



**February  
2019**



# **Policy & Economic Report - Oil & Gas Market**

**Federation of Indian Petroleum Industry (FIPI)**

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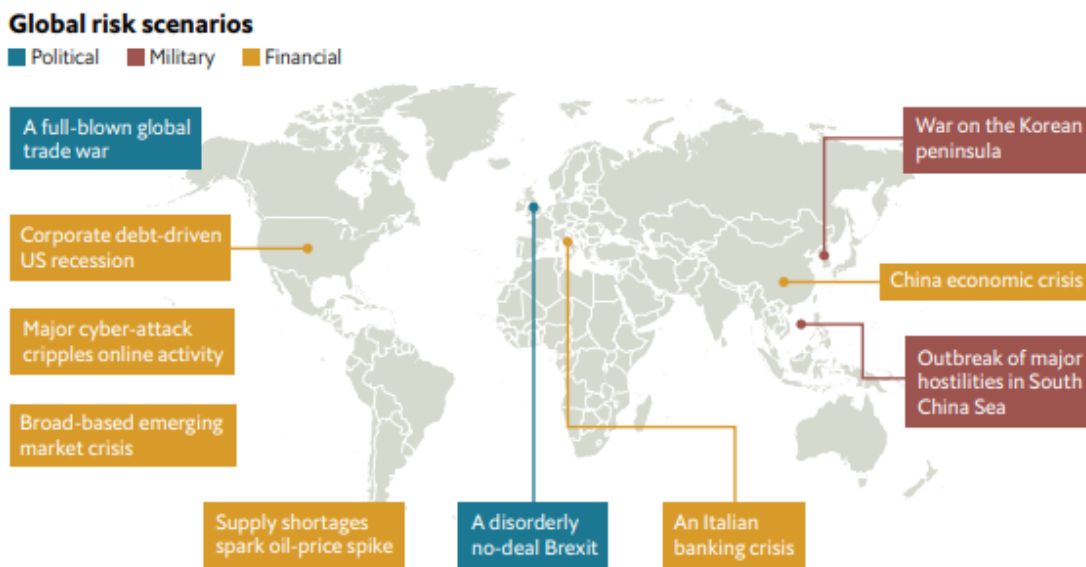
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# Policy & Economic report – Oil & Gas market

## Economy in Focus

### Top Risks plaguing global economy in 2019



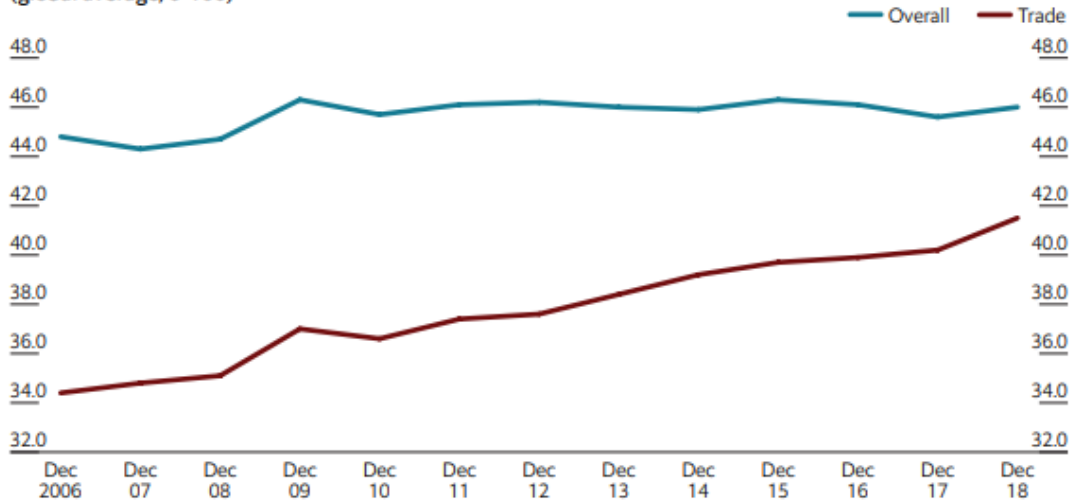
Source: The Economist

#### a. The US- China trade conflict morphing in to full-fledged trade war

While negotiations have started to resolve the current trade conflict and the US government has decided to suspend further increases in tariffs on US\$200bn-worth of Chinese Goods, it is believed that this is temporary. A full-blown trade war seems eminent mainly due to the fact that China is yet to address on issues such as technology transfer and intellectual property theft. The next coming couple of years are expected to see issues beyond bilateral protectionism, so much so that global trade is expected to decline significantly thereby affecting inflation, business sentiment, consumer sentiment and, ultimately, global economic growth.

### Trade risks have grown consistently

(global average; 0-100)



Sources: The Economist Intelligence Unit; Risk Briefings.

### b. US Corporate Debt forcing downturn into recession

Ultra-low interest rates have resulted in corporate debt as a percentage of GDP to just under 49% - higher than the previous peak during the financial crisis of 2008-09. Adding to this woe is the fact that over half of US corporate debt rated BBB—the lowest investment grade and 60% of loans were issued without maintenance covenants in 2018. This could very well mean an increasing number of firms cutting investment and hiring while struggling to make repayments as their profits decline, in turn resulting in rating agency downgrades thus leading investor to withdraw funding to corporates.

### Quality Breakdown of US Investment Grade Corporate Bond Index

(% with BBB ratings)

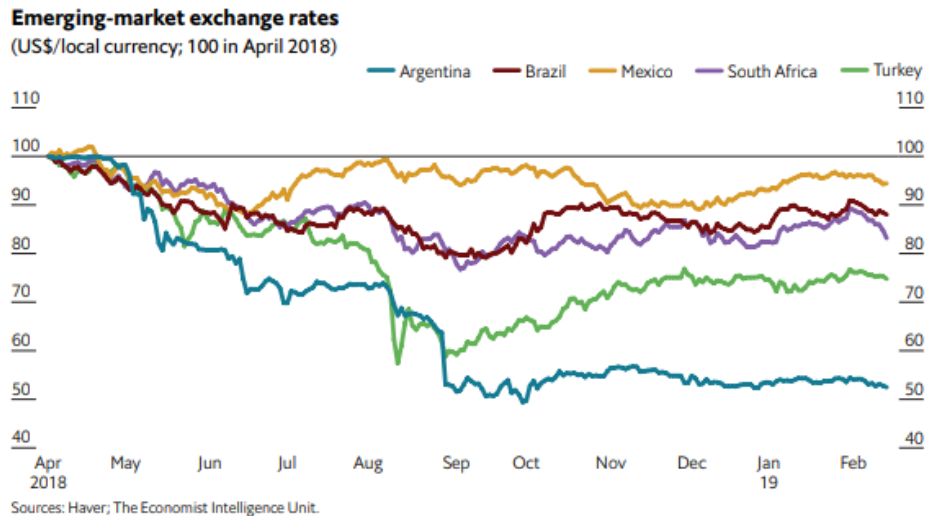


Sources: IMF, Bloomberg; Standard & Poors.

### c. Emerging Market-Crisis

US monetary tightening and strengthening of the dollar has resulted in many emerging markets suffering from currency volatility in 2018. Turkey and Argentina saw full-fledged currency crisis due to a combination of factors such as external imbalances, political instability and poor

policymaking. Several markets such as Brazil, Mexico and South Africa remain at risk. If rising value of foreign-currency debt leads to defaults in Turkey and Argentina, investors could very well flee emerging markets. Capital outflows from emerging markets can force countries with external imbalances to make serious adjustments which could result in the most susceptible to fall into crisis.

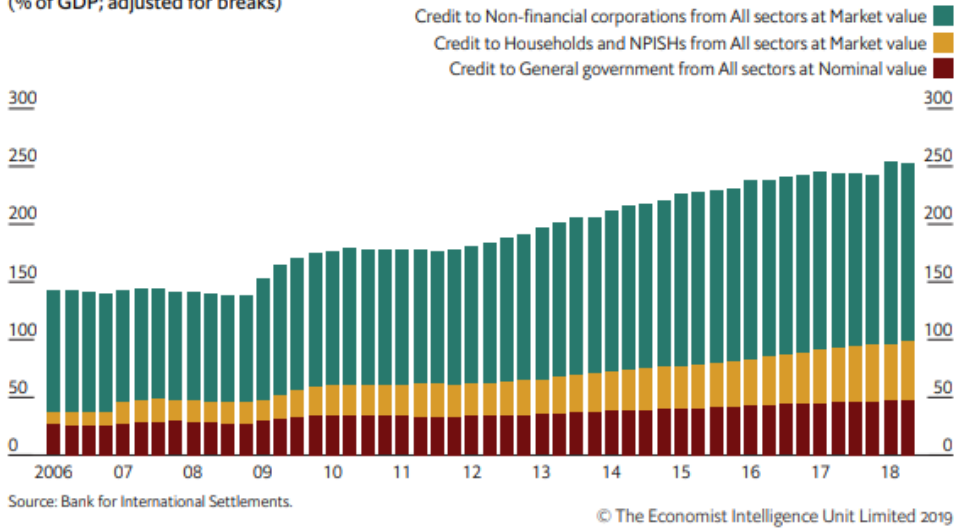


**d. China’s prolonged economic crisis**

Escalating trade conflict with US has propelled China towards a much looser macro-economic policy. While this may support domestic demand in the short term, goals of lowering unsold housing stock and corporate deleveraging have now been shifted to the back burner. Domestic credit was at over 230% of GDP at the end of third quarter of 2018 and while every effort would be made to avoid any kind of banking crisis especially considering the mounting debt over recent years. Bursting of credit bubbles everywhere has mostly been associated with a sharp deceleration in economic growth and if this happens, it would definitely have damaging impact on countries of Latin America, Middle East and Sub-Saharan Africa since they have been earlier beneficiaries of Chinese-driven boom in commodity prices.

### China's debt burden remains a concern

(% of GDP; adjusted for breaks)



#### e. Detrimental oil price spike due to supply shortages

In the event that US decides to step down from its current conciliatory approach of granting six-month sanction waivers to eight of the key purchasers of Iranian oil and decides to crack down upon Iran and switch to other importers, Iran's oil exports could very well drop down below the 1.2 m barrels/day expected in 2019-20. While Saudi Arabia and Russia have the capacity to ramp up supply, and US shale production could also fill the gap, it will become difficult to cover sudden sizeable cuts elsewhere, especially in volatile countries such as Libya and Venezuela. This would force prices to escalate to above US\$80/b seen in 2018, along with lack of capacity from producers end to increase supply. Such a situation would push inflation and global growth would be affected.

#### f. South/East China Sea Disputes

Disputed island groups in the South China Sea



**g. Data Integrity and Cyber-attacks paralysing the Internet**

Coming couple of years are expected to see higher regulations in terms of usage of social media due to major data breaches. This is mainly due to the fact that a looming fear remains that higher frequency and severity of such data breaches can bring down corporate and government networks. The consumer faith has been shaken and billions of dollars of daily transactions have been put at risk.

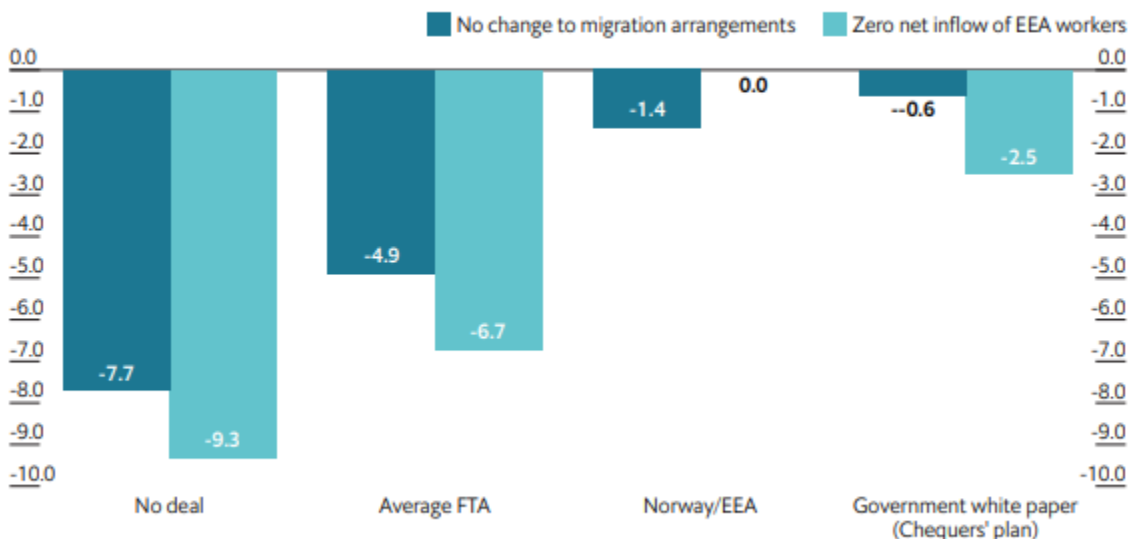
**h. Military confrontation in Korean Peninsula**

Inspite of attempts to diffuse the situation, irreconcilable differences between the US and North Korea continue to remain. US goals remain significantly at odds with the North's long-term commitment to its nuclear programme. Should diplomatic talks fail, US could be seen in a much more aggressive position such as strategic strikes on the North Korea. Under such a scenario, North Korea would almost certainly retaliate with conventional weaponry and, potentially, short-range nuclear missiles, bringing devastation to South Korea and Japan, in particular, at enormous human cost and entailing the destruction of major global supply chains.

**i. A disorderly no-deal Brexit due to political gridlock**

**Government Brexit impact assessment**

(projected % change in GDP over 15 years compared with current relationship with EU; central estimate)



Source: HM Government.

In the event of a no-deal Brexit, the pound is expected to depreciate significantly and UK would be headed for a much sharper economic slowdown than previously forecasted. Moreover, under a no-deal, UK would be treated by EU as a "third country" leading to tariffs, border checks and border controls, which in all probability UK would respond in kind. The impact of all this on trade and investment in the UK and EU is expected to go beyond the negative impact on EU economies and may be large enough to dent global economic growth.

## j. The Italian Banking Crisis

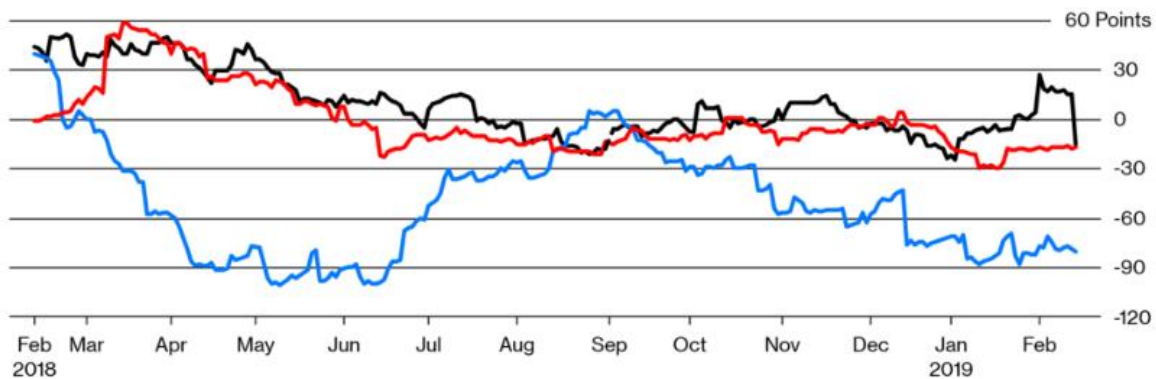
Domestic political and economic uncertainty, tightening liquidity conditions and the worsening global trade outlook has resulted in major contraction of the Italian economy in the final two quarters of 2018. While this means that GDP is expected to shrink from 0.8% to 0.2% in 2019, a higher risk of a much deeper recession prevails, especially if investor confidence leads to another spike in bond yields. A banking crisis could well be on its way considering that government debt is 130% of GDP and is largely still held by domestic banks.

## The Weakest Link in the Global Economy

### Bad News

Euro-area economic numbers have consistently missed forecasts

▲ Citi economic surprise index for the U.S. ▲ Euro area ▲ Asia Pacific



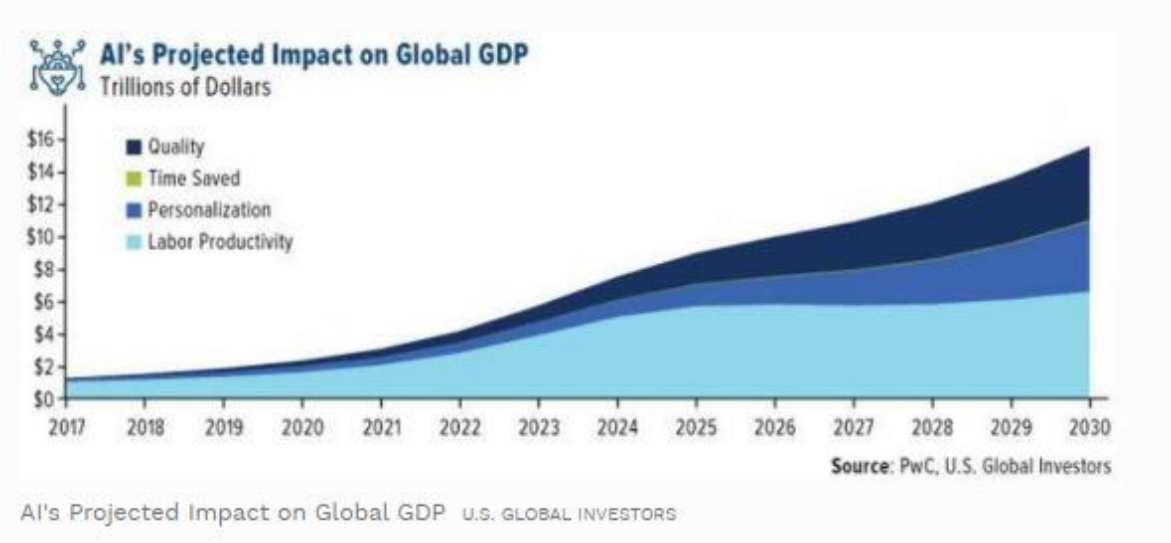
Data: Citigroup; graphic by Bloomberg Businessweek

In spite of all the cry about the trade war between U.S. and China damaging their economies, in fact it seems that the biggest threat to global growth is Europe, which has not seen any positive news in the longest time. Even powerhouse Germany seems to be in trouble. There has been a decreasing demand pattern along the 19-nation euro zone, indicating a sharp slowdown from 2018's 1.9 percent.

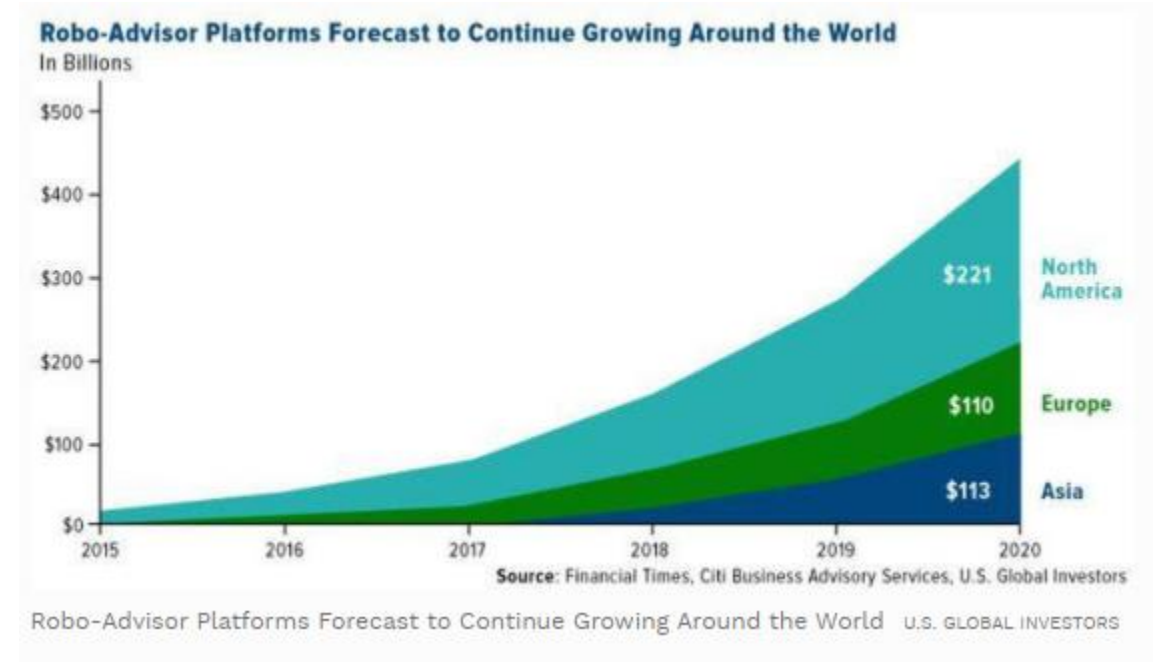
## A \$15 Trillion addition to the World Economy by 2030 by AI

Estimates by PwC claim that Artificial Intelligence (AI) contributing a whopping \$2 trillion to global GDP last year and by 2030, it is expected to be as much as \$15.7 trillion making it's the biggest commercial opportunity.



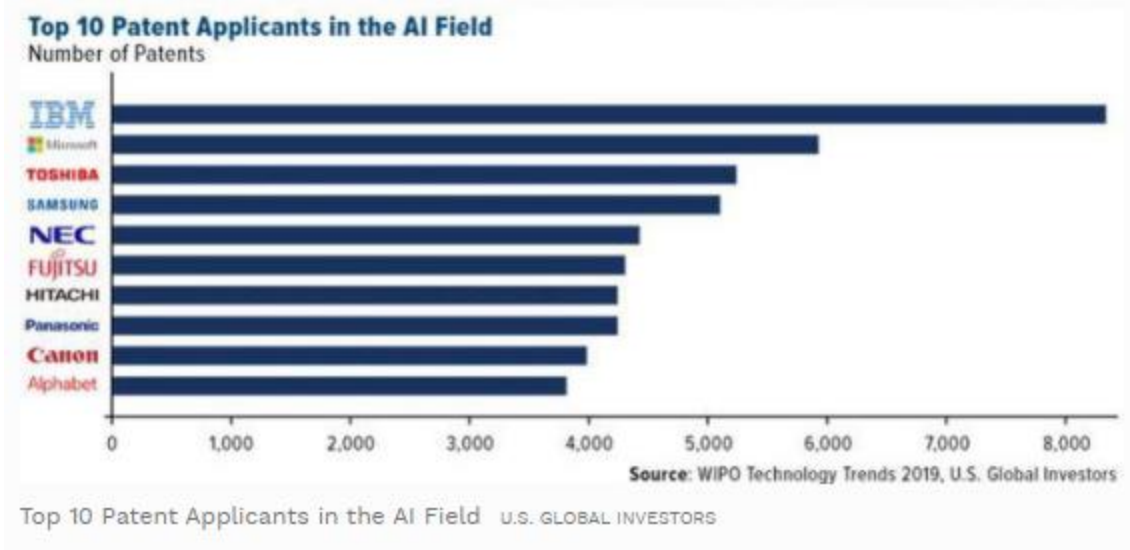


Artificial Intelligence seems to be the “New Electricity” and industries such as healthcare, automotive and financial services have been the fastest to adopt it.



The World Intellectual Property Organisation states that AI patents have surged in the past five years alone and from 2013, till the end of 2017, the number of patents grew nearly three times, from 19,000 to more than 55,600.

Majority of the top 500 applicants are from China, the U.S. and South Korea while only four are from Europe. While IBM sits at the top of the list with 8290 inventions so far, Microsoft has 5,930 patents to its name.



## India Story

### India slowing down at 6.6% GDP growth rate

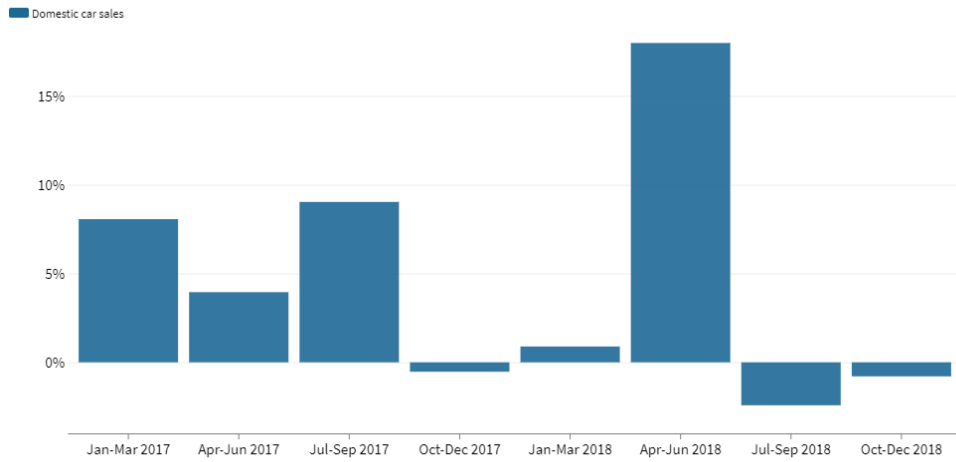
India saw a slowdown in its GDP growth rate in the December quarter to 6.6%, quite below the expectations of 6.9% anticipated by Reuters. Analysis states that if the economic fundamentals are measured via high-frequency economic indicators like car sales, two-wheeler sales, tourist arrivals, railway freight movement, this growth rate may actually seem optimistic.

Unlike theoretical construct, these indicators are real time economic indicators and will be able to provide a fair picture to the actual performance of the Indian economy.

Car sales are considered to be important since it provide a direct image of how urban India feels about the economic prospects of the country.

### Car sales in India have been weak for most part of the last year

This hurts a whole host of sectors like steel, rubber, paint, glass, batteries, and fuel.

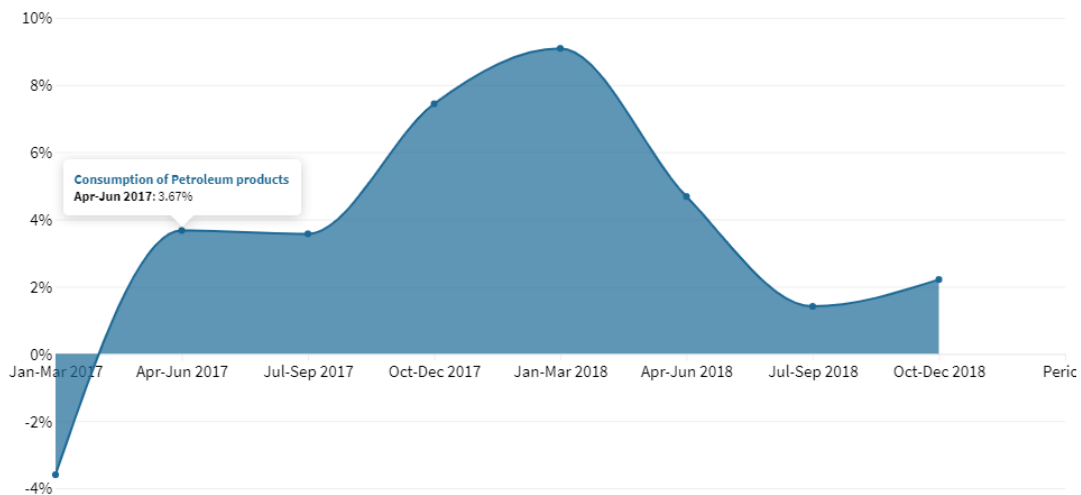


A Flourish data visualisation

The fact that car sales have been falling is an indicator that the average Indian is not too optimistic about the prospects. Moreover, car sales have significant backward and forward linkages. A higher demand in cars automatically signals a higher demand in steel, rubber, paint, glass and batteries. Similarly, a growth in car sales indicates a higher demand for loans, servicing centers as well as energy consumption. As is shown below, the consumption of fuel went up by just 2.21% during the period October to December 2018, in comparison to a year earlier – again, a clear impact of slowdown in car sales.

### Fall in auto sales also lead to reduced consumption of fuel

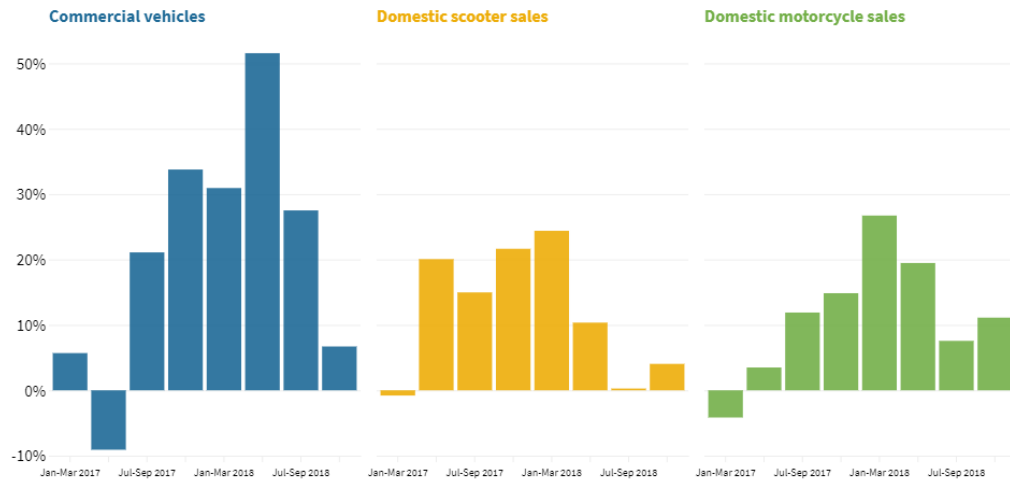
Consumption of petroleum products has fallen sharply in the last one year



A Flourish data visualisation

## Vehicles sales growth have been largely slower compared to a year ago

Motorcycle sales have been relatively better than other two categories



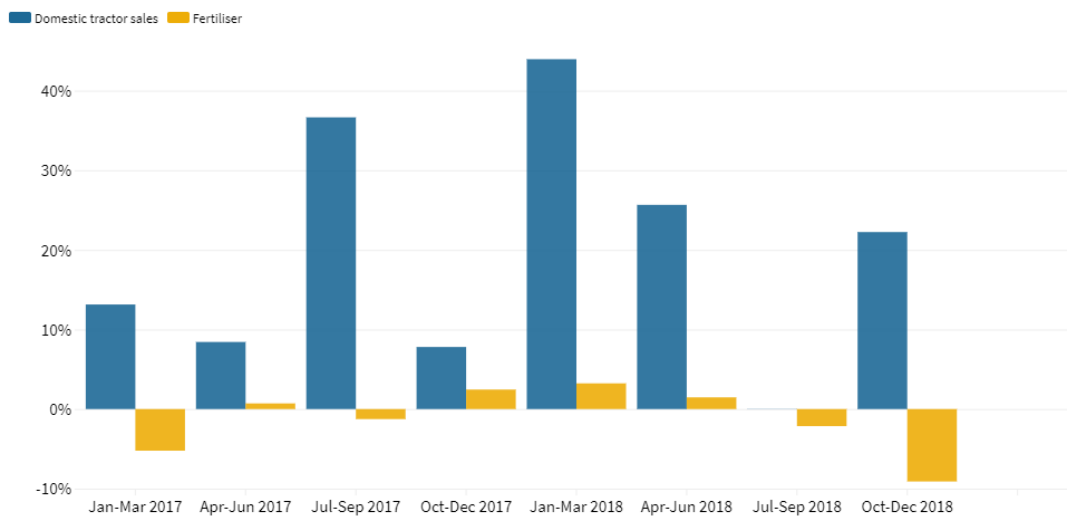
A Flourish data visualisation

While a slowdown in scooter sales between July and December 2018 signifies lower confidence of urban India in general, the motorcycle sales growth seems to be on the path to recovery growing by 11.11% between October and December 2018. This growth along with a growth in tractor sales by 22.24% shows that a larger part of rural India is economically confident.

However, with fertilizer production falling 9.1% during the period, agriculture sector does not seem to be doing too well.

## Falling fertiliser sales show farm growth may not be strong

However, rising tractor sales show richer farmers are feeling more confident

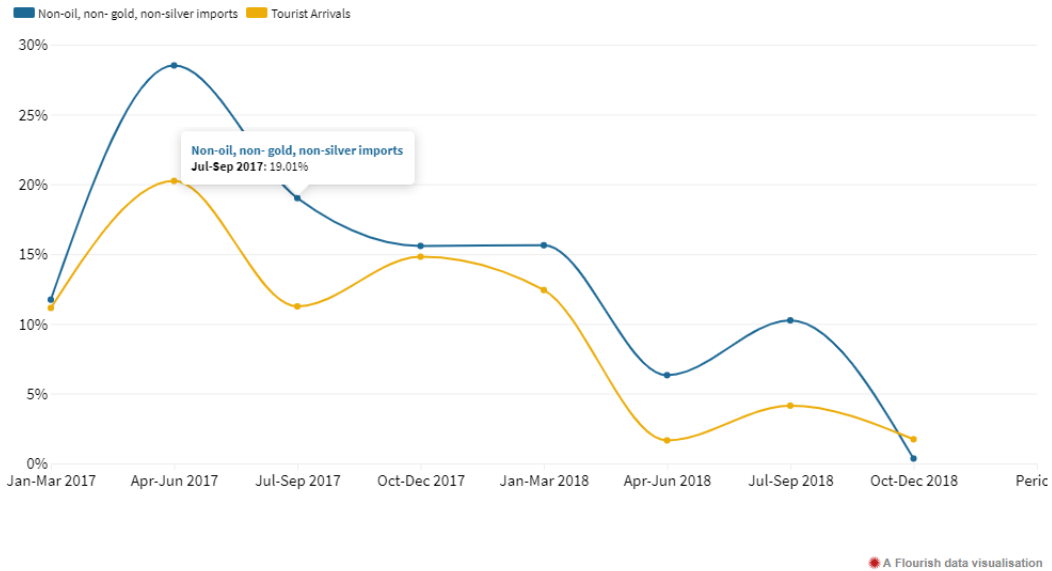


A Flourish data visualisation

Non-oil non-gold non-silver imports, which are a very good indicator of consumer demand grew by just 0.35% between October and December 2018. Consumer demand was further dampened by slow growth in tourist arrivals which grew by just 1.73%, in comparison to 14.81% a year earlier.

### Fall in consumer demand has been worsened by the fall in tourist arrivals

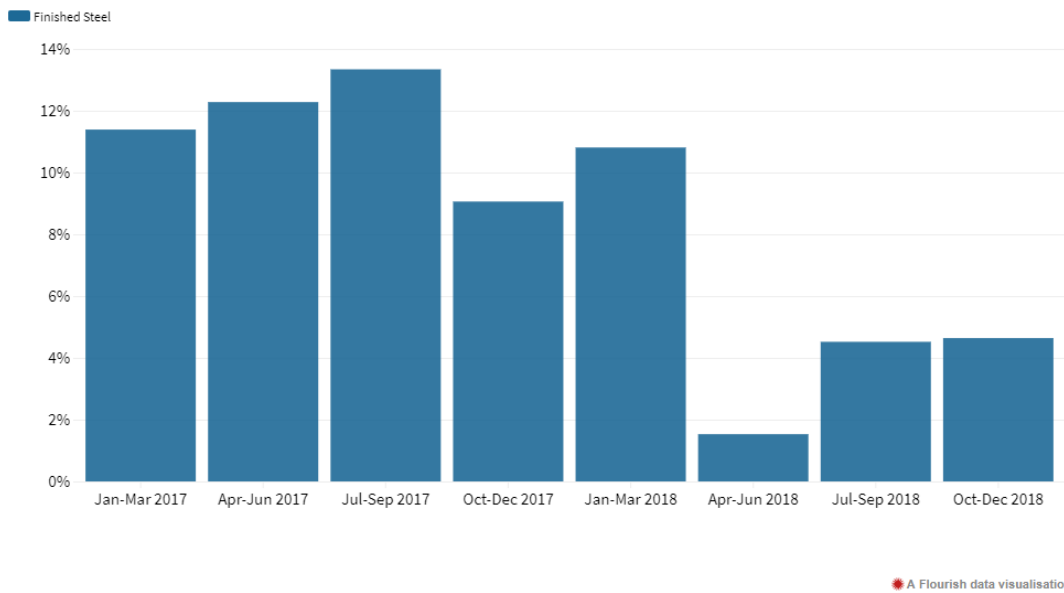
Imports other than oil, gold, and silver are good gauge of consumer demand



The slowdown in car sales and the real estate sector went against the steel sector which grew by 4.64% during the period.

### Slowing car sales also affect demand for steel

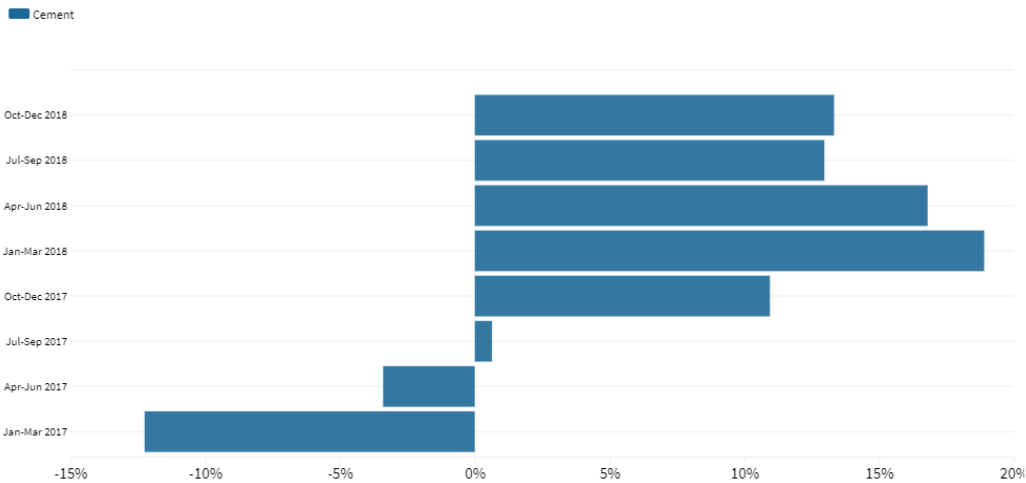
Finished steel production has also fallen significantly in the last year



However, road construction saw a healthy pace of growth. April to November 2018 saw 5,579 kilometres of highways were constructed as against 4,942 kilometres, during the same period in 2017. Road construction also boosted cement production which saw a 13..3% growth.

### Rise in road construction helped the demand for steel

Higher demand has led to a steady growth in cement production



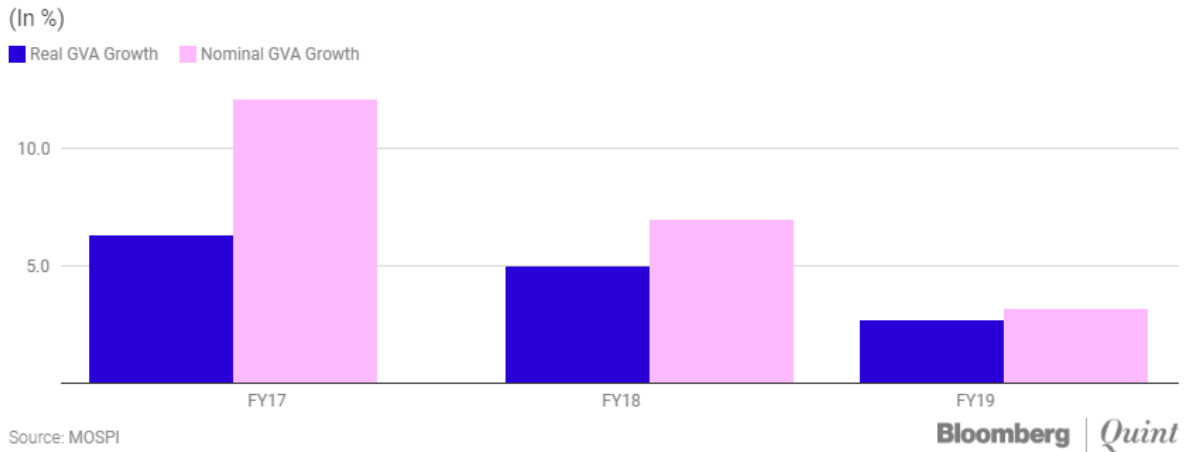
A Flourish data visualisation

Exports remained significantly weak during this period. Non-oil exports grew by just 1.19% while revenue earning rail freight saw a slight growth at 5.92%.

The slow pace of growth in commercial vehicle sales at 6.7% was the lowest in six quarters. Commercial sales act as a beacon of industrial as well as infrastructure activity. The period of October to December 2018 saw new projects fall by 24.14%, completed projects fall by 8.35% and stalled projects went up by 246.89%. This had a cumulative impact of a major slowdown in central government revenue receipts, which grew by just 0.48% during the period.

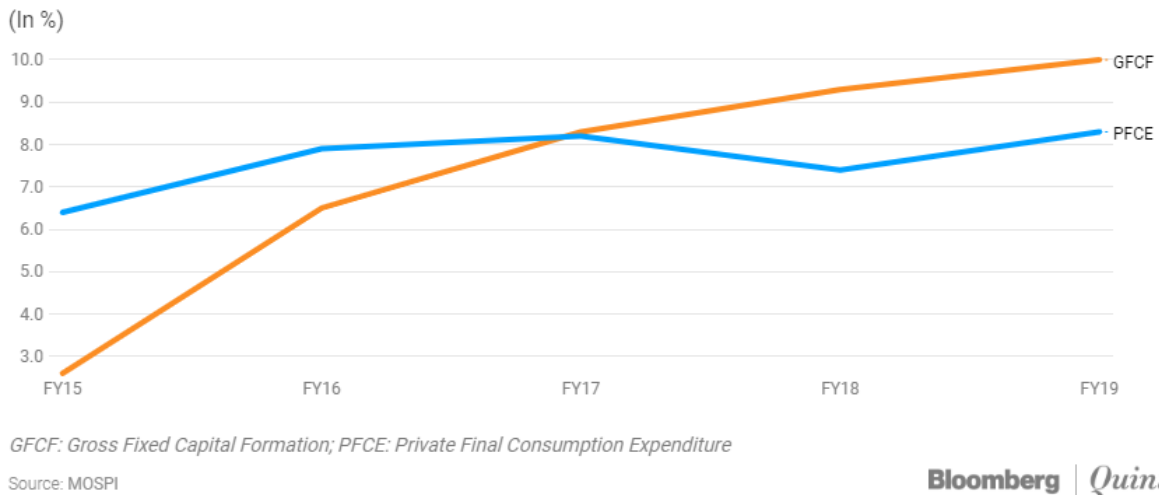
The last two financial years have been adverse for the farm sector. Decline in food price inflation has contributed largely to the control in overall inflation in the Indian economy. While this is beneficial for the consumers, the implications on the producers are adverse.

## Narrowing Gap Between Nominal And Real Agriculture Growth



The annual GDP story has been quite telling. Until FY17, the nominal growth in agriculture, which includes output and price impact, was running well above real growth, which reflects just increase in output. FY19 saw the nominal agricultural growth at 3.2 percent was above the real growth by just 50 basis points. Lower nominal growth means that farm incomes continue to take a hit.

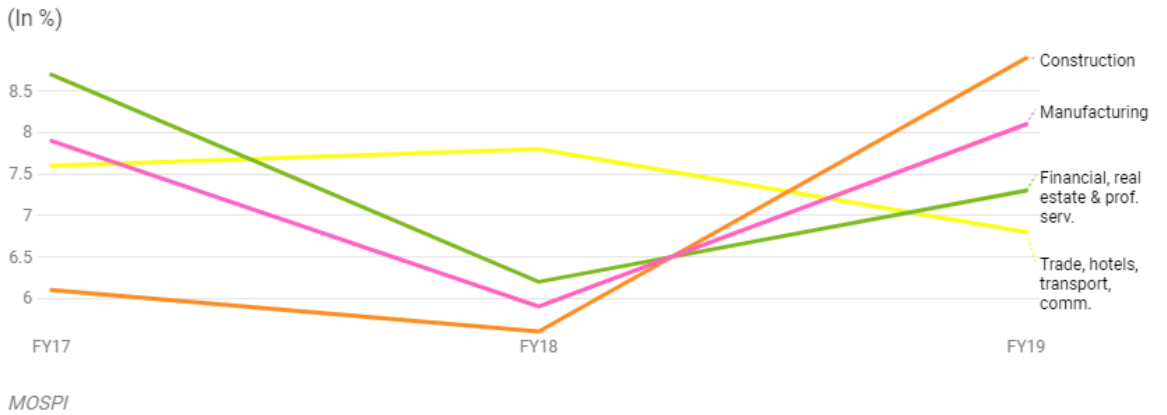
## Investment Growth Exceeds Consumption Growth



Consumption growth is slowing and this is evident by the growth of 8.4 percent in the third quarter of FY19, compared to 9.8 percent in the second quarter, thereby pushing the GDP further down. On the other hand, investments grew by 10 percent in the third quarter, as against 9.3 percent in the second quarter of FY19. High frequency indicators such as auto sales, aviation passenger traffic and fuel consumption indicate a slump in urban as well as rural private consumption. While urban consumption has been impacted by higher crude oil prices in the beginning of the third quarter, rising interest rates and also possibly due to a slowdown in the lending by NBFC sector in the third quarter, the moderation in rural consumption could

be due to sustained moderation in rural wages and subdued food prices that has depressed agricultural incomes.

### Construction, Manufacturing See Strong Rebound



**Bloomberg** | *Quint*

*BloombergQuint*

FY19 saw growth in both manufacturing and construction with the former growing at 8.9 percent while the latter grew at 8.1 percent. While the construction activity seems to have grown due to the thrust on rural housing and the accelerated pace of completion of road and railway projects, the strength in manufacturing remains unconvincing due to the volatile trends of Index of Industrial Production.



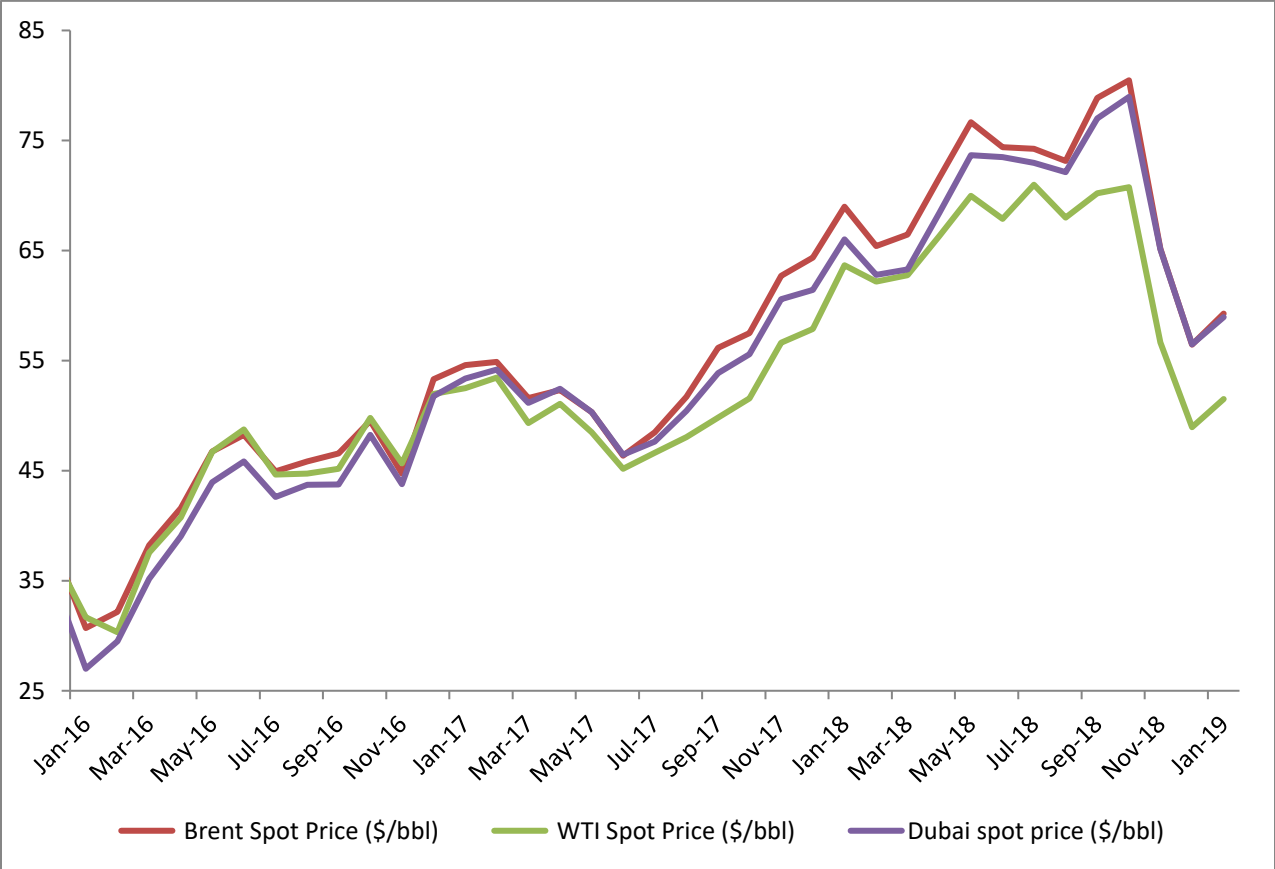
# Oil & Gas Market

## Crude oil price

In January, oil prices strengthened on the account of tightening market due to the product cut. Crude oil future prices recovered substantially higher than their low levels in December 2018. Monthly gain was more than 10% as the crude supply market tightened.

First fortnight of the January saw the crude price climb by 15 % gradually as the confidence over the global market grew along with the willingness of OPEC plus allies to adhere to its production cut agreement. In the second half of January, crude price continued to rally on the shrinking U.S commercial crude supplies and implementation of production cut by Russia. Brent, WTI and Dubai basket crude prices increased by around 12.65%, 17.68 % and 14.40 % respectively from the prices at start of the month.

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



Source: WORLD BANK

- Brent crude price averaged \$59.27 per bbl in January 2019, and was up 5.0% and down 14.1% on a month on month (MoM) and year on year (YoY) basis, respectively.

- WTI crude price averaged \$51.52 per bbl in January 2019, and was up 5.3% and down 19.1% on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged \$58.96 per bbl in January 2019, and was up 4.4% and down 10.7% on a month on month (MoM) and year on year (YoY) basis, respectively.

**Table 1: Crude oil price in January, 2019**

Crude oil	Price (\$/bbl) in January 2019	MoM (%) change	YoY (%) change
<b>Brent</b>	59.27	5.0%	-14.1%
<b>WTI</b>	51.52	5.3%	-19.1%
<b>Dubai</b>	58.96	4.4%	-10.7%

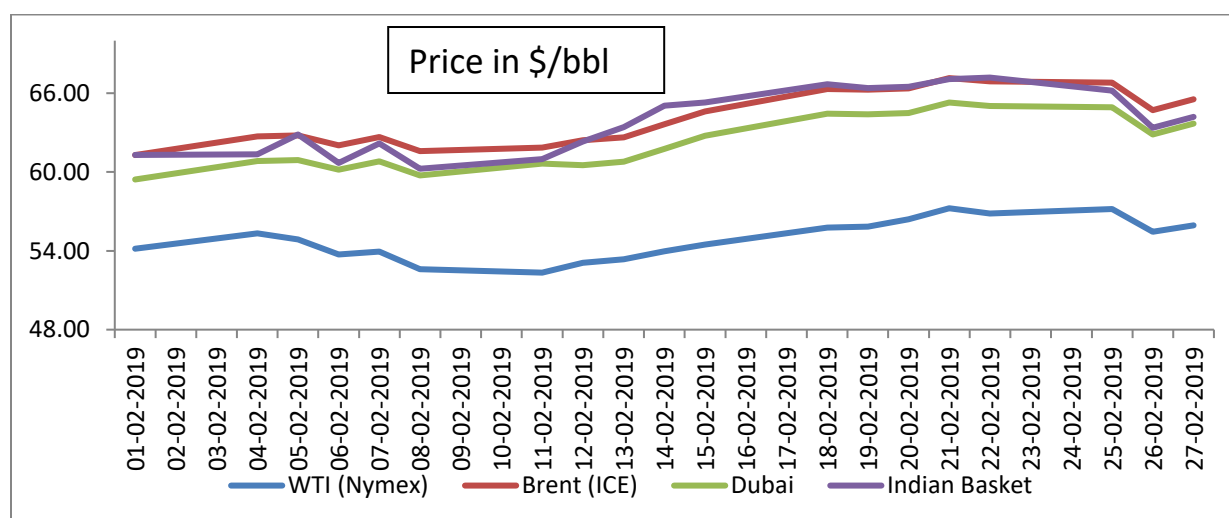
Source: WORLD BANK

## Crude oil price strengthens in February 2019

Crude prices rallied higher in February as OPEC and allies increased their quota of production cut. Tightening supply lead to removal of extra barrels of crude in the market and strengthened the price.

Despite crude prices attaining new a stronger price in February, fears of record US production global economic slowdown still looms causing the uncertainty over the crude price. Average Brent, WTI and Dubai basket crude prices went up by around 8.16 %, 6.48 % and 8.0 % respectively from the prices in the month of January.

**Figure 2: Crude oil price in February 2019**

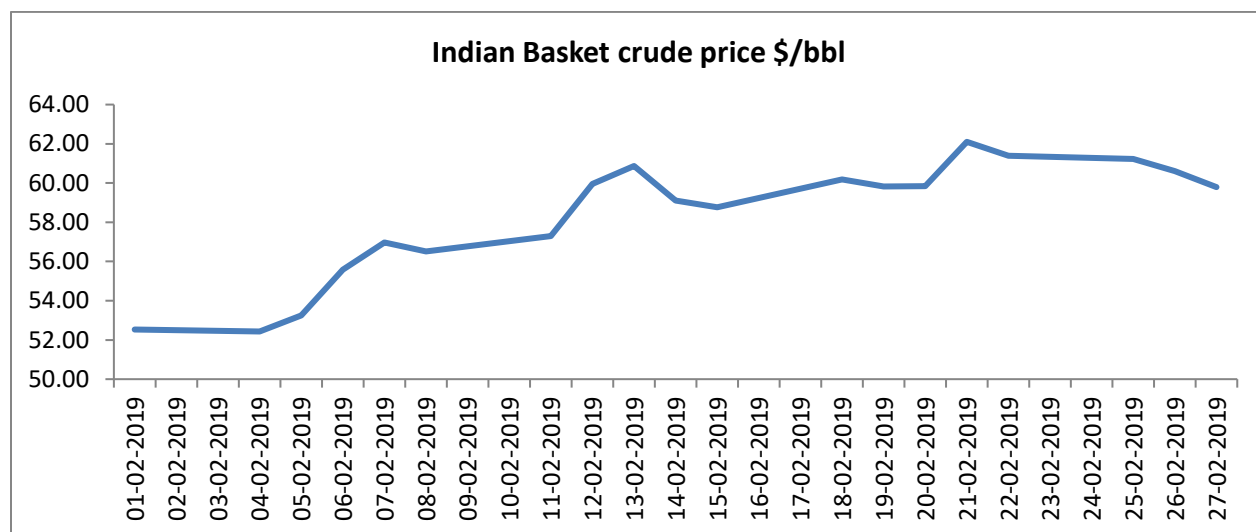


Source: EIA, PPAC

## 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 74.77:25.23 during 2017-18.

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



Source: Petroleum Planning & Analysis Cell

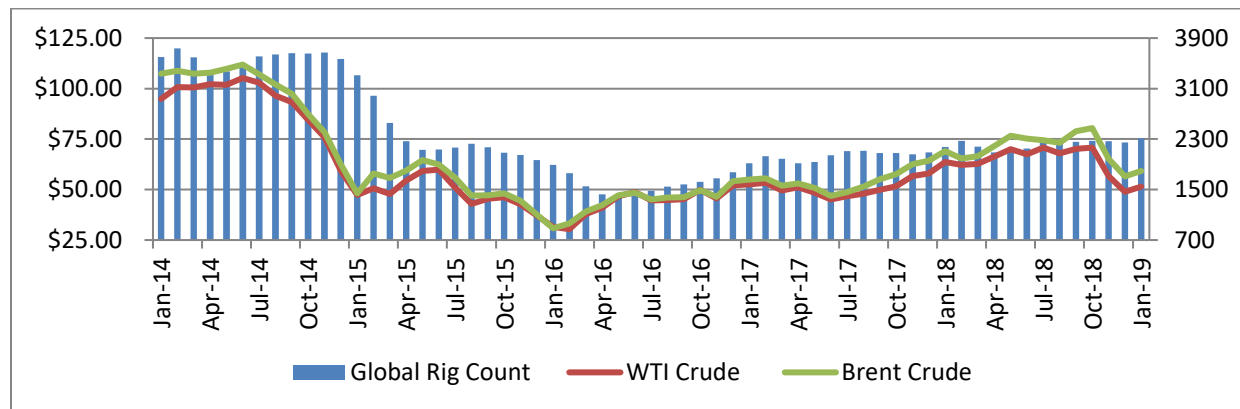
- Indian crude basket price averaged \$ 63.86 per barrel in February, up 9.63 % Month on Month (MoM) basis and 1.4% on a year on year (YoY) basis, respectively.

## Upstream activity & Rig count

### Global rig count

Rig count represents the total number of active drilling rigs in the world. Demand for drilling rig is highly dependent on crude oil price. When the oil price increases, demand for exploration activity increases, resulting in the increase in rig count. A lower oil price could trim the exploration budget of the oil companies, thereby reducing the demand for drilling rig.

**Figure 4 Global Rig Count vs. Crude Prices**



Source: Baker Hughes

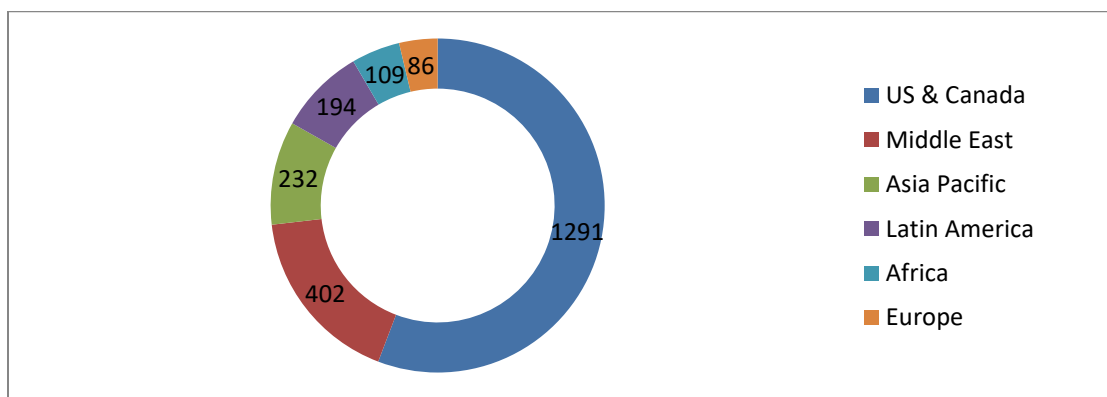
In January 2018, global drilling rig count stood at 2314, 20 more than December. Onshore rigs went up by 67, while offshore rig count went up by 3. Europe saw a decrease in rig count, while rig count went up in Middle East, Asia Pacific, Africa and Latin America. Onshore rig count in North America increased primarily due to strengthening oil & gas price. United States is the most active market for drilling industry with a rig count of 1059. 1039 were onshore rigs and 20 were offshore rigs. US & Canada and the Middle East count for about 2/3<sup>rd</sup> of the global rig count.

**Table 2 : Global Drilling Rig Count**

Rig Type	Count in January 2018	MoM (%) change	YoY (%) change
Land	2051	3.38%	0.98%
Offshore	263	1.15%	22.90%
<b>Total</b>	<b>2314</b>	<b>3.12%</b>	<b>3.07%</b>

Source: Baker Hughes

**Figure 5 Geography-wise Rig count - January 2018**



Source: Baker Hughes

## Indian Drilling Rig Count

Indian rig count declined by 1 in the month of January. Indian drilling rig count grew in 2018-19, albeit the volatile crude oil price. On YOY basis, Indian rig count was up by 3.36% in 2019 as compared to 2018. Onshore rig count remained unaltered in December while, 1 offshore rigs was released from drilling. 101 drilling rigs were deployed in oil fields and the rest 22 drillings rigs were deployed in gas fields.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

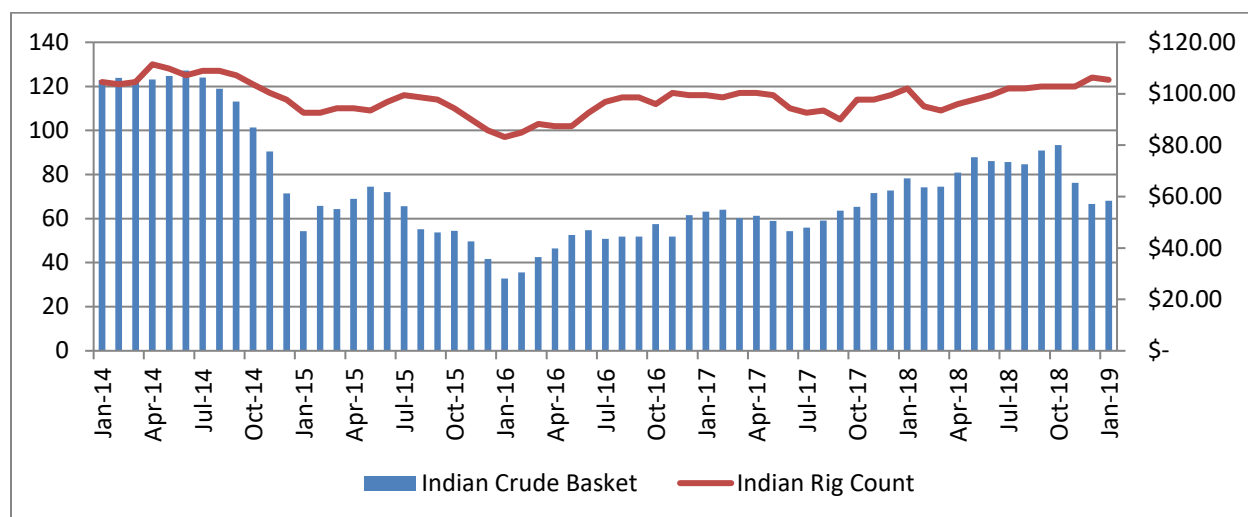


Table 3 : Indian Rig Count

Rig Type	Count in January 2019	MoM (%) change	YoY (%) change
Land	85	0 %	2.41%
Offshore	38	-2.56%	5.56%
<b>Total</b>	<b>123</b>	<b>-0.81%</b>	<b>3.36%</b>

Source: Baker Hughes

## Oil demand & supply

Preliminary data indicates that global oil supply declined by 1.03 mb/d to average 99.32 mb/d in January 2019, compared with the previous month. A decrease in non-OPEC supply (including OPEC NGLs) of 0.23 mb/d compared with the previous month was mainly driven by Canada, FSU and China. Along with a remarkable decline in OPEC crude oil production of 797 tb/d in January, this equates to a total decrease in global oil output of 1.73 mb/d y-o-y. The share of OPEC crude oil in total global production declined by 0.5% to 31.0% in January 2019 compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

For 2019, non-OPEC oil supply growth was revised up by 0.08 mb/d from the January's forecast to stand at 2.18 mb/d due to the revised production forecast from the US Gulf of Mexico. Total non-OPEC supply is now projected to reach an average of 64.34 mb/d. The US, Brazil, Russia, the UK, Kazakhstan, Ghana and Australia are expected to be main drivers. Countries projected to see the largest declines are Mexico, Canada, Indonesia, Norway and Vietnam. In 2019, world oil demand growth is anticipated to grow by 1.24 mb/d y-o-y, with total world consumption to reach 100.0 mb/d, slightly lower than previous month's assessment.

**Table 4: World Oil demand in mbpd**

	2018	1Q19	2Q19	3Q19	4Q19	2019	Growth	%
<b>Total OECD</b>	<b>47.86</b>	<b>47.94</b>	<b>47.43</b>	<b>48.38</b>	<b>48.61</b>	<b>48.09</b>	<b>0.24</b>	<b>0.49</b>
<b>Dev. Countries</b>	<b>32.63</b>	<b>32.98</b>	<b>33.15</b>	<b>33.42</b>	<b>33.18</b>	<b>33.18</b>	<b>0.55</b>	<b>1.70</b>
~ of which India	4.73	5.03	4.93	4.58	5.15	4.92	0.19	4.05
<b>Other regions</b>	<b>18.27</b>	<b>18.11</b>	<b>18.63</b>	<b>18.77</b>	<b>19.37</b>	<b>18.72</b>	<b>0.45</b>	<b>2.46</b>
~ of which China	12.71	12.61	13.18	12.99	13.42	13.05	0.34	2.67
<b>Total world</b>	<b>98.76</b>	<b>99.02</b>	<b>99.21</b>	<b>100.57</b>	<b>101.16</b>	<b>100.00</b>	<b>1.24</b>	<b>1.26</b>

Source: OPEC monthly report, February 2019

Note: \*2018 = Estimate and 2019 Forecast

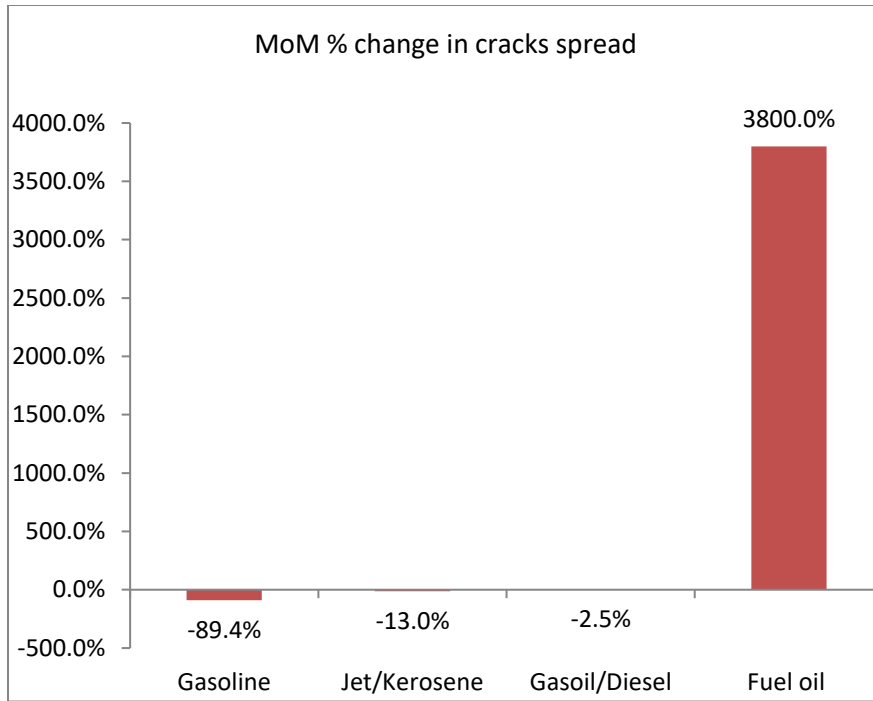
## Global petroleum product prices

Prices in the Asian Gasoline-92 market saw an increase of 2% over the previous month. Retail price has fallen by significant smaller margin. Refinery margins dipped slightly. Gasoline cracks in Singapore declined by 64 cents/b, showing a minor recovery from new-time low in last month. Refinery utilization declined in December averaging 85.25% in selected Asian markets comprising of Japan, China, India and Singapore.

Jet/Kerosene price increased by 0.8% as compared to December. Earlier in November, Jet/kerosene declined by 14.3 %. Jet/Kerosene spread continued under pressure as fuel demand for heating remained subdued due to a warmer-than-normal winter witnessed in January. The Singapore jet/kerosene crack spread against Oman averaged \$12.68/b, down by \$1.20 m-o-m and by \$2.17 y-o-y.

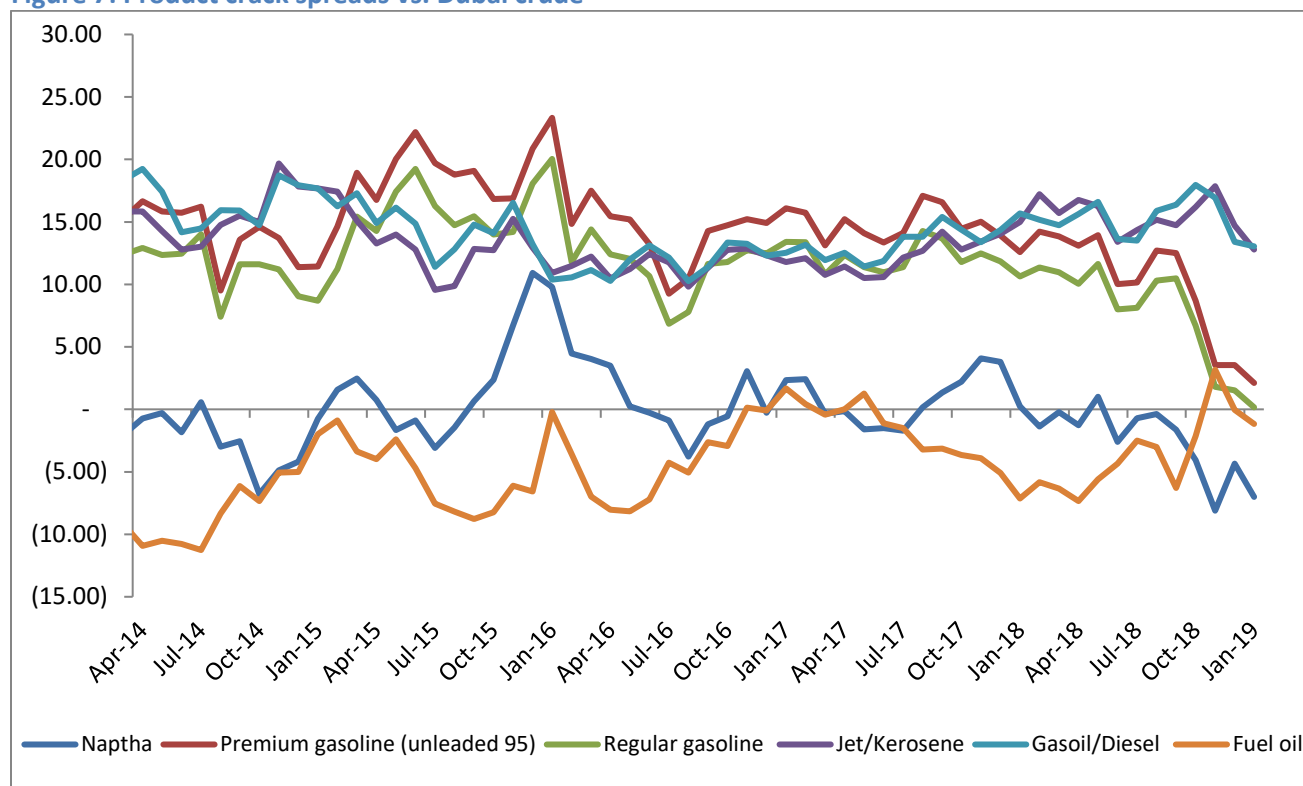
Price differential between gasoil in Asia Vs. Europe narrowed in January. European gasoil market tightness encouraged trade flows from Asia to the West, providing support to the regional market. In January, gasoil crack spread increased by 3.1 %. Singapore gasoil crack spread against Oman averaged \$12.94/b, slightly up by 37 cents m-o-m and by down \$2.61 y-o-y.

The fuel oil market in Singapore came down by 2.5 % pressured by weak demand and unseasonal high imports into Asia. Signs of a tightening balance towards the end of the month, due to declining output from China prevented a steeper downturn. Singapore fuel oil cracks against Oman averaged minus \$1.28/b, down by 43¢ m-o-m, but were up by \$5.98 y-o-y.



Source: OPEC monthly report

Figure 7: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

Table 5: Singapore FOB, refined product prices (\$/bbl)

Products	Price (\$/b) in January 2019	MoM (%) change	YoY (%) change
<b>Naptha</b>	51.96	-0.3%	-21.6%
<b>Premium gasoline (unleaded 95)</b>	61.07	1.7%	-22.3%
<b>Regular gasoline (unleaded 92)</b>	59.12	2.0%	-22.9%
<b>Jet/Kerosene</b>	71.75	0.8%	-11.4%
<b>Gasoil/Diesel (50 ppm)</b>	72.01	3.1%	-11.9%
<b>Fuel oil (180 cst 2.0% S)</b>	57.79	2.4%	-1.9%
<b>Fuel oil (380 cst 3.5% S)</b>	58.10	2.6%	-1.3%

Source: OPEC

## Petroleum products consumption in India

- In January, LPG consumption increased 6.8% on MoM basis.
- Consumption of gasoline increased (13.8% YoY) driven by higher demand from transport segment.
- Demand for diesel increased by 6.4% on YoY basis in the month of January.



**Table 6: Petroleum products consumption in India, January 2019**

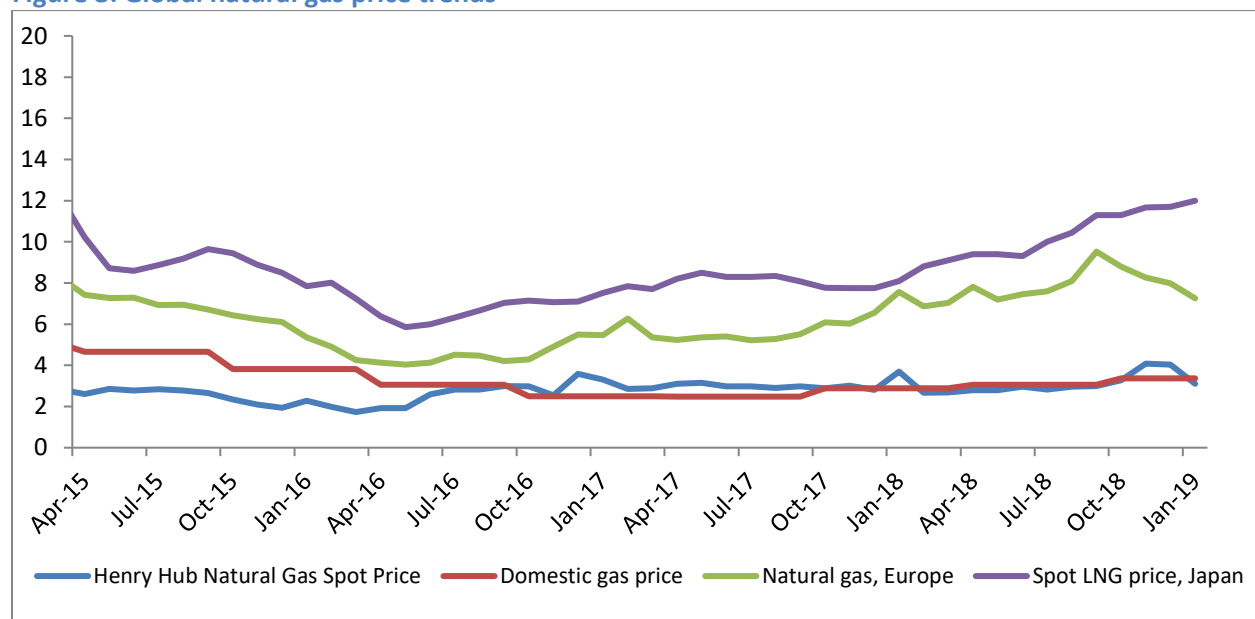
Petroleum products	Consumption in '000 MT January 2019	MoM (%) change	YoY (%) change
<b>LPG</b>	2,312	6.8%	11.1%
<b>Naphtha</b>	1,259	2.7%	25.1%
<b>MS</b>	2,373	-0.9%	13.8%
<b>ATF</b>	737	1.9%	5.8%
<b>HSD</b>	7,069	-4.1%	6.4%
<b>LDO</b>	65	24.9%	17.6%
<b>Lubricants &amp; Greases</b>	330	-1.2%	12.6%
<b>FO &amp; LSHS</b>	584	1.3%	2.8%
<b>Bitumen</b>	656	2.6%	17.5%
<b>Petroleum coke</b>	1,745	-10.0%	-12.0%
<b>Others</b>	945	17.4%	50.0%
<b>TOTAL</b>	<b>18,340</b>	<b>-0.9%</b>	<b>8.4%</b>

Source: PPAC

## Natural Gas Price

In January, the Henry Hub natural gas index decreased on average by 22%, to \$3.08/MMBtu. The index was 20.6% below the January 2018 level. Prices witnessed a short-lived rally in the middle of the month, hitting \$3.6/MMBtu due to the arrival of an arctic blast.

**Figure 8: Global natural gas price trends**



Source: EIA, WORLD BANK

**Table 7: Gas price**

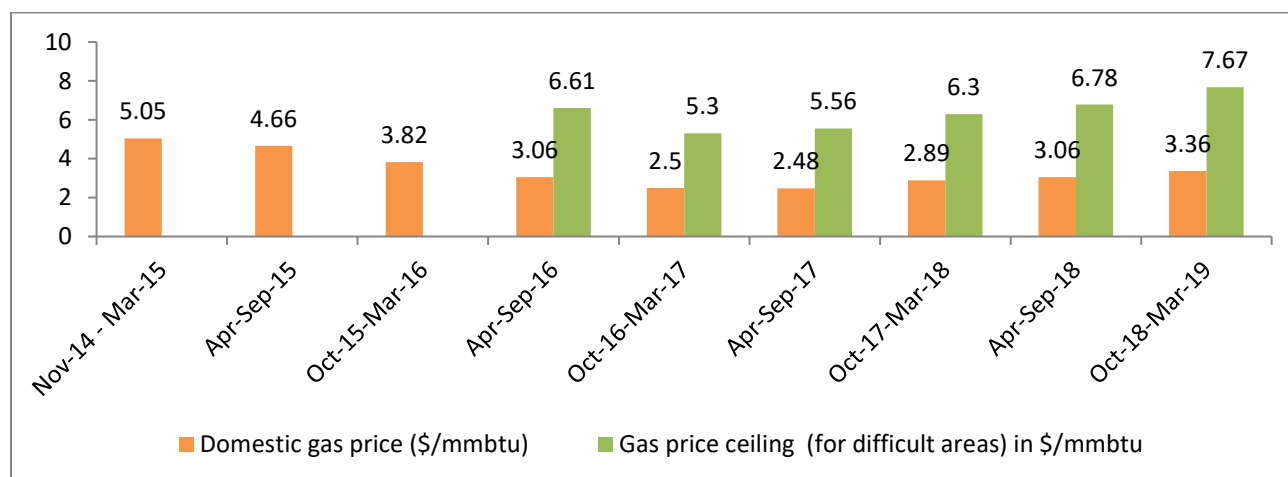
Natural Gas	Price (\$/MMBTU) in January 2019	MoM (%) change	YoY (%) change
India, Domestic gas price	3.36	0.0%	16.3%
India, Gas price ceiling – difficult areas	7.67	13.1%	21.7%
Henry Hub	3.11	-23.0%	-15.7%
Natural Gas, Europe	7.26	-9.0%	-4.0%
Liquefied Natural Gas, Japan	12.00	2.6%	48.1%

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 23% 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 October to March 2019 period, the price of gas from such areas has been notified at \$7.67 per MMBTU.

**Figure 9: Domestic natural gas price**

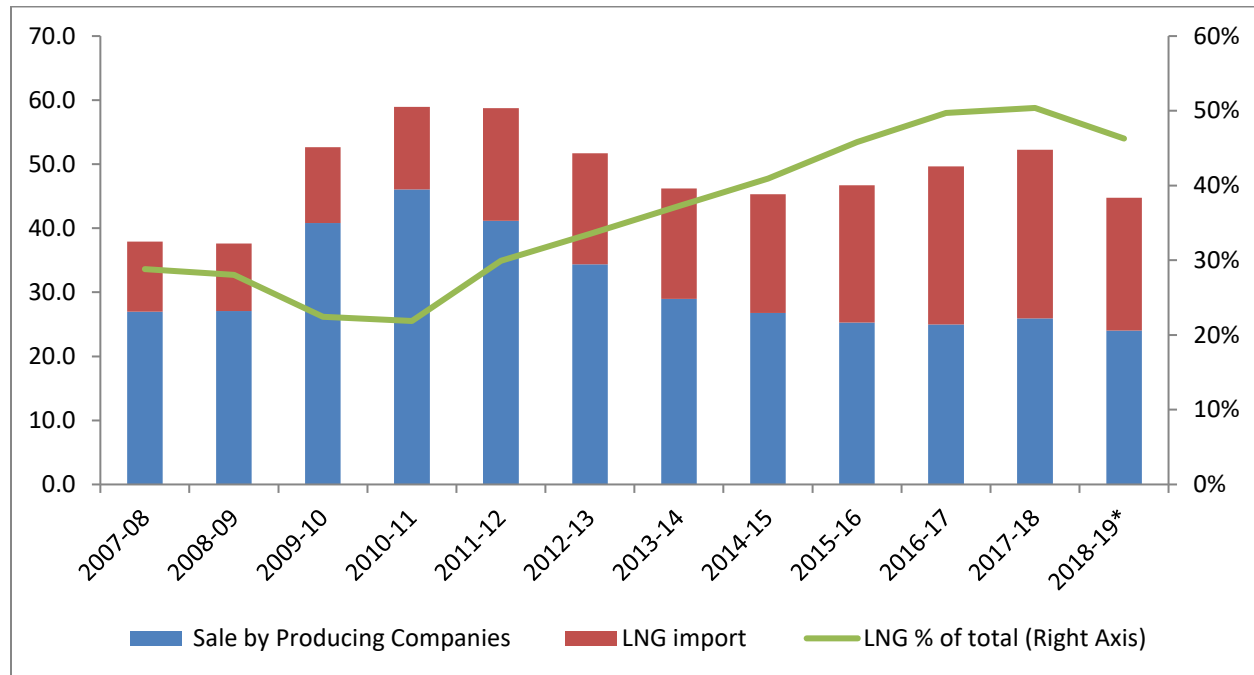


Source: PPAC

## Natural gas production, consumption and import in India

- Natural gas constitutes for 6.2% 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 10: Domestic natural gas consumption, domestic production and LNG import in BCM**



Source: PPAC

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

## Key developments in Oil & Gas sector during February 2019

- **Exploration and Licensing Policy for Enhancing Domestic Exploration and Production of Oil and Gas**

Petroleum and Natural Gas & Skill Development and Entrepreneurship Minister Mr. Dharmendra Pradhan addressed a Press Conference on February 21 on reforms in Exploration and Licensing Policy for Enhancing Domestic Exploration and Production of Oil and Gas. Addressing the Press Conference, Mr. Dharmendra Pradhan gave details on the policy reforms: Increasing exploration activities in unexplored/unallocated areas, Marketing and Pricing Reform for Natural Gas, Production Enhancement Scheme for Nomination fields, Measures will be initiated for promoting 'ease of doing business'. Expected benefits are massive boost to exploration activities with greater weightage to exploration work programme, simplified fiscal and contractual terms, Early monetization of discoveries also by extending fiscal incentives, Incentivizing production including through marketing and pricing freedom, induction of latest technology and substantial capital, More functional freedom to NOCs for collaboration and private sector participation and Streamlining approval processes and promoting ease of doing business

- **Cabinet approves "Reforms in Exploration and Licensing Policy for enhancing domestic exploration and production of oil and gas"**

On February 19, the Union Cabinet chaired by Prime Minister Mr. Narendra Modi approved the Policy framework on reforms in exploration and licensing sector for enhancing domestic exploration and production of oil and gas. The objective of the Policy is to attract new investment in Exploration and Production (E&P) Sector, intensification of exploration activities in hitherto unexplored areas and liberalizing the policy in producing basins. Considering stagnant/declining domestic production of oil and gas, rise in import dependence and decline in investment in E&P activities, the need to bring further policy reforms was felt. Secondly, to incentivize enhanced gas production, marketing and pricing freedom has been granted for those new gas discoveries whose Field Development Plan (FDP) is yet to be approved Fiscal incentive is also provided on additional gas production from domestic fields over and above normal production Thirdly, to enhance production from existing nomination fields of ONGC and OIL, enhanced production profile will be prepared by both PSUs. For production enhancement, bringing new technology, and capital, NOCs will be allowed to induct private sector partners Fourthly measures will be initiated for promoting ease of doing business through setting up coordination mechanism and simplification of approval of DGH, alternate dispute resolution mechanism etc.

- **Government envisages to develop the National Gas Grid**

On February 14, the Government envisaged to develop the National Gas Grid. At present about 16,788 Km natural gas pipeline is operational and about 14,239 Km gas pipelines are being developed to increase the availability of natural gas across the country. These pipelines have been authorized by

Petroleum and Natural Gas Regulatory Board (PNGRB) and are at various stages of execution viz. Pre-Project activities/laying/testing/commissioning etc.

PNGRB has authorized GAIL to develop Jagdishpur –Haldia –Bokaro- Dhamra Pipeline (JHBDPL) project and approximately 750 km long Barauni - Guwahati pipeline as its integral part which will connect North East region with the National Gas Grid. Under this 809.9 km pipeline has been laid at present. Further, PNGRB has also authorized Indradhanush Gas Grid Limited (IGGL), a joint venture company of five Central Public Sector Enterprises (CPSEs) i.e. IOCL, ONGC, GAIL, OIL and NRL for the development of North East Gas Grid to connect eight states of North Eastern India.

- **Bid round –III under Open Acreages Licensing Policy (OALP) launched by Mr. Dharmendra Pradhan**

On 10<sup>th</sup> February, Union Petroleum and Natural Gas & Skill Development and Entrepreneurship Minister Mr. Dharmendra Pradhan launched the bid round –III under Open Acreages Licensing Policy (OALP) at Greater Noida, the venue of PETROTECH-2019. Under this Bid round, 23 blocks, covering over 31,000 sq km of area will be available for exploration. Following the contract signing of 55 Blocks under OALP Bid Round-I, the Government launched OALP Bid Round-II on 07th January 2019 offering 14 Blocks under Petroleum Operation Contract for International Competitive Bidding. With the launch of the third bidding round, more than 1,20,000sq km of area has now been made available for exploration in last one year. The OALP adopts all features of HELP - reduced royalty rates, no Oil Cess, uniform licensing system, marketing and pricing freedom, Revenue Sharing Model, Exploration rights on all retained area for full contract life etc.

Speaking on the occasion, Mr. Pradhan said we recently awarded 55 blocks spread across 10 sedimentary basins under maiden Bid Round after a gap of 6 years and 30 contract areas under the Discovered Small Field Policy Bid Round-I. The 2nd Bid Rounds for both Discovered Small Field Policy and Open Acreages Licensing Policy are now underway and have also seen encouraging response from investors. The overwhelming participation from investors is a testimony to their faith and confidence in India's upstream sector potential. He invited the investors to participate in the bidding round and be a part of the Indian growth story.

- **Cabinet approved ethanol projects' funding**

The Cabinet has approved a scheme to provide Rs 1969 crore as viability gap funding to second generation (2G) ethanol projects over the next six years. Under the scheme, called the Pradhan Mantri JI-VAN Yojana, Rs 1800 crore has been allocated for supporting 12 commercial projects, Rs 150 crore for 10 demonstration projects and the balance Rs 9.50 crore for the administrative expense by the Centre for High Technology (CHT), an Oil Ministry arm that would oversee the scheme. "The scheme focuses to incentivise 2G Ethanol sector and support this nascent industry by creating a suitable ecosystem for setting up commercial projects and increasing research & development in this area," an official statement said.

The ethanol produced by the scheme beneficiaries will be mandatorily supplied to Oil Marketing Companies (OMCs) such as Indian Oil, Bharat Petroleum and Hindustan Petroleum to further enhance the blending percentage under the ethanol blending programme, as per the statement. The government is aiming to achieve 10% blending percentage of ethanol in petrol by 2022.

- **Cabinet approves Rs 10,000 cr FAME India Phase II scheme**

The Union cabinet chaired by Prime Minister Narendra Modi has approved a proposal for implementation of a scheme titled 'Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME India Phase II)' for promotion of Electric Mobility in the country. "The scheme with a total outlay of Rs 10,000 Crores over the period of three years will be implemented with effect from 1st April 2019, over three years from 2019-20 to 2021- 22," an official statement said.

This scheme is the expanded version of the present scheme titled 'FAME India 1 which was launched on 1st April 2015, with a total outlay of Rs 895 crores. Through this scheme, the emphasis is on electrification of the public transportation that includes shared transport. Demand incentives on operational expenditure mode for electric buses will be delivered through state/city transport corporation (STUs). In three and four-wheeler segment incentives will be applicable mainly to vehicles used for public transport or registered for commercial purposes. In the e-two wheelers segment, the focus will be on private vehicles. The government plans to support ten lakhs e-2W, five Lakhs e-3W, 55,000 4Ws and 7,000 buses.

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