, especially growth opportunities aligned with China's One Belt, One Road trade route to Europe initiative. Our fair value currently stands at S$1.82.

Year end	Revenue (US$m)	PBT* (US$m)	EPS* (US$ c)	DPS (S$ c)	P/E (x)	Yield (%)
12/16	11,703	89.9	10.4	4.5	11.6	2.9
12/17	16,268	88.0	9.9	4.5	12.1	2.9
12/18e	18,405	96.0	10.8	4.8	11.1	3.1
12/19e	20,750	105.0	11.8	5.3	10.1	3.4

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

FY17 results

While core trading and supply operations experienced less favourable conditions in H217, Q4 saw meaningful improvement over Q3 despite the inability to optimise margins due to the less favourable trading environment. Trading volumes for the full year were up 15% to a record 37.3m tonnes with a 25% rise in trading of other oil products and a more moderate 8% increase in middle distillates. Revenues were 39% higher, aided by oil price rises. Associates net profit rose 5% but adjusted profit before tax fell 2%. Year end net cash fell by US$7m to US$180m reflecting timing of working capital requirements at the period end, which should unwind.

Strategy to expand capability and regionally

Despite the disruption to trading activities caused by backwardation (spot price is higher than forward price) market conditions, growth in air transport markets remains supportive of the strategy. The nature of the trading operation is predominantly to supply end customer demand thus the risk remains limited, albeit with constrained gross margin optimisation strategies due to lack of supply opportunities. CAO's global supply chain remains an advantage in this regard, especially in contango (spot price is lower than forward price) supply markets. As CAO continues to grow its international trading and supply we expect further investment in the supporting infrastructure.

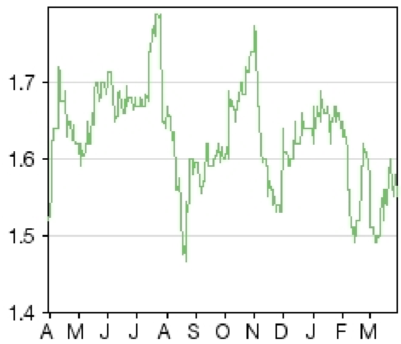
Valuation

We have rolled our peer group and DCF-based valuations forward a year and our fair value now stands at S$1.82 from S$1.88 previously. The decline reflects the forecast lower gross margin in the core oil trading and supply activity partly offset by increased returns from the associates, especially Shanghai Pudong International Airport Aviation Fuel Supply Company (SPIA). CAO is trading on 10.1x our FY19e EPS, at a modest discount to its closest peer World Fuel Services.

29 March 2018

Price	**S$1.57**
Market cap	**S$1,350m**
	S$1.312/US$
Net cash (US$m) at end December 2017	180
Shares in issue	860.2m
Free float	29%
Code	G92
Primary exchange	SGX
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(1.9)	(5.5)	2.0
Rel (local)	2.0	(5.0)	(4.8)
52-week high/low		S$1.8	S$1.5

Business description

China Aviation Oil (Singapore) Corporation (CAO) is the largest physical jet fuel supplier and trader in Asia. It holds the sole import licence for bonded jet fuel into China, and has nascent businesses in the US and Europe. Of its five associates, the most important is SPIA, which supplies all jet fuel to Shanghai Pudong Airport.

Next events

Q118 results	April 2018

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Edison profile page

China Aviation Oil (Singapore) is a research client of Edison Investment Research Limited

FY17 results summary

Exhibit 1: China Aviation Oil (Singapore) Q417 and FY17 results summary

	Q416	Q417	% change	FY16	FY17	% change
Revenues						
- Middle distillates	2,233.3	2,778.8	24%	7,754.1	233.2	32%
- Other oil products	1,042.4	1,282.0	23%	3,949.1	6,034.4	53%
Group revenue	**3,275.7**	**4,060.7**	**24%**	**11,703.2**	**16,267.6**	**39%**
Gross profit	**10.6**	**8.3**	**27%**	**44.1**	**38.7**	**-12%**
Gross margin	*0.32%*	*0.21%*	*-36%*	*0.38%*	*0.24%*	*-37%*
EBITDA				30.2	24.0	-20%
Associates (net income)	13.33	16.82	26%	60.5	63.6	5%
Profit before tax (reported)	18.3	17.4	-5%	91.9	92.2	0%
Profit before tax (adjusted)				**89.9**	**88.0**	**-2%**
Net income	17.9	14.0	-2%	88.9	85.3	-4%
EPS (c)	2.08	1.63	-22%	10.3	9.9	-4%
Net cash				187.3	180.0	-4%

Source: China Aviation Oil (Singapore) FY17 report

- Total **volumes** increased by 14.6% y-o-y to 37.3m tonnes. This included healthy growth in core jet fuel supply and the growing diversified customer base. Exhibit 2 gives more detail.
- Reported **revenues** were US$16,268m (FY16 US$11,703m) against our estimate of US$15,834m and up 39% y-o-y on higher trading volume and oil prices.
- Reported **gross profit** US$38.7m (FY16 US$44.1m) against our estimate of US$42.0m and down 12% y-o-y on backwardation effects plus supply disruptions (including weather and refineries outage). This affected gross profit margin, which declined 37%.
- Adjusted **pre-tax profit** US$88.0m (FY16 US$89.9m) against our estimate of US$89.1m.
- **Net income** US$85.3m (FY16 US$89.9m) with a rising tax expense, compared to our estimate of US$88.2m.
- Reported **EPS** of US9.92c (FY16 US10.34c) down 4.1% y-o-y, against our estimate of US$10.2c.
- Reported **DPS** maintained at S$0.045 (FY16 US$0.03).

Volume development remained strong in FY17, up 15% at 37.3m tonnes. However, there was sequential and y-o-y weakness visible in Q417. Supply volumes saw a greater annual uplift in other oil products, up 25% y-o-y to 17.51m tonnes, resulting in a more evenly split performance for the full year. This demonstrates the diversification strategy in action. However, even here the strong momentum demonstrated by the other oils segment in the first nine months (up 36%) was more subdued in Q417, falling back 8%.

Revenues benefited from rising oil product prices in 2017 which augmented the volume growth. Group revenues rose 39% to US$16.3bn, reflecting a 32% improvement in Middle Distillates and a very strong 53% expansion in Other Oil Products, However, the more difficult trading environment was reflected in much reduced year-on-year growth rates in H217 compared to H117. Group revenues grew by 29% in the second half compared to 56% in the first. Similar trends were seen in each division. Middle Distillates slowed to 20% in H217 from 32% in H1 17, while growth in Other Oil Products slowed to 42% from 79%.

The impact of the difficult trading environment was more apparent in gross margins. Gross margin for Middle Distillates fell to 0.35% in FY17 from 0.54%. Performance continued to benefit from the cost plus a fixed contribution per barrel for oil supplied into China, which acts as both an enhancement and a stabilising influence. The Other Oil Products area has been more variable historically. Since suspension of petrochemical operations in 2015 a move into profit has been sustained, helped by the increased scale of the activity and its product diversification. While narrower than the Middle Distillates, it produced a positive margin of 0.05% in FY17 (FY16 0.06%).

CAO now supplies 48 airports outside of China as well as being the monopoly supplier of jet fuel for international flights from all of China. International connectivity from China continues to expand and now extends to 176 airports in 65 countries as demand continues to increase rapidly and from record levels.

Exhibit 2: Volume of oil products traded

mt	Q416	Q417	% change	FY16	FY17	% change
- Jet fuel	*4.07*	*3.81*	*-6%*	*14.96*	*16.12*	*8%*
- Other middle distillates	*0.75*	*1.25*	*67%*	*3.6*	*3.68*	*2%*
Middle distillates	4.82	5.06	5%	18.56	19.80	7%
Other oil products	3.43	3.14	-8%	13.99	17.51	25%
Total	**8.25**	**8.20**	**-1%**	**32.55**	**37.31**	**15%**

Source: China Aviation Oil (Singapore) FY17 report

Net cash flow in 2017 was modestly negative but the year end working capital position had a negative effect, as did a US$4m increase in tax paid and an US$8m increase in the dividend payment. The nature of the trading and supply operation means that the period end trade debtors and trade receivables can vary significantly due to the timing of invoices and payments. As the position normally unwinds relatively quickly in the normal course of trade, the underlying position is more neutral. There was an increase in inventories held for trading which rose by US$39m. Net cash finished the year at US$180m compared to US$187m at the start of the year.

FY17 net income fell 4% to US$85.3m (FY26 US$88.9m), having risen 0.4% in the first nine months of the year.

Associates

Exhibit 3: Share of associates' contribution to profit before tax (US$m) – Q417 and FY17

Associate	Stake	Activity	Q416	Q417	*Change %*	FY16	FY17	*Change %*
SPIA	33%	Sole jet fuel supplier and all infrastructure at Shanghai Pudong International Airport in China	13.6	16.3	*20%*	60.64	64.17	*6%*
TSN-PEKCL	49%	Pipeline transportation of jet fuel to Beijing Capital and Tianjin Binhai international airports	-0.34	0.10	*-131%*	2.18	2.61	*20%*
Xinyuan	39%	Tank storage facilities in Guangdong province in China	0.06	0.25	*346%*	0.31	0.60	*94%*
OKYC	26%	Largest independent storage tank terminal in South Korea	0.23	0.41	*76%*	4.14	4.95	*20%*
CNAF HKR	39%	Plane refuelling at Hong Kong International Airport at Chek Lap Kok	-0.23	-0.23	*-1%*	-0.91	-0.80	*-13%*
Total			**13.33**	**16.82**	***26%***	**66.36**	**71.53**	***8%***

Source: Source: China Aviation Oil (Singapore) FY17 report

The share of profits from associates increased by 26% in Q417 over the prior year, more than reversing the 1% decline that was apparent at the half year stage. This resulted in FY17 growth of 8%. It is expected that following SPIA's lower payout ratio in FY16 (dividend received by CAO in FY17) to help fund investment at Shanghai Pudong airport, the payout for FY17 should revert to 80%.

SPIA remains the largest associate by a distance in terms of contribution to profits and dividend receipts. Its performance was constrained in 2017 as additional required capacity at the airport was under construction, but these are now starting to lift as the new fifth runway comes into operation this year. Not only should volumes start to grow more rapidly, but with lower capital investment requirements its dividend payout ratio is expected to return to 80% in FY18.

Outlook

The company believes that the oil trading market will continue to be affected by geopolitical uncertainties and re-balancing in global oil demand and supply. As such, CAO will continue to exercise stringent risk management to mitigate trading risks. However, core to the company strategy is globalisation, expanding the footprint into key aviation hubs. M&A is also a strong consideration as market opportunities arise to invest in synergetic businesses.

In terms of the core trading operation, the return to backwardation positions in oil product markets in H217 reduced the opportunity to optimise margins. Supply strategies became more limited with stocks being consumed more rapidly as future prices are less attractive than spot. The situation was exacerbated by some weather-related refinery outages in Asia that also increased costs of contract fulfilment. So, despite the favourable impact on revenues from rising oil prices and stronger fundamental demand, margins faced pressure. The situation in the early months of 2018 remains uncertain with a backwardation market in January in jet fuel returning to a contango position in February, which is currently maintained. We take encouragement from the partial gross margin recovery in Q4 that while the H118 gross margin performance is likely to be lower than in H117, the overall performance should remain respectably profitable.

We expect accelerating growth from the associates, especially in FY19. The fifth runway at Shanghai Pudong International Airport will be operational early this year, with the new terminal hub still expected later in the year. Thus, the capacity constraints that have limited growth in 2017 of SPIA, the monopoly fuel supplier to the airport in which CAO has a 33% stake, should resolve. SPIA is by far the largest of CAO's five associate and joint venture interests. While we still expect some drop in utilisation for the South Korean storage associate this year due to market conditions, we expect this to be less significant. While tax costs are increasing, we expect a return to an overall payout ratio of 80% from this year, boosting the cash dividend stream to CAO significantly.

CAO's commitment to a 30% payout ratio from 2015, as opposed to the fixed dividend previously, is improving shareholder returns. However, following a 50% dividend rise in FY16, the payment was held at S$0.045 in 2017, with a reduced level of cover which we see as a sign of confidence of an improvement in FY18 earnings. We expect dividend growth to resume as CAO secures resilient and progressive growth, in line with the Vision 2020 strategy.

Our revenue estimate for FY18 reflects the growth in trading volumes and the higher oil price. However, the decline in our profitability estimates are a factor of the still difficult trading environment for the core operations although an increased contribution from the associates, especially SPIA, is anticipated. The EPS is further impacted by a higher tax charge. We introduce FY19 forecasts, as per below.

Exhibit 4: Revisions table

Year end 31 December	FY17E	FY17A	%	FY18E (prior)	FY18E (new)	%	FY19 (new)
Revenue (US$m)	15,834	16,268	2.7%	17,792	18,406	3.5%	20,750
Profit before tax (US$m)(norm)	89.1	88.0	-1.2%	97.5	96.0	-1.5%	105.0
EPS (US cents)(norm)	10.2	9.9	-2.9%	11.2	10.8	-3.6%	11.8

Source: Company accounts, Edison Investment Research

Valuation

While CAO is quoted in Singapore, exposure to the Chinese air transport market presents both an opportunity and a risk for investors. The opportunity is the rapid growth of air travel, but the potential for disruption to performance due to policy changes in China must be considered. Today, the opportunity would appear to far outweigh the risk, despite the relatively restricted free float.

CAO has few direct peers as competition often comes from much larger international oil companies, banks and more general commodity traders. The closest comparison is with World Fuel Services, which currently trades at a modest discount to CAO. In our opinion, this is justified by CAO's unique exposure to the faster-growing Chinese aviation market.

The core CAO operations can be valued on a DCF basis given the relative stability provided by being a physical jet fuel supplier as well as a trader. The paper trading of oil contracts is limited to 10% of total trade volume, with 90% backed by physical contracts substantially de-risking the activity. In addition, the cost plus per barrel nature of the sole source import supply contract to China provides further stability as well as a gross margin premium return compared to normal trading activity. Using our calculated WACC of 8.9% implies a core CAO valuation (including US$180m FY17 year-end net cash) of US$0.58 (S$0.76) per share, to which must be added a value for the associates and joint ventures. The reduction since our initiation note last year reflects the reduced gross margin assumptions caused by the less favourable trading environment for margin optimisation.

In FY17 the five associate and joint venture entities generated 75% of net income and $45m of free cash flow, whereas the core operations consumed c $25m largely due to year end timing in trade working capital at the year end. Valuing the sustainable growth of the associates' cash stream appropriately is therefore important. Applying net income at the group FY18 P/E multiple of 11.0x is conservative in our view given peer multiples and growth rates. Thus, we consider three cash-based valuations of the dividend stream to provide a composite value, which currently stands at US$0.81 (S$1.07) per share. Our total DCF-based estimate of fair value for CAO overall is thus currently US$1.38 (S$1.82) per share, a modest premium to the current share price.

The average of our various peer and cash-based valuations methodologies is also S$1.82 per share, down 3% from S$1.88 previously, and still suggesting continued potential for the shares following the performance in 2017.

Exhibit 5: CAO average DCF value sensitivity to changes in WACC and terminal growth

WACC	8%	9%	10%	11%	12%	13%	14%	15%
Terminal growth rate								
0%	1.50	**1.38**	1.29	1.21	1.15	1.09	1.05	1.01
1%	1.55	1.42	1.32	1.23	1.16	1.11	1.06	1.02
2%	1.61	1.47	1.35	1.26	1.19	1.12	1.07	1.03
3%	1.70	1.53	1.39	1.29	1.21	1.14	1.09	1.04

Source: Edison Investment Research estimates: Note: Core DCF is calculated at a WACC of 8.9%.

Exhibit 6: Valuation methodology summary

Valuation basis (US$m)	EV	Cash	JVs	Market cap	Value per share US$	Value per share S$
Current valuation FY17 PER 12.1x	82	180	767	1,029	1.20	1.57
FY18 PER of World Fuel Service (10.6x)	70	180	733	984	1.14	1.50
FY18 PER of peer group 10% discount (15.1x)	177	180	1,045	1,402	1.63	2.14
DCF (A)	315	180	767	1,263	1.47	1.93
DCF (B)	315	180	684	1,179	1.37	1.80
DCF (C)	315	180	644	1,139	1.32	1.74
Average					1.39	1.82

Source: Bloomberg data, Edison Investment Research estimates. Note: Priced at 27 March 2017.

Exhibit 7: Financial summary

US$m	2015	2016	2017	2018e	2019e
Year end 31 December	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue	8,987	11,703	16,268	18,406	20,750
Cost of Sales	(8,952)	(11,659)	(16,229)	(18,365)	(20,703)
Gross Profit	35.4	44.0	38.7	40.5	47.0
EBITDA	25.9	30.2	24.1	26.8	31.2
Operating Profit (before amort. and except.)	25.2	29.6	23.4	26.1	30.5
Intangible Amortisation	(0.7)	(0.5)	(0.3)	(0.2)	(0.3)
Net income from associates	38.6	60.5	63.6	69.2	73.4
Exceptionals	(0.8)	(0.3)	(0.0)	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0
Operating Profit	62.3	89.2	86.7	95.1	103.6
Net Interest	(0.7)	0.3	1.2	0.9	1.4
Profit Before Tax (norm)	62.4	89.9	88.0	96.0	105.0
Profit Before Tax (FRS 3)	61.6	89.5	87.9	96.0	105.0
Tax	(0.4)	(0.6)	(2.6)	(2.9)	(3.2)
Profit After Tax (norm)	62.0	89.2	85.4	93.1	101.9
Profit After Tax (FRS 3)	61.3	88.9	85.3	93.1	101.9
Average Number of Shares Outstanding (m)	860.2	860.2	860.2	860.2	860.2
EPS - normalised (c)	7.2	10.4	9.9	10.8	11.8
EPS - normalised fully diluted (c)	7.2	10.4	9.9	10.8	11.8
EPS - (IFRS) (c)	7.1	10.3	9.9	10.8	11.8
Dividend per share (c)	2.1	3.40	3.40	3.7	4.0
Gross Margin (%)	0.4	0.4	0.2	0.2	0.2
EBITDA Margin (%)	0.3	0.3	0.1	0.2	0.2
Operating Margin (before GW and except.) (%)	0.3	0.3	0.1	0.1	0.1
BALANCE SHEET					
Fixed Assets	273.7	288.2	327.9	335.4	341.3
Intangible Assets	1.8	1.6	1.5	1.6	1.6
Tangible Assets	6.2	5.7	5.2	4.7	4.2
Investments	265.6	281.0	321.2	329.1	335.5
Current Assets	571.9	1,056.2	1,584.8	1,750.3	1,927.4
Stocks	56.8	170.7	209.6	230.0	251.6
Debtors	296.0	540.2	993.5	1,090.3	1,192.3
Cash	170.5	287.3	300.0	338.4	381.0
Other	48.5	57.9	81.6	91.6	102.5
Current Liabilities	(246.7)	(688.4)	(1,181.2)	(1,171.3)	(1,288.4)
Creditors	(246.7)	(588.4)	(1,061.2)	(1,171.3)	(1,288.4)
Short term borrowings	0.0	(100.0)	(120.0)	0.0	0.0
Long Term Liabilities	(6.2)	(6.3)	(7.9)	(129.4)	(128.0)
Long term borrowings	0.0	0.0	0.0	(121.5)	(120.1)
Other long term liabilities	(6.2)	(6.3)	(7.9)	(7.9)	(7.9)
Net Assets	592.6	649.7	723.6	785.0	852.3
CASH FLOW					
Operating Cash Flow	92.7	37.8	22.5	68.3	78.5
Net Interest	(2.8)	(0.7)	0.3	1.2	0.9
Tax	(0.5)	(0.4)	(2.6)	(2.9)	(3.2)
Capex	(0.4)	(0.4)	(0.4)	(0.5)	(0.6)
Acquisitions/disposals	0.0	0.0	0.0	0.0	0.0
Financing	0.0	0.0	0.0	0.0	0.0
Dividends	(12.8)	(19.3)	(27.7)	(29.3)	(31.7)
Other	(0.1)	(0.4)	0.6	0.0	0.0
Net Cash Flow	76.2	16.8	(7.2)	36.8	44.0
Opening net debt/(cash)	(94.3)	(170.5)	(187.3)	(180.0)	(216.9)
HP finance leases initiated	0.0	0.0	0.0	0.0	0.0
Other	(0.0)	0.0	(0.0)	(0.0)	0.0
Closing net debt/(cash)	(170.5)	(187.3)	(180.0)	(216.9)	(260.9)

Source: Company accounts, Edison Investment Research

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