JANUARY
2020

FIPI

FEDERATION OF INDIAN PETROLEUM INDUSTRY

POLICY & ECONOMIC REPORT
OIL & GAS MARKET

Table of Contents

Policy & Economic report – Oil & Gas market

Economy in Focus

1. Riding high on new investments and trade, Global economic growth to reach 2.5% in 2020: World bank

World Bank in its recently released January 2020 'Global Economic Prospects' suggests that the global economic growth is forecast to edge up to 2.5 per cent in 2020 as investment and trade gradually recover from last year's significant weakness. However, it has also warned that the downward risks still persist.

Growth among advanced economies as a group is anticipated to slip to 1.4 per cent in 2020 in part due to continued softness in manufacturing. Growth in emerging market and developing economies is expected to accelerate this year to 4.1 per cent. This rebound is not broad-based, it assumes improved performance of a small group of large economies, some of which are emerging from a period of substantial weakness. About a third of emerging market and developing economies are projected to decelerate this year due to weaker-than-expected exports and investment.

U.S. growth is forecast to slow to 1.8 per cent this year, reflecting the negative impact of earlier tariff increases and elevated uncertainty. Euro Area growth is projected to slip to a downwardly revised 1 per cent in 2020 amid weak industrial activity.

Downside risks to the global outlook predominate, and their materialization could slow growth substantially. These risks include a re-escalation of trade tensions and trade policy uncertainty, a sharper-than expected downturn in major economies, and financial turmoil in emerging market and developing economies. Even if the recovery in emerging and developing economy growth takes place as expected, per capita growth would remain well below long-term averages and well below levels necessary to achieve poverty alleviation goals.

Regional Outlooks:

East Asia and Pacific: Growth in the region is projected to ease to 5.7% in 2020, reflecting a further moderate slowdown in China to 5.9 per cent this year amid continued domestic and external headwinds, including the lingering impact of trade tensions. Regional growth excluding China is projected to slightly recover to 4.9 per cent, as domestic demand benefits from generally supportive financial conditions amid low inflation and robust capital flows in some countries (Cambodia, the Philippines, Thailand, and Vietnam), and as large public infrastructure projects come onstream (the Philippines and Thailand). Regional growth will also benefit from the reduced global trade policy uncertainty and a moderate, even if still subdued, recovery of global trade.

Europe and Central Asia: Regional growth is expected to firm to 2.6 per cent in 2020, assuming stabilization of key commodity prices and Euro Area growth and recovery in Turkey (to 3 per cent) and Russia (to 1.6 per cent). Economies in Central Europe are anticipated to slow to 3.4 per cent as fiscal support wanes and as demographic pressures persist, while countries in Central Asia are projected to grow at a robust pace on the back of structural reform progress. Growth is projected to firm in the Western Balkans to 3.6 per cent -- although the aftermath of devastating earthquakes could weigh on the outlook -- and decelerate in the South Caucasus to 3.1 per cent.

Latin America and the Caribbean: Regional growth is expected to rise to 1.8 per cent in 2020, as growth in the largest economies strengthens and domestic demand picks up at the regional level. In Brazil, more robust investor confidence, together with a gradual easing of lending and labour market conditions, is expected to support an acceleration in growth to 2 per cent. Growth in Mexico is seen rising to 1.2 per cent as less policy uncertainty contributes to a pickup in investment, while Argentina is anticipated to contract by a slower 1.3 per cent. In Colombia, progress on infrastructure projects is forecast to help support a rise in growth to 3.6 per cent. Growth in Central America is projected to firm to 3 per cent thanks to easing credit conditions in Costa Rica and relief from setbacks to construction projects in Panama. Growth in the Caribbean is expected to accelerate to 5.6 per cent, predominantly due to offshore oil production developments in Guyana.

Middle East and North Africa: Regional growth is projected to accelerate to a modest 2.4 per cent in 2020, largely on higher investment and stronger business climates. Among oil exporters, growth is expected to pick up to 2 per cent. Infrastructure investment and business climate reforms are seen advancing growth among the Gulf Cooperation Council economies to 2.2 per cent. Iran's economy is expected to stabilize after a contractionary year as the impact of US sanctions tapers and oil production and exports stabilize, while Algeria's growth is anticipated to rise to 1.9 per cent as policy uncertainty abates and investment picks up. Growth in oil importers is expected to rise to 4.4 per cent. Higher investment and private consumption are expected to support a rise to 5.8 per cent in FY2020 growth in Egypt.

South Asia: Growth in the region is expected to rise to 5.5 per cent in 2020, assuming a modest rebound in domestic demand and as economic activity benefits from policy accommodation in India and Sri Lanka and improved business confidence and support from infrastructure investments in Afghanistan, Bangladesh, and Pakistan. In India, where weakness in credit from non-bank financial companies is expected to linger, growth is projected to slow to 5 per cent in FY 2019-20 and recover to 5.8 per cent the following fiscal year. In Pakistan's growth is expected to rise to 3 per cent in the next fiscal year after bottoming out at 2.4 per cent in FY2019-20, which ends June 30. In Bangladesh, growth is expected to ease to 7.2 per cent in FY2019-2020, and edge up to 7.3 per cent the following fiscal year. Growth in Sri Lanka is forecast to rise to 3.3 per cent.

Sub-Saharan Africa: Regional growth is expected to pick up to 2.9 per cent in 2020, assuming investor confidence improves in some large economies, energy bottlenecks ease, a pickup in oil production contributes to recovery in oil exporters and robust growth continues among agricultural commodity exporters. The forecast is weaker than previously expected reflecting softer demand from key trading partners, lower commodity prices, and adverse domestic developments in several countries. In South

Africa, growth is expected to pick up to 0.9 per cent, assuming the new administration's reform agenda gathers pace, policy uncertainty wanes, and investment gradually recovers. Growth in Nigeria expected to edge up to 2.1 per cent as the macroeconomic framework is not conducive to confidence. Growth in Angola is anticipated to accelerate to 1.5 per cent, assuming that ongoing reforms provide greater macroeconomic stability, improve the business environment, and bolster private investment. In the West African Economic and Monetary Union, growth is expected to hold steady at 6.4 per cent. In Kenya, growth is seen edging up to 6 per cent.

2. Present education system disconnected with needs of global economies and societies: WEF

According to a new opinion poll released at World Economic Forum (WEF), the world overwhelmingly blames global warming on human activities with trust level declining in climate science, but Indians are the most trusting people in this regard.

Indians and Bangladeshis are the frontrunners in trusting the climate science as also for keeping themselves abreast about news and current affairs, while Russia and Ukraine are among the laggards on both counts.

The public opinion poll published at the 50th annual meeting of World Economic Forum called for better climate education and urgent up-skilling. The findings of the report emphasized the urgent need for a collective approach from business, government and civil society to advance societal and environmental agendas.

The survey also found that majority of the people believe that schools are under-preparing students for jobs. Apart from the Americas and South Asia, majority of the regions still view education as a privilege for half of the population or less.

The WEF said the world urgently needs to start implementing policies and strategies that advance societal and environmental agendas – from reskilling the population for the future to ensuring strong education and leadership on climate change from all sectors.

The global public-opinion poll, prepared in collaboration with SAP and Qualtrics, surveyed more than 10,500 people in 30 countries accounting for around 76 per cent of the global population.

The findings of the report has been presented in two parts -- Toward a More Sustainable World and Toward a More Cohesive World.

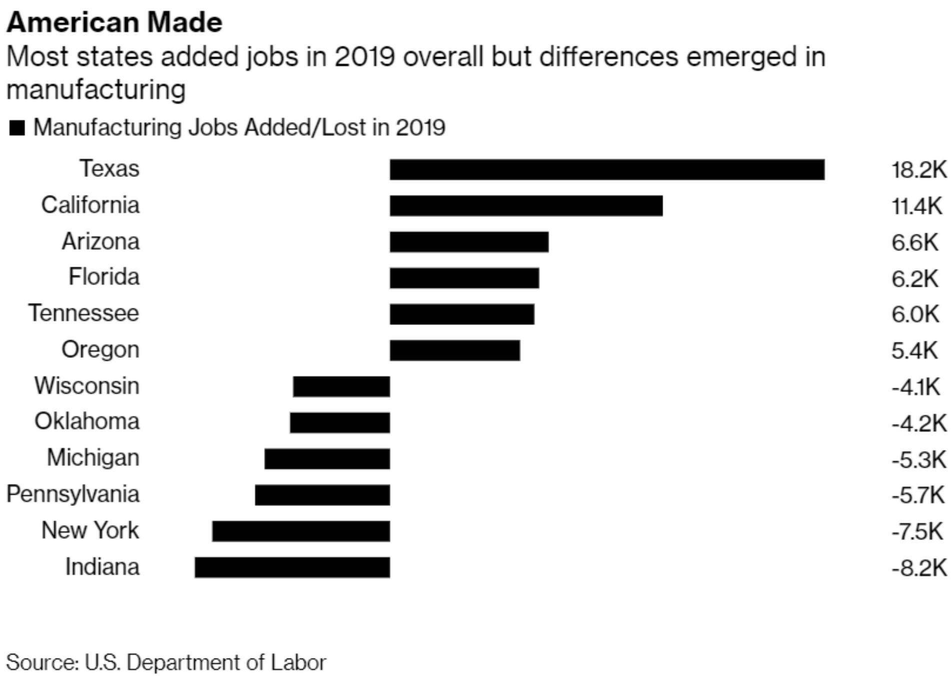
Toward a More Sustainable World survey found that while more than half of respondents reportedly trust climate science, those in India are the most trusting where 86 per cent said they trusted scientists "a great deal" or "a lot". India was followed by Bangladesh (78 per cent) and Pakistan (70 per cent). China and Turkey (both 69 per cent) complete the top five.

Respondents were also asked whether they believed global warming exists and what causes it. Overall, more than two-thirds of people agreed that it is caused mostly by human activity – In Latin America and the Caribbean (78 per cent) agreed.

A key focus area for the recently concluded 50th Annual Meeting of World Economic Forum was driving change to reskill and up-skill the global population for future jobs. In this regard, the research found that education systems have "become increasingly disconnected from the realities and needs of global economies and societies", with a need to adapt to provide future generations with the right skills.

3. Rust belt States in the US lose manufacturing jobs amidst strong national performance

The rust belt states in the US, lost manufacturing jobs in 2019 amid trade wars and a strong dollar, even as their labour markets held up more broadly. The rust belt states played a key role in securing a victory for President Donald Trump in 2016 elections. While Pennsylvania recorded a drop of about 5,700 factory positions, Wisconsin and Michigan fall by 4100 and 5300 respectively. However, the overall employment in the sector has increased over the past year. At a national level, the US has added 46,000 manufacturing jobs in 2019, the second-weakest performance since 2009.



Faced with slower demand abroad and the repercussions of the U.S.-China trade war, producers have pulled back on hiring and investment.

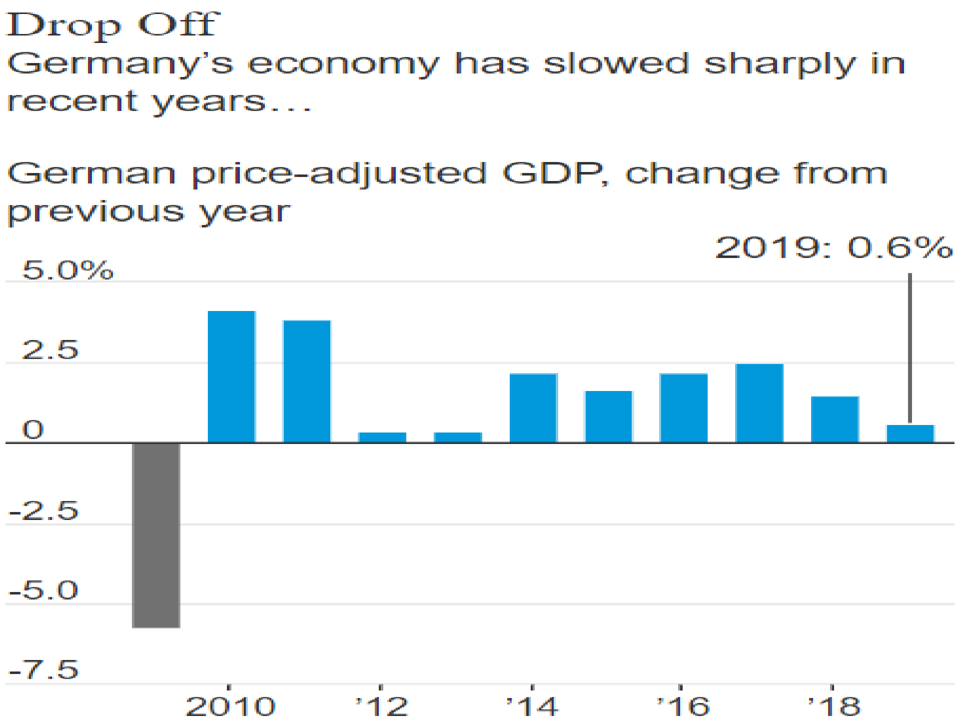
Beyond manufacturing, the State level picture for the region appears healthy. A number of states, including Florida and South Carolina, saw their lowest unemployment rates on record. Employers continued to add jobs and the size of the labour force increased in the vast majority of states.

4. Slump in Germany may soon spill to larger European economy

Germany's economic growth slumped to six-year low in 2019. Faced challenges in its flagship car industry, persistently slowing Chinese growth and global trade conflicts, Germany's slowdown may spill over and affect Europe's outlook.

Germany, Europe's largest economy, is the first major country to report full-year growth figures for 2019 after the World Bank last week estimated that the global economy expanded by just 2.4 per cent last year, the weakest rate since the global financial crisis.

With a GDP growth of 0.6 per cent in 2019, the German economy expanded at its slowest rate since 2013. Despite a resolution to Britain's exit from the European Union and an initial U.S.-China trade deal signed this month, economists expect German economy to grow at a slow pace this year.



Source: Wall Street Journal

Risks faced by the country in the short and medium term include rising U.S.-EU trade tensions, the absence of a pact on future EU-U.K. trade ties, China's slowing economy and Berlin's reluctance to consider greater spending for fear of debt. In the Longer term, Germany's car industry, central to a manufacturing sector that accounts for about a quarter of the economy, and the country's sprawling capital goods sector are facing rapid technological change and rising competition. Germany's aging population and deteriorating infrastructure are other risks to growth.

Germany's weakness is bad news for Europe, and not just because of its size, accounting for about a fifth of the EU's total gross domestic product. German manufacturers are also tightly integrated in the continent, particularly Central and Eastern Europe, where German-owned plants and suppliers to German companies account for a large share of jobs.

The slump in Germany's auto industry, for instance, has already affected neighboring countries that produce parts or finished vehicles for its leading brands, such as the Czech Republic and Slovakia. European Union's statistics agency showed that while German industrial output in November was 4 per cent down on a year earlier, Czech output was down 3.1 per cent, and Slovak output down 4.4 per cent. The French car industry that operates independently of Germany's, output grew by 1.2 per cent.

Germany is also the largest export market for Italy, the bloc's weakest large member. In the first 10 months of last year, Italy's exports to the country grew by just 0.2 per cent compared to the same period a year earlier versus Italy's 2.7 per cent increase in total foreign sales of goods. Italy's exports to France, its second largest foreign market, were up 2.2 per cent.

Germany is among the most open economies in the West and remains highly dependent on trade after decades of wage moderation, rising taxation, government belt-tightening and corporate cash hoarding. Exports are worth around 47 per cent of the country's GDP.

5. Saudi Arabia emerges top reformer in World Bank's Women, Business and the Law report 2020

The World Bank's Women, Business and the Law (WBL) 2020 report has ranked Saudi Arabia Top Reformer and the Top Improver among 190 countries.

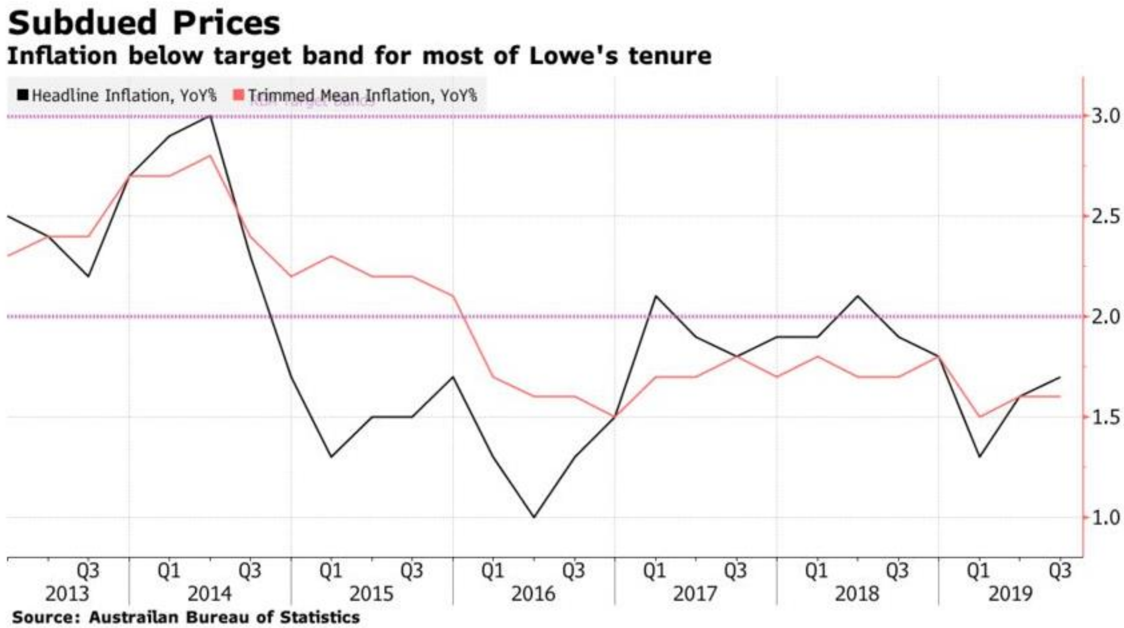
The report, which places Saudi Arabia first among GCC countries and second in the Arab world, shows that the kingdom has improved in 6 out of 8 indicators, including mobility, workplace, marriage, parenthood, entrepreneurship, and pension.

Saudi Arabia has introduced a range of reforms, including expanding women's access to employment opportunities in new sectors of the economy; lifting restrictions on their mobility; ensuring their access to public services; guaranteeing equal pay and retirement benefits; and protecting them against harassment and discrimination. The kingdom has set a global benchmark in four of these indicators, which also highlight areas of reform: women's mobility, workplace, entrepreneurship, and pension.

The Kingdom has transformed the lives of women by enhancing their economic participation, which in turn has strengthened the nation's global competitiveness.

6. Reserve Bank of Australia expects inflation to rise in 2020

The combination of drought and wildfires in Australia's east coast has left not only left communities devastated, but also crops burnt and distribution networks in disarray. This has set the scene for a spike in fruit and vegetables prices. Some of it will come through in the final quarter of 2019 and the rest in the first quarter of 2020.



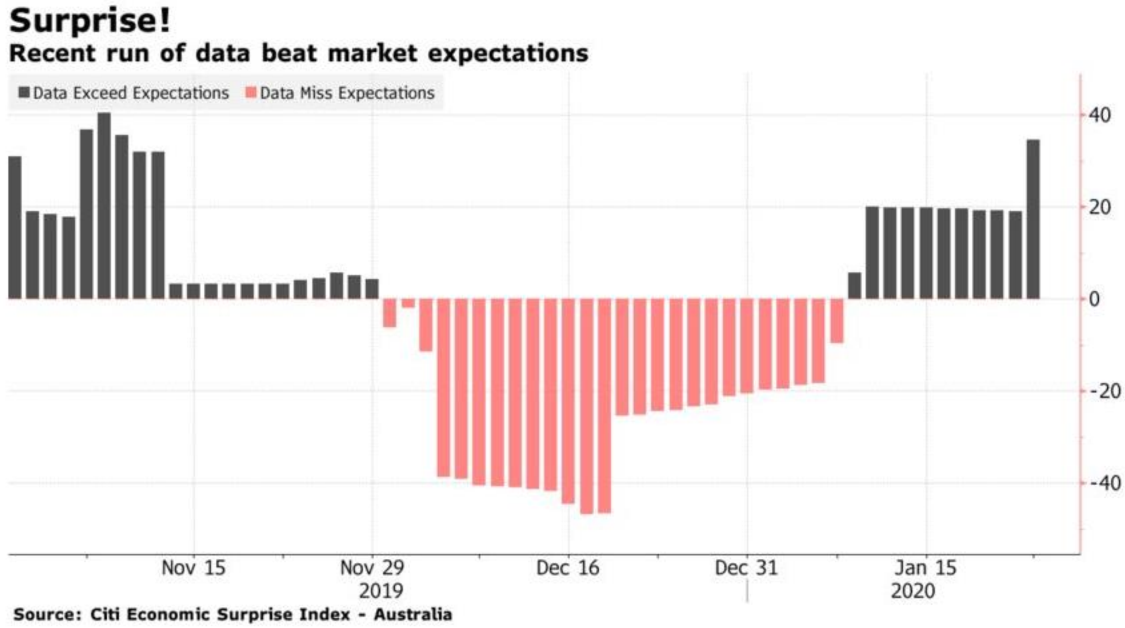
As result of the wold fire the key apple growing regions in New South Wales were destroyed and prices are already up 50-60 per cent. Over the past two weeks the price of avocados have nearly doubled.

Australia's inflation hasn't reached the mid-point of the Reserve Bank's 2-3 per cent target in more than half a decade as developed world price weakness infiltrated Down Under. A sharp rise in headline inflation would therefore shock markets, which are pricing in further RBA cuts this year.

The Commonwealth Bank of Australia is of the opinion that extreme events such as wild fire can have a big impact on food prices. However, it does not expect the impact to have the same impact as Cyclone Yasi's 2011 crop destruction that sent banana prices shooting up 377 per cent. But it feels that after a prolonged period of low inflation another 0.1 or 0.2 percentage point on top of what is now seen as normal has more shock value.

The median estimate of economists is that consumer prices advanced 0.6 per cent in the final three months of 2019 from the prior quarter, and 1.7 per cent from a year earlier.

Australia's labour market, meanwhile, remained strong through to the end of last year, with unemployment unexpectedly dropping in December. That's the latest in a series of results that exceeded expectations as measured in Citigroup Inc.'s Economic Surprise Index.



Intense competition for thrifty Australians' cash among major supermarkets could see them opt to absorb price rises rather than pass them on. Then there's improved data collection at the Australia Bureau of Statistics, which produces the inflation report. It's now able to obtain a more granular view of food spending patterns using barcode data. This allows the bureau to capture the substitution that typically occurs when the price of one product increases sharply.

7. Coronavirus may dampen the growth of booming Japanese tourism sector

The escalating viral outbreak of Coronavirus in China may hit the fragile Japanese economy harder than the SARS outbreak of 2003.

Over the last decade, tourism has emerged as a much more important source growth for Japan's economy. China's recent decision of blocking outbound tour groups to try to stem the spread of the novel coronavirus has raised alarm bells for the Japanese tourism sector.

According to Mitsubishi UFJ Morgan Stanley, if the much higher number of tourists fall at the same pace as they did during the SARS outbreak, Japanese growth could be cut by 0.2 percentage point, according to economist Shuji Tonouchi at. Should the crisis drag on for a full year, it could shave 0.45 percentage point from Japan's expansion, estimates Nomura Research Institute economist Takahide Kiuchi.

Spread of Novel Coronavirus

The outbreak, which has so far killed at least 80 people and sickened almost three thousand more, couldn't have come at a worse time for China, which is in the middle of the Lunar New Year holidays, an epic travel period that's usually the largest annual human migration in the world.

The timing is also bad for Japan, where gross domestic product is forecast to have shrunk 3.7 per cent in the fourth quarter amid an export slump and a consumer-spending drought following October's sales tax hike. Economists are expecting government spending to fuel a 1 per cent rebound this quarter, but the coronavirus crisis adds a new downward factor.

Under Prime Minister Shinzo Abe, Japan's tourism boom has been one of the few unambiguous economic success stories. Aided by government steps to relax visa approvals, visitors to Japan have surged almost four-fold to 31.9 million since 2012, buoying sectors from cosmetics to consumer goods and hospitality and accounting for almost 1 per cent of GDP in 2018

8. Slowdown in India to cost 16 lakh jobs in FY'20

A recent report published by the State Bank of India (SBI) suggests that economic slowdown has adversely impacted employment generation in the country as nearly 16 lakh less jobs are projected to be created in FY20 compared to 89.7 lakh fresh jobs in FY19

According to the report, there is a decline in remittances in a few states like Assam and Rajasthan, reflecting downsizing of contractual labourers. It further points out that in FY19, India had created 89.7 lakh new jobs as per the EPFO data. However, as per the current projections this number could be at least 15.8 lakh lower in FY'20. The EPFO data primarily covers low paid jobs as the salary is capped at Rs 15,000 per month. As per the calculation done by the report, during April-October 2019, the actual net new payroll was 43.1 lakh which annualized comes out to be 73.9 lakh for FY20. It does not cover government jobs, state government jobs and private jobs as such data have moved to National Pension Scheme (NPS), beginning 2004.

The sample of data on remittances by migrant labourers to selected states in the last one year showed that there is a decline in remittances in states like Assam, Bihar, Rajasthan, Odisha and UP. The downsizing of contractual labourers could be a result of delay in resolution of cases under bankruptcy proceedings.

Over the years, migration has been an important livelihood option for both the poor and the non-poor in the country. As a result of unequal growth, people from agriculturally and industrially less-developed states migrate to more developed states in search of job opportunities - for example from Uttar Pradesh, Bihar, the southern part of Madhya Pradesh, Odisha, and Rajasthan to states like Punjab, Gujarat, and Maharashtra. According to the report these migrants have been making significant financial contributions to their families in their places of origin.

The report further pointed out that in the last five years, the overall productivity growth has remained relatively stagnant between 9.4 to 9.9 per cent. The slow growth in productivity is evident in low growth in wages.

9. India's GDP to bounce back to 6.6 per cent growth in FY 2020-21: UN report

The UN's World Economic Situation and Prospects report published in January projects India's economy to grow by 5.7 per cent in the current fiscal year and expects it to rise to 6.6 per cent in the next year.

The UN projections are significantly higher than the World Bank projections published earlier this month. However, the growth estimate for the current fiscal is drastically lower than the forecast of 7.6 per cent made in last year's report in January and 7 per cent in the May update. According to the report, only China has a higher growth rate than India among the world's large economies with a forecast of 6 per cent growth.

The report presented a dire picture of the global economy last year when the world's gross product growth rate dropped to 2.3 per cent, the lowest in a decade. It further said that rising tariffs and rapid shift in trade policies were responsible for the lower growth rate with the United States-China trade disputes playing a significant part. The report predicts that in South Asia, Bangladesh is set to grow at 8.1 per cent this fiscal year and 7.8 in the next, while Pakistan's growth rate estimated at 3.3 per cent for 2019-20 is projected to slip to 2.1 per cent next year.

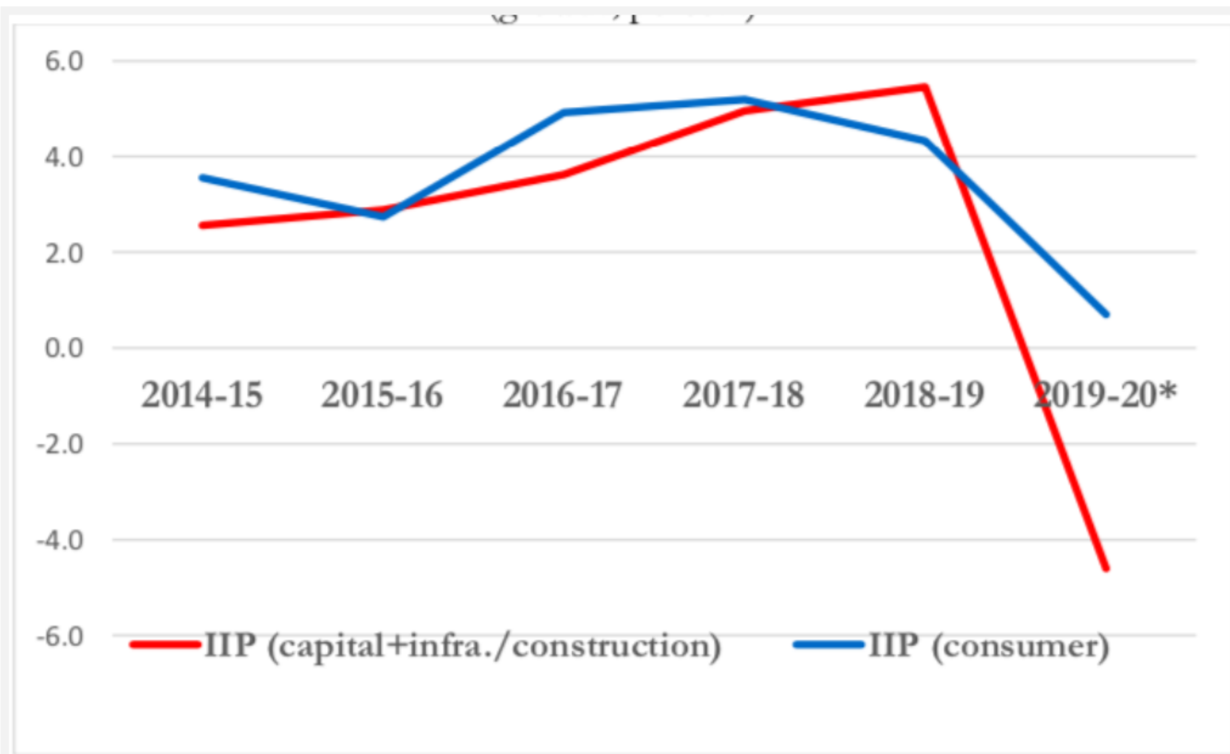
The report highlighted that the Indian government has responded to those issues by announcing some stimulus steps, which we do expect to improve economic growth in 2020 going forward. However, fiscal stimulus in itself will not be enough. The report specifically mentions two areas where India could perform better: Labour and green energy. The report pointed out that labour markets in India are not performing optimally with high levels of informality (and) gender barriers that effectively limit the participation of women. Additionally, a high number of youth are neither working nor undergoing training. The report suggests that the government will have address, to both improve long-term economic growth and to reach UN' sustainable development goals.

Access to clean and affordable energy is another major area for improvement, both to improve growth in the long-term and to reach green energy goals for sustainable development. It suggested that India being an importer of energy has much to gain from improving access to clean and affordable energy even if it has to put up with high upfront costs.

Finance Minister Ms Nirmala Sitharaman will present the Union Budget for Financial Year 2020-21 on 1 February. This will be the first full budget presented in the second term of the Modi Government. Every Budget presents challenges to the government, but some are more challenging than others. Over the last year, rising concerns over the slowing down of the Indian economy has made the upcoming budget even more important. This budget will be keenly awaited to see how the government tries to defeat the economic challenges and pave the way for a high growth future. Some of the major challenges faced by the Government in this budget are as under:

a. Falling consumption and industrial investment

Lowering Consumption and Industrial Investment



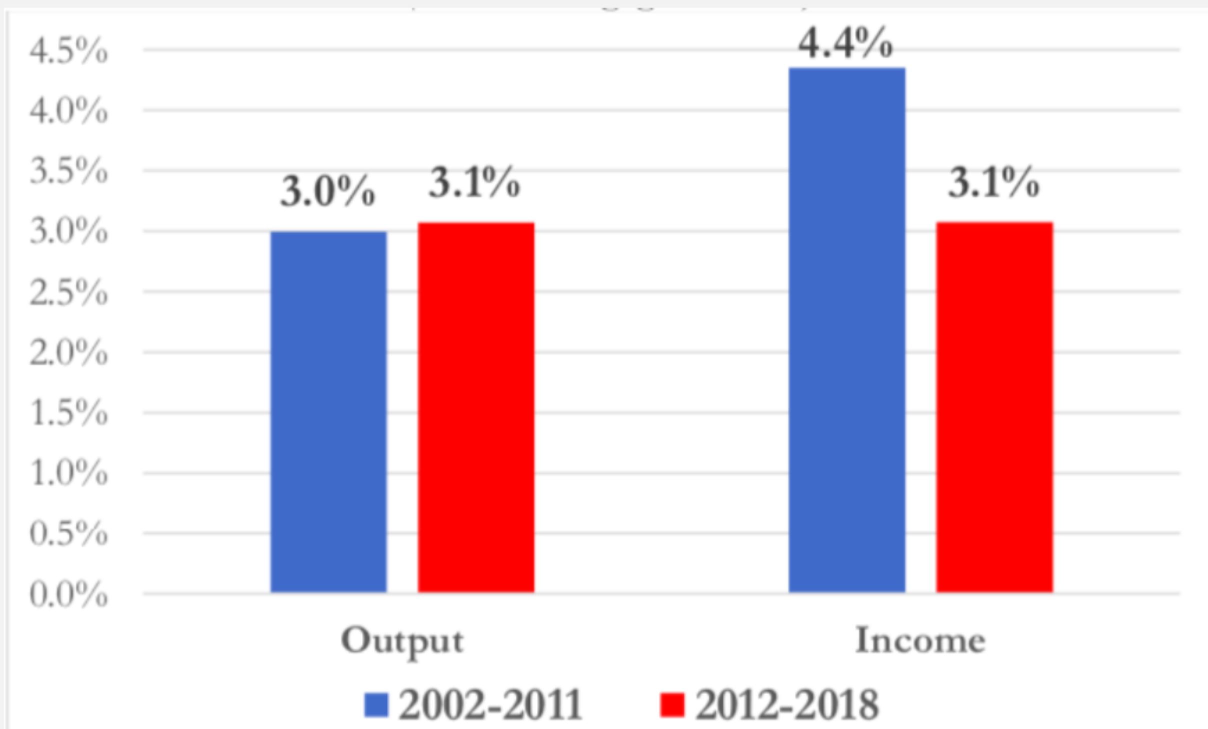
Source: Subramanian and Felman, 2019

India's industrial performance, in terms of production of both capital and consumer goods, is perhaps at its worst since the crisis of 1991-92. Productivity levels have been low and have worsened since 2018-19 (seen in Chart 1), whereas in recent months, the industrial sector has almost stopped investing in building new capacities within existing businesses due to a fall in demand.

The finance ministry's decision to cut corporate tax rates haven't yielded a positive boost to overall industrial production in the short-term so far. Within sectors like construction, which has been one of the largest worker employing segment (particularly for migrating workers), most firms are currently choked with higher tranches of debt or are otherwise unwilling to invest long-term capital due to low consumer demand.

b. Poor performance in agriculture sector

Stagnation in Agricultural Output and Income Growth (% of GDP)

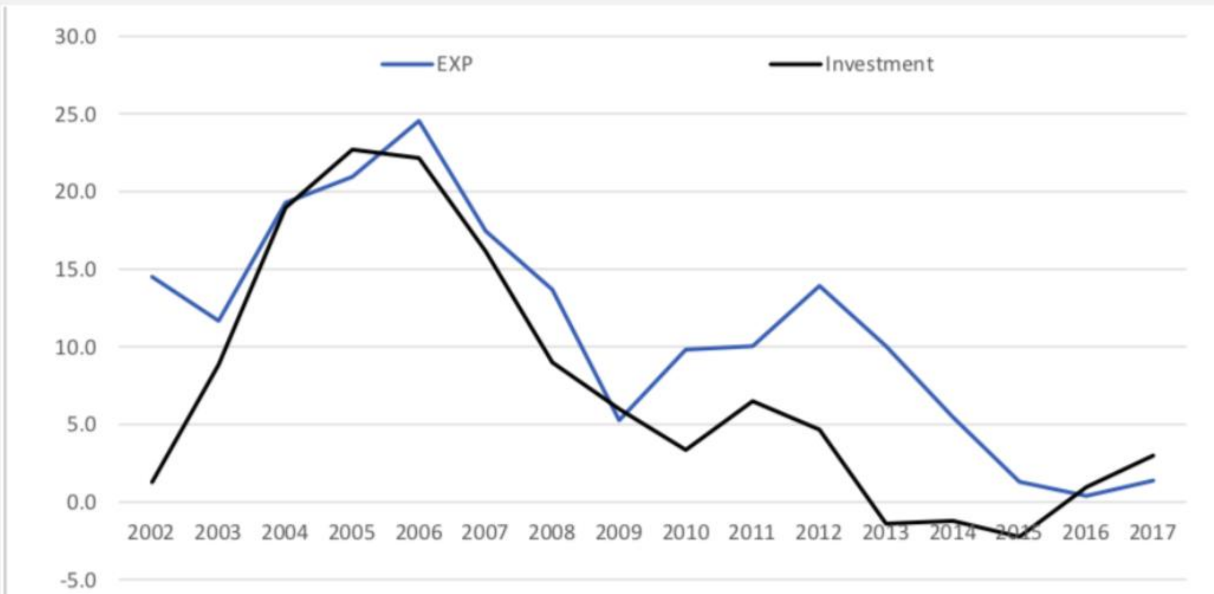


Source: Subramanian and Felman, 2019

Perhaps the most important concern in the Indian economy right now is a poorly performing agricultural sector. Agri-incomes have actually come down to 3.1 per cent of the GDP as against being at 4.4 per cent between the 2002-2011 period. Agri-output has been more or less the same in two decades now. A poorly performing agri-sector has been one of the principal reasons for driving down rural consumer demand or even pushing more and more people (including farmers) into poverty as cost of living continues to rise.

c. Exports

Real Exports and Investment Trends

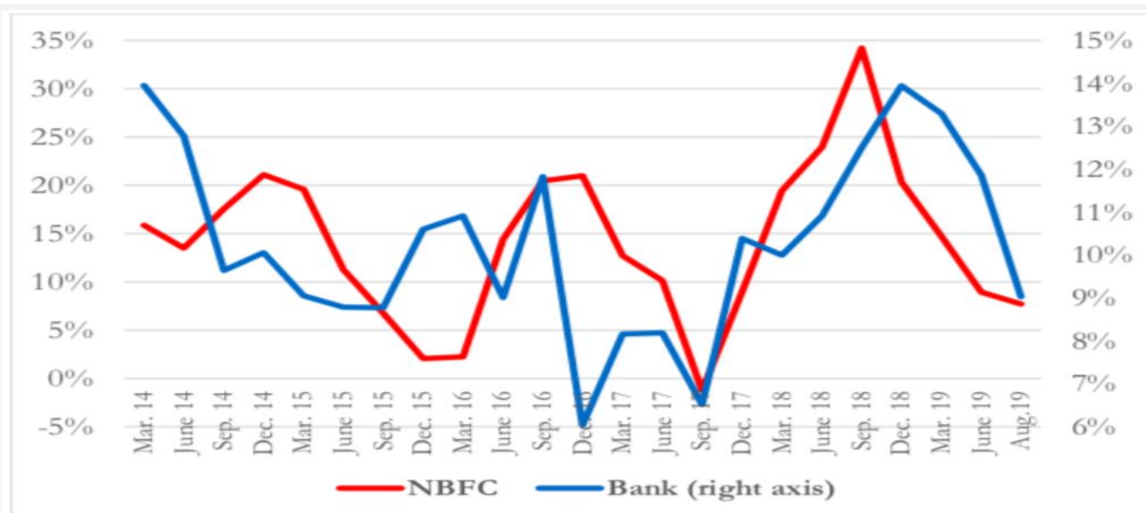


Source: Subramanian and Felman, 2019

For any increase in basic agricultural and industrial productivity to benefit the macro-economic landscape, a robust 'farm-to-factory' supply channel remains vital for the manufacturing sector to also benefit from rise in production of agri-based commodities. India's significant leverage in domestic production has been in its cooperative style of business across states

d. Troubling credit growth levels

Bank and Non-Banking Financial Corporations (NBFCs) Credit Growth (%)

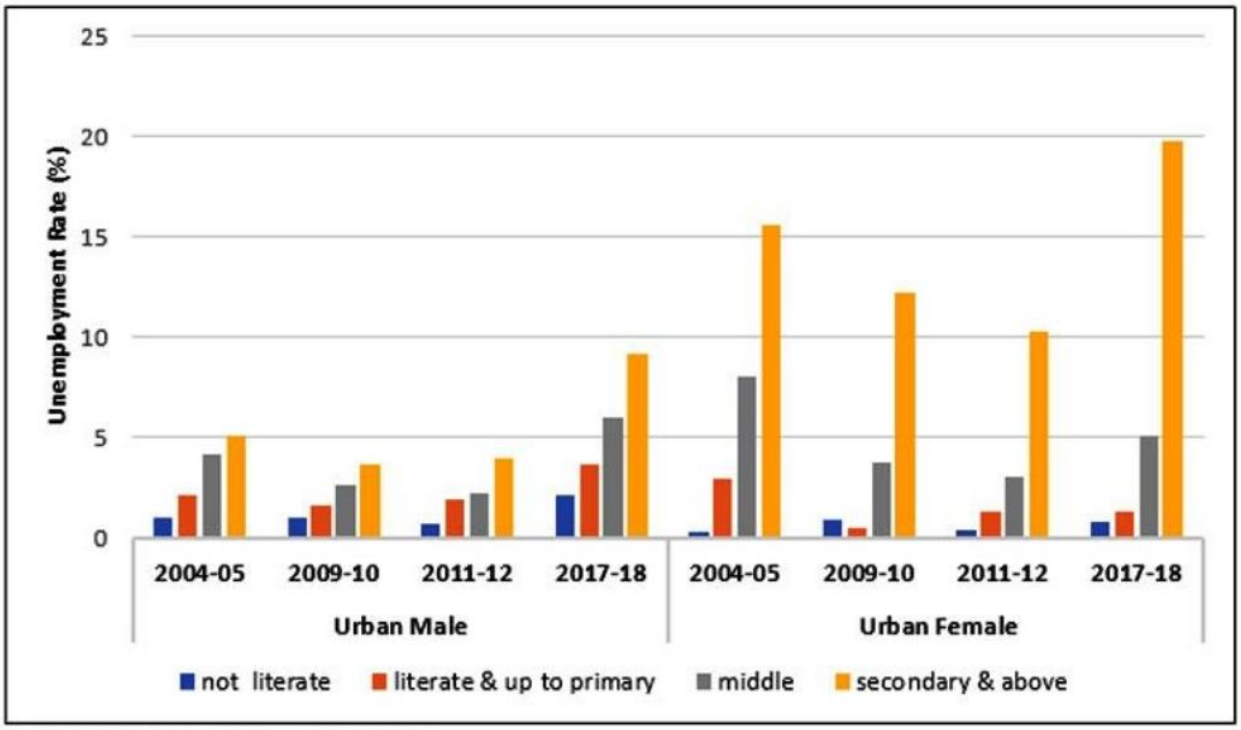


Source: Subramanian and Felman, 2019

On banks and the current troubling scenario of credit growth levels, even for NBFCs, the Budget statement may highlight the necessary fiscal plan for already announced measures during the last few months. A substantive amount of liquidity is being pumped in the public sector banking system and the source of funds going into the financial system may need to be transparently reflected in the government's fiscal statement.

e. Unemployment

Unemployment and Un-employability



Source: NSSO, Periodic Labour Force Survey

One of the major concerns in the country is the growing level of unemployment and a higher degree of un-employability amongst the educated youth, in both, rural and urban areas. Females, in rural and urban sections, have been worst affected by the unemployment and un-employability crisis. While this is a structural problem with no quick-fix measure to resolve this, a comprehensive fiscal plan will signal a strong intent by the government to both acknowledge and address the unemployment problem.

10. Key budget 2020 expectations to boost demand in Indian economy

The Finance Ministry is all set to present the union budget for the upcoming fiscal year 2020-21 on 1 February, 2020. The finance minister Ms Nirmala Sitharaman has quite a few things on her table, ranging from slowing demand, low industrial output and the overall GDP growth pegged at an 11-year low of 5 per cent.

Over the last year, the Government has introduced a flurry of incentives for the economy. A tax cut for corporates and new manufacturing companies, reforms in Goods and Service Tax law, capital infusion for PSU banks and setting up a fund for real estate and infrastructure. However, the economic indicators have not shown signs of growth revival and the Government's tax collections have remained low.

There is a general consensus among the people, economists and industrialists is that the demand needs to be revived. To boost demand in the country, below are some of the major budget expectations for 2020:

a. **Increase the cash flows of the middle-class taxpayer:** The Finance Ministry should consider relaxing personal income tax rates in the upcoming budget 2020. The present rates consist of 5 per cent for income slab from Rs 2.5 to 5 lakh, 20 per cent for income slab from Rs 5 to 10 lakh and 30 per cent for income slab from Rs 10 lakh and above. There is a significant tax outgo for an individual earning income between Rs 5 to 10 lakh. A cut in the tax rate from 20 per cent to 10 per cent would increase the disposable surplus in the hands of the middle-class. The middle class also the growth drivers for the economy

b. **Boost savings for individuals:** Section 80C accounts for most of the tax savings of individuals. It includes investment in government securities, LIC, mutual fund ELSS along with payments for children's tuition fee and housing loan repayment, all under the overall limit of Rs 1.5 lakh. Education costs and housing loan repayments form a significant part of the financial commitments for an individual. Consequentially, the section leaves less room for savings. The government could enhance the limit under section 80C to give a much-needed boost for public savings.

c. **Low tax rate for partnerships and LLPs:** There are MSMEs consisting of partnership firms and Limited Liability Partnerships (LLPs) who pay tax at 30 per cent (excluding surcharge and education Cess). While the government has conferred a tax cut on corporates and manufacturing companies, the other forms of business enterprises still pay high tax at 30 per cent. The government could reduce the tax rate for these business enterprises to create a level playing field among MSMEs.
   The government could aid capital intensive MSMEs for their investments in plant and machinery. The investments could be incentivized through a deduction under section 32AC. The Section was introduced in the union budget in 2013 to encourage investment in new plant and machinery by companies. The deduction was allowed in addition to depreciation allowance. The minimum investment threshold was Rs 25 Crore. The section can be revamped to confer deduction benefits to MSMEs with a lower investment threshold and for a time horizon of 1-2 years

d. **Sector-specific incentives:** The finance ministry has held meetings with representatives from various sectors and industrialists for the upcoming budget 2020. Sectors such as non-banking financial companies (NBFCs), real estate, infrastructure and power discoms have been suffering lack of demand and finances. The government, though it has outlined a plan for real estate and infrastructure, the mechanics are yet to be worked out. The government could aid the infrastructure plan through the issue of long term tax-deductible infrastructure bonds

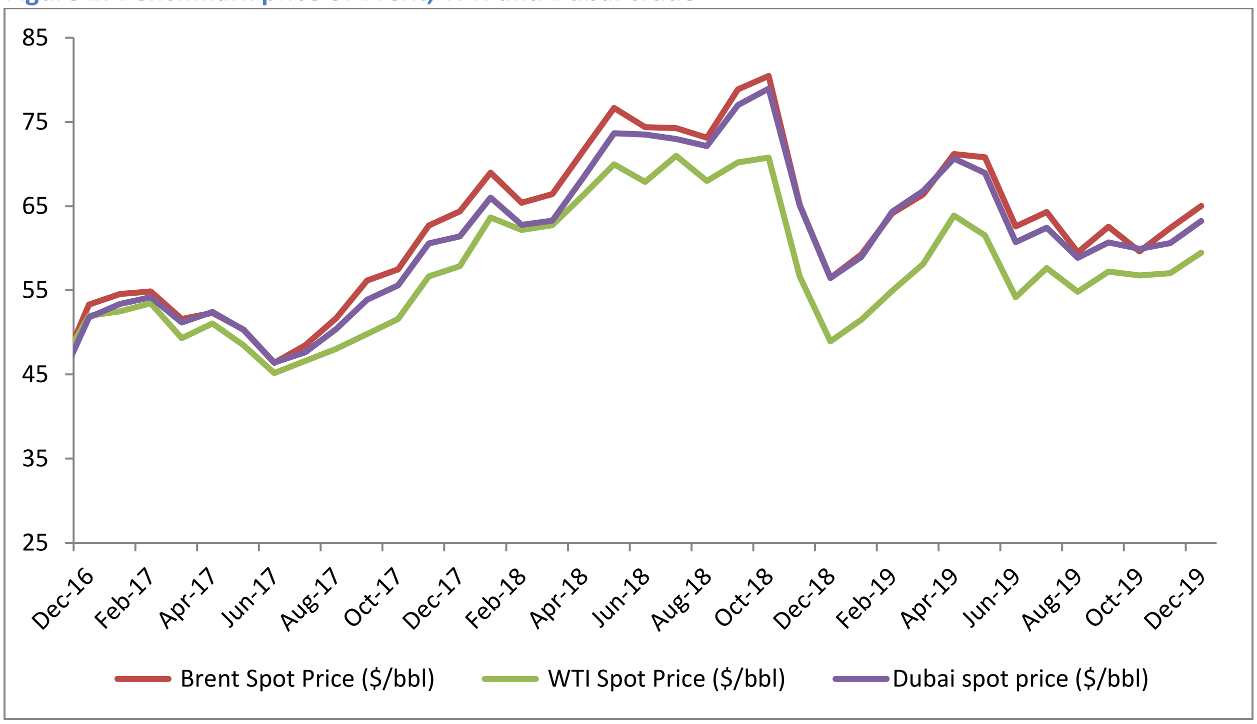
e. **GST rate cuts:** GST rate cuts have over the last two years have led to dwindling revenue collections. A phased increase in the GST rates has been favored by many economists. However, the auto sector is looking forward to a rate cut in automobiles from 28 per cent to 18 per cent. Additionally, there is a possibility of exemption from customs duty of 5 per cent for lithium-ion batteries. Followed by this, the health care segment expects to have the health care services zero-rated product under GST. Similarly, various items falling in between 18 per cent and 28 per cent may be contemplated for a single rate.

Oil & Gas Market

Crude oil price

Crude prices further continued to rally upwards in the month of December as the production curbs from the OPEC hit the market. Higher withdrawal of crude inventory, progress in trade issues between US and China were the other factors that added to increase in crude price.

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



Source: WORLD BANK

- Brent crude price averaged $65.03 per bbl in December 2019, and was up 4.2 % and up 15.2 % on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged $ 59.48 per bbl in December 2019, and was up by 4.3 % and 21.5 % % on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged $63.23 per bbl in December 2019, and was up by 0.9 % and 12.0% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in December, 2019

Crude oil	Price ($/bbl) in December 2019	MoM (%) change	YoY (%) change
Brent	65.03	4.2%	15.2%
WTI	59.48	4.3%	21.5%
Dubai	63.23	0.9%	12.0%

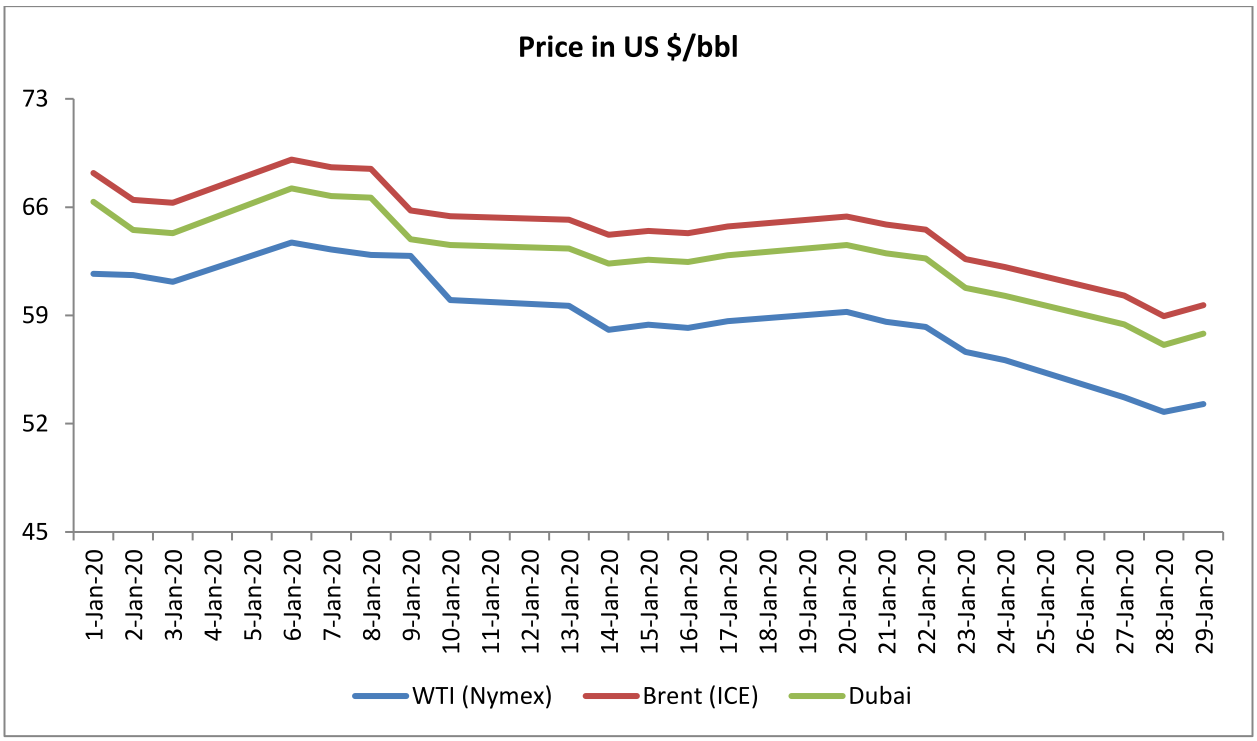
- *Source: WORLD BANK*

Crude price decline in January 2020

Buoyed by the supply cuts, crude oil made a strong start in January 2020. As tension rose between US and Iran Crude prices further continued to rally upwards as market was uncertain about the outcome. However, after both countries agreed to stand down, crude price settled. Towards the end of the month, oil prices plunged due to outbreak of coronavirus in China. Travel restrictions in few cities to prevent the virus from spreading have led to supply glut in China.

Average Brent, WTI and Dubai basket crude prices went down by 0.43 %, 0.84% and 0.55 % respectively from the prices in the month of December.

Figure 2: Crude oil price in January 2020

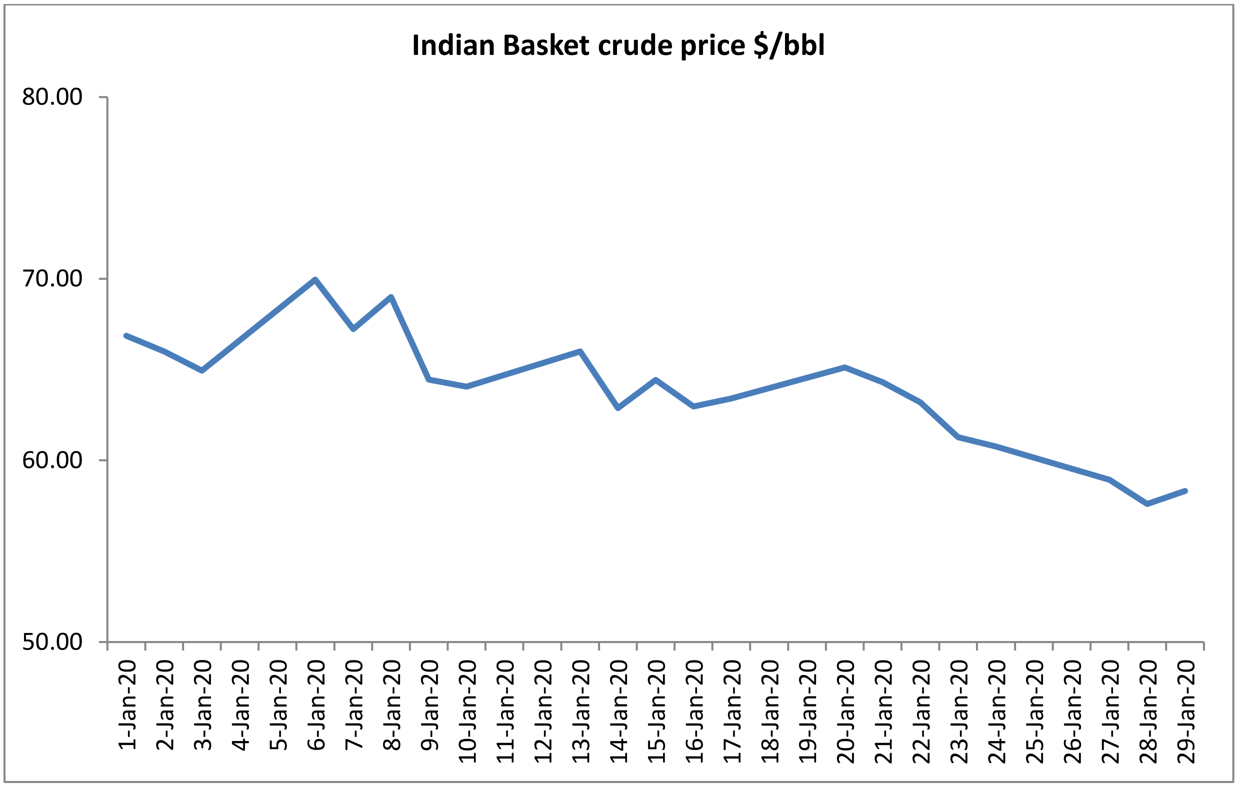


Source: EIA

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

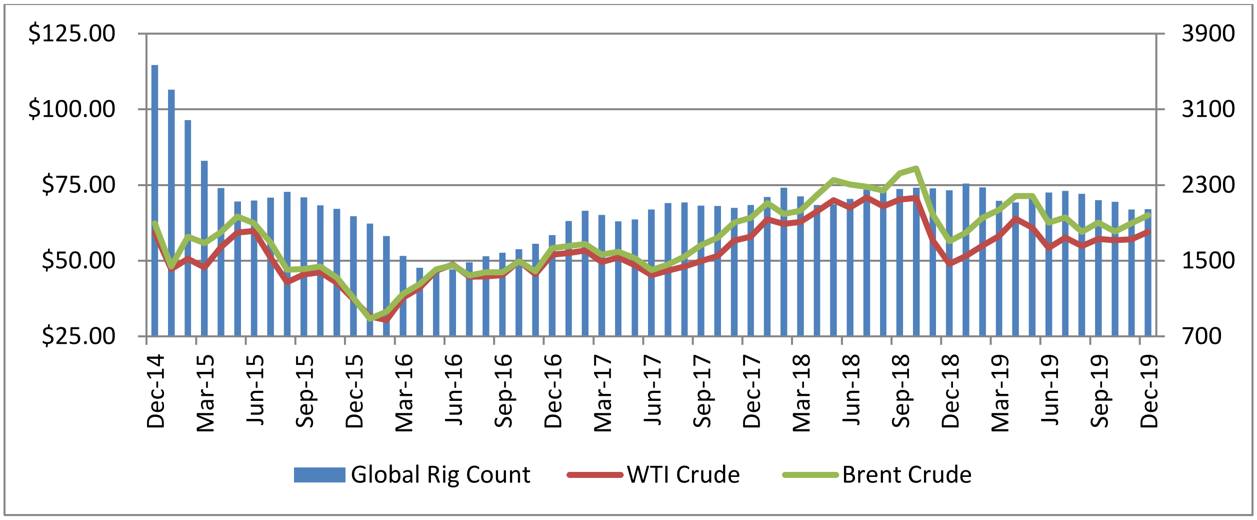
- Indian crude basket price averaged $63.89 per barrel in January, down by 1.15 % on Month on Month (M-o-M) basis but up by 7.79% on a year on year (Y-o-Y) basis, respectively.

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

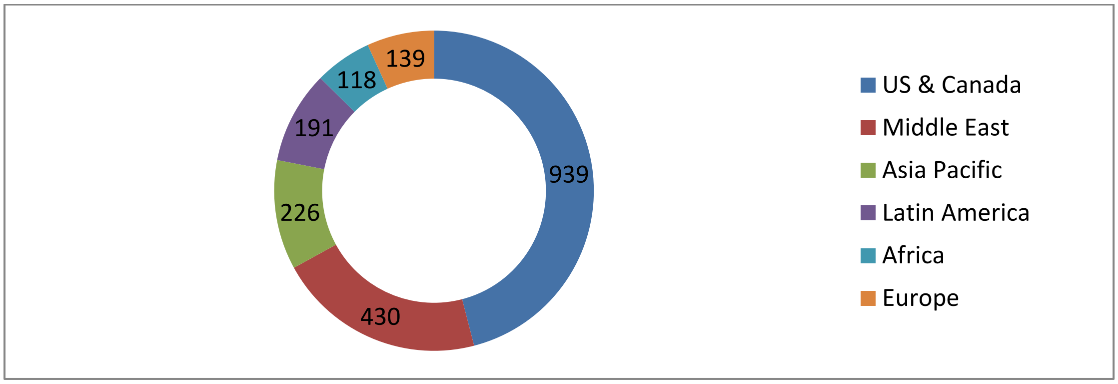
In December 2019, global drilling rig count stood at 2,043, one up from December's count. Onshore rig count declined by 10 and while offshore rig count went up by 11. Rig count saw a decline in Africa, Asia Pacific and Middle East, while rig count remained declined in Europe, Latin America and North America. Rig count dropped by around by 6 in the United States to reach 804. 781 were onshore rigs and 23 were offshore rigs. US & Canada and the Middle East count for about 2/3rd of the global rig count.

Table 2 : Global Drilling Rig Count

Rig Type	Count in December 2019	MoM (%) change	YoY (%) change
Land	1,761	-0.56 %	-11.24 %
Offshore	282	4.06 %	8.46%
Total	2,043	0.05 %	-8.96 %

Source: Baker Hughes

Figure 5 Geography-wise Rig count - December 2019



Source: Baker Hughes

Indian Drilling Rig Count

Indian rig count remained unchanged in the month of December 2019. On Y-O-Y basis, Indian rig count declined by 12.10 % in 2019 as compared to December 2018. 77 were onshore rigs and the rest 32 were offshore rigs.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

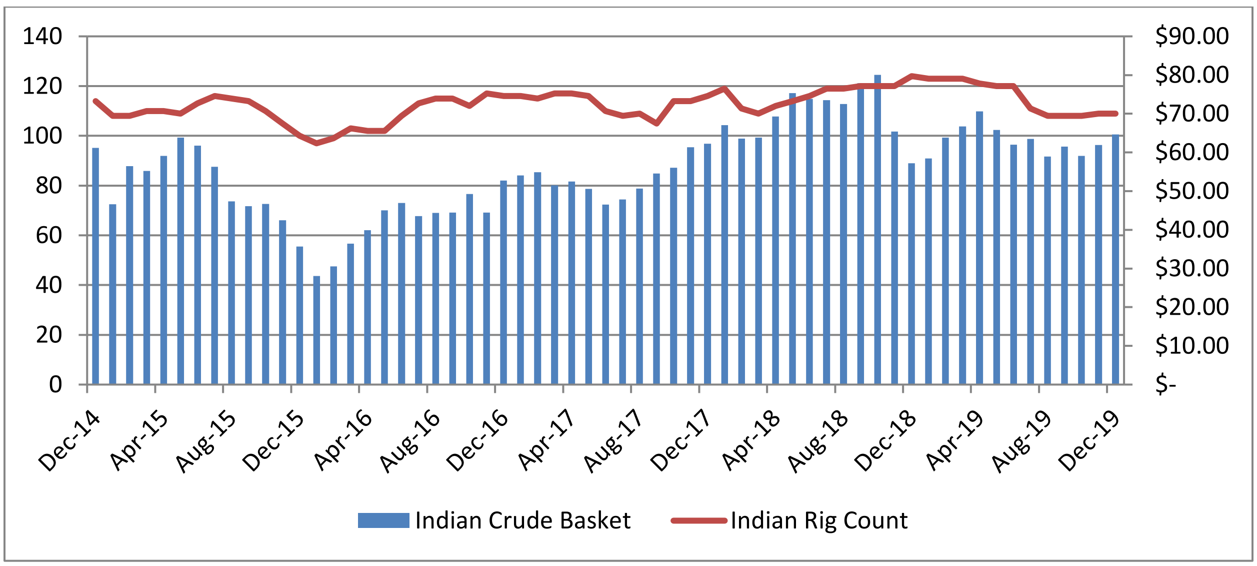


Table 3 : Indian Rig Count

Rig Type	Count in December 2019	MoM (%) change	YoY (%) change
Land	77	0.0 %	-9.41 %
Offshore	32	0.0%	-17.95 %
Total	109	0.0%	-12.10 %

Source: Baker Hughes

Oil demand & supply

Preliminary data indicates that global oil supply decreased by 0.06 mb/d m-o-m to average 100.28 mb/d in December 2019, compared with the previous month. Non-OPEC supply (including OPEC NGLs) increased by 0.11 mb/d m-o-m to average 70.84 mb/d in December. Incremental production from the US, Canada, Norway, the UK, and Mexico was driving the non-OPEC oil supply. The share of OPEC crude oil in total global production decreased by 0.1% to 29.4% in December 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.

Non-OPEC oil supply growth in 2020 is also revised up by 0.18 mb/d from last month's assessment and is forecast at 2.35 mb/d for an average of 66.68 mb/d. The upward revisions in Norway, Mexico and Guyana are partially offset by downward revisions to the supply forecasts of the US, Russia and other OECD Europe. World oil demand was revised by 0.05 mb/d lower than previous month. Demand for oil in 2020 is forecasted to increase bbl 0.14 mb/d. Oil consumption is expected to reach 99.77 mb/d and 100.98 mb/d in 2019 and in 2020 respectively.

Table 4: World Oil demand in mbpd

	2019	1Q2020	2Q2020	3Q2020	4Q2020	2020	Growth	%
Total OECD	**47.99**	**47.86**	**47.23**	**48.54**	**48.67**	**48.08**	**0.09**	**0.18**
Dev. Countries	**33.11**	**33.60**	**33.49**	**34.17**	**33.92**	**33.79**	**0.68**	**2.05**
~ of which India	*4.85*	*5.20*	*4.90*	*4.65*	*5.32*	*5.02*	*0.16*	*3.39*
Other regions	**18.66**	**18.50**	**19.02**	**19.12**	**19.80**	**19.11**	**0.45**	**2.40**
~ of which China	13.06	12.93	13.52	13.30	13.79	13.39	0.33	2.53
Total world	**99.77**	**99.95**	**99.73**	**101.83**	**102.38**	**100.98**	**1.22**	**1.22**

Source: OPEC monthly report, January 2020

*Note: *2019 = Estimate and 2020 Forecast*

Global petroleum product prices

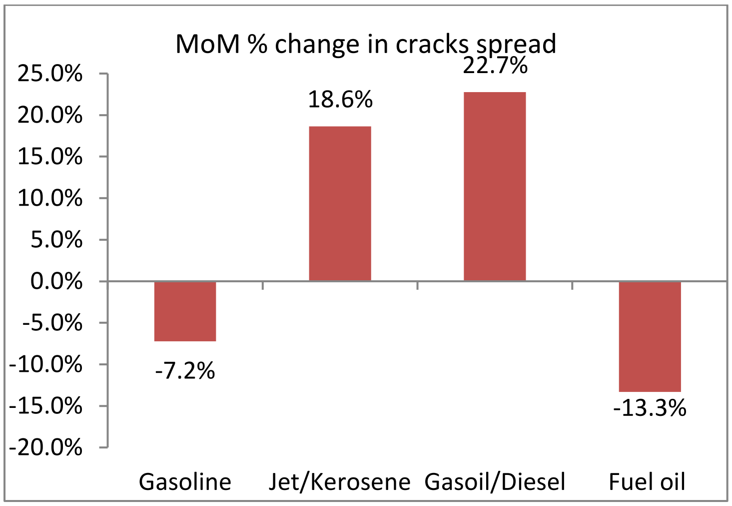
Prices in the Asian Gasoline-92 market saw a mild decline in price by 0.1 % over December month. Refinery margins fell due to lower demand for gasoline levels. Refinery margins in December fell sharply and stood in negative territory for straight second month. Margins went to multi-year low minus $1.23/b, lower by 64¢ on m-o-m and by $4.52 on y-o-y basis.

Singapore Gasoline cracks averaged $6.48/b against Oman, down by $ 3 m-o-m but up by $5.79 y-o-y in December. Refinery utilization rates in December averaged 92.37 % in selected Asian markets comprising of Japan, China, India and Singapore.

Jet/Kerosene prices went up by 3.8% % in December as the onset of the winter season sparked the consumption for heating. The Singapore jet/kerosene crack spread against Oman averaged $12.89, down by 9¢ m-o-m and by 99¢ y-o-y.

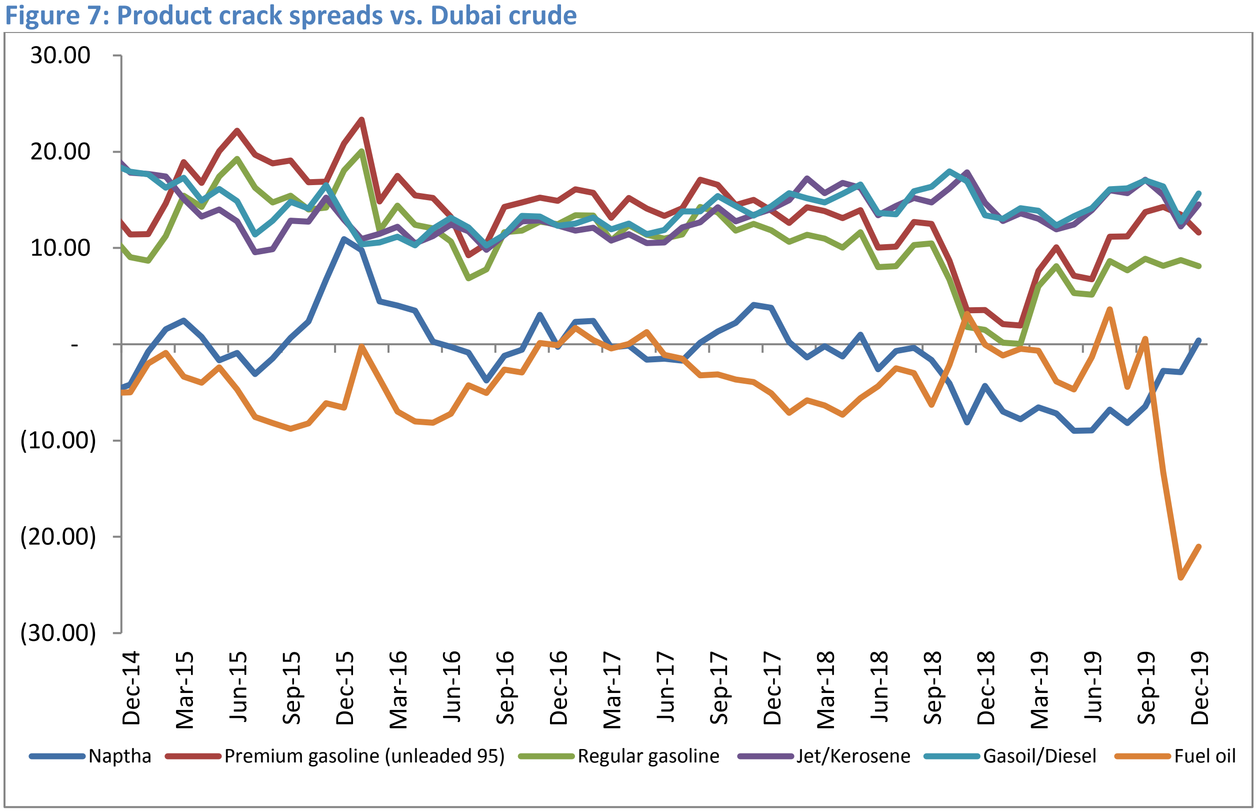
The Singapore gasoil crack spread trended slightly upwards in the month of December on the stronger spot demands from India of IMO 2020 related support. In December, gasoil price went up by 4.60%. Singapore gasoil crack spread against Oman averaged $14.02/b, up by 53¢ m-o-m and by $1.45 y-o-y.

The Singapore fuel oil crack spread recovered in December after deterioration in the previous month of December as 3.5% sulphur fuel oil prices almost returned to levels recorded in October Singapore fuel oil cracks against Oman averaged minus $22.64, up by 86¢ m-o-m and by $21.79 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 December 2019	MoM (%) change	YoY (%) change
Naptha	63.62	6.5%	22.0%
Premium gasoline (unleaded 95)	74.82	-1.7%	24.7%
Regular gasoline (unleaded 92)	71.34	-0.1%	23.0%
Jet/Kerosene	77.75	3.8%	9.2%
Gasoil/Diesel (50 ppm)	78.88	4.6%	12.9%
Fuel oil (180 cst 2.0% S)	42.22	9.9%	-25.2%
Fuel oil (380 cst 3.5% S)	41.2	7.9%	-27.2%

Source: OPEC

Petroleum products consumption in India

- December month saw an increase in overall consumption by petroleum products by 0.1%
- In December, LPG consumption increased by 3.9 % on M-o-M basis.
- Consumption of gasoline declined by 2.4% M-o-M and up by 3.2 % Y-o-Y).
- Demand for diesel declined by 2.8 % on M-o-M basis in the month of December due to decline in factory output and heavy truck transportation.

Table 6: Petroleum products consumption in India, December 2019

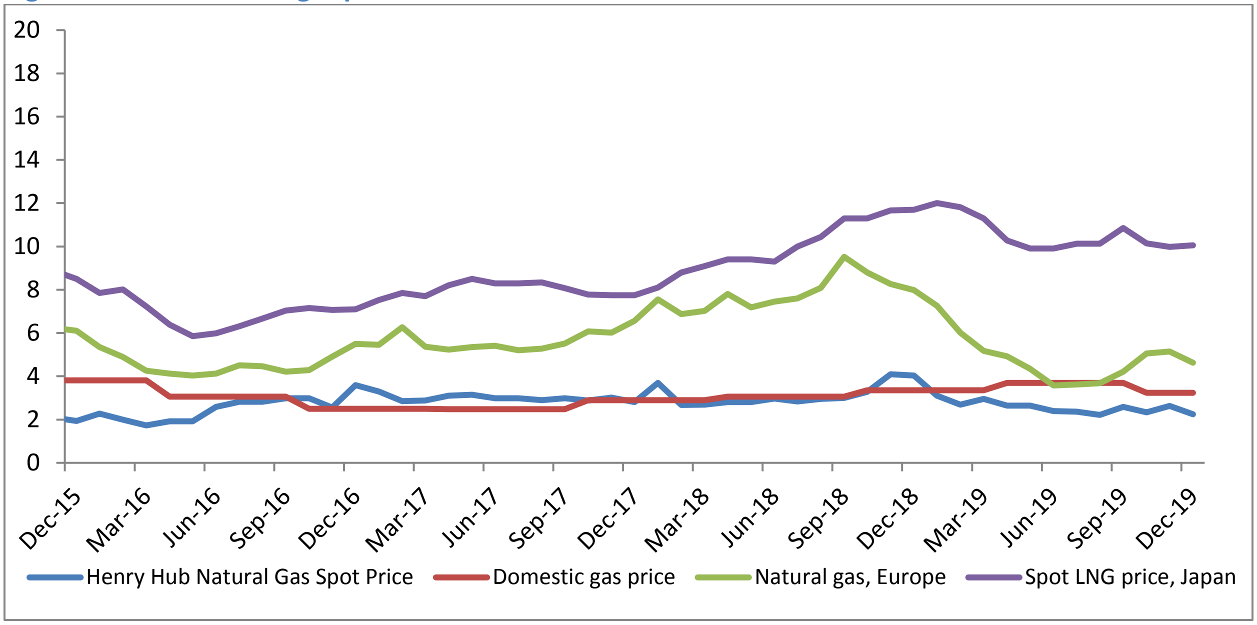
Petroleum products	Consumption in '000 MT December 2019	MoM (%) change	YoY (%) change
LPG	2,361	3.9%	9.1%
Naphtha	1,228	-2.1%	0.1%
MS	2,472	-2.4%	3.2%
ATF	733	2.5%	1.3%
HSD	7,337	-2.8%	-0.5%
LDO	46	-9.0%	-11.4%
Lubricants & Greases	330	1.4%	-1.4%
FO & LSHS	545	13.5%	-5.4%
Bitumen	567	2.6%	-11.3%
Petroleum coke	1,961	8.3%	1.2%
Others	1,055	2.2%	31.1%
TOTAL	18,787	0.1%	1.5%

Source: PPAC

Natural Gas Price

In December, natural gas price at the Henry Hub decreased by 14.8 % to reach $2.24/MMBtu. Increase in gas stockpile during the same period across the United States led to the decrease in natural gas price.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

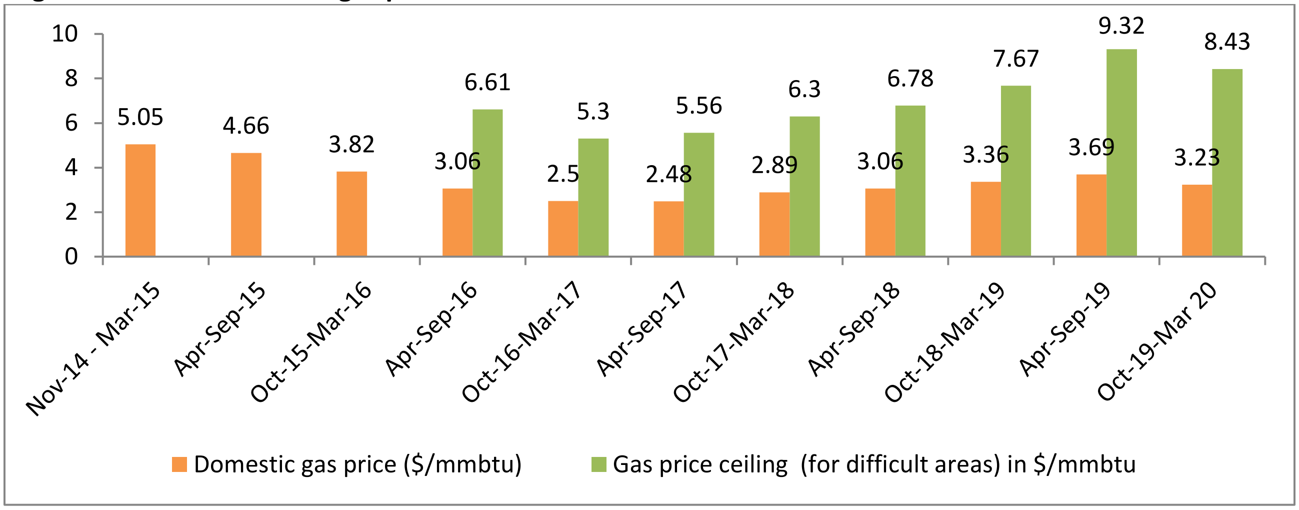
Natural Gas	Price ($/MMBTU) in December 2019	MoM (%) change	YoY (%) change
India, Domestic gas price	3.23	0.00 %	-3.9%
India, Gas price ceiling – difficult areas	8.43	0.00 %	9.90%
Henry Hub	2.24	-14.8%	-44.6%
Natural Gas, Europe	4.62	-10.3%	-42.1%
Liquefied Natural Gas, Japan (Long Term Contract, not Spot Market)	10.05	0.7%	-14.1%

Source: EIA, PPAC, World Bank

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. Gas price for October 2019 to March 2020 is $3.23 per MMBTU

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 2019 to March 2020 period, the price of gas from such areas has been notified at $8.43 per MMBTU.

Figure 9: Domestic natural gas price

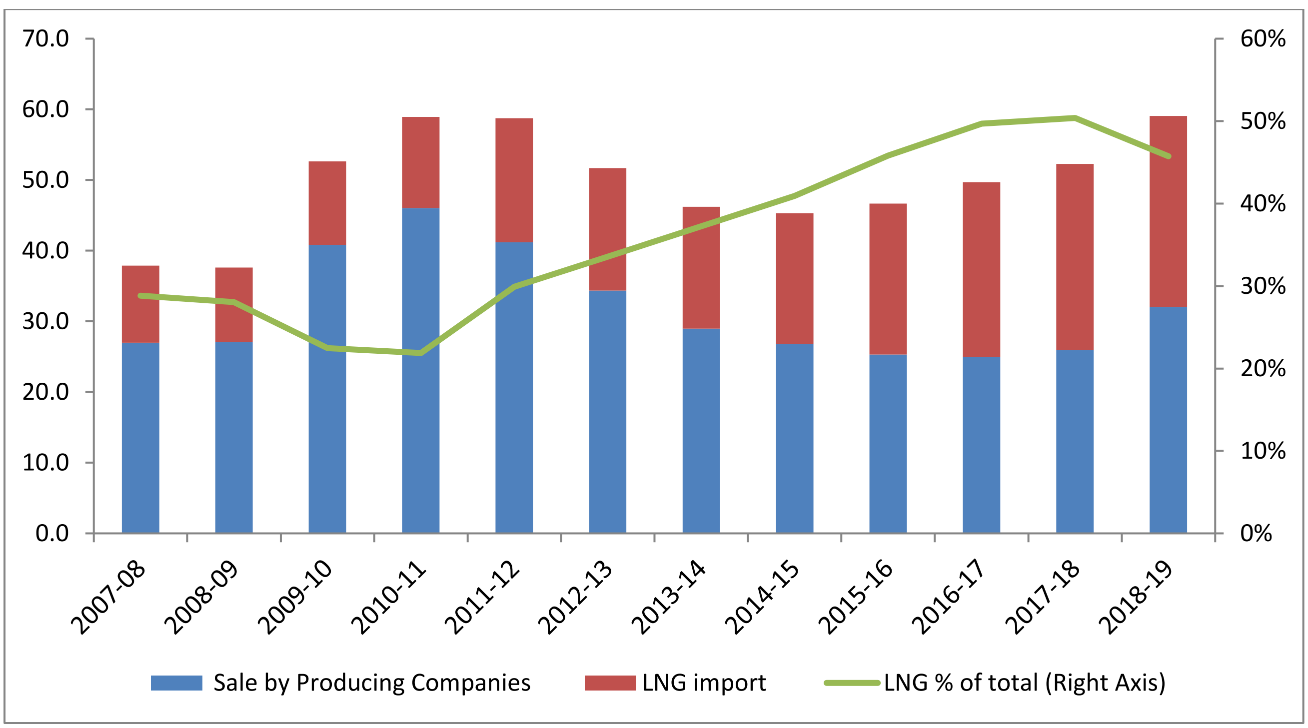


Source: PPAC

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

Sale by producing companies includes internal consumption

Key developments in Oil & Gas sector during January 2020

- **Monthly Production Report for December, 2019**

Crude oil production during December, 2019 was 2650.81 TMT which is 10.85% lower than target and 7.39% lower when compared with December 2018. Cumulative crude oil production during April-December, 2019 was 24375.57 TMT which is 6.01% and 6.02% lower than target for the period and production during corresponding period of last year respectively.

Natural gas production during December, 2019 was 2640.80 MMSCM which is 11.13% lower than the monthly target and 7.87% lower when compared with December, 2018. Cumulative natural gas production during April-December, 2019 was 23850.36 MMSCM which is 6.95% and 3.24% lower than target for the period and production during corresponding period of last year respectively.

Refinery production during December, 2019 was 20829.85 TMT which is 1.00% higher than the target for the month and 0.96% lower when compared with December, 2018. Cumulative production during April-December, 2019 was 190384.89 TMT which is 0.94% higher than the target for the period but 1.19% lower than production during corresponding period of last year respectively.

- **Ministry of Petroleum and Natural Gas signs Contracts for 7 Blocks Awarded under Open Acreage Licensing Programme (OALP) Bid Round – IV**

On January 2nd, Ministry of Petroleum and Natural Gas signed contracts for 7 blocks, awarded under Open Acreage Licensing Programme (OALP) Bid Round - IV. The Government had launched OALP Bid Round – IV on 27th August 2019. The Bid Round-IV offered 7 blocks under International Competitive Bidding (ICB) process. The bidding round closed on 31st October, 2019. Subsequent to evaluation, all 7 blocks were approved for award to ONGC, for which the Revenue Sharing Contracts have been signed today, in the presence of the Minister of Petroleum and Natural Gas & Steel, Shri Dharmendra Pradhan. The total area awarded today in the 7 Onland blocks is 18,510 sq.km. The blocks are spread across 3 sedimentary basins.

Speaking on the occasion, Shri Pradhan highlighted the success of OALP Bid Rounds under the ambit of Hydrocarbon Exploration and Licensing Policy (HELP) introduced in the year 2016, primarily characterized by Revenue Sharing Mechanism replacing the earlier New Exploration and Licensing Policy (NELP) which had Production Sharing Mechanism. He said, “In the last two and a half years, Government has successfully bid out nearly 1.4 lakh sq. km for exploration and production. Seven blocks awarded today under OALP IV to ONGC have resource potential of approx. 33 billion bbls of oil and oil equivalent gas.”

The four OALP Bid Rounds, conducted till date have been a success, with total of 94 blocks awarded covering an area of 1,36,790 Sq. Km to leading E&P companies. The operators of these blocks have since then initiated petroleum exploration activities or are in final stages of obtaining Petroleum Exploration Licenses (PELs).

- **In-depth Review of India's Energy Policies report launched**

In-depth Review of India's Energy Policies report by International Energy Agency (IEA) was launched in New Delhi on 10th January by Shri Dharmendra Pradhan, Minister of Petroleum and Natural Gas & Steel, Shri Pralhad Joshi, Minister of Coal, Mines and Parliamentary Affairs, Shri Raj Kumar Singh, Minister of State (I/C) for Power and New and Renewable Energy, Shri Rajiv Kumar, Vice Chairman, Niti Aayog, Ambassadors, Dr Fatih Birol, Executive Director, International Energy Agency, and Shri Amitabh Kant, CEO, Niti Aayog.

Thanking Dr. Fatih Birol and his IEA team for coming up with a comprehensive Report covering India's energy sector in its entirety, Shri Pradhan said that IEA's findings are a vindication of the significant advances made in realizing the energy vision enunciated by Hon'ble Prime Minister Shri Narendra Modi, anchored by Energy Access, Energy Efficiency, Energy Sustainability and Energy Security, with Energy Justice at its core.

Shri Pradhan said that India is now the third largest energy consumer in the world. India is in the midst of a major transformative shift in its energy sector. The energy polices already put in place by the Government and also those on the anvil, clearly demonstrate our determination to embrace this energy transition in a sustainable and responsible manner.

The Minister said that a number of pathbreaking initiatives launched by Indian Government since 2015, have redefined India's commitment to sustainable energy. "Our key challenge as a developing country, with per capita energy consumption below the global average, is to meet the growing demand for energy. India made great strides in recent years towards achieving universal access to modern energy, including clean cooking and electricity, affordable, secure and cleaner energy for its people. The Report captures well the progress made in achieving sustainable energy for all, as reflected in the UN Sustainable Development Goal 7 (SDG 7). It does also highlight the persisting challenges to be focused in the coming days." he added.

- **Cabinet approves MoU between India and Brazil for cooperation in the oil and natural gas sector**

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has given its approval for the signing of the Memorandum of Understanding (MoU) between Republic of India and Federative Republic of Brazil on cooperation in the field of oil and natural gas.

The MoU will enhance cooperation between the two sides in oil and natural gas sector. Under the MoU, both sides will work towards establishing cooperation in the E&P initiatives in Brazil and India, research & development in this sector, explore collaboration in Liquefied Natural Gas projects in Brazil, India and third countries, and also encourage collaboration in oil energy and environmental issues, including energy policies such as energy efficiency, energy research development and expansion of the regional energy infrastructure networks.

- **National Conclave on Emerging Opportunities in Natural Gas sector held in New Delhi**

Minister of Petroleum and Natural Gas Shri Dharmendra Pradhan has called upon all the stakeholders to contribute positively in transforming India into a gas based economy. Presiding over the national conclave on emerging opportunities in the natural gas sector here today, he said that the present share of gas in the energy basket of the country is 6.2% and the target is to take it to15% by 2030. He said that the world average is 24% while within the country, the Gujarat has 26% share of gas based energy.

Describing the natural gas as the next generation fossil fuel which is comparatively cheaper and less polluting, Shri Pradhan said that the Government has taken a number of initiatives to give thrust to gas based economy. He said that the domestic gas production is likely to increase in the current financial year to 34.55 billion cubic meter. Pricing and LNG marketing freedoms have been given to gas producers, LNG terminal capacity is being augmented and national gas grid is being developed. Shri Pradhan said that this is the first time that Government of India is providing Rs.10,500 Crore worth of viability gap funding for laying pipeline in Eastern and North-Eastern India. He said gas pipeline network will be ready from Kutch to Kohima and Kashmir to Kochi. Shri Pradhan said that 4 lakh Crore rupee worth of investment is likely to be made in such projects which are a challenge as well as an opportunity. He said that the sources of import have been diversified and the Government is holding discussions with gas-exporting countries for getting more gas on favourable terms. He said that CBG is a great initiative which has the potential to generate wealth from waste, provide employment, protect the environment, and give boost to the economy.

Calling upon the States to fully cooperate and support the gas infrastructure activities and projects, he said Ministry of Petroleum and Natural Gas has prepared a draft Policy of City Gas Distribution (CGD), which may be adopted by States to facilitate such activities.

Shri Pradhan said that PNGRB is likely to soon start bid round 11 for CGD and States make like to give suggestions in identification of geographical areas. He also called upon the States to adopt qualification packs developed by Hydrocarbon Sector Council in their Vocational Training Institutes. He called upon the States to actively promote CNG usage in State transportation and mining sector. Shri Pradhan called upon all the entities that have bagged CGD rounds to not delay their work and immediately start action. He also called upon PNGRB to strictly monitor the progress.

Shri Pradhan announced that Federation of Indian Petroleum Industry (FIPI) will have a Help Desk for holding any future interaction with all stakeholders. He assured full support to all the stakeholders who are part of the gas based supply chain.

Research, analysis & compilation by:

Economic Policy & Planning Team -FIPI

Email: prai@fipi.org.in, Kaushiki@fipi.org.in