

# Oil & Gas - Monthly

Oil prices – Likely to be subdued over the medium term

**Crude oil prices decline led by higher OPEC production:** Brent oil prices averaged at ~US\$102/bbl in August (down 4.7% MoM). OPEC production at 31mnbpd for Aug'14 (up 0.89mnbpd MoM; highest level in the trailing twelve months) is prime factor for price decline. Demand weakness in the Asian markets can be witnessed from the higher discounts offered by Saudi Aramco for October contracts (discount for the October contract up by US\$1.7/bbls MoM basis - highest MoM increase in discount since February 2012). The Saudi Aramco contract prices are at a discount of US\$0.05/bbl to regional market prices of Oman/Dubai. China's net crude oil demand adjusted with net products trade dropped from 10mbpd in June to 9.6mbpd in July; an 8.6% YoY decline. In aggregate, China's oil demand for the first seven months of the year is ~10.3mbpd. The key factor to watch in the near term is OPEC stance towards production output and adherence to production limits (role of Saudi continues to be significant for price determination). Similarly, the Chinese effort on revival is equally important (monetary stimulus provided of US\$81bn yesterday could revive growth and increase oil product demand). EIA has revised downwards its Brent forecast to US\$103/bbls for 4QCY14 and CY15. We believe higher OPEC production, weak demand, comfortable surplus and expectation of rising non-OPEC supplies points towards environment of subdued oil prices over medium term.

**LNG price rising on winter demand:** Spot LNG prices had started to rally from the lows of ~US\$10/mmbtu, the trend is reversing following the October prices rising (forward LNG curve also points towards rising LNG prices). The October '14 EAX contract closed at US\$13.4/mmbtu on 15 September, marking a US\$1.8/mmbtu increase; similarly November contract price rose by US\$2.4/mmbtu to US\$14.5/mmbtu.

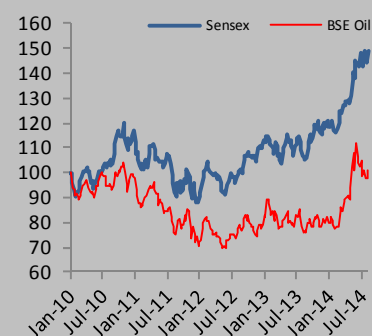
**Singapore GRMS decline:** Benchmark Singapore GRM's averaged at US\$3.7/bbl during August (2QCY14 US\$5.8/bbl and July- US\$4.3/bbl). We expect GRM's to remain subdued over next fiscal following comfortable inventory in Singapore and increased US export to Europe putting pressure on middle distillate cracks. Capacity addition in Asia and Middle East is likely to keep a check on margins. Moreover, increased discounts will offset the weaker product cracks, thereby protecting margins to some extent. Based on the cash operational cost for the Asian refineries, we believe benchmark margins are unlikely to remain below US\$4/bbls on a sustainable basis.

## Snapshot

| Particular.                        | Aug    | July   | June   |
|------------------------------------|--------|--------|--------|
| <b>Crude prices</b>                |        |        |        |
| WTI (USD/bbl)                      | 96.6   | 103.1  | 105.3  |
| Brent (USD/bbl)                    | 102.0  | 107.0  | 111.9  |
| <b>Prod. Crack &amp; GRM</b>       |        |        |        |
| Naphtha cracks (USD/bbl)           | (2.5)  | (0.4)  | (2.5)  |
| Gasoline cracks (USD/bbl)          | 7.2    | 15.4   | 10.8   |
| Jet/Kerosene cracks (USD/bbl)      | 15.0   | 13.5   | 13.3   |
| Diesel cracks (USD/bbl)            | 15.9   | 14.4   | 14.2   |
| Fuel oil cracks (USD/bbl)          | (11.8) | (13.7) | (14.2) |
| Estimated Singapore GRMs (USD/bbl) | 3.7    | 4.3    | 4.8    |
| <b>Mktg. losses</b>                |        |        |        |
| Diesel (INR/ltr)                   | 1.6    | 2.9    | 2.2    |
| Domestic LPG (INR/cyl)             | 448    | 449    | 432    |
| Kerosene (INR/ltr)                 | 33.0   | 33.1   | 33.9   |

Source: Bloomberg, PhillipCapital India Research

## Sensex v/s BSE Oil Index



Source: PhillipCapital India Research

## Stock Performance

| (%)            | 1m     | 6m     | 12m    |
|----------------|--------|--------|--------|
| <b>Sensex</b>  | 1.49   | 21.47  | 33.77  |
| <b>BSE Oil</b> | 0.89   | 18.86  | 28.74  |
| BPCL           | 5.98   | 46.15  | 107.20 |
| Cairn India    | 0.36   | (2.16) | (1.11) |
| GAIL           | 5.37   | 20.48  | 41.52  |
| GSPL           | 12.76  | 53.60  | 84.47  |
| Guj. Gas       | 15.33  | 104.87 | 119.17 |
| HPCL           | 13.23  | 64.51  | 140.13 |
| IGL            | 15.73  | 50.46  | 53.35  |
| Oil India      | 8.70   | 31.24  | 32.51  |
| ONGC           | (0.33) | 26.65  | 46.14  |
| Petronet LNG   | 11.98  | 50.47  | 64.05  |
| Reliance Ind.  | (2.35) | 10.52  | 14.13  |

Source: Bloomberg

## What's inside?

- [Crude Oil changing trends](#)
- [Global demand and supply and US and Singapore Inventory data](#)
- [Petroleum products cracks and GRM](#)
- [Global Gas Markets](#)
- [Under-recoveries and product consumption.](#)
- [Petrochemical cracks and margins](#)
- [Relative trade monitor](#)
- [Key news during the month and data](#)
- [Stock performance](#)

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## Crude oil trends lower in July

Brent and WTI crude oil price

Average price for Aug stood at US\$ 102.0/96.6 bbl for Brent/WTI respectively – a decline from July Brent – US\$107.0/bbl; WTI – 103.1/bbl. Weak global demand, reduced geopolitical concerns, ample inventories and rising production led to cooling in the prices.



Source: Bloomberg, PhillipCapital India Research

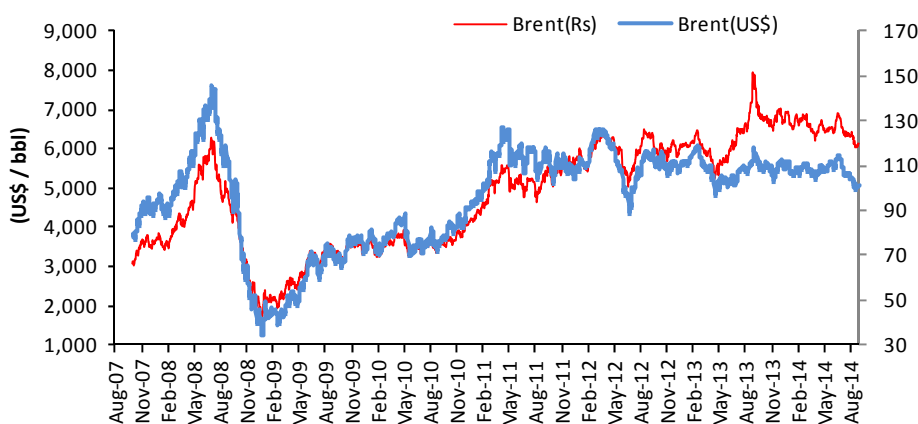
### Crude oil performance (as on 17<sup>th</sup> September 2014)

| Crude Type   | 1W (%) | 1M (%) | 3M (%) | 6M (%) | 1Y (%) | 3Y (%) | 5Y (%) |
|--|--------|--------|--------|--------|--------|--------|--------|
| West Texas Intermediate (WTI) Cushing Crude Oil Spot Price | 2.3%   | -2.5%  | -11.2% | -4.1%  | -11.0% | 2.6%   | 5.5%   |
| European Dated Brent                                       | -1.3%  | -4.6%  | -13.8% | -10.2% | -12.2% | -5.8%  | 6.6%   |
| OPEC Secretariat Crude Oil Basket Daily Price              | -2.4%  | -5.3%  | -13.4% | -8.8%  | -13.8% | -4.8%  | 7.2%   |
| Arabian Gulf Dubai Fateh Crude oil prices                  | -2.4%  | -4.3%  | -12.3% | -7.7%  | -10.5% | -4.4%  | 6.7%   |

Source: Bloomberg, PhillipCapital India Research

Brent oil (US\$) and Brent oil (Rs)

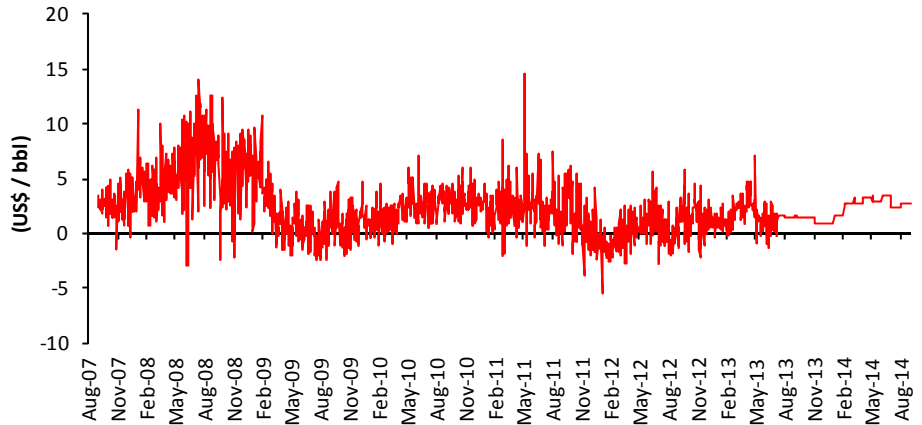
Led by depreciation of INR, Brent price declined in INR terms (3.4%) while the US\$ prices were lower by 4.7%



Source: Bloomberg, PhillipCapital India Research

**Dubai Crude – Arab Heavy spreads**

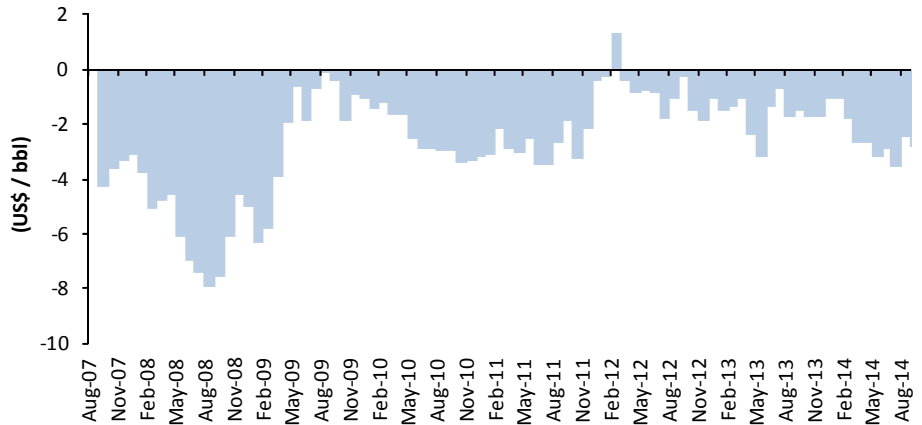
*Dubai-AH spreads have increased to US \$2.75/bbl (from US\$ 2.40/bbls in July 2014). Lower spread benefits complex refineries*



Source: Bloomberg, PhillipCapital India Research

**Saudi Aramco Arab Heavy – Dubai spreads**

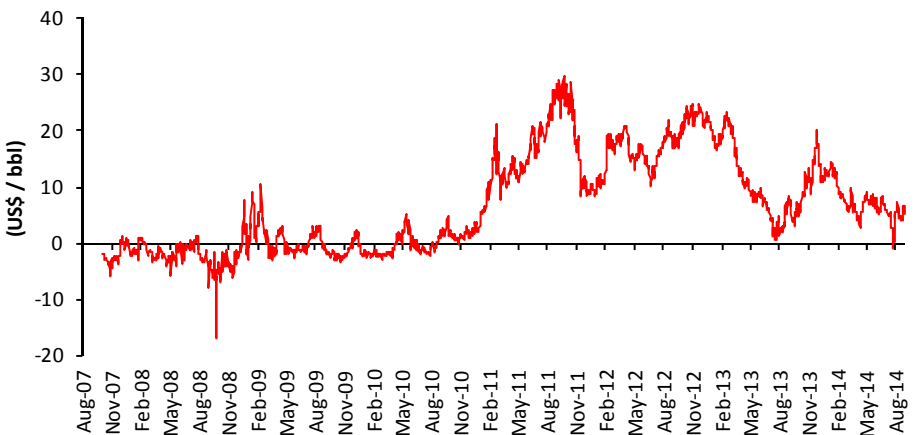
*Saudi offers higher discount: Based on Saudi Aramco’s official selling price for August 2014, discount for the Arab heavy crude over Dubai crude has increased to US\$5.40/bbl from US\$3.8/bbls in July 14; complex refiners stand to benefit*



Source: Bloomberg, PhillipCapital India Research

**Brent- WTI spreads**

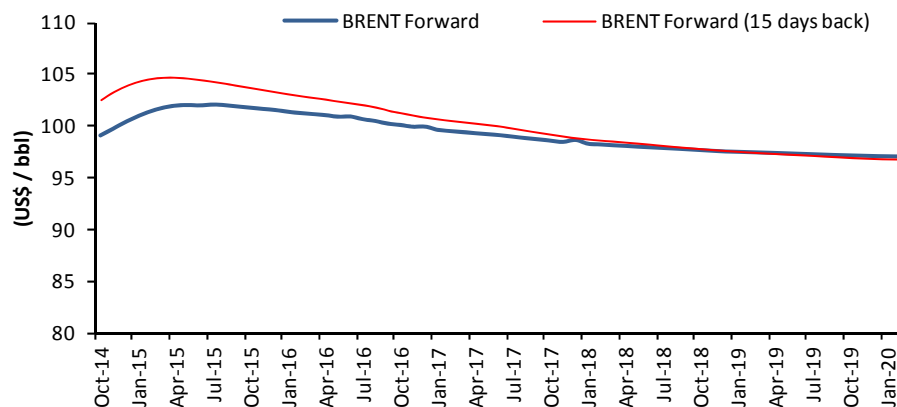
*Brent-WTI spreads declines: Brent’s premium to WTI increased in August to US\$5.4 v/s US\$3.8/bbl in July 2014*



Source: Bloomberg, PhillipCapital India Research

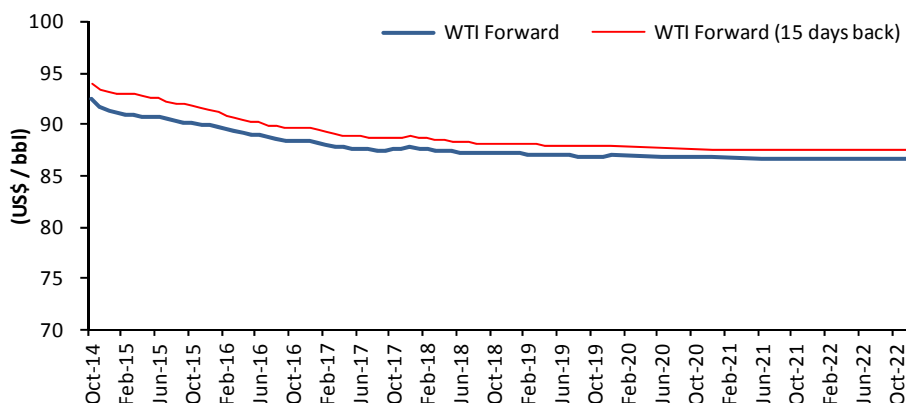
### Brent Oil forward prices

*Long-term Brent oil forward curve has remained relatively flat compared to the forward curve 15 days back*



Source: Bloomberg, PhillipCapital India Research

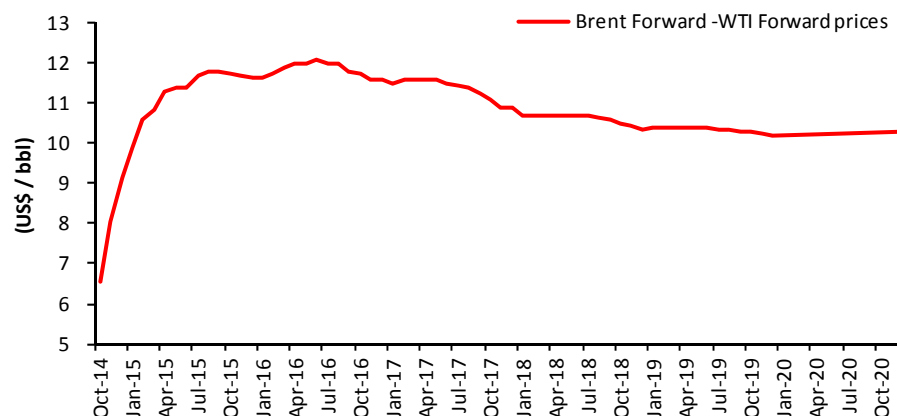
### WTI oil forward prices



Source: Bloomberg, PhillipCapital India Research

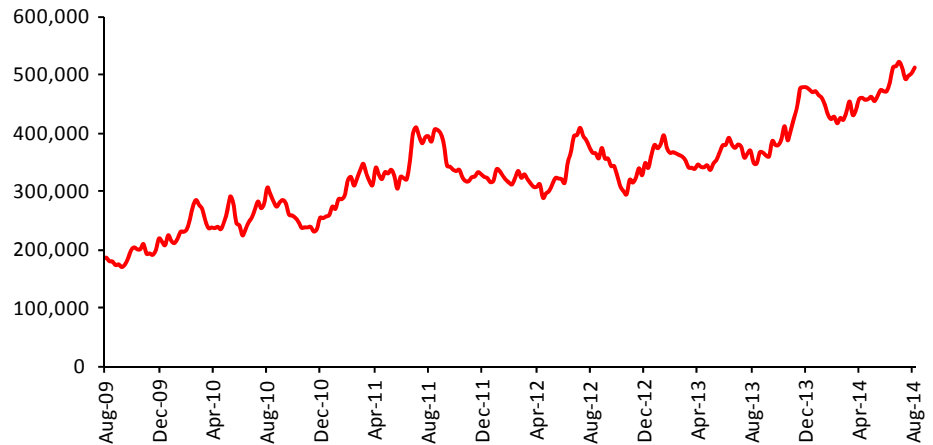
### Brent - WTI oil forward prices

*Near term Brent-WTI spreads has been narrow. However, long term trend suggests a spread of US\$10-11/bbls*



Source: Bloomberg, PhillipCapital India Research

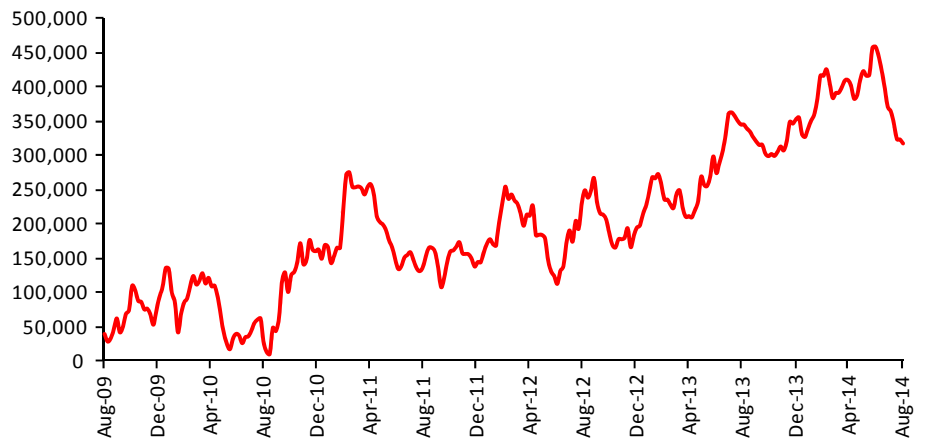
**CFTC Nymex Crude oil non-commercial contract/futures only**



Source: Bloomberg, PhillipCapital India Research

**CFTC Nymex Crude oil net non-commercial long contract/futures only**

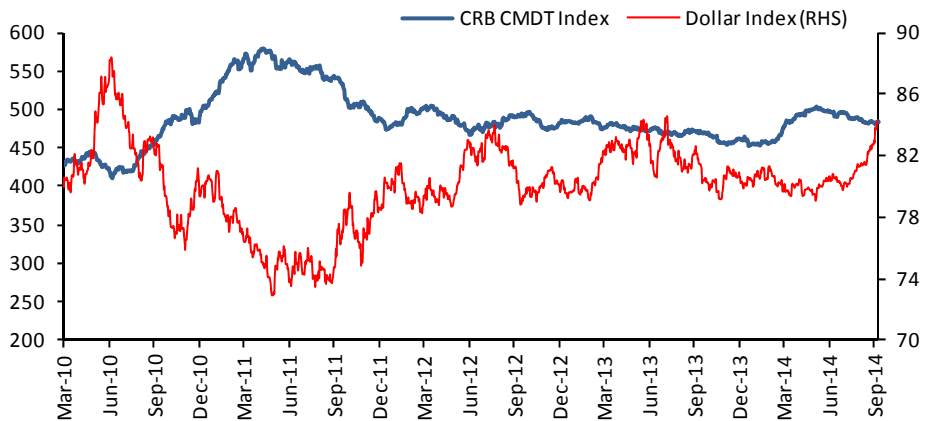
*Net non-commercial futures volumes have declined sharply from its high...reflecting lower speculative positions*



Source: Bloomberg, PhillipCapital India Research

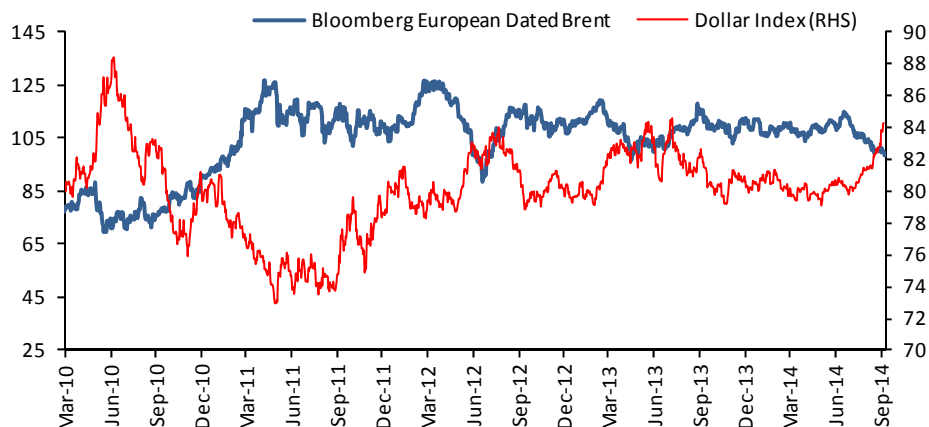
**CRB and Dollar Index**

*CRB index declined in Aug 2014; the dollar index during the similar period was higher.*



Source: Bloomberg, PhillipCapital India Research

**Brent and Dollar Index**

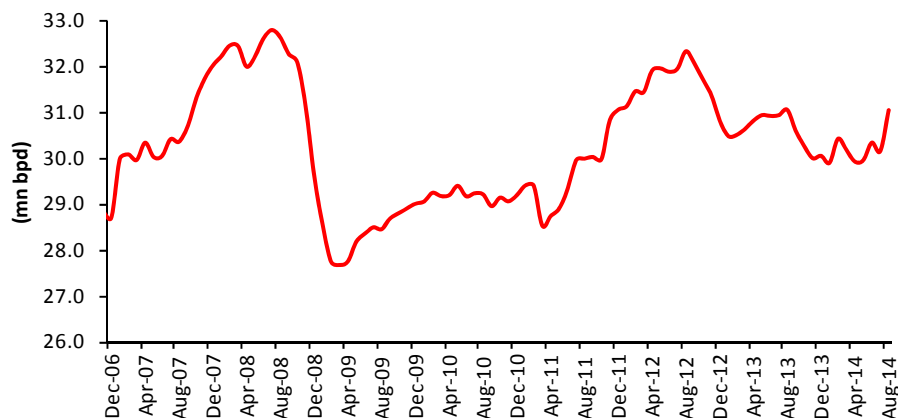


Source: Bloomberg, PhillipCapital India Research

## Global demand and supply and US and Singapore Inventory data

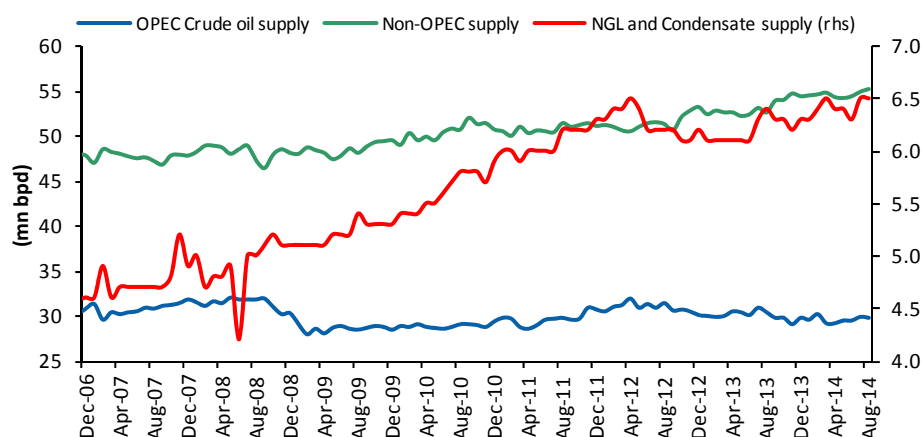
OPEC production increased in month of August-14, a significant increase from the previous month's production

### OPEC crude oil production



Source: Bloomberg, PhillipCapital India Research

### Liquid fuel supply

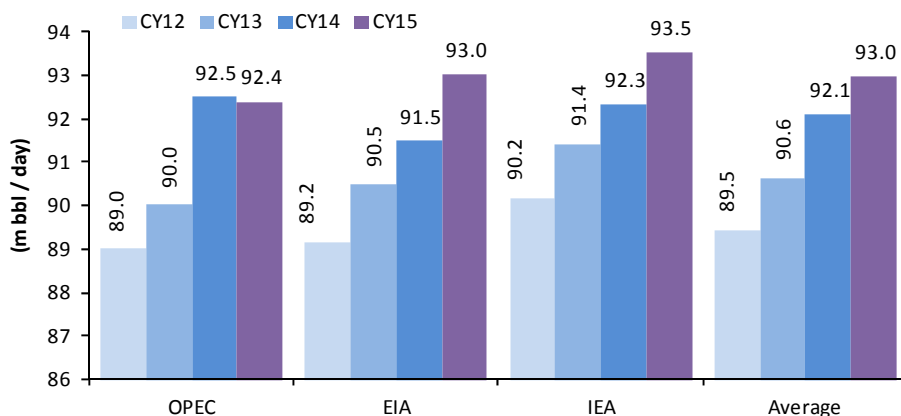


Source: Bloomberg, PhillipCapital India Research

### Global liquid fuel demand estimates

Most agency point to a firm demand estimate ~ avg. 1.0 mnbpd growth in CY14 and 1.4 mnbpd in CY15; with China, ME, Central & South America and other countries outside of OECD to account for nearly all consumption growth over the forecast period

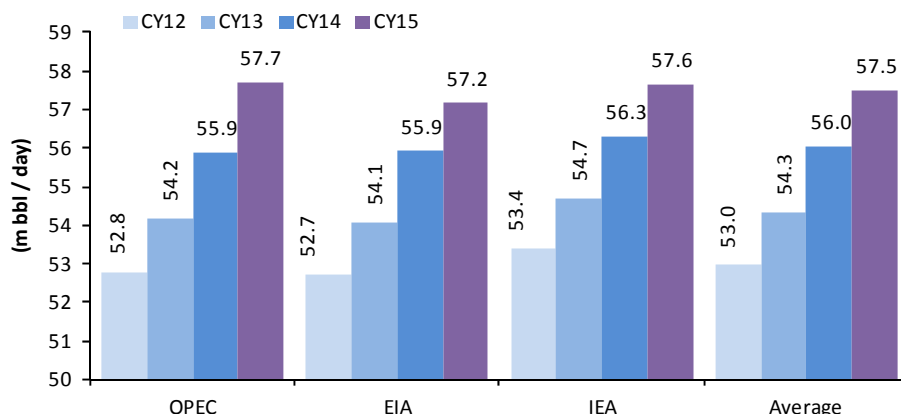
EIA forecasts Brent prices of US\$103/bbl for 4QCY14 and US\$103 for CY15. This is US\$5/bbls and US\$2/bbls lower than earlier guidance



Source: Bloomberg, PhillipCapital India Research

### Non-OPEC supply estimate

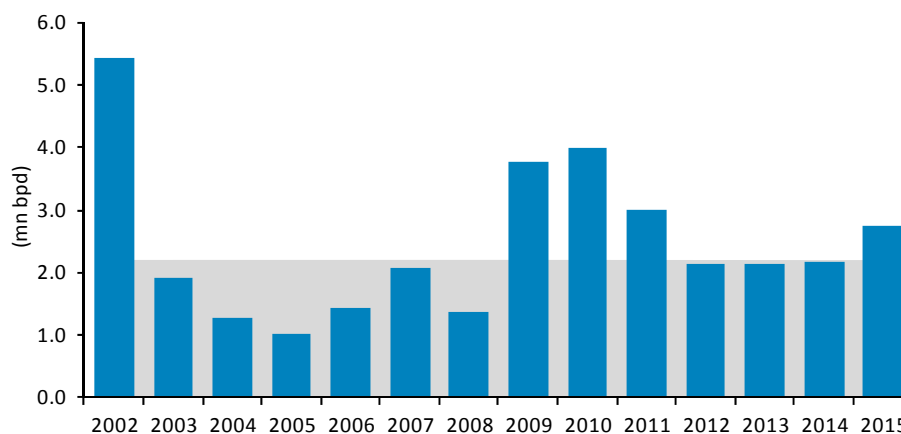
Agencies project Non-OPEC supplies to grow by 1.7mbpd and 1.5mbpd in CY14 and CY15 respectively.



Source: Bloomberg, PhillipCapital India Research

### OPEC spare capacity

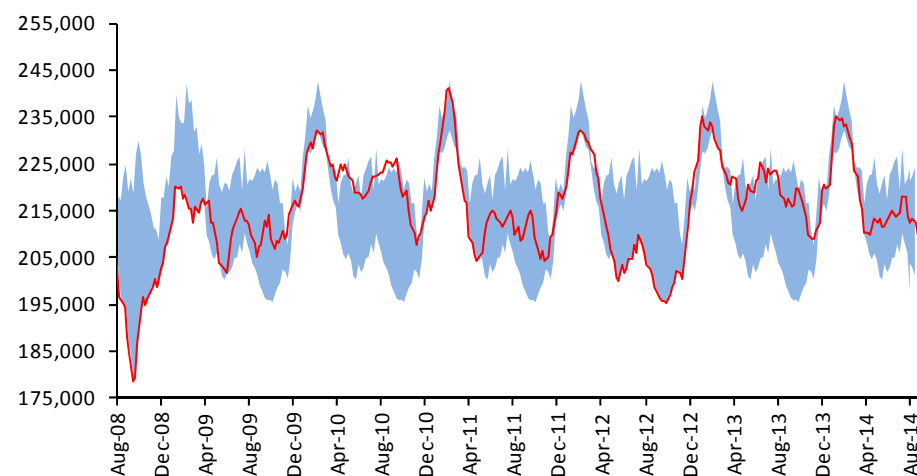
As per the EIA estimates, OPEC spare capacity is likely to be ~2.68 mbpd in CY15 up from 2.12 mbpd in CY14.



Source: Bloomberg, PhillipCapital India Research

### US motor gasoline inventory

US total motor gasoline inventories trended lower in July' 14 is at lower range of 5 year average

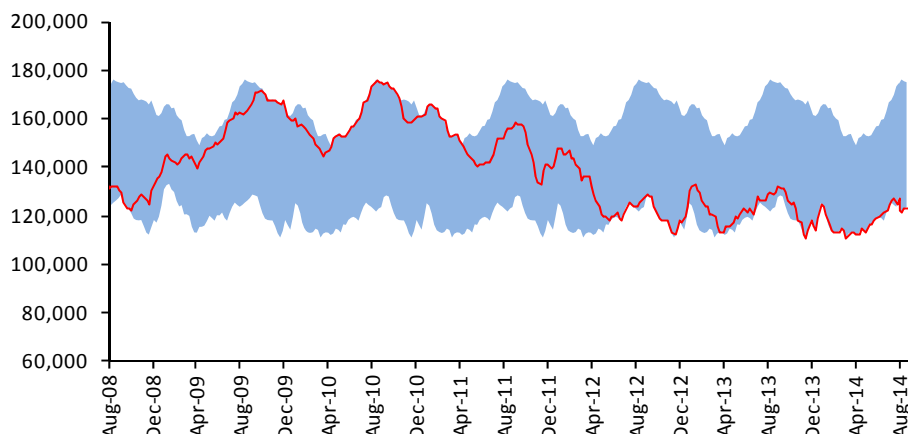


Source: Bloomberg, PhillipCapital India Research



### US Distillate fuel oil Inventory

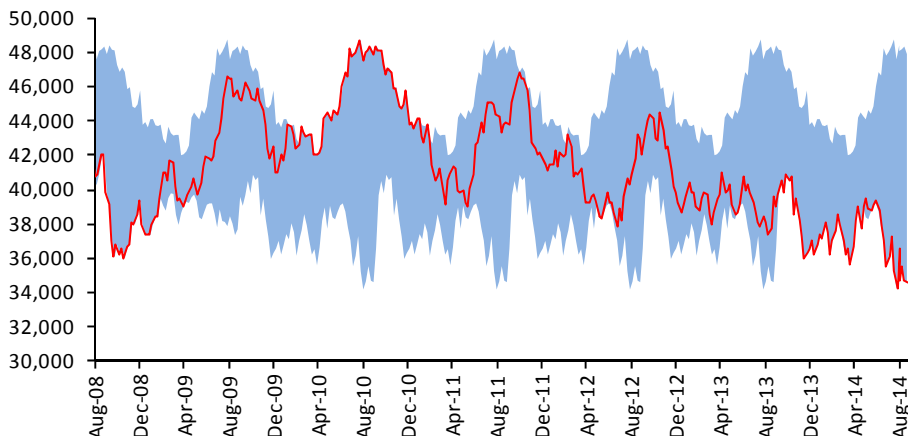
*US distillate inventory declined over the month, continues at the lowest level in the last five years*



Source: Bloomberg, PhillipCapital India Research

### US Jet Kerosene total Inventory

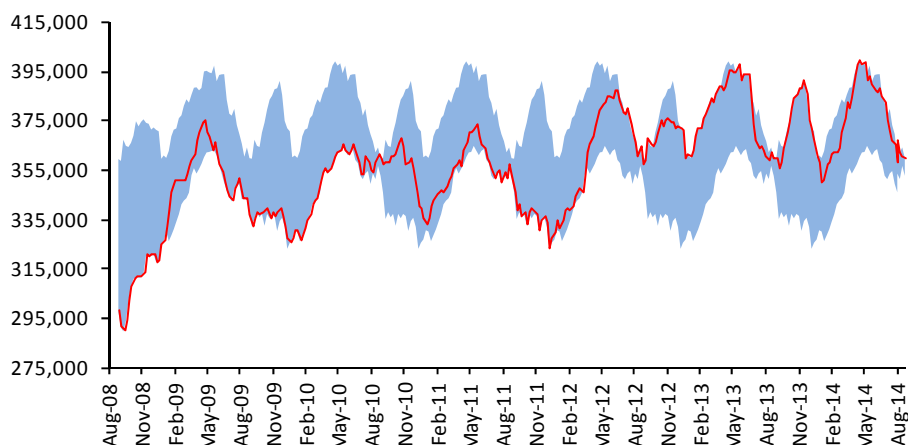
*US Jet Kerosene inventory fell towards lows and stands at 5 years lows*



Source: Bloomberg, PhillipCapital India Research

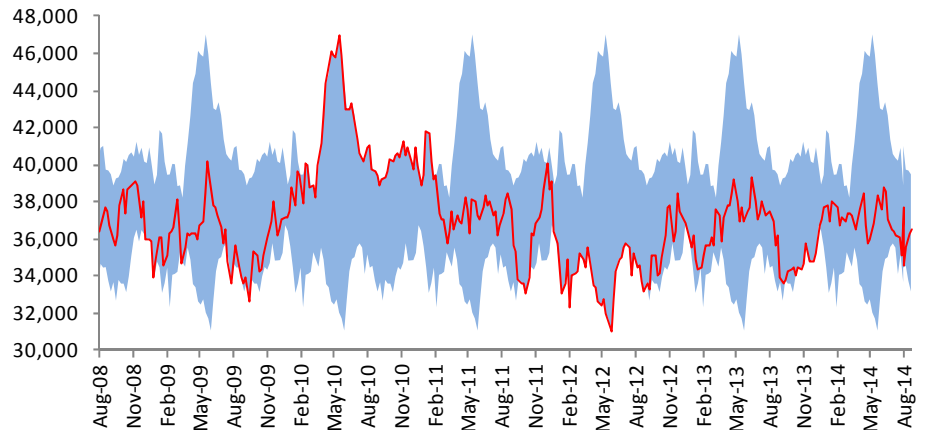
### Crude oil Total Inventory

*Crude oil inventory continues to remain at elevated levels.*



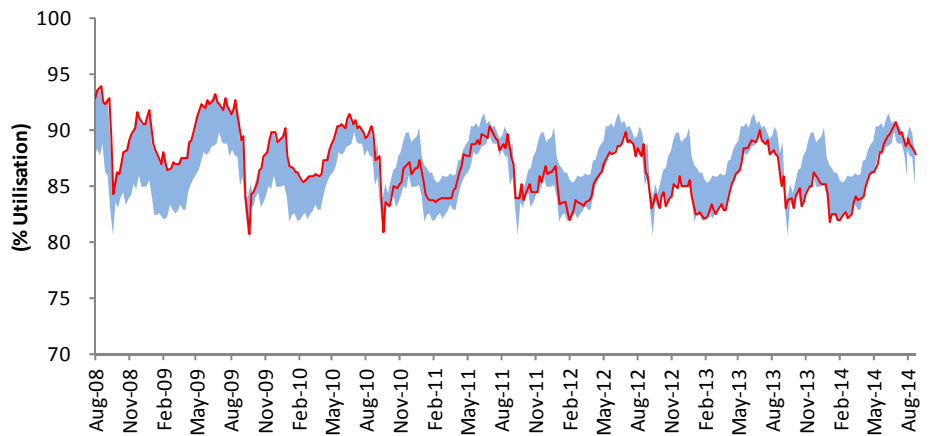
Source: Bloomberg, PhillipCapital India Research

### US Residual Fuel total Inventory



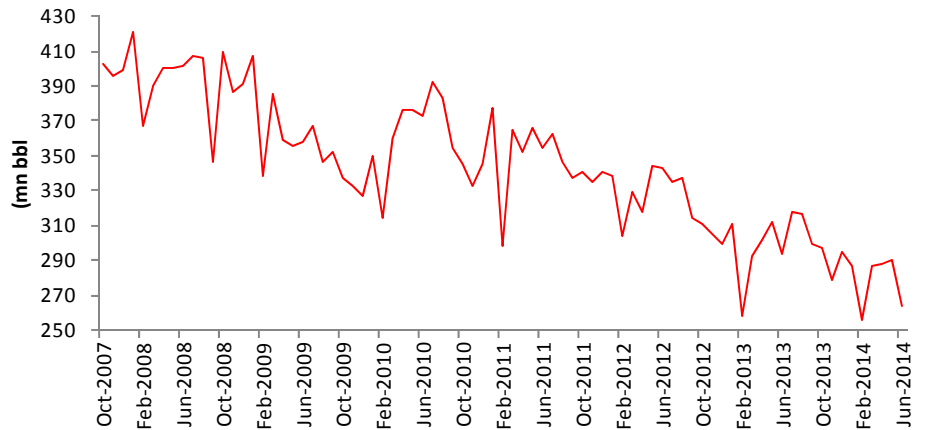
Source: Bloomberg, PhillipCapital India Research

### US refinery utilization (%)



Source: Bloomberg, PhillipCapital India Research

### US crude and product imports

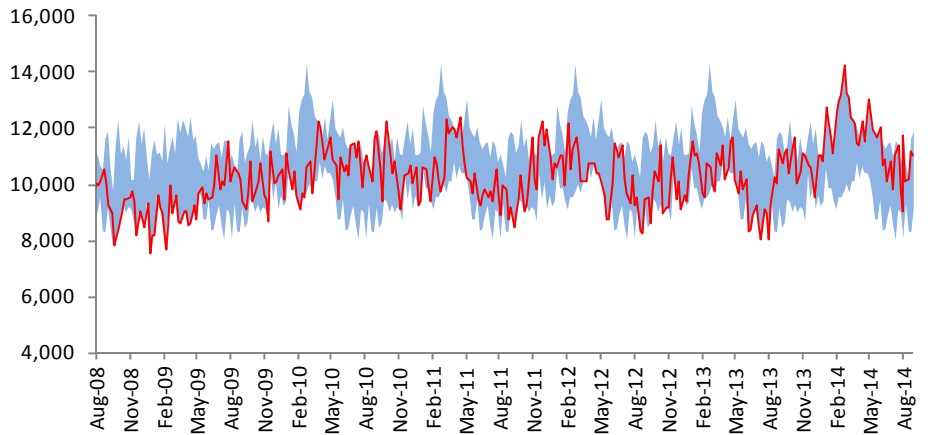


*US Import of Crude oil and products has been steadily declining, after witnessing higher imports in May 2014, June 2014 crude import declined*

Source: Bloomberg, PhillipCapital India Research

**Singapore Light Distillate Inventory data**

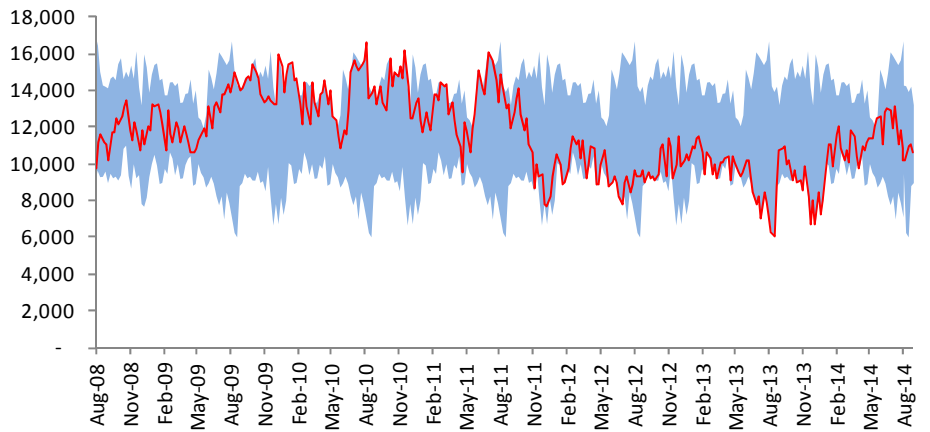
*Singapore light distillate inventory is at the higher end of the 5-yr average*



Source: Bloomberg, PhillipCapital India Research

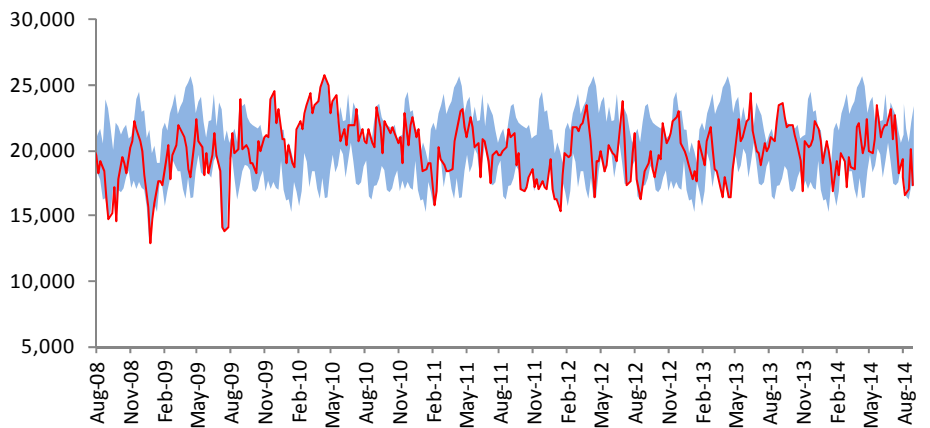
**Singapore Middle Distillate Inventory data**

*Singapore middle distillate inventories has moved to mid band of 5 year average*



Source: Bloomberg, PhillipCapital India Research

**Singapore Residues Total Inventory Data**



Source: Bloomberg, PhillipCapital India Research

## Petroleum Products cracks and GRMs

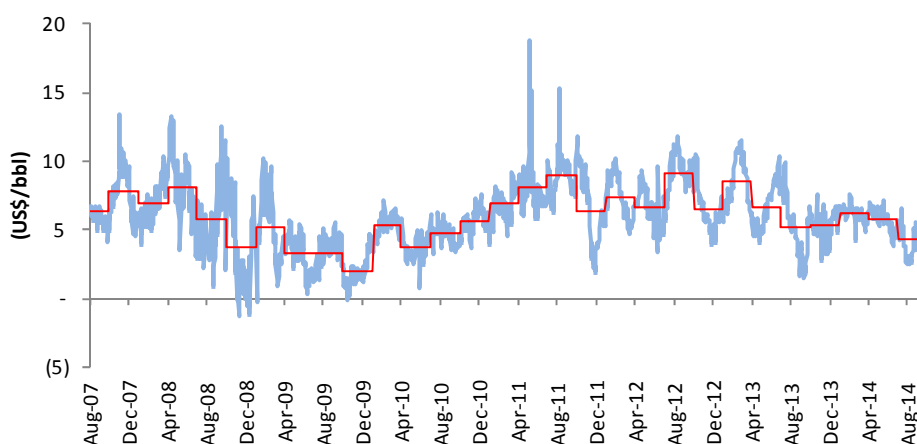
### Petroleum product prices

| Prices                 | Aug-14 | Jul-14 | Jun-14 | May-14 | Apr-14 | Q4FY14 | Q3FY14 | Q2FY14 | Q1FY14 | Q4FY13 | Q3FY13 | Q2FY13 | FY12  |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Dubai crude (US\$/bbl) | 101.9  | 105.7  | 108.2  | 105.6  | 104.8  | 104.6  | 106.7  | 106.2  | 100.7  | 108.0  | 107.1  | 106.2  | 109.9 |
| Gasoline (US\$/bbl)    | 109.1  | 121.1  | 119.0  | 116.7  | 117.3  | 116.7  | 112.4  | 116.2  | 112.0  | 123.4  | 117.3  | 117.8  | 121.1 |
| Diesel (US\$/bbl)      | 117.8  | 120.1  | 122.4  | 122.2  | 123.1  | 122.9  | 123.8  | 123.5  | 117.7  | 127.9  | 127.4  | 126.8  | 129.6 |
| Naphtha (US\$/bbl)     | 99.5   | 105.4  | 105.7  | 104.0  | 102.6  | 102.0  | 103.3  | 100.4  | 93.0   | 104.6  | 102.6  | 99.7   | 105.2 |
| SKO (US\$/bbl)         | 116.9  | 119.3  | 121.6  | 120.1  | 120.5  | 121.0  | 123.6  | 123.0  | 116.3  | 127.7  | 126.3  | 125.7  | 128.7 |
| Fuel oil (US\$/bbl)    | 90.1   | 92.1   | 93.9   | 92.4   | 91.3   | 92.1   | 92.9   | 93.0   | 93.1   | 98.1   | 95.5   | 99.8   | 103.2 |

Source: Bloomberg, PhillipCapital India Research

**Benchmark Singapore GRMs for the Aug declined to US\$ 3.66/bbl from US\$ 4.34/bbl in July 14**

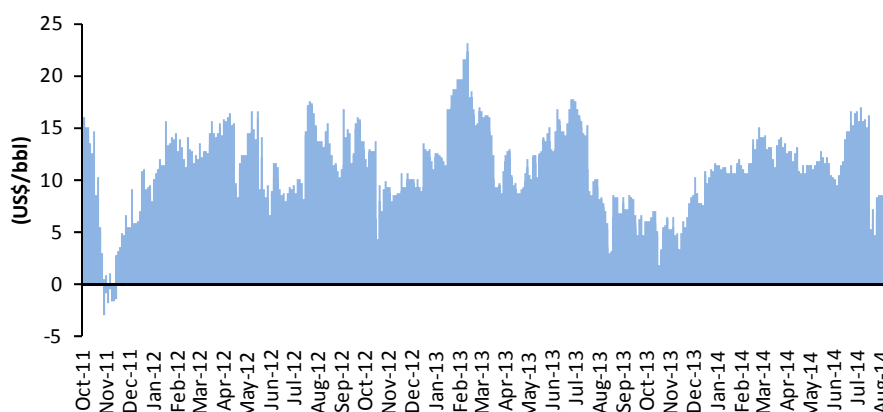
### Singapore complex GRMs



Source: Bloomberg, PhillipCapital India Research

**Gasoline cracks declined in August at US\$ 7.2/bbl compared to July 2014(US\$15.4/bbl)**

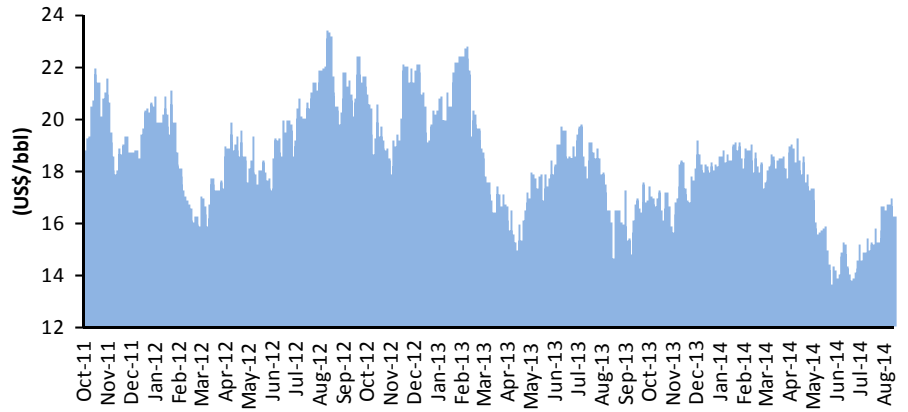
### Gasoline spreads



Source: Bloomberg, PhillipCapital India Research

*Diesel spreads improved to US\$ 15.9/bbl vs. US\$ 14.4/bbl in the Aug'14*

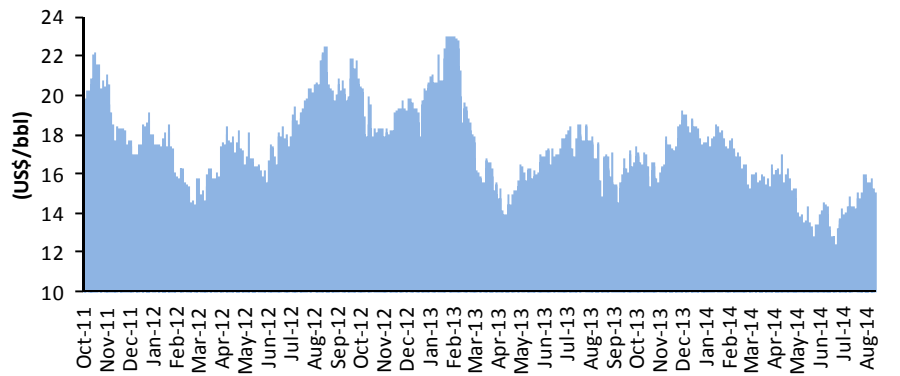
### Diesel Spreads



Source: Bloomberg, PhillipCapital India Research

*SKO spreads also improved to US\$15.0/bbl in Aug'14 compared to US\$13.5/bbls in July'14*

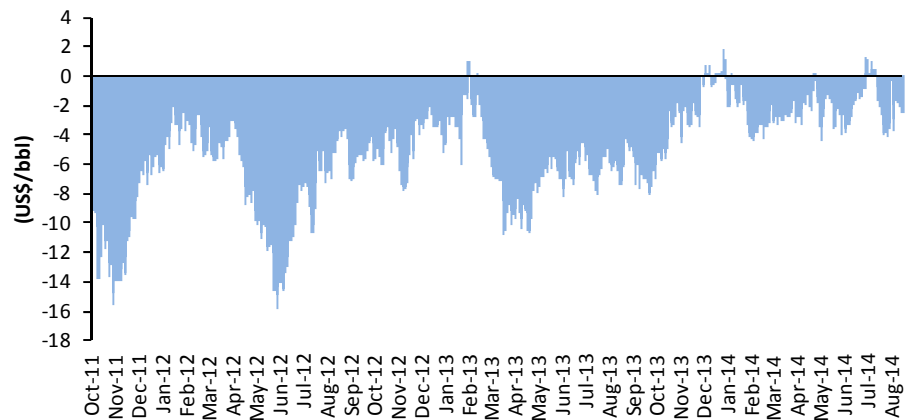
### SKO spreads



Source: Bloomberg, PhillipCapital India Research

*Naphtha spreads over Dubai crude were weaker at US\$(2.5)/bbls. Spreads during July were at US\$(0.4)/bbls.*

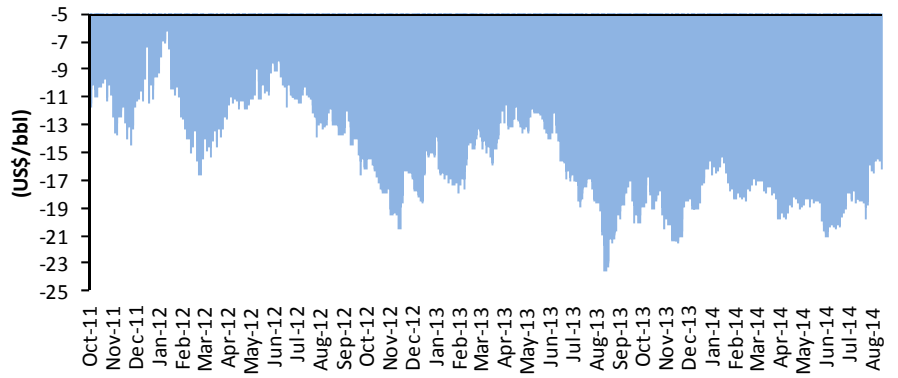
### Naphtha spreads



Source: Bloomberg, PhillipCapital India Research

**Fuel oil spreads**

*Fuel oil spreads also witnessed marginal improvement over Dubai by 1.9~/bbl to US\$ (11.9)/bbl in Aug'14 vs. (13.7)/bbbls in July-14.*

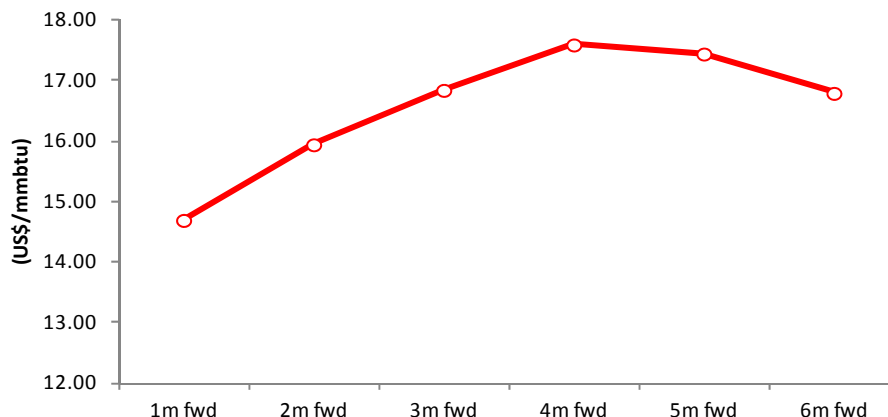


Source: Bloomberg, PhillipCapital India Research

## Global Gas Markets

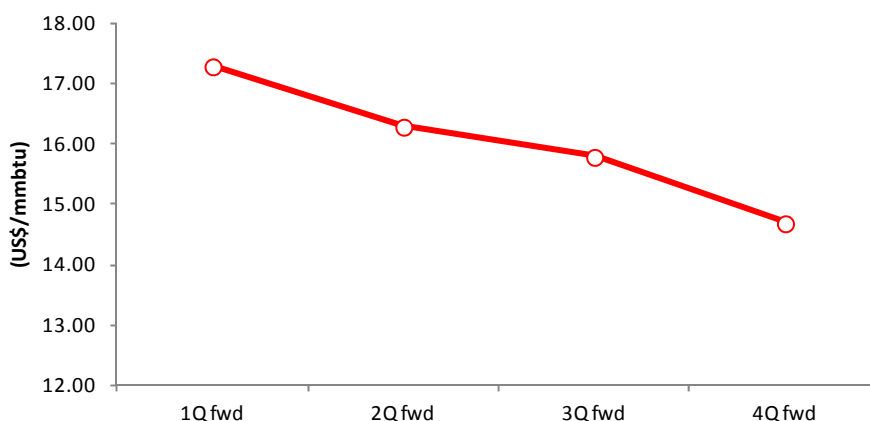
*LNG prices post correction seems to point towards rising prices in winters...*

**Forward LNG prices - Monthly**



Source: Bloomberg, PhillipCapital India Research

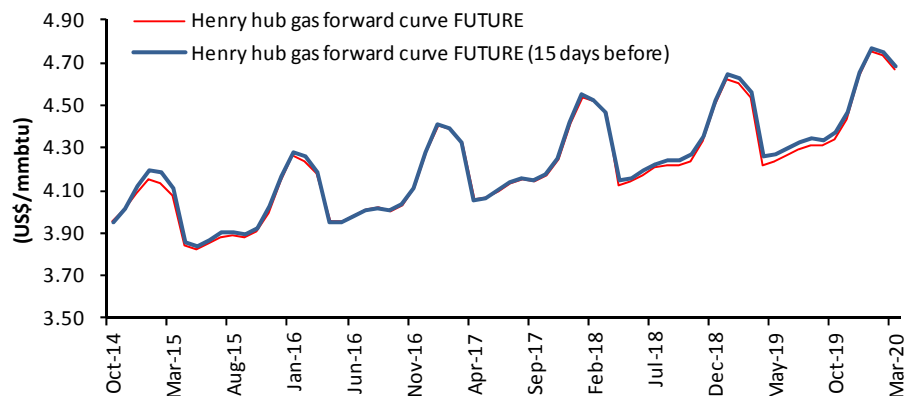
**Forward LNG prices - Quarterly**



Source: Bloomberg, PhillipCapital India Research

*Henry hub forwards point towards gas prices remaining subdued until 2020.*

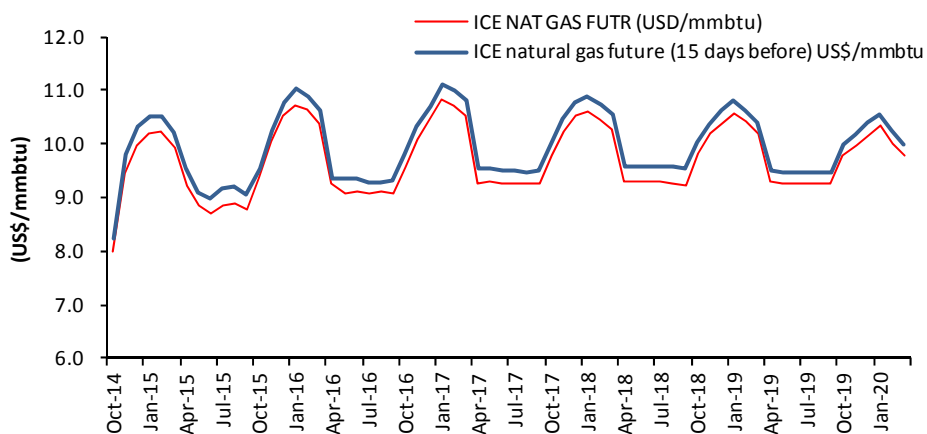
**Henry Hub forward gas prices**



Source: Bloomberg, PhillipCapital India Research

**ICE forward natural gas prices**

*ICE forward natural gas prices indicate prices ranging between US\$11.5-9.5/mmbtu going ahead*



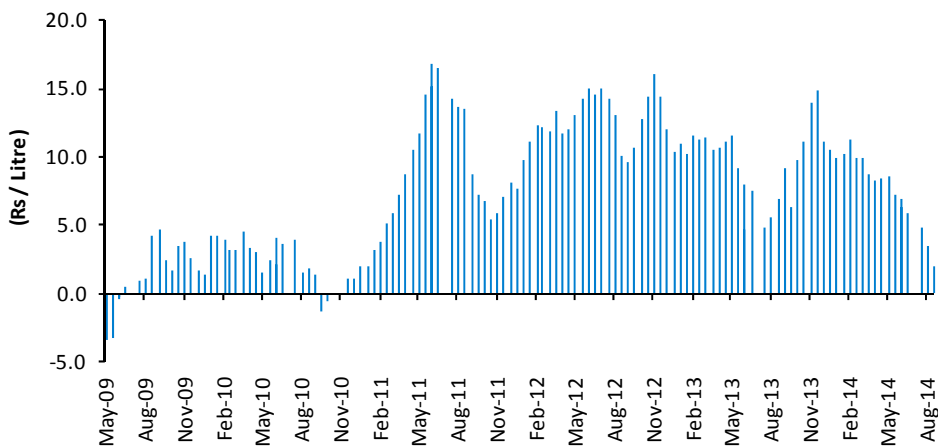
Source: Bloomberg, PhillipCapital India Research



## Under-recoveries and petroleum product consumption

**Diesel Under-recoveries for the August stands at Rs1.55/litre vs. UR of Rs2.9/litre in July 2014**

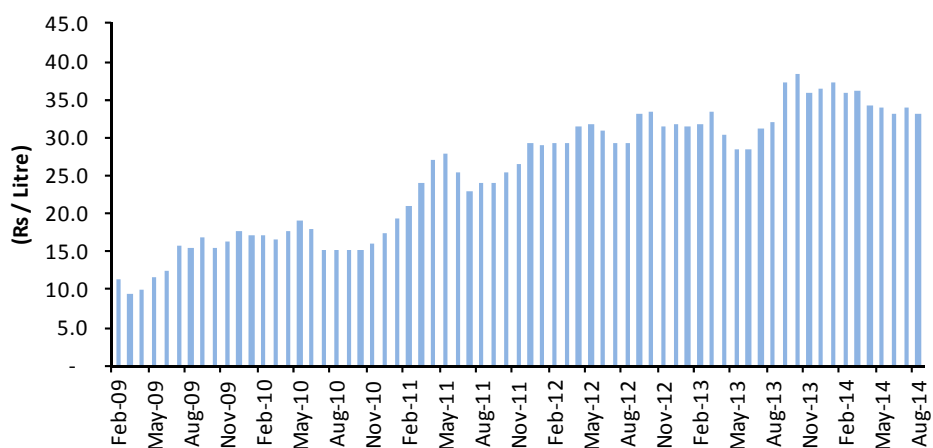
### Under-recoveries on Diesel



Source: Bloomberg, PhillipCapital India Research

**SKO Under-recoveries for the Aug stands at Rs33.0/litre vs. UR of Rs33.1/litre in July 2014**

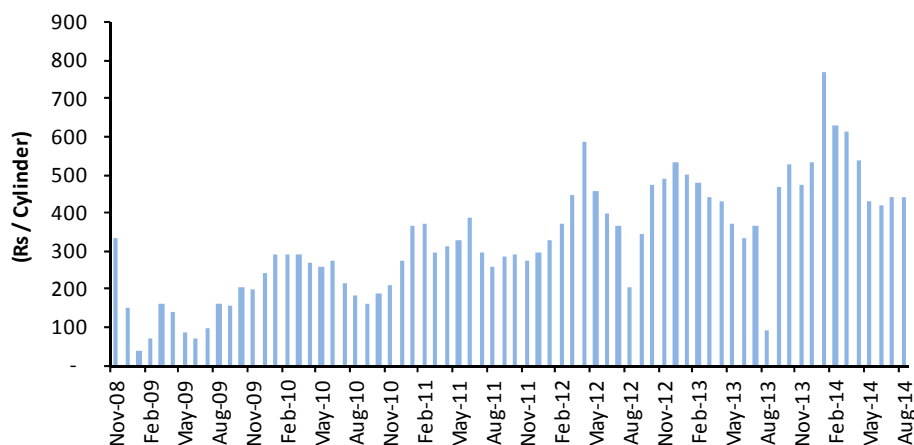
### Under-recoveries on Kerosene



Source: Bloomberg, PhillipCapital India Research

**LPG UR in month of August stood at Rs448/cy flat compared to Rs449/cy in July**

### Under-recoveries on Domestic LPG



Source: Bloomberg, PhillipCapital India Research

**Total Under-recovery- Crude & Exchange rate (FY15)**

| Brent Oil Prices |    |         |         |                |           |           |
|------------------|----|---------|---------|----------------|-----------|-----------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5     | 115       |
| Exchange Rate    | 57 | 797,460 | 875,387 | 953,313        | 1,031,240 | 1,109,166 |
|                  | 58 | 800,669 | 878,659 | 956,649        | 1,034,639 | 1,112,630 |
|                  | 59 | 803,878 | 881,932 | <b>959,986</b> | 1,038,039 | 1,116,093 |
|                  | 60 | 807,088 | 885,205 | 963,322        | 1,041,439 | 1,119,557 |
|                  | 61 | 810,297 | 888,478 | 966,658        | 1,044,839 | 1,123,020 |

**Total Under-recovery- Crude & Exchange rate (FY16)**

| Brent Oil Prices |    |         |         |                |           |           |
|------------------|----|---------|---------|----------------|-----------|-----------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5     | 115       |
| Exchange Rate    | 57 | 443,548 | 540,049 | 636,551        | 733,052   | 829,554   |
|                  | 58 | 509,618 | 607,532 | 705,447        | 803,361   | 901,276   |
|                  | 59 | 575,687 | 675,015 | <b>774,343</b> | 873,671   | 972,999   |
|                  | 60 | 641,757 | 742,498 | 843,239        | 943,981   | 1,044,722 |
|                  | 61 | 707,827 | 809,981 | 912,135        | 1,014,290 | 1,116,444 |

**Diesel Under-recovery- Crude & Exchange rate (FY15)**

| Brent Oil Prices |    |         |         |                |         |         |
|------------------|----|---------|---------|----------------|---------|---------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5   | 115     |
| Exchange Rate    | 57 | 94,857  | 150,183 | 205,508        | 260,834 | 316,160 |
|                  | 58 | 97,297  | 152,673 | 208,048        | 263,423 | 318,799 |
|                  | 59 | 99,738  | 155,163 | <b>210,588</b> | 266,013 | 321,438 |
|                  | 60 | 102,179 | 157,654 | 213,128        | 268,602 | 324,077 |
|                  | 61 | 104,619 | 160,144 | 215,668        | 271,192 | 326,716 |

**SKO Under-recovery- Crude & Exchange rate (FY16)**

| Brent Oil Prices |    |         |         |                |         |         |
|------------------|----|---------|---------|----------------|---------|---------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5   | 115     |
| Exchange Rate    | 57 | 260,910 | 267,599 | 274,288        | 280,977 | 287,666 |
|                  | 58 | 263,486 | 270,228 | 276,969        | 283,711 | 290,452 |
|                  | 59 | 266,062 | 272,856 | <b>279,650</b> | 286,444 | 293,238 |
|                  | 60 | 268,639 | 275,485 | 282,332        | 289,178 | 296,025 |
|                  | 61 | 271,215 | 278,114 | 285,013        | 291,912 | 298,811 |

**SKO Under-recovery- Crude & Exchange rate (FY15)**

| Brent Oil Prices |    |         |         |                |         |         |
|------------------|----|---------|---------|----------------|---------|---------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5   | 115     |
| Exchange Rate    | 57 | 277,362 | 283,132 | 288,903        | 294,673 | 300,443 |
|                  | 58 | 277,631 | 283,406 | 289,182        | 294,958 | 300,733 |
|                  | 59 | 277,899 | 283,680 | <b>289,461</b> | 295,243 | 301,024 |
|                  | 60 | 278,167 | 283,954 | 289,741        | 295,527 | 301,314 |
|                  | 61 | 278,436 | 284,228 | 290,020        | 295,812 | 301,604 |

**LPG Under-recovery- Crude & Exchange rate (FY16)**

| Brent Oil Prices |    |         |         |         |         |         |
|------------------|----|---------|---------|---------|---------|---------|
| Rs mn            |    | 105     | 107.5   | 110     | 112.5   | 115     |
| Exchange Rate    | 57 | 421,626 | 443,773 | 465,920 | 488,067 | 510,215 |
|                  | 58 | 426,737 | 449,058 | 471,379 | 493,700 | 516,021 |
|                  | 59 | 431,849 | 454,344 | 476,839 | 499,333 | 521,828 |
|                  | 60 | 436,961 | 459,630 | 482,298 | 504,966 | 527,635 |
|                  | 61 | 442,073 | 464,915 | 487,757 | 510,599 | 533,441 |

**LPG Under-recovery- Crude & Exchange rate (FY15)**

| Brent Oil Prices |    |         |         |                |         |         |
|------------------|----|---------|---------|----------------|---------|---------|
| Rs mn            |    | 105     | 107.5   | 110            | 112.5   | 115     |
| Exchange Rate    | 57 | 425,241 | 442,071 | 458,902        | 475,733 | 492,564 |
|                  | 58 | 425,741 | 442,580 | 459,419        | 476,258 | 493,098 |
|                  | 59 | 426,241 | 443,089 | <b>459,936</b> | 476,784 | 493,632 |
|                  | 60 | 426,742 | 443,598 | 460,454        | 477,309 | 494,166 |
|                  | 61 | 427,242 | 444,106 | 460,971        | 477,835 | 494,699 |

Source: Bloomberg, PhillipCapital India Research

Note: We assume diesel losses to erode from FY16

**Consumption of petroleum products**

| Product (tmt)        | July-14 | July -13 | YoY gr | June-13 | MoM gr | FY14    | FY13    | YoY gr |
|----------------------|---------|----------|--------|---------|--------|---------|---------|--------|
| LPG                  | 1,426   | 1,363    | 4.6    | 1,352   | 5.5    | 16,355  | 15,601  | 4.8    |
| SKO                  | 591.3   | 603.1    | (2.0)  | 595.3   | (0.7)  | 7,165   | 7,502   | (4.5)  |
| HSD                  | 5,738   | 5,400    | 6.3    | 6,144   | (6.6)  | 68,348  | 69,080  | (1.1)  |
| MS                   | 1,481   | 1,406    | 5.4    | 1,610   | (8.0)  | 17,127  | 15,744  | 8.8    |
| Naptha+NGL           | 1010.1  | 958.5    | 5.4    | 875.9   | 15.3   | 11,358  | 12,289  | (7.6)  |
| ATF                  | 462.2   | 439.5    | 5.2    | 450     | 2.7    | 5,504   | 5,271   | 4.4    |
| LDO                  | 31.4    | 30.2     | 4.0    | 29.6    | 6.1    | 385.9   | 398.5   | (3.2)  |
| Lubricants & Greases | 228.7   | 224.7    | 1.8    | 231     | (1.0)  | 2,863   | 3,196   | (10.4) |
| FO & LSHS            | 472.5   | 606.5    | (22.1) | 503     | (6.1)  | 6,332   | 7,656   | (17.3) |
| Bitumen              | 246.3   | 187      | 31.7   | 486.6   | (49.4) | 4,921   | 4,676   | 5.2    |
| Petroleum coke       | 985.6   | 1070.7   | (7.9)  | 939.9   | 4.9    | 11,512  | 10,135  | 13.6   |
| Others               | 494.3   | 514.4    | (3.9)  | 489     | 1.1    | 6,047   | 5,509   | 9.8    |
| Total                | 13,168  | 12,804   | 2.8    | 13,707  | (3.9)  | 157,917 | 157,057 | 0.5    |

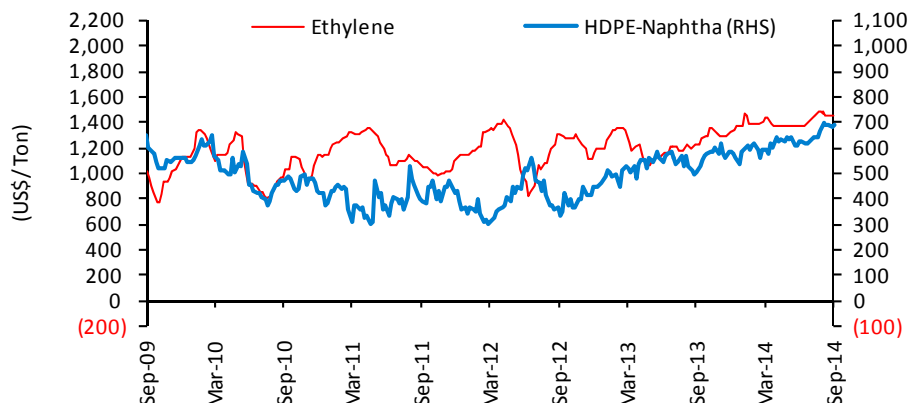
Source: Bloomberg, Phillip Capital India Research

*Diesel demand registered a growth of 6.3% in July 2014  
While MS demand grew by 5.4% YoY*

## Petrochemical cracks and margins

**HDPE – Naphtha spreads have averaged at US\$682/tonne in Aug higher compared to US\$637/MT in July 2014**

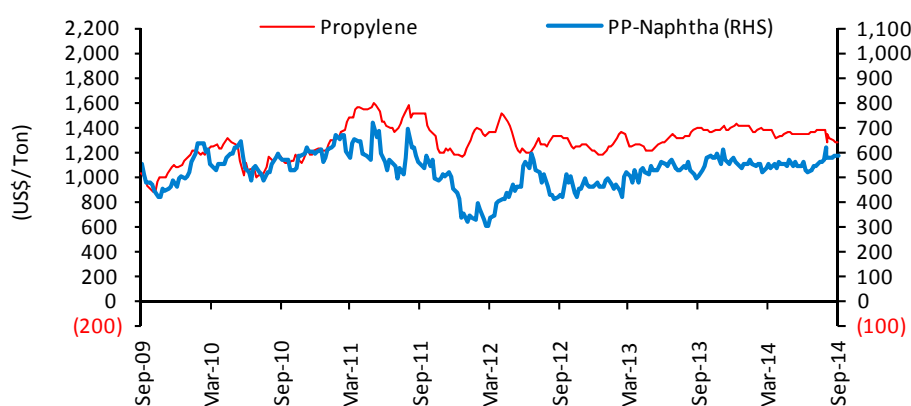
**HDPE-Naphtha spreads and Ethylene prices**



Source: Bloomberg, PhillipCapital India Research

**PP – Naphtha spreads have averaged at US\$581/tonne in Aug higher compared to US\$555/MT in July 2014**

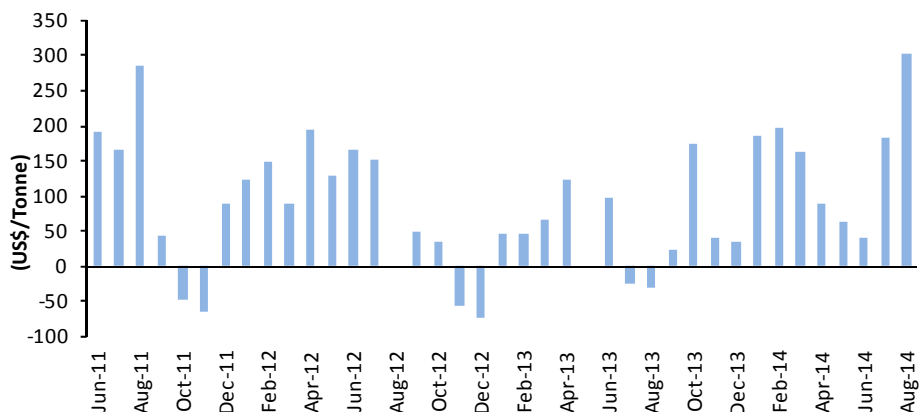
**PP spreads over Naphtha and Propylene prices**



Source: Bloomberg, PhillipCapital India Research

**Cracker margins improved during July averaging at US\$302/MT vs. US\$182/MT in July 2014 and trailing 12 months average of US\$125/tonne**

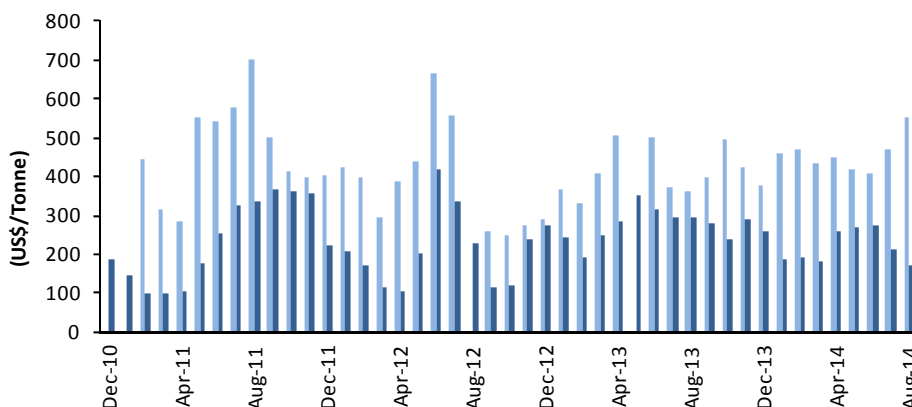
**Cracker margins**



Source: Bloomberg, PhillipCapital India Research

*Margins for the Integrated PE manufacturers were strong during Aug. Integrated margins witnessed increase (US\$554/MT in Aug vs. US\$471/MT in July), non-integrated margins were however lower at US\$172/MT vs. US\$213/MT*

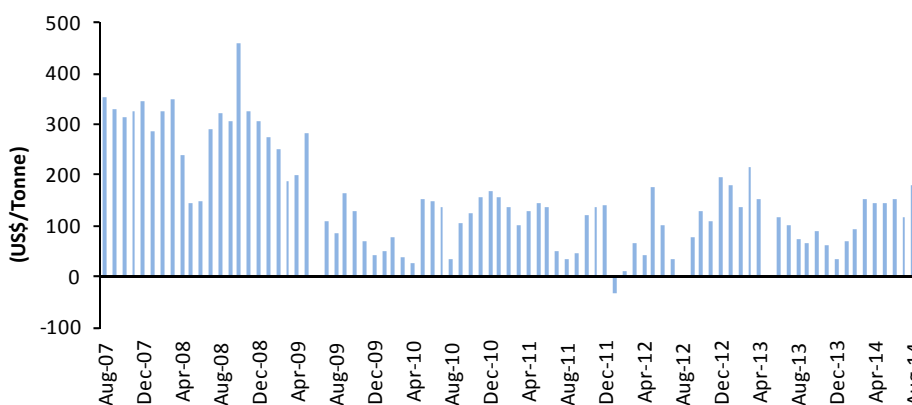
**PE margins**



Source: Bloomberg, PhillipCapital India Research

*PP margins have improved with margins at US\$180/MMT vs. US\$117/MMT. RIL stands to benefit due to higher PP margins as it forms significant part of its Petchem production*

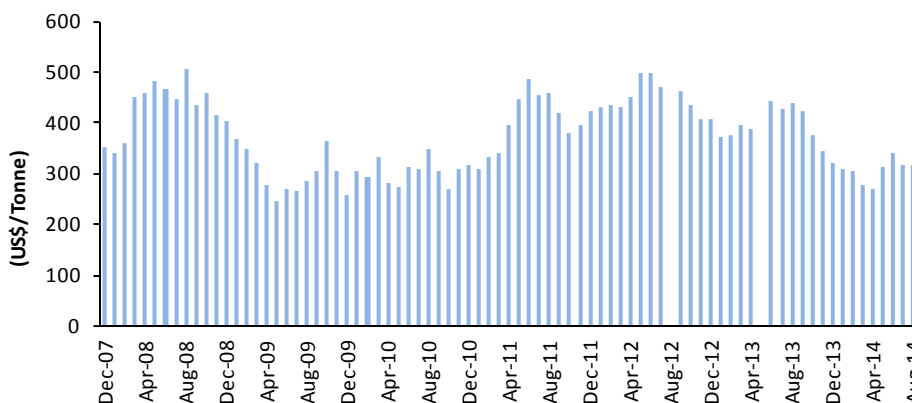
**PP margins**



Source: Bloomberg, PhillipCapital India Research

*PVC margins have also declined with July average at US\$317/tonne vs. US\$317/tonne in July 2014*

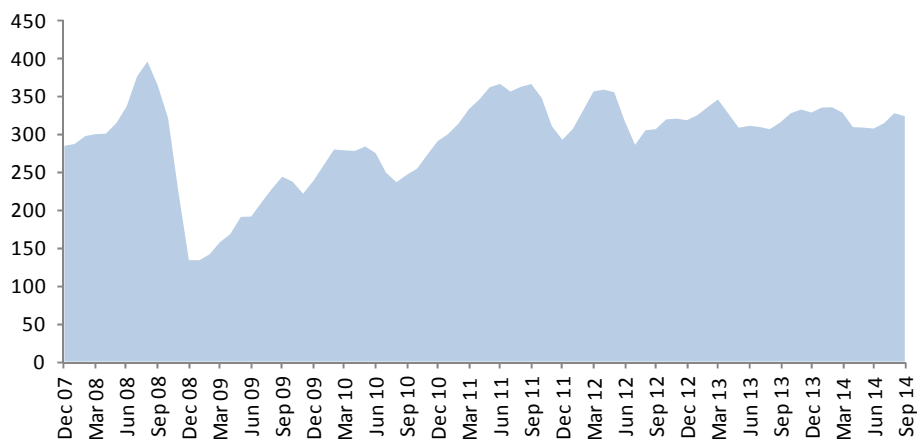
**PVC margins**



Source: Bloomberg, PhillipCapital India Research

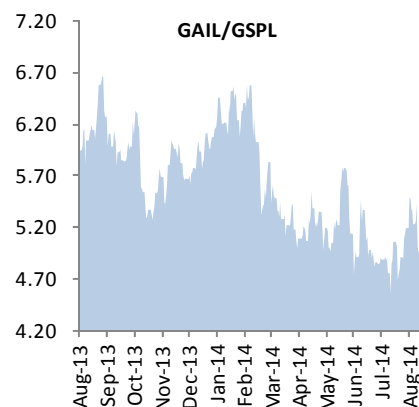
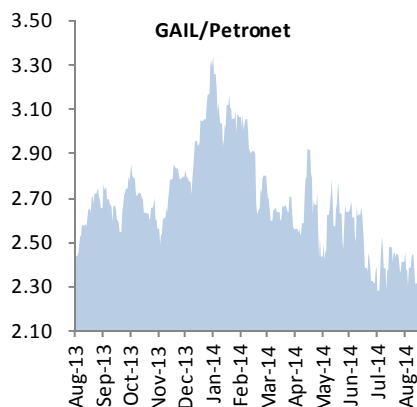
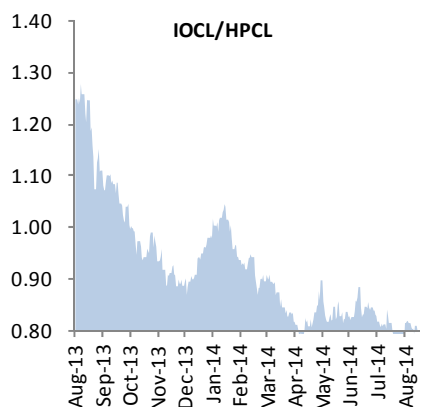
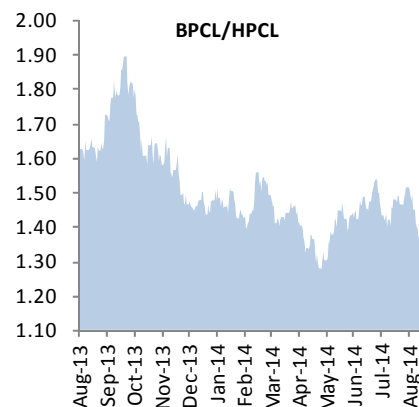
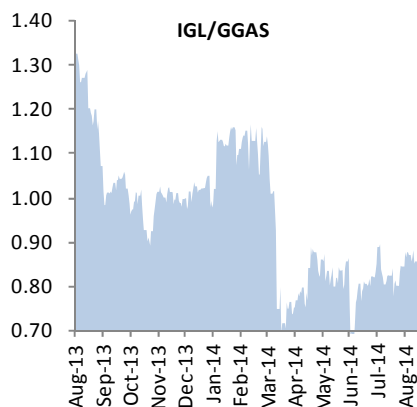
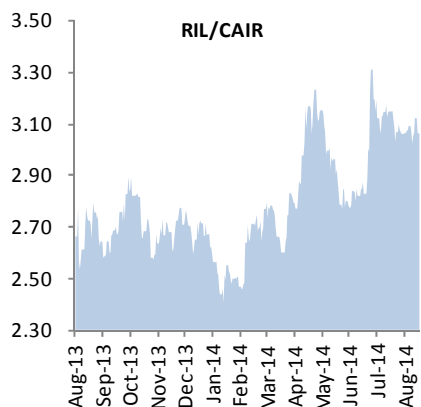
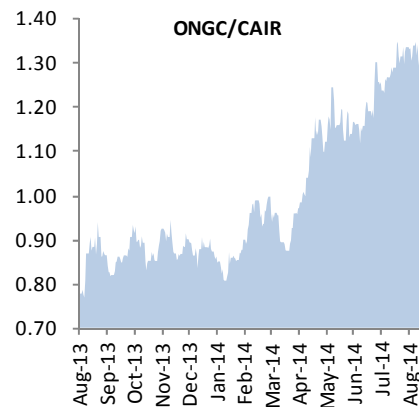
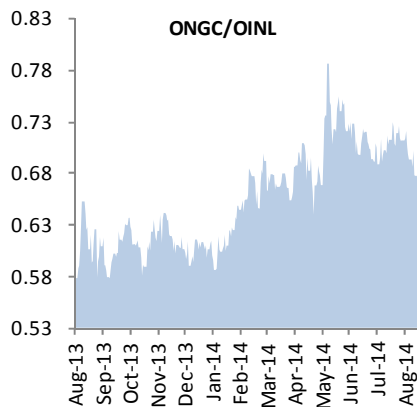
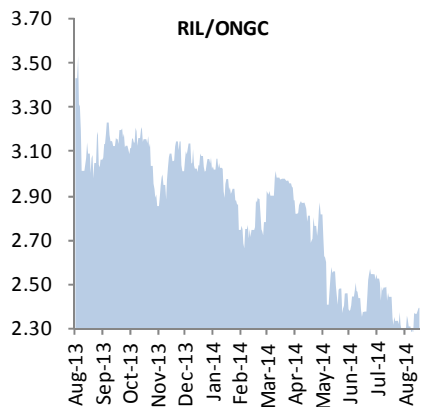
**ICIS Asian Petrochemical Index**

*ICIS Asian petrochemical index during September 2014 averages at 324 vs. Aug2014 average of 314, lower MoM. Index during the trailing 12 months was at 323 thus current month prices are flat on relative basis*



Source: ICIS, PhillipCapital India Research

## Relative trade monitor



Source: Bloomberg, PhillipCapital India Research

## Key news during the month

### BP makes presentation before Committee of Secretaries -D-34 cluster not viable at less than \$10/mmbtu

- BP along with its partners, RIL has approximately 5-7TCF of gas discoveries in deep and ultra-deep waters.
- JV is in various stages of developing these discoveries - some are being appraised while some have already been approved to be developed. These discoveries, if developed, have the potential to increase production upto 50 MMSCMD of gas within the next 4-5 years. The first of these projects, the D-34 cluster of discoveries contain 1.2 TCF of gas and first gas is expected by 2018. But the \$4 billion investment is on hold pending a gas price hike.
- BP has submitted a detailed exercise which shows that the development of the D-34 cluster is not viable at a gas price of less than US\$10/mmbtu.
- These resources however will not be viable for development at any price less than \$9-10/mmbtu. For example, below, are indicative economics for the brownfield development of the D34 cluster of discoveries. Developing D34 will result in 1.2TCF of gas being produced for domestic markets and will require \$4 billion of upfront capital investment from the contractor group. A comparison of economic viability of the D34 project based on the FDP and additional information submitted to DGH at different gas prices is as follows:

#### D-34 NPV at various gas prices

|   | Units      | \$8/mmbtu | \$9/mmbtu | \$10/mmbtu | \$12/mmbtu |
|---|------------|-----------|-----------|------------|------------|
| Resource Size                                     | TCF        | 1.2       | 1.2       | 1.2        | 1.2        |
| Total Revenues (adjusted for D34 calorific value) | \$ billion | 8.1       | 9.1       | 10.1       | 12.1       |
| Less Royalty                                      | \$ billion | -0.8      | -0.9      | -1         | -1.2       |
| Less Operating Expenditure (indicative)           | \$ billion | -1.4      | -1.4      | -1.4       | -1.4       |
| Net Revenue                                       | \$ billion | 5.9       | 6.8       | 7.7        | 9.5        |
| PV of Net Revenue                                 | \$ billion | 3         | 3.4       | 3.9        | 4.7        |
| Less Capital Expenditure (upfront)                | \$ billion | -4        | -4        | -4         | -4         |
| Returns from project                              | \$ billion | -1        | -0.6      | -0.1       | 0.7        |

- **Key assumptions:** (1) US\$4 billion Capex for each TCF for deep water is ~US\$23/boe (in line with international practice). (2) 3% of capex as operating expenditure. (3) 0.5% gas utilized as fuel for the project. (4) Fast track development - 3-4 years of FDP approval. (5) Aggressive production profile (14% plateau) and production for 13 years

### Cairn seeks revision in price of Rajasthan crude

- Cairn India Limited has sought an increase in price of crude sold from its RJ-ON-90/1 block in Rajasthan. The Rajasthan crude oil is being delivered through the world's longest heated pipeline to two of IOC's refineries at Panipat and Gujarat, and the Reliance and Essar Oil refineries in Gujarat. Currently 20% of Rajasthan crude is being consumed by the public sector refineries and the balance 80% by the private refiners.
- It may be noted that pricing for this crude was agreed in line with other indigenous crude oils as: RJ Crude Price = Bonny Light (less) GPW Adjustment (less) 2.14% of Bonny Light (less) CST Adjustment (2%). Since then, only minor adjustments have been made to the pricing formula.
- Cairn has noted that the discount of 2.14% in the pricing formula was provided only as an initial incentive for refineries to process RJ crude in view of apprehensions on logistics and processing due to high viscosity and pour point. Since over 240 MMbbls



of RJ crude oil has been processed by the domestic refineries in the last 5 years, this adjustment is no longer applicable, the company has claimed.

- Notably, an independent study by an international consultant to assess RJ crude value in the overseas market has pegged the price of Rajasthan crude to be higher by \$7-8 per barrel to the price at which it is currently being sold domestically.
- Cairn has argued that the current sub optimal realization in pricing of RJ crude is impacting the value for all stake holders. At a production rate of 200,000 bopd, the potential yearly revenue loss due to lower price realisation is around US\$ 600 Million, of which US\$ 425 Million ( around 71%) is the financial loss to the Government.

#### 'Extend oil & gas pacts' tenure to entire economic life of blocks'

- Kelkar committee set up to suggest a road map for enhancing oil and gas production has gone beyond its key recommendation of market-linked gas pricing. The panel has pitched for extending contracts for the economic life of blocks, revamping the bid parameters under NELP and allowing the private sector to develop shale reserves in nominated blocks.
- The committee proposed the changes in a consultation paper submitted to the petroleum ministry last month. The views of the panel chaired by former Finance Secretary Vijay Kelkar, if adopted, will alter the development of India's oil and gas sector over the next decade-and-a-half through 2030.
- "Extension of the contract tenure up to the end of the economic life of the asset would create incentives for operators to focus on long-term investments such as enhanced oil recovery techniques rather than short-term gains," the panel said. The suggestion assumes significance as Cairn India, the petroleum arm of Vedanta Resources, is seeking an extension of its contract for the Rajasthan oilfields beyond the current term ending in 2019.
- Vedanta Chief Executive Tom Albanese had last week said the limited tenure of production sharing contracts (PSCs) in the petroleum sector with multiple renewals deterred investment and private sector participation by not allowing investors to put in place business plans that maximised output over the economic life of the field. The former Rio Tinto chief had also called for relaxed guidelines on private sector participation for exploitation of non-conventional reserves like shale gas and coal bed methane (CBM).

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#### **ONGC could take 20% stake in Russian LNG project**

- Russian energy giant Gazprom and state-run oil major Rosneft are negotiating the possible participation of Asian partners in energy projects in Russia's Far East, Russian Energy Minister Alexander Novak said Wednesday.
- "Talks are under way on the participation of Asia-Pacific region companies in Gazprom's project in Vladivostok and Rosneft's project in the [Russian] Far East," Novak said in an interview with the Rossiya-24 TV.
- The projects in question are Gazprom's Vladivostok-LNG and Rosneft's Dalnevostochny-LNG.
- Dalnevostochny-LNG project involves the construction of a liquefaction plant on Sakhalin Island in the Russian Far East. The capacity of the plant is expected to be 5 million tons per year, subject to further expansion.
- According to Novak, India's biggest state-owned explorer ONGC is holding negotiations with Rosneft for acquiring 20 percent stake in the project.
- As for Vladivostok-LNG project, Gazprom Deputy CEO Vitaly Markelov said in May that the Russian energy giant could propose a 49% share in the project to its foreign partners.

#### **OIL hires services from France-based FOROIL for improving production from Tengakhat field in Assam**

- OIL has hired the services of France-based FOROIL for improving production from its Tengakhat field in Assam.
- FOROIL will carry out a pilot R&D study under which it will have a re-look at the Field Development Plan (FDP) of the matured Tengakhat field to maximize recovery from the field in a cost effective manner.
- The France-based consultant will use a unique proprietary algorithm software and process to maximize recovery from the field. The company has developed a breakthrough technology -- dubbed the Production Forecaster and the Field Development Engine -- which helps in forecasting and improving production from mature oil and gas fields.

#### **ONGC says needs US\$6-7.15/mmbtu gas price to break-even**

- ONGC has conveyed to the government that it needs a price of \$6-7 per unit to make its plan for producing gas from new and ageing fields in the next few years viable.
- ONGC's quote, in the state-run company's submission to the panel of secretaries on gas prices, is lower than \$8-9 per unit projected by the Rangarajan formula approved by the UPA government. This price also fits well within the government's line of thinking -- a price of \$5.5-6.5 per unit.
- "Most of ONGC's major producing fields are more than 35 years old. These fields have crossed their plateau level and are on natural decline. Maintaining production levels from these fields, through improved oil recovery and enhanced oil recovery schemes, is highly capital intensive thereby increasing marginal cost of production," ONGC said in its submission.
- In FY14, ONGC said its cost of gas production, after including return on capital, came to US\$4.43/mmbtu, higher than the current price of US\$4.2/mmbtu.
- Meanwhile, the Association of Oil and Gas Operators (AOGO) have told the panel that the future of exploration and production (E&P) industry will depend a lot on

the gas price decision. It insisted that the issue has to be addressed urgently to bring back investor confidence.

- They said as many as 10 trillion cubic feet of gas could not be developed at current prices.

| <b>WISH LIST</b>                   |                   |
|------------------------------------|-------------------|
| <i>Price of gas in \$ per mBtu</i> |                   |
| KG basin block                     | <b>5.99-7.15</b>  |
| Blocks in Arabian Sea              | <b>Above 5.25</b> |
| Western offshore fields            | <b>5.25-17.80</b> |
| Mahanadi basin blocks              | <b>15.30</b>      |



- Thus, the process of the aligning the domestic prices with the international prices has taken places.
- The important factors to watch from the current levels will be process of deregulation/reform in the cooking fuel segment, we believe, the impending gas price hike is likely to act as a trigger for the pricing reform in the LPG segment.

#### **Ravva gas price revision: Cairn requests Petroleum Ministry to expedite decision**

- Cairn India Limited has requested the Petroleum Ministry to expedite its decision with regard to Ravva gas price revision. In a letter to petroleum secretary, Saurabh Chandra, recently, the company made the following observations:
  1. As per Gas Sales Agreement between Ravva JV and GAIL, the gas price is due for revision from 1st December 2008.
  2. In February, 2009, MOPNG directed GAIL to agree to a gas price upto US\$ 4.2/ mmbtu. Further, in February, 2013, MOPNG reaffirmed that GAIL to agree to a gas price upto US\$ 4.2/ mmbtu with Ravva JV.
  3. In view of the above, GAIL and Ravva JV signed a Minutes of Meeting to revise gas price for the period 1st April 2012 to 31st March, 2014 on an immediate basis and subsequently take-up revision for the period 1st December 2008 to 31st March 2012.
  4. It is pertinent to note here that GAIL has been recovering gas price of US\$ 4.2/ mmbtu from the downstream customers but has been paying US\$ 3.5 / mmbtu to Ravva JV, with the differential being deposited in the Gas Pool Account.
  5. However, despite repeated reminders, GAIL is yet to implement the revised gas price. This inordinate delay exposes all the stakeholders (including Government of India) to various audits and other tax & accounting issues. GAIL, dated 17th April, 2014 approached MoPNG seeking consent to implement the revised gas price. We are given to understand that GAIL is awaiting MOPNG's approval for implementing the revised gas price
  6. Similarly, as per the provisions of the Ravva PSC, Contractor has offered Ravva Satellite Gas (Contract # 2) to Government to match price and terms & conditions on 9th May 2014. Government is required to notify the Contractor of its decision of matching the gas price and other material terms as mentioned in the offer in writing within 14 business days from the date of receipt of notice of offering gas (i.e. by 29th May, 2014), which is still pending with Government. However, Government on 22nd May 2014 advised that the matter is under consideration and continue selling gas to GAIL. There is no further communication from the ministry's end till date. This is also a matter for Ravva PSC compliance in a timely manner and also a matter of opportunity to realize optimal value for gas.

### Oil Ministry delayed KG gas project: ONGC

- After the new government took over, the Oil Ministry is looking into reasons why ONGC has not started natural gas production from KG-D5, where 11 oil and gas discoveries have been made so far. In contrast, RIL's neighbouring KG-D6 block started gas output in April 2009.
- ONGC has made 11 oil and gas discoveries in the Block KG-DWN-98/2 or KG-D5. The block is divided into a Northern Discovery Area (NDA) and Southern Discovery Area (SDA). It plans to invest USD 9 billion in producing from discoveries in NDA, sources said.
- As Oil Ministry looks into reasons for delay in ONGC's KG basin gas development, the state-owned firm says it lost three years because the ministry and DGH refused to approve its partnership with Norway's Statoil and Petrobras of Brazil for the block.
- ONGC had in 2007 farmed out 15% stake in the KG-DWN-98/2 block, which sits next to Reliance Industries' KG-D6 block, to Petrobras. Another 10% interest was given to Norsk Hydro (now Statoil Hydro). The two firm, who are among the biggest deep-sea developers in the world, were to bring in technology and expertise to development of gas discoveries in KG-DWN-98/2 or KG-D5 block of ONGC.
- However, the ministry and its technical arm Directorate General of Hydrocarbons (DGH) did not approve the equity participation of the foreign companies, leading to inordinate delays in clearing of drilling programme. Frustrated at delays, the two firms finally walked out of the block in 2010.
- KG-D5 block was originally planned to start producing gas from 2014 with a peak of about 20-25 million standard cubic meters per day. Now, the block will not produce before 2018. After the pullout of Petrobras and Statoil, ONGC, which does not have the technology to produce gas from deep-sea in geologically hostile KG basin, tried to rope in other foreign energy majors but its attempts were frustrated as it could not get approvals.
- Shortly after the pullout by Petrobras and Statoil in 2010, the then ONGC Chairman RS Sharma had shot off an angry letter to the oil secretary saying red tape was making international oil majors apprehensive over sharing exploration risks in acreages where they pick up stake.
- He stated that although the farm out agreements with Petrobras and Statoil were signed in August/September, 2007, "Joint Operating Agreement (JOA) could not be signed with both these companies, initially, due to 9 months taken in obtaining approval on assignment of participating interest, and then one year in signing amendment to the Production Sharing Contract (PSC) from various parties, including government."
- ONGC is looking at producing 2.5-3 million tonnes of oil per annum and 9-10 million standard cubic metres per day of gas from the Northern Development Area of KG-D5 block. NDA holds an estimated 92.30 million tonnes of oil reserves and 97.568 billion cubic metres of in-place gas reserves spread over seven fields.
- ONGC has submitted to the DGH a Declaration of Commerciality (DoC) for the oil find in the NDA and a detailed field development plan will be submitted by year-end.
- ONGC bought 90% interest in Block KG-D5 from Cairn Energy India Ltd in 2005. And Cairn sold the balance holds 10% in the block for value of ~Rs600cr. Before selling its stake and giving away operatorship of the block, Cairn made four discoveries in the area Padmavati, Kanakdurga, N-1 and R-1 (Annapurna).
- Cairn India has also said that ONGC has overstated the reserves at the field.

### Cost recovery from D-6 block: Ministry in a fix

- The petroleum ministry seems to have found itself in a loss over how to recoup the \$1.797 billion capital recovery from RIL for creation of extra facilities in the D-6 block.

- As a first step, after the deductions, RIL was meant to remit \$ 115.26 million as additional profit petroleum for up to the FY 2012-13
- Since RIL was showing no signs of paying up, the government had thought that the money could be extracted from GAIL against payments for supply of D-6 gas as well as from crude oil sold to CPCL and HPCL from the MA field of the D-6 block.
- But a subsequent investigation by the petroleum ministry has come out with a surprise: there are no public sector companies who are paying RIL for supply of gas or crude and therefore the capital recovery through deductions from public sector payments cannot be made.
- GAIL was meant to receive 2.59 mmscmd of gas for production of LPG but given the low priority attached to the commodity, supply of D-6 gas was stopped.
- Then again, the government owned Dabhol power plant was meant to receive 8.9 mmscmd of D-6 gas but given that the power sector's priority was lower than that of fertilizers, no RIL gas was supplied to it.
- CPCL, an IOC subsidiary, was nominated as the government off-taker for the KG D-6 crude but for some reason in April, 2014, RIL shifted to a tender route to sell the crude. CPCL sent in a conditional bid that was rejected by RIL and the crude was then supplied to RIL's own Jamnagar refinery.
- The government today does not have an option to ensure recovery of the outstanding amount from RIL and its partners, BP and Niko. The way out is through arbitration and litigation and that's a long and circuitous route and it is going to take a long time before any recovery can happen.
- The petroleum minister Dharmendra Pradhan has ordered a full investigation into the lapses that lead to a situation where the government is not in a position to carry out the recovery of capital cost from RIL's D-6 block. The first point that Pradhan has said that would need to be investigated is the reason for the delay in the initiating the recovery process.
- Notices were first issued in May 2, 2012 and the wheels of the government turned indeed very slowly after that. Detailed computations on the recovery were only made only in December 2013 and the DGH had then observed that it could be made from gas sales to GAIL and crude to CPCL and HPCL.
- A notice was issued for deductions on February 2, 2014 but then petroleum minister Veerappa Moily had put it off, claiming that the views of the contractors be obtained before notices were served. Eventually however, the contractors and the public sector units were only notified of the deductions to be made in July, 2014 after the proposal was okayed by the new petroleum minister.
- More importantly, CPCL was the government nominated buyer for RIL crude but in March 2014, RIL insisted on a letter of credit for supply of crude which the refinery refused. Subsequently, RIL opted for the tender route for sale of crude for 2015-16. CPCL sent in a conditional bid agreeing to the letter of credit but sought a revision in the pricing mechanism apparently taking into account the deteriorating quality of the MA crude and increased levels of naphtha content.
- RIL rejected the bid and has decide to route it instead to its Jamnagar refinery. CPCL's conduct is currently under investigation as is the delay in the initiation of recovery proceedings by the petroleum ministry. Officers who delayed the processing of the file are also being investigated within the ministry.

#### **MRPL's Phase-III Refinery Project: Commissioning now likely in September, 2014**

- MRPL's Phase-III Refinery Project is now expected to be commissioned in September, 2014. Most of the Units have been commissioned progressively barring the Captive Power Plant (CPP), Coke Handling System and Raw Water Treatment Plant (RWTP) which achieved a progress of 99.7%, 87.8% and 95.5%, respectively. Balance works are expected to be completed progressively by September, 2014.

- The project was originally stipulated to be commissioned by June, 2010. Reasons of time overrun include delay in award of Process Package and SIA Approval for Licensed Units, delay in receipt of Environmental clearance and consent for establishment, delay in land acquisition, longer than scheduled duration required by licensors for Process Packages.
- Some other reasons for the lapse include delay in completion of site grading, slow progress by contractors for Civil & structural and Mechanical works for U&O, low progress for coke handling system by Tecpro, slow construction progress for CPP by BHEL.
- Additionally, slow progress for Process units, Utilities packages and Mechanical works in PFCCU and SRU, delay in delivery of Wet Gas Compressor for PFCCU by BHEL have also impacted progress.
- The project involves increasing crude processing capacity to 15 MMTPA and to meet Euro III and Euro IV specifications.

### **Mukesh Ambani's Reliance Industries plans \$13 billion upgrade to its Jamnagar complex, including refinery**

- RIL has sought environment ministry approval for a US\$13 billion upgrade to its Jamnagar complex, including a 400,000 barrels per day (bpd) refinery, documents seen by Reuters show.
- The refinery would process cheap, heavy grades of crude that are increasingly available in Asia as the U.S. shale boom has cut demand there.
- Reliance, controlled by billionaire Mukesh Ambani, operates the world's biggest refining complex in India's western state of Gujarat, where its two adjacent plants can process about 1.4 million bpd of oil.
- The company last year sought the approval of the environment ministry to invest 773 billion rupees (\$12.8 billion) to build a new refinery and some polymer units, and to switch the fuel for a 450 megawatt power plant from gas to coal, according to a copy of the proposal obtained by Reuters.
- The federal environment ministry wrote back in May this year asking Reliance to meet certain conditions in order to secure a green light for the projects, the documents show.
- It was not immediately clear if there had been further communications between Reliance and the environment ministry. The documents did not reference a potential start-up date.
- Incremental new refining capacity plans will boost the throughput by ~30% (~20MMTPA) over the current estimated output of 68MMTPA.
- The news seems to be old as with 4QFY14 results it was mentioned in media that RIL is likely to add incremental CDUs.
- Given the weak refining margins environment over the medium term any plans to add refining capacity will not be taken positive.

### **MoPNG asks capping upstream subsidy at 50%**

- News reports suggest that MoPNG wants upstream subsidy burden to be capped at 50%.
- We are current building upstream subsidy at 72.6% in FY15 and 75% in FY16 and 72.5% in FY17. We are building net realisation for upstream companies rising to US\$~60/bbls and US\$65/bbls for FY16 and FY17(ex impact of the subsidy on the condensate for like-to-like comparison between two companies).
- We believe, government will try to target net earnings from subsidies products (excise duty plus custom duty less subsidy) at Rs350bn based on historical evidence. Thus, the possibility of 50% sharing is ruled out in the near term.
- The government's intent of raising ~Rs180-200bn from ONGC stake sale does require clarity over the subsidy sharing and gas prices, however we believe the possibility of the capping upstream subsidy at 50% looks bleak.

- We believe more transparent formulae for calculation of upstream subsidies will be appreciated by the markets (as proposed by fuel pricing reform committees). While we remain skeptical of FinMin accepting the MoPNG proposal given the government's focus on improvement in fiscal position, we believe over the long course the net realisation is likely to rise to US\$65/bbls.
- We believe gas price hike would pave the way for pricing reforms in LPG segment. If gas prices rises to US\$ 6.5/mmbtu there will be a need to raise LPG prices by Rs100/cylinder (Rs100bn reduction in under-recoveries over base case assumption of Rs 740bn for FY16). Maintain positive on upstream PSU on gas price hike; expectation of increase in net realisation. Maintain BUY on ONGC and OINL.

#### Domestic gas supply during 2013-14: Source and sector-wise break up

| Sector  | APM         | APM@<br>MDP | Non-<br>APM | NELP         | Pre-NELP    | CBM         | Total<br>Domestic | R-LNG        | Domestic<br>+ R-LNG |
|---|-------------|-------------|-------------|--------------|-------------|-------------|-------------------|--------------|---------------------|
| Fertilisers   | 12          |             | 3.22        | 13.01        | 2.06        | 0           | 30.3              | 12.65        | 42.95               |
| Gas Based LPG plants for<br>LPG extraction                    | 1.4         |             | 0.01        | 0.2          | 0.22        | 0           | 1.83              | 1.09         | 2.92                |
| Power   | 19.7        |             | 3.9         | 0            | 3.67        | 0           | 27.26             | 2.17         | 29.43               |
| CGD for CNG & Domestic<br>PNG Purpose                         | 5.76        | 0.06        |             | 0            | 1.41        | 0.02        | 7.25              | 8.23         | 15.48               |
| TTZ   | 0.98        |             | 0           | 0            | 0           | 0           | 0.98              | 0.07         | 1.05                |
| Small consumers having<br>allocation less than<br>50,000 SCMD | 2.14        |             | 0.26        | 0            | 0.05        | 0           | 2.45              | 2.58         | 5.03                |
| Steel   | 0.96        | 0.36        |             | 0            | 0           | 0           | 1.32              | 1.82         | 3.14                |
| Refineries  | 0.98        | 0.91        |             | 0            | 0           | 0           | 1.89              | 10.45        | 12.34               |
| Petrochemicals  | 1.78        | 0.2         |             | 0            | 1.84        | 0           | 3.82              | 0.88         | 4.7                 |
| Others  | 0.39        |             | 0.21        | 0            | 0.6         | 0.32        | 1.52              | 1.17         | 2.69                |
| Internal consumption -<br>pipeline system                     | 1.08        |             | 0           | 0.32         | 0           | 0           | 1.4               | 0            | 1.4                 |
| <b>Total</b>  | <b>47.2</b> | <b>1.53</b> | <b>7.59</b> | <b>13.53</b> | <b>9.85</b> | <b>0.34</b> | <b>80.02</b>      | <b>41.11</b> | <b>121.13</b>       |

#### Shiv-Vani fails to deliver: OIL re-tenders for two 2000 HP drilling wells

- Shaken by its falling crude production, and subsequent to the rap on the knuckles by the petroleum secretary for non-performance, OIL has decided to float a tender to replace the two 2000 HP (minimum capacity) drilling rigs which it had hired from Shiv-Vani Oil & Gas Exploration Services Ltd.
- Shiv-Vani was awarded a contract for charter-hire of two 2000 HP drilling rigs for a period of two years at a total estimated cost of Rs 139.82 crore, including all taxes and duties except customs duty and service tax.
- The contractor mobilized the two rigs in April and September 2013, but both the rigs remained down for most of the time. As a result, Shiv-Vani was unable to carryout drilling operations as per the laid out plan because of which the drilling and production targets of OIL for 2013-14 were affected.
- As it was feared that OIL would not be able to meet its targets for 2014-15 as well, the company brass decided to re-tender the requirement for the replacement of the two rigs. The estimated cost this time worked out to Rs 240 crore for a period of three years.
- However, the company has modified the bid evaluation criteria (BEC) keeping in mind its fresh technical requirements. An additional clause inviting bidders having an experience of drilling wells with a top drive mechanism (with 2000 HP rig) as part of the bid rejection criteria (BRC) has been added to improve the drilling efficiency.

- Along with this, the age of the offered rig has also been increased from 10 to 15 years to generate more competition

#### **Phulpur-Haldia gas pipeline: PMO asks Petroleum Ministry to exercise sovereign powers to authorize GAIL for setting up CGD projects**

- In a bid to expedite laying and development of the Phulpur-Haldia section of the Jagdishpur-Haldia pipeline in eastern India, the Prime Minister's Office (PMO) has asked the Petroleum Ministry to exercise its sovereign powers and allow GAIL to develop City Gas Distribution (CGD) projects along the pipeline without going through the bidding route prescribed by PNGRB.
- It may be noted that revival of fertilizer plants and direct authorization of at least five CGD projects namely, Varanasi, Gorakhpur, Patna, Ranchi and Jamshedpur on the route of the pipeline (without going through the bidding route of the PNGRB) will ensure commercial viability of the pipeline. While revival of the gas based fertilizer plants will require 42-48 months, the pipeline can be executed within a span of about 40 months. GAIL can immediately commence construction of the pipeline once a final decision is taken on the revival of the fertilizer plants.
- Direct authorisation for development of at least 5 CGD projects en-route the pipeline has been proposed by GAIL since work on development of CGD networks can be simultaneously started alongwith the construction of the main trunk pipeline. This would enable supply of CNG and PNG in the cities, where CGD networks are proposed to be developed, immediately after commissioning of the main trunk pipeline.
- Section 42 of the PNGRB' Act, 2006 provides power to Government to give directions to PNGRB. Power of Central Government to issue directions under Section 42 of the Act includes:-
  - The Central Government may, from time to time, by writing- issue to the Board such directions as it may think necessary in the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States or public order.
  - Without prejudice to the foregoing provision, the Central Government may, if it finds necessary or expedient so to do in public interest or for maintaining or increasing supplies of petroleum, petroleum products or natural gas or all or any of them or for securing their equitable distribution and ensuring adequate availability, issue policy directives to the Board in writing and such policy directives shall be binding upon the Board : Provided that no such directive shall relate to any day-to-day affairs of the Board : Provided further that the Board shall, as far as practicable, be given an opportunity of expressing its views before any directive is issued under this sub-section.
  - The decision of the Central Government whether a question is one of policy or not shall be final. In pursuance of the same, we may give directions to PNGRB for early bidding or for authorizing GAIL to develop the 5 CGDs' mentioned above.
- Regarding establishment of a Steel plant at Sindri, it is submitted that as per the prevailing Gas Utilisation policy of the Government, Steel is a non-core sector and keeping in view the limited availability of domestic gas, presently it is not possible to meet the demand of even core sector customers. Hence, at this juncture it is essential to optimize the supplies by combining the domestic production and imported R-LNG.
- In July, 2007, Government authorised GAIL (India) Limited to lay the 2050 km Jagdishpur-Haldia natural gas pipeline to supply natural gas for various fertilizer, power and industrial sector plants in the States of UP, Bihar, West Bengal and Jharkhand. Post authorisation of this pipeline, GAIL has extended the Auraiya-Thulendi section of the HVJ pipeline (250 kms South of Jagdishpur upto Phulpur) in order to supply gas to a fertilizer plant at Phulpur. The route of the balance section of the pipeline from Phulpur to Haldia will remain same as originally envisaged for the Jagdishpur-Haldia pipeline. The total pipeline would be about 2050 km with a



design capacity of 16 MMSCMD in Phase-I which can be increased to 32 MMSCMD in Phase-II.

- GAIL has already approved an expenditure of Rs.7,596 Crore for laying the pipeline. The route survey of the pipeline has also been completed. The execution of the project has so far, been held up due to non-finalisation of anchor load customers, especially the fertilizer plants of the route on this pipeline. Since the new pipelines constructed by GAIL in the last 5 years have been operating at only about 40% of capacity, GAIL has consciously decided to commence construction of the Phulpur-Haldia pipeline only after approval for setting up of anchor load customers are in place.
- The major prospective consumers along the pipeline route, along with their demand for gas in MMSCMD, are as follows:
  1. Fertilizer Plants : FCI Sindri, FCI Gorakhpur, HFC Barauni, HFC Durgapur and HFC Haldia (2.2 mmscmd each plant totaling 11.0 MMSCMD)
  2. Power Plants (05 nos.1 : CESC Haldia (2.2), CESC-Kashipur (2.7), DPL-Durgapur (4.0), WBPDC-Bandel (3.5), WBPDC-Sagardighi (7) (totaling 19.4 MMSCMD)
  3. Industries (04 Nos.) : SAIL Durgapur (1.0), SAIL Bokaro (0.5), IOCL's Plants at Barauni and Haldia (3.0) (totaling 4.5 MMSCMD)
  4. City Gas Networks: Allahabad, Varanasi, Gorakhpur, Patna, Ranchi, Jamshedpur and Kolkata.

## Stock performance

### Stock performance (as on 17th September 2014)

|   | Absolute |        |        |        | Relative to Sensex |        |        |        |
|---|----------|--------|--------|--------|--------------------|--------|--------|--------|
|   | 1M       | 3M     | 6M     | 12M    | 1M                 | 3M     | 6M     | 12M    |
| Reliance Industries Ltd                 | -2.3%    | -8.1%  | 11.5%  | 14.7%  | -3.8%              | -13.4% | -9.0%  | -14.7% |
| Oil & Natural Gas Corp Ltd              | -0.3%    | -4.2%  | 28.3%  | 46.9%  | -1.8%              | -11.5% | 4.3%   | 9.2%   |
| Oil India Ltd                           | 8.7%     | 5.5%   | 34.0%  | 41.0%  | 7.1%               | 0.6%   | 8.0%   | -0.9%  |
| Cairn India Ltd                         | 0.4%     | -11.2% | -0.3%  | 4.4%   | -1.1%              | -17.4% | -19.5% | -26.1% |
| Indian Oil Corp Ltd                     | 10.9%    | 14.6%  | 43.0%  | 65.9%  | 9.3%               | 3.1%   | 14.8%  | 20.2%  |
| Bharat Petroleum Corp Ltd               | 8.6%     | 12.7%  | 49.8%  | 109.5% | 4.4%               | 2.6%   | 20.3%  | 54.9%  |
| Hindustan Petroleum Corp Ltd            | 13.2%    | 19.4%  | 70.8%  | 149.4% | 11.6%              | 6.8%   | 35.4%  | 79.5%  |
| GAIL India Ltd                          | 6.8%     | 4.9%   | 22.1%  | 47.7%  | 3.8%               | -2.9%  | -0.8%  | 5.8%   |
| Petronet LNG Ltd                        | 13.1%    | 18.9%  | 52.0%  | 64.1%  | 10.3%              | 11.5%  | 23.9%  | 22.6%  |
| Gujarat State Petronet Ltd              | 12.8%    | 21.6%  | 53.6%  | 87.9%  | 11.1%              | 15.8%  | 26.4%  | 37.9%  |
| Indraprastha Gas Ltd                    | 17.3%    | 23.1%  | 52.5%  | 55.1%  | 14.0%              | 15.5%  | 23.9%  | 14.6%  |
| Gujarat Gas Co Ltd                      | 15.3%    | 20.1%  | 104.9% | 126.9% | 13.6%              | 14.5%  | 68.7%  | 63.8%  |
| Essar Oil Ltd                           | 0.6%     | 11.5%  | 135.2% | 103.7% | -0.9%              | 7.4%   | 93.7%  | 54.0%  |
| Chennai Petroleum Corp Ltd              | 9.2%     | 5.9%   | 46.3%  | 48.3%  | 7.6%               | -0.4%  | 20.5%  | 12.8%  |
| Mangalore Refinery & Petrochemicals Ltd | 7.0%     | -0.9%  | 52.8%  | 93.5%  | 5.5%               | -7.7%  | 25.8%  | 37.7%  |
| Aban Offshore Ltd                       | -4.1%    | -3.4%  | 45.9%  | 210.3% | -6.0%              | -9.7%  | 19.6%  | 132.3% |

Source: Bloomberg, PhillipCapital India Research

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