

Crude oil – Is the bottom found?

2 March 2016

Barnabas Gan

Global Treasury Research & Strategy

Executive Summary

The fall in crude oil prices may be overdone

- Crude oil has seen some rally in the last week, with WTI and Brent rallying to where it first started off in 2016. To date, the fall in crude prices have already been a twenty months phenomenon.
- Still, tell-tale signs of a bottom may be seen from (1) higher and steeper forward curves, (2) healthier speculative positions, and (3) healthy demand outlook in China, Europe and US.

Global oil production may fall eventually

- Although upside in crude oil production remains, especially from Iran (and maybe Libya should domestic affairs improve), overall production adjustments from OPEC and major non-OPEC producers may come to pass.
- Thus, should we assume a 5% cut in oil production in OPEC in its June meeting, and a gradual fall in US oil production to 8.8 mbpd¹ at end-2016, we may well see a fall in production by 1.3 mbpd by June 2016. This is in contrast with a 2.0 mbpd crude oil production surplus seen at end 2015.
- In addition, should Russia joins in with a production cut (rather than a production freeze), the production fall then will be magnified.

Price outlook

- We stick to our forecast for WTI and Brent to rally to an eventual \$50/bbl at end-2016. The bullish outlook is underpinned by our expectation for the crude oil market to rebalance further into the year.



OCBC Bank

Source: EIA, Bloomberg, OCBC

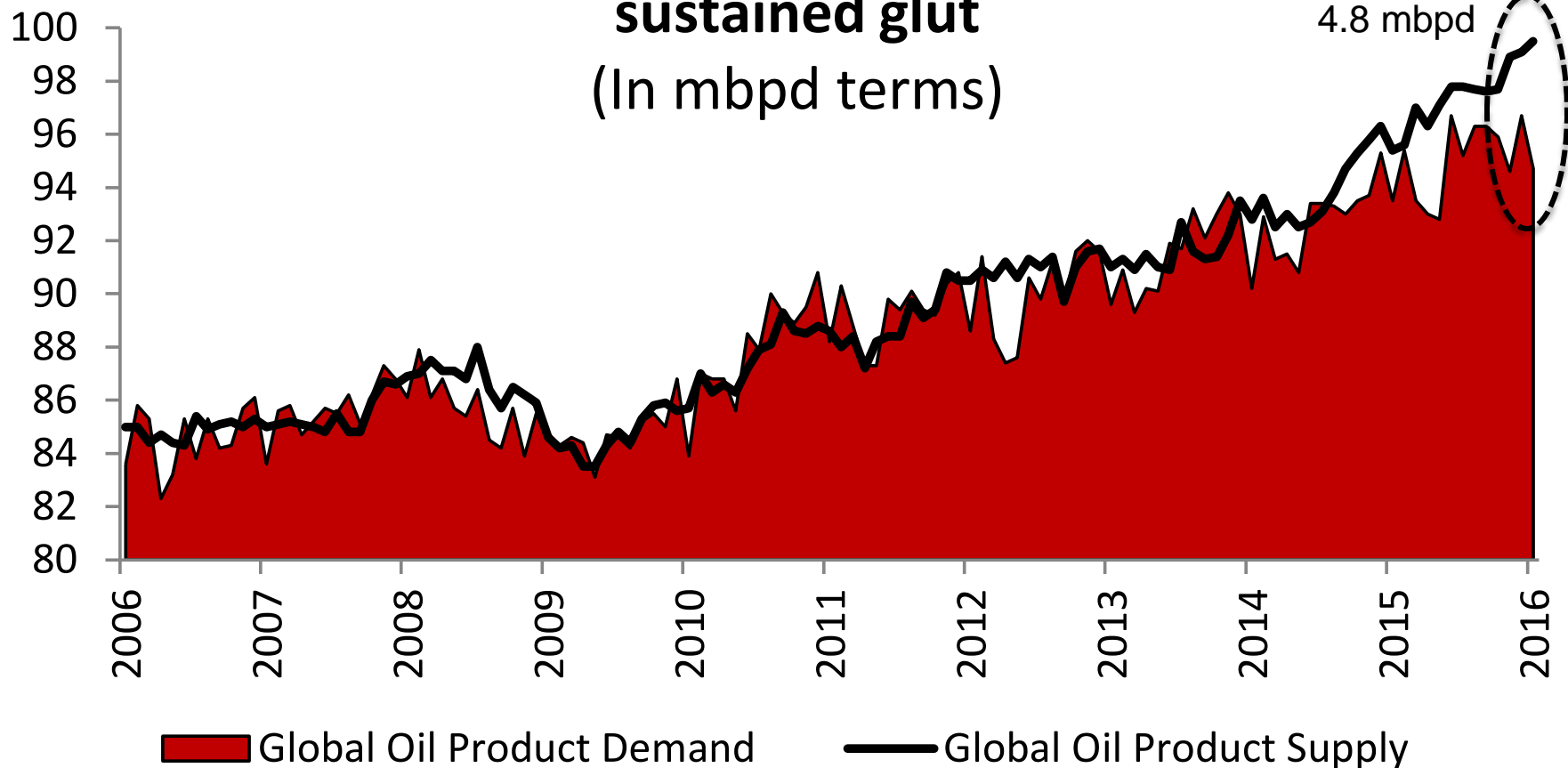
¹ OCBC forecast

Why are oil prices so low? – Overproduction!

**Global oil production and demand points to a
sustained glut**

(In mbpd terms)

Overproduction:
4.8 mbpd

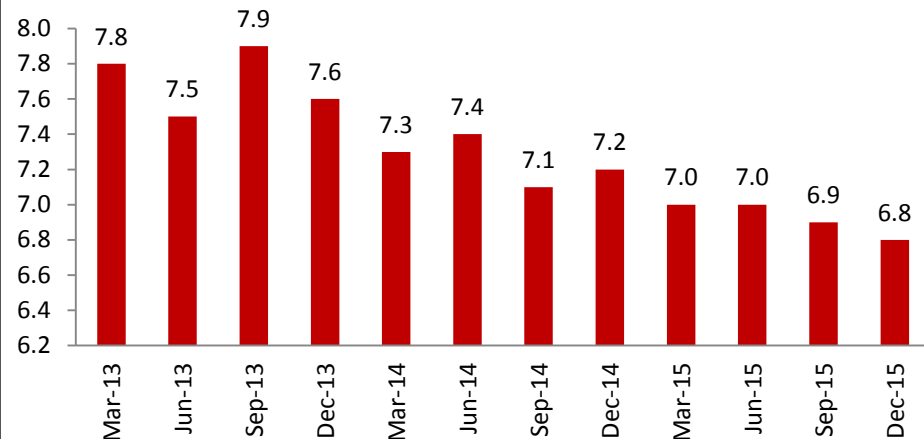


OCBC Bank

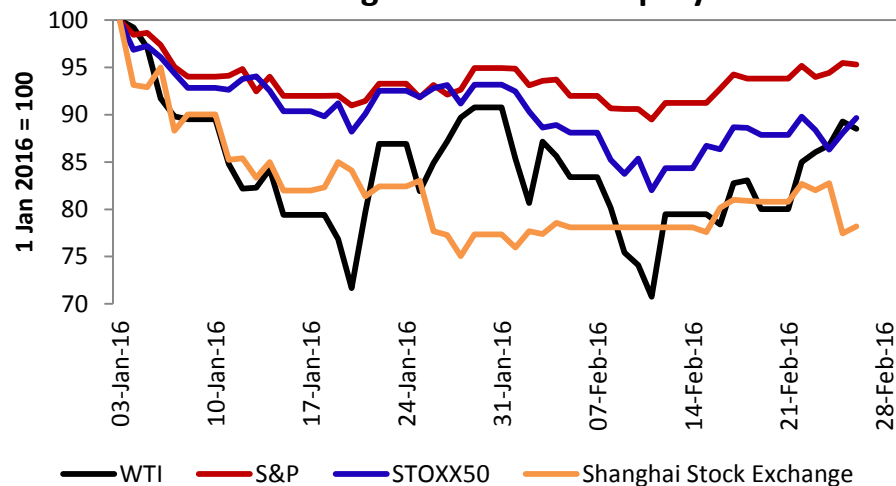
Source: Energy Intelligence Group (EIG), Bloomberg, OCBC

Why are oil prices so low? – Growth headwinds!

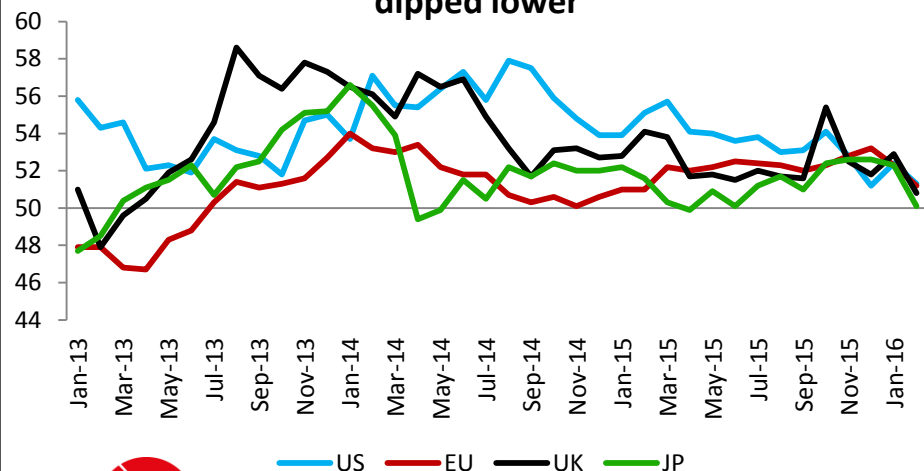
China's growth slowed gradually over the last three years



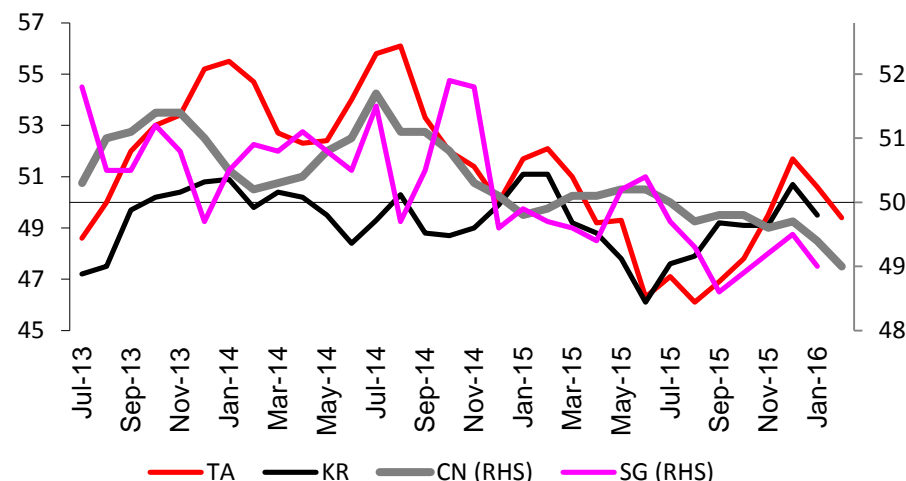
Crude oil fell together with the equity rout



Manufacturing PMI prints in developed markets dipped lower

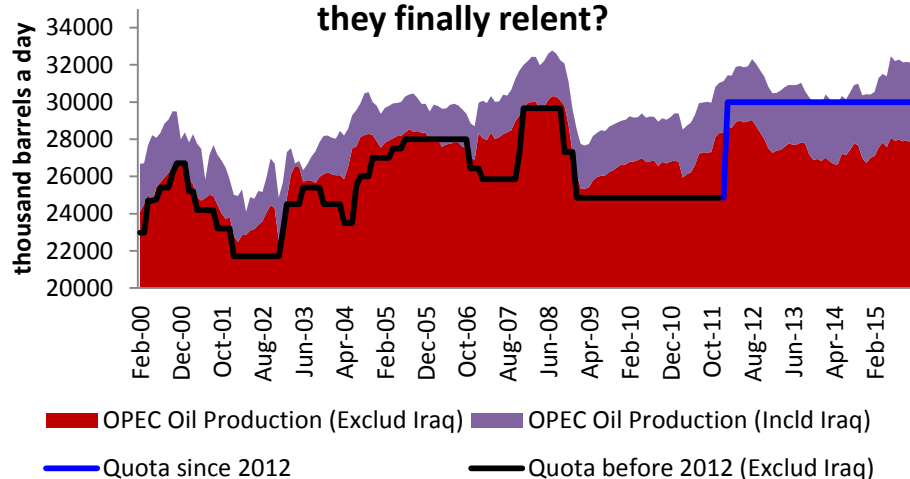


Manufacturing PMI prints in Asia back to sub-50

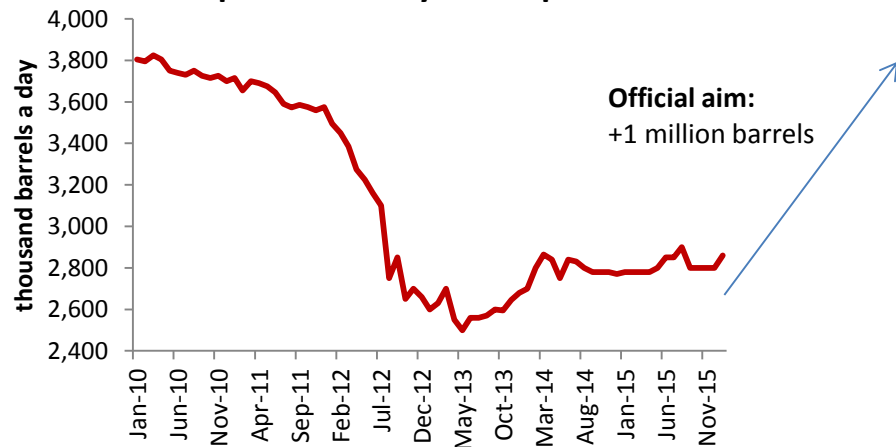


Why are oil prices so low? – Upside pdtn risk!

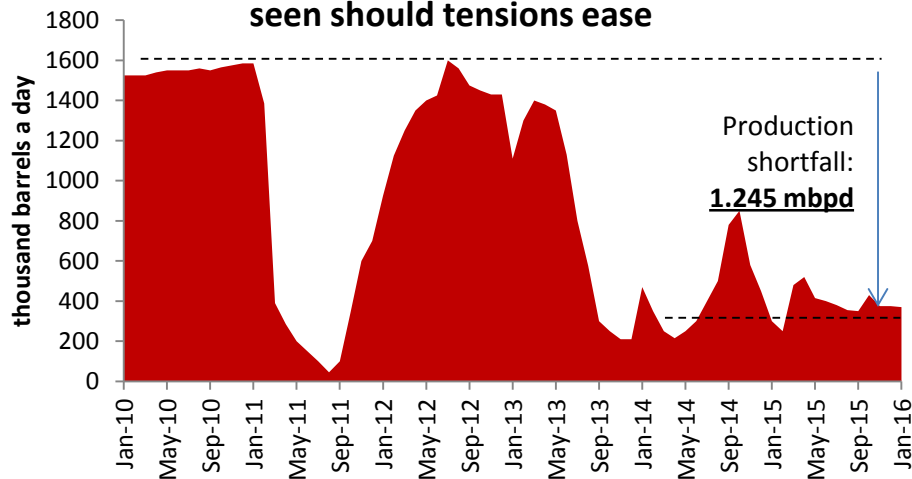
OPEC's production is adding to the glut. Will they finally relent?



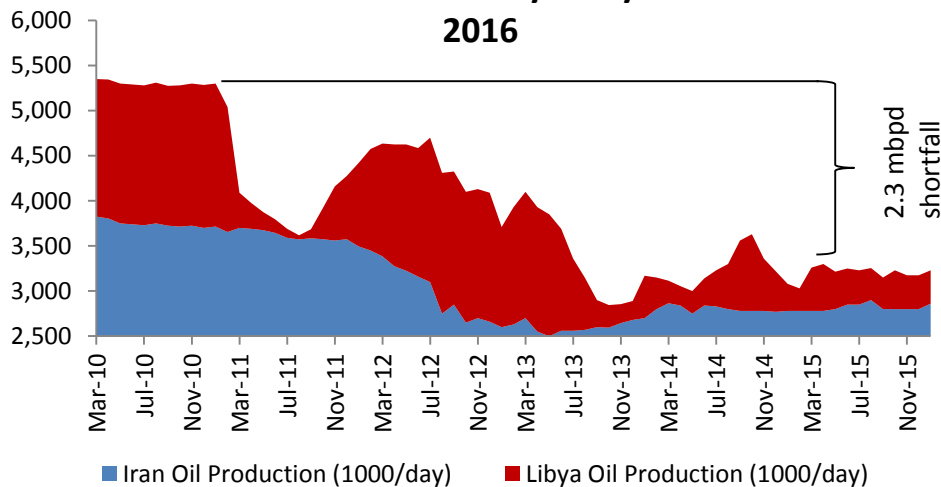
Iran and its purported aim to increase oil production by 1.0mbpd in 2016



Upside surprises in Libya's production may be seen should tensions ease



Production in Iran and Libya may recover into 2016



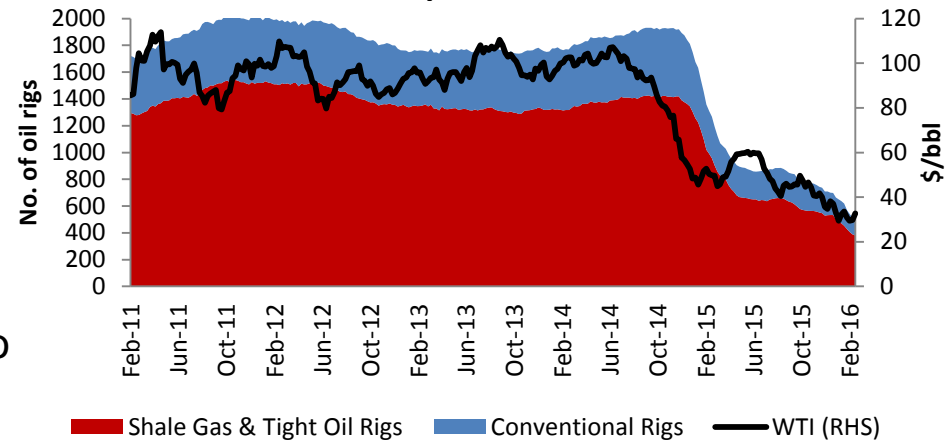
OCBC Bank

Source: Bloomberg, OCBC

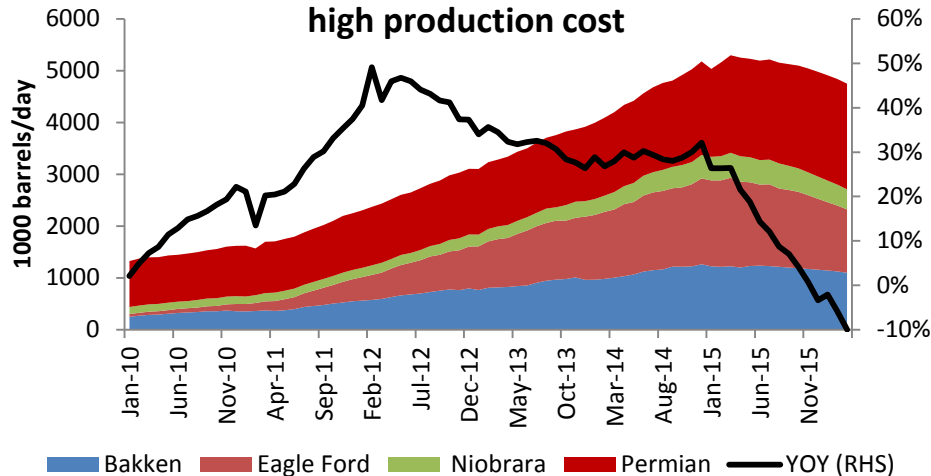
Reaction from the non-OPEC producers

- Falling rig counts and US lower crude oil production are likely a function of the crude oil slump.
- Given relatively weaker crude oil prices at this juncture, non-OPEC oil production, especially from the US, should see further downside risk.
- We look for US crude oil production to fall to 8.8 mbpd at end 2016.

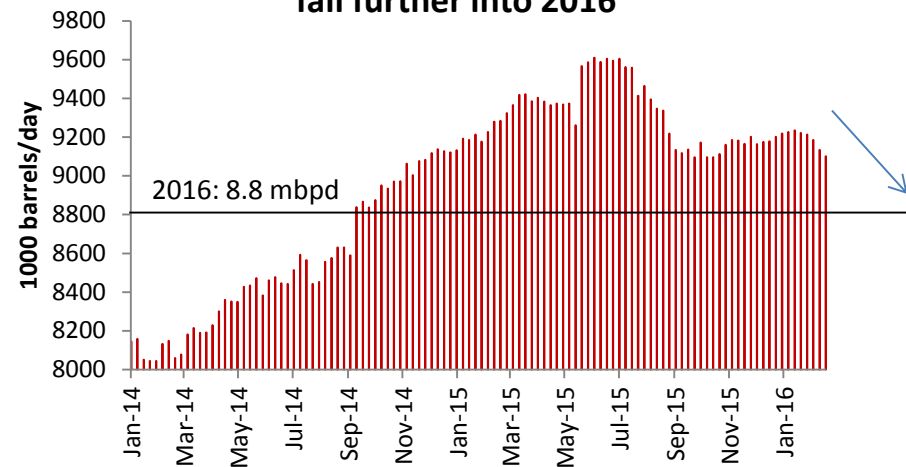
Number of US oil rigs continue to fall on low oil prices



Shale oil production is adversely affected, given high production cost



US production has fallen rapidly in 2015, may fall further into 2016



OCBC Bank

Source: Bloomberg, OCBC

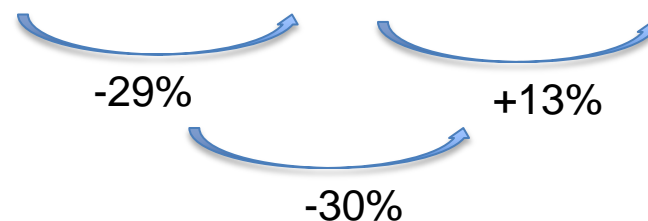
US crude supply is likely to fall into 2016

Capital Expenditure in Major Energy Names (USD mn)

Name	2014	2015^	2016^	2017^
Anadarko Petroleum Corp	9,508	6,067	3,979	5,633
Apache Corp	11,378	5,178	3,120	5,002
Chevron Corp	35,407	29,504	19,329	19,316
Concho Resources Inc	2,589	2,511	1,536	2,080
ConocoPhillips	17,085	10,050	6,752	8,541
Continental Resources Inc/OK	4,717	3,080	1,414	1,794
Denbury Resources Inc	1,079	465	303	478
Diamondback Energy Inc	1,448	902	459	681
Energy XXI Ltd	789	724	133	133
Exxon Mobil Corp	32,952	26,490	22,721	23,107
Goodrich Petroleum Corp	322	78	44	10
Marathon Oil Corp	5,160	3,476	1,851	1,909
Oasis Petroleum Inc	1,401	849	422	588
Pioneer Natural Resources Co	3,576	2,393	2,345	2,869
Rosetta Resources Inc	1,298	362	349	695
Swift Energy Co	386	116	83	127
WPX Energy Inc	1,807	1,124	599	1,164
Total	130,902	93,369	65,438	74,127

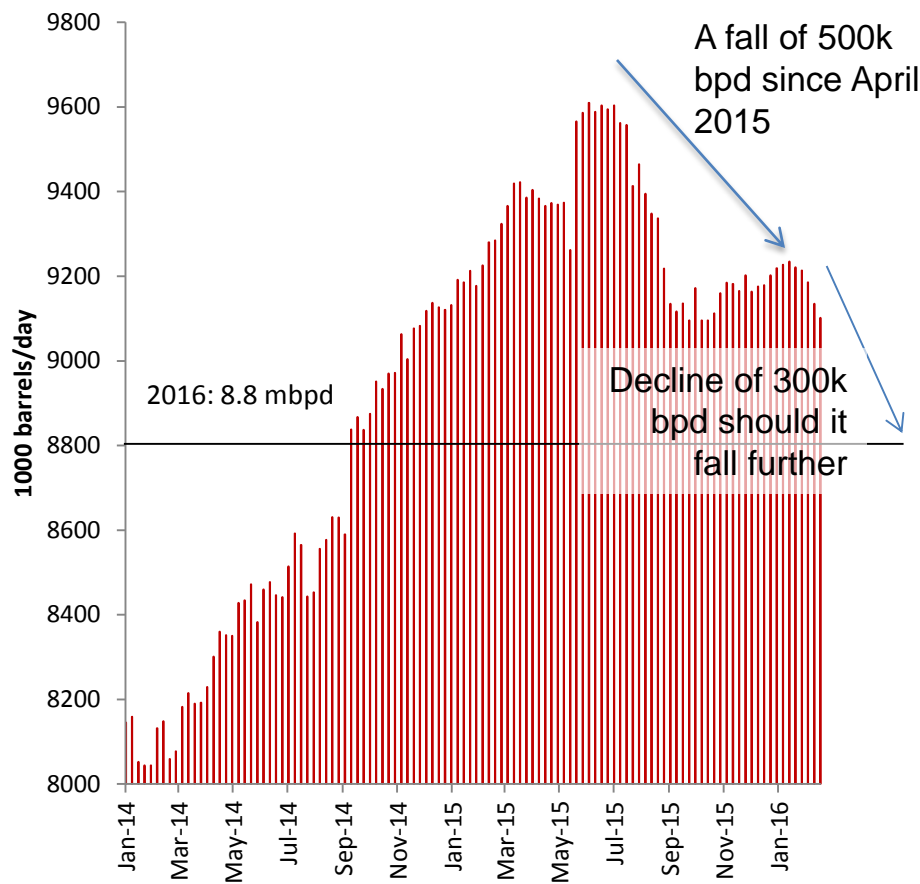
Source: Company Balance Sheet, Bloomberg, OCBC Bank

^ Including Bloomberg Estimates & Empirical Data

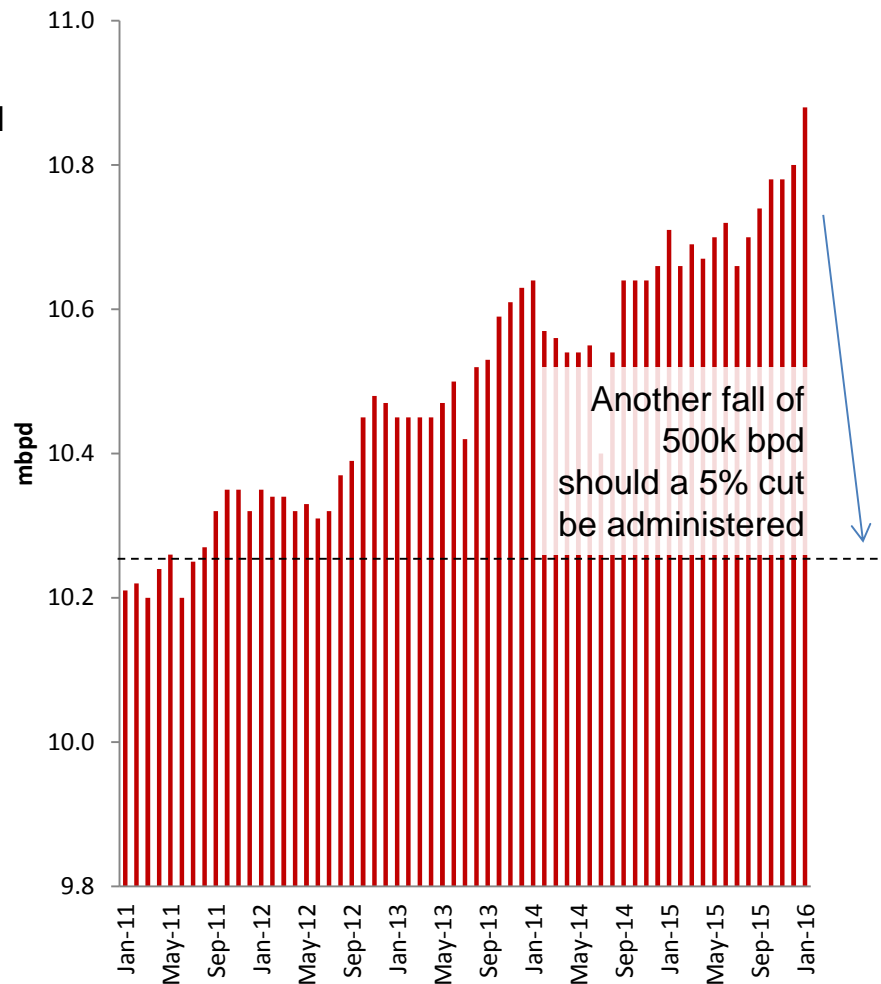


Outlook on non-OPEC production

US production has fallen rapidly in 2015, may fall further into 2016



Will Russia finally relent? A 5% cut brings production back to 2011 levels



OCBC Bank

Source: Bloomberg, OCBC

Outlook on OPEC production

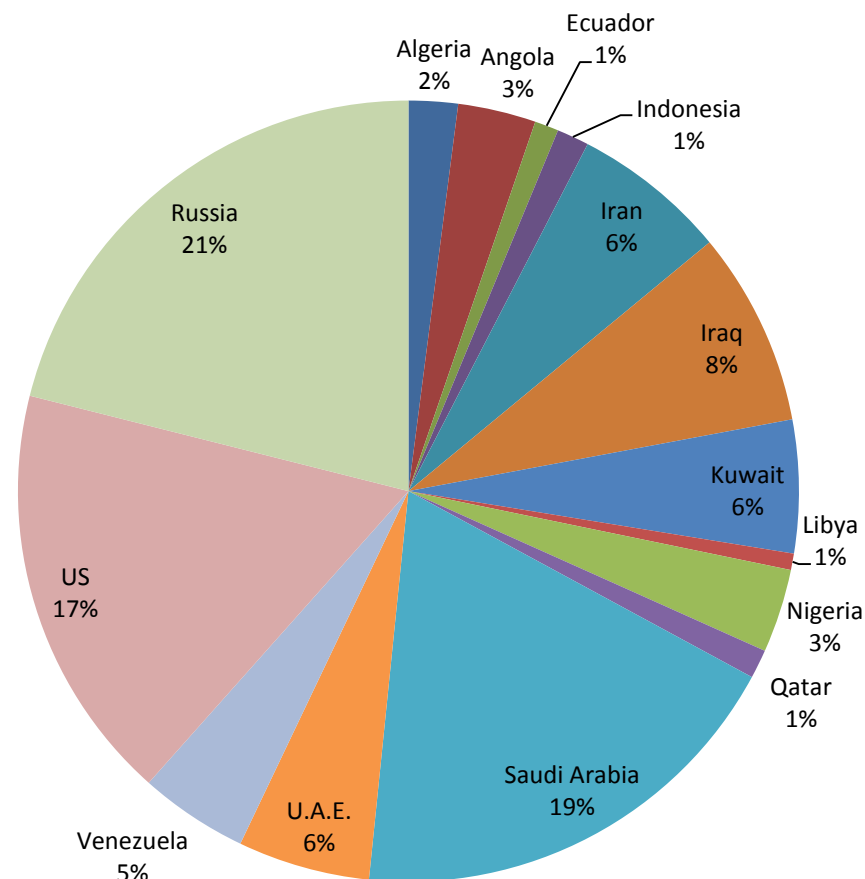
Production ('000 b/d)	June (5% Cut)	Feb	Jan
1. Total OPEC	31,882	33,060	33,139
Algeria	1,055	1,110	1,100
Angola	1,671	1,759	1,751
Ecuador	513	540	534
Indonesia	690	726	700
Iran [^]	3,325	3,000	2,860
Iraq	4,166	4,385	4,510
Kuwait	2,850	3,000	3,000
Libya	352	370	370
Nigeria	1,795	1,889	2,028
Qatar	618	650	650
Saudi Arabia	9,690	10,200	10,200
U.A.E.	2,831	2,980	2,970
Venezuela	2,328	2,451	2,466
2. Major Non-OPEC	19,891	20,012	20,124
US ¹	8,981	9,102	9,214
Russia*	10,910	10,910	10,910
OPEC + Major Non-OPEC	51,773	53,072	53,263
Fall of (in mbpd)	-1.30		

[^] Priced in Iranian's increase in oil production by 500kbpd

* Assumed production freeze in Russia

¹ Assumed constant rate of decline to 8.8mbpd

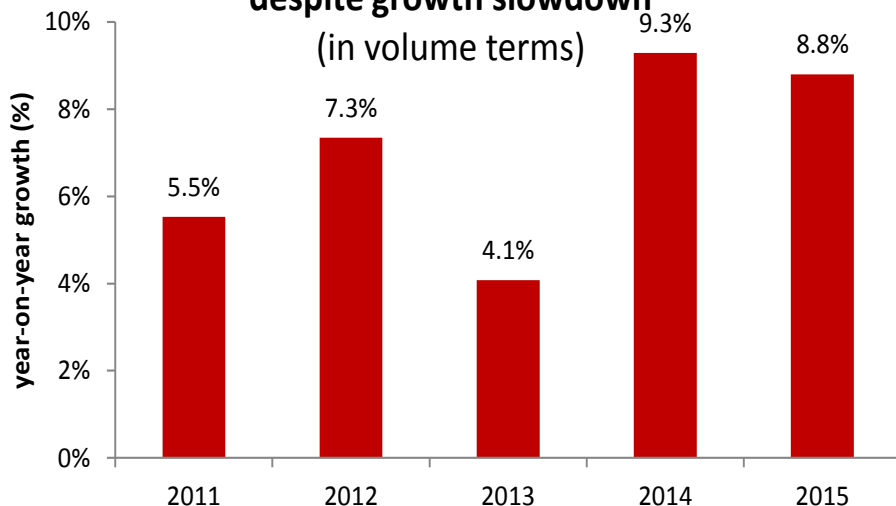
How oil production will look like in June 2016?



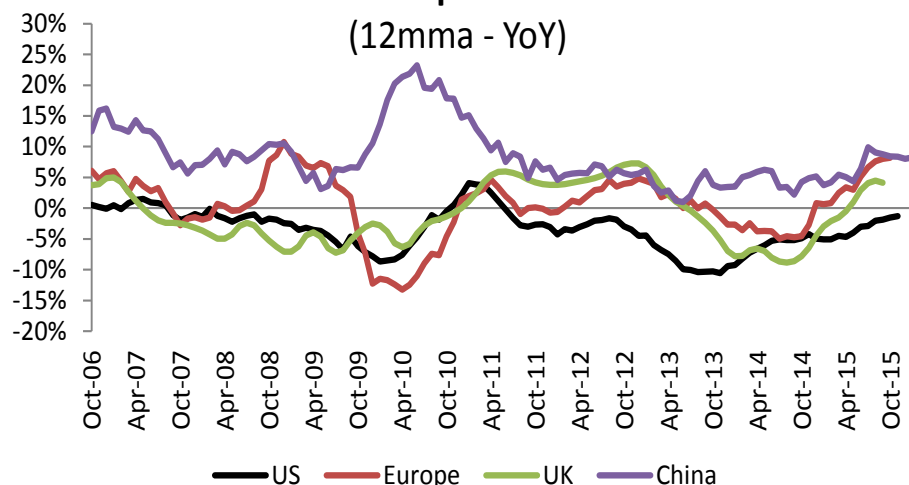
Demand is the (only) saving grace

- Demand appears supportive for oil prices. Note that global consumption of petroleum and other liquid fuels grew by 1.4 mbpd in 2015, and is expected to grow by another 1.4 mbpd in 2016.
- Elsewhere, crude oil imports in 2015 were largely supported by improving economic fundamentals in Europe, while Chinese thirst for the sticky liquid led to a robust 8.8% yoy growth last year.

China crude petroleum imports still healthy despite growth slowdown (in volume terms)

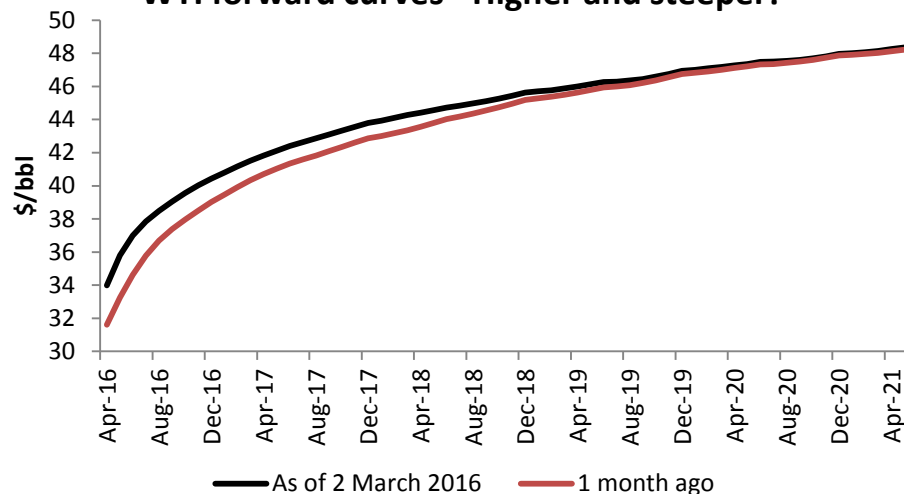


China and Europe leading the growth in oil imports (12mma - YoY)

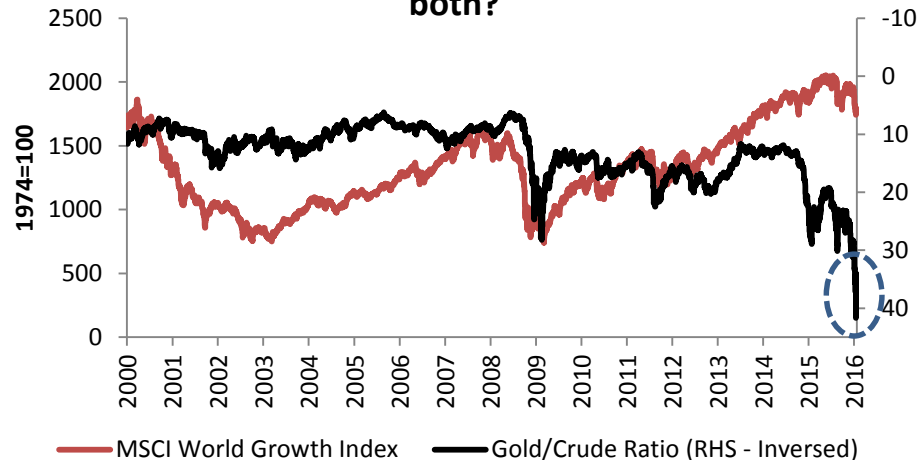


Is the crude oil price fall 'overdone'?

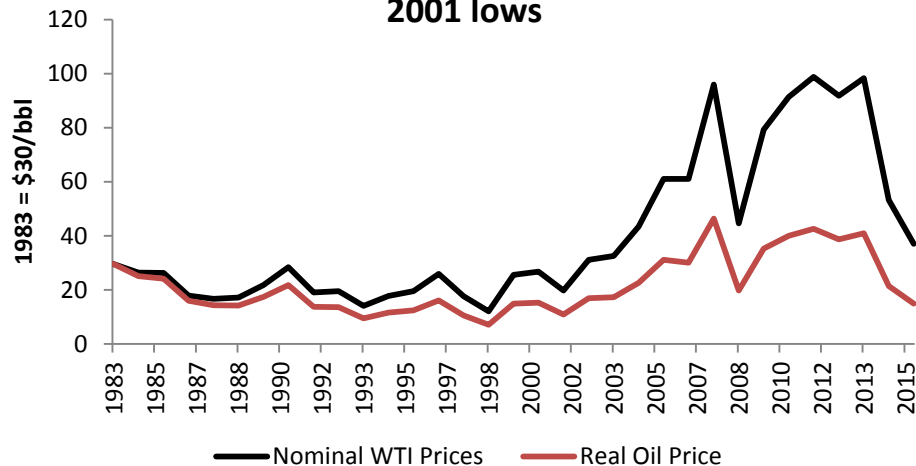
WTI forward curves - Higher and steeper!



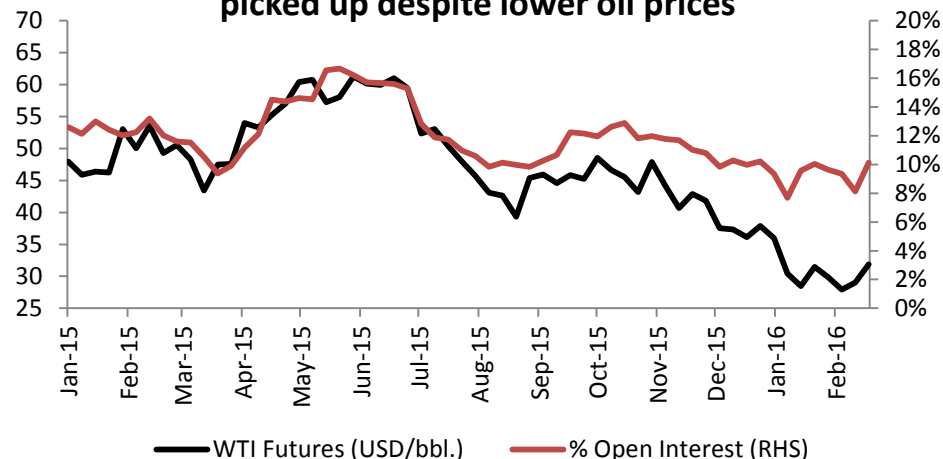
Either oil is undervalued, gold is overvalued... or both?



Crude oil price (adjusted for inflation) is at its 2001 lows

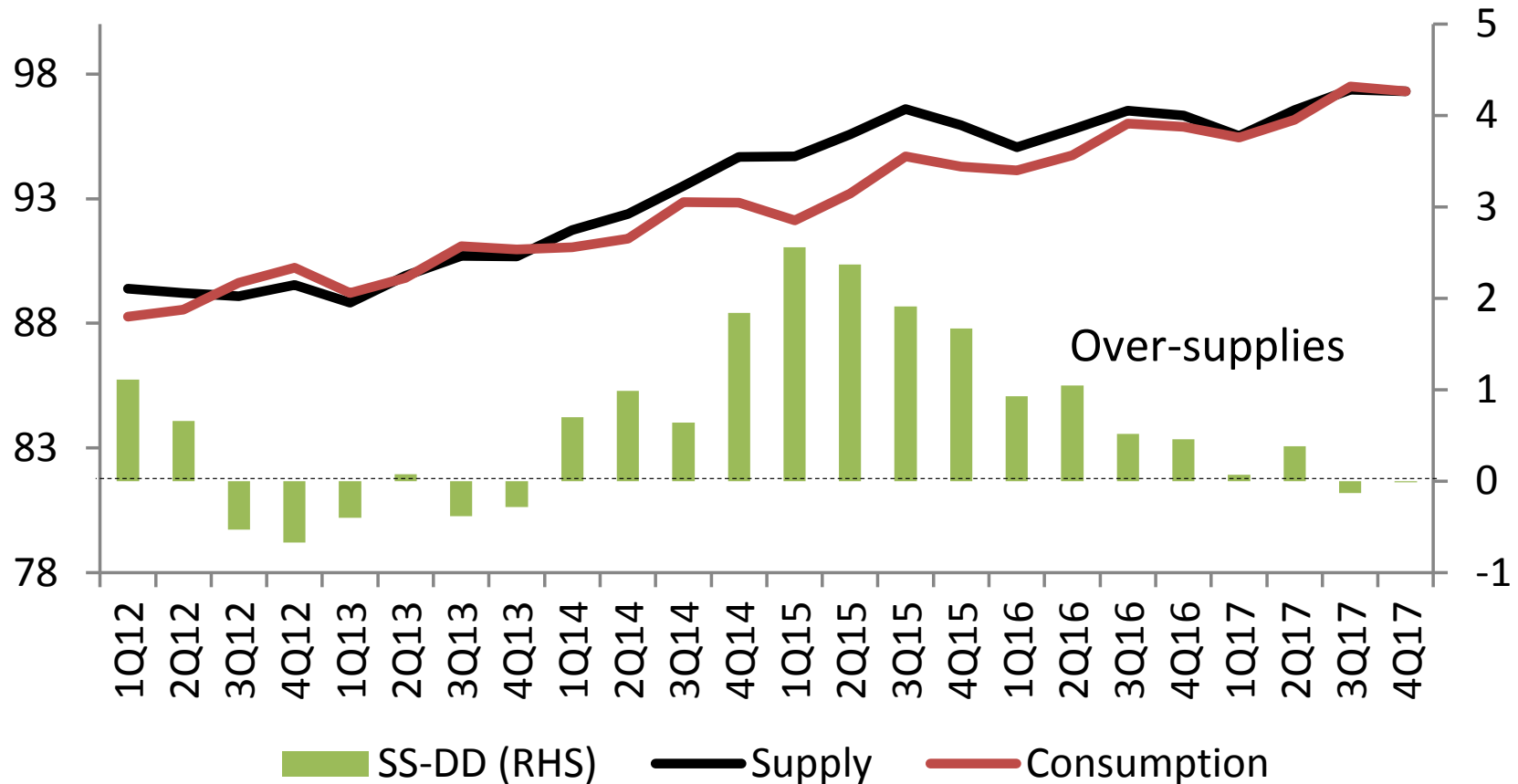


Net-long positions as a % of open interest picked up despite lower oil prices



Don't be myopic, rebalancing likely to happen

Crude oil likely to rebalance into 2H16





Thank You

Disclaimer

Treasury Market Research & Strategy

Selena Ling (LingSSSelena@ocbc.com)

Emmanuel Ng (NgCYEmmanuel@ocbc.com)

Wellian Wiranto (WellianWiranto@ocbc.com)

Tommy Xie Dongming (XieD@ocbc.com)

Barnabas Gan (BarnabasGan@ocbc.com)

Tel : (65) 6530 4887

Tel : (65) 6530 4073

Tel : (65) 6530 5949

Tel : (65) 6530 7256

Tel : (65) 6530 1778

OCBC Credit Research

Andrew Wong (WongVKAM@ocbc.com)

Wong Liang Mian (NickWong@ocbc.com)

Koh Jun Ming (NicholasKoh@ocbc.com)

Tel : (65) 6530 4736

Tel : (65) 6530 7348

Tel : (65) 6722 5333

OCBC Wing Hang

Kam Liu (kamyliu@ocbcwh.com)

Carie Li (carierli@ocbcwh.com)

Tel : (852) 2852 5245

Tel : (852) 2852 5767

This publication is solely for information purposes only and may not be published, circulated, reproduced or distributed in whole or in part to any other person without our prior written consent. This publication should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities/instruments mentioned herein. Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation or particular needs before you make a commitment to purchase the investment product. OCBC and/or its related and affiliated corporations may at any time make markets in the securities/instruments mentioned in this publication and together with their respective directors and officers, may have or take positions in the securities/instruments mentioned in this publication and may be engaged in purchasing or selling the same for themselves or their clients, and may also perform or seek to perform broking and other investment or securities-related services for the corporations whose securities are mentioned in this publication as well as other parties generally.

Co.Reg.no.:193200032W