جدوى للإستثمار
Jadwa Investment

February 2018

Quarterly Oil Market Update

Downward Pressure on Oil Prices

Summary

- A brighter outlook for the global economy and tighter oil markets had seen Brent oil prices rise 18 percent quarter-on-quarter in Q4 2017, to $62 per barrel (pb), with prices continue to rally to $70 pb in January 2018, the highest level since November 2014.

- In the last few weeks, however, some of these gains have been reversed (Figure 1). A combination of rising US oil production, a build-up of commercial oil stocks and a sell-off in US and global equities, has dampened sentiment.

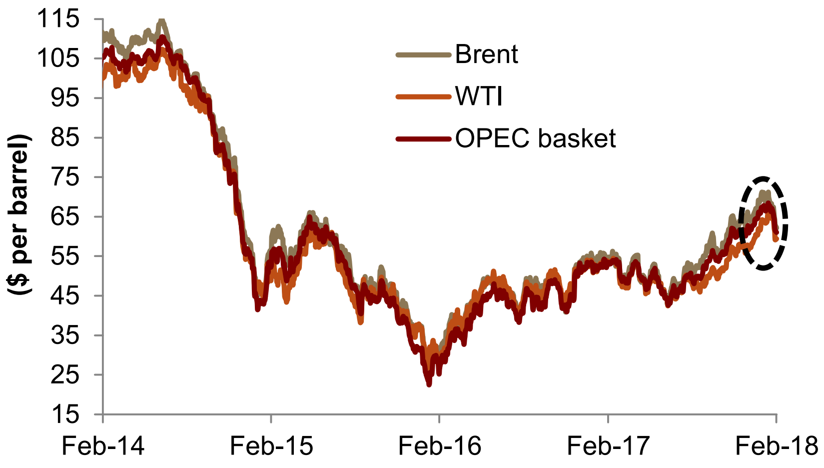
- Looking ahead, oil markets are expected to see higher levels of volatility due to a number of reasons. Firstly, despite the OPEC and non-OPEC production agreement currently showing strong levels of compliance, there are major challenges ahead, particularly as the organization meets in June 2018 to decide whether or not to continue with the current agreement.

- Additionally, the recent turbulence seen in global equity markets is likely to continue, especially as speculation mounts over the degree of interest rate tightening by the US Federal Reserve (Fed). This, in turn, may have further knock-on effects for the oil market.

- Lastly, a number of oil producing nations are seeing a build-up in political risk. The Venezuelan economy is on a knife-edge, whilst Nigeria and Libya could see an uptick in renewed civil strife as elections approach.

- Overall, we maintain our full year Brent oil price forecast of $60 pb in 2018 and $65 pb for 2019.

Figure 1: Oil prices have retreated after climbing to three year highs



For comments and queries please contact:

Fahad M. Alturki
Chief Economist and Head of Research
falturki@jadwa.com

Asad Khan
Director
rkhan@jadwa.com

Head office:

Phone +966 11 279-1111
Fax +966 11 279-1571
P.O. Box 60677, Riyadh 11555
Kingdom of Saudi Arabia
www.jadwa.com

Jadwa Investment is licensed by the Capital Market Authority to conduct Securities Businesses, license number 6034-37.

View Jadwa Investment's research archive and sign up to receive future publications:
http://www.jadwa.com

Released: February-14-2018, 15:00 UTC+3

In its latest monthly oil report, OPEC raised its global oil demand projections for the sixth consecutive month…

...and now expects global oil demand to rise by 1.59 mbpd year-on-year in 2018.

In 2017, total OPEC output equated to 1.5 mbpd less than the organization's October 2016 output.

Saudi Arabia has seen the largest levels of voluntary compliance…

...so too has Venezuela, but this has been involuntary due to…

<u>Oil demand is rising:</u>

In its January monthly oil report, OPEC raised its global oil demand projections for the sixth consecutive month. Back in July 2017, OPEC's monthly oil report forecasted global oil demand would rise by around 1.26 million barrels per day (mbpd) year-on-year in 2018, but this was raised to 1.59 mbpd in its January report (Figure 2). Three countries alone are expected to contribute half of the yearly rises in demand in 2018, with China contributing 28 percent, and US and India both 12 percent each.

Crude oil imports in China are expected to keep growing, with higher refinery intake, additional crude oil for strategic storage purposes, and continued lower domestic crude oil production, all supporting growth in 2018. India is also expected to see continued rises in imports, with overall oil consumption expected to rise by 4 percent year-on-year in 2018. In the US, according to Energy Information Administration's (EIA) forecasts, total US liquid consumption will rise by 2 percent, year-on-year in 2018 and 2019, compared to an average of 0.8 percent in both 2016 & 2017.

<u>OPEC agreement is working:</u>

OPEC data shows that crude oil production from its members averaged 32.3 mbpd in Q4 2017, down 0.9 percent quarter-on-quarter. Full year OPEC data, based on secondary sources, was down 3.6 percent year-on-year. Overall, in 2017, total output equated to 1.5 mbpd less than the organization's October 2016 output, the reference point for the production agreement. Comparing full year average 2017 oil production to October 2016's level, we can see that Saudi Arabia has seen the largest levels of compliance. In fact, Saudi Arabia's output during the year was even lower than agreed, highlighting the Kingdom's voluntary commitment to OPEC's agreement (Figure 3).

Meanwhile, two countries stand out for different reasons. Firstly, Venezuelan production declined in excess of its agreement level during the year, resulting in a 150 percent level of compliance. Unlike Saudi Arabia, this decline was involuntary. The Latin American country has been in an economic crisis since a steep fall in oil prices back in mid-2014. As a result, a majority of the government's oil revenue has been diverted to social spending. Since oil revenues form a major source of government revenue, very

Figure 2: OPEC has consistently raised forecasts for 2018 global oil demand growth

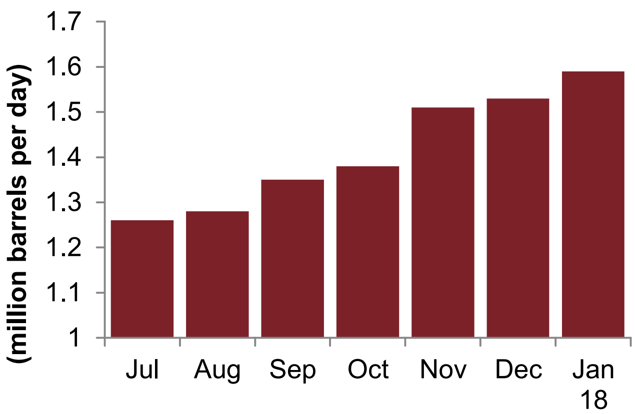
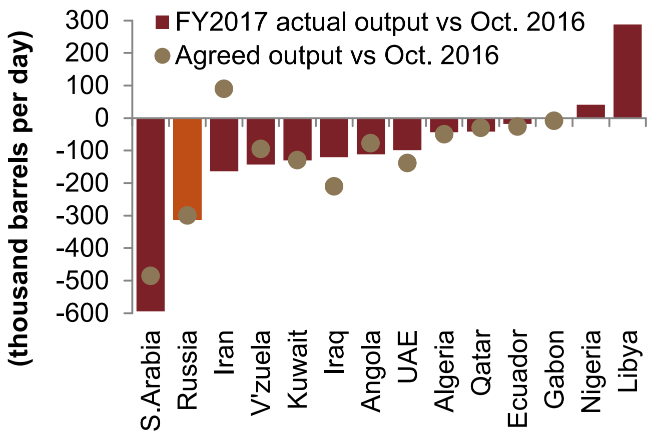


Figure 3: Full year oil actual output and agreed output, versus October 2016 levels*



*Libya and Nigeria were exempt from the OPEC output agreement

...a major economic crisis resulting in a reduction in capex for its national oil company.

In contrast, Iraq has seen some of the lowest levels of compliance, at 58 percent, to its targeted output.

Nevertheless, improving sentiment and overall OPEC adherence to the production agreement during 2017 helped push up prices in recent months…

...although there are question marks over whether the agreement will be maintained until the end of the year.

Two OPEC members are ready to expand output immediately if the agreement is annulled.

Iran's oil minister recently stated crude oil production could rise by 100 tbpd within days of OPEC ending its agreement…

little cash has been left for capital expenditure to reverse the national oil company's (Petroleos de Venezuela) decline in output, which started with the oil price correction back in 2014. Conversely, Iraq has seen some of the lowest level of compliance, at 58 percent, resulting in output at around 100 thousand barrels per day (tbpd) higher than to its targeted output. Iraq had, from the outset, been reluctant to join OPEC's agreement and its low level of compliance demonstrates the lack of enthusiasm to the accord. Meanwhile, Russia represents 50 percent of non-OPEC participant's agreed output target, and therefore is a crucial partner in meeting compliance. Whilst Russian oil production was in-line with its commitment, any dismantling of the agreement could see output rising quickly, especially since all the oil producers in Russia are privately held companies.

Nevertheless, improving sentiment over global oil demand and overall OPEC adherence to the production agreement during 2017 helped push up prices in recent months. This was evidenced by an 18 percent quarter-on-quarter rise in oil prices in Q4 2017, to $62 pb. As a result, full year Brent oil prices averaged $54 pb in 2017, up 25 percent year-on-year. More recently, oil prices rose to around $70 pb for the first time since 2014, as signs that OPEC and non-OPEC production agreement is creating tighter oil markets. Despite this, the oil market faces a number of challenges. Firstly, there are issues related to OPEC and non-OPEC agreement, and whether they will indeed be maintained until the end of the year. Secondly, of course, is the prospect of a continued rebound in US shale oil production.

Will the OPEC agreement end early?:

Whilst OPEC (along with some non-OPEC producers) extended the production agreement until the end of 2018, there are number of reasons why the agreement could end prior to this. As we highlighted in our *Saudi Economy in 2018 (published February 2018),* the main risk is related to some OPEC members pushing for an exit on the belief that markets are well balanced already, and could go into steeper decline later in the year (Figure 4). The decision to continue with the current agreement is likely to be decided in an OPEC meeting in Vienna in June. If an exit from the agreement were to be decided then, it would still require OPEC and non-OPEC members to agree on gradual rises in output so to ensure an orderly exit. On the other hand, a disorderly exit, whereby some

Figure 4: Global oil balances assuming OPEC agreement holds until end 2018

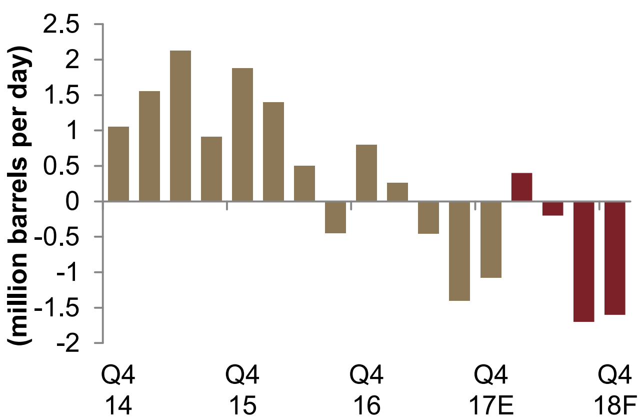
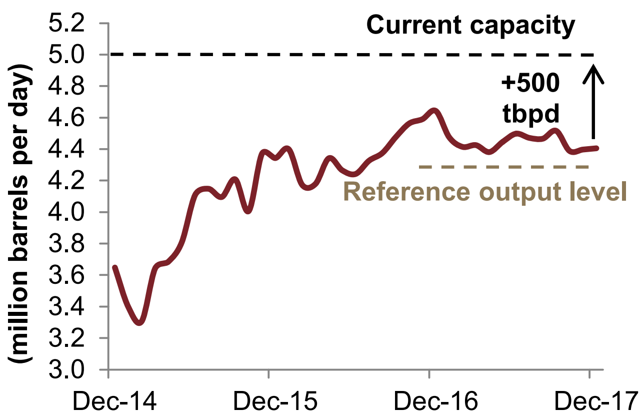


Figure 5: Iraq historical oil output, reference output level and current capacity



...whilst the Iraqi oil minister recently stated that its country's oil production capacity had reached 5 mbpd…

...with a high probability that Iraq would aim to raise production to maximum capacity.

That said, an early exit is by no means a foregone conclusion.

Both Saudi Arabia and Russia concur on the need to keep the current agreement in place until the end of 2018 and even into 2019…

...with the thinking behind such a strategy being that the current five year oil inventory has been inflated.

The latest report by the EIA shows that total US crude oil production hit

producers begin to accelerate output, would be the worse case scenario. In fact, two OPEC members are ready to expand output immediately if the agreement is annulled. Iran's oil minister recently stated crude oil production could rise by 100 tbpd within days of OPEC ending its agreement, assuming there is no change in sanctions from the US (Box 1). Furthermore, the Iraqi oil minister recently stated that its country's oil production capacity had reached 5 mbpd. Considering Iraq's low compliance to the current agreement, there is a high probability that it would aim to raise production to maximum capacity, resulting in roughly 500 tbpd of additional crude output (Figure 5). We do not, however, see Saudi Arabia reverting to 2016 output levels, even if an earlier than scheduled exit from the OPEC agreement takes place during 2018. Saudi crude oil production averaged 10 mbpd in 2017, and we see this rising only marginally, by around 100 tbpd, to an average of 10.1 mbpd during 2018 (Figure 6).

That said, an early exit is by no means a foregone conclusion. In a recent Joint OPEC-Non-OPEC Ministerial Monitoring Committee (JMMC), both Saudi Arabia and Russia concurred on the need to keep the current agreement in place until the end of 2018, even if that meant revisiting the 2016 production levels for each country. Moreover, the idea of extending OPEC and non-OPEC cooperation into 2019 was also aired, with the thinking behind such a strategy being that the current five year oil inventory has been inflated due to a prolonged period of stock building seen since late 2014. Figure 7 shows OECD commercial oil stocks totaled 2.9 billion barrels at the end of 2017. At the same time, the five year average of stocks totaled around 2.85 billion barrels, roughly 82 million barrels, or 225 tbpd over a course of a year, more than the ten year average. Taking this into account, there is indeed an argument for pushing OPEC and non-OPEC cooperation forward into 2019. However, any such accord still carries a risk of, firstly, member agreement, and, secondly, member adherence, both of which may be difficult to grind out, especially so if US shale oil continues on its recent growth trajectory.

Shale oil surge:

The latest Short Term Energy Outlook by the EIA shows that total US crude oil production hit 10 mbpd at the end of 2017. The EIA recently revised its forecasts upwards for 2018, with oil production

Figure 6: We expect Saudi crude oil production to rise marginally in 2018

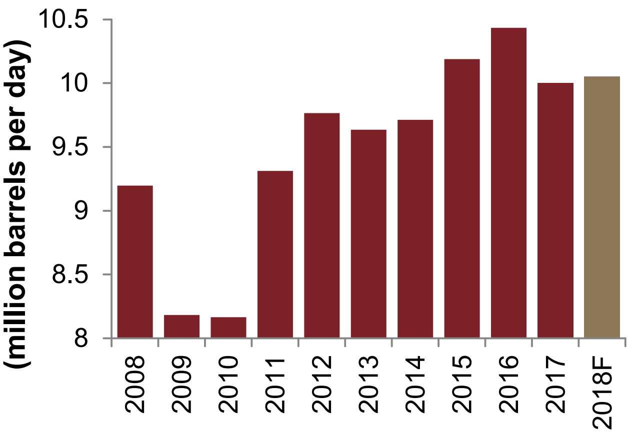
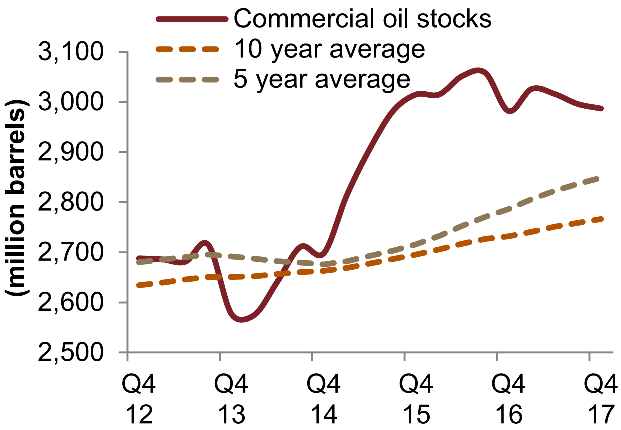


Figure 7: OECD commercial oil stocks vs. five and ten year averages



10 mbpd at the end of 2017.

The EIA recently revised its forecasts upwards for 2018…

...with oil production now expected to average 10.6 mbpd during the year, up 13 percent from 2017…

…which, if attained, would surpass the previous record of 9.6 mbpd set back in 1970.

now expected to average 10.6 mbpd during the year, up 13 percent from 2017, which, if attained, would surpass the previous record of 9.6 mbpd set back in 1970 (Figure 8). Furthermore, the EIA expects US crude oil production to continue rising in 2019, albeit at a slower annual growth rate of 2 percent, to reach an average of 11.2 mbpd, compared to a previous forecast of 10.8 mbpd. According to the administration, the Permian region, which is home to the largest US shale play, will account for a significant proportion of projected increase in total US output, with some rises also due to conventional offshore oil from the Gulf of Mexico. Certainly, all the indicators point to a rebound, with oil rigs having recovered in recent months to levels similar to early 2015. Additionally, the recent uptick in prices has seen more hedging activity. Data from 37 listed E&P companies, which account for around 75 percent of total US shale oil production, shows a steep rise in hedges in the last few months. According to latest available data, back in Q3 2017, an average of 1.5 mbpd, roughly 23 percent of current shale oil production, had been hedged at an average price of $50.3 pb (Figure 9). This was roughly 900 tbpd higher than the number of barrels hedged by the same number of companies in Q2 2017. In addition, we expect to see a rise in the number of hedges and the price at which they are hedged in subsequent quarters. This is because US WTI oil prices rose by 15 percent quarter-on-quarter in Q4 2017, to $55 pb, and hit $65 pb at one point in January before declining to current levels of around $60 pb.

<u>Quarterly outlook:</u>

Looking ahead into the remainder of Q1 2018…

...any sizable build up in oil stocks beyond the usually observed seasonal rise could put downward pressure on oil prices.

Looking ahead into the remainder of Q1 2018, we expect OPEC and non-OPEC countries' output compliance to improve mildly as seasonal refinery maintenance begins, resulting in less oil being demanded, and hence produced. However, with US oil production expected to continue rising during the quarter, any sizable build up in oil stocks beyond the usually observed seasonal rise could put downward pressure on oil prices, similar to the drop in oil prices seen after the EIA reported higher than expected US crude stockpiles in the second week of February.

Increased fears of higher inflation in the US and, as a consequence, expectations of tighter monetary policy by the US Fed has resulted in a sell-off in US and other global equity markets in recent weeks. Part of this sell-off has negatively affected oil prices. Higher interest rates

Figure 8: US crude oil production set to hit an all-time record high in 2018, and then again in 2019

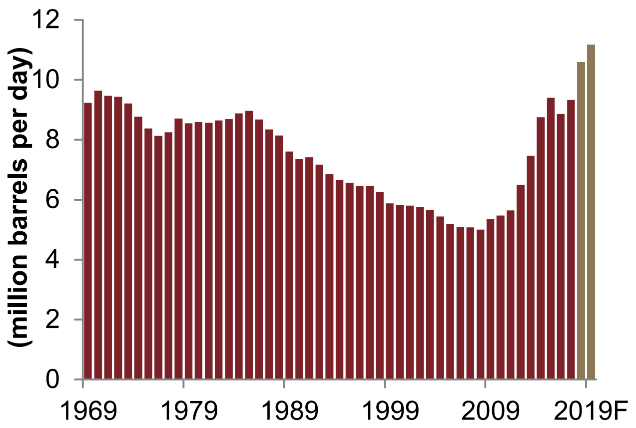
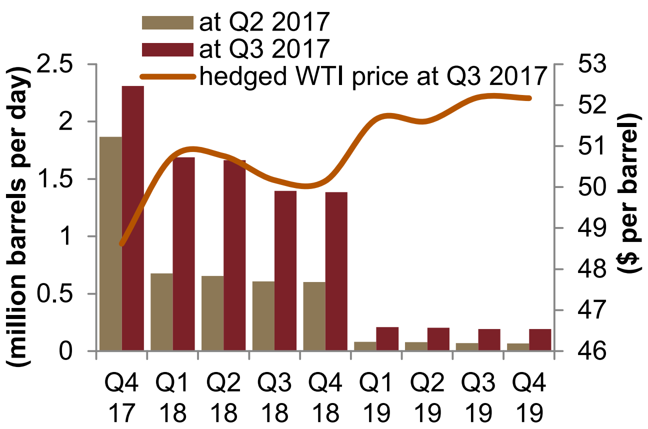


Figure 9: The quantity of hedged US shale oil is rising



make the US dollar more attractive, pushing up its value. Since oil prices and the dollar have a negative correlation, a strengthening of the greenback has added to downward pressure on oil prices. Looking ahead, any further rises in the US dollar in the run-up to the Fed's next meeting in March, when investors see a high probability of a interest rate hike, could add additional downward pressure on oil prices.

Also, any further rise in the US dollar in the run-up to the Fed's next meeting in March, could add additional downward pressure on oil prices.

Looking at the oil market beyond Q1 and into 2018 as a whole, we see risks to current oil prices as a result of expanding US output and possible OPEC and non-OPEC exit from the output agreement. The current volatility seen in equity markets, linked to higher interest rates and a stronger dollar, only add to a downward pressure. Therefore, we expect full year Brent oil prices to average $60 pb in 2018, barring any unforeseen outages outlined in Box 1.

Therefore, we expect full year Brent oil prices to average $60 pb in 2018, barring any unforeseen outages outlined in Box 1.

Box 1. Rising Political Risk

Our current oil price forecast could be affected by unplanned outages from a specific group of oil producing countries. In particular, Venezuela along with Iran, Libya, Nigeria and Iraq are most susceptible. In all these countries, political risk related to oil supply is nothing new, but as the OPEC and non-OPEC agreement helps bring about tighter oil markets, the domestic situation in each country takes more prominence. Venezuela, as outlined above, currently seems the most vulnerable, as the country attempts to fight severe economic decline. In addition, further disruptions are likely to follow as the country prepares for elections in April, with the threat of US sanctions on oil imports lingering in the background. Despite oil production rising by more than 100 percent year-on-year in Libya in 2017, the country could see more volatile production in the year ahead. Just like Venezuela, Libya is also scheduled to hold elections during 2018, and this raises the risk of renewed civil strife in a country which has already experienced ongoing political and security challenges in recent years. Nigeria will see elections as well, albeit in early 2019, and whilst an August 2016 cease-fire has decreased the number of attacks on oil pipelines by militants, a collapse in the agreement could result in around 500 tbpd of oil being taken off-line, similar to what happened during the most part of 2016 and early 2017.

Our current oil price forecast could be affected by unplanned outages from a specific group of oil producing countries.

In particular, Venezuela along with Iran, Libya, Nigeria and Iraq are most susceptible.

Although the risk of unplanned outages from Iran and Iraq are less acute, they are nevertheless apparent. Back in September 2017, certain political factions in northern Iraq declared independence from the central Iraqi government. Although the central Iraqi military subsequently took control of northern (Kirkuk) oil fields, around 200 tbpd of oil has since remained off-line. At this point in time, Iraq still has on-going issues in its northern territories and any escalation of tension in the country, which has already been a focal point in ongoing battle against another group of militants, could add a risk premium to oil prices. This premium does not necessarily present the risk tied to oil exports in the affected Iraqi region of Kirkuk alone, but rather the raising regional tensions, especially related to neighboring countries, such as Turkey, who voiced strong opposition to the referendum back in September 2017.

In all these countries, political risk related to oil supply is nothing new…

...but as the OPEC and non-OPEC agreement helps bring about tighter oil markets…

Lastly, the US administration's stance towards Iran has hardened. Diplomatic tensions between the two countries have risen and so has the risk of sanctions being reapplied on Iran in May, when the US president decides whether or not to waiver decision a nuclear deal. Any return to sanctions would have the most extensive and

...the domestic situation in each country takes more prominence.

immediate impact on oil markets. Previously, combined US and European Union (EU) oil sanctions removed more than 1 mbpd of Iranian oil exports between 2011 to 2015, although it would be less this time around since the EU is not as keen to implement sanctions. Nevertheless, sanctions by the US alone would still dent Iran's longer term ambitions of increasing crude oil capacity by roughly 1 mbpd by 2020, to a total of 5 mbpd. The EIA estimates that Iran needs to attract around $200 billion of infrastructure investment over the next four years to reach these targets.

Disclaimer of Liability

The data contained in this research is sourced from Reuters, Bloomberg, EIA and OPEC unless otherwise stated.

Jadwa Investment makes its best effort to ensure that the content in the Publication is accurate and up to date at all times. Jadwa Investment makes no warranty, representation or undertaking whether expressed or implied, nor does it assume any legal liability, whether direct or indirect, or responsibility for the accuracy, completeness, or usefulness of any information that contain in the Publication. It is not the intention of the publication to be used or deemed as recommendation, option or advice for any action(s) that may take place in future.