

# **Oversea-Chinese Banking Corp Ltd**

### Further upside for NIM expansion

### SINGAPORE | BANKING | FY18 RESULTS

- FY18 revenue and PATMI missed our estimates by 3.5% and 5.2% respectively due to a decline in net gains from investment securities and other income.
- FY18 NIM met our expectations by expanding 5 bps YoY to 1.70%.
- FY18 loans grew 8.6% YoY, driven by Building & Construction (+51.2% YoY) and Greater China loans (+8.9% YoY).
- FY18 NPL ratio remained stable at 1.5% (FY17: 1.4%); while credit costs normalised to 11 bps (FY17: 27 bps).
- Proposed final dividend increased to 23 cents per share, bringing full-year dividend to 43 cents per share (FY17: 37 cents per share).
- Maintain BUY with an unchanged target price of S\$13.70.

#### Results at a glance

(SGD mn)	FY18	FY17	YoY%	Comments
Netinterestincome	5,890	5,423	9%	NIM rose 5bps YoY to 1.70%. Loans grew 9%
Fees & Comm	2,030	1,953	4%	Underpinned by growth in WM, loan and trade-related fees. 4Q18 net fee income fell QoQ mainly due to lower wealth management fees as a result of subdued investment sentiments.
Insurance	912	918	-1%	
Other NII	869	1,234	-30%	S\$406m decline in net gains from investment securities and other income, substantial gains from GEH's divestment of investments last year.
Total income	9,701	9,528	2%	
Expenses	4,214	4,043	4%	FY18 CIR was higher YoY at 43.4% as compared to 42.4% in FY17.
Allowances and others	390	775	-50%	Allowances amounted to S\$288mn and fell 57% YoY due to provisions set aside for O&G sector last year.
PATMI	4,492	4,045	11%	

Source: Company, PSR

#### **The Positives**

+ FY18 NIM expanded 5 bps YoY to 1.70%, but remained flat QoQ; meeting the full year guidance. NIM expansion was boosted by higher margins in Singapore, Malaysia and Greater China. Loan, interbank and other assets yields surged 41 bps, 123 bps and 32 bps YoY while the cost of funds increased 50 bps YoY. Given the recent dovish tone on future rate hikes by the U.S. Federal Reserve, we lower our NIM estimates for FY19e from 1.8% to 1.74%. We expect mortgage repricing to support NIM expansion.

+ FY18 loan growth was the highest in four years at 8.6% YoY, in line with high-single-digit guidance. After enjoying three quarters of c.16% YoY loan growth, Greater China's 4Q18 loan growth slowed to 8.9% YoY. Loans expanded 8.3% YoY in Singapore and 5.0% YoY in Malaysia. Housing loans contracted for the second consecutive quarter due to the onset of property cooling measures. OCBC's LDR declined to 86.4% (3Q18: 88.5%) due to the shoring up of deposits at year end which resulted in a flat QoQ NIM. We believe that the sluggish global economic growth and slowdown in Singapore's mortgage loan growth will make it challenging for loan growth in 2019. Hence we lowered our FY19e loan growth estimates from 7.5% to 4.4%, in line with guidance of low-mid single-digit growth.



#### 25 February 2019

### **BUY (Maintained)**

LAST CLOSE PRICE	SGD 11.39
FORECAST DIV	SGD 0.45
TARGET PRICE	SGD 13.70
TOTAL RETURN	24.2%

#### **COMPANY DATA**

BLOOMBERGTICKER	OCBC SP
O/S SHARES (MN):	4,249
MARKET CAP (USD mn / SGD mn):	35859 / 48398
52 - WK HI/LO (SGD):	14.04 / 10.36
3M Average Daily T/O (mn):	4.42

#### **MAJOR SHAREHOLDERS (%)**

Selat Pte Limited	10.9%
Lee Foundation Singapore	4.3%
Vanguard Group Inc	2.7%

#### PRICE PERFORMANCE (%)

	1M T H	3 M T H	YTD
COMPANY	(10)	5.5	1.2
STIRETURN	2.6	7.9	6.7

#### PRICE VS. STI



Source: Bloomberg, PSR

#### **KEY FINANCIALS**

Y/E Dec (SGD mn)	FY 17	FY 18	FY 19 e	FY20e
Total Income	9,528	9,701	10,433	10,979
Op. Profit	4,710	5,097	5,532	5,974
NPAT, adj.	4,045	4,492	4,881	5,279
EPS (SGD)	1.00	1.06	1.15	1.25
PER, adj. (x)	11.4	10.8	9.9	9.1
P/BV, x	1.3	1.2	1.1	1.1
ROE	10.9%	11.3 %	11.7%	12.1%

Source: Bloomberg, Company, PSR

Valuation Method:

Gordon Growth Model (COE: 9%, g: 2.5%)

Tin Min Ying (+65 6212 1853)

Research Analyst

tinmy@phillip.com.sg

Ref. No.: SG2019\_0037





+ NPL stable at 1.5%; Credit Costs normalised to 11 bps. Allowances amounted to \$\$288mn and fell 57% YoY due to provisions set aside for O&G sector last year.

#### The Negatives

- FY18 non-interest income fell 7.2% YoY due to a \$406mn declined in net gains from investment securities and other income. Great Eastern Holdings (GEH) sustained a marked to market loss of almost \$\$100mn in the investments carried. Also, there was investment gain of almost \$\$300mn last year, and there was no such substantial gain in FY18.
- 4Q18 provisions spiked 318.4% QoQ. Majority of the increase was due to higher NPL formation booked in Hong Kong and a corporate account restructuring in Malaysia, which they do not anticipate further losses. OCBC had expected more investments by oil majors following the higher oil prices would increase which should result in a higher utilisation rate and subsequently higher charter rates. However, the assumption did not realise, and the cash-flow projections that rely on better charter rates did not increase. Hence OCBC reassessed its O&G portfolio and took in specific provisions in 4Q18.
- 4Q18 CIR spiked to 45.9% (4Q17: 40.8%). The increase in CIR was due to a fall in trading income led by unrealised marked to market losses from GEH's investment portfolio.

#### Outlook

We continue to be positive on the NIM expansion in 2019, but we tone down our FY19e NIM expectations due to the US Federal Reserve tapering off rate hikes. Attention is to be directed on the property sector to support loan growth in FY19. We expect overall loan growth in FY19 to be slower than FY18 due to trade tensions, property cooling measures and rising interest rates. PATMI is stable at a mid-high single digit growth rate; and any further upside will depend on capital markets improving for investment and wealth management business turn around. We believe that heavier reliance on interest income should provide stability and predictability to revenue.

#### **Investment Actions**

We maintain BUY with an unchanged target price of S\$13.70.

#### Valuation: Gordon Growth Model

Item	Description	Value
R <sub>f</sub>	Risk-free rate	2.6%
Ε	Equity-risk premium	5.5%
В	Beta	1.2
COE	Cost of Equity	9.2%
ROE	FY19e Return on Equity	11.7%
g	Terminal growth rate	2.5%
(ROE-g) (COE-g)	FY19e Target Price to Book	1.4
	FY19e BVPS, S\$	10.1
	FY19e Valuation, S\$	13.7

Figure 1: 2019e Guidance vs PSR estimates

Assumptions	OCBC	PSR
NIM (%)	1.70% - 1.75%	1.74%
Loans growth (%)	Low-mid single digit	4.4%
ROE (%)	12%	11.7%
Credit cost (bps)	12-15 bps	14
CIR (%)	44%	42.6%

Source: Company, PSR

#### **List of Abbreviations**

WM - Wealth Management

IBG - Institutional Banking Group

CBG - Consumer Banking Group

NII - Net Interest Income

Non-II - Non-Interest Income

NIM - Net Interest Margin

LDR – Loan to Deposit Ratio

NPL - Non-performing Loans

CASA - Current Account, Savings Account

IB - Investment Banking

O&G - Oil and Gas

SP - specific provisions

GP - general provisions

AUM - Asset Under Management

CIR - Cost-to-income ratio



Figure	2.	Revenue	hrea	kdown

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Netinterestincome	1,520	1,424	6.7%	1,505	1.0%
Net fee and comm inc	474	491	-3.5%	502	-5.6%
Profits from insurance	247	310	-20.3%	184	34.2%
Other non-interest inc	109	415	-73.7%	353	-69.1%
Allowance	(205)	(178)	15.2%	(49)	318.4%
Total	2,350	2,640	-11.0%	2,544	-7.6%

NII was supported by 8.6% YoY while NIM remained flat QoQ at 1.72% in 4Q18.

Figure 3: Fee and commission income

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Brokerage	21	28	-25.0%	20	5.0%
Wealth management	206	236	-12.7%	238	-13.4%
Fund management	28	28	0.0%	28	0.0%
Credit card	91	85	7.1%	92	-1.1%
Loan-related	72	70	2.9%	81	-11.1%
Trade and remittances	62	56	10.7%	62	0.0%
Guarantees	4	5	-20.0%	5	-20.0%
Investment Banking	25	26	-3.8%	21	19.0%
Service charges	25	21	19.0%	20	25.0%
Others	9	10	-10.0%	13	-30.8%
Fee and commission expense	(69)	(74)	-6.8%	(78)	-11.5%
Total Fee and Comm	543	565	-3.9%	580	-6.4%

WM fee income fell as high net worth individuals are in a risk-off mode in a volatile market condition.

Figure 4: Other non-interest income

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Net trading income	9	99	-90.9%	213	-95.8%
Net gain on Invt securities	2	249	-99.2%	4	-50.0%
Disposal of subsi/associate	3	21	-85.7%	-	nm
Disposal of properties	6	1	500.0%	7	-14.3%
Others	54	11	390.9%	8	575.0%
Total other non int Inc	74	381	-80.6%	232	-68.1%

In FY17, there was an investment gain of almost \$300m. In FY18 there was no such substantial gain.

Figure 5: Loans by Industries

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Agri, mining & quarrying	8,894	8,073	10.2%	10,056	-11.6%
Manufacturing	16,703	12,501	33.6%	16,399	1.9%
Building and construction	53,572	35,436	51.2%	51,463	4.1%
Housing loans	64,753	64,542	0.3%	65,553	-1.2%
General commerce	34,664	29,010	19.5%	34,959	-0.8%
Tpt, storage & comms	13,917	11,568	20.3%	13,832	0.6%
FIs, invt & holding co	22,144	37,838	-41.5%	20,801	6.5%
Professionals & Pri inv	30,373	28,704	5.8%	30,698	-1.1%
Others	12,685	9,649	31.5%	12,815	-1.0%
Total loans	257,705	237,321	8.6%	256,576	0.4%

Local domestic loans particularly on property will still provide a swift slight growth in 2019; while mortgage loan growth will be pressured by the property cooling measures.

Figure 6: Loans by currencies

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Singapore dollar	91,640	85,485	7.2%	90,067	1.7%
US dollar	67,248	61,445	9.4%	67,907	-1.0%
Malaysian ringgit	20,870	20,481	1.9%	20,942	-0.3%
Indonesian rupiah	8,695	7,795	11.5%	8,437	3.1%
Others	35,195	24,478	43.8%	28,801	22.2%
Hong Kong Dollar	4,502	33,011	-86.4%	35,714	-87.4%
Renminbi	29,555	4,626	538.9%	4,708	527.8%
Total loans	257,705	237,321	8.6%	256,576	0.4%

Figure 7: Operating profit by Business segment

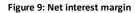
Figure 7: Operating profit by Business segments						
SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)	
Global Consumer/ Private Banking	303	285	6.3%	316	-4.1%	
Global Corporate/ Investment Banking	343	258	32.9%	472	-27.3%	
Global Treasury and Markets	109	95	14.7%	142	-23.2%	
Insurance	129	482	-73.2%	239	-46.0%	
OCBC Wing Hang	138	83	66.3%	135	2.2%	
Others	19	156	-87.8%	96	-80.2%	
Total Profit	1.041	1.359	-23.4%	1.400	-25.6%	

Figure 8: Profit before tax by Geographical segments

SGD mn	4Q18	4Q17	YoY (%)	3Q18	QoQ (%)
Singapore	602	798	-24.6%	802	-24.9%
Malaysia	213	111	91.9%	230	-7.4%
Indonesia	117	221	-47.1%	123	-4.9%
Greater China	124	216	-42.6%	315	-60.6%
Other Asia Pacific	36	44	-18.2%	33	9.1%
Rest of the World	34	(3)	-1233.3%	31	9.7%
Total NPBT	1,126	1,387	-18.8%	1,534	-26.6%

Source (Figure 2-8): Company, Phillip Securities Research





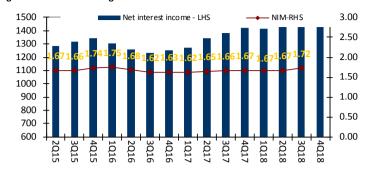


Figure 10: NonII/Total revenue

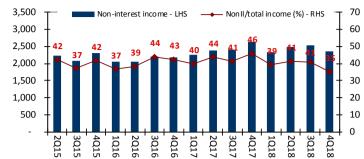


Figure 11: Efficiency ratio

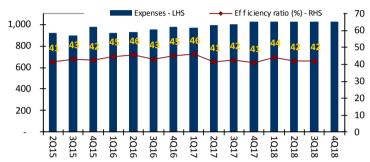


Figure 12: Net profit margin



Figure 13: Deposits, Loans, LDR

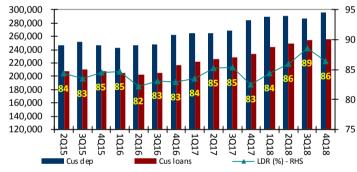


Figure 14: NPA, NPL

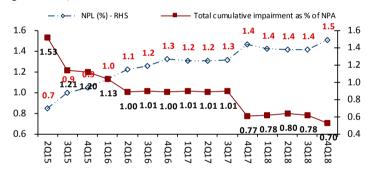


Figure 15: Growth in selected asset items

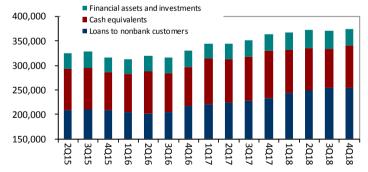


Figure 16: CAR

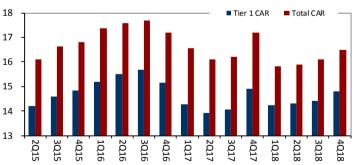


Figure 17: ROE and ROA

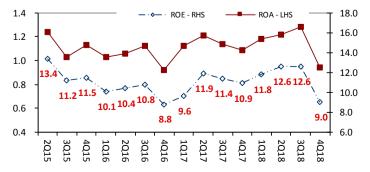


Figure 18: EPS and NBV

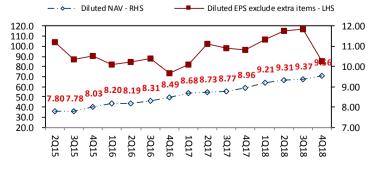




Figure 19: Profit before tax by geographical segment

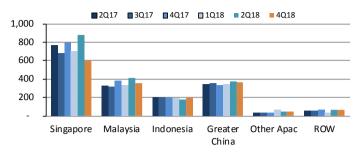


Figure 20: Operating profit by Business segment

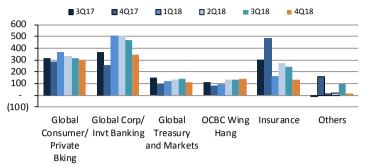


Figure 21: Net interest income trend



Figure 22: Fee and Commission trend

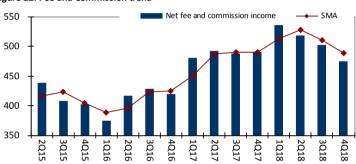


Figure 23: Other noninterest income trend

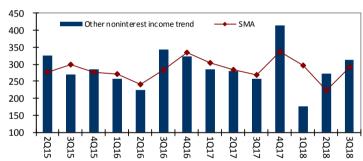
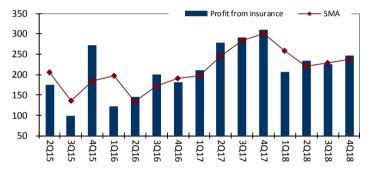


Figure 24: Profit from insurance



## **Financials**

Income	Statement
--------	-----------

Y/E Dec, SGD mn	FY16	FY17	FY18	FY19e	FY20e
Net Int Income	5,052	5,423	5,890	6,244	6,533
Fees and Commission	1,638	1,953	2,030	2,372	2,576
Other Non intincome	1,799	2,152	1,781	1,818	1,870
Total operating income	8,489	9,528	9,701	10,433	10,979
Operating expenses	3,789	4,043	4,214	4,442	4,613
Provisions	821	775	390	459	391
Operating profit	3,879	4,710	5,097	5,532	5,974
Associates & JVs	396	389	456	502	552
Profit Before Tax	4,275	5,099	5,553	6,034	6,526
Taxation	629	803	878	954	1,032
Profit After Tax	3,646	4,296	4,675	5,080	5,494
Non-controlling Interest	173	251	183	199	215
Net Income, reported	3,473	4,045	4,492	4,881	5,279
Net Income, adj.	3,473	4,045	4,492	4,881	5,279

#### **Balance Sheet**

Y/E Dec, SGD mn	FY16	FY17	FY18	FY19e	FY20e
Cash bal with central banks	16,559	19,594	18,748	30,511	38,035
Due from banks	39,801	49,377	39,035	37,668	38,046
Debt and equity securities	23,157	25,329	25,542	23,705	23,943
Loans and bills receivable	216,830	234,141	255,193	267,956	276,148
Life Assur. Fund Inv. Assets	61,973	73,927	76,867	79,173	81,548
Others	51,564	52,527	52,158	49,648	49,864
Total Assets	409,884	454,895	467,543	488,660	507,583
Due to banks	10,740	7,485	7,576	5,854	5,070
Due to non-bank customers	261,486	283,642	295,412	308,363	322,145
Life Assur. Fund Liabilities	61,962	73,755	74,928	77,176	79,491
Debts issued	19,947	32,235	30,272	35,779	36,924
Others	16,107	15,985	15,963	16,431	16,913
Total liabilities	370,242	413,102	424,151	443,603	460,543
Shareholder's equity	37,007	39,028	42,137	43,603	45,372
Non-controlling interest	2,635	2,765	1,255	1,454	1,669
Total Equity	39,642	41,793	43,392	45,057	47,040

### Per share data (SGD)

Y/E Dec, SGD mn	FY16	FY17	FY18	FY19e	FY20e
EPS, reported	0.83	1.00	1.06	1.15	1.25
EPS, adj.	0.83	1.00	1.06	1.15	1.25
DPS	0.36	0.37	0.43	0.45	0.49
BVPS	8.61	9.08	9.68	10.06	10.51
Dividend payout ratio (%)	43%	37%	41%	39%	39%

### Supplementary items

Y/E Dec, SGD mn	FY16	FY17	FY18	FY19e	FY20e
CET1 CAR (%)	14.7%	13.9%	14.0%	13.1%	13.1%
Tier 1 CAR (%)	15.2%	15.0%	14.8%	13.8%	13.8%
Total CAR (%)	17.2%	17.2%	16.5%	15.3%	15.3%

#### Valuation Ratios

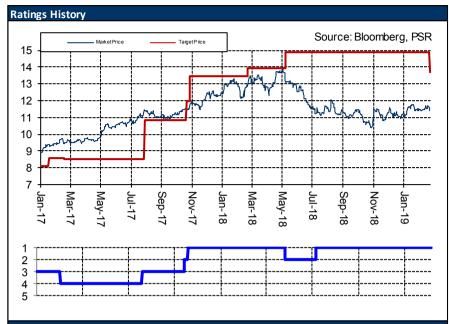
Y/E Dec, SGD mn	FY16	FY17	FY18	FY19e	FY20e
P/E (X), adj.	10.9	11.4	10.8	9.9	9.1
P/B (X)	1.0	1.3	1.2	1.1	1.1
Dividend Yield (%)	4.0%	3.2%	3.8%	4.0%	4.3%
Growth & Margins (%)					
Growth					
Netintincome	-2.6%	7.3%	8.6%	6.0%	4.6%
Non int income	-2.7%	24.4%	-10.9%	9.9%	6.1%
Pre provision operating profit	-2.7%	14.2%	0.0%	7.6%	5.2%
Operating income	-13.3%	25.8%	4.4%	8.5%	8.0%
Net income, reported	-11.0%	20.8%	7.1%	8.7%	8.2%
Net income, adj	-11.0%	20.8%	7.1%	8.7%	8.2%
Margins					
Net interest margin	1.67%	1.65%	1.70%	1.74%	1.77%
Key Ratios (%)					
ROE	10.0%	10.9%	11.3%	11.7%	12.1%
ROA	1.0%	1.1%	1.1%	1.2%	1.2%
RORWA	1.8%	2.1%	2.2%	2.3%	2.3%
Non-int/total income ratio	40.5%	43.1%	39.3%	40.2%	40.5%
Cost/income ratio	44.6%	42.4%	43.4%	42.6%	42.0%
Loan/deposit ratio	82.9%	82.5%	86.4%	86.9%	85.7%
NPL ratio	1.3	1.4	1.5	1.5	1.6

Source: Company, Phillip Securities Research (Singapore) Estimates

<sup>\*</sup>Forward multiples & yields based on current market price; historical multiples & yields based on historical market price.







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

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



#### **Contact Information (Singapore Research Team)**

Head of Research

Paul Chew - paulchewkl@phillip.com.sg

Research Admin

research@phillip.com.sg

Banking and Finance | Healthcare

Tin Min Ying - tinmy@phillip.com.sg

Natalie Ong - natalieongpf@phillip.com.sg

**US Equity** 

Edmund Xue - edmundxuejj@phillip.com.sg

Oil & Gas | Energy

Chen Guangzhi - chengz@phillip.com.sg

China/HK Equity

Zheng Jieyuan – zhengjy@phillip.com.sg

Telco | Technology

Alvin Chia - alvinchiawy@phillip.com.sg

REITs (Commercial, Retail, Healthcare) | Property

Tara Wong - tarawongsj@phillip.com.sg

#### 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

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

**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

UNITED STATES

**Phillip Capital 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 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

**CAMBODIA Phillip Bank Plc** Ground Floor of B-Office Centre,#61-64, Norodom Blvd Corner Street 306, Sangkat Boeung Keng Kang 1, Khan Chamkamorn, Phnom Penh, Cambodia Tel: 855 (0) 7796 6151/855 (0) 1620 0769 Website: www.phillipbank.com.kh

Website: www.poems.com.my **INDONESIA** 

**Contact Information (Regional Member Companies)** 

ΜΔΙΔΥΚΙΔ

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

**PT Phillip Securities Indonesia** 

Jl Jend Sudirman Kav 33A Jakarta 10220 - Indonesia Tel +62-21 5790 0800

ANZ Tower Level 23B,

Fax +62-21 5790 0809 Website: www.phillip.co.id

**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

AUSTRALIA

**Phillip Capital Limited** 

Level 10, 330 Collins Street Melbourne, Victoria 3000, Australia Tel +61-03 8633 9803 Fax +61-03 8633 9899

 $Website: \underline{www.phillipcapital.com.au}\\$ 

**TURKEY** 

PhillipCapital Menkul Degerler

Dr. Cemil Bengü Cad. Hak Is Merkezi No. 2 Kat. 6A Caglavan 34403 Istanbul, Turkey Tel: 0212 296 84 84 Fax: 0212 233 69 29

Website: www.phillipcapital.com.tr

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

**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

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

SRI LANKA

Asha Phillip Securities Limited

No. 60, 5th Lane, Colombo 3, Sri Lanka Tel: (94) 11 2429 100 Fax: (94) 11 2429 199

Website: www.ashaphillip.net

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



#### 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 license 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.