more give, less take

Oil Market Update – July 2015

by NAB Group Economics

Key points

- After recording gravity-defying price gains in April and May that are largely denominated by correlation with the USD, oil price movements have turned bearish in June and July-to-date. Investor sentiment in the oil market has soured over the period on the back of a number of key international events: a sharp correction in Chinese equity markets, Greece's high-profile political wrangling with the Troika over its debt crisis and the lead-up to the conclusion of a nuclear deal between Iran and the world's powers. Meanwhile, the rising trend in global oil supply (despite current low prices) also constitutes a dragging force on prices. In June, Brent and Tapis indices fell by 4% and 5% respectively while WTI charted a modest 1% increase to average at US$63, US$64 and US$60 a barrel correspondingly.

- So far in July, oil prices have weakened further to average around US$58, US$59 and US$52 a barrel for Brent, Tapis and WTI respectively.

- One year on since the advent of the global oil price collapse, the expected price response from US supply has been much more contained than most analysts had expected at the start of the crash: US production is currently hovering around its record levels of 9.6mb/day (based on weekly field crude data), after an initial slowdown in March and April was quickly reversed when prices rallied in April and May. Additional supply upside risks have also now emerged from the OPEC region, with a Saudi-led production increase resulting in the organisation's aggregate output levels exceeding their quota of 30mb/day for the 13th straight month in June. We are also likely to see a lift-off in Iranian oil output in its post-sanctions era, projected to take place somewhat moderately in the first half of 2016, before rising more substantially towards maximising its output capacity by the end of 2016.

- Our expectation of a persistent global oil glut into 2017, largely stemming from a revised projection for OPEC production in the coming year, has led us to revise our oil price forecasts throughout the entire profile moderately. We now expect oil prices to stay below USD 70 a barrel for the rest of 2015 and 2016.

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Recent market movements

- After recording gravity-defying price gains in April and May that are largely denominated by correlation with the USD, **oil price movements have turned bearish in June and July.** Investor sentiment has soured over the period on the back of a number of key international events: a sharp correction in Chinese equity markets, Greece's high-profile political wrangling with the Troika over its debt crisis and the lead-up to the conclusion of a nuclear deal between Iran and the world's powers.

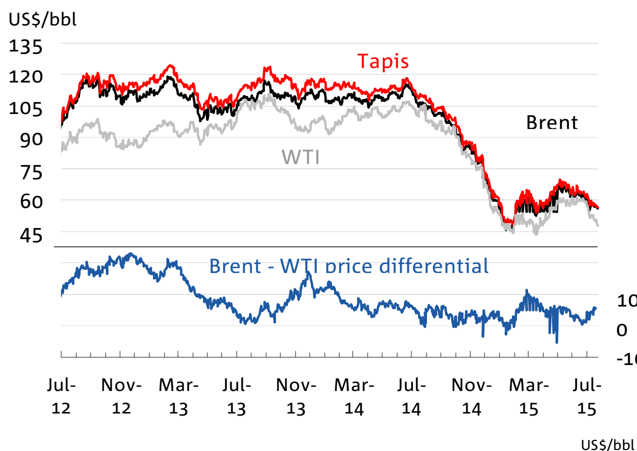
- In the meantime, **the rising trend in global oil supply despite current low prices constitutes a dragging force on prices.** All the above factors conspired to force oil prices lower in June (for Brent and Tapis) and July (all major indices) to-date. As a result, the contango in Brent futures has steepened, but with a lower end point for December 2017. In June, Brent and Tapis indices fell by 4% and 5% respectively while WTI charted a modest 1% increase to average at US$63, US$64 and US$60 a barrel correspondingly. **So far in July, oil prices have weakened further to average around US$58, US$59 and US$52 a barrel for Brent, Tapis and WTI respectively.**

- In the past month, the precipitous slide in Chinese equity markets has spooked oil investors, especially for the fears of contagion onto real Chinese activity resulting in weaker oil demand by the world's second largest oil consumer.

- **Combined with the heightened political uncertainty associated with the Greek crisis, market risk aversion spiked to the highest level since late April in the second week of July, as demonstrated by the oil and emerging market VIX indices.** The resultant stronger USD as a result of euro weakness also weighed down on oil prices. As a result of the increased market aversion, managed fund managers cut back their bullish bets at the quickest rate since 2012 in the first week of July while raising short bets dramatically.

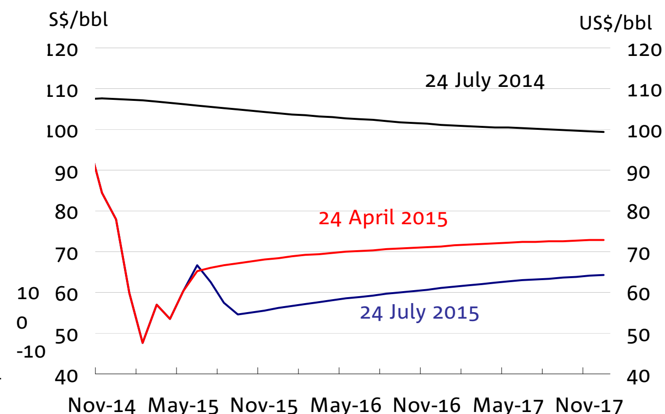
- The global oil market remains in a surplus to the tune of around 1.5 to 2 million barrels a day (mb/d). **Global demand is expected to continue to grow for the rest of the year and 2016, however we expect the continuous rise in OPEC production, especially that stemming from Saudi Arabia and Iran (post-sanctions), to outweigh the expected fall in non-OPEC output.** This will lead to the perpetuation of a glut into 2017, albeit of increasingly smaller magnitude.

Figure 1: Oil Price Indexes



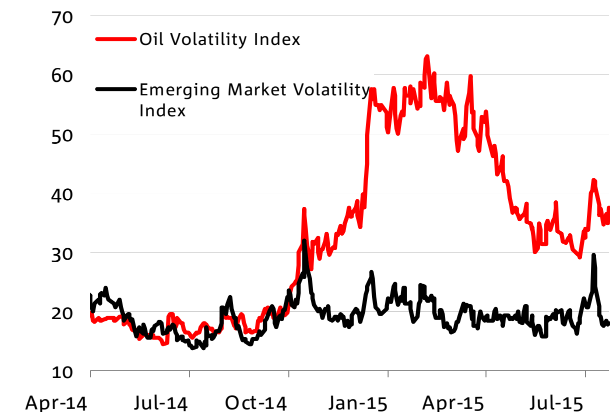
Source: Thomson Datastream

Figure 2: Brent Futures Curves



Source: Bloomberg and NAB Group Economics

Figure 3: Oil & Emerging Market Volatility

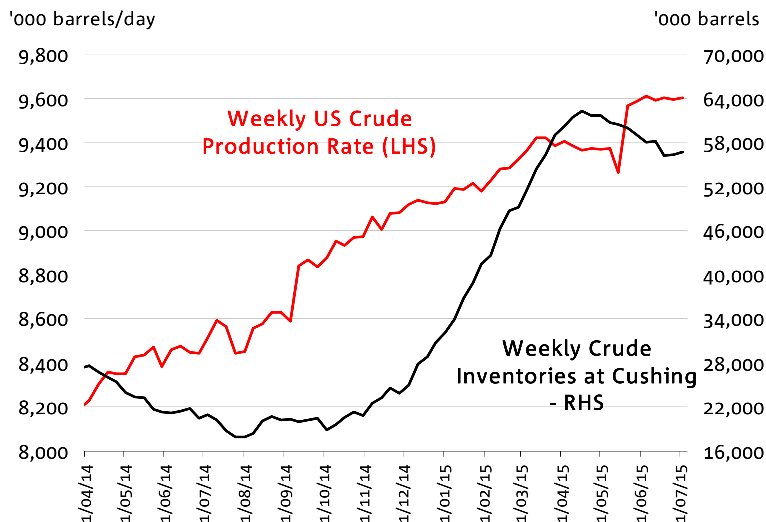


Source: Bloomberg and NAB Group Economics

Supply conditions: US

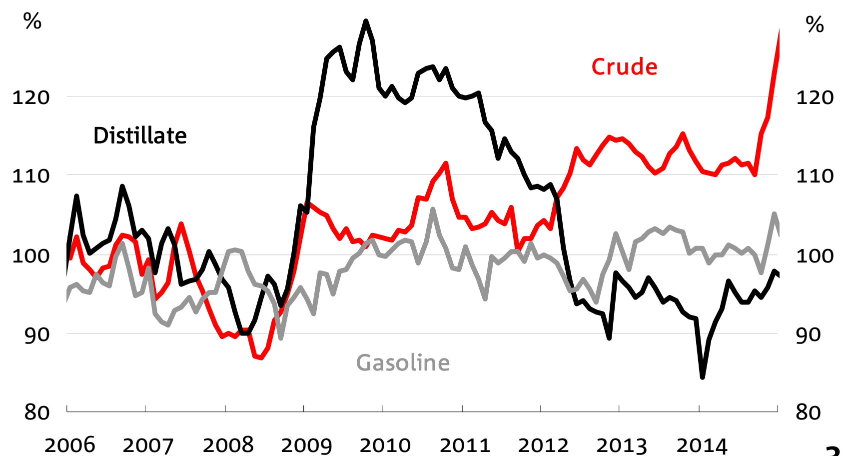
- **More than a year on since the advent of the global oil price collapse, a snapshot of the current global oil market outlook still looks eerily similar to the one a year ago.** This is despite prices are now 55% lower and the US rig count, which is an indicator of drilling activity in the country, is also 60% below its October 2014 peak.
- **The expected price response from the US supply has been much more contained than most analysts had expected at the start of the crash: US production rate is currently hovering around its record levels of 9.6 mb/day (based on weekly field crude data). The initial slowdown in March and April was quickly reversed when prices rebounded in April and May.** The swift supply response by US producers to upward price movements suggests the presence of substantial latent production capacity that can be easily jump-started for production. That said, the latest monthly data ending in April showed a slightly different trend of no apparent slowing in March and April, with US crude oil production reaching a record of 9.7 mb/day in the latter month.
- In our report last month, we explored the anecdotal evidence pointing to a large backlog of horizontal oil wells (also known as "fracklog" in the industry) which act as surplus capacity. **Bloomberg Intelligence estimates that the fracklog can add up to 500,000 barrels of oil a day by the end of next year if prices stabilise around USD65/bbl or above for a sustained period of time.** Meanwhile US production is also supported by continuous improvements in efficiency, with oil producers focussing on richer fields and adopting more intensive use of fracturing sand ("frac sand") in new wells in Eagle Ford and other shale plays during their hydraulic fracturing process.
- **In the absence of OPEC being the swing producer in the global oil market, the global oil market is now subject to greater competition and variability in producers' responses.** Any expectations that US producers will react in a synchronised manner to a price event are unrealistic given the wide spectrums experienced by US producers in economies of scale, technology, production costs and maturity of the oil fields they operate in. In the meantime, OPEC's determination to defend its market share suggests that it is prepared to expand output volume at the expense of its revenue in the short to medium term, with any slowdown in US production growth to date having been more than offset by a strategic expansion in OPEC output.

Figure 4: US Weekly Crude Production and Inventories at Cushing



Source: EIA, NAB Group Economics

Figure 5: US Crude and Petroleum Products Inventories (Proportion of long-run average, seasonally adjusted)



Source: EIA, NAB Group Economics

Supply conditions : OPEC and Others (Part I)

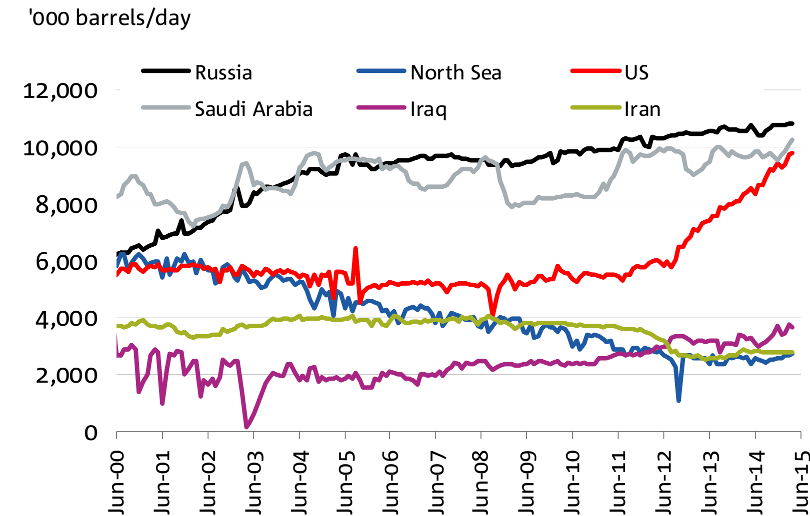
- **OPEC's unmistakable resolution to keep its output elevated such as to pressure high-cost shale producers remains unwavered. Recent aggregate OPEC output levels exceeded their quota of 30mb/day for the 13th straight month in June.** Spearheading the organisation's output growth is Saudi Arabia, which has steadily cranked up oil production volumes to reach a record level of 10.6mb/day in June. It was the third consecutive month that Saudi's oil output has exceeded 10mb/day, and if this continues, it is on track to be the first country to achieve 11mb/day since the former Soviet Union.

- **Some market analysts also pointed out Saudi Arabia could be taking a pre-emptive strike to ward off a potential surge in Iranian oil exports, given the successful agreement Iran has struck with world powers to end the political and economical sanctions imposed on it.** The effective removal of the sanctions is likely to take place late this year/early 2016, after a process of verification by the International Atomic Energy Agency that Iran has complied with its commitments under the deal.

- **The Iranian government has signalled its ambitions to lift oil output and exports significantly in the post-sanctions era, but there are questions around the rate of recovery and final output level achievable.** Iran has the world's fourth largest proven oil reserves and is currently producing around 2.9mb/day currently, compared to 4mb/day just prior to the sanctions. Its record production rate was 6mb/day in 1974.

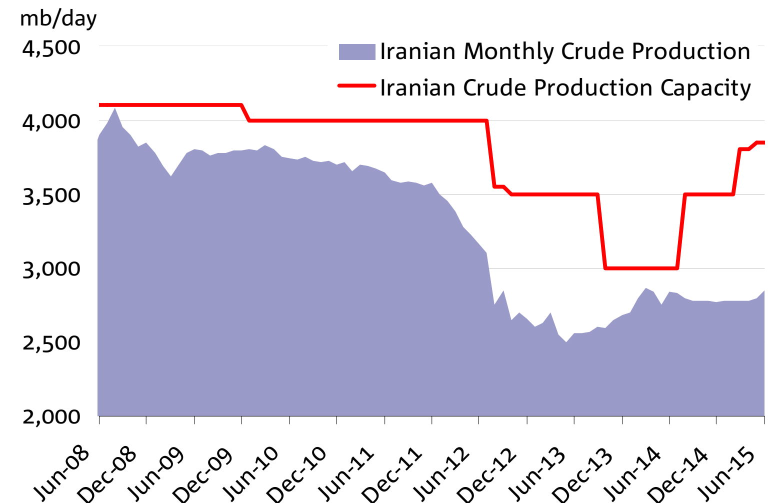
- **It is expected that Iran will be to able to export the existing crude and condensates in tankers (estimates range from 20 to 40 million barrels) immediately after the end of the sanctions.** According to the Chief Economist of International Energy Agency, Fatih Birol, Tehran's large and geologically complex fields have not been well-maintained during the sanctions. This suggests that further investments are likely to be required before these fields can return to their previous productive glory. However, according to Bloomberg, there is a substantial level of productive spare capacity in Iranian fields which can be utilised at present (see Figure 7).

Figure 6: Monthly Production by Major Global Producers



Source: Bloomberg, NAB Group Economics

Figure 7: Iranian Crude Production Capacity (Bloomberg) and Actual Monthly Production



Source: Bloomberg, NAB Group Economics

Supply conditions : OPEC and Others (Part II)

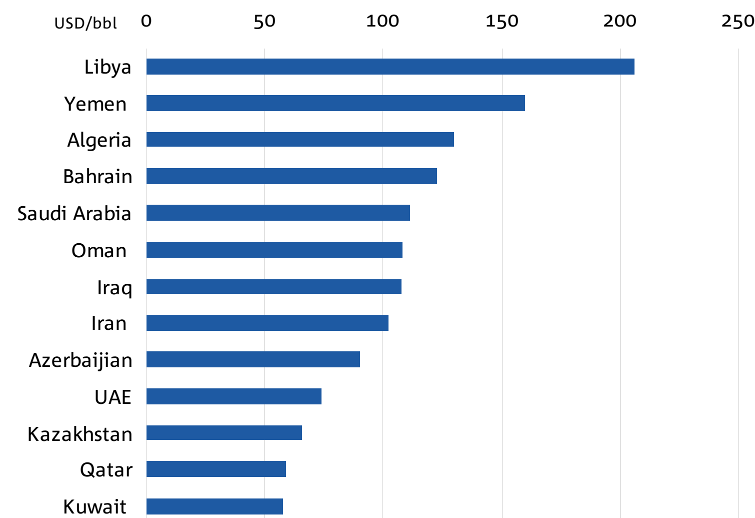
- **That said, we are of the view that there is likely to be a moderate revival in Iranian output in the first six months of 2016 as it runs down its oil inventories in storage and utilises some of its spare capacity.** We expect an increase of 300,000 to 400,000 barrels a day before Iran raises its output more substantially to maximise its spare capacity after that, possibly reaching an additional 850,000 bbl/day relative to current levels by the end of 2016. In order to keep OPEC output around its quota level (if members adhere to it), Iran needs other OPEC producers to pare back production to make way for it to recover its previous market share. However, the ongoing tensions between Iran and Saudi Arabia may see the latter blockading Iranian efforts to achieve its output goal.

- **Hence the speed with which Iran expands its output will not only depend on how quickly it can overcome some of the physical constraints on production, but also its strategies to manoeuvre in an increasingly competitive and politically-charged environment within OPEC.** The diminished power by OPEC to influence global output and prices has seen major producers within the organisation resorting to price wars through aggressive output expansion and heavy price discounting, thereby straining the political ties amongst the members further. The current low-price environment, if prolonged, may serve to exacerbate the financial difficulties faced by high-cost members, such as Libya, Algeria, Venezuela and Yemen etc., thereby incentivising them to act in uncooperative manner and perpetuate the race to the bottom.

- **Despite being engaged in an ongoing war with Islamist rebels, Iraqi oil exports have risen significantly since late 2013 and have charted a new record during March this year.** This is partly driven by Iraq's self-ruled Kurds who are exporting crude up to as much as 600,000 barrels a day from their region independently, bypassing the national marketing agency.

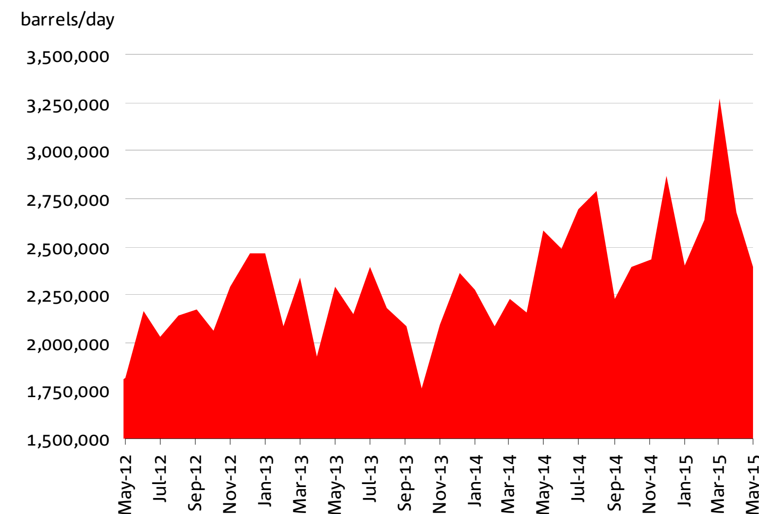
- **As such, upside supply risks from OPEC continue to build while US production has not slowed. Unless OPEC resorts to cutting output in one of their upcoming meetings, we are likely to witness a prolonged period of glut persisting into 2017, with a surplus of around 1mb/day in 2016 and a somewhat smaller one after that.**

Figure 8: Fiscal Breakeven Prices for Selected Producers



Source: IMF,Bloomberg, NAB Group Economics

Figure 9: Monthly Crude Export Volume from Basrah, Iraq



Source: Bloomberg, NAB Group Economics

Demand conditions

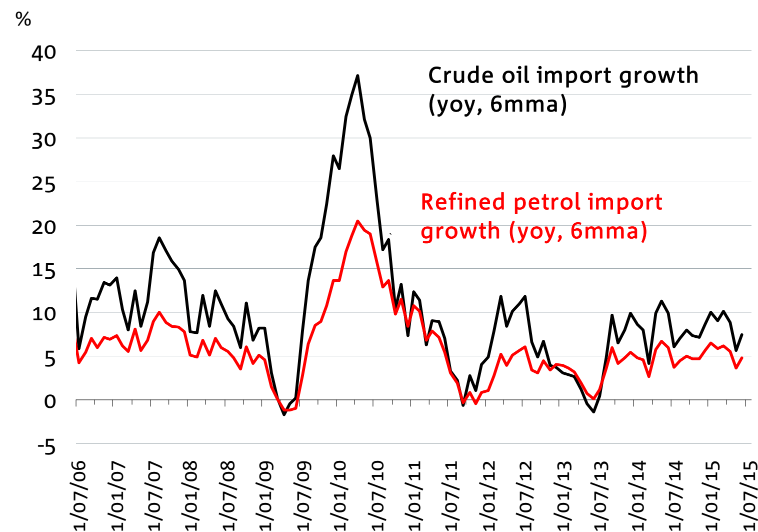
- **US demand for oil products for the 2014-15 financial year has shown much more momentum relative to previous years, benefiting from low pump prices and improvements in its economy.** Weekly US consumption data is pointing to an annual growth rate of around 2.0% for 2014-15, and this trend is expected to strengthen in 2015-16 on the back of a pick-up in industrial activity, although a rising USD continues to pose downside risks to the manufacturing and export sectors. EIA expects US consumption to average 19.43 and 19.56 mb/d and in 2015 and 2016 respectively.

- **Chinese crude imports surged in June, largely reversing the sharp fall in May to reach 29.5 million tonnes which represented 27% growth relative to the same month last year.** Meanwhile, refined oil imports were marginally lower in the month at 3.1 million tonnes but this was 31.3% above last June's level. This was accompanied by a 2.4% rise in total apparent oil demand to 10.6 mb/day in the month.

- **Chinese apparent demand for oil has shown a discernible upward trend since the second half of 2014 to coincide with lower global oil prices, despite showing a generally weaker macroeconomic outlook since the start of this year.** The sustained strength in China's crude imports growth over the period suggests that its crude stockpiles have been growing. Based on our calculation, Chinese crude stockpiles have increased by close to 17 million tonnes in the year to June, and since the beginning 1996, the figure is closer to 257 mt which is equivalent to approximately 24 days of China's daily demand. China overtook the US as the world's largest net crude importer in March 2014 and recently surpassed the country as the world's largest overall crude importer. That said, slowing activity and physical storage constraints place downside risks on Chinese crude imports growth in the coming months.

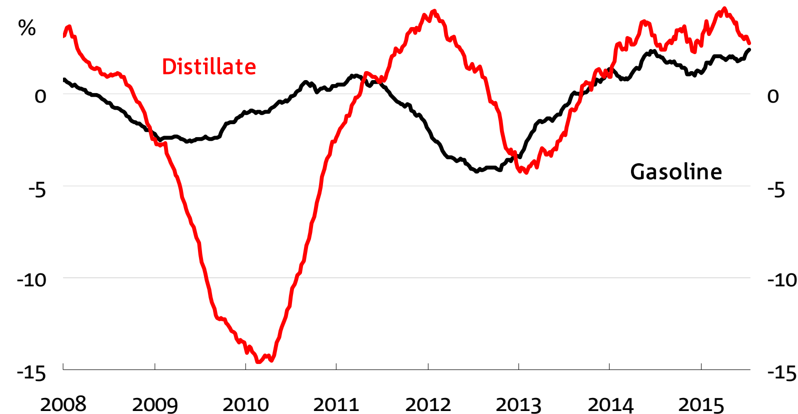
- **Indian fuel consumption has also gained notable momentum in 2014 and has managed to keep up pace in the first half of 2015, largely supported by the usage of gasoline, LPG and diesel.** In volume terms, domestic sales of refined oil products rose for the 7th consecutive month in June, to be 3% higher year-on-year in May.

Figure 10: Chinese Imports of Crude Oil and Refined Oil, 6-month Moving Average Growth (y-o-y)



Source: CEIC Database, NAB Group Economics

Figure 11: Weekly US Distillate & Gasoline Demand (12-month rolling average % change)



Source: US Energy Information Administration, NAB Group Economics

Summary and NAB quarterly oil price forecasts

- **Since our last report, oil prices have weakened substantially on the back of Chinese share market jitters (which were taken as signals of potential weakening in crude demand by investors), a stronger USD and continued strength in global production.** There are now significantly more upside production risks emanating from the OPEC region. Its effectiveness as a cartel has diminished in the wake of a persistent global glut, with a number of key members exhibiting predatorial behaviours against one another by partaking in aggressive output expansion and price discounting. The long-awaited conclusion of the Iranian nuclear deal is likely to contribute around an additional 300,000 to 400,000 barrels a day to OPEC's oil output by mid-2016.

- **Rising global supply is likely to be partly counteracted by stronger global demand for oil and a more pronounced fall in US output next year following a collapse in oil-related investments this year. However, an overall global oil surplus is expected to persist into 2017 to keep a lid on oil prices.** Meanwhile, further expected appreciation in the US dollar in line with the normalisation of US monetary settings – the liftoff likely to take place by the end of this year – is also expected to weigh on oil prices in the coming months.

- **Meanwhile, Australian petrol prices jumped significantly in the June quarter, largely led by a rebound in the Tapis index and a depreciation in the AUD, which led to an 11% jump in the Singapore Gasoil Index in AUD terms.** A further expected depreciation in the AUD is likely to constitute as an upside risk to domestic petrol prices, and is expected to offset the effects of weakening global oil prices in the September quarter.

- **In light of the above, we have made the decision to revise our oil price forecasts downwards moderately for the rest of 2015 and forward estimates period, with prices expected to stay below USD70 a barrel from now till end of 2016.**

Figure 12: NAB Oil Price Forecasts (Quarterly Average)

	Current	Actual	Forecasts							
	24/07/2015	Jun-15	*Sep 15*	*Dec 15*	*Mar 16*	*Jun 16*	*Sep 16*	*Dec 16*	*Mar 17*	*Jun 17*
WTI (US$/bbl)	48.0	57.7	48	52	56	59	62	64	66	68
Brent (US$/bbl)	56.3	62.5	55	58	61	63	65	67	69	71
Singapore Gasoil (AUD/L)	0.54	0.55	0.54	0.57	0.58	0.61	0.63	0.65	0.66	0.67
Tapis (US$/bbl)	56.7	64.2	56	59	62	64	66	68	70	72
Australian Retail Unleaded Petrol (AUc/L)*	NA	136	136	140	142	144	146	148	150	150

Sources: NAB Economics; RACQ; Thomson Datastream

* Denotes 5-capital average **Estimate

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