Singapore Company Focus
China Aviation Oil

Bloomberg: CAO SP | Reuters: CNAO.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

7 Jul 2016

BUY

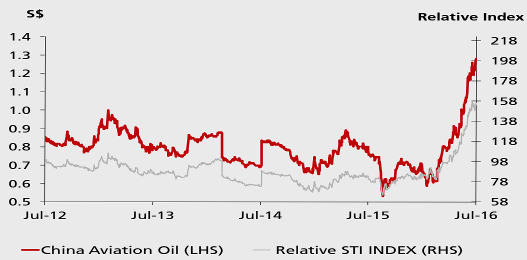
(Initiating Coverage)
Last Traded Price: S$1.30 (STI : 2,862.17)
Price Target : S$1.62 (25% upside)

Potential Catalyst: Earnings growth and delivery; value-accretive acquisitions

Analyst
Paul YONG CFA +65 6682 3712 paulyong@dbs.com

Singapore Research Team

Price Relative



Forecasts and Valuation

FY Dec (US$m)	2014A	2015A	2016F	2017F
Revenue	17,061	8,987	7,492	8,826
EBITDA	55.6	66.2	76.2	86.8
Pre-tax Profit	51.0	63.6	74.1	84.7
Net Profit	49.2	61.3	71.2	81.3
Net Pft (Pre Ex.)	49.2	61.3	71.2	81.3
EPS (S cts)	7.72	9.62	11.2	12.8
EPS Pre Ex. (S cts)	7.72	9.62	11.2	12.8
EPS Gth (%)	(30)	25	16	14
EPS Gth Pre Ex (%)	(30)	25	16	14
Diluted EPS (S cts)	7.72	9.62	11.2	12.8
Net DPS (S cts)	2.04	2.86	3.35	3.83
BV Per Share (S cts)	86.9	93.0	101	110
PE (X)	16.8	13.5	11.6	10.2
PE Pre Ex. (X)	16.8	13.5	11.6	10.2
P/Cash Flow (X)	17.5	15.9	19.2	29.6
EV/EBITDA (X)	13.2	9.9	7.8	6.3
Net Div Yield (%)	1.6	2.2	2.6	2.9
P/Book Value (X)	1.5	1.4	1.3	1.2
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	9.1	10.7	11.5	12.1
Consensus EPS (S cts):			11.7	12.8
Other Broker Recs:		B: 2	S: 0	H: 1

ICB Industry : Oil & Gas
ICB Sector: Oil & Gas Producers
Principal Business: CAO is the largest physical jet fuel trader in the Asia Pacific region and the key importer of jet fuel into the PRC.

Source of all data: Company, DBS Bank, Bloomberg Finance L.P

Propelling towards full potential

Initiate with BUY and TP of S$1.62, based on 12x FY17F PE; we like CAO as its two main sources of profit are derived from 1) a monopoly to supply imported jet fuel to the burgeoning Chinese civil aviation market, and 2) a 33% stake in the sole supplier of jet fuel at China's second largest airport – Shanghai Pudong International Airport, both of which are fairly low risk and have firm long-term growth prospects. Following our Equity Explorer in April, we initiate coverage on the stock.

Sole supplier of imported jet fuel in China with growing international presence. With a monopoly on the supply of bonded jet fuel to the civil aviation industry in China, CAO should benefit from the long-term growth of China's international air travel market. Furthermore, with the backing of SOE parent China National Aviation Fuel Group (CNAF), CAO has expanded its business to the marketing and supply of jet fuel at 41 international airports outside China, and further growing its reach, volumes, and ultimately greater economies of scale.

Firm outlook for prized asset 33%-owned associate, SPIA. Shanghai Pudong International Airport Aviation Fuel Supply Company (SPIA) has and should continue to benefit from rising air traffic at Pudong International Airport, which is driven by the continued development of Shanghai as China's key financial centre. Contribution from SPIA amounted to 64%, 85% and 63% of CAO's total profit in FY13, FY14 and FY15, respectively.

Net cash and strong balance sheet could fund acquisition-driven growth. With net cash of c.US$230m at the end of 1Q16, and strong support from its parent CNAF, we are of the belief that CAO could be on the lookout for acquisitions to further grow the scale and reach of its business and profits.

Valuation:

Our 12-month TP of S$1.62 is based on 12x FY17F PE. We think that 12x earnings against the projected 15% EPS CAGR over FY15-FY17F is reasonable, and believe that the group is poised to see a structural re-rating of its valuation multiple on sustained earnings growth, especially if CAO can utilise its strong cash balance to further accelerate growth through M&A.

Key Risks to Our View:

Weaker demand for air travel and execution risk. A sustained slowdown in demand for air travel could impact jet fuel demand and volumes. Further, the group could also face execution risk in its trading business and prospective M&A activities.

At A Glance

Issued Capital (m shrs)	865
Mkt. Cap (Sm/USm)	1,124 / 833
Major Shareholders (%)	
China National Aviation Fuel	51.0
BP Plc	20.1
Free Float (%)	28.9
3m Avg. Daily Val (US$m)	1.6

INVESTMENT THESIS

Profile	Rationale
China Aviation Oil (Singapore) Corporation Ltd (CAO SP) is principally engaged in the supply and trading of bonded jet fuel, with monopoly in China and a growing international presence. Apart from jet fuel, the Group also trades and/or supplies other transportation fuel (such as fuel oil, gas oil and aviation gas) and has varying equity stakes in oil-related assets. These assets include airport refuelling facilities (SPIA and CNAF HKR), pipelines (TSN-PEKCL) and storage facilities (Xinyuan and OKYC).	**Continued growth of civil aviation in China.** CAO's monopoly to supply imported jet fuel to the Chinese civil aviation market is fairly low risk as the group typically operates this segment on a cost-plus model. With the ongoing expansion of Chinese carriers and greater demand for outbound leisure travel, we think that CAO should benefit from the long-term growth of China's international air travel market. **Unique exposure to Shanghai Pudong International Airport's long -term growth.** CAO also has a 33% stake in the sole supplier of jet fuel at China's second largest airport – Shanghai Pudong International Airport, which is expected to see better traffic ahead with the recent opening of Disneyland in Shanghai and the expected launch of the satellite terminal in 2019.
Valuation	**Risks**
Our TP of S$1.62 is based on 12x FY17F PE. We think that 12x earnings against the projected 15% EPS CAGR over FY15-FY17F is reasonable, and believe that the group is poised to see a structural re-rating of its valuation multiple on sustained earnings growth, especially if CAO can utilise its strong cash balance to further accelerate growth through M&A.	**Weaker demand for air travel.** Given the group's exposure to the air passenger market, events that could significantly dampen traveller sentiment, such as the outbreak of diseases and acts of terror, pose direct threats to the tourism and air travel industry which in turn, could weigh on global demand for jet fuel. **Trading and execution risks.** CAO is exposed to a myriad of risks that are inherent in the lifecycle of trades, which include market risk, credit risk, and operational risk. Further, despite its good track record, the future success of and returns on the group's prospective M&A activities are not guaranteed.

Source: DBS Bank

SWOT Analysis

Strengths	Weakness
• Largest purchaser and trader of physical jet fuel in Asia Pacific • Monopoly in supply of bonded jet fuel to airports in China Leveraging on the strengths of its parent, CNAF, CAO has monopoly in the supply of bonded jet fuel in China, which are mainly used by outbound flights across airports in the PRC, as well as flights (all flights, including those making domestic and regional routes) departing from any of the country's international airports. • Strong management team and robust risk management framework	• Heavily dependent on jet fuel business The bulk of CAO's revenue is derived from its jet fuel supply business. While management has implemented product diversification strategies through exposures to other transportation fuels such as fuel oil and avgas, it will likely take some time before structural efficiencies in these products can be established so that these strategies can help generate profitable diversification opportunities from CAO's mainstay jet fuel supply business.
Opportunities	**Threats**
• Well positioned to ride robust growth in the Chinese aviation market Given its monopoly in the supply of bonded jet fuel to the Chinese aviation market, CAO is well positioned to capture the industry's growth. • M&A opportunities Management hopes to achieve vertical integration through investments in oil-related assets, which will likely be financed in-house given CAO's ample net cash position of US$228m. With further integration, we will likely see improved cost and operating synergies for the group.	• Outbreak of diseases and/or security threats Health and safety concerns could dampen traveller sentiment significantly and weigh on demand for jet fuel. • Competition from oil majors Competition from oil majors that have integrated infrastructure and economies of scale could impede CAO's ability to expand its international networks or renew existing international contracts. • Impact of macro-uncertainty on oil prices Uncertainty in the macro economy could weigh on oil prices (which will affect contributions from certain associates as the inventories of SPIA and CNAF HKR are marked to market) and trading prospects.

Source: DBS Bank

The Business

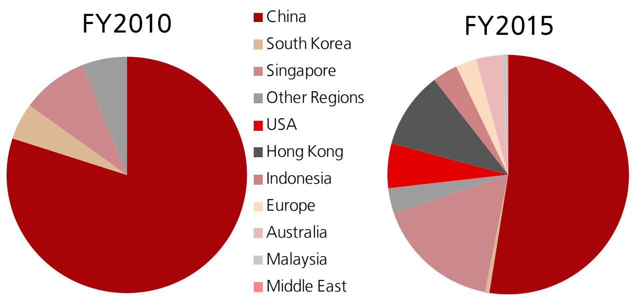
Sole importer of jet fuel into the PRC with growing international presence. China Aviation Oil (Singapore) Corporation Ltd (CAO) was incorporated in Singapore in 1993 and is the largest physical jet fuel trader in Asia Pacific. Leveraging on the network of its parent, China National Aviation Fuel Group Corporation (CNAF) – a state-owned enterprise and the largest aviation transportation logistics services provider in the PRC – CAO has monopoly in the supply of imported jet fuel (or bonded jet fuel) to airports in China.

CAO currently supplies jet fuel at 17 international airports across China, including the three largest airports – Beijing Capital, Shanghai Pudong and Guangzhou Baiyun, and currently provides c.40% of China's total jet fuel demand. Over the years, to capitalise on opportunities in the growing international air transportation market, the group has also been steadily growing its international exposure and now supplies jet fuel to airline companies at 41 international airports outside of the PRC, spanning Asia Pacific, North America, Europe and the Middle East.

As a result of its internationalisation strategy, CAO has achieved significant diversification over the years. In FY15, the group's China portfolio contributed 52.5% of overall revenue, down from 80% in FY10.

Apart from its strengths in jet fuel, CAO also engages in trading of other transportation fuels... With structural advantages in jet fuel already in place, CAO hopes to diversify its revenue stream and achieve similar scale and advantages in fuel oil, gas oil and aviation gas products, by also building up supply and trading businesses in these oil products.

Geographical Diversification (FY10-FY15)



Source: Company, DBS Bank

...and has been growing investments in oil-related assets. To gain access to assets, CAO has been growing via associates as it prefers to have management on the ground, and currently holds varying equity stakes in the following oil-related assets, from which it derives significant income and value:

Company	Equity Stake
Shanghai Pudong International Airport Aviation Fuel Supply Company Ltd **("SPIA")**	33%
China Aviation Fuel TSN-PEK Pipeline Transportation Corporation Ltd **("TSN PEKCL")**	49%
China Aviation Oil Xinyuan Petrochemicals Co., Ltd **("Xinyuan")**	39%
Oilhub Korea Yeosu Co., Ltd **("OKYC")**	26%
CNAF Hong Kong Refuelling Limited **("CNAF HKR")**	39%

Source: Company, DBS Bank

China Aviation Oil's Three Pillars of Growth

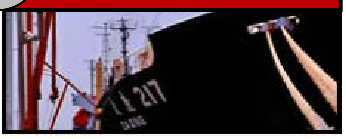
China Aviation Oil (Singapore) Corporation Ltd
中国航油（新加坡）股份有限公司

1 Jet Fuel Supply & Trading

Domestic: 17 international airports in the PRC

International: 41 international airports outside the PRC (covering Asia Pacific, North America, Europe and the Middle East)

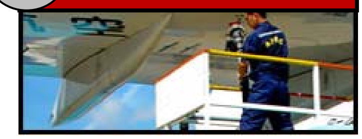
2 Trading of Other Oil Products



Expand scale in other oil products by building up supply and trading businesses in:

- Fuel oil
- Gas oil
- Aviation gas ("Avgas")

3 Investments in Oil-related Assets



Oil-related assets that are synergistic to CAO's core businesses include:

- Storage tanks & jetties
- Pipelines
- Airport refuelling facilities

Source: Company, DBS Bank

Pillar 1: Jet Fuel Supply and Trading

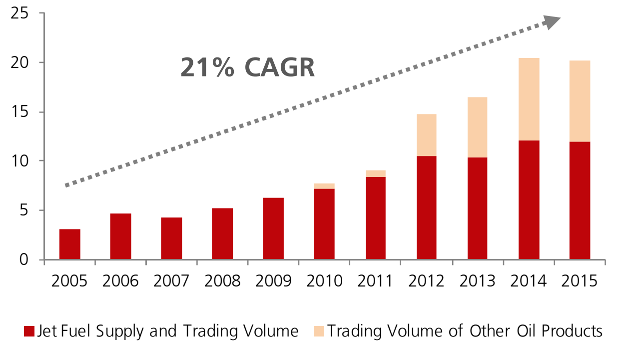
Focus on volume growth as core jet fuel supply business is not oil price dependent. To better reflect CAO's core business growth, given the group's cost-plus model in China, we believe that jet supply volume, rather than revenue, will be a more relevant driver. While margins for the core business can be pretty thin (which we estimate to be c.0.4%, or gross profit of US$3.02/ tonne), we think the jet fuel supply business is a good, stable source of revenue for the group, which is secured by the perpetual licence awarded by CNAF.

Outside of China, given the competition from oil majors and the practice of open bidding, we believe that margins from CAO's international jet fuel supply business (which the group categorises as "aviation marketing") will likely be lower.

However, to further optimise margins of its overall jet fuel supply business, CAO also trades in jet fuel when the trading environment presents viable opportunities, i.e. in contango markets.

Over the last decade, helped by its international expansion and growth in China's outbound passenger traffic (which has almost quadrupled), CAO was able to grow its jet fuel supply and trading volumes at 14.8% CAGR, from 3m tonnes in 2005 to c.12m tonnes in 2015. At the same time, gross profit has tracked volume growth relatively closely, growing at 13.2% CAGR from US$10.3m in 2005 to US$35.4m in 2015.

Total Supply and Trading Volume (m tonnes)



Source: Company, DBS Bank

Contrary to public perception, CAO's trading activities are guided by overarching risk management policies, which appear conservative. Orders for jet fuel are typically placed three months ahead, and priced on an M-1 basis (one month prior to delivery) which provides CAO with colour on prospective demand.

With near-term order visibility, the group first hedges downside risk before undertaking trades to further optimise margins. As guided by the group's risk management framework, 90% of its trading activities are effectively backed by physical demand (as opposed to more risky paper trades).

Leveraging on parent's competitive strengths in China to expand into international markets. Major airlines often prefer to procure jet fuel from established suppliers with integrated facilities, which tend to be better equipped in supporting their cross-geographical needs.

In late 2011, leveraging on CNAF's competitive strengths in China and helped by the group's strong domestic market position (given the sheer volume of jet fuel supplied), CAO made its first foray outside of the PRC after successfully securing contracts to supply and market jet fuel to major airlines – Hainan Co. Ltd and Turkish Airlines, at specified international airports.

Less than five years on, the group's internationalisation efforts have yielded commendable results, helped by the:

(i) Formation of strategic alliances with major Chinese airlines such as Air China, and
(ii) Participation in (i.e. LAXFUEL) or collaboration with (i.e. CAFHI) various jet fuel consortia

Pillar 2: Trading of Other Oil Products

Diversifying revenue streams to reduce reliance on jet fuel. From 2010, to reduce reliance on a single product (jet fuel), CAO began to diversify its revenue streams by growing its portfolio of oil products:

Product	Desc.
Fuel Oil	• Established in 2010 • Reliable supplier of bunker fuel • Built effective relationships with oil majors, large trading houses and reliable end users worldwide
Gas Oil	• Established in 2012 • Successfully supplied gasoil to Indonesia • To expand presence in South East Asia region by securing more supply contracts
Aviation Gas (Avgas)	• Established in 2014 • Sole licensed importer of Avgas into China; sourced from and sold to Asia Pacific, Middle East and USA • Secured European refinery's exclusive distribution rights in 14 Asia Pacific countries

Source: Company, DBS Bank

Fuel oil market was weak for most of 2015 but is turning around. The fuel oil market was plagued by weakness in 2015 as the overall supply of fuel oil surpassed demand for most of the year. However trends appear to have reversed from 4Q15 onwards. In 4Q15, the group achieved record volumes and profits in fuel oil trading (primarily for physical cargo and bunker ex-wharf trading), as low oil prices lifted Singapore bunker sales volumes.

Avgas predominantly used by private propeller jets. Similar to its competitive advantage in jet fuel, CAO is also the sole licensed importer of avgas in China. Mostly used in light aircraft such as private jets, we believe the company has yet to benefit from its privileged position in the Chinese avgas market as the lack of infrastructural support, implementation of austerity measures and stringent controls on air space have weighed on domestic demand for private jets.

Mainly supplying avgas for use in propeller jets at Chinese aviation schools currently, we think the shortage of pilots in China should continue to lift demand for flight schools and consequently, demand for avgas moving ahead.

We also note that despite its fairly recent entry into the avgas business, CAO has seen good progress outside of China as the group has expanded its supply locations to include India, Indonesia and Saudi Arabia.

Pillar 3: Investments in Oil-related Assets

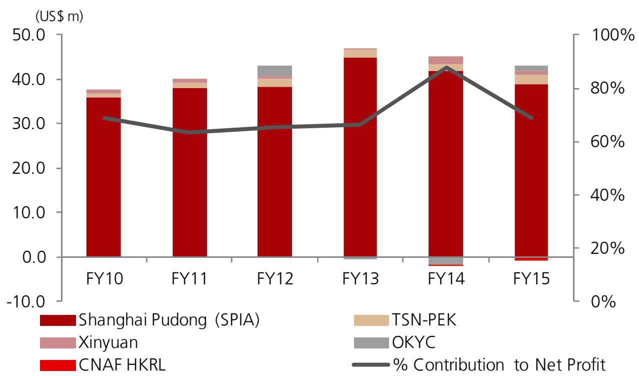
Building structural advantages in core businesses through investments in oil-related assets. To achieve vertical integration of its value chain, CAO has also been growing steadily on investments and acquisitions in oil-related assets that are synergistic to its core businesses.

Inventories of SPIA and CNAF HKR are marked to market. While CAO does not have direct inventory exposures, its associates – SPIA and CNAF HKR – are required to mark their inventories to market, in accordance to regulatory requirements. SPIA typically takes about fifteen days of inventory, while CNAF HKR usually holds inventory for eight days.

Well-run assets have been contributing significantly to the group's profitability… The group's associated companies have been a sustainable source of income – contributing north of US$35m p.a. (or representing more than 60% of CAO's annual net profit) over the last five years.

More recently, contributions from these associated businesses represented 66.5% of FY15 net profit, or US$42.3m, even though its investment in CNAF Hong Kong, which only commenced operations in Aug 2015, has yet to bear fruit.

Contribution from Associated Companies (FY10-FY15)

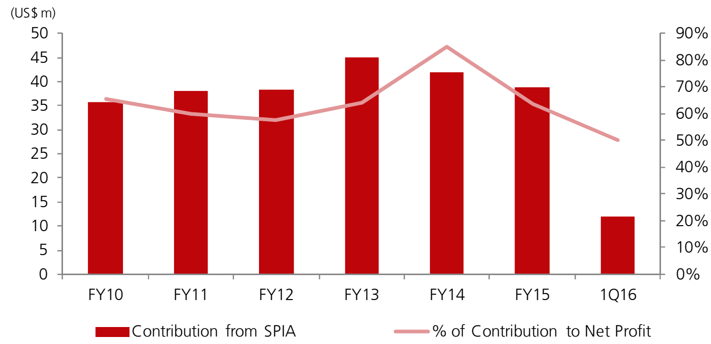


Source: Company, DBS Bank

The return on equity (ROE) of c.15.9% on these investments in 2015 is also impressive. A salient and stable part of the group's profits, we expect contributions from these investments to grow steadily ahead.

…primarily as prized asset, SPIA, has performed remarkably. Arguably CAO's best performing asset, SPIA has never had a cash call since the group first invested in Shanghai Pudong International Airport's exclusive supplier of jet fuel in 2002, and has historically had close to 90% share in the annual income contributions from CAO's associated companies. In FY15, SPIA alone contributed c.61.3% of the group's total profit.

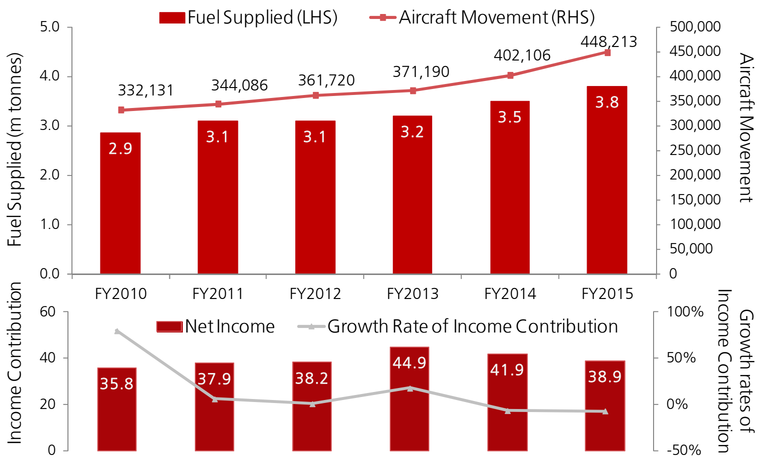
SPIA Contributes > 61% of Total Profit in FY15



Source: Company, DBS Bank

SPIA's ability to consistently generate profits (it has been profitable every year since CAO's investment in 2002) is proof of its superior profit-generation capabilities. The associate has a 100% dividend payout policy and its dividends are distributed net of 5% withholding tax.

Refuelling Volumes at Pudong Airport Climbing Steadily



Source: Company, CAPA, DBS Bank

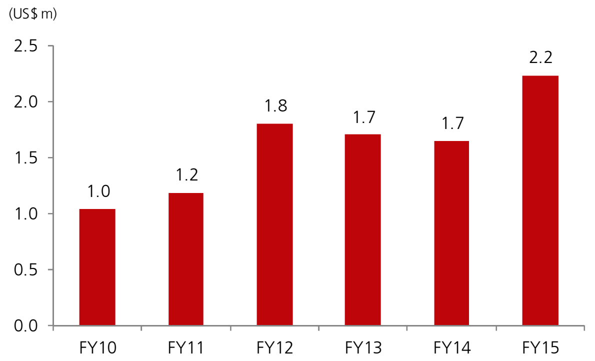
We also observe that refuelling volumes at Pudong Airport has grown at a CAGR of 5.8% over the last five years, which was slightly behind the 6.2% growth in total aircraft movements at the airport – mainly as the growth in short-haul domestic routes have outpaced that of the long-haul international flights.

However, despite the higher refuelling volumes, net contributions from SPIA were slightly lower y-o-y in 2014 and 2015, partly due to the lower refuelling sales price.

Income stream from TSN-PEKCL are small, but steady. Principally engaged in the transportation of jet fuel to Beijing Capital International Airport and Tianjin Binhai International

Airport, CAO's TSN-PEKCL associate has also demonstrated consistency in its profitability. However, even as contributions from TSN-PEK had more than doubled from US$1.0m in FY10 to US$2.2m in FY15, income on an absolute basis remains small, as it only represents about 3.7% of the group's net profit in FY15.

Steady Income Stream from TSN-PEKCL (FY10-FY15)



Source: Company, DBS Bank

CNAF-HKR poised to break even by Aug 2018. Owing to its relatively late entry as the third licensed refueller at the Hong Kong International Airport (HKIA), CNAF-HKR has yet to be profitable. Furthermore, as HKIA's airline customers typically have 3-5 year contracts with the existing refuellers, the group only expects to break even around Aug 2018 (or three years from the start of its operations).

Contributions from remaining associates fairly immaterial. While contributions from remaining associates – Xinyuan and OKYC – are expected to remain fairly material, we note that the group's investment in OKYC is largely strategic in nature.

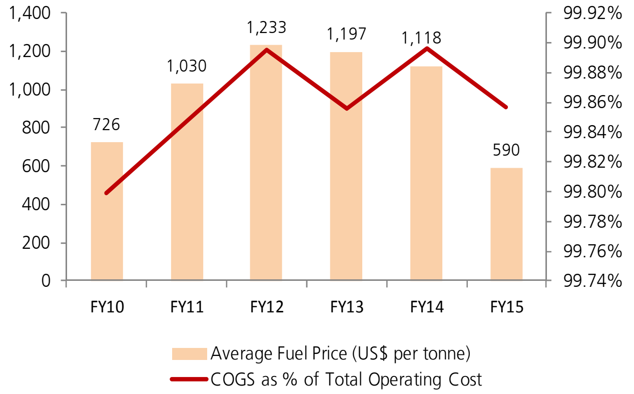
Strategically located in Korea, CAO's OKYC assets provide group-wide synergistic value as it enhances the group's ability to supply jet fuel into the Northern Hemisphere in a cost-effective manner, and is thus invaluable to the group's ongoing efforts to boost its international presence.

Meanwhile, contributions from Xinyuan will likely weaken in 2016 (on a y-o-y basis), mainly as we believe that competition in the region should continue to pose direct challenge to the associate's ability to ramp up its utilisation.

Cost Structure

Fuel prices form bulk of CAO's operating costs. The group has been able to maintain a fairly stable cost structure (which is largely variable in nature) despite the volatility in fuel prices (represented by cost of goods sold (COGS)), mainly as CAO earns a dollar spread on top of the prevailing oil price for its Chinese operations. Over the last 10 years, COGS has typically made up >99% of the group's total operating costs.

Variable Cost Structure



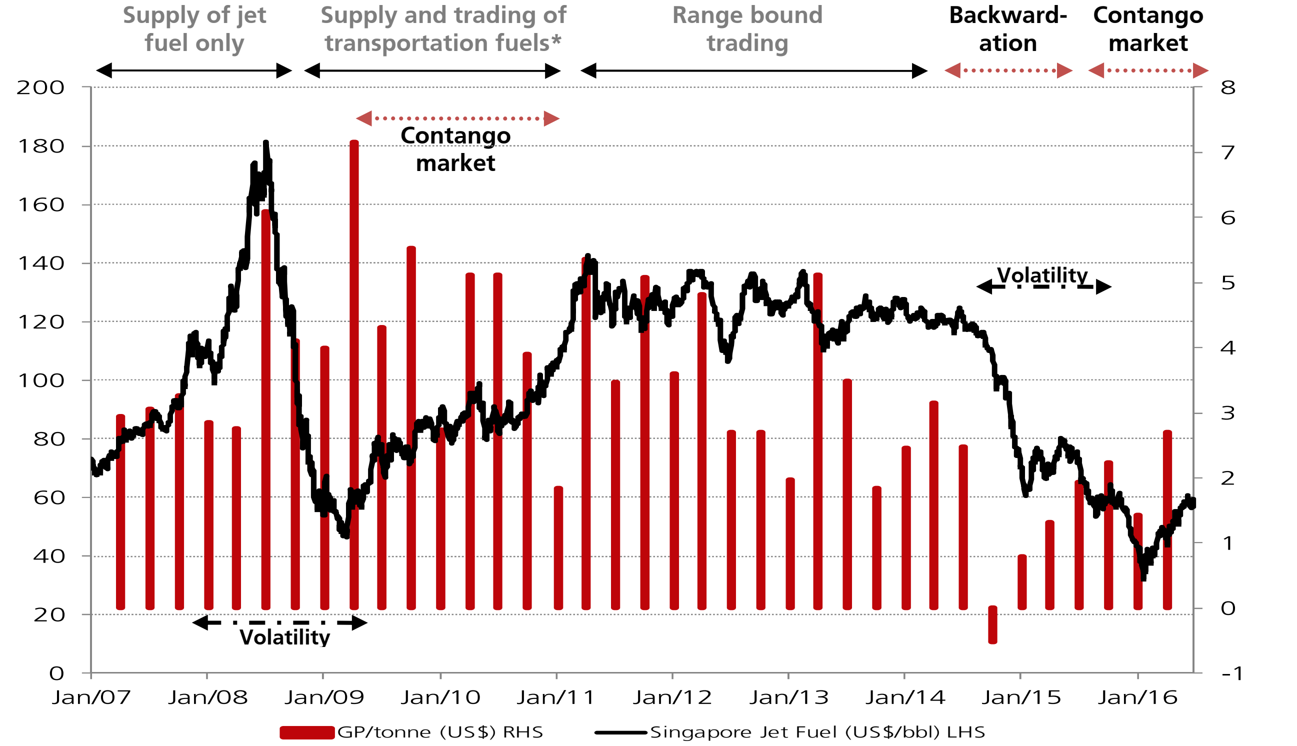
Source: Company, DBS Bank

Opportunities for further cost optimisation on larger scale and integration. As CAO continues to grow its scale, we see opportunities (both direct and indirect) for improved cost optimisation. First, we believe that as CAO grows it volumes, it should naturally benefit from higher operating cost efficiencies. For instance, following its successful penetration into the West Coast, CAO is now able to command a full VLCC when transporting fuel, as compared to only 1/3 previously.

Indirectly, as 90% of the group's trading activities are backed by physical demand, the growth in actual volumes supplied will provide traders with more room to undertake trades to further optimise CAO's gross margins.

Opportunities for Margin Optimisation across Market Conditions

CAO's Blended Gross Profit/Tonne vs Singapore Jet Fuel Prices



*includes trading of jet fuel, petrochemicals (bench started in 4Q 2008) and other oil products (such as fuel oil and gas oil – benches started in 2010)

Source: Company, ThomsonReuters, DBS Bank

Jet fuel in contango. Underpinned by a consistent and growing demand for jet fuel from the booming aviation market and persistently low crude prices, jet fuel is presently in a contango market.

However, the duration of each individual contango spread can vary widely – stretching between weeks to months, depending on the underlying demand situation.

Volatility is also generally desirable, as it often presents windows of opportunity for margin optimisation, but are not without risk as they could result in the erosion of profits.

Opportunities to improve margins are available in both backwardation and contango markets. As transportation fuels are typically sold on an M-1 basis, CAO's fuel supply business benefits in periods of backwardation. Meanwhile, the trading business has more opportunities for margin optimisation in periods of contango.

Overall, CAO generally prefers contango markets as it allows for superior opportunities for margin optimisation from the storing and trading of fuels. Judging from the group's historical performance (measured in gross profit/tonne), we observe that CAO's margins and profits are generally more optimised in contango markets, such as in the period between Jan 2009 and late 2010.

…but backwardation limits trading opportunities for the Group. While CAO typically seeks to optimise its trading margins on an ongoing basis, we note that backwardation does not necessarily present viable margin optimisation opportunities for the Group. For instance, when the contango spread is too narrow, or when the underlying market is weak, there is little incentive for the trading benches to take on trades. In other words, traders make do with its cost-plus model for jet fuel supply into China.

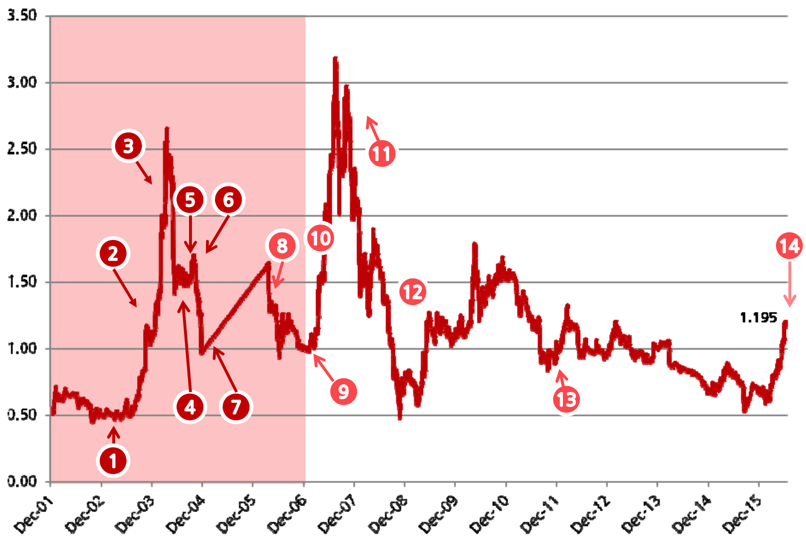
Gross profit per tonne is also affected by trading of other fuels. While the group is principally involved in the supply and trading of jet fuel, we note that all else constant, GP/tonne should be on a downtrend to reflect the group's growing diversification into the trading of other fuels, as gross profit is presented on a blended basis.

To illustrate, the historically high GP/tonne of c.US$7 observed in early 2009 was partly due to CAO's diversification strategy into other oil products such as petrochemicals (which benefited from the upswing in prices), as well as backwardation for the supply business, which made up the bulk of volumes then. However, due to weak underlying demand, CAO has subsequently exited from the petrochemicals business.

Meanwhile, the dip in GP/tonne observed in 3Q14 was largely attributed to other oil products - on a combination of the weak petrochemicals market and provision for losses incurred by the group pertaining to counterparty, OW bunker.

Moving Past the 2004 Scandal

CAO's Share Price Through the Years



Source: Company, DBS Bank

No.	Events
1	**Late March 2003:** CAO commenced speculative trading on oil options on its proprietary account
2	**End of 4Q 2003:** The company took a bearish view on oil prices and entered into short option contracts
3	**29th August 2003:** CAO announced a net profit of $54.3m, representing a 60% growth in normalised profits, which led to a spike in stock prices.
4	**16th Nov 2004:** CAO posted an operating loss as a result of unspecified losses from trading operations
5	**30th Nov 2004:** CAO announced that was unable to meet some of the margin calls arising from its derivatives trades, with losses amounting to US$550m. Chen Jiulin (then CEO) was suspended immediately
6	**8th Dec 2004:** Chen Jiulin was under arrest
7	**25th Jan 2005:** CAO filled a debt restructuring plan by way of a Scheme of Arrangement with CAO's creditors who had to take a haircut on amounts owed

No.	Events
8	**29th Mar 2006:** CAO shares resumed trading on the SGX under a new leadership and management team
9	**January 2007:** Divested 5% stake in CLH, repaid outstanding debts owed to creditors 4 years ahead of schedule, and also reduced shareholdings in Xinyuan
10	**17th May 2007:** Completion and termination of Scheme of Arrangement
11	**August 2007:** Attained record profit of US$140.2m in 2Q2007
12	**November 2008:** Profits slide to US$15.3m post GFC market turmoil
13	**January 2012:** Proposed acquisition of 100% equity interest in (1) China Aviation Oil (Hong Kong) and (2) North American Fuel Corporation
14	**21st April 2016:** CAO's net profit surged 68.2% y-o-y to US $24.2m

Source: Company, DBS Bank

What went wrong?

Nearly brought down by speculative trading in 2004... CAO first engaged into back-to-back options trading on behalf of its airline customers in early-2002 as a means of hedging against its core jet fuel supply and trading business, but subsequently went into speculative options trading after the group saw a window of opportunity when the fuel market moved into contango in Mar 2003. CAO purchased call options financed by short puts, which led to substantial profits for the company.

In 4Q03, when oil prices were trading near historic highs, the group began to take a bearish view on oil prices. Encouraged by the profits generated on their earlier option trades, then-CEO Chen Jiulin took to the options market once again and entered into short option contracts with the assumption that oil prices would not go beyond US$38/bbl.

Contrary to their expectations, however, oil prices broke the US$38/bbl mark in Jul 2004 before reaching US$50/bbl levels in Oct 2004.

…as a wrong bet on oil prices resulted in hefty losses amounting to US$550m... Shortly after, CAO announced in Nov 2004 that it was unable to meet some of its margin calls. The group was then forced to close the positions and had to recognise losses of close to US$390m, while unrealised losses on its remaining open positions totalled US$160m.

…but parent, CAOHC, and new investors (BP and Aranda) came to CAO's aid in the nick of time. Post scandal, the group ceased all oil derivative trading activities and a special task force was appointed (in Nov 2004) to take over the management of the company and lead CAO's rehabilitation process.

The group underwent debt restructuring (by way of Scheme of Arrangement with its creditors who were owed a combined total of US$482m), which was approved on 8 June 2005:

Debt Restructuring – Scheme of Arrangement	
Amounts owed to creditors:	US$482m
Haircut to amounts owed (borne by creditors):	US$207m
Repayment by CAO:	US$275m
Upfront cash payment	US$130m
Deferred debt repayment (over a period of 5 years)	US145m

Source: SIAS Informational Dialogue on China Aviation Oil Restructuring, DBS Bank

Under the scheme, creditors would recover c.57%, or US$275m, of the amounts owed to them. The upfront cash payment of US$130m would be raised via equity restructuring, as new investments were made in the CAO:

Equity Restructuring – Secured New Investments	
CAOHC (parent, later renamed CNAF)	US$75.77m (total stake: 50.88%)
BP Investment Asia Ltd	US$44m (total stake: 20%)
Aranda Investments Pte Ltd (indirect subsidiary of Temasek Holdings)	US$10.23m (total stake: 14.47%)
Sum of new investments:	US$130m

Source: SIAS Informational Dialogue on China Aviation Oil Restructuring, DBS Bank

Thereafter, under a new management and leadership team, CAO's shares resumed trading on the SGX on 29 May 2006. A little over a year later, the group also successfully completed and terminated its debt repayment scheme.

Rising from the ashes – what has changed?

Replaced with a new board and complete overhaul of management team. Following the scandal, there was a complete overhaul of the management team, which included members of the Special Task Force as well as individuals who were seconded from BP. Immediately after the EGM (Extraordinary General Meeting) of 3 Mar 2006, eight new directors were also elected to replace the previous board.

Today, there is a clear division of responsibilities between the leadership of the Board and the executives responsible for the management of the business. Separately, Independent Directors currently constitute one-third of the Board, while BP is represented by two out of nine seats.

Realignment of interest through revised management compensation structure. Prior to 2006, CAO practised profit-sharing, which incentivised rogue executives to speculate on options. The breakdown of the profit-sharing scheme (as detailed in the prospectus) is as follows:

Service Agreement with Chen Jiulin (9 Nov 2001)	
CAO's Profits before Tax	% of Profits (per year)
First S$12m (Up to S$12m)	0%
Next S$8m	7%
Next S$15m	9%
Thereafter (More than S$35m)	10%

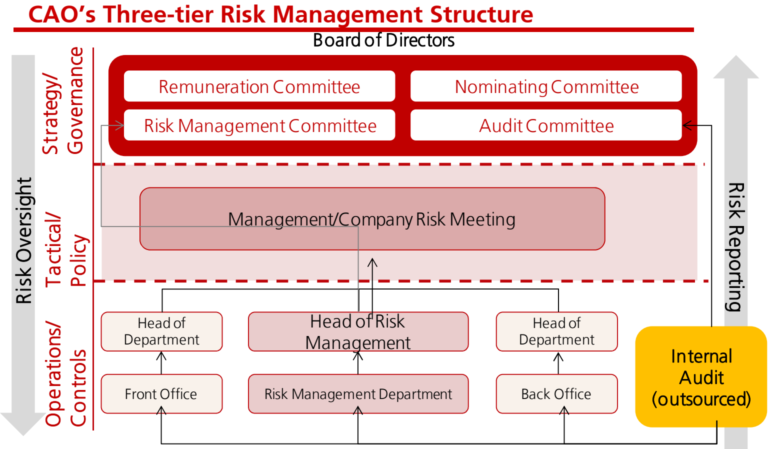
Source: Company, DBS Bank

Post-restructuring, we believe that management's interest is now aligned with that of shareholders, as the remuneration of key executives no longer comprises variable elements.

Reconstitution of the company's policies and risk management system. After coming on board in end-2005, strategic partner, BP, provided both training and risk management services to CAO. The company subsequently revamped its risk management process and benchmarked it against BP's - which is ranked among the best practices adopted by top-tier international energy trading firms globally.

CAO currently adopts a three-tier management control infrastructure, with the Risk Management Committee at the Board level, the Company Risk Meeting at the management level, and the Risk Management Department at the operational level.

CAO's Three-tier Risk Management Structure



Source: Company, DBS Bank

We believe that this robust risk framework allows the group to strike a balance between maintaining effective controls over key risk indicators and retaining flexibility in providing timely support to trading counterparties to drive prudent growth.

Management and Strategy

Led by experienced management team. Mr Meng Fanqiu previously served as the Division Director of CNAF, where he led the steering committee for the restructuring of CAO in 2005, and was subsequently appointed as CEO of the group in 2008. Following his appointment, Mr Meng played an instrumental role in the transformation of CAO's jet fuel supply model in 2008. Members of the core management team, such as Mr Wang Chunyan and Ms Jean Teo, who joined CAO in 2006 and 2008, respectively, are also highly experienced and individually boast more than a decade of experience in their respective functions within the oil and gas industry.

Under their leadership, the firm has come a long way, and has received recognition via various accolades such as:

- Ranked 34th in the 100 Asian Corporate Governance Excellence Award in 2015
- SIAS Most Transparent Company Award for sixth consecutive year in 2015
- Ranked among more valuable companies in Forbes Global 2000 for the third consecutive year in 2015

Adoption of dividend policy in 2015. In Nov 2015, the Board approved the adoption of a dividend policy, with a minimum payout of 30% of CAO's annual consolidated net profit. Based on our estimates, this represents a prospective 3.3-Sct dividend per share in FY16F, or a >50% increase from the historical fixed dividend of 2 Scts p.a.

Strategy 2020. In 2013, CAO unveiled its 2020 corporate strategy, where it envisions to becoming a top-tier integrated transportation fuels provider, by focusing on building a global platform for jet fuel supply, while broadening its trading portfolio, and expanding into more regions outside of the PRC.

Key Management Team

Member	Designation	Role and Responsibilities
Meng Fanqiu	CEO, Executive Director	• Prior to his appointment as CEO in 2008, Mr Meng was the Division Director of the Planning and Development Division of CNAF. He also led the steering committee for the restructuring of China Aviation Oil Supply Corporation, which resulted in the formation of China National Aviation Fuel Corporation Ltd • Previously, from 1991 to 2003, Mr Meng also served as an official at the Civil Aviation Administration of China, where he had an extensive experience in law and enterprise reforms • Holds an APAC Executive MBA from the National University of Singapore, Masters of Business Law from Renmin University of China (Beijing), and Bachelor of Law (International Economics Law) from China University of Political Science and Law in Beijing
Wang Chuyan	Chief Financial Officer	• Over 14 years of experience in China's petroleum industry • Prior to joining CAO, Mr Wang was the Deputy Head of Financial Assets Division at Shengli Petroleum Administrative Bureau, a subsidiary of SINOPEC, where he also held several senior positions during his tenure • Holds a Bachelor's Degree in Economics, majoring in Accountancy from Changchun Taxation College, China • Qualified Senior International Finance Manager and Senior Accountant
Jean Teo	Chief Operations Officer	• Over 10 years of experience in the oil trading industry, mainly with BP Singapore Pte Ltd • Past experiences include various roles in BP such as the lead trader of light distillates, and was subsequently seconded by BP to undertake the position of Head of Trading at CAO from Jan 2008 to Aug 2010 • Ms Teo also previously served as the senior trader of distillates products at Cargill International Pte Ltd • Holds a Master's Degree in Business Administration (Finance) from Manchester Business School and a Bachelor of Engineering, Chemical (Honours) from the National University of Singapore

Source: Company, DBS Bank

Industry Prospects

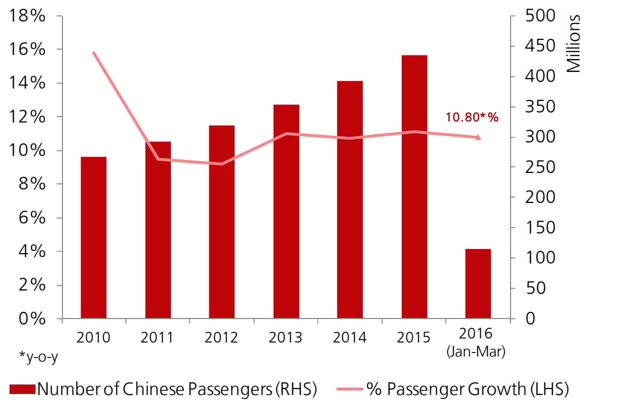
China's Outbound Tourism Market Takes Flight

Source: World Bank, GFK, China Outbound Tourism Research Institute (COTRI) Reuters, DBS Bank

China poised to be the world's largest passenger market by 2029. China's overall passenger market has undergone a period of tremendous growth, with passenger numbers surging >60% (or 10.2% CAGR) over the last five years.

According to forecasts by IATA, China is expected to surpass the US as the largest passenger market (by country) in 2029, where it is estimated to account for more than 1.19bn air passengers. This implies growth at about 5.2% CAGR (or incremental growth of 758m passengers over the next 20+ years) from c.436m passengers in 2015.

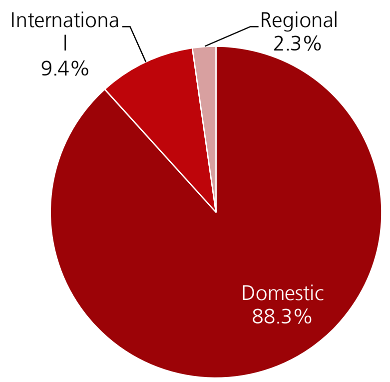
Overall Chinese Passenger Market (2010-2015)



Source: CAPA, DBS Bank

Domestic travel accounts for the lion's share of the Chinese aviation market. According to CAPA and CAAC (Civil Aviation Authority of China), domestic air travel made up over 88.3% of the country's total air passenger traffic in 2015.

Bulk of China's Air Traffic is for Regional Routes (2015)



Source: CAPA, DBS Bank

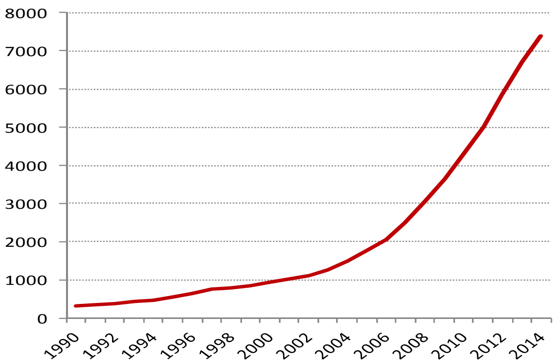
However, CAO's exposure to domestic passenger travel is limited to its supply of jet fuel to domestic flights departing from Shanghai Pudong International Airport only, as it is predominantly focused on the supply of jet fuel to outbound flights from international airports across the PRC.

We will thus mainly focus on Chinese outbound tourism, which has also experienced explosive growth over the last decade. Chinese outbound tourism has been growing at a breakneck pace of 14.5% CAGR over the last decade, outpacing China's cumulative real GDP growth rate (in USD terms) of 9.5%. We believe that the strong growth in Chinese outbound tourism is largely driven by China's growing middle class, firm economic growth, higher propensity to travel, and greater air connectivity.

China is home to a fast-growing middle class population… China has enjoyed tremendous economic growth since it joined the World Trade Organisation in Dec 2001 and opened up its economy, which has naturally led to higher income growth for its population, and lifting millions of people into the middle class.

In terms of GNI (Gross National Income) per capita, as measured by the World Bank, China has seen its income per capita rise multi-fold from just US$330 in 1990 to US$7,400 in 2014, which was close to the World Bank's upper-middle-income benchmark of US$7,926 then.

GNI per capita, Atlas method (current US$) – China



Source: World Bank, DBS Bank

According to the Discover China's Emerging Middle Class survey released by ZenithOptimedia, China's emerging urban middle class totalled 125m in 2012, and the number is expected to reach 356m by 2020.

…with rising propensity to travel for leisure. It was estimated in the MasterCard Insights 1Q2014 report that outbound leisure trips (excluding HK and Macau) as a percentage of total households in China was 9.1% in 2014, and is projected to rise to 18.8% in 2020. According to the same report, the inflection point for the propensity for international leisure travel for emerging markets is around the US$10,000 (household income) mark, after which it continues rising rapidly until the US$30,000 level.

Outbound Travel Growth (as % of Total Households)

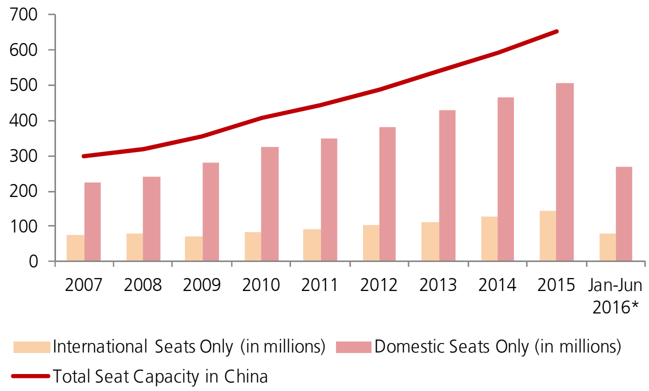
Country / Region	Trip Type	2014	2020F
China	Leisure	16.3%	29.7%
China (excl. HK & Macau)	Leisure	9.1%	18.8%
India	Leisure	3.0%	5.8%
Japan	All purpose	35.0%	37.7%
South Korea	All purpose	82.3%	99.6%

Source: MasterCard Insights 1Q2014

Apart from socio-economic factors, greater air connectivity has also been a key driver of Chinese outbound air travel. Apart from socio-economic factors, we believe that much of the growth in China's outbound air travel is led by greater air connectivity to and from China.

Data compiled by CAPA shows that the total seat capacity for China, be it domestic or international routes, has exhibited growth trends that are largely similar to that of the country's actual passenger growth over the last couple of years. Between 2007 and 2015, we observe that China's international seat capacity grew at a CAGR of 8.4% while domestic seat capacity grew at a faster pace of 10.8% CAGR.

China's Seat Capacity Grew at 10.2% CAGR (2007-2015)

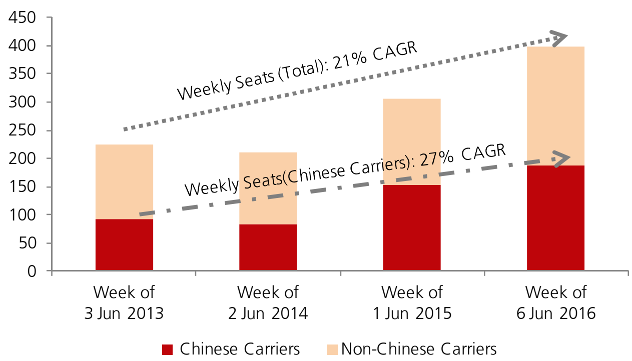


Source: CAPA, DBS Bank

Chinese carriers have been and should remain the driving force for China's seat capacity growth. We think that the rising outbound seat capacity in China over the last few years can be largely attributed to the internationalisation of Chinese carriers (which have benefited from Open Skies agreements).

For instance, we note that Open Skies agreements with ASEAN has led to double-digit outbound (from China into ASEAN) seat growth from 92,000 weekly seats in June 2013 to 188,500 weekly seats in June 2016.

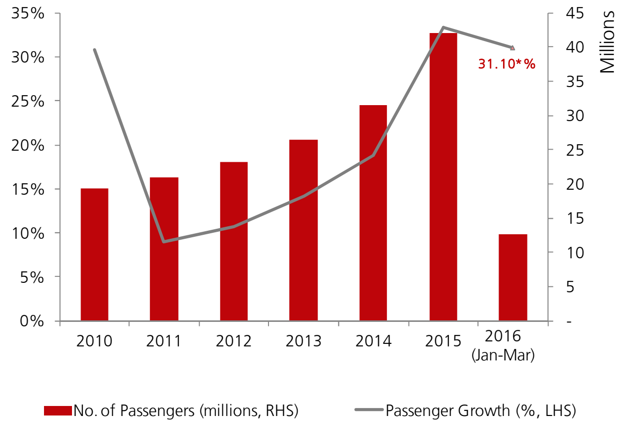
Weekly Seats Between China and ASEAN (2013-2016)



Source: CAPA, DBS Bank

Similarly, statistics from CAPA also suggests that the total number of international passengers to/from China (excluding regional traffic, i.e. Hong Kong, Macau and Taiwan) that were carried on Chinese airlines grew at c.16.9% CAGR between 2010 and 2015 – from 19.2m international passengers in 2010 to more than double to about 42.1m international passengers in 2015.

International Passenger Traffic* on Chinese Carriers

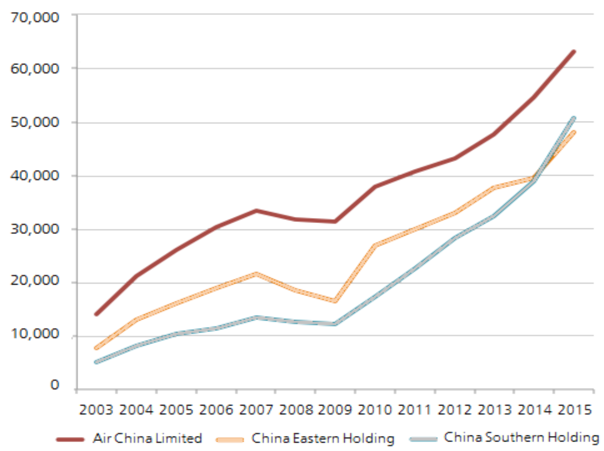


**refers to passenger traffic to/from China, excluding routes between China and Taiwan, Hong Kong and Macau*

Source: CAPA, DBS Bank

Internationalisation of Chinese carriers also bodes well for CAO's mandate to grow its jet fuel supply business into international markets. Chinese airlines, particularly the Big 3 airline groups – Air China, China Eastern and China Southern, have substantially grown their international exposure. Today, Chinese airlines command a larger share of China-US routes compared to their US counterparts.

International (including Regional) RPKs (2003-2015)



Source: CAPA, DBS Bank

Despite so, we think that the trend towards internationalisation should continue to strengthen ahead, as Chinese carriers seek to enhance their international presence further through partnerships with other airline partners (i.e. on 23 Mar 2016, Air China and United Airlines announced plans to foster closer cooperation).

With expectations of further internationalisation of other budding Chinese carriers ahead, we believe that the group could be a prime beneficiary given the scale of its operations and existing relationship with these airlines in China, and could thus be a choice, trusted supplier of jet fuel to these airlines when they successfully break into new geographies.

Right demand-supply conditions are in place to drive outbound travel and in turn, jet supply volume growth into the long-term… Supported by a rising middle class population in China with higher disposable incomes, coupled with growing connectivity to/from China, we think the right conditions are in place for long-term sustainable growth in CAO's jet fuel supply business.

Boeing forecasts that there will be a significant increase in outbound traffic growth for the Chinese aviation market, and estimates that RPKs (or "Revenue Passenger Kilometres", which is used to measure each kilometre a revenue-paying passenger has flown) in billions for all China-domiciled international flights will increase from 396.6bn in 2014 to 1353.8bn by 2034. This represents an impressive CAGR of 6.3% over the next 20 years, which exceeds the expected global CAGR of 4.9%.

China's Outbound Airline Passenger Traffic Forecasts

(RPK in billions)	2014	2034	20-yr CAGR
China to China	509.2	1704.2	6.2%
China to Europe	105.2	333.7	5.9%
China to N. America	98.1	346.2	6.5%
China to NE Asia	66.2	171.6	4.9%
China to Oceania	37.7	127.0	6.3%
China to SEA	89.4	375.3	7.4%
China (international only)	396.6	1352.8	**6.3%**
All China (including domestic)	905.8	3058.0	6.3%
Global Average	6246.0	16153.2	**4.9%**

Source: Boeing Current Market Outlook 2015, DBS Bank

Apart from underlying growth in Chinese outbound tourist numbers, which we believe is a key indicator of CAO's organic growth outlook, we also consider other potential catalysts (in the following section) which we think could drive the group's profitability if they pan out in the periods ahead.

…with further upside from exposure to the booming domestic segment through 33% stake in SPIA. Based on data from CAPA, we estimate that SPIA's market share of intra-China routes is still small, at c.3.9% of domestic seat capacity in China as at the week of 4 Jul 2016 (compared to a leading market share of c.12.7% for total seat capacity in China).

However, we believe that the recent opening of the Shanghai Disneyland in June 2016, which state-owned Shanghai Shendi Group forecasts will draw 10m visitors p.a., coupled with the expected launch of the new satellite terminal at the Shanghai Pudong International Airport in 2019, should drive greater intra-China air traffic into the airport and catalyse the volume of jet fuel supplied by CAO's SPIA associate on these domestic routes.

Growth Strategies

Robust growth in the Chinese aviation market. As the sole importer and supplier of jet fuel to outbound international carriers in the PRC, we believe that CAO will be the prime beneficiary of organic growth in the world's second largest aviation market. According to industry sources, China consumed almost 24m tonnes of jet fuel in 2015 – of which bonded jet fuel typically makes up approximately 30-40%, and jet fuel consumption is estimated to grow by 10.6% CAGR to 39m tonnes by 2020.

CAO should thus be a natural beneficiary of China's burgeoning civil aviation market.

Expansions at Shanghai Pudong International Airport underpins SPIA's growth. Pudong International Airport added two new runways in the last 18 months, which has doubled the capacity of the airport. At the same time, an additional satellite concourse capacity to provide further gates and handle more passengers has begun construction and is expected to be complete by 2019. These expansion initiatives will raise the airport's capacity from 60m passengers to 80m passengers and should underpin SPIA's long-term growth prospects.

Expansion into new international markets to gain scale. Leveraging on its parent, CNAF's strengths in China, and the consolidated scale of its international supply and trading network, CAO has been gaining traction in its expansion outside of mainland China. The group has increased its current supply locations to 41international airports as at end-1Q16 (up from 34 in 2014) outside of mainland China, with an enlarged customer base which includes reputable international airlines such as Emirates and Lufthansa, in addition to three major Chinese airlines (Air China, China Eastern Airlines and China Southern Airlines).

With greater reach and volumes, CAO should be able to achieve better economies of scale for its aviation fuel marketing and trading segments.

Build competencies in other oil products. Similar to its strategy for jet fuel, CAO also hopes to build up an integrated supply chain in fuel oil and gas oil. However, we think it will likely take some time before CAO attains critical mass in these segments as the volume of fuel oil supplied and traded remains small as compared to jet fuel volumes presently.

Dry powder for acquisitions and investments in oil-related assets. To build structural advantages across its diversified business platforms, the group continually seeks to expand its investments in oil-related assets and businesses.

Management shared that it will be looking at both "asset-light" investments, which will allow the group to gain access to air spaces, customer contracts, strategic alliances and further trading synergies, as well as "asset-backed" investments (or infrastructure assets), which may include airport refuelling stations, pipelines going into airports and storage facilities.

As the market for oil-related assets can be quite fragmented, CAO's potential counterparties would primarily be existing players who have been unable to build critical mass and are looking to divest. These counterparties include national oil companies and oil majors.

Backed by net cash position of c. US$228m as at end-1Q16, we believe that CAO has sufficient firepower to finance its objectives on the M&A front or to increase its stake in existing associates, and expect contributions from associated businesses to be a key driver of long-term growth.

New business – exporting jet fuel to US. Due to the Jones Act (which was enacted in the US in 1920), the East Coast is long jet fuel and exports to Europe, while the West Coast is short jet fuel and imports from Asia, as it is cheaper to do so.

Meanwhile in Asia, Chinese refineries such as PetroChina which have traditionally supplied jet fuel for use in domestic flights, are challenged by oversupply conditions and have been looking to export excess capacities into regions where jet fuel can be readily absorbed. As such, beginning late-2015, CAO has been helping Chinese refineries in exporting such cargoes to the US, although these remain small in volumes at the moment.

Riding on One Belt, One Road. CAO is well positioned to benefit from China's "One Belt, One Road" development strategy, especially in terms of gaining access to aviation fuel supply or perhaps even participating in airport refuelling ventures into new markets.

Key Risks

Risks inherent in trading activities. Due to the myriad of risks that are inherent in the lifecycle of trades (from execution to delivery), trading firms are often deemed to have higher risk. Some risks which CAO could be exposed to given the nature of its business include:

(1) Market risk: CAO could be held captive by unanticipated swings in oil prices, particularly during periods of heightened macroeconomic uncertainty. In these instances, the group's positions and oil inventory could be subject to basis risk.

(2) Credit risk: CAO could be faced with counterparty risk when counterparties are unable to make payments when due. For instance, CAO took two years before it could claw back amounts owed by MF Global which went belly-up in 2011, and also had counterparty risk with OW Bunker for its fuel oil trading business in 2014.

(3) Operational risk: As 90% of the trades are backed by physical demand, CAO bears responsibility for the transportation and delivery of fuel and other oil products. While doing it, it could come across undesirable incidents such as oil spills.

Backwardation limits trading opportunities. CAO typically scales back its trading activities substantially when oil prices move into backwardation, which would dampen its trading profits.

Outbreak of diseases and security concerns. Given the group's direct exposure to the air passenger market, events that could significantly dampen traveller sentiment, such as the outbreak of diseases and acts of terror, could have serious implications for the tourism industry and demand for air travel, and in turn, weigh on global demand for jet fuel.

Potential mark-to-market losses for associates. As SPIA and CNAF-HKR hold inventories of fifteen days and seven days respectively, these have to be marked to market. In a declining oil price environment, these would result in paper losses for these associates, which would impact CAO's bottom-line.

Competition from oil majors and risk of non-renewal on international contracts. As its monopoly in bonded jet fuel supply is only restricted to China, CAO has to engage in open bidding when seeking jet fuel supply contracts with international airline companies.

However, its ability to secure new contracts to grow its international network could be mitigated by the competitiveness of the industry – especially competition from the oil majors given the scale of their operations and their integrated infrastructure.

Furthermore, as the typical length of these contracts are only for about 18 months, there is no guarantee that CAO will be able to renew the contracts it currently has in place for the 41 international airports (outside of China) that it presently serves.

Delays to or non-optimal deployment of cash. CAO has been relatively vocal about its plans to grow via M&A, and appears to have sufficient ammo to finance its ambitions as the group is currently sitting on net cash of US$228m.

However, post the 2004 scandal, the group has on some occasions erred on the side of caution, and if it is overly conservative in its approach, it could miss out on potentially lucrative investment opportunities.

Good track record, but success of future acquisitions not guaranteed. While CAO has established a pretty decent track record in its investment portfolio thus far, it does not guarantee the success of and returns on the group's future investments in oil-related assets.

Forecasts and Assumptions

Steady growth in volumes expected. With the growth in the Chinese international air travel market expected to strengthen on favourable supply-demand dynamics (higher outbound seat capacities driven by expansion of Chinese carriers and higher demand for leisure travel), and CAO's continued expansion into international markets, we believe that the volume of jet fuel supplied and traded will likely grow at 10% and 8% y-o-y for FY16F and FY17F, respectively.

Likewise, we have also factored in similar y-o-y growth assumptions for other oil products of 8% and 6% for FY16F and FY17F, respectively, on expectations of improved fuel oil trading conditions and demand for avgas ahead.

Profitability per tonne to improve as 1) oil prices move away from backwardation, and 2) CAO gains increasing volumes and hence economies of scale. While CAO typically seeks to optimise margins via trading in contango markets, its trading activities are also restricted by its risk management framework, which presently dictates that 90% of trades are to be backed by physical orders.

As the group continues to gain scale to maximise the size of its potential trading pool, and as the oil prices move away from backwardation, we see potential for gross profit per tonne to improve from US$1.76 in FY15 to US$2.11 in FY16F and US$2.28 in FY17F.

Firm outlook for SPIA as traffic at Pudong airport continues to grow. One of the leading gateways into China, we believe that Shanghai Pudong International Airport should continue to see good growth in both international and domestic air traffic ahead. As the sole supplier of jet fuel at Pudong Airport, we think SPIA's refuelling volumes will likely grow at 8% in FY16F and 10% in FY17F, to 4.1m tonnes and 4.5m tonnes, respectively.

Stable contribution from other associates. We expect stable earnings contribution from three of the other associates namely TSN PEKCL, Xinyuan and OKYC, while we project CNAF HKR to move towards breakeven by 2017F. Total contribution from other associates is expected to grow modestly from US$3.4m in 2016F to US$4.4m in 2017F.

Forecasts and Key Assumptions

FYE Dec (S$m)	FY12	FY13	FY14	FY15	FY16F	FY17F
Revenue						
Middle distillates	13,106.5	12,456.0	13,507.6	7,009.5	5,866.7	6,939.4
Other oil products	1,701.5	3,115.8	3,553.4	1,978.0	1,625.4	1,887.0
Total Revenue	14,808.0	15,571.9	17,061.0	8,987.5	7,492.0	8,826.4
Gross Profit	42.8	52.5	27.4	35.4	46.4	53.8
Volume ('000 tonnes)						
Middle distillates	10,630.0	10,410.0	12,080.0	11,880.0	13,068.0	14,113.4
Other oil products	4,160.0	6,070.0	8,290.0	8,280.0	8,942.4	9,478.9
Growth						
Middle distillates	26.8%	-2.1%	16.0%	-1.7%	10.0%	8.0%
Other oil products	447.4%	45.9%	36.6%	-0.1%	8.0%	6.0%
Gross profit per tonne (US$)	2.89	3.19	1.34	1.76	2.11	2.28
Average Price (US$ per tonne)						
Middle Distillates	1233.0	1196.5	1118.2	590.0	448.9	491.7
Other oil products	409.0	513.3	428.6	238.9	181.8	199.1
Associate Income						
Shanghai Pudong (SPIA)	38.2	44.9	41.9	38.9	42.0	46.2
Others	5.0	1.5	1.3	3.4	3.4	4.4
SPIA refuelling volumes (m tonnes)	3.1	3.2	3.5	3.8	4.1	4.5
Growth	0.0%	3.2%	9.4%	8.6%	8.0%	10.0%

Source: Company, DBS Bank

Income Statement

15% profit CAGR projected over 2015-2017F. We project CAO's net profit to rise from US$61m in 2015 to US$71m in 2016F and US$81m in 2017F, on both higher volumes and margins, as measured by gross profit per tonne. Profit contribution from associates, driven by higher traffic and earnings at SPIA, should increase from US$42m in 2015 to US$45m in 2016F and US$51m in 2017F.

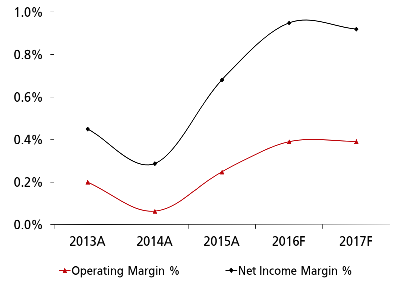
Tax rate to remain low as CAO receives tax incentives under Singapore's Global Trader programme. CAO pays a concessionary tax rate of 5% under Singapore's Global Trade Programme, and with its significant and growing scale, it should continue paying this concessionary tax rate.

Income Statement (US$m)

FY Dec	2012A	2013A	2014A	2015A	2016F	2017F
Revenue	14,808	15,572	17,061	8,987	7,492	8,826
Cost of Goods Sold	(14,765)	(15,519)	(17,034)	(8,952)	(7,446)	(8,773)
Gross Profit	**42.8**	**52.5**	**27.4**	**35.4**	**46.4**	**53.8**
Other Opng (Exp)/Inc	(14.7)	(21.2)	(16.5)	(13.1)	(17.2)	(19.2)
Operating Profit	**28.0**	**31.3**	**10.9**	**22.3**	**29.3**	**34.6**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	43.2	46.5	43.2	42.3	45.4	50.6
Net Interest (Exp)/Inc	(5.6)	(5.3)	(3.1)	(1.0)	(0.5)	(0.5)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	**65.6**	**72.4**	**51.0**	**63.6**	**74.1**	**84.7**
Tax	0.62	(2.2)	(1.9)	(2.3)	(3.0)	(3.4)
Minority Interest	0.0	0.0	0.0	0.0	0.0	0.0
Preference Dividend	0.0	0.0	0.0	0.0	0.0	0.0
Net Profit	**66.2**	**70.2**	**49.2**	**61.3**	**71.2**	**81.3**
Net Profit before Except.	66.2	70.2	49.2	61.3	71.2	81.3
EBITDA	72.1	79.5	55.6	66.2	76.2	86.8
Growth						
Revenue Gth (%)	64.3	5.2	9.6	(47.3)	(16.6)	17.8
EBITDA Gth (%)	4.1	10.3	(30.1)	19.1	15.1	13.9
Opg Profit Gth (%)	(1.5)	11.5	(65.1)	104.8	30.9	18.3
Net Profit Gth (Pre-ex) (%)	4.4	6.1	(30.0)	24.7	16.1	14.2
Margins & Ratio						
Gross Margins (%)	0.3	0.3	0.2	0.4	0.6	0.6
Opg Profit Margin (%)	0.2	0.2	0.1	0.2	0.4	0.4
Net Profit Margin (%)	0.4	0.5	0.3	0.7	0.9	0.9
ROAE (%)	15.4	14.3	9.1	10.7	11.5	12.1
ROA (%)	4.7	4.2	3.2	5.5	8.4	9.0
ROCE (%)	6.2	5.9	1.9	3.7	4.5	4.9
Div Payout Ratio (%)	17.7	19.4	26.5	29.8	30.0	30.0
Net Interest Cover (x)	5.0	5.9	3.5	21.5	58.5	69.2

Source: Company, DBS Bank

Margins Trend



Strong rebound in earnings in 1Q16. CAO reported a strong set of 1Q16 numbers, as net earnings grew 68% y-o-y to US$24.2 on 4.2% y-o-y volume growth in middle distillates, and 67% y-o-y volume growth in other oil products. Gross profit per tonne more than doubled to US$2.70 as the trading segment took advantage of what was a strong contango market in the quarter to lock in better margins.

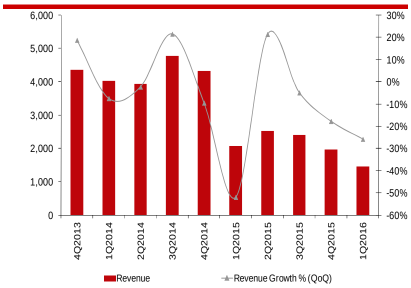
Strong performance from associate SPIA. The firm 1Q16 numbers were also a result of associate SPIA's contribution growing by 47% y-o-y to US$12.1m, on the back of robust traffic at Pudong airport during the Chinese New Year period.

Quarterly / Interim Income Statement (US$m)

FY Dec	4Q2014	1Q2015	2Q2015	3Q2015	4Q2015	1Q2016
Revenue	4,323	2,081	2,524	2,399	1,973	1,464
Cost of Goods Sold	(4,318)	(2,076)	(2,515)	(2,386)	(1,965)	(1,451)
Gross Profit	**4.58**	**5.30**	**9.20**	**12.9**	**8.00**	**13.2**
Other Oper. (Exp)/Inc	(3.5)	0.58	(3.9)	(4.1)	(5.7)	(2.3)
Operating Profit	**1.06**	**5.88**	**5.36**	**8.80**	**2.30**	**10.8**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	4.62	9.33	13.5	9.73	9.75	14.2
Net Interest (Exp)/Inc	(1.2)	(0.4)	(0.3)	(0.2)	(0.2)	(0.1)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	**4.52**	**14.9**	**18.6**	**18.3**	**11.9**	**24.9**
Tax	(0.1)	(0.5)	(0.8)	(0.6)	(0.4)	(0.7)
Minority Interest	0.0	0.0	0.0	0.0	0.0	0.0
Net Profit	**4.43**	**14.4**	**17.8**	**17.7**	**11.4**	**24.2**
Net profit bef Except.	4.43	14.4	17.8	17.7	11.4	24.2
EBITDA	5.69	15.2	18.9	18.5	12.0	25.0
Growth						
Revenue Gth (%)	(9.5)	(51.9)	21.3	(4.9)	(17.8)	(25.8)
EBITDA Gth (%)	(30.3)	167.4	24.0	(1.7)	(35.0)	107.7
Opg Profit Gth (%)	nm	453.2	(8.9)	64.2	(73.9)	371.7
Net Profit Gth (Pre-ex) (%)	(39.5)	224.3	23.9	(0.3)	(35.6)	111.6
Margins						
Gross Margins (%)	0.1	0.3	0.4	0.5	0.4	0.9
Opg Profit Margins (%)	0.0	0.3	0.2	0.4	0.1	0.7
Net Profit Margins (%)	0.1	0.7	0.7	0.7	0.6	1.6

Source: Company, DBS Bank

Revenue Trend



Balance Sheet

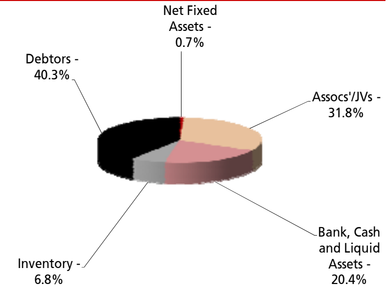
Strong balance sheet with a net cash position of c.US$230m as at end-1Q16. With net cash of US$228m, or about 37-Sct per share, we believe that the Group has ample firepower to finance its M&A opportunities and further grow the scale and reach of its business and profits.

Balance Sheet (US$m)

FY Dec	2012A	2013A	2014A	2015A	2016F	2017F
Net Fixed Assets	8.05	7.38	6.79	6.21	5.64	5.06
Invts in Associates & JVs	249	268	270	266	271	278
Other LT Assets	9.07	9.90	9.96	9.43	8.70	7.97
Cash & ST Invts	81.1	56.3	94.3	171	232	279
Inventory	18.6	113	38.1	56.8	47.3	55.7
Debtors	1,285	1,267	959	337	288	327
Other Current Assets	0.0	0.0	0.0	0.0	0.0	0.0
Total Assets	1,650	1,721	1,379	846	853	953
ST Debt	1.67	28.6	0.0	0.0	0.0	0.0
Creditor	1,182	1,163	819	247	201	244
Other Current Liab	0.36	0.37	0.02	0.01	2.97	3.39
LT Debt	0.0	0.0	0.0	0.0	0.0	0.0
Other LT Liabilities	6.19	6.23	6.24	6.16	6.16	6.16
Shareholder's Equity	460	524	554	593	642	699
Minority Interests	0.0	0.0	0.0	0.0	0.0	0.0
Total Cap. & Liab.	1,650	1,721	1,379	846	853	953
Non-Cash Wkg. Capital	121	217	179	147	131	136
Net Cash/(Debt)	79.5	27.7	94.3	171	232	279
Debtors Turn (avg days)	26.0	29.9	23.8	26.3	15.2	12.7
Creditors Turn (avg days)	23.8	27.6	21.2	21.7	11.0	9.3
Inventory Turn (avg days)	0.7	1.5	1.6	1.9	2.6	2.1
Asset Turnover (x)	10.5	9.2	11.0	8.1	8.8	9.8
Current Ratio (x)	1.2	1.2	1.3	2.3	2.8	2.7
Quick Ratio (x)	1.2	1.1	1.3	2.1	2.5	2.5
Net Debt/Equity (X)	CASH	CASH	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	CASH	CASH	CASH	CASH	CASH	CASH
Capex to Debt (%)	11.5	0.5	N/A	N/A	N/A	N/A

Source: Company, DBS Bank

Asset Breakdown



Cash Flow Statement

SPIA pays out 100% of earnings, boosting CAO's cash flows substantially. Earnings from SPIA are fully paid out to CAO, net of 5% withholding tax, and SPIA has historically contributed between US$35m and US$39m in the last three years to the group's cash flow. We have assumed that CAO will receive 95% of SPIA's associate contribution going forward.

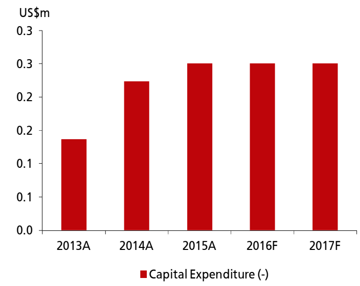
30% dividend payout policy is easily sustainable. With CAO's dividend policy at 30% currently, we project the group to pay out c.US$21m of dividends declared for FY16, which is easily met by the cash generated from its operations and dividends from associates.

Cash Flow Statement (US$m)

FY Dec	2012A	2013A	2014A	2015A	2016F	2017F
Pre-Tax Profit	65.6	72.4	51.0	63.6	74.1	84.7
Dep. & Amort.	0.88	1.80	1.50	1.56	1.56	1.56
Tax Paid	2.52	(2.3)	(2.6)	(2.2)	0.0	(3.0)
Assoc. & JV Inc/(loss)	(43.2)	(46.5)	(43.2)	(42.3)	(45.4)	(50.6)
Chg in Wkg.Cap.	0.94	(97.5)	36.1	33.1	12.8	(4.7)
Other Operating CF	(0.4)	1.20	4.34	(1.7)	0.0	0.0
Net Operating CF	26.3	(70.8)	47.2	52.1	43.1	28.0
Capital Exp.(net)	(0.2)	(0.1)	(0.2)	(0.3)	(0.3)	(0.3)
Other Invts.(net)	0.0	0.0	0.0	0.0	0.0	0.0
Invts in Assoc. & JV	(28.8)	(5.0)	0.0	0.0	0.0	0.0
Div from Assoc & JV	45.4	38.8	35.2	37.2	39.9	43.9
Other Investing CF	(8.5)	(1.3)	0.07	0.19	0.0	0.0
Net Investing CF	7.90	32.4	35.0	37.2	39.6	43.6
Div Paid	(11.6)	(11.6)	(13.7)	(12.8)	(21.4)	(24.4)
Chg in Gross Debt	(28.3)	26.9	(28.6)	0.0	0.0	0.0
Capital Issues	0.0	0.0	0.0	0.0	0.0	0.0
Other Financing CF	(1.4)	(2.0)	(1.6)	(0.3)	0.0	0.0
Net Financing CF	(41.2)	13.4	(43.9)	(13.0)	(21.4)	(24.4)
Currency Adjustments	0.13	0.26	(0.4)	(0.1)	0.0	0.0
Chg in Cash	(6.9)	(24.9)	38.0	76.2	61.4	47.2
Opg CFPS (S cts)	4.78	4.19	1.74	2.98	4.76	5.13
Free CFPS (S cts)	4.92	(11.1)	7.37	8.14	6.73	4.35

Source: Company, DBS Bank

Capital Expenditure



Valuation

12-month target price of S$1.62, based on 12x FY17 PE. We opine that CAO should trade at 12x earnings, as it enters a period of sustained profit growth driven by continued growth of civil aviation in China, with its unique exposure to Shanghai Pudong International Airport's long-term growth, as well as improving margins as it ventures into more markets and achieves higher economies of scale.

While 12x earnings would represent +2 SD of its historical current PE range, we believe that CAO is poised to see a structural re-rating of its valuation multiple on sustained earnings growth, and especially if it can utilise its strong balance sheet to further accelerate growth through acquisitions. We also note that 12x PE is reasonable against the projected 15% EPS CAGR over 2015-2017F, and also represents a substantial discount to its peer group.

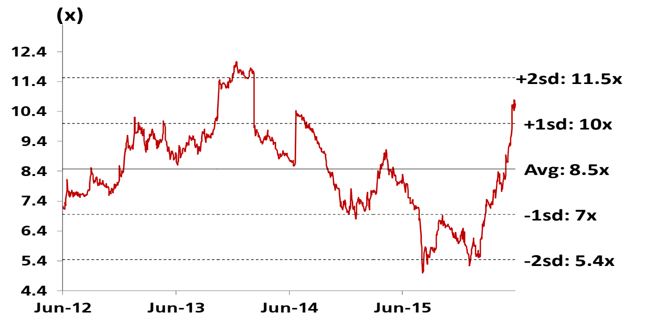
Larger peers are trading at an average of 20x FY16 earnings. We note that peers with larger market capitalisations, such as World Fuel Services, Brightoil and Z Energy, are trading at c.20x FY16 earnings and that CAO is trading at over 40% discount to its peers. At the same time, Bangkok Aviation Fuel Services, which is very similar to SPIA, is trading at over 23x historical earnings.

Peer Comparables for China Aviation Oil

		Last Px	Mkt Cap	--------- PER ----------			Price-to-Book		--- ROE ---		Crnt
Company			US$m	2015	2016	2017	2015	2016	2015	2016	Yield
World Fuel Servs	USD	47.49	3,364	17.4	16.2	14.1	1.76	1.59	10.1%	9.8%	0.5%
Bangkok Aviation	THB	35.25	638	23.5	-	-	6.49	5.89	27.6%	-	1.2%
Brightoil	HKD	2.24	2,958	17.3	26.0	10.5	2.31	2.03	13.4%	7.8%	0.0%
Z Energy	NZD	8.05	2,302	22.4	17.8	14.6	6.43	5.56	28.8%	31.1%	3.7%
China Aviatn Oil	SGD	1.22	791	14.1	11.1	10.4	1.29	1.41	9.2%	12.7%	2.5%
Average				18.9	17.8	12.4	3.7	3.3	17.8%	15.3%	1.6%
Average excl. CAO				20.1	20.0	13.1	4.2	3.8	20.0%	16.2%	1.4%

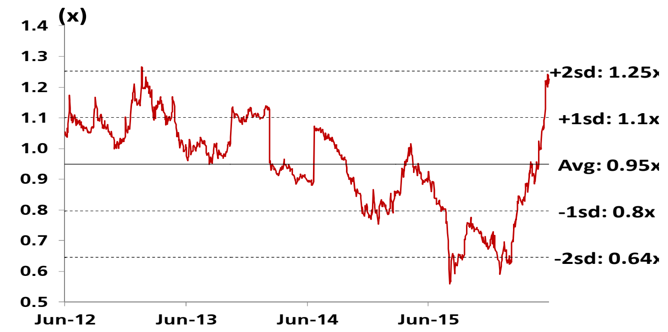
Source: ThomsonReuters, DBS Bank

Historical 12-month current PE ratio (x)



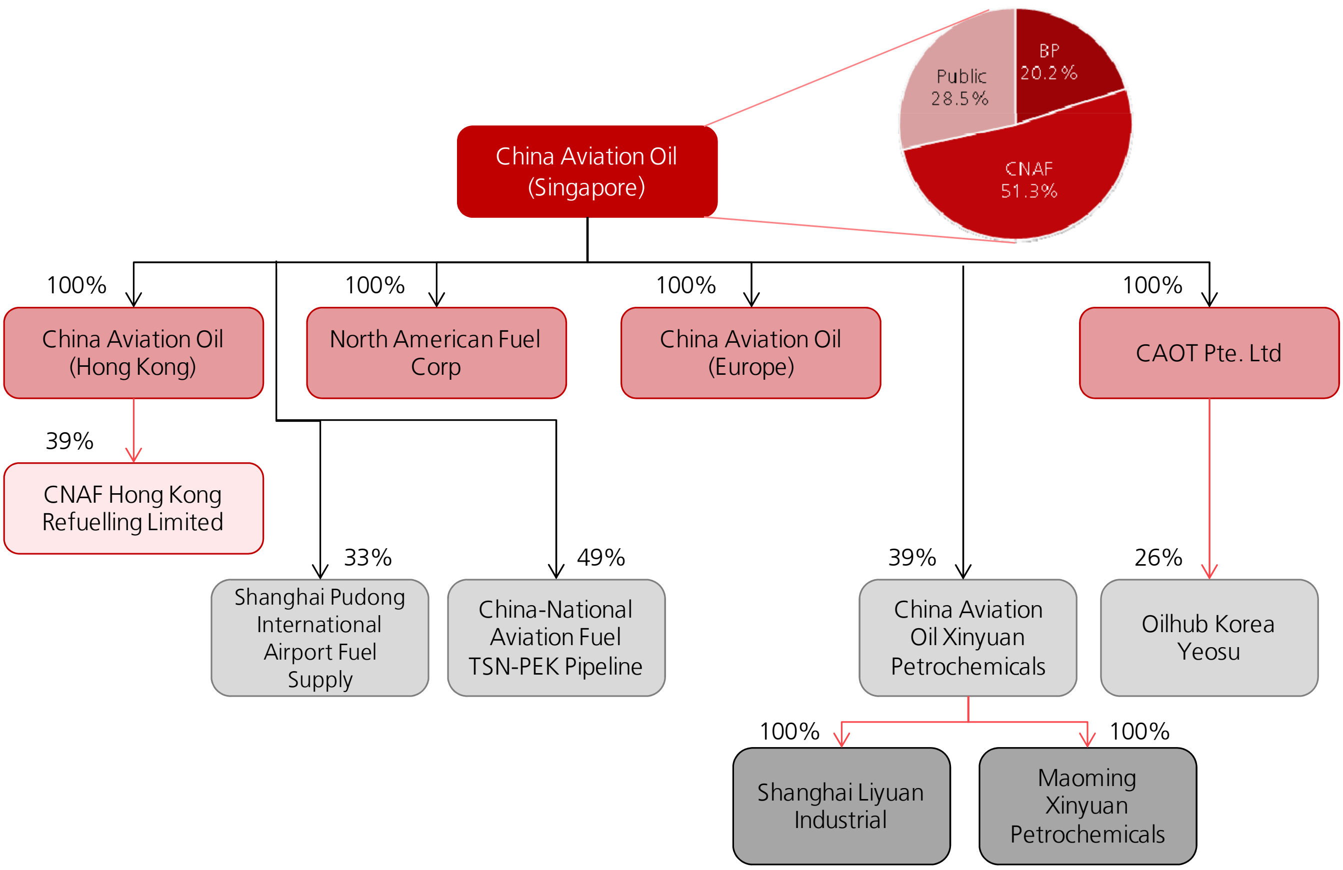
Source: DBS Bank, Bloomberg Finance L.P

Historical 12-month current PB ratio (x)



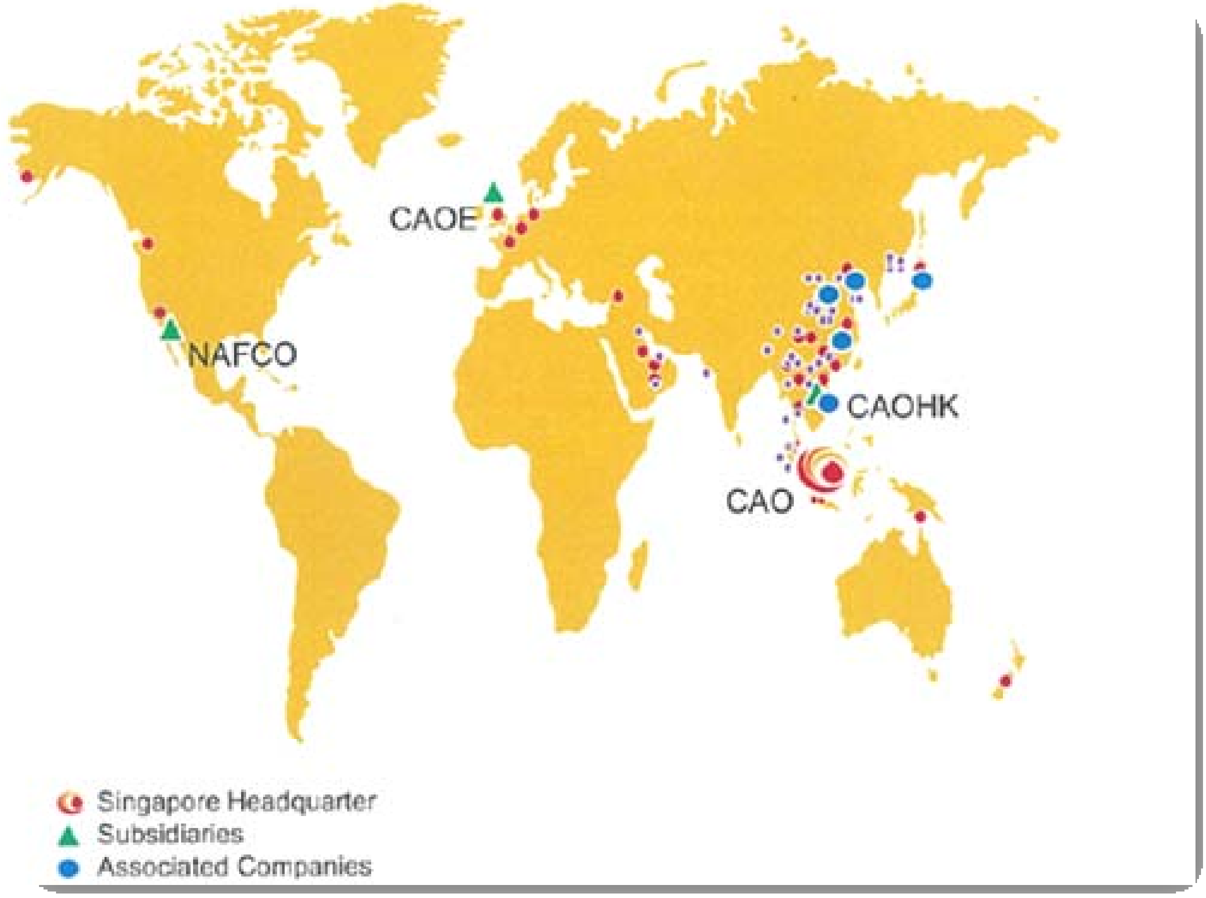
Source: DBS Bank, Bloomberg Finance L.P

Appendix 1: Group Structure



Source: Company, DBS Bank

Appendix 2: Supply and Trading Network



Source: Company, DBS Bank

Appendix 3: Profiles of Associated Companies

Asset #1: Shanghai Pudong International Airport Aviation Fuel Supply Company ("SPIA")

Asset Description

SPIA owns and operates all the refueling facilities at the Pudong Airport which includes :

- Hydrant system
- Dispenser fleet
- Refuelling stations
- Airport tank farm
- Storage terminal with 140,000m^3
- 42 km dedicated pipeline connecting Shanghai Pudong Airrport to Waigaoqiao Terminal

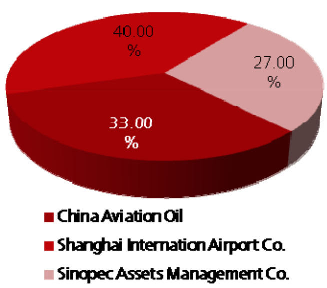
Revenue / Services

SPIA is the exclusive supplier of jet fuel at Pudong Airport.

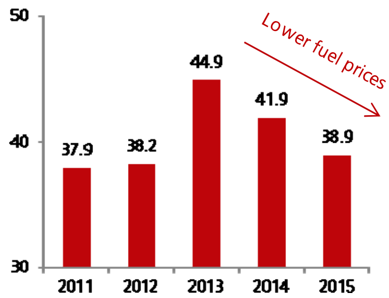
- Provides jet distribution and refuelling service to about 127 Chinese and foreign airlines operating at Pudong Airport

Ownership Structure

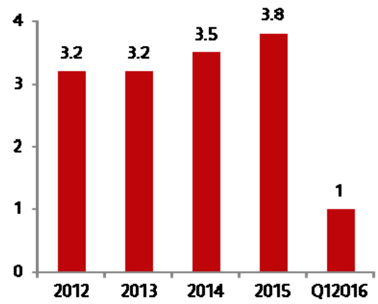
33% owned by CAO



Asset Income (US/million)



Refuelling Volume in million tonnes



Source: Company

Asset #2: China National Aviation Fuel TSN-PEK Pipeline Transportation Corp Ltd ("TSN-PEKCL")

Asset Description

TSN-PEKCL is a pipeline transporting the majority of jet fuel from Tianjin Nanjiang Terminal to Beijing Capital International Airport and Tianjin Binhai International Airport

- 185 km end-to-end between two airports
- Largest diameter
- Longest Multi-oil product pipeline
- Highest transfer volume in the PRC Civil Aviation Industry
- Excellent track record: Zero error and pollution in 2015

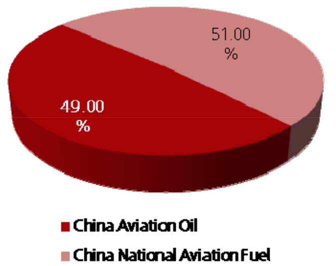
Revenue / Services

Provide the aviation fuel transportation from Nanjiang terminal to between two key airports.

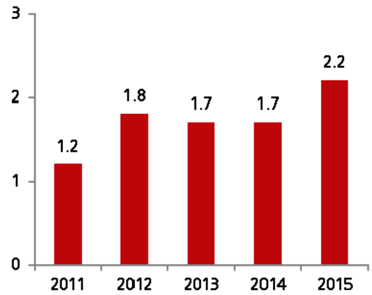
- Promising business given the increase in increase in aviation traffic turnover between the two airports.

Ownership Structure

49% equity stake by CAO



Asset Income (US/million)



Source: Company

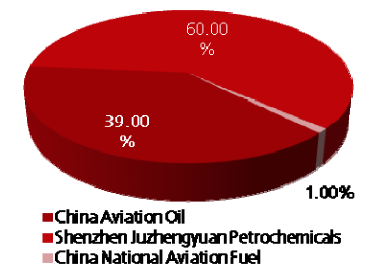
Asset #3: China Aviation Oil Xinyuan Petrochemicals Co. ("Xinyuan")

Asset Description / Services

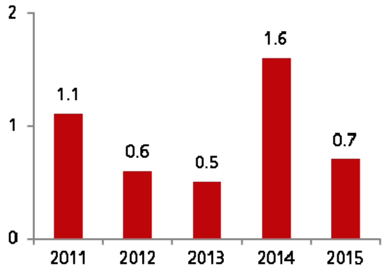
Xinyuan mainly engages in the storage and trading of jet fuel and other products:

- Owns a 75,000m^3 tank near Shuidong Habour in Maoming, Guangdong Province
- Shuidong storage continued to achieve high safety standards by fully conducting comprehensive safety management measures on a regular basis

Ownership Structure



Asset Income (US/million)





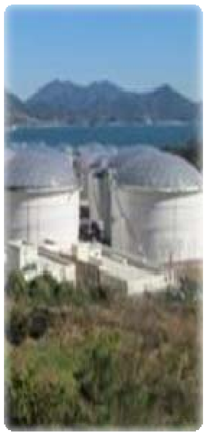
Source: Company

Asset #4: Oilhub Korea Yeosu Co. ("OKYC")

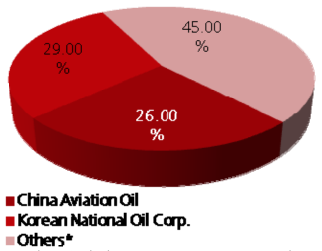
Asset Description	Key Facts
OKYC operates the largest oil storage facility in Korea which is located in Yeosu ▪ Consist of 36 storage tanks with size ranging from 6,000m^3 to 80,000m^3 ▪ Total storage capacity of 1.3 million m^3 ▪ Storage terminal is capable of handing crude oil, full range of refined petroleum products ▪ Capable of value-added services with its state-of-the art blending system	▪ Zero accidents & high safety standards ▪ High utilisation rate ▪ High profile clients such as reputable oil companies

Additional Information for Accessing/Transportation the Northeast Asia Hub terminal

- ✓ 4 berths with draft of 17.7 metres
- ✓ Capacities ranging between 10,000 to 200,000 dwt
- ✓ Able to access KNOC owned jetty with 330,000 dwt capacity
- ✓ Able to support trading activates with the west coast of United states and Southeast Asia with shipping time:
  - 1.88 days to Tianjin, China
  - 1.21 days to Shanghai, China

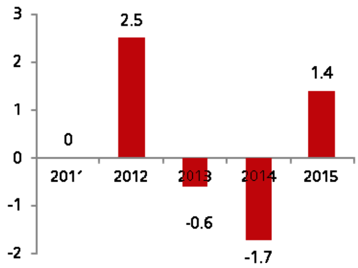


Ownership Structure



* Others include: Samsung C&T corp. and LG International Corp

Asset Income (US/million)



Source: Company

Asset #5: China National Aviation Fuel Hong Kong Refuelling Limited ("CNAF HKR")

Asset Description

CNAF HKR is a Hong Kong joint-venture under CAO's wholly subsidary.

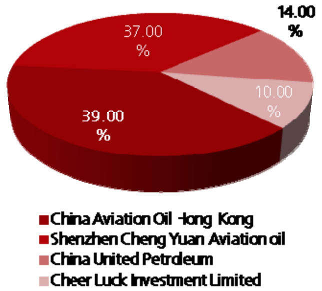
- Have a site of 3000m2
- Includes refuelling station
- Offices for both administrative work, scheduling office
- Maintenance workshop fully equipped with dispenser and refuellers

Revenue / Services

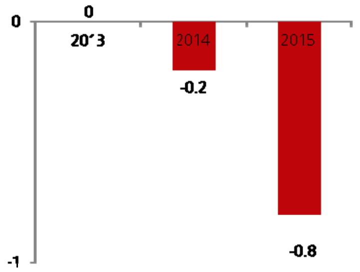
CNAF HKR provides fuelling services at Hong Kong International Airport at Chek Lap Kok ("HKIA")

- Currently the third licensed refueller to provide plane fuelling services at HKIA
- Commenced operations on 1st August 2015

Ownership Structure



Asset Income (US/million)



Source: Company

DBS Bank recommendations are based an 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

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DBS Bank Ltd
12 Marina Boulevard, Marina Bay Financial Centre Tower 3
Singapore 018982
Tel. 65-6878 8888
e-mail: equityresearch@dbs.com
Company Regn. No. 196800306E