FIPI

Federation of Indian Petroleum Industry

POLICY & ECONOMIC REPORT

OIL & GAS MARKET

February

2020

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Policy & Economic report – Oil & Gas market

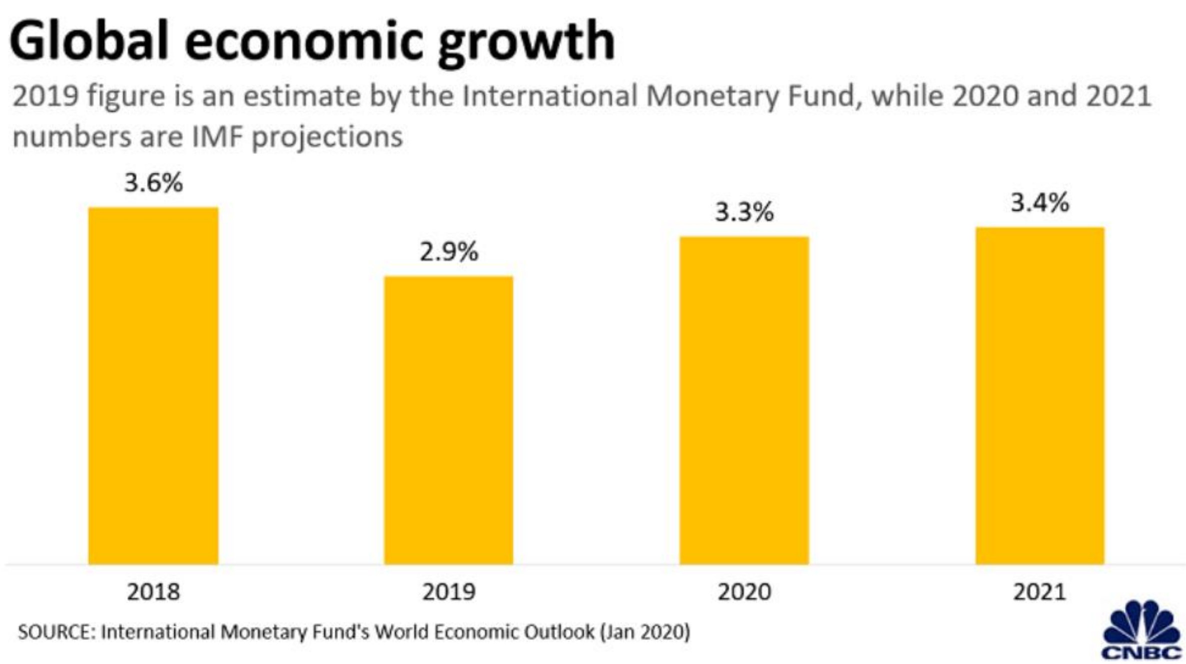
Economy in Focus

1. **Global economy to rebound to 3.3 percent in 2020: IMF**

The International Monetary Fund has released its latest projections for the global economy. Below are five charts that show the fund's latest assessments of the world economy.

Global recovery

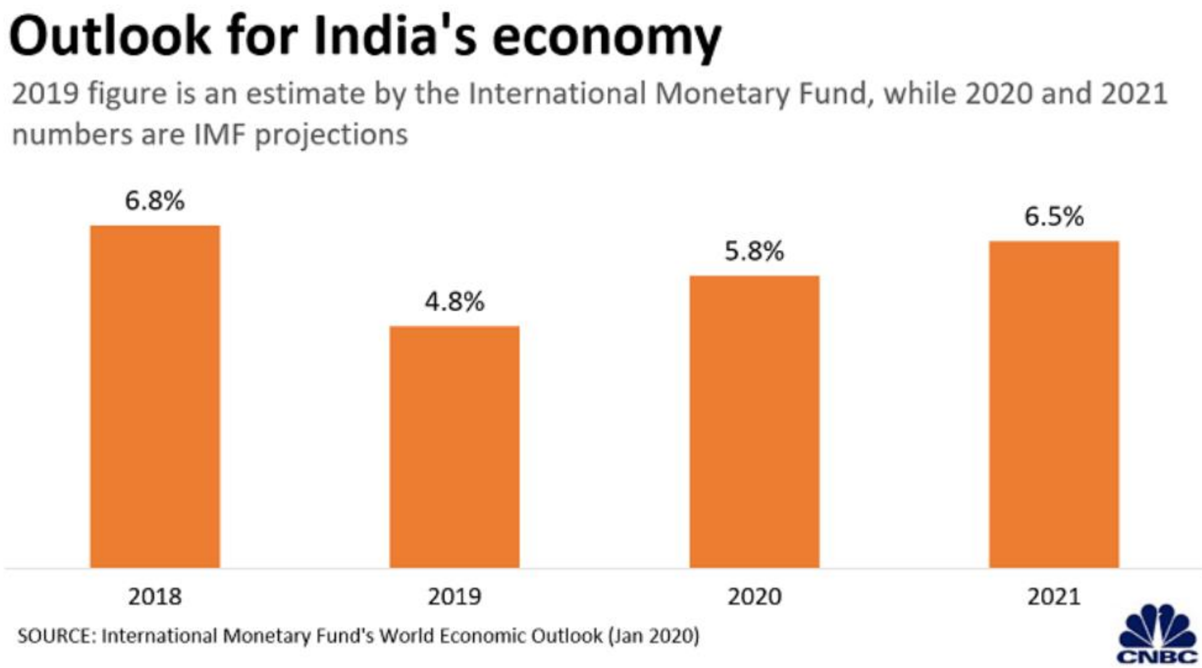
The IMF has forecasted the global economy will rebound to 3.3 per cent this year from an estimated 2.9 per cent last year. However, that projection for 2020 is a downward revision from 3.4 per cent stated in its October 2019 World Economic Outlook.



The fund attributed the major share of the downward revision to a more subdued growth forecast for India.

India’s growth markdown

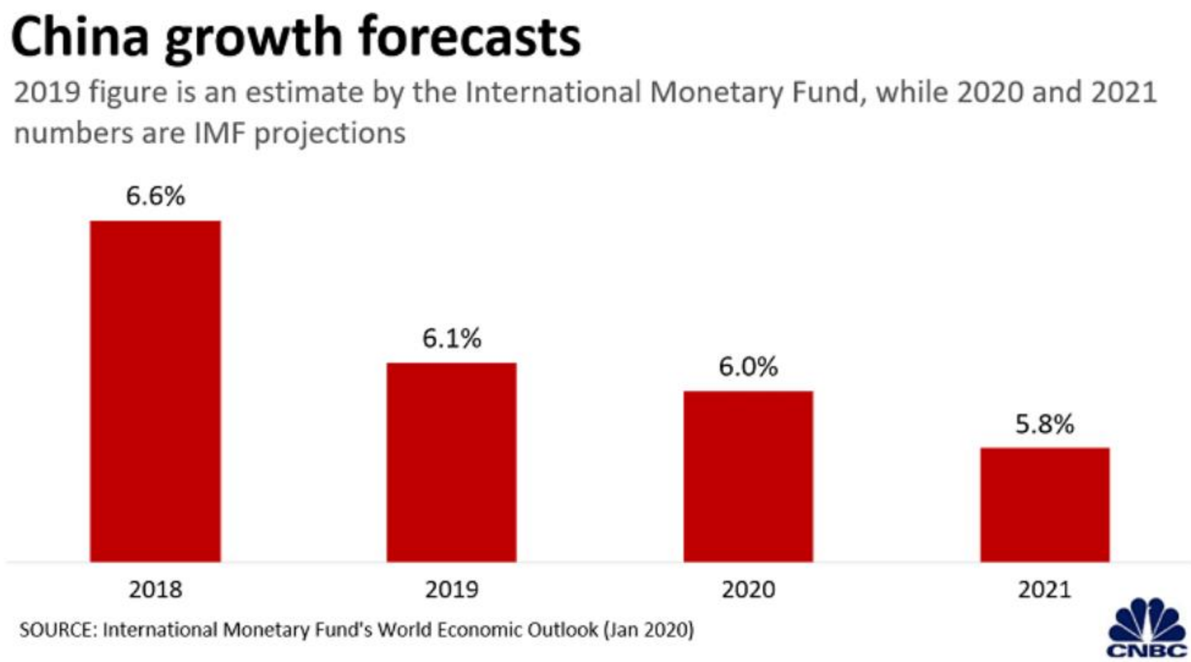
India, Asia’s third-largest economy, is expected to grow by 5.8 per cent in 2020 — a 1.2 percentage point markdown from the organization’s October forecast.



The IMF pointed out that India’s domestic demand has slowed more sharply than expected due to stresses in the financial sector and a decline in credit growth. Still, the 5.8 per cent forecast for this year is an improvement from the estimated 4.8 per cent growth for last year, owing to both monetary and fiscal measures, and subdued oil prices.

China’s upgrade

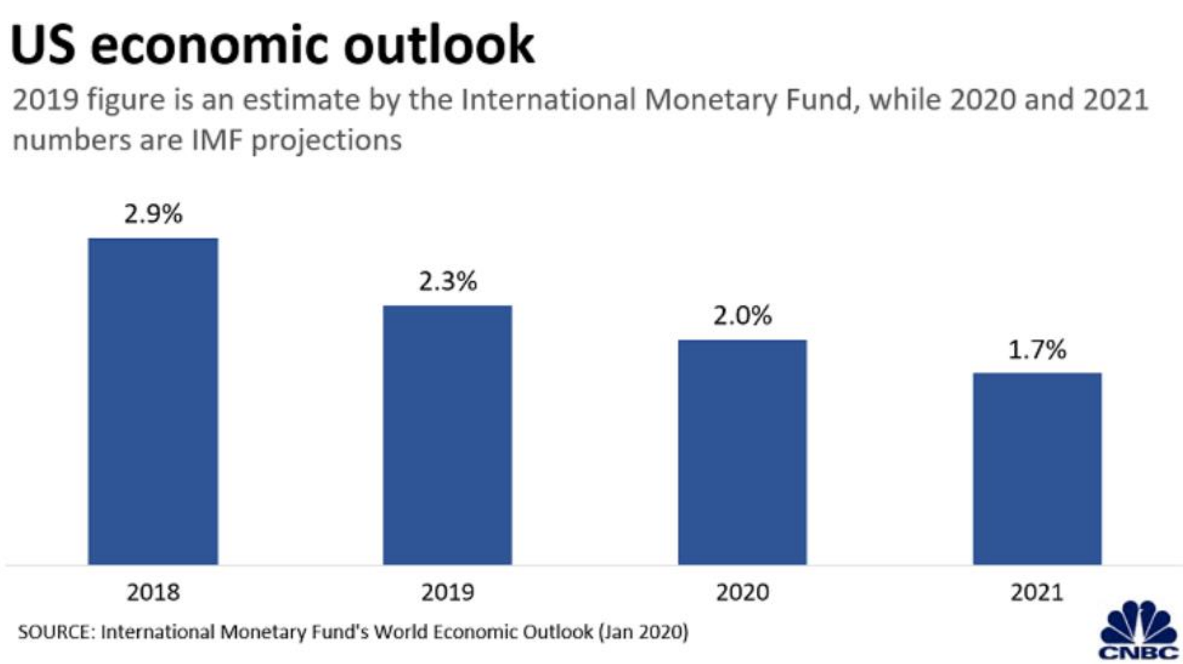
China’s growth forecast for 2020 was revised higher by 0.2 percentage points to 6.0 per cent, according to the IMF. That’s partly because the country’s ‘phase one’ trade deal with the U.S. is likely to reduce some risks facing the world’s second-largest economy, the fund said.



However, unresolved disputes on broader US-China economic relations as well as needed domestic financial regulatory strengthening are expected to continue weighing on activity," the fund wrote in its report.

US growth moderation

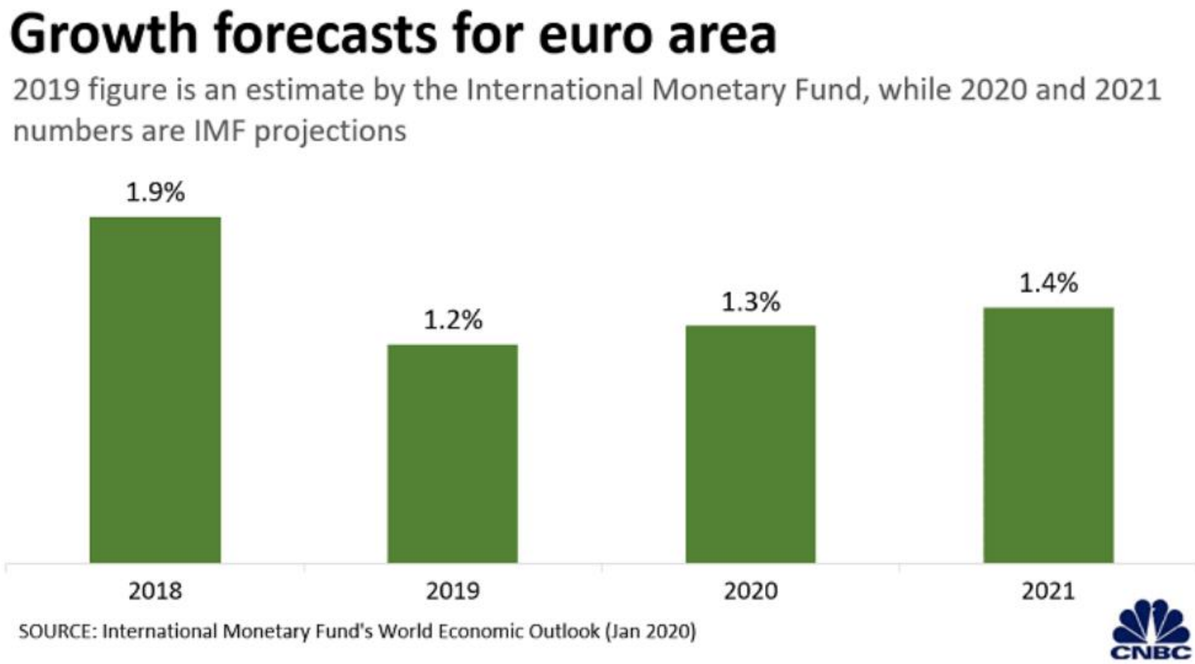
The U.S., the world's largest economy, is projected to grow by 2.0 per cent this year — a downward revision of 0.1 percentage points compared to the IMF's October forecast.



The downgrade of US reflects a slowing manufacturing sector in the U.S. and potential risks from the presidential elections later this year.

Euro area pick up

According to IMF, growth in the euro area for this year was revised down by 0.1 percentage points to 1.3 per cent.



But that projection reflects a pick up from last year's 1.2 per cent estimate, which the organization attributed to an expected improvement in external demand.

Below are IMF's growth forecasts for major European economies this year: Germany: 1.1 per cent; France: 1.3 per cent; Italy: 0.5 per cent and Spain: 1.6 per cent.

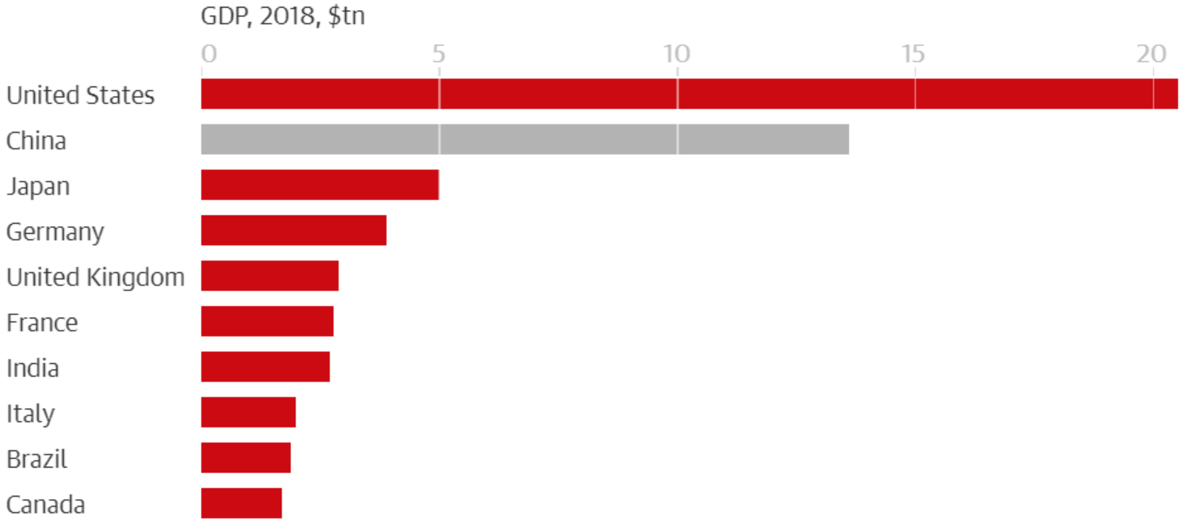
2. **Global impact of Coronavirus**

Coronavirus has infected close to 40,000 people, the vast majority of them in China, and killed more than 800 and spread to almost 30 countries. Given China's huge importance to the global economy, the ripple effect could be lasting.

Why is China so Vital?

China's extraordinary economic surge over the past 40 years has resulted in it becoming the world's second biggest economy, with a GDP of USD 13.6 Trillion (compared with USD 20.5tn for the US). Annualized growth of 7 per cent and more – way beyond the capacity of developed economies – has become the norm.

China has grown faster than any big economy to become the world's second biggest by GDP



Guardian graphic | Source: World Bank

China reached this position by ousting the US as the fulcrum of global trade. China is the largest trader of merchandise in the world, and is fast catching the US in commercial services following an 18 per cent growth spurt in 2018. The long-held practice of sourcing components and widgets from Chinese companies, and the country's vast and growing domestic market, has encouraged thousands of foreign businesses to open their own factories on the mainland, join local distribution networks and open shops.

China is also central to a diverse range of global supply chains - much of the world's raw materials travel to China before being turned into a manufactured product. Last year's battle with the US over import tariffs on billions of dollars' worth of goods illustrated the power of the Chinese economy to disrupt and disturb the global outlook.

How is Coronavirus affecting economic activity within China?

Most industries in China shut down over the two weeks around the lunar New Year. The majority of factories were not expected to open again until this weekend and some have delayed opening until 14 February as a precaution, as millions of people remained locked down in dozens of cities across the country.

Small and medium-sized businesses, which operate on short-term contracts and with only small financial and physical reserves, are known to already be in trouble. Reports from regions across China's central belt tell of livestock farmers only days away from running out of feed.

Wuhan, a city of about 11 million people and centre of the outbreak, is a large industrial centre, a regional hub, an important cog in the automotive industry and a magnet for foreign firms. It is the third largest education and scientific base in China, with two top-10 universities. It is impossible to think that weeks of standstill will not have a considerable impact on economic output. Chinese President Mr. Xi Jinping has also accepted the vast economic impact of the outbreak. In response, the authorities are redoubling efforts to shore up the economy, slashing tariffs on US imports, and making borrowing cheaper for businesses and consumers.

China's economy grew by 6 per cent last year, which was the lowest rate for almost 30 years and a big drop from the 10.2 per cent achieved in 2010. There were hopes that 2020 would prove to be a period of recovery following a protracted trade war during 2019 with the US Trump administration. However, the coronavirus makes that unlikely. Most analysts are still predicting growth well above 5 per cent for the Chinese economy, based on what is known so far about the virus's spread, and the likely impact on consumers, businesses and government.

Importantly, investors hoping for a decisive rebound once the outbreak is contained are likely to be disappointed. Huge overhang of bad debts plague China's ageing state-run industries as a drag on growth over several years. China's central bank has begun to pump extra funds into the economy to maintain borrowing while the virus takes hold, mainly to boost business investment, but these funds, while they are cheap and plentiful, are mainly used to keep zombie companies from going bust.

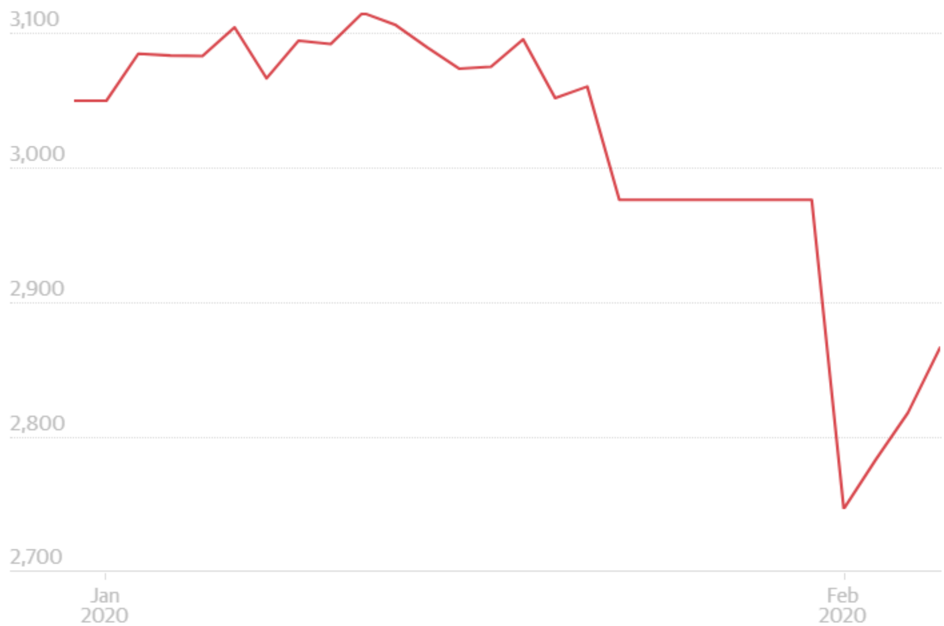
Impact on Stock Market and Other Key Indicators?

Asian stock markets endured a seesaw month last month, tumbling early because of a slump in retail, consumer services and transport businesses, before recovering amid hopes that the virus outbreak could be contained. Western markets largely followed suit.

Source: Guardian

The Shanghai market fell heavily last week

Shanghai SE Composite



Guardian graphic | Source: Refinitiv

But oil prices came under pressure too, amid anticipation of a slowdown in global demand, as did other raw materials. China is the world's largest crude importer and also a big consumer of metals such as copper and iron ore.

Oil prices have fallen sharply as the coronavirus has spread

$US per barrel

Guardian graphic | Source: Refinitiv

Which Countries will be Worst Affected?

South-East Asia is most exposed, so tightly are local economies tied to the Chinese markets. Here, it's worth remembering that Asia's worst post-war financial crisis in 1997-98 was partly blamed on the devaluation of the Chinese currency.

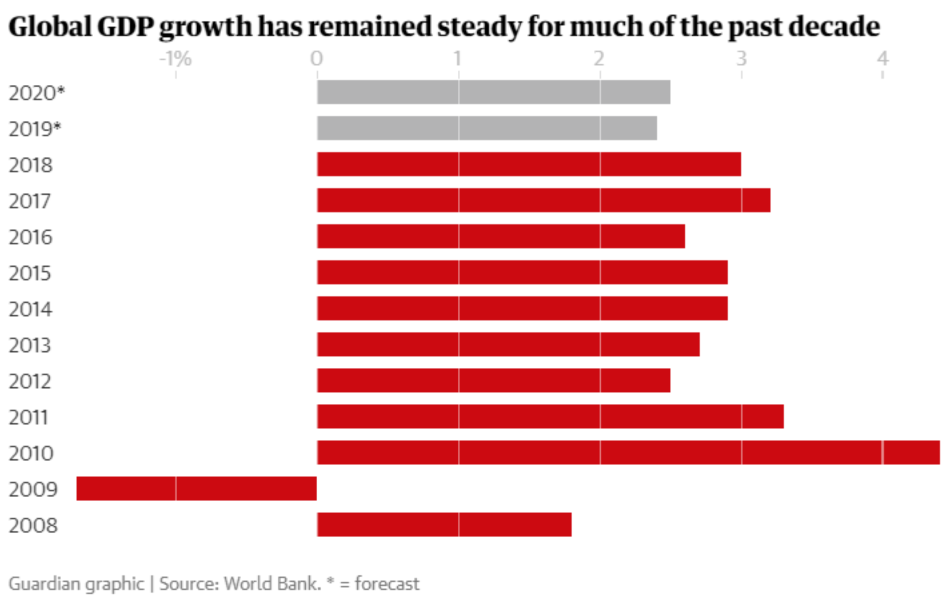
Japan may be a richer economy, but it too is exposed. China is a big buyer of Japan's industrial machines, its cars and trucks and technologically advanced consumer goods. Chinese-made parts go in the other direction, feeding components into Japanese factories.

And then there are the millions of Chinese tourists who visit their eastern neighbour each year. Already Japan is bracing for cancellations from 400,000 people in the first quarter of 2020.

Australia's economy is tightly interconnected with China too, and the Prime Minister, Scott Morrison, warned last week of "a real weight on the economy". Even Australian universities are suffering because far fewer Chinese students have returned to enroll for the new academic year.

Overall Impact on Global Economy

Economists are cautiously speculating that the perhaps 0.3 percentage points may be shaved off global growth, though it would remain somewhere around the 3 per cent mark.



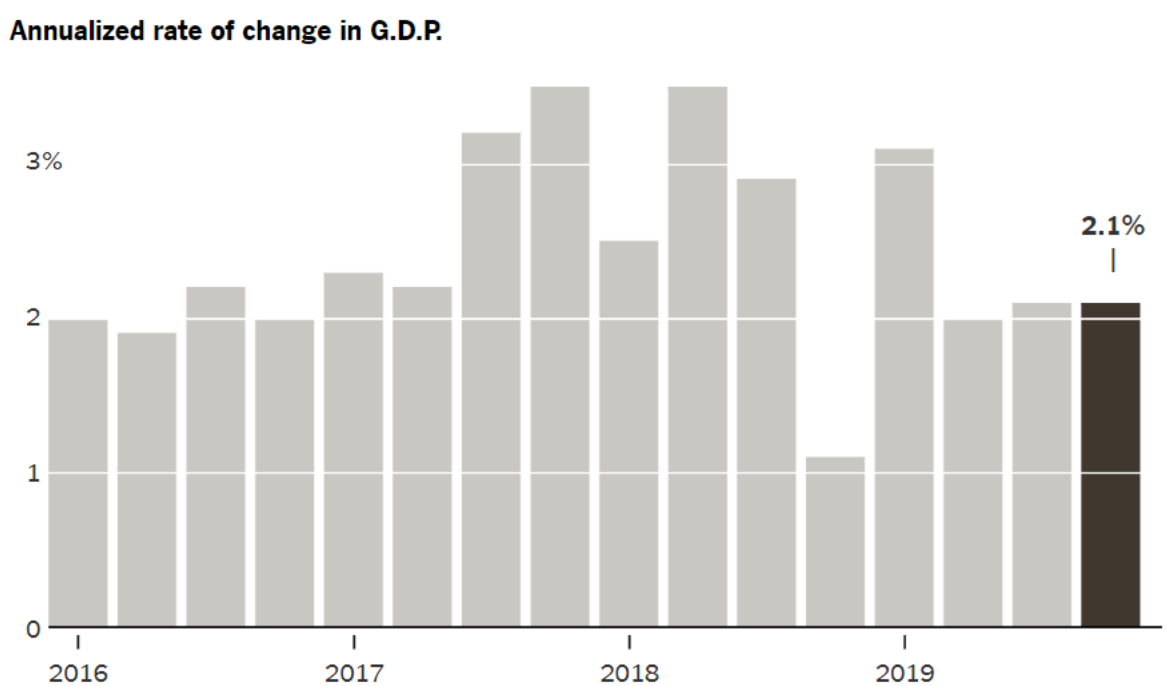
Analysts at Barclays suggest the impact on the world economy could range from almost no change to its current global growth forecast of 3.3 per cent for 2020 to growth of about 3 per cent. Others are gloomier still, warning that if the virus continues to spread and Chinese activity remains deeply disrupted for months, a contraction of the global economy is not impossible, particularly as central banks have little effective monetary ammunition for emergencies.

3. **US GDP recorded slowest growth under President Donald Trump's rule**

Economic growth continued to moderate at the end of 2019 but maintained a solid enough pace to keep the record long expansion on track in the eleventh year.

The US Commerce Department estimated that the Gross Domestic Product (GDP), a broad measure of all goods and services produced in the nation, rose by 2.1 per cent between October and December. In the previous three months GDP rose by the same percentage. Economists had expected 2 per cent growth in the third quarter.

That brought full year GDP growth to 2.3 per cent the weakest rate since President Donald Trump took office and short of the 3-4 per cent growth his administration has long pledged to deliver. GDP growth has consistently registered significantly below that target throughout the President's term, undermining a key talking point as he campaigns for re-election this November.



Source: the New York Times

4. **Despite resentment to President Bolsanaro's free market policies, Brazil's economy to strengthen in 2020**

Brazil's economy will slowly regain health this year, riding on firmer consumer spending and a boost from privatizations, dispelling fears of the kind of social unrest affecting other Latin American nations. The economy is expected to grow 2.1 per cent in 2020, almost twice the official forecast for 2019.

Many private forecasters are wary of predicting a stronger recovery after three years of meagre growth that have marked the weakest-ever recovery from recession. Despite sweeping reforms and the privatization of state-run businesses, the Government has failed to inspire a consistent economic upswing.

Analysts at Goldman Sach's predict a 2.7 per cent rise in consumer spending this year from 1.8 per cent in 2019. However, significant slack in the labour market and subdued consumer confidence may cap the buoyancy of the recovery.

Hopes for a quicker turnaround last year were dashed as economic sentiment took a hit when President Bolsonaro's drive to overhaul the country's pension system met unexpected resistance from lawmakers, who eventually passed a diluted bill. Market participants are now placing their bets on new proposals aimed at further reducing the size of the state and generating extra income, like the planned sale of Brazil's largest utility, state-run Centrais Eletricas Brasileiras SA, known as Eletrobras.

Expectations are high despite emerging signs of more trouble in Congress. Officials will have a short time window to push for significant changes before attention starts focusing on the campaign for local elections in October. Brazil's central bank will do its part, keeping rates at record lows for more than one year. President Bolsonaro's free-market policies have faced intense opposition and protests. However, severe discontent, of the type that struck neighbouring Andean countries in 2019, has been absent since many voters still believe in his promises of progress.

5. **Changes in taxation may lead to economic boom in post-Brexit UK**

Following the exit from the European Union at the end of last month, the UK is now able to review and reshape its tax policy as an independent economy following the transition period. A recently published report looked at nine key taxation areas that could benefit from possible changes, including R&D, free ports, energy tax, income tax, corporation tax rate, VAT and 'free trade' rules.

According to the report, the UK government faces a major opportunity to reshape its tax system to ensure the economy becomes more internationally competitive. For instance, a combination of three high-impact measures – increased R&D incentives, creation of free ports, and a regional corporate tax system with lower average rates – could provide a 7 per cent boost to GDP, amounting to EUR 150 billion, or nearly EUR 5,500 per household over a 20-year period.

Meanwhile, a decrease in VAT on electricity of five percentage points and an increase in VAT on domestic energy derived from fossil fuels of five percentage points would lower domestic energy consumption in the U.K. by 1.2 per cent and lower domestic fossil fuel use by 1.5 per cent.

Increase in R&D and IP incentives

Currently spending is lagging behind other developed countries such as France and Germany. Increased incentives would drive UK business investment in R&D while both increasing international competitiveness and boosting productivity. Each EUR 1 of tax saved with tax credits stimulates EUR 1.62 of higher R&D spending and each 10 per cent rise in R&D spending drives an average 1.3 per cent increase in output.

Creation of free ports

The UK's ports currently account for 96 per cent of all trade volumes and 75 per cent of trade value. The reintroduction of free ports would build on the strength of existing port infrastructure, encouraging regional productivity and prosperity. Each free port in the United Kingdom would create an average of 13,500 jobs and EUR 800 million of GDP per year over a 20 to 25-year period.

Introduction of a regional corporate tax system

A 10-percentage point reduction in the rate of corporate tax leads to an increase in GDP of 1.2 per cent, driving growth in regions across the country. The change would also raise foreign direct investment by 1.6 per cent post-Brexit, equivalent to EUR 34 billion.

Changes in the energy tax

After Brexit, the UK will be free to set its own rates for energy taxes, which could help reduce the UK's carbon footprint. A decrease in VAT on electricity by five percentage points and an increase in VAT on domestic energy from fossil fuels of five percentage points would lower domestic energy consumption in the UK by 1.2 per cent and lower domestic fossil fuel use by 1.5 per cent. A lower rate of VAT on energy-saving materials could also make the economy greener.

Lower income tax

A one percentage point decrease in the rate of income tax raises national gross domestic product, on average, by 1.4 per cent over two years.

Changes to / possible overhaul of VAT

Reducing the VAT threshold from EUR 85,000 to EUR 43,000 would affect about half a million businesses and increase Treasury receipts by up to EUR 1.5 billion a year.

Simplification of the current tax system

A single consolidated tax could save small businesses EUR 7,700 per year, on average, in administrative and compliance costs and free up twelve days per year for more productive work.

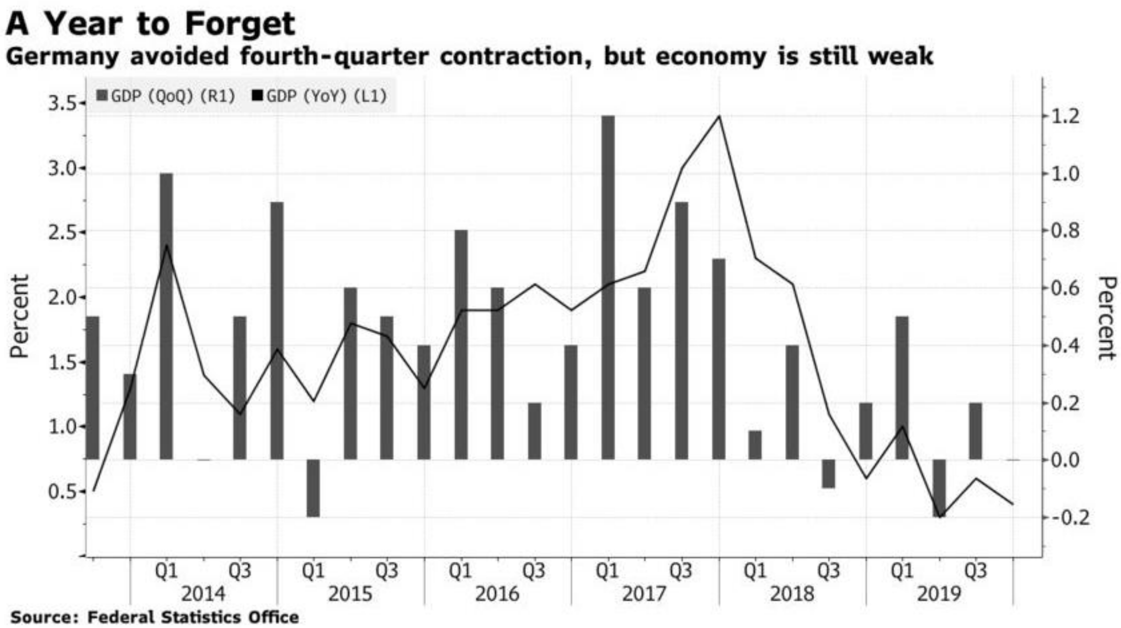
Establishment of a 'unilateral free trade' model

A partial unilateral free trade approach, reducing tariffs to their 'most favored nation' levels, would reduce annual household bills by EUR 113 a year, with a fall in prices of 0.5 per cent.

6. In the new year, German economy faces threat of an impending recession

Germany entered 2020 with a stagnating economy and manufacturers in distress, leaving it ill prepared for continued trade uncertainty and the new coronavirus threat.

Europe’s largest economy has been battered by multiple forces that have turned it from a growth engine to one of the region’s weakest performers. Expansion last year was just 0.6 per cent and 2020 may be little better. The euro-area economy grew 1.2 per cent in 2019, though the pace was just 0.1 per cent in the fourth quarter.



On top of global factors, Germany has had to deal with domestic issues from struggling lenders to climate-related upheaval in the car industry. One bright spot in has been the labour market -- in Germany and the broader euro area. Employment growth in EU, the 19-nation bloc, accelerated to 0.3 per cent at the end of 2019.

If looking for more positives, Germany avoiding contraction -- which some saw as a risk -- should silence speculation for the moment that it’s getting closer to a recession. But the bad news still dominates, and is weighing on the euro, which is at the lowest against the dollar in almost three years. Yields on 10-year German debt remain stuck well below zero.

In the fourth quarter, Germany saw a sharp slowdown in consumer and government spending, a significant drop in equipment investment, and a drag from trade. 2020 was supposed to see recovery, an outlook that’s now in question amid continued weakness in industry plus fallout from the virus outbreak in China. Business is already feeling the impact of the epidemic. Volkswagen AG was among the companies forced to shut their Chinese plants, and Daimler sees weaker Mercedes Benz sales this year.

In its economic outlook, the European Commission singled out the coronavirus, which has killed more than 1,000 people in China, as a “key downside risk.” The Asian country is a huge market for German companies. Outside the European Union, it’s second only to the U.S. in importance, with close to EUR 100 billion (USD 108 billion) of sales a year.

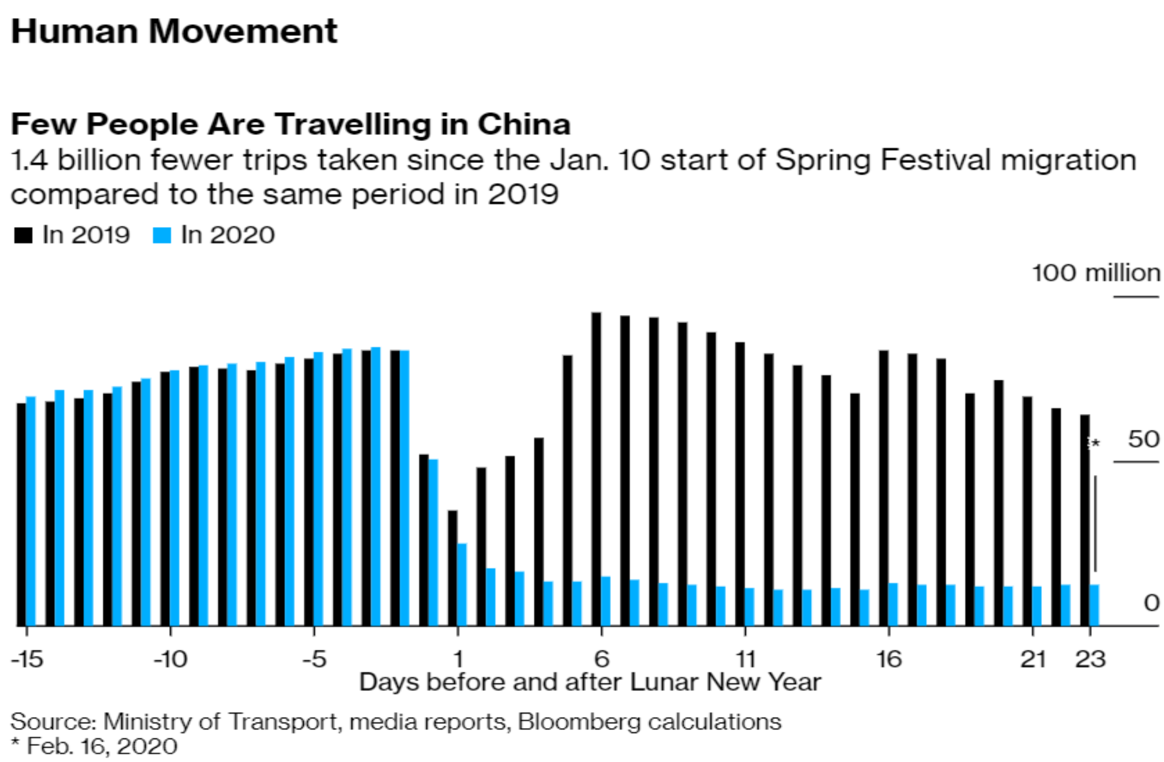
Analysts are of the opinion that looking ahead, the latest soft indicators and industrial data for December do not bode well for the short-term outlook. Also, the impact from the coronavirus on the Chinese economy is likely to delay any rebound in the manufacturing.

7. Coronavirus outbreak leads to a manufacturing slowdown in China

Today the biggest question that the Global economy faces is how quickly China can get back to anything close to normal operations while it's battling the coronavirus outbreak that has killed almost 1,900 people and sickened tens of thousands.

Government controls and people's fears to go outside have decimated spending for businesses. Meanwhile, many factories are still not operating due to a lack of staff, with workers trapped in their hometowns or spending two weeks in quarantine.

China's economy was likely running at just 40-50 per cent capacity last week, according to a Bloomberg Economics report. The following data track how much of the world's second-largest economy remains out of action:

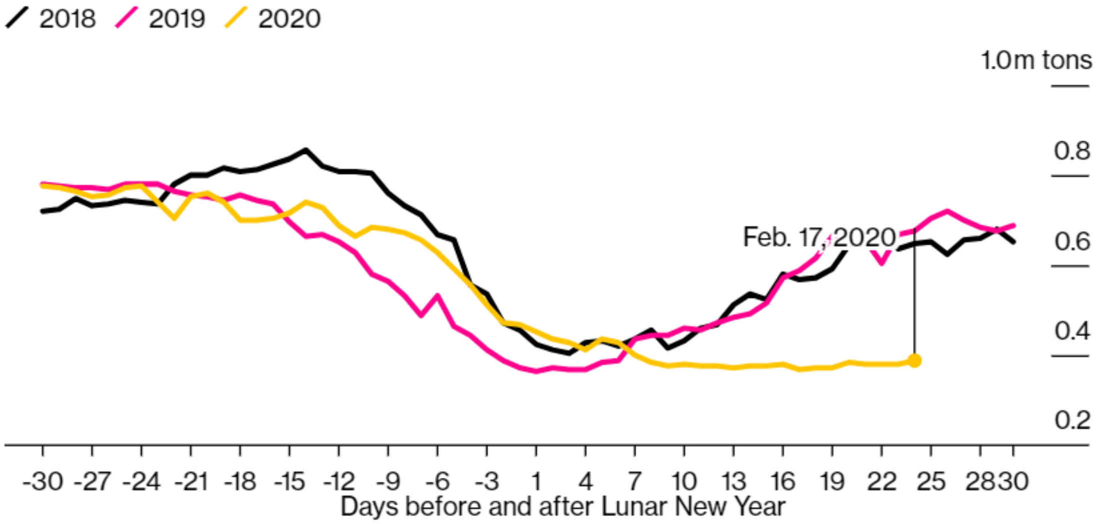


About the same number of trips by planes, trains, automobiles and boats was taken in the run up to the Lunar New Year this year compared to last year, but the fall off since the first day of the Year of the Rat on January 25 has been stark. On average, there's only about 20 per cent as many trips being taken each day, meaning millions of people still haven't travelled back to work. And with long-distance buses only allowed to operate at 50 per cent capacity to reduce the risks of viral transmission, that backlog will take a long time to clear.

Industrial Demand

Power Demand Still Low

Thermal coal usage in China still at holiday lows



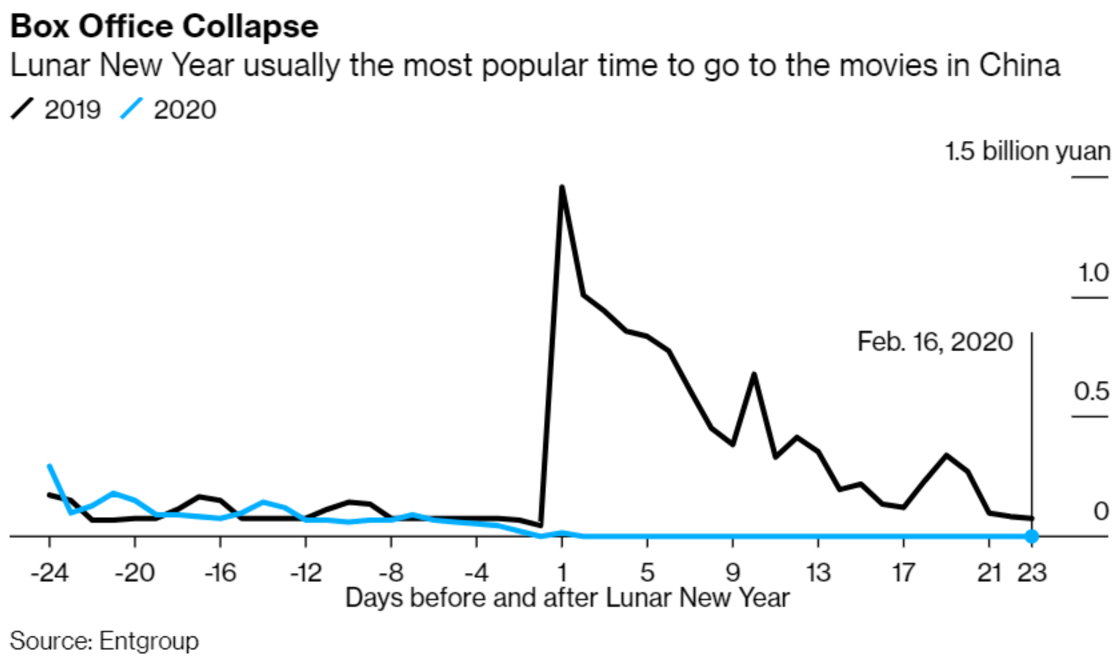
Source: China Coal Transport & Distribution Association, showing daily coal consumption for 6 major coastal power groups

Although some companies, especially large state-owned industrial firms and those making medical equipment, have ramped up output, demand for electricity is still well below where it should be at this time of year. Along with anecdotal reporting from across China's vast east-coast manufacturing heartland, the power numbers suggest much of the nation's industrial capacity remains idle.

Emissions of NO2 in the week after the holiday were 36 per cent lower than the same period in 2019, according to the Centre for Research on Energy and Clean Air, which cited satellite data. A recent report suggests that the slowdown of 25-50 per cent across industrial sectors such as oil refining, coal-fired power generation and steel production contributed to the drop, according to the independent research organization.

A recent survey of 109 American manufacturing companies in and around Shanghai found that almost 70 per cent are still operating and more than 90 per cent are expected to come back by the end of the month. The survey pointed out that over 78 per cent of the firms complained about insufficient staff to run a full production line.

Alibaba Group Holding Ltd, the first major Chinese technology corporation to report results since the epidemic emerged in January, said the virus is undermining production and has changed buying patterns, with consumers pulling back on discretionary spending, including travel and restaurants.



Even if people do want to spend, many shops are shut and online & offline retailers are facing logistical problems to supply customers. That situation may continue until the virus is contained, people are back at work and getting paid, and they feel confident to spend again.

8. In spite of weak growth, India emerges as the fifth largest global economy

A recent report suggests that India has emerged as the world's fifth largest economy by overtaking the UK and France in 2019.

A US-based think tank 'World Population Review' in its report said that India is developing into an open-market economy from its previous closed market policies. India's economy is the fifth largest in the world with a GDP of USD 2.94 Trillion, overtaking the UK and France in 2019 to claim the fifth spot.

The size of the UK economy is USD 2.83 trillion and that of France is USD 2.71 trillion. The report further said that in purchasing power parity (PPP) terms, India's GDP (PPP) is USD 10.51 Trillion, exceeding that of Japan and Germany. Due to India's high population, India's GDP per capita is USD 2,170.

The report highlighted that India's real GDP growth, however, is expected to weaken for the third straight year from 7.5 per cent to 5 per cent. It observed that India's economic liberalization began in the early 1990s and included industrial deregulation, reduced control on foreign trade and investment, and privatization of state-owned enterprises. According to the report these measures have helped India accelerate economic growth.

India's service sector is the fast-growing sector in the world accounting for 60 per cent of the economy and 28 per cent of employment, adding that manufacturing and agriculture are two other significant sectors of the economy. The US-based World Population Review is an independent organization without any political affiliations.

9. Moody's Further downgrades India's growth forecast for 2020

At the Budget Session, Union Finance Minister Ms. Nirmala Sitharaman told Parliament that "green shoots were visible" indicating that the economic slowdown might be over. Recovery was on the cards. However, a recent report points out that there is marked decline in growth projections for Indian economy compared to various forecast made in November 2019.

In four months' time, Moody's has slashed growth forecast for Indian economy to 5.4 per cent from 6.6 per cent for 2020 -- a difference of over one percentage point. The updated GDP growth estimate for 2021 is 5.8 per cent, down from 6.7 per cent. Moody's estimated that Indian economy grew by 5 per cent in 2019. It is the same estimate that Ms. Sitharaman projected for GDP growth for 2019-20 financial year. This comes on the back of a rather distressing quarterly GDP growth rate figure of 4.5 per cent for July-September 2019, the slowest in more than six years. At 5 per cent, the GDP growth rate for 2019-20 is the lowest in 11 years.

Moody's predicts that GDP growth rate staying at around 5.4 per cent this year is much lower than the government's estimate. The Economic Survey estimated that Indian economy would grow by 6-6.5 per cent in 2020-21. But Moody's downward revision of the growth figures raises a doubt on assertion of economic slowdown having bottomed out.

Moody's pins its hope on the easing of key rates by the Reserve Bank of India, which has been cautious in the wake of rising retail inflation. The RBI, however, slashed repo rate by a cumulative 135 basis point through 2019. But further easing of the rates would depend on how inflation stays.

Retail inflation, measured on the Consumer Price Index, hit a 68-month high of 7.59 per cent in January 2020. The RBI aims to cap inflation at 4 per cent over the medium term. Its mandate for retail inflation is in the target range of 2-6 per cent. High inflation dictates what the RBI does with the key banking rates.

10. Union Budget 2020-21

The Hon'ble Finance Minister Smt. Nirmala Sitharaman presented the Union budget for financial year 2020-21 in Lok Sabha on February 1, 2020. She informed that the Economic Survey has projected economic growth at 6-6.5 per cent during the next financial year commencing April 1. Apart from the introducing new tax slabs and unraveling the outcomes of the Economy Survey, the Government has also revealed major plans for other sectors as well. There were three major themes for Union Budget 2020 – 21:

a. **Aspirational India**: better standards of living with access to health, education and better jobs for all sections of the society
b. **Economic Development:** "Sabka Saath, Sabka Vikas, Sabka Vishwas"
c. **Caring Society:** Both humane and compassionate; Antyodaya (helping the under privileged and oppressed) as an article of faith

Key budgetary allocations are as under:

Rural development	INR 1.23 lakh crore	USD 17,571.43 Million (Approx.)[3]
Agriculture and rural	INR 2.83 lakh crore	USD 40,428.57 Million (Approx.)
Agriculture credit target	INR 15 lakh crore	USD 214,285.71 Million (Approx.)
Education	INR 99,300 crore	USD 14,185.71 Million (Approx.)
Healthcare	INR 69,000 crore	USD 9,857.14 Million (Approx.)
Transportation infrastructure allocation	INR 1.7 lakh crore	USD 24,285.71 Million (Approx.)

Below are the highlights of Union Budget 2020 – 21

Tax

A new tax regime has been announced. Those who want to be in the old regime with exemptions can continue to pay at the old rates.

Between ₹5 lakh and ₹7.5 lakh	Reduced to 10% from the current 20%
Between ₹7.5 lakh to ₹10 lakh	Reduced to 15% from the current 20%
Between ₹10 lakh to ₹12.5 lakh	Reduced to 20% from the current 30%
Between ₹12.5 lakh to ₹15 lakh	Reduced to 25% from the current 30%
Above ₹15 lakh	Continue at 30%, but without exemptions

Source: The Hindu

Over 70 deductions have been removed. Companies will no longer be required to pay Dividend Distribution Tax (DDT). Aadhaar-based verification for GST compliance to be introduced.

Economy and Finance:

Bank deposit insurance cover had been increased from Rs1 lakh to Rs 5 lakh per depositor. Government plans to amend the Companies Act to decriminalize civil offences. Government to sell part of its stake in LIC via public offering.

Agriculture:

- A budget allocation of ₹2.83 lakh Crore for the sector comprising agriculture and allied activities.
- Doubling farmer's incomes by 2022.
- Agri-credit availability set at ₹15 lakh Crore for 2020-21.
- Comprehensive measures for 100 water stressed districts.
- Provide 20 lakh farmers to set up standalone solar pumps. Help another 15 lakh farmers to solarize their power grid.
- Village storage scheme proposed to be run by women SHGs.
- Indian Railways to have refrigerated coaches capability in 'Kisan trains' to carry perishables and milk.
- Krishi UDAN on international and national routes.

Health and Sanitation:

- An allocation of ₹69,000 Crore for the health sector.
- ₹12,300 Crore for Swachh Bharat this year.
- Proposal to set up hospitals in Tier-II and Tier-III cities with the private sector using PPP.
- Expand Jan Aushadhi scheme to provide for all hospitals under Ayushman Bharat by 2025.

Education:

- ₹99,300 Crore for education sector in 2021 and about ₹3,000 Crore for skill development.
- Urban local bodies to provide internship to young engineers for a year.
- Degree-level full-fledged online education programmes by institutions ranked in top 100 in NIRF rankings, especially to benefit underprivileged students.
- A national police university and a national forensic science university are proposed to be setup.
- IND SAT exam for students of Asia and Africa to promote "study in India" programme.

Infrastructure:

- Budget proposes to provide ₹1.7 lakh Crore for transport infrastructure in 2021
- National Logistics Policy to be released soon.
- Chennai-Bengaluru Expressway to be started.
- Aim to achieve electrification of 27,000 km of lines.
- Plan to have a large solar power capacity for Indian Railways.
- The government also proposes a Bengaluru suburban rail project at a cost of ₹18,600 Crore.
- Government to monetize 12 lots of national highways by 202
- 100 more airports will be developed by 2024 to support UDAN

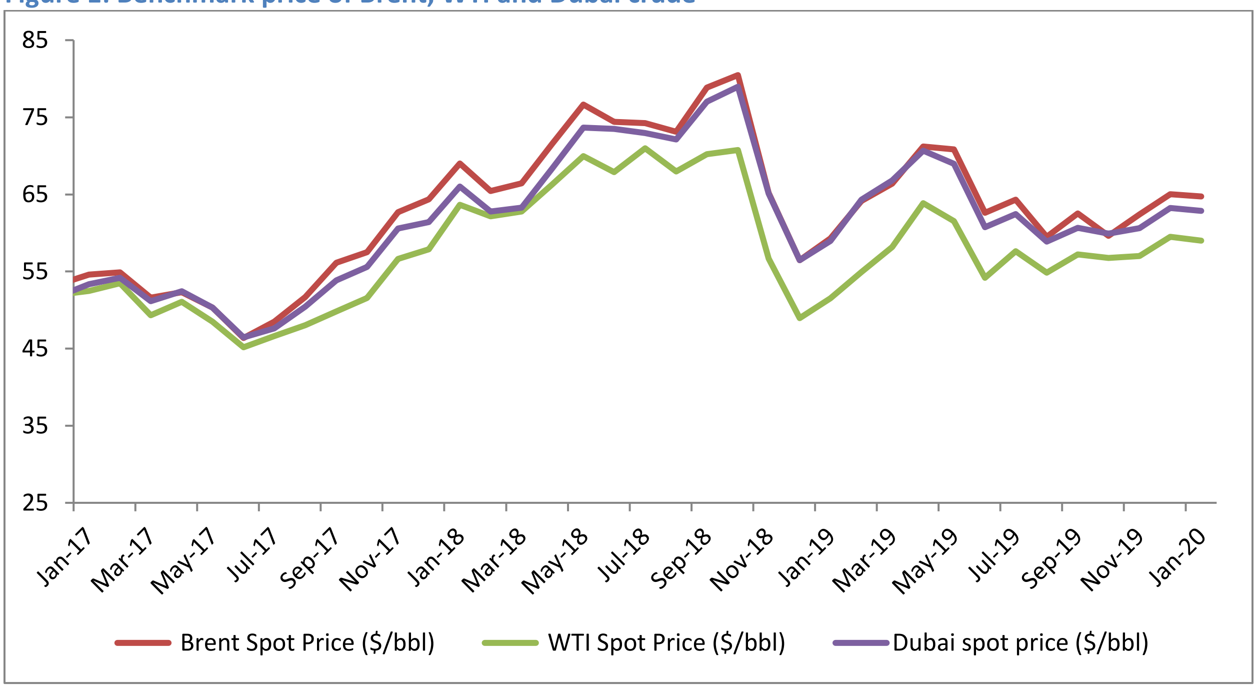
Oil & Gas Market

Crude oil price

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 1: Benchmark price of Brent, WTI and Dubai crude



Source: WORLD BANK

- Brent crude price averaged $64.75 per bbl in January 2020, and was down by 0.4 % and up by 9.2 % on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged $ 58.98 per bbl in January 2020, and was down by 0.8 % and up by 14.5 % % on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged $62.88 per bbl in January 2020, and was down by 0.6 % and up by 6.6% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in January, 2020

Crude oil	Price ($/bbl) in January 2020	MoM (%) change	YoY (%) change
Brent	64.75	-0.4%	9.2%
WTI	58.98	-0.8%	14.5%
Dubai	62.88	-0.6%	6.6%

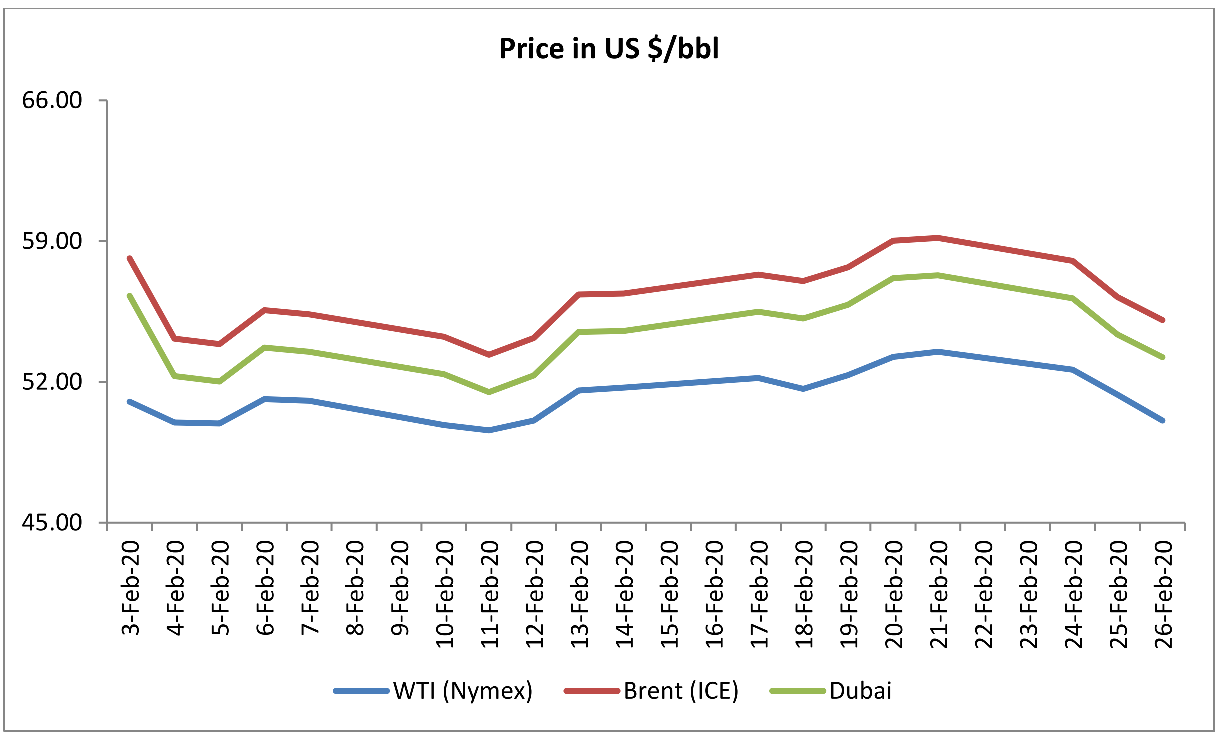
- *Source: WORLD BANK*

Crude price decline in February 2020

Outbreak of coronavirus continued to impact the global crude oil benchmarks in the month of February. Travel restrictions, flight cancellations have led to reduction for crude oil in China, one of the largest importers of crude oil. Thin hope of production cuts led crude benchmarks to rise in the third week of February, however it failed to sustain and the prices declined again.

Average Brent, WTI and Dubai basket crude prices went down by 13.24 %, 13.07% and 13.61 % respectively from the prices in the month of January.

Figure 2: Crude oil price in February 2020

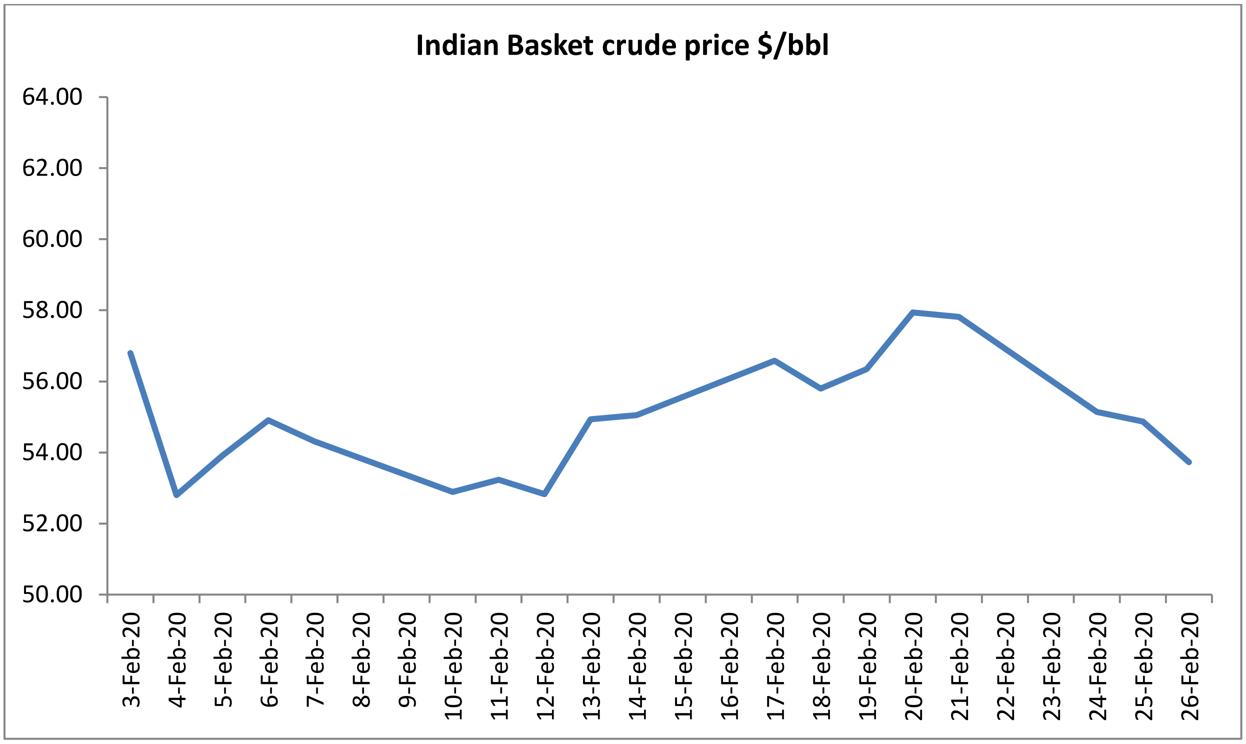


Source: EIA

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

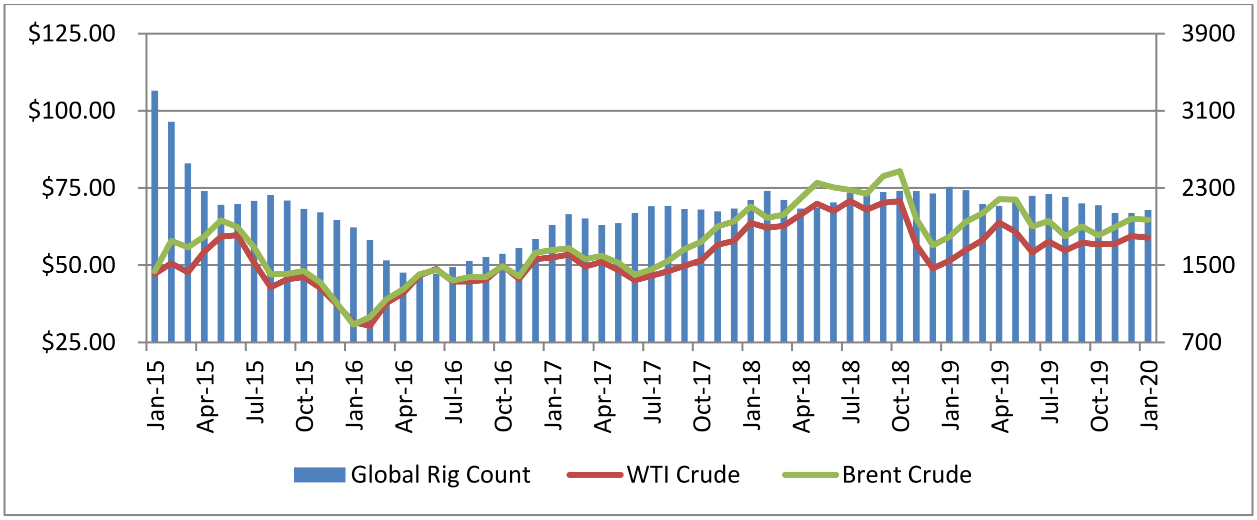
- Indian crude basket price averaged $54.99 per barrel in February, down by 13.92 % on Month on Month (M-o-M) and 14.78% on a year on year (Y-o-Y) basis, respectively.

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

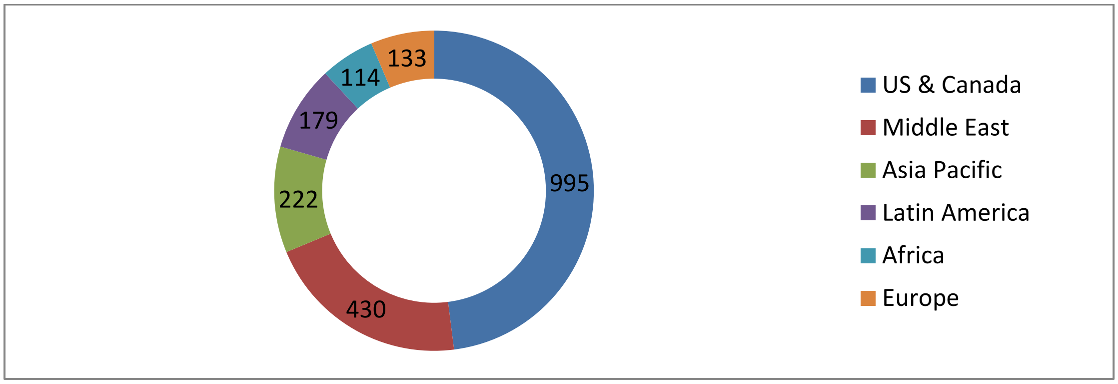
In January 2020, global drilling rig count stood at 2,073, thirty up from December's count. Onshore rig count increased by 44 and while offshore rig count went down by 14. Major chunk of the increase in rig counts came from Canada due to seasonality, while rig count declined in all other places namely Africa, Asia Pacific, Europe, Latin America and USA. Rig count dropped by 13 in the United States to reach 791. 770 were onshore rigs and 21 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 January 2020	MoM (%) change	YoY (%) change
Land	1,805	2.50 %	-11.24 %
Offshore	268	-4.96 %	0.75%
Total	2,073	1.47 %	-8.48 %

Source: Baker Hughes

Figure 5 Geography-wise Rig count - January 2020



Source: Baker Hughes

Indian Drilling Rig Count

Indian rig count remained unchanged in the month of January 2020. On Y-O-Y basis, Indian rig count declined by 11.38 % in 2020 as compared to January 2019. 77 were onshore rigs and the rest 32 were offshore rigs.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

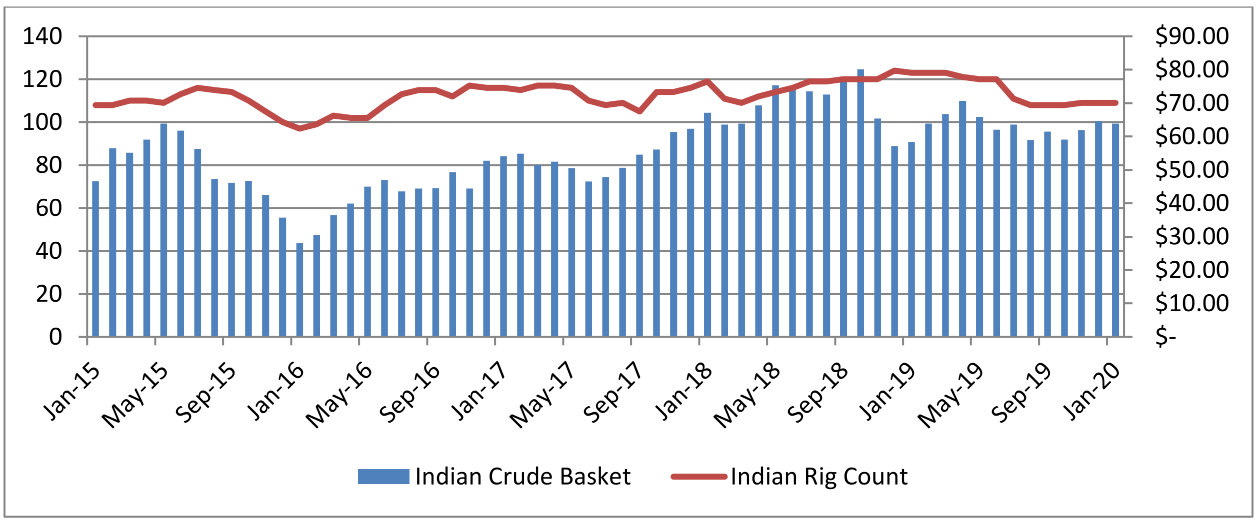


Table 3 : Indian Rig Count

Rig Type	Count in January 2020	MoM (%) change	YoY (%) change
Land	77	0.0 %	-9.41 %
Offshore	32	0.0%	-15.79 %
Total	109	0.0%	-11.38 %

Source: Baker Hughes

Oil demand & supply

Preliminary data indicates that global oil supply decreased by 0.01 mb/d m-o-m to average 100.12 mb/d in January 2020, compared with the previous month. Non-OPEC supply (including OPEC NGLs) increased by 0.5 mb/d m-o-m to average 71.26 mb/d in December. Incremental production from the US, Canada, Malaysia, the UK, Qatar and Russia was driving the non-OPEC oil supply. The share of OPEC crude oil in total global production decreased by 0.5% to 28.8% in January 2020 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 0.10 mb/d from last month's assessment and the forecast is at 2.25 mb/d for an average of 66.60 mb/d. The downward revision mainly comes from US. Decline in US production is partially offset by upward adjustments from the other region. World oil demand was revised by 0.23 mb/d lower than previous month. Demand for oil in 2020 is forecasted to increase by 0.99 mb/d. Oil consumption is expected to reach 100.73 mb/d in 2020.

Table 4: World Oil demand in mbpd

	2019	1Q2020	2Q2020	3Q2020	4Q2020	2020	Growth	%
Total OECD	**47.97**	**47.67**	**47.09**	**48.53**	**48.61**	**47.98**	**0.01**	**0.02**
Dev. Countries	**33.10**	**33.51**	**33.49**	**34.17**	**33.92**	**33.79**	**0.68**	**2.05**
~ of which India	*4.85*	*5.14*	*4.85*	*4.64*	*5.32*	*4.99*	*0.14*	*2.82*
Other regions	**18.67**	**18.33**	**18.87**	**19.00**	**19.85**	**19.02**	**0.35**	**1.85**
~ of which China	13.06	12.77	13.37	13.17	13.84	13.29	2.23	1.74
Total world	**99.74**	**99.51**	**99.36**	**101.62**	**102.38**	**100.73**	**0.99**	**0.99**

Source: OPEC monthly report, February 2020

*Note: *2019 = Estimate and 2020 Forecast*

Global petroleum product prices

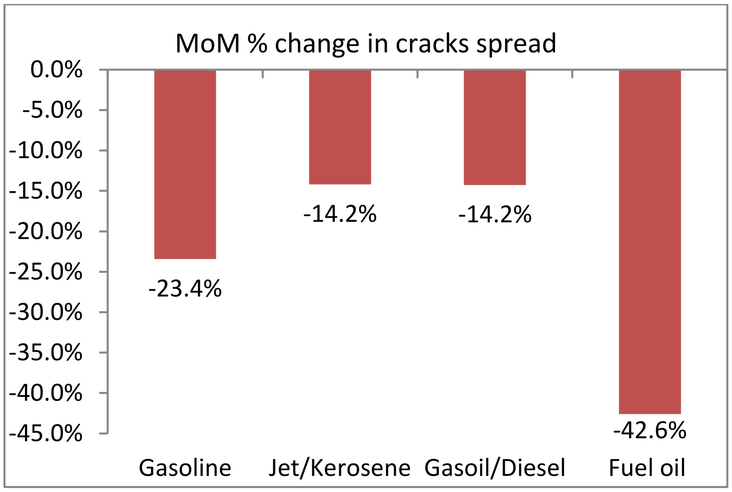
Prices in the Asian Gasoline-92 market saw a decline in price by 3.2 % in the month of January due to ample inflow of gasoline. Refinery margins saw marginal gains du e to robust fuel oil demand from within the region. Refinery margins for Oman in Asia gained 35¢ on m-o-m to average -88/b, but were lower by $4.02 on y-o-y basis.

Singapore Gasoline cracks averaged $4.98/b against Oman, down by $ 1.50 m-o-m, but up by $ 4.93 y-o-y in January. Refinery utilization rates in December averaged 91.62 % in selected Asian markets comprising of Japan, China, India and Singapore.

Jet/Kerosene prices went down by 3.1% % in January Coronavirus outbreak in China caused flight cancellation during the peak travel season. The Singapore jet/kerosene crack spread against Oman averaged $11.24/b, down by $1.65 m-o-m and $1.44 y-o-y.

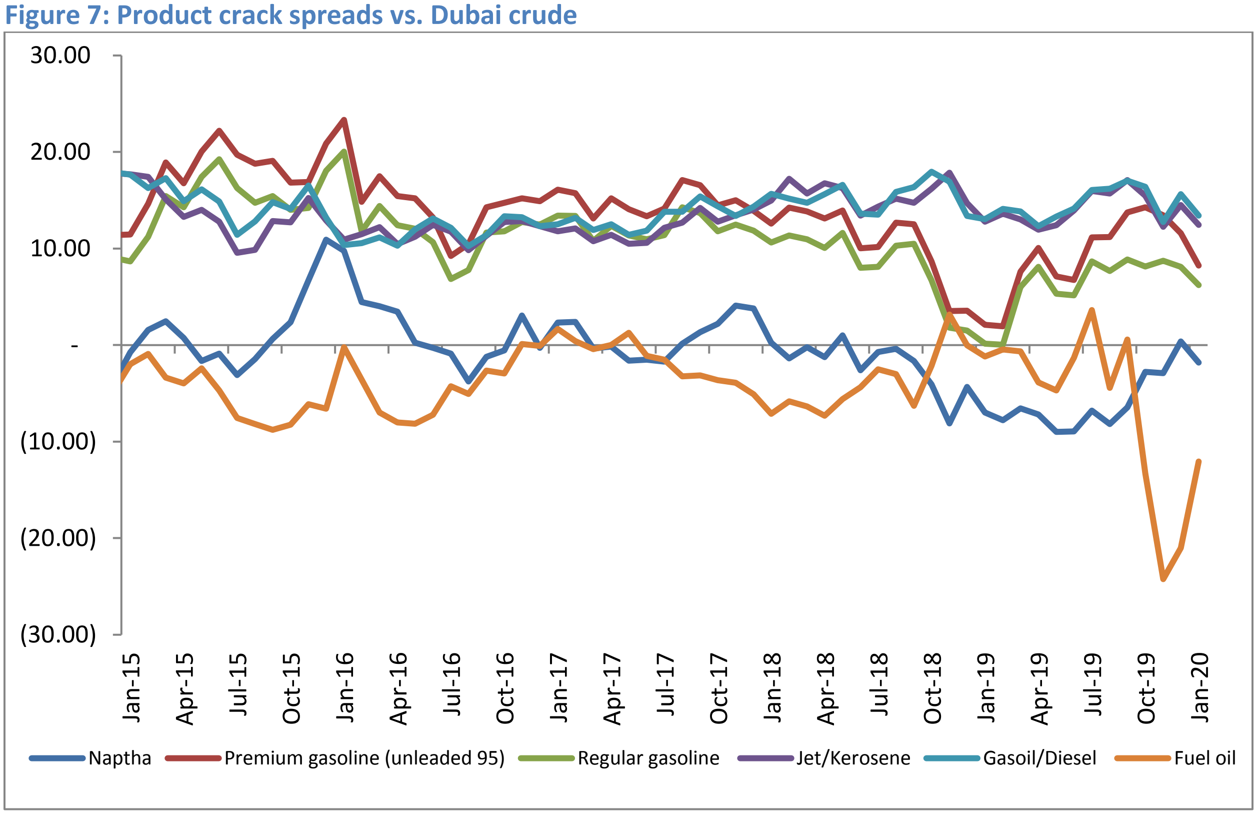
The Singapore gasoil crack spread dropped lighted and reached to 9-month low, due to healthy inventory levels despite the firm supplies from Russia. In January, gasoil price declined by 3.3%. Singapore gasoil crack spread against Oman averaged $12.20/b, down by $1.82 m-o-m and 74¢ y-o-y.

The Singapore fuel oil crack spread gained ground in January with the extension of the upward trend witnessed in the previous month. Tight supplies from refineries and lower feedstock prices, downward correction in freight rates attributed to the upward movement. Singapore fuel oil cracks against Oman averaged minus $13.28, up by $9.36 m-o-m, but down by $12.00 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 2020	MoM (%) change	YoY (%) change
Naptha	61.06	-4.0%	17.5%
Premium gasoline (unleaded 95)	71.13	-4.9%	16.5%
Regular gasoline (unleaded 92)	69.09	-3.2%	16.9%
Jet/Kerosene	75.34	-3.1%	5.0%
Gasoil/Diesel (50 ppm)	76.3	-3.3%	6.0%
Fuel oil (180 cst 2.0% S)	50.82	20.4%	-12.1%
Fuel oil (380 cst 3.5% S)	49.41	19.9%	-15.0%

Source: OPEC

Petroleum products consumption in India

- January 2020 saw a decrease in overall consumption by petroleum products by 0.4%
- In January, LPG consumption increased by 3.8 % on M-o-M basis for second straight month.
- Consumption of gasoline declined by 0.6% on M-o-M and up by 3.5% on Y-o-Y).
- Demand for diesel declined by 5.4 % on M-o-M basis in the month of January due to subdued industrial activity

Table 6: Petroleum products consumption in India, January 2020

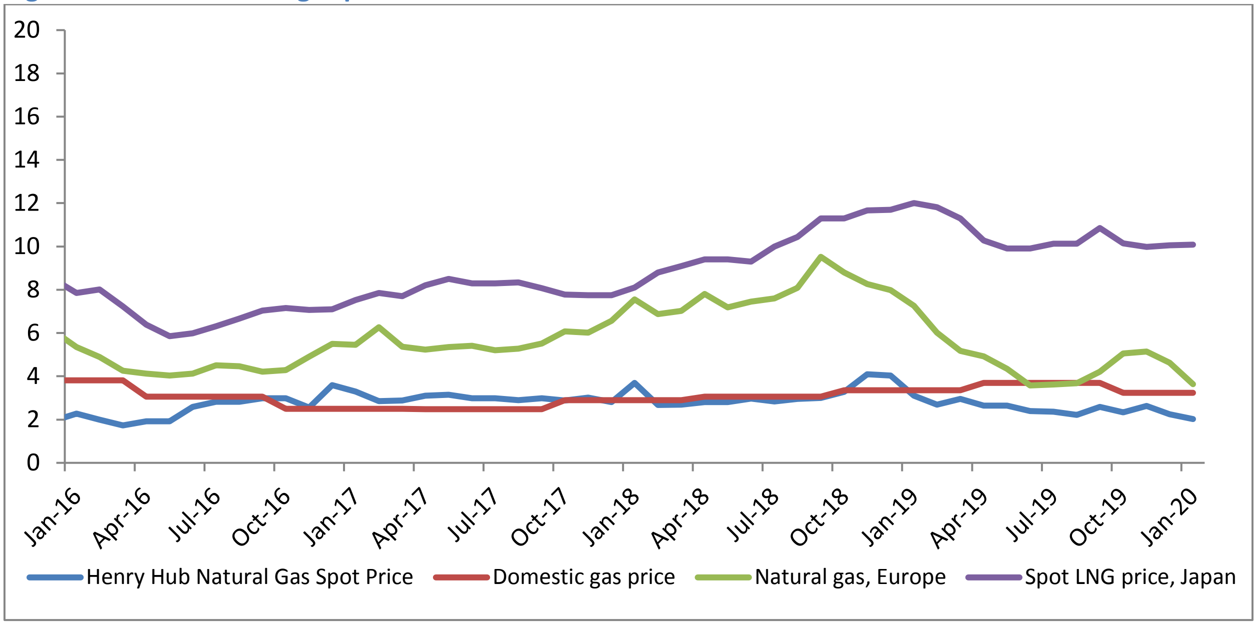
Petroleum products	Consumption in '000 MT January 2020	MoM (%) change	YoY (%) change
LPG	2,450	3.8%	6.0%
Naphtha	1,277	4.0%	1.4%
MS	2,456	-0.6%	3.5%
ATF	741	1.0%	0.5%
HSD	6,938	-5.4%	-1.8%
LDO	57	24.6%	-11.6%
Lubricants & Greases	327	-1.0%	-1.2%
FO & LSHS	489	-10.4%	-16.3%
Bitumen	595	4.8%	-9.4%
Petroleum coke	1,934	-1.4%	10.9%
Others	987	-6.4%	4.5%
TOTAL	18,413	-2.0%	0.4%

Source: PPAC

Natural Gas Price

In January, natural gas price at the Henry Hub decreased by 9.4 % to reach $2.03/MMBtu. Ample supplies and warmer than expected weather pushed the gas price four-year low.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

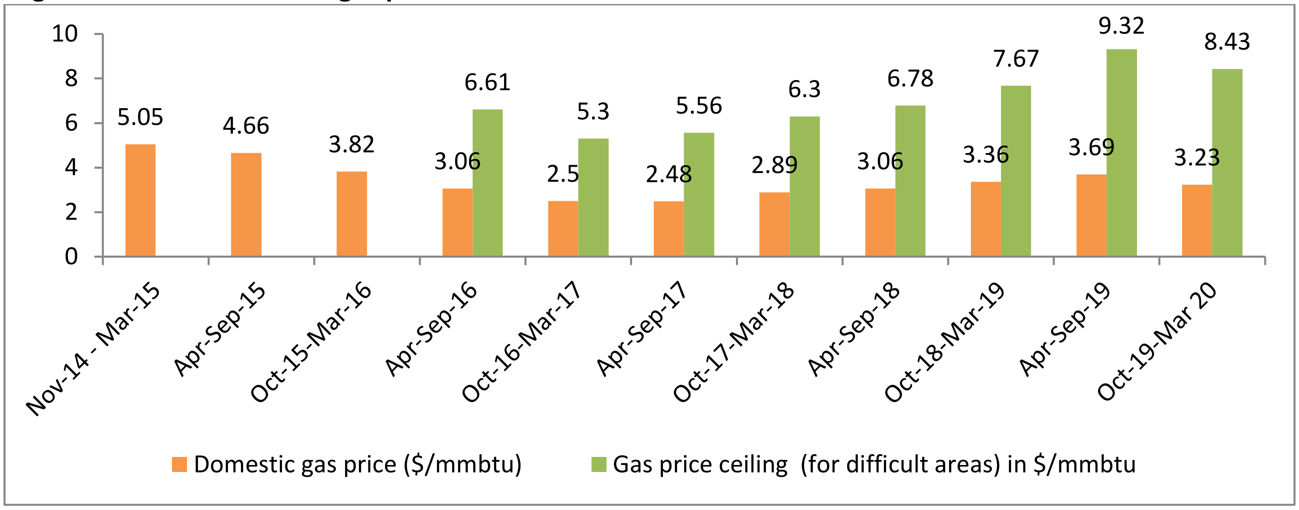
Natural Gas	Price ($/MMBTU) in January 2020	MoM (%) change	YoY (%) change
India, Domestic gas price	3.23	0.00 %	-3.9%
India, Gas price ceiling – difficult areas	8.43	0.00 %	9.90%
Henry Hub	2.03	-9.4%	-34.7%
Natural Gas, Europe	3.63	-21.4%	-50.0%
Liquefied Natural Gas, Japan (Long Term Contract, not Spot Market)	10.08	0.3%	-16.0%

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

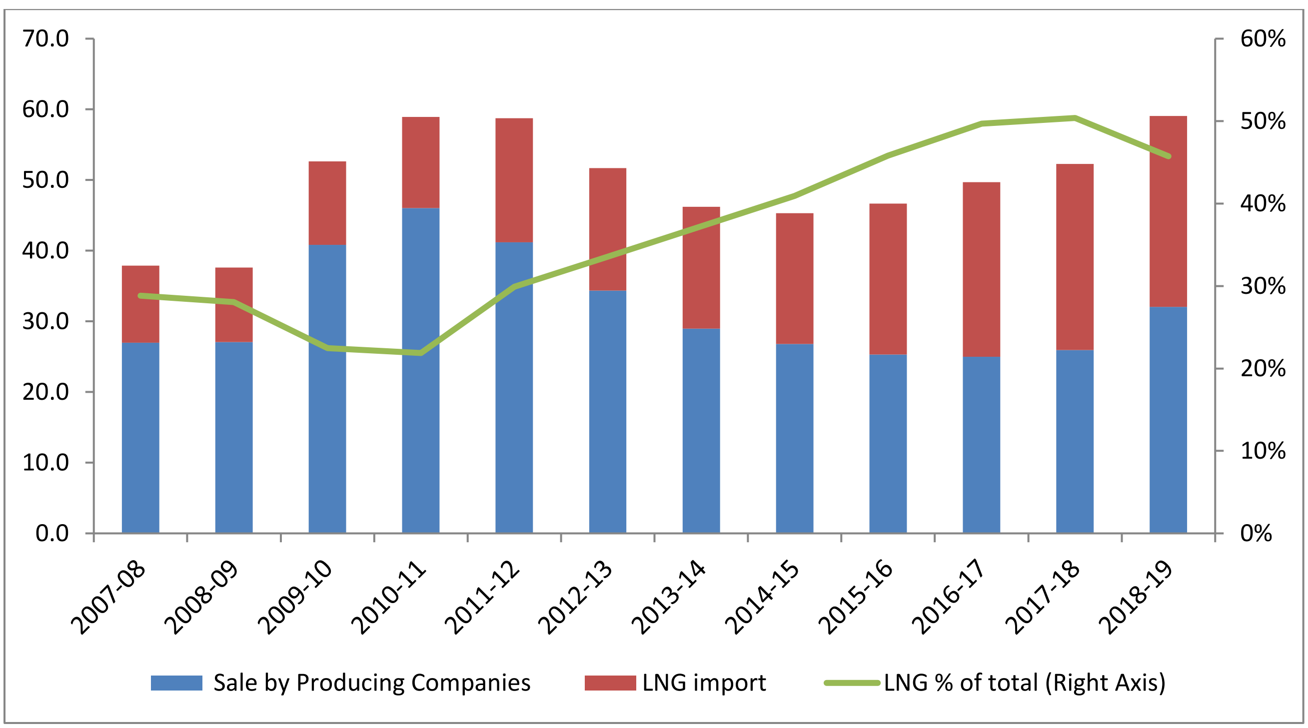


Source: PPAC

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 February 2020

- **Monthly Production Report for January, 2020**

Crude oil production during January, 2020 was 2696.77 TMT which is 12.48% lower than target and 5.30% lower when compared with January 2019. Cumulative crude oil production during April-January, 2019-20 was 27072.34 TMT which is 6.70% and 5.95% lower than target for the period and production during corresponding period of last year respectively.

Natural gas production during January, 2020 was 2606.67 MMSCM which is 13.49% lower than the monthly target and 8.26% lower when compared with January, 2019. Cumulative natural gas production during April-January, 2019-20 was 26427.23 MMSCM which is 7.74% and 3.87% lower than target for the period and production during corresponding period of last year respectively.

Refinery production during January, 2020 was 21679.19 TMT which is 2.86% lower than the target for the month and 1.21% lower when compared with January, 2019. Cumulative production during April-January, 2019-20 was 212064.08 TMT which is marginally higher by 0.54% than the target for the period but 1.19% lower than production during corresponding period of last year respectively.

- **Future of India's energy sector will be driven by new technology and business models, says Shri Dharmendra Pradhan**

Minister of Petroleum & Natural Gas and Steel Shri Dharmendra Pradhan has said that future of India's energy sector will be noticeably different from its current avatar, to be driven by new technology and business models. In his inaugural address at the 10th World PetroCoal Congress here on 15th of February, he said "We are encouraging our oil & gas companies to develop extensive and qualitative engagement with Indian technology and research institutions of excellence. I am happy that seven Indian oil & gas PSUs joined with IIT Bombay last year to set up a Centre of Excellence in oil, gas and energy. Energy transition currently underway can become more manageable only if proactive measures are set in motion. Digital technologies are transforming the energy sector in a profound manner. Industrial Revolution 4.0 is truly at our door step. Indian energy companies will have to quickly adopt and adapt these technologies at a faster pace. We need to create more innovative platforms in India for convergence of leading global technology leaders in the energy sector.

- **Plan to Reduce Country's Oil Import**

Ministry of Petroleum and Natural Gas is working in collaboration with various Central Government Ministries/State Governments/ stakeholders to make efforts to achieve reduction in import dependency on oil. The import reduction strategy broadly includes increasing domestic production of oil and gas, improving energy efficiency and productivity, giving thrust on demand substitution, promoting biofuels and using alternate fuels/ renewables.

Government has taken several steps to enhance exploration & production of oil and gas in the country which include; Policy for Relaxations, Extensions and Clarifications under Production Sharing Contract (PSC) regime for early monetization of hydrocarbon discoveries, Discovered Small Field Policy, Hydrocarbon Exploration and Licensing Policy, Policy for Extension of Production Sharing Contracts, Policy for early monetization of Coal Bed Methane, Setting up of National Data Repository, Appraisal of Unappraised areas in Sedimentary Basins, Re-assessment of Hydrocarbon Resources, Policy framework to streamline the working of Production Sharing Contracts in Pre-NELP and NELP Blocks, Policy to Promote and Incentivize Enhanced Recovery Methods for Oil and Gas, Policy framework for exploration and exploitation of Unconventional Hydrocarbons under existing Production Sharing Contracts, Coal Bed Methane contracts and Nomination fields.

The Government in February, 2019 approved major reforms in exploration and licensing policy to enhance exploration activities, attract domestic and foreign investment in unexplored/unallocated areas of sedimentary basins and accelerate domestic production of oil and gas from existing fields. The policy reforms inter-alia, aims to boost exploration activities with greater weightage to work programme, simplified fiscal and contractual terms, bidding of exploration blocks under Category II and III sedimentary basins without any production or revenue sharing to Government, early monetization of discoveries by extending fiscal incentives, incentivizing gas production including marketing and pricing freedom, induction of latest technology and capital, more functional freedom to National Oil Companies for collaboration and private sector participation for production enhancement methods in nomination fields, streamlining approval processes and promoting ease of doing business including electronic single window mechanism.

Government has also taken a number of initiatives to encourage the use of alternative fuels like ethanol and bio-diesel through Ethanol Blending in Petrol (EBP) Programme and Bio-diesel blending in diesel. Government has formulated a National Bio Fuel Policy 2018 to boost availability of biofuels in country. Government has launched a Sustainable Alternative Towards Affordable Transportation (SATAT) initiative for producing Bio CNG by setting up 5000 Bio-CNG plants in next five years. With a view to promote bio-fuels, the three oil marketing companies (OMCs) have invited Expression of Interests (EoIs) to produce bio-diesel from Used Cooking Oil (UCO), with an assured price and assured off take guarantee.

A Committee was constituted by the Government for “Preparing a roadmap to reduce the dependency on import in energy by 10% by 2021-22”. The report submitted by Committee was accepted by the Government which envisages five-pronged strategy broadly comprises of increasing domestic production of oil and gas, promoting energy efficiency and conservation measures, giving thrust on demand substitution, capitalizing untapped potential in biofuels and other alternate fuels/ renewables and implementing measures for refinery process improvements.

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