FIPI

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Policy & Economic Report - Oil & Gas Market

Federation of Indian Petroleum Industry(FIPI)

3rd Floor, PHD House, 4/2, Siri Institutional Area,
August Kranti Marg, New Delhi - 110016

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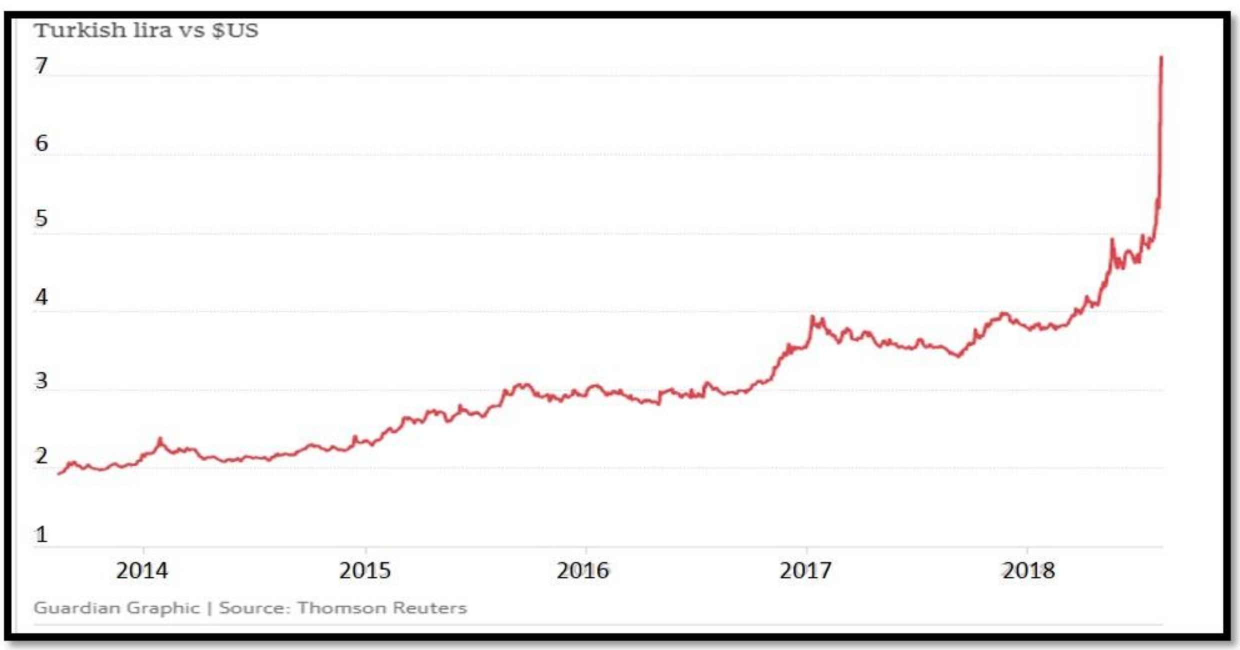
Economy in Focus

Emerging economies under pressure amid Turkish crisis

The immediate cause of Turkey's economic crisis earlier this month was the US government imposing sanctions against Turkey in response to its continued detention of an American evangelical pastor accused of involvement in the attempted coup of 2016. The announcement by the Trump administration of a doubling of steel and aluminium tariffs on August 10 immediately sent the lira into a tailspin.

The crisis has since been aggravated by investors' fears stemming from Turkish President Recep Tayyip Erdogan's standing opposition to raising interest rates — a measure Turkey's central bank has nevertheless had to press forward with a number of times over the past year.

Over the past five years, Turkey's growth has been virtually keeping pace with that of China and India but it is now displaying the signs of overheating: a large trade deficit, a construction boom and soaring debt. Financial markets have taken fright at inflation, rising at an annual rate of more than 15%, and have been selling the Turkish lira, which is down by 45% against the US dollar since the start of the year.



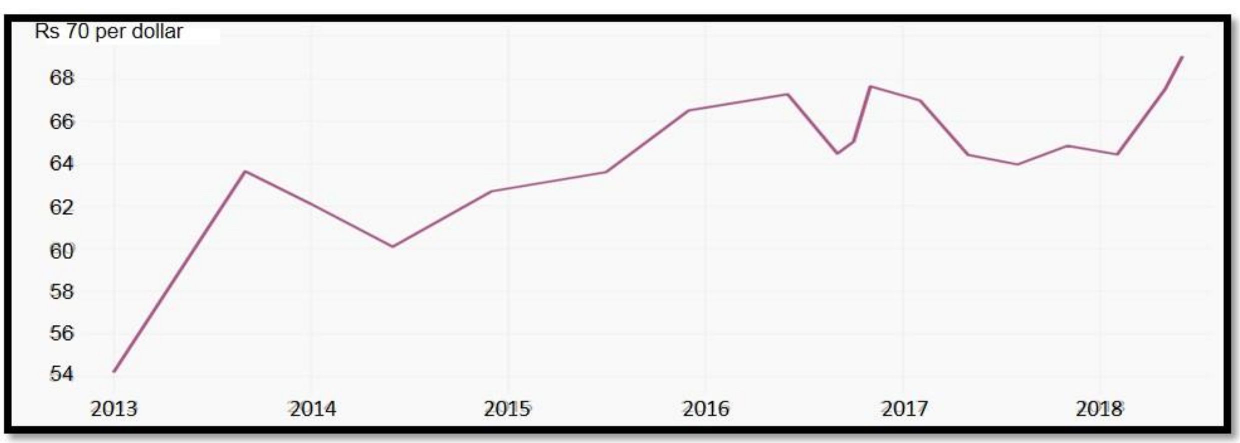
The immediate impact of the Turkish crisis on the global economy has been that Investors have been pulling money out of the broader emerging markets for fear that other countries, especially those with poor financial positions; will follow in Turkey's footsteps. Such withdrawals have hurt other currencies: The Indian rupee and Argentine peso touched their weakest levels against the U.S. dollar in august. As investors look for a safe haven to park their money, U.S. assets have emerged as their favorite on the back of a stronger American economy and higher interest rates.

US-China trade war will not change the bull case for Crude oil, says Goldman Sachs report

In spite of the ongoing and worsening trade spat between the United States and China, Goldman Sachs has maintained its price forecast for West Texas Intermediate at US$70 for this year. Despite a string of weekly losses for WTI clearly linked to the escalation between the United States and China, Currie believes that global economic growth will support higher average prices for the year. The fundamentals behind prices have not changed much. Although with the ongoing trade war, China has not imposed any tariff on import of Crude oil from US. The most important factor that supports price fundamentals is strong demand which could even lead to a shortage given the decline in global inventories and the fact that Saudi Arabia has not ramped up supply as quickly as it was expected.

Rupee slides to an all-time low

During August, Rupee hit an all-time low against the US Dollar. The rupee has crossed the 70 mark against the US dollar, and though it has pulled back there is widespread concern at what is being seen as a rather quick slide to new all-time lows. One of the recent reasons cited for slide in Rupee is collapse of Turkish lira, which has led to investors pulling out funds from emerging economies. Other reason that has contributed to the fall in rupee is the rising crude oil prices. Further with sanctions on Iran by US, India may have to look at other options for importing crude, which will further increase import bills as India saved on shipping costs, insurance and favorable credit terms being offered by Iran. The graph below shows rupee depreciation against US dollar over the past 5 year period.



Source: FRED

RBI hiked interest rates for the second time in three months in August

At its monetary policy meeting on 1 August, Reserve Bank of India (RBI) raised interest rates by 0.25 percentage points. As a result, the repo rate now stands at 6.50%, the marginal standing facility (Bank Rate) at 6.75% and the reverse repurchase rate at 6.25%. The RBI's decision to raise rates for the second time in three months was driven by high inflation and a weak rupee.

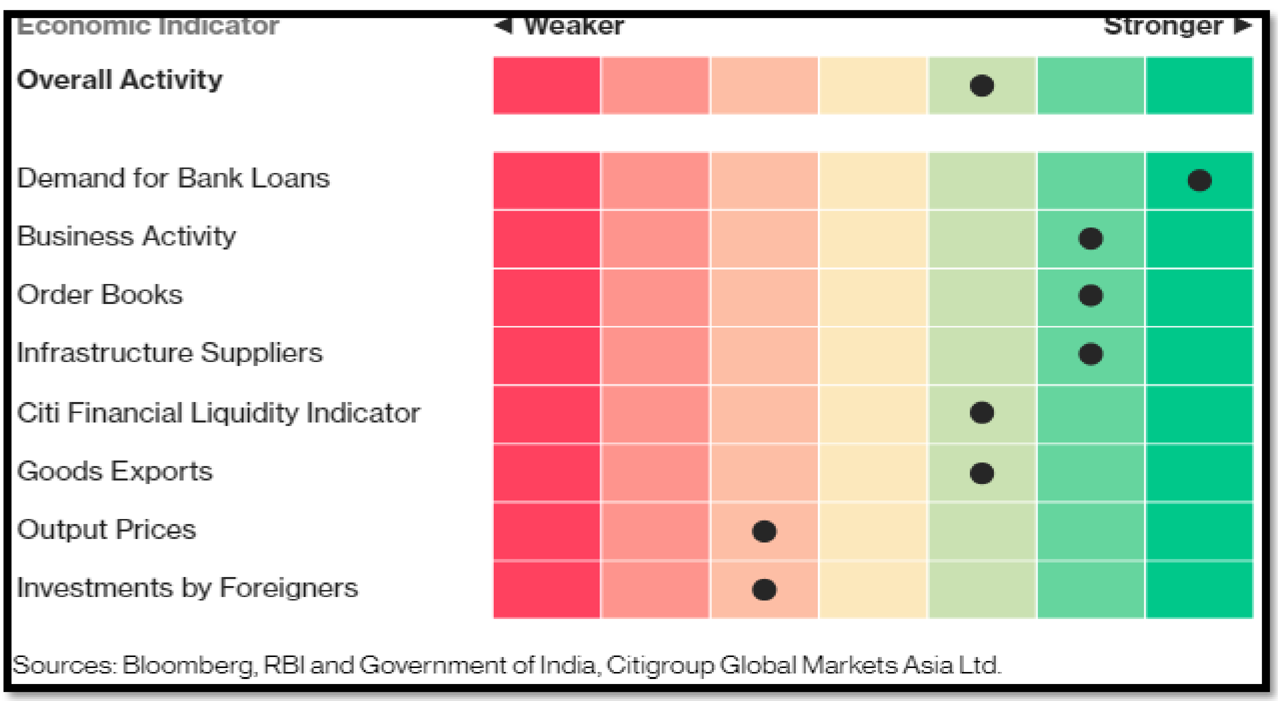
Inflation has accelerated in recent months, hitting a five-month high of 5.0% in June, which is above the 4% midpoint of the Reserve Bank of India's 2–6% target range. At its monetary policy meeting in August, the RBI maintained its inflation forecast for Q2 FY 2018—which runs from July to September—at 4.6%. It slightly raised its projection for the second half of FY 2018—which runs from October to March—to 4.8%, up from 4.7%. Meanwhile, the Reserve Bank of India left its GDP growth forecast for FY 2018 unchanged in August at 7.4%, which would mark the largest economic expansion since FY 2015.

India's growth indicators remain strong, shrugging off global trade wars

In a recent report released by Bloomberg, it published the key economic indicators for India. India's economy is shrugging off global trade wars by relying on domestic consumption to stay on course to becoming the fastest-growing major economy this year. Demand for bank loans remained robust going into the July quarter despite rising interest rates, and so was the case with services and manufactured goods. Key indicators highlighted in the published document are as follows:

- **Business Activity :** India's main services index rose at the fastest pace in 21 months in July, the latest purchasing managers survey showed, while manufacturing continued to expand, but at a slower pace. These together pushed the composite index to its highest level since October 2016. The optimism stems from a rise in new orders, giving confidence to businesses to produce more.
- **Exports:** Exports grew by a relatively strong 14.3 percent in July from a year earlier, although slower than the 18 percent pace in the previous month. Economists and policy makers are optimistic that the recent weakness in the rupee will help support the recovery in sectors such as textiles.
- **Consumer activity:** Data from the Society of Indian Automobile Manufacturers show that the industry produced more vehicles in July than a year ago, with the increase led by commercial vehicles and two-wheelers. Total sales were up 8 percent in the latest indicator, underpinning a view that domestic demand is holding up well.
- **Economic activity:** Foreign direct investments fell to their lowest since January, and that could weigh on India's balance of payments. Already, the current account deficit is expected to widen due to higher oil prices and slowing inflows into the capital markets.

The figure below depicts the economic indicators published in the report.



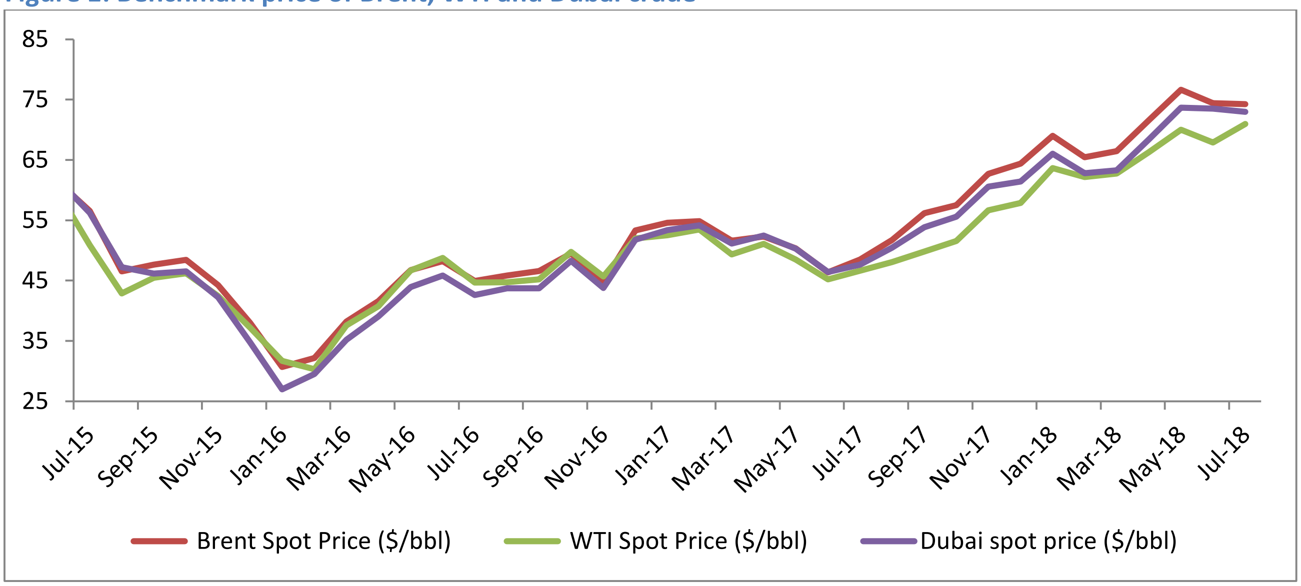
Oil & Gas Market

Crude oil price

Global benchmark crude oil prices remained volatile in July 2018 and mostly remained range bound; Brent traded in the range of $ 71 - $ 78 per barrel. Although the oil markets got a boost after OPEC decided to relax its tight policies, the combination of backing out of the Iran nuclear accord and the declines in Venezuelan output have created a pressure on oil prices.

Oil demand has continued to strengthen as a primary driver of rising prices. Demand should start to ease, along with the slowing of the recent economic expansion. Thus, oil demand could be greatly inhibited if we see continued Middle Eastern tensions, which are looking to worsen rather than improve.

Figure 1: Benchmark price of Brent, WTI and Dubai crude



Source: EIA, OIL PRICE

- Brent crude price averaged $74.25 per bbl in July 2018, and was down -0.2% and up 53.2% on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged $70.98 per bbl in July 2018, and was up 4.6% and 52.2% on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged $72.96 per bbl in July 2018, and was down 0.7% and up 53.2% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in July, 2018

Crude oil	Price ($/bbl) in July 2018	MoM (%) change	YoY (%) change
Brent	74.25	-0.2%	53.2%
WTI	70.98	4.6%	52.2%
Dubai	72.96	-0.7%	53.2%

Source: EIA, OIL PRICE

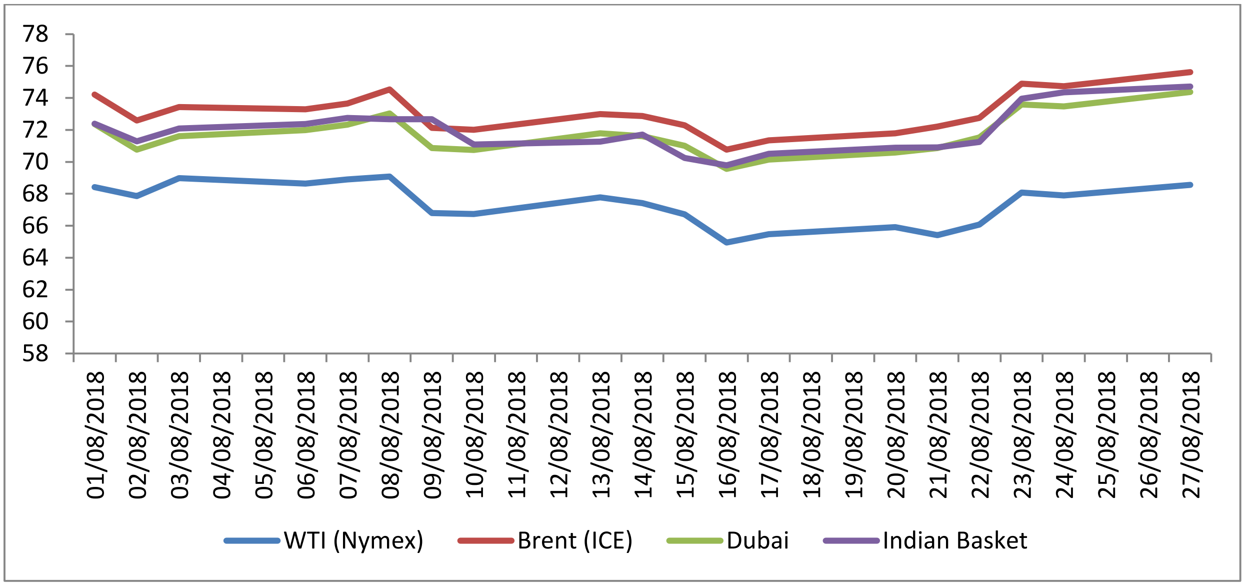
Crude oil prices remain volatile in August on fears of an economic slowdown

Global crude oil prices remained volatile in August 2018. During later part of August, the US crude oil inventories fell by close to3.4 mbpd. Sanctions against Iran also contributed to the climb in oil prices. Analysts expect to see a 900,000-barrel to 1.6 million-barrel reduction in Iran exports, but they also said they “see capacity” for members of the Organization of the Petroleum Exporting Countries to lift production to offset at least the low end of the range. Unilateral U.S. sanctions on Iranian oil are expected to begin Nov. 4, and the U.S. has “announced a zero tolerance policy on Iran sanctions evasion, and promised ‘unprecedented financial pressure’ to ensure new sanctions are effective.

During the first half of August, oil prices slid on fears on economic crisis in Italy. The meltdown in Turkey’s currency, the lira, has set off a different source of trouble. The turmoil spread to other emerging markets, dragging down a whole host of currencies. Weaker emerging market currencies threaten to seriously slow down demand – not just for oil, but for a range of commodities. The Bloomberg Commodities Index has declined by 3 percent this month and by more than 9 percent in the last three months. Oil prices are down by more than 10 percent since May.

The IEA is, for now, sticking with its forecast of oil demand growth at 1.4 million barrels per day (mb/d) for 2018. Brent oil prices are up 7 percent this year, but in local currencies the price increase is much bigger. In Turkey, oil is around 75 percent more expensive, and there has been a similar increase in Argentina. In Brazil, Russia and South Africa, oil feels about 20 to 25 percent more expensive this year, even though oil has only climbed by about 7 percent, according to ING. In Hungary, India, Poland, Chile, Indonesia and the Philippines, oil is 15 to 20 percent more expensive, so and so forth.

Figure 2: Crude oil price in August 2018

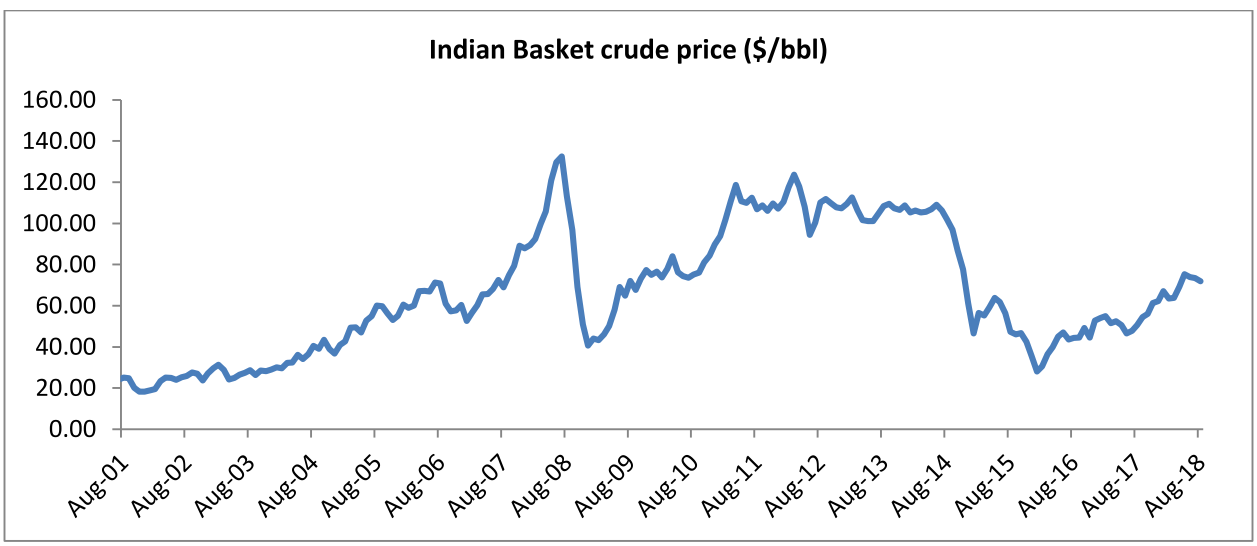


Source: EIA, PPAC

Indian Basket Crude oil price

- The Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and Sweet grade (Brent Dated) of Crude oil processed in Indian refineries in the ratio of 72.38:27.62 during 2016-17.

Figure 3: Indian crude oil basket price in $ per bbl



Source: Petroleum Planning & Analysis Cell

- Indian crude basket price averaged $ 71.95 per barrel in August, down 2.1% Month on Month (MoM) basis and up 42.1% on a year on year (YoY) basis, respectively.

Oil demand & supply

- According to OPEC, World oil demand is expected to grow by 1.70% in 2018* to 98.83 mbpd from 97.20 mbpd in 2017. India's demand for oil in 2017 was 4.53 mbpd and is projected to increase to 4.75 mbpd in 2018.

Table 2: World Oil demand in mbpd

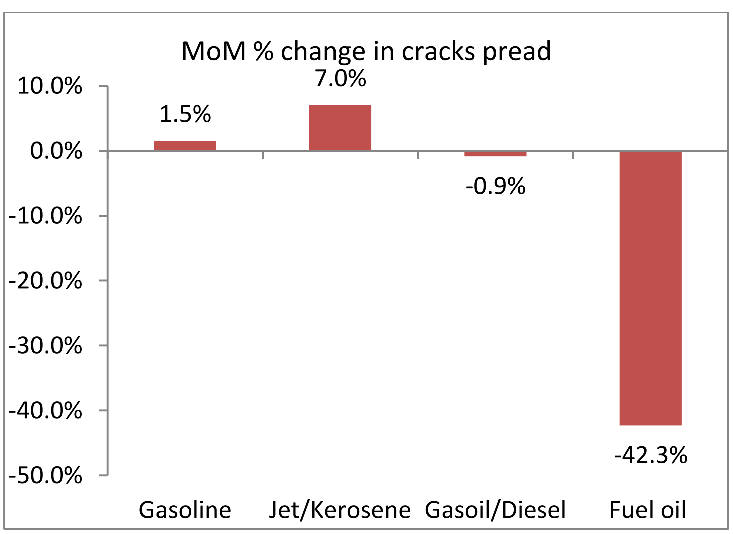
	2017	1Q18	2Q18	3Q18	4Q18	2018	Growth	%
Total OECD	**47.33**	**47.59**	**47.27**	**47.89**	**48.26**	**47.75**	**0.42**	**0.90**
Dev. Countries	**32.13**	**32.14**	**32.62**	**33.23**	**32.86**	**32.78**	**0.65**	**2.03**
~ of which India	*4.53*	*4.83*	*4.74*	*4.40*	*5.02*	*4.75*	*0.22*	*4.76*
Other regions	**17.74**	**17.68**	**18.03**	**18.33**	**19.15**	**18.30**	**0.56**	**3.15**
~ of which China	12.32	12.28	12.84	12.71	13.12	12.74	0.42	3.40
Total world	**97.20**	**97.67**	**97.91**	**99.44**	**100.27**	**98.83**	**1.64**	**1.68**

Source: OPEC monthly report, August 2018

*Note: *2018 = Forecast*

Global petroleum product prices

The Asian gasoline 92 market showed a trend reversal in July as cracks rebounded slightly from the decline witnessed in the previous month. This improvement was due to higher gasoline demand from Sri Lanka, despite firm supply from China and other parts of North Asia. Additional support emerged from higher delivery requirements from the Atlantic Basin.



Source: OPEC monthly report

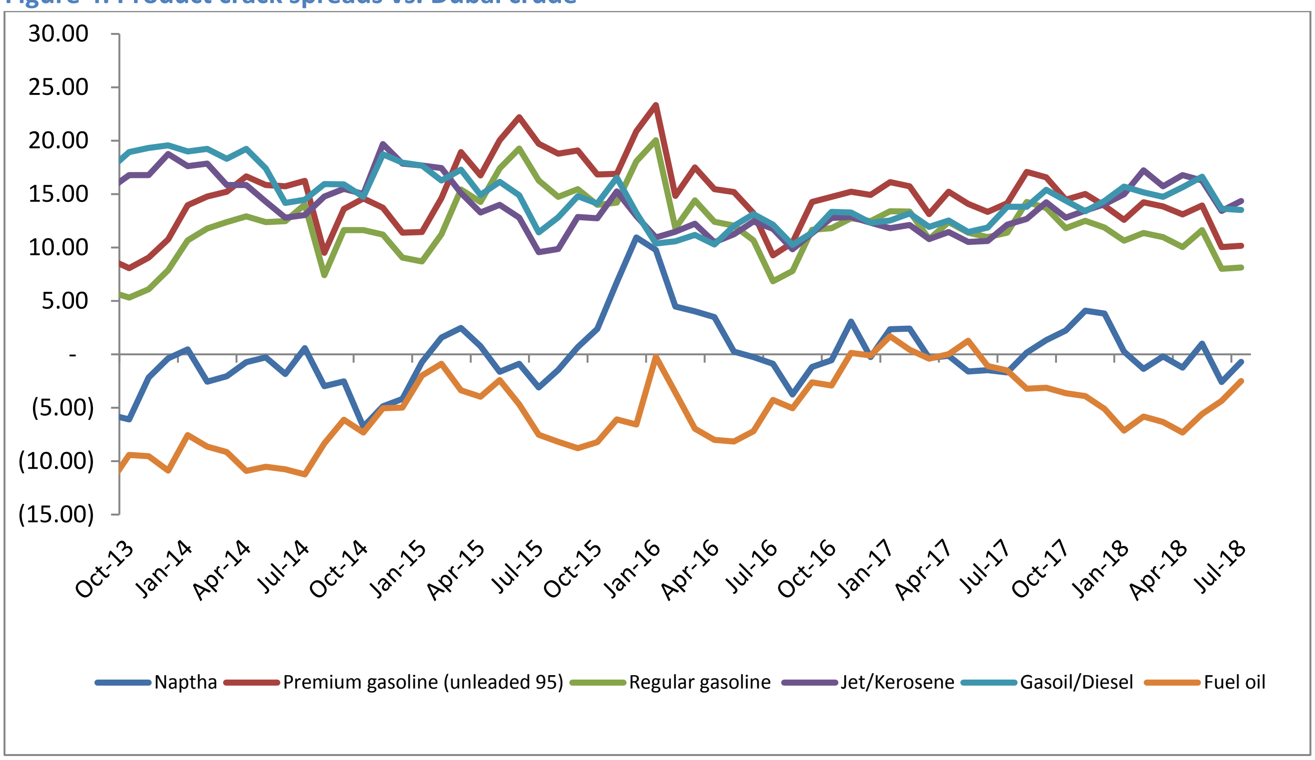
The Singapore light distillate naphtha crack spread exhibited the strongest performance across the barrel in July, as the crack moved closer to reaching positive territory. This development was attributed to an uptick in trading activities and strong fundamentals. Additionally, higher regional demand due to bullish sentiment fuelled by expectations of lower naphtha supplies into the region and higher LPG prices further supported the crack.

The jet/kerosene market strengthened, supported by market tightness which was further boosted by consumer tax exemptions and strong domestic demand growth in China. Firm volume requirements from the US West Coast also provided an outlet for jet fuel in Northeast Asia.

Asian gasoil crack spreads dipped due to pressure from weaker demand in India, Taiwan and China. At the same time, gasoil production in China reached record-breaking levels in response to rising refinery crude intake rates, which rose to 12 mb/d, a four-month high. This contributed to growing gasoil stock levels and weakening in Asian gasoil crack spreads.

The Singapore fuel oil crack spread against Oman saw an extension of the upward trend seen in the previous months, climbing for the third consecutive month. A reduction in crude prices along with declining refinery output, particularly from Iran, contributed to the upside and pushed fuel oil futures onto a steeper backwardation market structure.

Figure 4: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

Table 3: Singapore FOB, refined product prices ($/bbl)

Products	Price ($/b) in July 2018	MoM (%) change	YoY (%) change
Naptha	72.25	1.9%	57.3%
Premium gasoline (unleaded 95)	83.11	-0.5%	34.6%
Regular gasoline (unleaded 92)	81.08	-0.5%	37.4%
Jet/Kerosene	87.31	0.5%	46.1%
Gasoil/Diesel (50 ppm)	86.46	-0.8%	40.7%
Fuel oil (180 cst 2.0% S)	70.45	1.9%	52.8%
Fuel oil (380 cst 3.5% S)	69.98	23.7%	53.5%

Source: OPEC

Petroleum products consumption in India

- With the push by government on promotion of LPG, its Consumption has steadily increased in India. In July, LPG consumption increased 5.6% on MoM basis.
- Consumption of gasoline increased (8.0% YoY) driven by higher demand from transport segment.
- Demand for diesel also witnessed robust increase of 4.9% on YoY basis in the month of July.

Table 4: Petroleum products consumption in India, July 2018

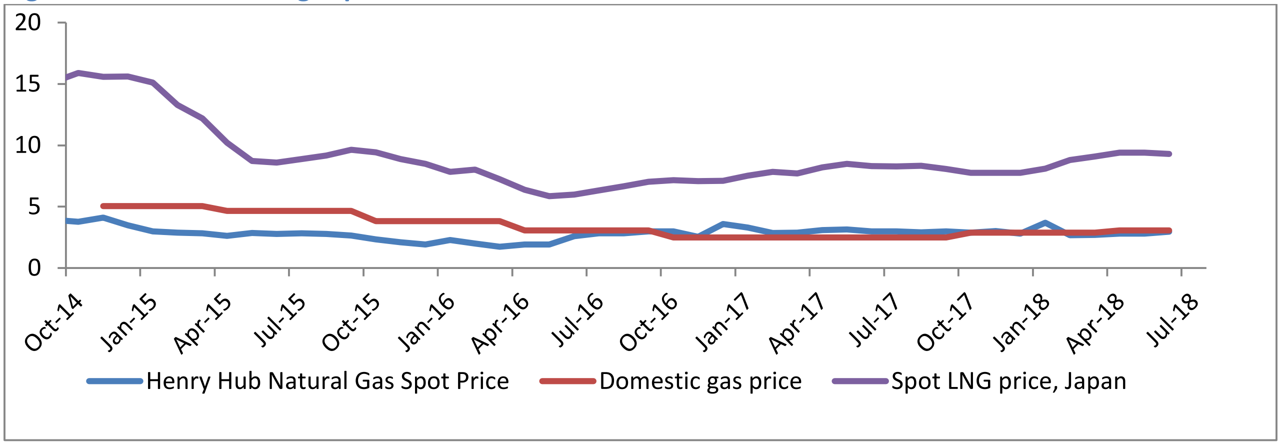
Petroleum products	Consumption in '000 MT July 2018	MoM (%) change	YoY (%) change
LPG	2,043	5.6%	6.0%
Naphtha	1,140	6.2%	60.7%
MS	2,314	-2.7%	8.0%
ATF	672	-1.1%	12.7%
HSD	6,610	-9.8%	4.9%
LDO	42	-3.8%	10.2%
Lubricants & Greases	313	-1.9%	10.4%
FO & LSHS	517	1.9%	-2.5%
Bitumen	316	-45.6%	52.9%
Petroleum coke	2,237	1.4%	2.0%
Others	561	-11.1%	-11.5%
TOTAL	**17,057**	**-5.2%**	**7.4%**

Source: PPAC

Natural Gas Price

Natural gas prices in US remained low due to higher US production. LNG prices saw an upswing over previous year due to higher natural gas demand.

Figure 5: Global natural gas price trends



Source: EIA,

Table 5: Gas price

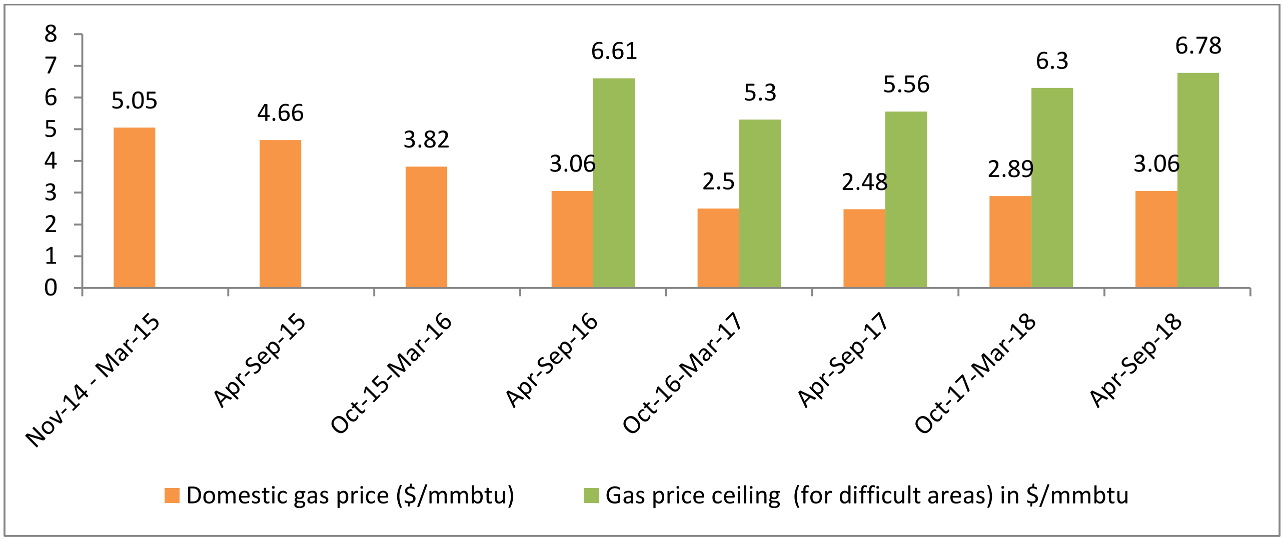
Natural Gas	Price ($/MMBTU) in July 2018	MoM (%) change	YoY (%) change
India, Domestic gas price	3.06	0.0%	23.4%
India, Gas price ceiling – difficult areas	6.78	0.0%	21.9%
Henry Hub	2.83	-4.7%	-5.0%
Liquefied Natural Gas, Japan	10.00	7.5%	20.6%

Source: EIA, PPAC,

Domestic natural gas price which takes into account international benchmarks including Henry Hub, Alberta hub, Russia and UK National Balancing Point, has increased around 22% as compared to a year before, thus capturing the international gas price trends.

A notification was issued by MoP&NG on 21st March 2016, for marketing including pricing freedom for gas to be produced from discoveries in deep water, ultra-deep water, and high pressure high temperature areas. For the Apr-Sep-18 period, the price of gas from such areas was notified at $6.78 per MMBTU.

Figure 6: Domestic natural gas price

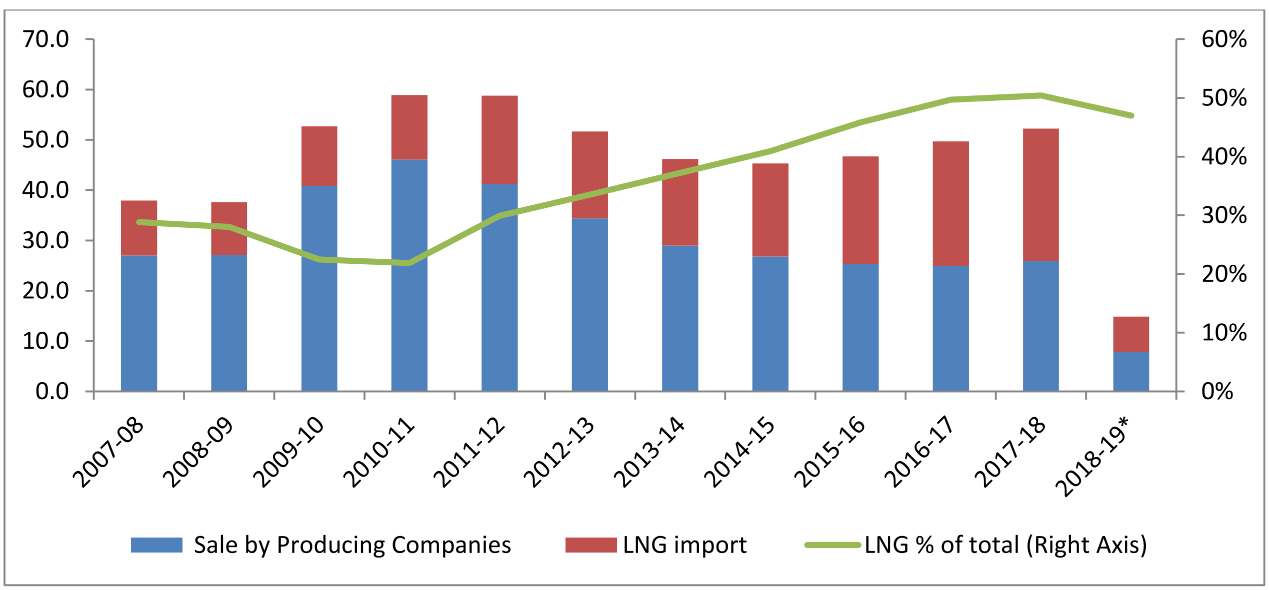


Source: PPAC

Natural gas production, consumption and import in India

- Natural gas constitutes for 6.5% of total energy primary mix of India
- Natural gas consumption in India has grown at a very slow pace in the past 3 – 4 years, with share of LNG imports increasing in the overall consumption mix

Figure 7: Domestic natural gas consumption, domestic production and LNG import in BCM



Source: PPAC

**Figures for 2018-19 are for the period of April – June only. Sale by producing companies includes internal consumption*

Key policy developments in energy sector during the month

- **Cabinet approved the Policy Framework for exploration and exploitation of Unconventional Hydrocarbons**

  The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the policy to permit exploration and exploitation of unconventional hydrocarbons such as Shale oil/gas, Coal Bed Methane (CBM) etc. It will be carried out under the existing Production Sharing Contracts (PSCs), CBM contracts and Nomination fields to encourage the existing Contractors in the licensed/leased area to unlock the potential of unconventional hydrocarbons in the existing acreages.

  - This policy will enable the realization of prospective hydrocarbon reserves in the existing Contract Areas which otherwise would remain unexplored and unexploited.

  - With this policy dispensation, new investment in Exploration and Production (E&P) activities and chances of finding new hydrocarbon discoveries and resultant increased domestic production thereof is expected.

  - Exploration and exploitation of additional hydrocarbon resources is expected to spur new investment, impetus to economic activities, additional employment generation and thus benefitting various sections of society.

  - This will lead to induction of new, innovative and cutting-edge technology and forging new technological collaboration to exploit unconventional hydrocarbons.

- **Bid round – II under discovered small field round launched**

  Bid round –II under Discovered Small Field Policy were launched on August 9 by Shri Dharmendra Pradhan, Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship. He also released the Model Revenue sharing contract and Notice Inviting Offer for the same. The bids will start next month and close in December 2018. The signing of contracts with the successful bidder for 59 discovered small fields clubbed into 25 contract areas is likely to be done in January next year.

  Speaking on the occasion, Shri Pradhan said that Systematic reforms have been initiated in the last four years in the Hydrocarbon sector, which have brought about consistency, certainty, and transparency in the policy making. The Government has shown that it is capable of taking strong and clear decisions in the national interest. All these factors have made India a preferred destination for foreign investors. Encouraged with the Success of Bid Round-I, the Minister expressed the hope that there will be massive interest from Industry, especially from Private Sector since the Government is offering larger field areas in commercially producing basins now.

Features of DSF Bid Round–II are as below:

- No previous technical experience required for bidders, easy entry & investor friendly policy
- Large field areas on offer in already producing basins
- Established Hydrocarbon resource base of over 190 MMT (O+OEG)
- Better fiscal system through Revenue Sharing Contracts
- Area having oil/gas discoveries; Potential of upsides in the area; Ready processing facilities nearby; Ready market
- Easy bidding process; minimum requirements; transparent award; swift processing of approvals
- Single license for all types of hydrocarbons
- No signature bonus
- Exploration allowed during the entire contract period
- Full pricing and marketing freedom
- Royalty rates further reduced for shallow water compared to DSF-I

- **"World Biofuel Day 2018'' observed on 10th August 2018**

World Biofuel Day 2018" event was organized in New Delhi, with the Prime Minister Sh Narendra Modi addressing a diverse gathering, consisting of farmers, scientists, entrepreneurs, students, government officials, and legislators. On the occasion, Sh. Narendra Modi unveiled a Booklet on "National Policy on Biofuels 2018", and launched "Pro Active and Responsive facilitation by Interactive and Virtuous Environmental Single window Hub"[PARIVESH]. Shri Nitin Gadkari, Union Minister of Road Transport & Highways, Shipping, and Water Resources, River Development and Ganga Rejuvenation; Shri Ramvilas Paswan, Union Minister of Consumer Affairs, Food and Public Distribution; Shri Radha Mohan Singh, Union Minister of Agriculture and Farmers Welfare, Dr. Harsh Vardhan, Union Minister of Science & Technology, Earth Sciences, and Environment, Forest & Climate Change; and Shri Dharmendra Pradhan, Union Minister of Petroleum & Natural Gas, and Skill Development and Entrepreneurship were also present.

In his welcome address, Shri Dharmendra Pradhan said that World Biofuel day is being observed since 2015 to create awareness about the importance of non-fossil fuels as an alternative to conventional fossil fuels and to highlight the various efforts made by the Government in the Biofuel sector. He said that the day reaffirms the Government's commitment to increase farmers' income and improve the environment. Minister of Petroleum & Natural Gas said that several steps have been taken to improve the supply of ethanol for the blending programme that has resulted in supplies jumping from 38 crore litres in 2013-14 to about 141 crore litres in the ongoing season. Shri Pradhan said that the Government has notified the new National Policy on Biofuels-2018, which envisages a target of 20% blending of ethanol in petrol by 2030. The policy has widened the scope of raw material for ethanol procurement.

- **Pradhan Mantri Ujjwala Yojana achieved the 5 core mark**

Lok sabha Speaker Smt Sumitra Mahajan handed over 5 croreth LPG connection under Pradhan Mantri Ujjwala Yojana (PMUY) to Smt Takrdiran of Delhi in the Parliament House. Modi Government launched Pradhan Mantri Ujjwala Yojana (PMUY) on 1st May, 2016 and it is implemented by Ministry of Petroleum and Natural Gas through its Oil Marketing Companies i.e., IOC, BPCL and HPCL through their network of distributors across the country. Through PMUY, initially, 5 crore BPL households were targeted for providing deposit free LPG connections to BPL households by 31stMarch, 2019. In a record time of 28 months for its launch, PMUY achieved the initial target of providing 5 crores LPG connection to BPL households. In the current year, considering the huge success of the Scheme, target was revised to 8 crores with budgetary allocation of Rs 12,800 crore.

States of Uttar Pradesh (87 lakh), West Bengal (67 lakh), Bihar (61 lakh), Madhya Pradesh (45 lakh), Rajasthan (37 lakh) and Odisha (30 lakh) have accounted for nearly 65% of the connections provided. 47% of the beneficiaries are from the weaker sections of the society i.e., SC/STs.

PMUY has been recognized by World Health Organisation as one of the decisive intervention by the Government to address the Indoor Air Pollution which accounts for nearly 10 lakh deaths in a year in the country.

PMUY aims at providing clean-cooking fuel to the poor households, which are otherwise vulnerable to various health hazards associated with indoor air pollution and bringing in qualitative charges in the living standards. PMUY is under implementation in the all the States/UTs. Beneficiaries are identified through Socio-Economic Caste Census List-2011 and in such cases where names are not covered under SECC list, beneficiaries are identified from seven categories which includes SC/ST households, beneficiaries of PMAY(Gramin), Antyodaya Anna Yojana, Most Backward Classes, Forest Dwellers, Resident of Islands/River Islands and Tea Garden & Ex-tea Garden Tribes.

Research, analysis & compilation by:

Praveen Rai, Deputy Director (Economic Policy & Planning)

Email: prai@fipi.org.in

Kaushiki Sinha Ray, Senior Assistant Director (Economic Policy & Planning)

Email: Kaushiki@fipi.org.in