strong rupee

Equity | India | Oil & Gas 20 November 2006

# Merrill Lynch

Vidyadhar Ginde >> Research Analyst DSP Merrill Lynch (India) vidyadhar\_ginde@ml.com

91 22 6632-8673

Sudarshan Narasimhan>> Research Analyst DSP Merrill Lynch (India) sudarshan\_narasimhan@ml.com +91 22 6632-8662

Net gain for R&M companies Singapore refining margins to date in 3Q FY07 have weakened to their lowest level since 3Q FY04. However marketing margins on auto fuels have risen to over

Gains from weak oil price and

US\$5/bbl for the first time since February 2005. The weakness in refining margins is bad news for refiners. Though R&M companies will also be hurt by the weakness in refining margins, they will gain from the rise in marketing margins. They will be net gainers as they sell more than they produce.

#### Marketing margins on auto fuels at over Rs1.4/litre now

The composite marketing margin on gasoline and diesel (auto fuels) is at over Rs1.4/litre (US\$5.2/bbl) in November 16-30. This means marketing margins on auto fuels are above the desired level of Rs1.3/litre (US\$4.7/bbl) for the first time since February 2005. Marketing margin on gasoline was at supernormal levels since mid-September 2006. However with marketing margins on diesel being in the red until mid-November, the composite margin (80% weight for diesel and 20% for gasoline) was well below desired levels. Marketing margins on diesel have turned positive in the current fortnight. This is not only due to weakness in international diesel prices but also due to strengthening of the Indian rupee.

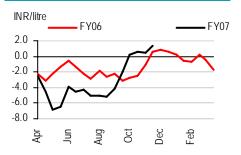
### Refining margins weak; light-heavy crude spread contracts

Singapore complex refining margin based on Dubai crude to date in 3Q is US\$5.4/bbl, which is 14% YoY lower and 33% QoQ lower. It is in fact at its lowest level since 3Q FY04. One of the main factors hurting refining margins is the contraction of spread between light and heavy crude oil, which is also at its lowest level in at least twelve quarters. Production cuts by OPEC appear to have contributed to light-heavy spread contraction. OPEC members mainly cut heavy crude oil output to comply with cuts, which means that it is mainly heavy crude oil supply, which declines. Even in the past, OPEC output cuts have seen spread contract. The contraction in gasoline-crude spread has also hit refining margins.

#### Subsidies at their lowest level in seven quarters

We expect 3Q FY07 under-recovery (i.e. subsidy) to be 19% YoY lower at Rs80bn despite oil price being marginally higher YoY. This is due to gains from auto fuel price hikes and duty cuts made in June 2006. 3Q subsidy will be the lowest subsidy in seven quarters and for the first time will be YoY lower in a long time. Most of the subsidy in 3Q is likely to be on LPG and kerosene. In case of auto fuels with marketing margin being about Rs0.75/litre, there will be no subsidy but just under-recovery of Rs0.55/litre vis-à-vis desired margin of Rs1.3/litre.

#### Chart 1: Marketing margin at over Rs1.4/litre



Source: DSP Merrill Lynch

#### Chart 2: Subsidy at lowest level in 7 quarters



Source: Industry, DSP Merrill Lynch

Merrill Lynch does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

<sup>&</sup>gt;> Employed by a non-US affiliate of MLPF&S and is not registered/qualified as a research analyst under the NYSE/NASD rules.

#### 20 November 2006

## Key trends

The key trends in the oil sector are

- Composite (80% weight for diesel and 20% for gasoline) marketing margin on gasoline and diesel surging to healthy level of Rs1.4/litre (US\$5.2/bbl) in November 16-30
- The weakening of international gasoline and diesel prices. This along with the strengthening of the Indian rupee has boosted marketing margins
- Singapore complex refining margins based on Dubai crude declining to below US\$4/bbl with average to date in 3Q FY07 being US\$5.4/bbl
- The spread between the price of light and heavy crude oil contracting in 3Q
   FY07 to its lowest level in at least twelve quarters
- Subsidy in 3Q FY07 is set to be at the lowest level in seven quarters

#### Marketing margins on auto fuels now above Rs1.4/litre

Marketing margins on auto fuels have bounced back to healthy levels of Rs1.42/litre (US\$5.2/bbl) during the November 16-30 fortnight. Auto fuels were either being subsidized or at least fetching lower than desirable marketing margins since March 2005. Marketing margins are now above the desired level of Rs1.3/litre (US\$4.7/bbl) for the first time since February 2005.

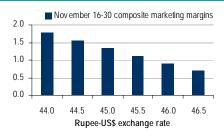
Auto fuel pricing in India follows a fortnightly cycle. Ex-refinery prices are changed every fortnight based on Arabian Gulf prices in the immediately preceding fortnight. Even consumer prices used to be reviewed every fortnight until 2003.

Marketing margin on gasoline was at supernormal levels since mid-September 2006. However with marketing margins on diesel being in the red until mid-November, the composite margin was well below desired levels. Marketing margin on diesel has turned positive in the current fortnight thereby helping to take composite margin to over desired level.

Weak international prices, strong rupee boosted marketing margins. The rise in marketing margins to over desired levels is mainly due to

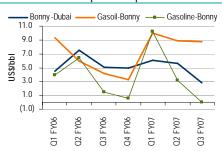
- Weakening of Arabian Gulf diesel prices to US\$67/bbl and gasoline prices to US\$58/bbl. Diesel prices were at US\$69/bbl in the immediately preceding fortnight and had touched peak levels of over US\$84/bbl in 2Q FY07.
- Strengthening of the Indian rupee to below Rs45 (vis-à-vis US\$1). The Indian rupee has been volatile and was rather weak as recently as in July-August 2006 at over Rs46.5 to US\$1. The exchange rate has a significant influence on marketing margins as is apparent from Chart 3. It depicts composite marketing margins on diesel and gasoline for November 16-30 at exchange rate of Rs44-46.5 vis-à-vis US\$1. Every change in the exchange rate by Re1 changes composite marketing margin by Rs0.44/litre.
- The 6-9% hike in domestic auto fuel prices made in June 2006 has also helped
- A cut in the import duty on auto fuels to 7.5% from 10% and shift to trade parity pricing made in June 2006 has also helped boost marketing margins

Chart 3: Sensitivity of marketing margins to exchange rate changes



Source: DSP Merrill Lynch

#### Chart 4: Crude and product spreads



Source: Petroleum Argus, DSP Merrill Lynch

#### Chart 5: Brent-Dubai spread since 1997



Source: Petroleum Argus, DSP Merrill Lynch

#### Refining margins weaken

Singapore complex refining margin based on Dubai crude had declined to US\$3.96/bbl for the week ended November 9, 2006 but has bounced back now to US\$6.21/bbl. To date average in 3Q is US\$5.4/bbl, which is 14% YoY lower and 33% QoQ lower. Margins thus are at their lowest level since 3Q FY04.

## Contraction of gasoline cracks & light-heavy spread hit refining margins

The following factors have mainly contributed to the weakness in Singapore refining margins in 3Q

- The contraction of gasoline crack spreads. Gasoline prices have declined far more steeply than crude prices since August 2006. At peak gasoline prices exceeded US\$84/bbl while they declined below US\$75/bbl in August 2006 and then below US\$65/bbl in September 2006. Arabian Gulf gasoline price was on an average 11% higher than Brent price in 1H FY07 (i.e. US\$78/bbl with Brent at US\$70/bbl). To date in 2H the premium of gasoline to Brent is just 2% (i.e. US\$59/bbl with Brent at US\$58/bbl).
- The contraction of spread between light and heavy crude oil, which is at its lowest level in at least twelve quarters. The spread between Bonny Light and Dubai crude, which was US\$5.5/bbl in 1H has declined to US\$2.5/bbl in 3Q. Spread between Brent and Dubai crude, which was US\$4.6/bbl in 1H has declined to US\$1.2/bbl in 3Q and just US\$0.7/bbl in November 2006.

The refining margin based on Dubai crude can be broken up in to two components – 1) the spread between product prices and light crude oil 2) the spread between light and heavy crude oil. As discussed among the products it is the gasoline-crude spread, which has weakened.

#### OPEC output cut has compressed heavy light spread even in the past

Production cuts by OPEC appear to have led to light-heavy spread contraction. OPEC members mainly cut heavy crude oil output to comply with cuts, which means that it is mainly heavy crude oil supply, which declines. Chart 5 shows spread between Brent and Dubai since January 1997. The spread was at its lowest level of US\$0.6-0.7/bbl during 1998 and 1999 when OPEC cut ceiling on output from 26m bpd in January 1998 to 23m bpd in April 1999. The surge in spread since 2004 on the hand has coincided with OPEC oil output rising. It has been one of the factors driving up the light-heavy spread. Strong demand for distillates has also played a significant role in boosting spreads.

In 2H FY06 when Singapore refining margins had weakened to just over US\$6/bbl it was mainly contraction of product-crude spread rather than light-heavy spread, which had hurt margins. To that extent the current weakness in refining margins varies from that in 2H FY06.

Subsidy in 30 likely to be at lowest level in seven quarters the composition of the compo

## Refining margin drivers and trends

Singapore margin on Minas crude higher than that on Dubai crude For the first time since 3Q FY06, Singapore refining margin in 3Q FY07 based on lighter Minas crude is higher than that on heavier Dubai crude.

Table 1: Singapore complex refining margin on Dubai crude

- and the desired			g			
US\$/bbl	1Q	2Q	3Q	4Q	Total	y-t-d
FY07	12.6	8.1	5.4		9.2	9.2
FY06	9.0	11.1	6.3	6.2	8.2	9.6
Y-o-y change	40%	-27%	-14%		12%	-4%

Source: Petroleum Argus, DSP Merrill Lynch

Table 2: Singapore complex refining margin on Minas crude

J 1		J	J			
US\$/bbl	1Q	2Q	3Q	4Q	Total	y-t-d
FY07	8.5	5.5	7.6		6.9	7.1
FY06	5.1	7.1	6.9	3.3	5.5	6.6
Y-o-y change	66%	-22%	11%		24%	7%

Source: Petroleum Argus, DSP Merrill Lynch

Chart 6: Trend of Singapore complex refining margin on Dubai crude



Source: Petroleum Argus, DSP Merrill Lynch

Chart 7: Trend of Singapore complex refining margin on Minas crude

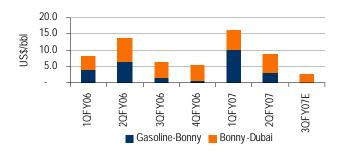


Source: Petroleum Argus, DSP Merrill Lynch

#### Contraction on light-heavy and gasoline-crude spreads

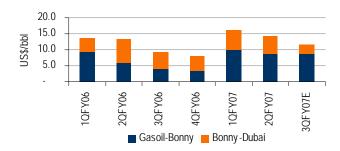
Chart 8 and Chart 9 show trend in spread between products like diesel, gasoline and Bonny Light crude oil and between Bonny Light and Dubai crude. Bonny Light is perhaps the best benchmark for light crude oil used by Indian refiners. This is because the ONGC crude is most similar to Bonny Light and therefore is benchmarked to it. Bonny Light and other Nigerian crude form a significant part of light crude oil imported by Indian refineries. These charts highlight the contraction of the gasoline-Bonny Light and Bonny Light-Dubai spread to their lowest level in at least seven quarters.

Chart 8: Trend in gasoline-Bonny Light and Bonny-Dubai spread



Source: Petroleum Argus, DSP Merrill Lynch

Chart 9: Trend in Diesel-Bonny Light and Bonny-Dubai spread



Source: Petroleum Argus, DSP Merrill Lynch

## Marketing margin & Subsidy trend

#### Gasoline marketing margin at super-normal levels

Marketing margin on gasoline is at super-normal levels to date in 3Q FY07. In 2H FY06 marketing margins on gasoline had bounced back in to the black but were never at super-normal levels.

Table 3: Marketing margins on gasoline

Rs/litre	1Q	2Q	3Q	4Q	Total	y-t-d
FY07	-3.9	-1.5	4.3		-1.0	-1.3
FY06	-0.9	-2.1	0.4	0.7	-0.5	-1.3
Y-o-y change	NM	NM	1030%		NM	NM

Source: DSP Merrill Lynch

Table 4: Marketing margins on diesel								
Rs/litre	10	2Q	3Q	40				
E) (0.3	F 0	4.0						

FY07 -3.8 -4.1 -5.0 -0.2 FY06 -2.6 -1.0 -2.3 -2.0 -1.6 Y-o-y change NM NM NM NM NM

Total

y-t-d

Source: DSP Merrill Lynch

#### Diesel margins back in to the black but 3Q average still negative

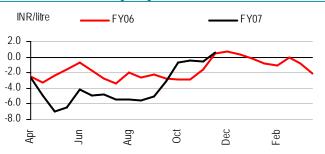
Marketing margins on diesel on the other hand are still in the red as far as the 3Q average is concerned. However in the latest fortnight (November 16-30), marketing margins have bounced back in to the black.

Chart 10: Gasoline marketing margin trend



Source: DSP Merrill Lynch

#### Chart 11: Gas oil marketing margin trend



Source: DSP Merrill Lynch

#### Composite auto fuel marketing margin above Rs1.4/litre

The bounce back of diesel margins in to the black and continuing super-normal margins on gasoline has meant composite margin during November 16-30 is now at healthy level of Rs1.42/litre.

Chart 12: Composite marketing margin trend



Source: DSP Merrill Lynch

Chart 13: Quarter-wise subsidy trend



Source: Industry, DSP Merrill Lynch

#### 20 November 2006

#### Subsidies lowest in the last seven quarters

Under-recoveries based on data available to date in 3Q FY07 are at the lowest in the last seven quarters at Rs80bn. Oil price in 3Q FY07 is marginally higher YoY but subsidies will be 19% YoY lower. This is mainly due to steep decline in under-recoveries on auto fuels. The 6-9% auto fuel price hike and the cut in import duty on gasoline and diesel by 2.5 percentage points made in June 2006 has helped reduce auto fuel under-recoveries.

Table 5: Quarter-wise under-recoveries (i.e. subsidies)

Tubic of Zuartor Wise under receiveres (nor	•					411	
Rs-bn	10	2Q	3QE	4Q	Total	1H	9M
Subsidy in FY07 on							
LPG and kerosene	67.3	90.2	71.6		229.1	157.5	229.1
Auto fuels	106.7	82.3	8.3		197.2	189.0	197.2
	174.0	172.5	79.9		426	346	426
Brent price (US\$/bbl)	69.6	69.6	57.9		66.9	69.6	66.9
Subsidy in FY06 on							
LPG and kerosene	48.3	52.8	65.1	80.0	246.2	101.1	166.2
Auto fuels	49.4	43.8	33.1	26.0	152.3	93.2	126.4
	97.7	96.6	98.2	106.0	399	194	293
Brent price (US\$/bbl)	51.6	61.5	57.0	61.8	58.0	56.6	56.7
YoY change in subsidy on							
LPG and kerosene	39%	71%	10%			56%	38%
Auto fuels	116%	88%	-75%			103%	56%
	78%	79%	-19%			78%	46%

Source: Industry, DSP Merrill Lynch



20 November 2006

## **Analyst Certification**

I, Vidyadhar Ginde, hereby certify that the views expressed in this research report about securities and issuers accurately reflect the research model applied in such analysis. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

## Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium, and C - High. INVESTMENT RATINGS, indicators of expected total return (price appreciation plus yield) within the 12-month period from the date of the initial rating, are: 1 - Buy (10% or more for Low and Medium Volatility Risk Securities - 20% or more for High Volatility Risk securities); 2 - Neutral (0-10% for Low and Medium Volatility Risk securities - 0-20% for High Volatility Risk securities); 3 - Sell (negative return); and 6 - No Rating. INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure); 8 - same/lower (dividend not considered to be secure); and 9 - pays no cash dividend.

The analyst(s) responsible for covering the securities in this report receive compensation based upon, among other factors, the overall profitability of Merrill Lynch, including profits derived from investment banking revenues.

## Other Important Disclosures

UK readers: MLPF&S or an affiliate is a liquidity provider for the securities discussed in this report.

Information relating to Non-U.S. affiliates of Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S):

MLPF&S distributes research reports of the following non-US affiliates in the US (short name: legal name): Merrill Lynch (France): Merrill Lynch Capital Markets MLPF&S distributes research reports of the following non-US affiliates in the US (short name): Merrill Lynch (France): Merrill Lynch Capital Markets (France) SAS; Merrill Lynch (Frankfurt): Merrill Lynch International Bank Ltd, Frankfurt Branch; Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd; Merrill Lynch (Milan): Merrill Lynch International Bank Limited: MLPF&S (UK): Merrill Lynch, Pierce, Fenner & Smith Limited; Merrill Lynch (Australia): Merrill Lynch (Asia Pacific) Limited; Merrill Lynch (Singapore): Merrill Lynch (Singapore): Merrill Lynch (Singapore): Merrill Lynch (Singapore): Merrill Lynch (Canada): Merrill Lynch Canada Inc; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa; Merrill Lynch (Argentina): Merrill Lynch Argentina SA; Merrill Lynch (Japan): Merrill Lynch Japan Securities Co, Ltd; Merrill Lynch (Seoul): Merrill Lynch International Incorporated (Seoul Branch); Merrill Lynch (Taiwan): Merrill Lynch Global (Taiwan) Limited; DSP Merrill Lynch (India): DSP Merrill Lynch Limited; PT Merrill Lynch (Indonesia): PT Merrill Lynch (Indonesia): Merrill Lynch (Russia): Merrill Lynch (India): Merrill Lynch (Israel): Merrill Lynch (Russia): Merrill Lynch (CIS Limited, Mexecut) Moscow.

This research report has been prepared and issued by MLPF&S and/or one or more of its non-U.S. affiliates. MLPF&S is the distributor of this research report in the U.S. and accepts full responsibility for research reports of its non-U.S. affiliates distributed in the U.S. Any U.S. person receiving this research report and wishing to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates.

to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates.

This research report has been approved for publication in the United Kingdom by Merrill Lynch, Pierce, Fenner & Smith Limited, which is authorized and regulated by the Financial Services Authority; has been considered and distributed in Japan by Merrill Lynch Japan Securities Co, Ltd, a registered securities dealer under the Securities and Exchange Law in Japan; is distributed in Hong Kong by Merrill Lynch (Asia Pacific) Limited, which is regulated by the Hong Kong SFC; is issued and distributed in Taiwan by Merrill Lynch Global (Taiwan) Ltd or Merrill Lynch, Pierce, Fenner & Smith Limited (Taiwan Branch); is issued and distributed in Malaysia by Merrill Lynch (KL) Sdn. Bhd., a licensed investment adviser regulated by the Malaysian Securities Commission; and is issued and distributed in Singapore by Merrill Lynch International Bank Limited (Merchant Bank) and Merrill Lynch (Singapore) Pte Ltd (Company Registration No.'s F 06872E and 198602883D respectively). Merrill Lynch International Bank Limited (Merchant Bank) and Merrill Lynch (Singapore) Pte Ltd. are regulated by the Monetary Authority of Singapore. Merrill Lynch Equities (Australia) Limited, (ABN 65 006 276 795), AFS License 235132, provides this report in Australia. No approval is required for publication or distribution of this report in Brazil.

Merrill Lynch (Frankfurt) is regulated by BaFin.

Merrill Lynch (Frankfurt) is regulated by BaFin.

Copyright, User Agreement and other general information related to this report:
Copyright 2006 Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. This research report is prepared for the use of Merrill Lynch clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of Merrill Lynch research reports are distributed simultaneously to internal and client websites eligible to receive such research prior to any public dissemination by Merrill Lynch of the research report or information or opinion contained therein. Any unauthorized use or disclosure is prohibited. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets) prior to Merrill Lynch's public disclosure of such information. The information herein (other than disclosure information relating to Merrill Lynch and its affiliates) was obtained from various sources and we do not guarantee its accuracy. Merrill Lynch makes no representations or warranties whatsoever as to the data and information provided in any third party referenced website and shall have no liability or responsibility arising out of or in connection with any such referenced website.

This research report provides general information only. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other investment or any options, futures or derivatives related to such securities or investments. It is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. Investors should seek financial advice regarding the appropriateness of investing in any securities, other investment or investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Investors should note that income from such securities or other investments, if any, may fluctuate and that price or value of such securities and investments may rise or fall. Accordingly, investors may receive back less than originally invested. Past performance is not necessarily a guide to future performance. Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or related investment mentioned in this report. In addition, investors in securities such as ADRs, whose values are influenced by the currency of the underlying security, effectively assume currency risk.

Officers of MLPF&S or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related

Merrill Lynch Research policies relating to conflicts of interest are described at http://www.ml.com/media/43347.pdf.

Fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.