

AIRLINE INDUSTRY

WHEN DO YOU BUY AIRLINES?

REGIONAL | TRANSPORTATION | SECTOR NOTE

11 March 2015

- Airline profits should benefit from lower oil prices in 1Q15 results
- Airlines stocks generally perform poorly over the long-term, but can perform marvelously over short periods
- Best time to buy airlines is during crisis
- AirAsia (AIRA MK, Not Rated) is in its own crisis

Publicly listed airline stocks

The US is the land of cars and Europe has its trains. Asia is huge. We take planes everywhere. Unsurprisingly, there are numerous publicly listed airlines within Asia Pacific. Half of the region's six biggest airlines operate from mainland China.

Figure: Asia-Pacific Airlines by market cap

| Stock | Home market | Ticker | Market cap (US\$ bn) |
|--------------------|-------------|----------|----------------------|
| Air China | China | 753 HK | 13.7 |
| Singapore Airlines | Singapore | SIA SP | 9.8 |
| ANA | Japan | 9202 JP | 9.5 |
| China Eastern | China | 670 HK | 9.0 |
| Cathay Pacific | HK SAR | 293 HK | 8.4 |
| China Southern | China | 1055 HK | 6.8 |
| Qantas | Australia | QAN AU | 4.8 |
| Korean Air | Korea | 3490 KS | 3.0 |
| EVA Airways | Taiwan ROC | 2618 TT | 2.6 |
| Air New Zealand | New Zealand | AIR NZ | 2.4 |
| China Airlines | Taiwan ROC | 2610 TT | 2.4 |
| AirAsia | Malaysia | AIRA MK | 1.8 |
| Asiana | Korea | 20560 KS | 1.5 |
| Virgin Australia | Australia | VAH AU | 1.3 |
| Cebu Air | Philippines | CEB PM | 1.2 |
| Garuda | Indonesia | GIAA IJ | 1.0 |
| Thai Airways | Thailand | THAI TB | 0.8 |
| Jet Airways | India | JETIN IN | 0.8 |
| Tiger Airways | Singapore | TGR SP | 0.5 |

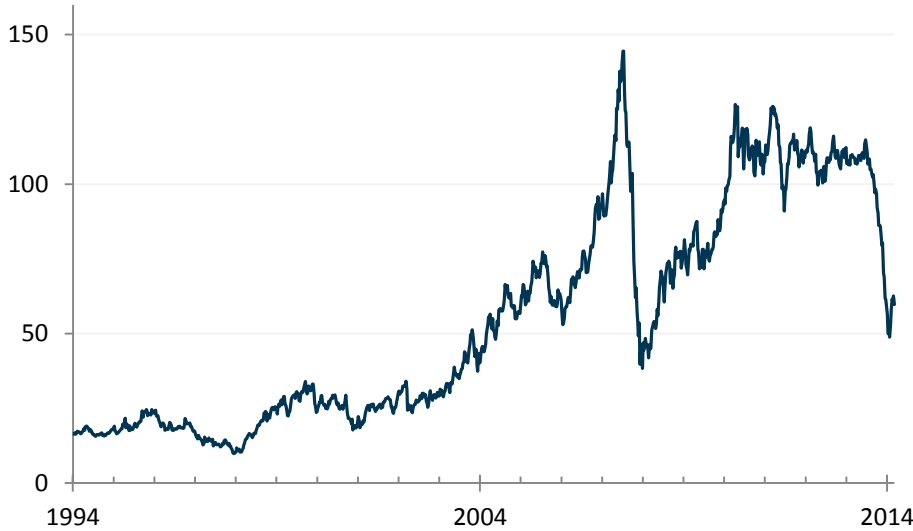
Source: PSR, Bloomberg

Phillip Securities Research Pte Ltd
 (+65 6531 1240)
 research@phillip.com.sg

Lower crude oil prices → Good for airlines, right?

Crude oil prices have declined from the low 110 dollar/barrel range in June 2014 to a low in January 2015. Crude oil prices have rebounded off the bottom, but remain nearly half the level they were nine months ago.

Figure: Brent crude oil price (US\$/bbl)

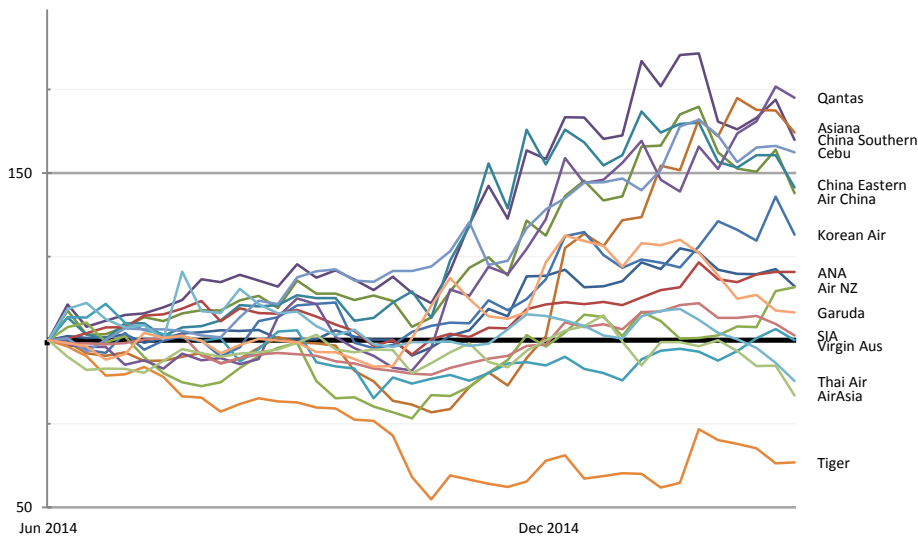


Source: Bloomberg

Lower fuel prices = better for airlines

Fuel is a large percent of company's operating costs (eg, fuel was 37.7% of Singapore Airlines' 3FY15 operating expenses). So, common wisdom is that airlines are the prime beneficiaries of lower crude oil prices. But how positively have they reacted? The following chart shows airline price performance indexed to nine months ago when crude oil prices were in the low 110 dollar range and translated into US dollars. In general, airlines have reacted positively to the lower energy prices.

Figure: Asia-Pacific airline share price performance (in US dollars, 100=nine months ago)



Source: Bloomberg, PSR

How have profits reacted to lower energy prices?

Airlines are an interesting business to analyze. If the planes are too empty, they lose money. If they are too full, then they are turning away customers who would otherwise fly on their planes. But managements' challenge is generally more focused on downside risk. Airlines need to operate efficiently to keep costs low. Airlines generally hedge some of their fuel price exposure, but their policies vary by company.

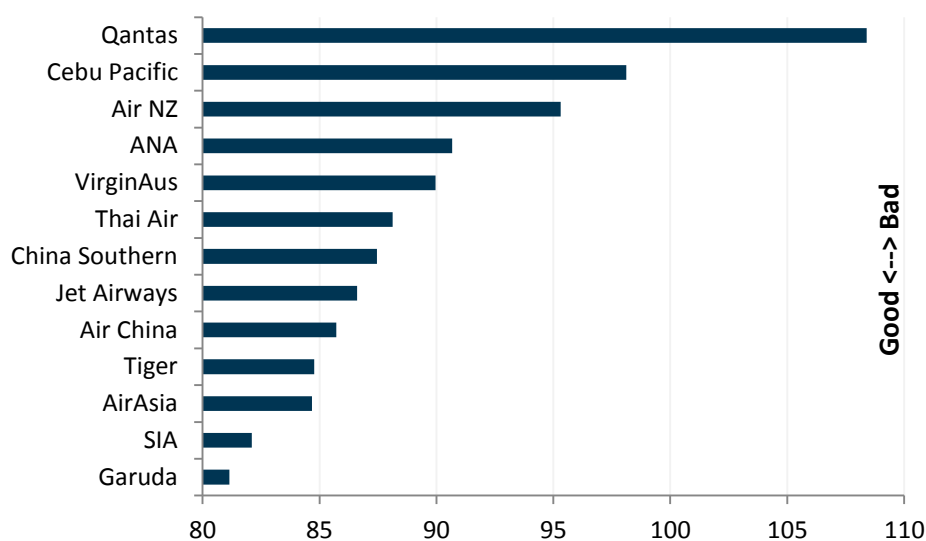
Lower energy prices: positive impact not yet reported in corporate results

The drop in energy prices was in 4Q14, so realistically one can only expect the impact to happen in 1Q15 and, to a lesser extent, 2Q15. The 4Q14 results still reflected a time when energy prices were in the 100s of dollars per barrel.

How investors should look at future operational performance?

One can analyze airlines by dividing their expenses by their passenger capacity. This is called the "break-even load factor". We reduce the population of airlines we look at because not all airlines report operational data and some companies have large accounting adjustments (eg, revaluation of dollar-denominated debt). The below chart show the 2013 break-even load factor of airline. One can see that airline run the spectrum of operational efficiency. Notoriously inefficient Qantas had a break-even load factor above 100%, whereas known efficiency experts AirAsia (due to adherence to low-cost carrier business model) and Singapore Airlines (due to reliance on long-haul flights/premium service/premium pricing). However, you might be surprised to see how efficient Garuda (GIAA IJ, Not rated). In general, one should see these break-even load factors decline over the next two quarters thanks to the positive impact of lower fuel prices.

Figure: Average 2013 Asia-Pacific airline break-even load factor (%)



Source: Bloomberg. Note: calculated by taking simple average of interim break-even load factor.

Ugh... airlines stocks

Over the past two decades of marketing to various institutional investors, we have noted that airline investors can be lumped into two different categories: 1) those who hate investing in airlines and 2) those who are begrudgingly forced to invest in airlines because they are benchmarked. If you look at the group of publicly listed airlines below, you can see a reason why. One can see the annualized returns for almost all the stocks (excluding dividends) is negative to low single digit annualized returns. This group also benefit from “survivorship-bias”, which means that it already excludes those airlines that have already delisted or gone bankrupt (eg, Malaysian Airlines, Japan Airlines, Skymark) and scores of airlines that were private and never came public before going bankrupt. This list also excludes unlisted national carriers that may have less pressure to report profits (eg, Air India, Philippine Air, Pakistan International Airlines, Cambodia Angkor Air, Vietnam Airlines, Lao Airlines). In other words, it is hard getting rich being a long-term investor in airlines.

“If you want to be a millionaire, start with a billion dollars and launch a new airline.”

- Sir Richard Branson

Asia-Pacific airlines stock price returns (dollarized)

| Airlines | Since | CAGR |
|----------------|-----------|--------|
| Air NZ | 28-Dec-01 | 9.1 |
| AirAsia | 19-Nov-04 | 7.6 |
| Air China | 17-Dec-04 | 7.1 |
| China Eastern | 07-Feb-97 | 4.9 |
| Korean Air | 10-Feb-95 | 2.7 |
| SIA | 30-Dec-94 | 2.2 |
| Cathay Pacific | 30-Dec-94 | 1.9 |
| Qantas | 04-Aug-95 | 1.8 |
| Asiana | 24-Dec-99 | 1.8 |
| China Southern | 01-Aug-97 | 0.7 |
| ANA | 30-Dec-94 | (6.7) |
| Cebu | 29-Oct-10 | (8.0) |
| Thai Air | 30-Dec-94 | (8.2) |
| Virgin Aus | 05-Dec-03 | (10.8) |
| Jet Airways | 11-Mar-05 | (12.4) |
| Garuda | 04-Mar-11 | (13.0) |
| Spicejet | 07-May-10 | (22.4) |
| Tiger | 22-Jan-10 | (22.5) |

Source: Bloomberg

Q: When do you invest in airlines? A: When in crisis.

Poor long-term performance does not mean that one should not invest in airlines. On the contrary, there are many opportunities to invest in airlines. The following few charts show performance of ASEAN airlines as an example of the broader market. The chart is shown on a logarithmic scale and indexed to 100 for today. One should note that some airlines are exceptionally volatile with stocks routinely being multi-baggers or performing poorly, depending on when and what airline. Flag carriers MAS and Thai Airlines have been exceptionally volatile over the past 20 years as they neared bankruptcy and were bailed out. But even less volatile/high quality stocks like Singapore Airlines represented a great investment opportunity after the Asian Currency Crisis, SARS, and the Global Credit Crisis. In summary, the best times to invest in airlines are when they are in crisis. The challenge is to make sure that they survive the crisis.

ASEAN airlines stock price performance (dollarized, 100 = today)


Source: Bloomberg, PSR

Stock recommendations

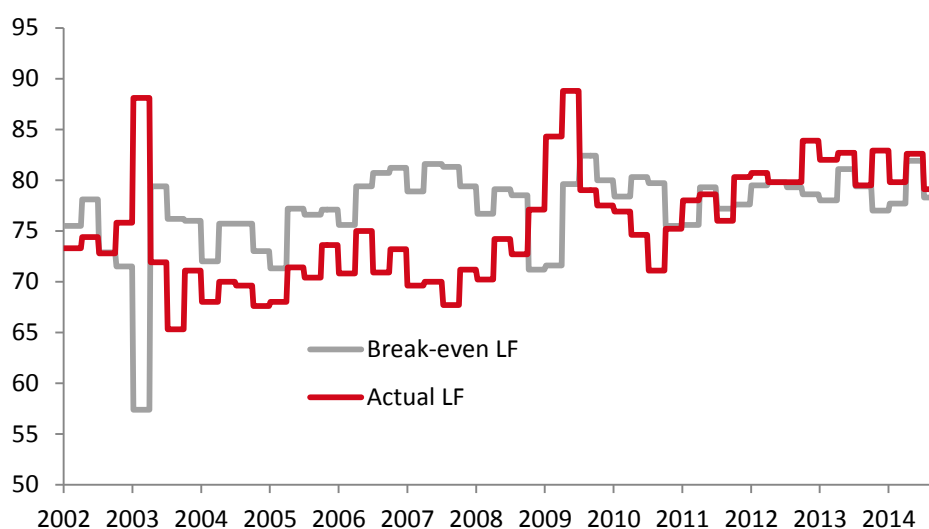
We do not have formal coverage on any airline stocks in Singapore.

However, we highlight that Air Asia (AIRA MK) is in its own crisis after its airliner QZ8501 crashed into the Java sea on 28 December 2014, the third Malaysia-related airline to crash within six months (MH370: missing on 8 March 2014 over southern Indian Ocean, MH17: shot down over Ukraine 17 July 2014).

Tiger Airways (TGR SP, Not rated) is also emerging from its own crisis, needing recapitalization from its equity holders (which includes Singapore Airlines) to remain financially solvent. We do not have an investment recommendation on Tiger Airways, nor will we forecast whether we think the company will be solvent in 10 years.

We do not have coverage of Singapore Airlines (SIA SP, Not rated), but we do note that its airlines break-even load factors and actual load factors are near the average of the higher end of the range of the past 13 years. In summary, its performance appears “normal”.

Singapore Airlines: break-even and actual passenger load factors



Source: Bloomberg

Contact Information (Singapore Research Team)

| | | |
|--|---|---|
| Management Chan Wai Chee (CEO, Research - Special Opportunities) | yebo@phillip.com.sg | Research Operations Officer Jaelyn Chin chinjn@phillip.com.sg |
| Macro Equities Soh Lin Sin sohls@phillip.com.sg Bakhteyar osama@phillip.com.sg Osama | Market Analyst Equities Kenneth Koh kennethkohwk@phillip.com.sg | US Equities Wong Yong Kai wongyk@phillip.com.sg |
| Finance Offshore Marine Benjamin Ong benjaminongcw@phillip.com.sg | Real Estate Caroline Tay carolinetavy@phillip.com.sg | REITs Dehong Tan tandh@phillip.com.sg |
| Telecoms Technology Colin Tan colintanwh@phillip.com.sg | Transport & Logistics Richard Leow, CFTe richardleowwt@phillip.com.sg | |

Contact Information (Regional Member Companies)

| | | |
|--|--|---|
| SINGAPORE Phillip Securities Pte Ltd Raffles City Tower 250, North Bridge Road #06-00 Singapore 179101 Tel +65 6533 6001 Fax +65 6535 6631 Website: www.poems.com.sg | MALAYSIA Phillip Capital Management Sdn Bhd B-3-6 Block B Level 3 Megan Avenue II, No. 12, Jalan Yap Kwan Seng, 50450 Kuala Lumpur Tel +603 2162 8841 Fax +603 2166 5099 Website: www.poems.com.my | HONG KONG Phillip Securities (HK) Ltd 11/F United Centre 95 Queensway Hong Kong Tel +852 2277 6600 Fax +852 2868 5307 Websites: www.phillip.com.hk |
| JAPAN Phillip Securities Japan, Ltd. 4-2 Nihonbashi Kabuto-cho Chuo-ku, Tokyo 103-0026 Tel +81-3 3666 2101 Fax +81-3 3666 6090 Website: www.phillip.co.jp | INDONESIA PT Phillip Securities Indonesia ANZ Tower Level 23B, Jl Jend Sudirman Kav 33A Jakarta 10220 – Indonesia Tel +62-21 5790 0800 Fax +62-21 5790 0809 Website: www.phillip.co.id | CHINA Phillip Financial Advisory (Shanghai) Co Ltd No 550 Yan An East Road, Ocean Tower Unit 2318, Postal code 200001 Tel +86-21 5169 9200 Fax +86-21 6351 2940 Website: www.phillip.com.cn |
| THAILAND Phillip Securities (Thailand) Public Co. Ltd 15th Floor, Vorawat Building, 849 Silom Road, Silom, Bangrak, Bangkok 10500 Thailand Tel +66-2 6351700 / 22680999 Fax +66-2 22680921 Website: www.phillip.co.th | FRANCE King & Shaxson Capital Limited 3rd Floor, 35 Rue de la Bienfaisance 75008 Paris France Tel +33-1 45633100 Fax +33-1 45636017 Website: www.kingandshaxson.com | UNITED KINGDOM King & Shaxson Capital Limited 6th Floor, Candlewick House, 120 Cannon Street, London, EC4N 6AS Tel +44-20 7426 5950 Fax +44-20 7626 1757 Website: www.kingandshaxson.com |
| UNITED STATES Phillip Futures Inc 141 W Jackson Blvd Ste 3050 The Chicago Board of Trade Building Chicago, IL 60604 USA Tel +1-312 356 9000 Fax +1-312 356 9005 Website: www.phillipusa.com | AUSTRALIA Phillip Capital Limited Level 12, 15 William Street, Melbourne, Victoria 3000, Australia Tel +61-03 9629 8288 Fax +61-03 9629 8882 Website: www.phillipcapital.com.au | SRI LANKA Asha Phillip Securities Limited No-10 Prince Alfred Tower, Alfred House Gardens, Colombo 03, Sri Lanka Tel: (94) 11 2429 100 Fax: (94) 11 2429 199 Website: www.ashaphillip.net |
| INDIA PhillipCapital (India) Private Limited No.1, 18th Floor Urmi Estate 95, Ganpatrao Kadam Marg Lower Parel West, Mumbai 400-013 Maharashtra, India Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969 Website: www.phillipcapital.in | TURKEY PhillipCapital Menkul Degerler Dr. Cemil Bengü Cad. Hak Is Merkezi No. 2 Kat. 6A Caglayan 34403 Istanbul, Turkey Tel: 0212 296 84 84 Fax: 0212 233 69 29 Website: www.phillipcapital.com.tr | DUBAI Phillip Futures DMCC Member of the Dubai Gold and Commodities Exchange (DGCX) Unit No 601, Plot No 58, White Crown Bldg, Sheikh Zayed Road, P.O.Box 212291 Dubai-UAE Tel: +971-4-3325052 / Fax: + 971-4-3328895 Website: www.phillipcapital.in |

Important Information

This report is prepared and/or distributed by Phillip Securities Research Pte Ltd ("Phillip Securities Research"), which is a holder of a financial adviser's licence under the Financial Advisers Act, Chapter 110 in Singapore.

By receiving or reading this report, you agree to be bound by the terms and limitations set out below. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

The information and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this report has been obtained from public sources which Phillip Securities Research believes to be reliable. However, Phillip Securities Research does not make any representation or warranty, express or implied that such information or Research is accurate, complete or appropriate or should be relied upon as such. Any such information or Research contained in this report is subject to change, and Phillip Securities Research shall not have any responsibility to maintain or update the information or Research made available or to supply any corrections, updates or releases in connection therewith.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this report are as of the date indicated and are subject to change at any time without prior notice.

Past performance of any product referred to in this report is not indicative of future results.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. This report should not be relied upon exclusively or as authoritative, without further being subject to the recipient's own independent verification and exercise of judgment. The fact that this report has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this report is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this report involve significant risks and may not be suitable for all investors, and that any decision to enter into transactions involving such products should not be made, unless all such risks are understood and an independent determination has been made that such transactions would be appropriate. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of such risks.

Nothing in this report shall be construed to be an offer or solicitation for the purchase or sale of any product. Any decision to purchase any product mentioned in this report should take into account existing public information, including any registered prospectus in respect of such product.

Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may provide an array of financial services to a large number of corporations in Singapore and worldwide, including but not limited to commercial / investment banking activities (including sponsorship, financial advisory or underwriting activities), brokerage or securities trading activities. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this report, and may have performed services for or solicited business from such issuers. Additionally, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have provided advice or investment services to such companies and investments or related investments, as may be mentioned in this report.

Phillip Securities Research or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report may, from time to time maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation in respect of the foregoing. Investments will be denominated in various currencies including US dollars and Euro and thus will be subject to any fluctuation in exchange rates between US dollars and Euro or foreign currencies and the currency of your own jurisdiction. Such fluctuations may have an adverse effect on the value, price or income return of the investment.

To the extent permitted by law, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold an interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this report. Accordingly, information may be available to Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, which is not reflected in this report, and Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may, to the extent permitted by law, have acted upon or used the information prior to or immediately following its publication. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited its officers, directors, employees or persons involved in the issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this report.

The information, tools and material presented herein are not directed, intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution, publication, availability or use would be contrary to the applicable law or regulation or which would subject Phillip Securities Research to any registration or licensing or other requirement, or penalty for contravention of such requirements within such jurisdiction.

This report is intended for general circulation only and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. The products mentioned in this report may not be suitable for all investors and a person receiving or reading this report should seek advice from a professional and financial adviser regarding the legal, business, financial, tax and other aspects including the suitability of such products, taking into account the specific investment objectives, financial situation or particular needs of that person, before making a commitment to invest in any of such products.

This report is not intended for distribution, publication to or use by any person in any jurisdiction outside of Singapore or any other jurisdiction as Phillip Securities Research may determine in its absolute discretion.

IMPORTANT DISCLOSURES FOR INCLUDED RESEARCH ANALYSES OR REPORTS OF FOREIGN RESEARCH HOUSES

Where the report contains research analyses or reports from a foreign research house, please note:

- (i) recipients of the analyses or reports are to contact Phillip Securities Research (and not the relevant foreign research house) in Singapore at 250 North Bridge Road, #06-00 Raffles City Tower, Singapore 179101, telephone number +65 6533 6001, in respect of any matters arising from, or in connection with, the analyses or reports; and
- (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, Phillip Securities Research accepts legal responsibility for the contents of the analyses or reports.