

# Oil Market Outlook – April 2007

Minerals & Energy: Gerard Burg

[Gerard.Burg@nab.com.au](mailto:Gerard.Burg@nab.com.au)

(+613) 8641 3984

## Summary – supply side risks combine to elevate oil prices

- **Crude oil prices rebound as supply side risks build:** A range of supply concerns rose in March – lead by the Iranian hostage crisis late in the month. With insufficient spare capacity to offset potentially threatened oil production, crude prices surged back above US\$60 a barrel.
- Iranian sabre-rattling continued after the release of the 15 British naval personnel, with the country announcing industrial scale nuclear processing – defying international pressure to cease uranium enrichment.
- Outside the Middle East, persistent violence in Nigeria and an anticipated above average hurricane season in the Gulf of Mexico increases the risk of disruptions to oil supply – driving prices higher.
- **Concerns around product supplies flow into crude prices:** With the peak summer “driving season” in the United States rapidly approaching, global oil traders are increasingly focussing on movement in gasoline markets.
- Since the futures markets for refined products are relatively illiquid (when compared with crude oil), tightness in underlying product markets is often reflected in crude markets.
- **Gasoline stocks are tight in the US...:** US gasoline stocks are currently at the bottom of the five year average range (in absolute terms). More alarming though, gasoline consumption has been around 1.9 per cent higher in the year to date. As a result, US gasoline stocks – in terms of days forward cover – is now well below average levels.
- Relief for US gasoline consumers will not be easy to find. US refiners lack the refining capacity to meet the country’s demand for the automotive fuel – with the shortfall offset by imports, primarily from Europe (given relatively similar environmental standards).
- **...and Europe:** Imported gasoline from Europe offers only limited potential – with European stockpiles well below five year average levels in absolute terms.
- **Forecast oil prices unchanged:** WTI crude is forecast to average US\$62 a barrel in 2007 – a year on year decrease of 6.1 per cent. However, we note that risks appear weighted to the upside.
- **Product prices track broadly sideways, in line with crude:** Weighted average capital city petrol prices are forecast to average 119.2 cents a litre in 2007, a year on year decline of 4.4 per cent. In 2007, benchmark European prices are forecast to average US\$618 a tonne, a year on year decline of 4.1 per cent.

## Quarterly price summary

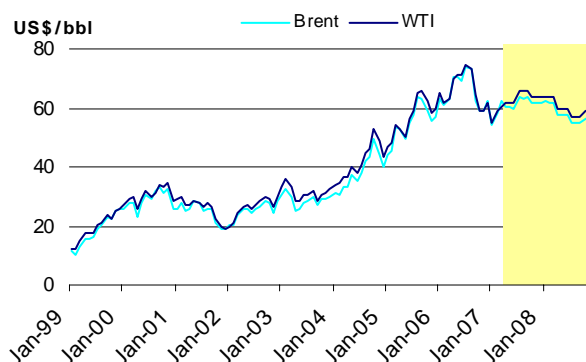
	Q4 06	Q1 07	Q2 07 f	Q3 07 f	Q4 07 f
Brent US\$/bbl	60.06	58.28	60.23	63.53	61.85
WTI US\$/bbl	60.07	58.20	61.50	65.50	63.75
Petrol Ac/L (a)	114.9	116.7	121.1	120.2	118.9
Jet fuel US\$/t	602.3	589.1	609.0	643.3	632.3
US\$/A\$	0.77	0.79	0.80	0.82	0.80

(a) – Weighted average capital cities, source: AAA, FuelTrac

## Oil prices surge as Iran tensions mount... again...

Crude oil prices rose by around 2.2 per cent in March, to average US\$60.56 a barrel (in West Texas Intermediate (WTI) terms). This increase was significantly lower than for other benchmark grades – partly due to refinery disruptions in Texas. Despite being a period of traditionally weak seasonal demand, elevated tensions in the Middle East and falling gasoline stockpiles in key markets pressured crude markets.

## Crude prices push back above US\$60 a barrel on Iran tensions and gasoline supplies



Source: Datastream, NAB Group Economics

In the first three months of 2007, WTI crude averaged US\$58.09 a barrel, a year on year decrease of 8.3 per cent. A tighter fundamental balance in recent months – driven in part by production discipline from OPEC – has led to a recovery in prices from relative lows at the start of the year.

On March 23, members of Iran’s Islamic Revolutionary Guard Corps seized 15 British naval personal in disputed waters between Iran and Iraq. It came as the United States increased military forces in the Persian Gulf – including two aircraft carrier groups – raising the concerns of military intervention, and an associated reduction in crude oil supply.

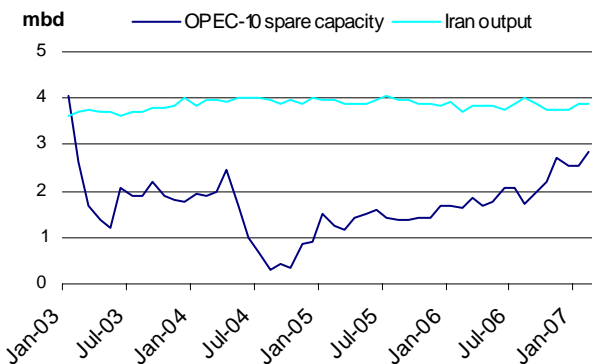
These tensions may have contributed to an unprecedented spike in the price of oil, when crude rose by over US\$5 to US\$68.09 a barrel in after hours trading on 27 March.

Rumours of an Iran-United States altercation emerged after the event, however an erroneous trade that triggered automatic purchases may have triggered the rise.

The British personnel were freed in early April, however this did not mark the end of Iranian sabre-rattling. The shadow of Iran's nuclear program continues to loom over oil markets, with the country's president announcing industrial scale nuclear fuel processing in early April. Iran has until the end of May to comply with a UN Security Council resolution to cease uranium enrichment but has repeatedly refused to cede to international pressure.

That geopolitical events – such as the current tensions around Iran – are capable of having such influence over crude oil markets highlights the ongoing tightness of fundamentals. There remains insufficient spare capacity to cover the loss of Iran's crude oil production.

**Iran's crude supply remains irreplaceable**



Source: IEA, NAB Group Economics

The impact of Iranian brinkmanship has fallen more heavily on European benchmark crudes, rather than US grades. Since the Iranian hostage crisis of 1979, the United States has maintained trade sanctions against Iran. In addition, disruptions at Valero's McKee refinery in Texas have reduced the short term demand for WTI crude. As a result, Brent crude traded at a considerable premium to WTI in March, in contrast to a typical discount for the European benchmark.

From a fundamental point of view, global oil and product markets tightened significantly in the first quarter of 2007 – as OPEC production cuts pared inflated crude stockpiles, while maintenance schedules and refinery disruptions have impacted on gasoline stocks (see below).

Supply side risks persist, adding upside to our price forecasts. Continued civil disturbances in Nigeria, ongoing violence elsewhere in the Middle East and the prospect of hurricane related disruptions in the Gulf of Mexico could threaten oil production in coming months.

Researchers at Colorado State University forecast nine hurricanes in the June to November Atlantic season – well above the typical six (based on the fifty year average). Crude oil prices spiked in 2004 and 2005 when hurricanes cut oil supply from the Gulf of Mexico.

Forecast oil prices are unchanged this month, with WTI crude forecast to average US\$62 a barrel in 2007 – a year

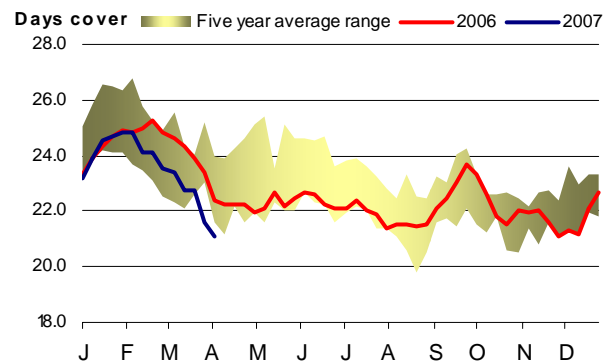
on year decrease of 6.1 per cent. However, we note that risks appear weighted to the upside.

**Crude markets influenced by gasoline market tightness**

With the peak summer “driving season” in the United States rapidly approaching, global oil traders are increasingly focussing on movement in gasoline markets. Since the futures markets for refined products are relatively illiquid (when compared with crude oil), tightness in underlying product markets is often reflected in crude markets.

US gasoline stockpiles have been heading south for the best part of two months. On face value this is not particularly concerning – US refineries are conducting seasonal maintenance – however stocks are at the bottom of the five year average range in absolute terms. More alarming though, gasoline consumption has been around 1.9 per cent higher in the year to date. As a result, US gasoline stocks – in terms of days forward cover – is now well below average levels.

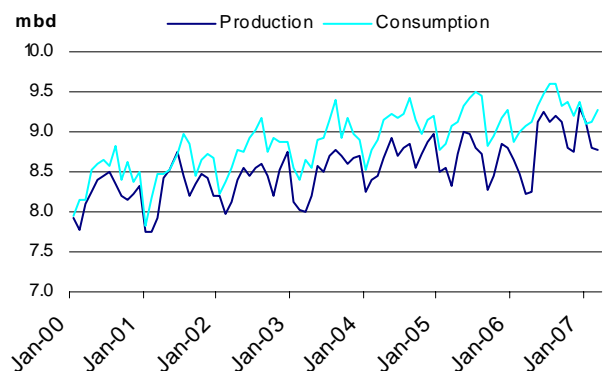
**US gasoline stocks substantially tighter in forward cover terms**



Source: EIA, NAB Group Economics

Relief for US gasoline consumers will not be easy to find. US refiners lack the refining capacity to meet the country's demand for the automotive fuel – with the shortfall offset by imports, primarily from Europe (given relatively similar environmental standards).

**US gasoline consumption outstrips domestic supply**



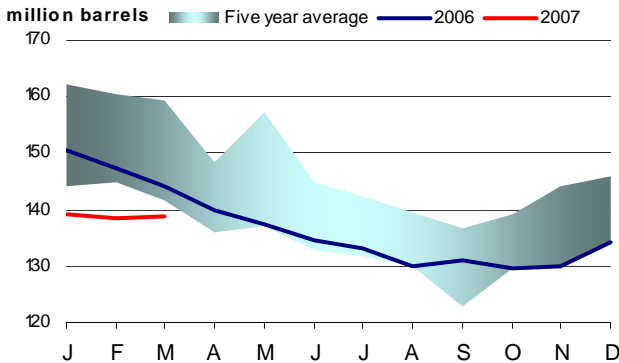
Source: EIA, NAB Group Economics

While gasoline production will increase in coming weeks – as refineries return from maintenance programs – gasoline

demand will also step up, as the peak holiday 'driving season' commences on Memorial Day (28 May).

Imported gasoline from Europe offers only limited potential relief – with European stockpiles well below five year average levels in absolute terms. Despite only moderate demand growth for refined products in aggregate, and a growing share of diesel in the automotive fuel mix, low gasoline stocks may limit exports.

**Europe's gasoline stocks below average**



Source: Euroilstock, Reuters

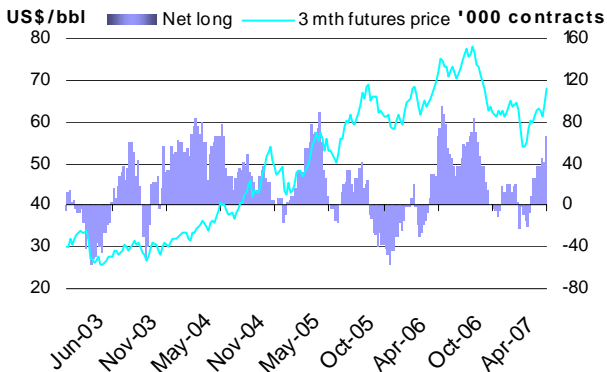
**Futures market – supply concerns restore speculative faith**

Futures prices on the New York Mercantile Exchange (NYMEX) rose more sharply than spot prices in March – with the three month light sweet crude contract increasing by around 4.2 per cent to average US\$63.54 a barrel.

In the first three months of 2007, the rolling three month contract averaged US\$60.32 a barrel, a year on year decline of 7.7 per cent.

Speculative interest in crude futures markets returned in late February – following a period of risk adjustment related to speculative losses in late 2006. The ongoing supply concerns surrounding Iran, Nigeria and the Gulf of Mexico prompted a reduction in short positions and fresh longs. In early April, net long speculative positions were at around 66 000 contracts – the highest level since August 2006.

**Speculative positions return as Iranian tensions support prices**

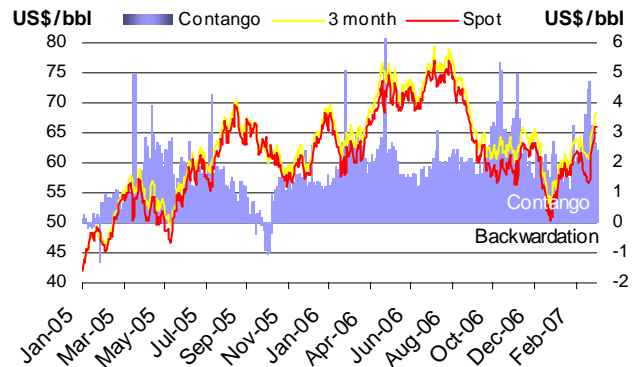


Source: CFTC, EIA

The contango in crude oil prices has rebuilt in recent months – as Middle East tensions have restored the risk premium in crude oil prices. A contango is a market state where near

term prices are lower than forward prices – typically indicating adequate immediate supply, but concerns around future oil supply. Crude markets have remained firmly in contango since November 2005, but the size of the spread narrowed as prices plummeted in early 2007.

**Supply concerns extend the oil market contango**



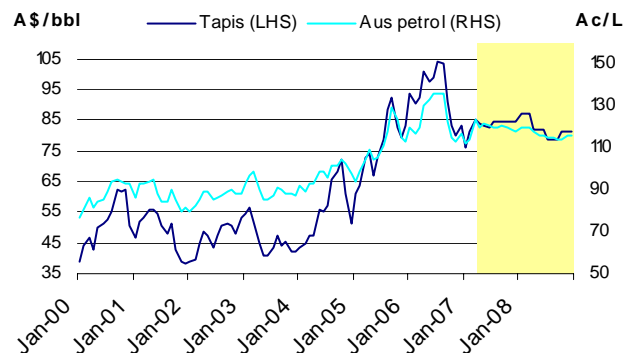
Source: Datastream, EIA, NAB Group Economics

**Refined markets – Australian petrol prices spike higher in line with regional crude...**

Prices for regional benchmark crude oil Tapis leapt in March – moving closely in line with Brent crude – up by around 6.4 per cent to US\$67.82 a barrel. Broadly in line with the rising prices of crude oil, weighted average capital city petrol prices averaged 123.4 cents a litre in March, an increase of 8.2 per cent (FuelTrac, AAA).

Reflecting NAB's recent upgrades to exchange rate assumptions, Australian petrol prices are forecast to track broadly sideways in 2007 before modest declines in 2008. As with crude prices, petrol prices will remain at historically high levels for the foreseeable future.

**Petrol prices track broadly sideways in the short term**

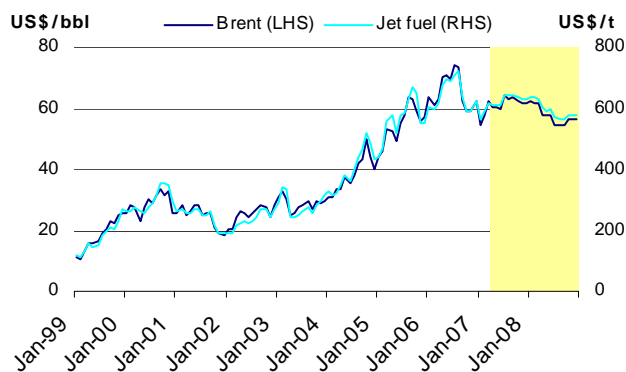


Source: Datastream, FuelTrac, AAA, NAB Group Economics

Weighted average capital city petrol prices are forecast to average 119.2 cents a litre in 2007 (previously 117.3), a year on year decline of 4.4 per cent.

**...with jet fuel also following the crude lead**

Jet fuel prices also increased in March, up by around 4.6 per cent to average US\$616 a tonne for benchmark European product, as prices reflected the recovery in crude oil markets. In the first three months of 2007, jet fuel prices averaged US\$582 a tonne, a year on year decrease of 2.5 per cent.

**Jet fuel prices recover, set to track crude outlook**

Source: Bloomberg, NAB Group Economics

In 2007, benchmark European prices are forecast to average US\$618 a tonne, a year on year decline of 4.1 per cent. Jet fuel prices are forecast to drift modestly lower in 2008, in line with marginally lower crude oil prices, but remain at historically high levels.

**Monthly price summary**

	Dec-06	Jan-07	Feb-07	Mar-07
Brent US\$/bbl	62.26	54.50	57.97	62.36
WTI US\$/bbl	62.03	54.78	59.27	60.56
Petrol Ac/L (a)	116.6	112.5	114.1	123.4
Jet fuel US\$/t	563.2	645.3	618.4	593.0

**Quarterly price summary**

	Q4 06	Q1 07 f	Q2 07 f	Q3 07 f	Q4 07 f
Brent US\$/bbl	60.06	58.28	60.23	63.53	61.85
WTI US\$/bbl	60.07	58.20	61.50	65.50	63.75
Petrol Ac/L (a)	114.9	116.7	121.1	120.2	118.9
Jet fuel US\$/t	602.3	589.1	609.0	643.3	632.3

**Annual price summary**

	2004	2005	2006	2007 f	2008 f
Brent US\$/bbl	38.22	54.80	65.63	60.04	57.74
WTI US\$/bbl	41.43	56.58	66.11	62.00	60.00
Petrol Ac/L (a)	97.5	110.6	124.7	119.2	116.7
Jet fuel US\$/t	398.7	563.2	645.3	618.4	593.0

(a) – Weighted average capital cities

Source: Datastream, AAA, FuelTrac, Bloomberg, NAB Group Economics

**Group Economics – Some Useful Contacts by Specialisation**

<b>Alan Oster</b> <a href="mailto:Alan.Oster@nab.com.au">Alan.Oster@nab.com.au</a>	<b>Group Chief Economist</b> Economic, Financial & Business Conditions	(03) 8641 3464
<b>Jeff Oughton</b> <a href="mailto:Jeff.Oughton@nab.com.au">Jeff.Oughton@nab.com.au</a>	<b>Head of Australia</b> Economic, Financial & Business Conditions	(03) 8641 3469
<b>Dean Pearson</b> <a href="mailto:Dean.Pearson@nab.com.au">Dean.Pearson@nab.com.au</a>	<b>Senior Economist</b> Telecommunications, Media, Recreation, Personal	(03) 8641 3474
<b>Skye Dixon</b> <a href="mailto:Skye.C.Dixon@nab.com.au">Skye.C.Dixon@nab.com.au</a>	<b>Economist</b> Agribusiness	(03) 8641 3442
<b>John Sharma</b> <a href="mailto:John.Sharma@nab.com.au">John.Sharma@nab.com.au</a>	<b>Economist</b> Property, Construction, Transport, Hospitality	(03) 8641 3473
<b>Ian Gordon</b> <a href="mailto:Ian.D.Gordon@nab.com.au">Ian.D.Gordon@nab.com.au</a>	<b>Economist</b> Healthcare, Retailing, Business Services, Education	(03) 8641 3472
<b>Gerard Burg</b> <a href="mailto:Gerard.Burg@nab.com.au">Gerard.Burg@nab.com.au</a>	<b>Economist</b> Minerals & Energy	(03) 8641 3984
<b>Vacant</b>	<b>Economist</b> Manufacturing, Wholesaling	(03) 8641 3762
<b>James McKinlay</b> <a href="mailto:James.McKinlay@nab.com.au">James.McKinlay@nab.com.au</a>	<b>Economist (Australia)</b> Economic & Financial Conditions	(03) 8641 3848
<b>Tom Taylor</b> <a href="mailto:Tom.Taylor@nab.com.au">Tom.Taylor@nab.com.au</a>	<b>Head of International</b> Economic & Financial Conditions	(03) 8641 3475
<b>Robert De lure</b> <a href="mailto:Robert.De.lure@nab.com.au">Robert.De.lure@nab.com.au</a>	<b>Economist</b> Country Risk & Asian Economies	(03) 8641 3445
<b>Carolyn Fraser</b> <a href="mailto:Carolyn.Fraser@nab.com.au">Carolyn.Fraser@nab.com.au</a>	<b>Economist (United Kingdom)</b> Economic & Financial Conditions	(03) 8641 3694
<b>Vacant</b>	<b>Economist (Europe)</b> Economic & Financial Conditions	(03) 8641 4304

DISCLAIMER: “[While care has been taken in preparing this material,] National Australia Bank Limited (ABN 12 004 044 937) does not warrant or represent that the information, recommendations, opinions or conclusions contained in this document (“Information”) are accurate, reliable, complete or current. The Information has been prepared for dissemination to professional investors for information purposes only and any statements as to past performance do not represent future performance. The Information does not purport to contain all matters relevant to any particular investment or financial instrument and all statements as to future matters are not guaranteed to be accurate. In all cases, anyone proposing to rely on or use the Information should independently verify and check the accuracy, completeness, reliability and suitability of the Information and should obtain independent and specific advice from appropriate professionals or experts. To the extent permissible by law, the National shall not be liable for any errors, omissions, defects or misrepresentations in the Information or for any loss or damage suffered by persons who use or rely on such Information (including by reasons of negligence, negligent misstatement or otherwise). If any law prohibits the exclusion of such liability, the National limits its liability to the re-supply of the Information, provided that such limitation is permitted by law and is fair and reasonable. The National, its affiliates and employees may hold a position or act as a price maker in the financial instruments of any issuer discussed within this document or act as an underwriter, placement agent, adviser or lender to such issuer.”

UK Disclaimer: So far as the law and the FSA Rules allow, National Australia Bank Limited (“the Bank”) disclaims any warranty or representation as to the accuracy or reliability of the information and statements in this document. The Bank will not be liable (whether in negligence or otherwise) for any loss or damage suffered from relying on this document. This document does not purport to contain all relevant information. Recipients should not rely on its contents but should make their own assessment and seek professional advice relevant to their circumstances. The Bank may have proprietary positions in the products described in this document. This document is for information purposes only, is not intended as an offer or solicitation nor is it the intention of the Bank to create legal relations on the basis of the information contained in it. No part of this document may be reproduced without the prior permission of the Bank. This document is intended for Investment Professionals (as such term is defined in The Financial Services and Markets Act 2000 (Financial Promotion) Order 2001) and should not be passed to any other person who would be defined as a private customer by the rules of the Financial Services Authority (“FSA”) in the UK or to any person who may not have experience of such matters. Issued by National Australia Bank Limited A.C.N. 004 044 937, 88 Wood Street, London EC2V 7QQ. Registered in England BR1924. Head Office: 500 Bourke Street, Melbourne, Victoria. Incorporated with limited liability in the state of Victoria, Australia. Regulated by the FSA in the UK.

U.S DISCLAIMER: This information has been prepared by National Australia Bank or one of its affiliates or subsidiaries (collectively, “NAB”). If it is distributed in the United States, such distribution is by National Australia Capital Markets, LLC (NACM) which accepts responsibility for its contents. Any U.S. person receiving this information wishes further information or desires to effect transactions in the securities described herein should call or write to NACM, 245 Park Avenue, New York, NY 10167 (or call (877) 377-5480). The information contained herein has been obtained from, and any opinions herein are based upon sources believed to be reliable and no guarantees, representations or warranties are made as to its accuracy, completeness or suitability for any purpose. Any opinions or estimates expressed in this information is our current opinion as of the date of this report and is subject to change without notice. The principals of NACM or NAB and/or its affiliates may have a long or short position or may transact in the securities referred to herein or hold or transact derivative instruments, including options, warrants or rights with securities, or may act as a market maker in the securities discussed herein and may sell such securities to or buy from customers on a principal basis. This material is not intended as an offer or solicitation for the purchase or sale of the securities described herein or for any other action. It is intended for the information of clients only and is not for publication in the press or elsewhere.