FIPI

FEDERATION OF INDIAN PETROLEUM INDUSTRY

POLICY & ECONOMIC REPORT

OIL & GAS MARKET

DECEMBER 2020

Table of Contents

Executive Summary

What a year it has been. This time in 2019, we had no idea what 2020 held in store for us. During the year, Indian economy went through turmoil, rarely seen in the history of human kind. As we enter the new year the world is still grappling with the horrors of COVID-19. As on 31 December, 2020, the number of COVID cases worldwide has reached over 82.7 million and has claimed the lives of over 1.8 million globally.

In all major global economies the results of the third quarter of 2020, brought some respite from the otherwise gloomy year. Growth was certainly lifted by extraordinary fiscal and monetary stimulus measures across the globe. In addition, forced private household savings in 1H20 mainly in OECD economies supported pent-up demand. This was reflected in quickly recovering consumption, leading to improving global trade and also to some extent rising investment. This dynamic was also reflected in the rebound in global consumer confidence. Apart from affecting the present economic climate, the COVID-19 pandemic has changed the world in ways no other global event has ever had. Diversification of supply chains, rise of satellite cities, increasing economic disparity and a greater awareness about the environment will emerge as some of the lasting trends spurred by the pandemic.

The highlight of the year for the global economy remained the signing of trade deal between Britain and Europe. The Brexit agreement that has been prepared over a period of four years manages to avoid the worst case scenario of new tariffs and quotas. This has come as a major relief and provides the companies with a greater scope of work for containing the damage from the COVID-19 pandemic. The separation of the UK and the EU will still lead to significant disruption for a range of industries. Mutual recognition of standards, which would have allowed firms to make products in the U.K. and market them in the EU without any extra certification process, isn't part of the deal.

In India, a remarkable fall in the number of new COVID-19 cases have been recorded in India in December. The daily Coronavirus cases that rose to close to a lakh every day in September dropped to below 20,000 by end of December. The Government of India and all respective states are at an advanced stage in to finalize the roll out of vaccination programme in the country by end of January. The general mood in the country seems optimistic for the upcoming year and the same also reflects on most economic parameters.

Global crude oil benchmarks was in the range of USD 60 at the beginning of 2020. In the month of February, spread of Covid-19 in China, led to the drop in crude price. By March, crude benchmarks were down by almost 50% from January's price. Implementation of lockdown, restriction of transport, closure of borders led to the decline in demand for crude oil globally. Crude benchmarks saw a new low since the second Gulf war. Crude prices benchmarks recovered as OPEC and allies trimmed down production to remove the surplus crude oil from market. In the second half of 2020, crude benchmarks continued to trade in the range of USD 40/bbl. Hope of vaccine and resumption of economic activities has helped the crude oil prices to recover significantly in the month of December. Brent touched USD 50 mark, for the first time since March. However, average Brent, WTI and Dubai basket crude prices in December 2020 were down by 23.2 %, 21.2 % and 22.4% per cent respectively from their 2019 prices. India crude oil benchmark was down by 23.00 % on Y-o-Y basis.

Global rig count stood at 2,073 at the start of 2020. Buoyed by the stronger oil price and seasonality, it climbed to 2,125 in February. With the fall in oil price and reduction in demand for crude due to Covid-19, E&P companies restricted their exploration activities to save cash flow. With budget cuts, rig count continued to decline in a rapid phase, losing close to 1,000 rigs by May. Global rig count was globally down by 50% in the mid of 2020. Recovery of oil prices gave a momentum for E&P operators to increase the exploration activity. By the end of 2020, rig count stood at 1074, lower by 47.43% on Y-o-Y basis.

In 2020, average global oil demand was down by 9.77 mb/d from 2019 and stood at 89.99 mb/d. In Q1 2020, oil demand was down to 92.71 mb/d from 2019's demand of 99.67 mb/d. Spread of Covid-19 and the implementation of lockdown impacted the demand of crude oil globally. In Q2 2020, demand was down to 82.57 mb/d, down by close to 20%. With relaxation of lockdown and resumption of economic & industrial activities, crude oil demand recovered gradually in Q3 & Q4 of 2020. On Y-o-Y, crude oil demand was down by 9.79%.

Refinery margins went for a toss in 2020 as the demand for refined products decline due to the pandemic. Refinery margins for Oman in Asia lost 10¢ m-o-m to average $ 1.05/b in November. On Y-o-Y basis, refinery margin was higher by $ 1.64 despite the downturn faced in 2020. In the selective Asian markets comprising of India, Singapore, South Korea, Japan and China, refinery utilization rate was down by 4.6% from 92.6% from 2019 to reach 88 %.

On yearly basis, petroleum product consumption in India was down by 3.5%. In November, petroleum product consumption reached the pre-Covid levels due to the strong recovery in economic activities and consumer activities.

Natural gas price faced the turmoil caused by the Covid-19 pandemic. Lockdown and closure of industrial activities led to the decline in demand for LNG and CNG globally. In Henry Hub, gas price was lower by 0.8% on Y-o-Y to reach USD 2.61/MMBtu. Lowest price recorded in Henry hub in 2020 was USD 1.61/MMBtu, in June. Europe gas market saw unseen decline in gas price due to decline in demand for gas in major markets like Italy, Germany, France and the UK. In May 2020, natural gas price in Europe reached a new low of USD 1.58/MMBtu. However, it recovered later as the industrial consumption improved and arrival of winter bolstered the demand for natural gas. On Y-o-Y basis, European gas price is lower by 6.00 % while Japanese LNG benchmark was down by 37.8% on Y-o-Y in 2020. Asian spot LNG prices stood at two-year high on the account of stronger winter demand, delivery price for January 2021, stood around $8.10/MMBtu. In India, domestic gas price was changed twice in 2020 as per the gas pricing formula. Domestic gas price for April 2020 to September 2020 was $2.39/MMBTU and price for deep water, ultra-deep water, and high-pressure high temperature field was $ 5.61/MMBtu. Domestic gas price for October 2020 to March 2021 is $1.79/MMBTU and price for deep water, ultra-deep water, and high-pressure high temperature field is $4.06/MMBtu.

Policy & Economic report – Oil & Gas market

Economy in Focus

1. Taking stock of the major economic events and trends of 2020

The COVID-19 virus has put the world economy through one of the worst recession seen in the recent times. The pandemic is not over yet and no clear timeline are visible yet to put an end to the sufferings. The recent progress with COVID-19 vaccination has brightened the outlook for the new year 2021. Some economists are still skeptical about the timely and effective roll out of the vaccination programmes across countries. They believe that a slower roll out of vaccines in 2021 could hamper the return of activity to pre-pandemic levels.

Even among the most advanced economies, especially Europe and the US, renewed lockdowns in an effort to avoid the resurgence of the virus has put the economic recovery through a palpable risk. A recent report by the CITI Bank mentions that "The vaccine discovery is a shot in the arm, but not until 2022,". The report further said "Still, there will be "clear improvement" in the global economy in 2021, partly because "it's not hard to be better than 2020."

UK finalizes the long awaited post-Brexit trade deal

On the Christmas day of 2020, the long awaited Brexit deal was the UK Prime Minister Mr Boris Johnson's gift to the nation. The post-Brexit trade deal is unique in that it will leave businesses will face more barriers for trade than they did while the UK was part of the European Union (EU). However, this is widely seen as the price the country is set to pay to reclaim its sovereignty. Through this deal, Britain has now taken back the control on its domestic fishing waters and ended the role of the European Court of justice.

While the agreement tries to ensure that most of the goods traded between the two regions face minimum tariffs and quotas, British exporters are expected to see a wide variety of hurdles to do business in and with Europe.

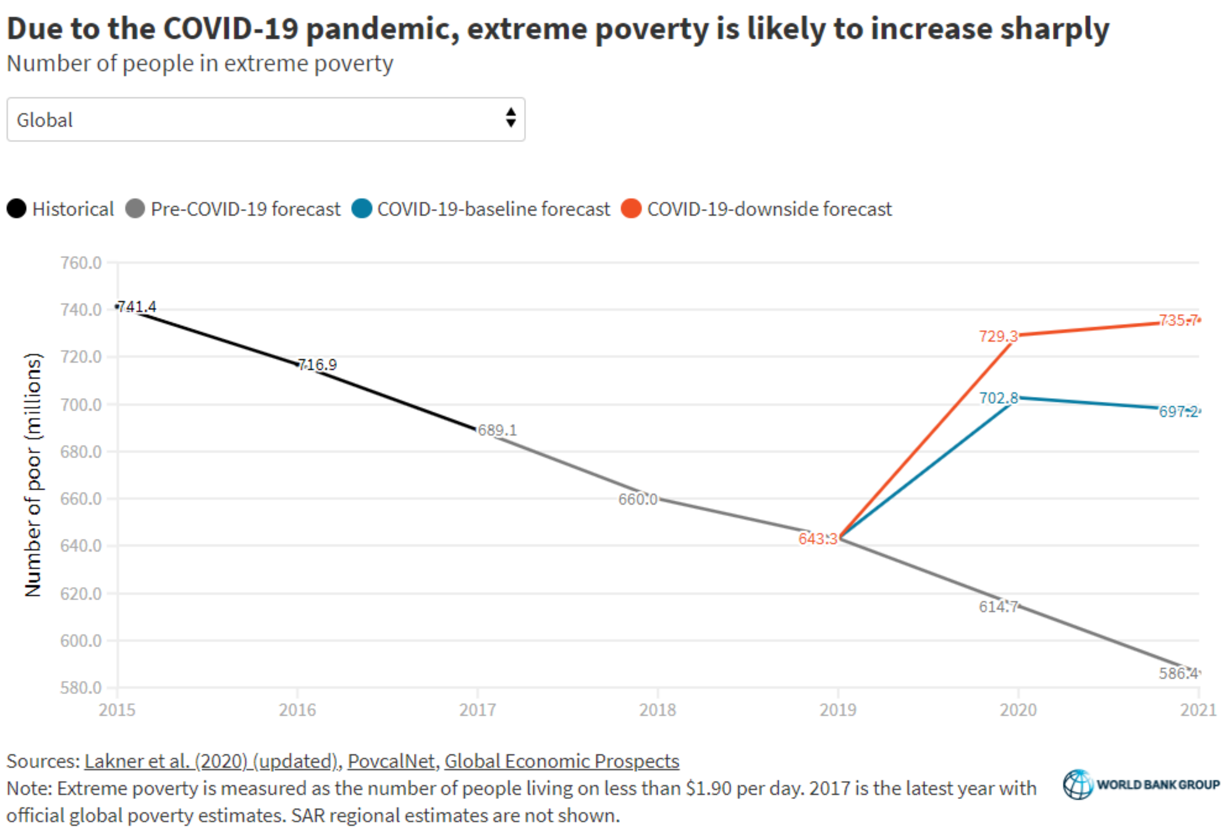
Below are some of the key features of the deal:

- **Access to market:** UK and EU will continue to face tariff free and quota free treatment
- **Origin of goods:** New rules require the UK to self-certify the origin of its exports to EU. Some of the products that contain a higher percentage of inputs from outside the EU and UK will face new tariffs
- **Health certificates for agri-products:** The EU will require UK agri-food exporters to provide health certificate and undergo sanitary and phyto sanitary controls at border inspection posts

- **Testing and Certification:** Due to the absence of mutual recognition agreements, UK regulatory bodies won't be able to certify products for sale in the EU. This may prove to be a huge trade barrier for UK based companies
- **Trade remedies:** The UK and EU may pursue tariffs and other sanctions according to the rules established by World Trade Organization (WTO)

Increased Poverty

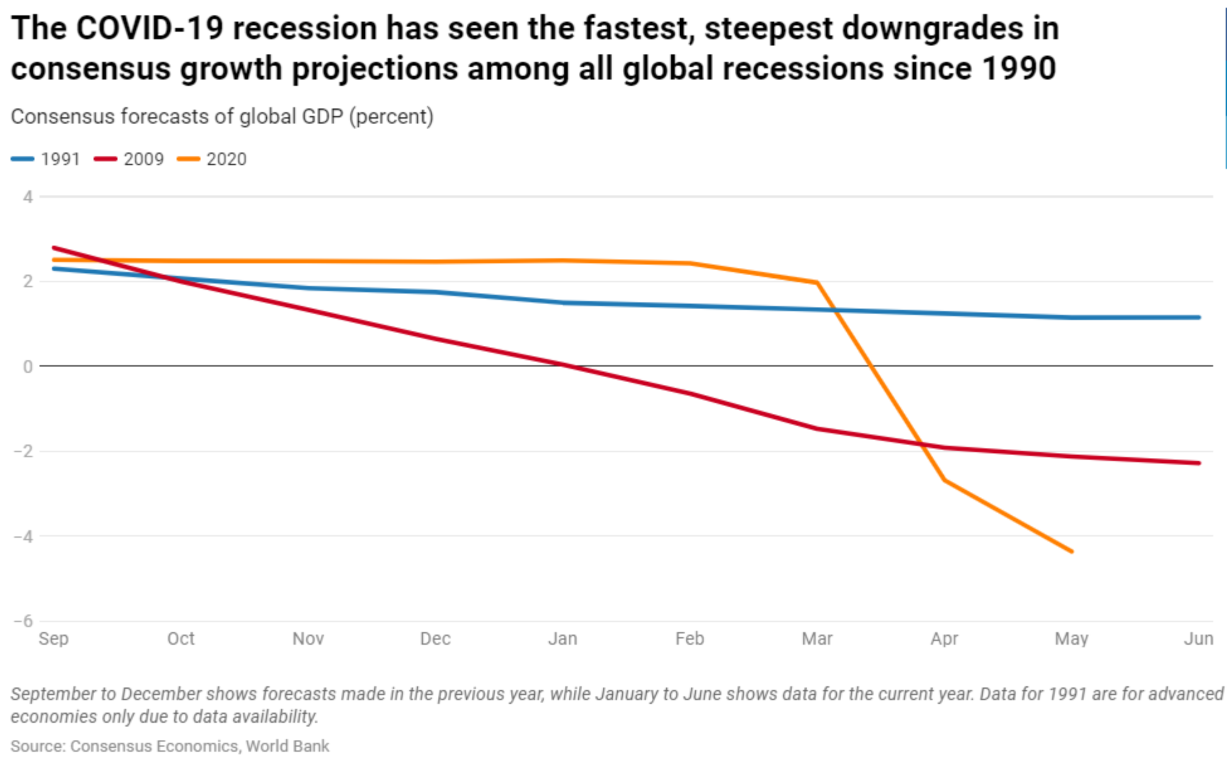
Over the past 12 months, the pandemic has harmed the poor and vulnerable the most, and it is threatening to push millions more into poverty. This year, after decades of steady progress in reducing the number of people living on less than USD 1.90/day, COVID-19 will usher in the first reversal in the fight against extreme poverty in a generation.



The latest report warns that COVID-19 has pushed an over 88 million people into extreme poverty in 2020 under the base case scenario. In a worst-case scenario, the figure could be as high as 115 million. The World Bank Group forecasts that the largest share of the "new poor" will be in South Asia, with Sub-Saharan Africa close behind. According to the latest Poverty and Shared Prosperity report, "many of the new poor are likely to be engaged in informal services, construction, and manufacturing – the sectors in which economic activity is most affected by lockdowns and other mobility restrictions.

Unprecedented Economic slowdown

The lockdowns implemented across countries to stop the spread of COVID-19 pandemic in the first half of 2020 has had an enormous impact on global economic growth. COVID-19 has triggered a global crisis like no other – a global health crisis that, in addition to an enormous human toll, is leading to the deepest global recession since the Second World War. The Global Economic Prospects (GEP) claims that the global economy as well as per capita incomes would fall considerably this year



Increased Government Debts

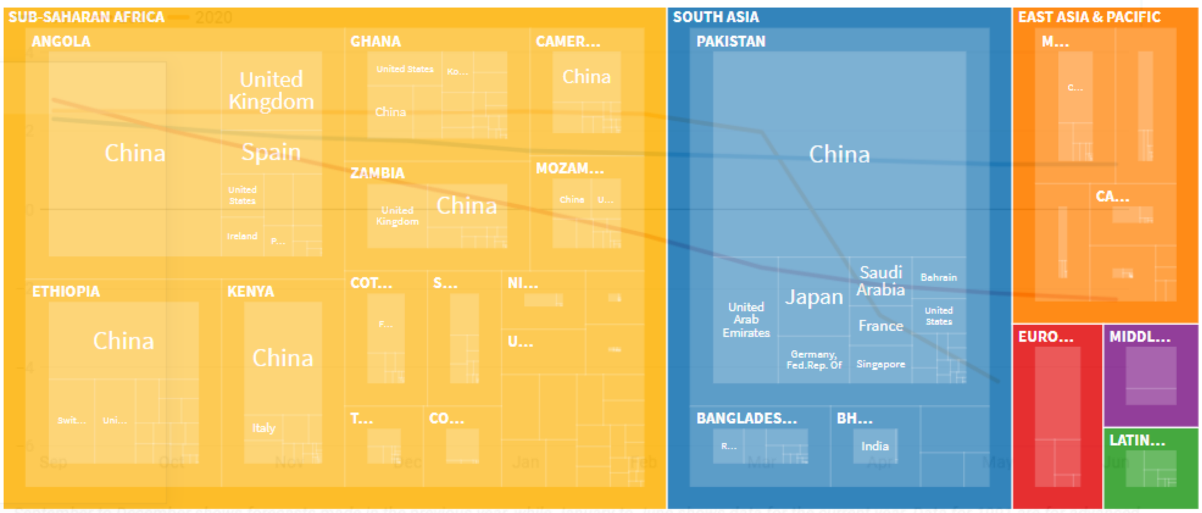
This economic fallout is hampering countries' ability to respond effectively to the pandemic's health and economic effects. Even before the spread of COVID-19, almost half of all low-income countries were already in debt distress or at a high risk of it , leaving them with little fiscal room to help the poor and vulnerable who were hit hardest. Taking account of the widespread lockdowns, World Bank and IMF called for the suspension of debt-service payments for the poorest countries to allow them to focus resources on fighting the pandemic. The Debt Service Suspension Initiative (DSSI) has enabled these countries to free-up billions of dollars for their COVID-19 response.

Debt service to official bilateral creditors will impose a heavy burden for years to come

The animation below shows the shifting composition of annual debt-service obligations that low-income countries owe to their bilateral creditors-from 2020 through 2022. It reflects projected debt service payments on external debt to official bilateral creditors (TDS, current US$, millions).

Filter:

2020



Source: International Debt Statistics: DSSI

WORLD BANK GROUP

Debt service suspension is an important relief, but not enough to alleviate the pain of the pandemic. More supporting steps such as including an expansion of DSSI will be required while a more permanent solution is developed. According to a World Bank report, while many emerging markets and developing economies (EMDEs) were able to implement large-scale fiscal and monetary responses during the 2007-2008 Financial Crisis, today they are less prepared to weather a global downturn. The most vulnerable of them rely heavily on global trade, tourism, and remittances.

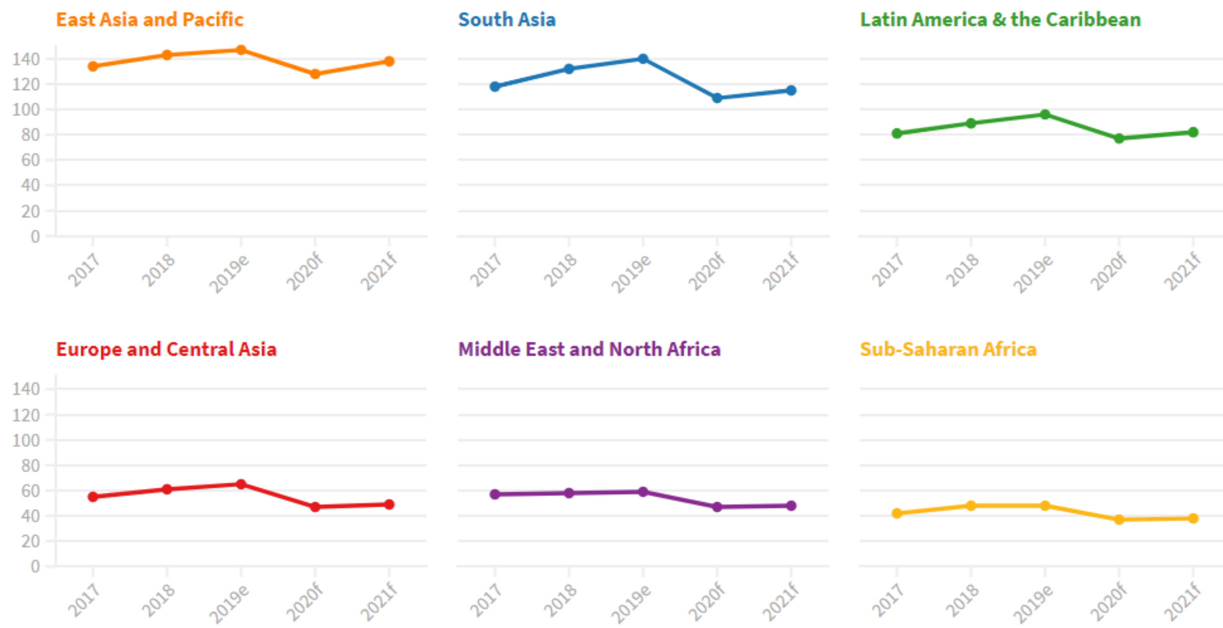
Sharp fall in remittances

Remittance is the money migrants send back to their home countries. Over previous decades, remittances have played an increasingly important role in alleviating poverty and sustaining growth. Just last year, these flows were at par with foreign direct investment and official development assistance.

Due to the COVID-19 pandemic, a dramatic fall has been notices in the remittances being sent. By the end of 2020, World Bank report claims that there is a 14 per cent fall on a yoy basis. All regions have witnessed a drop, with Europe and Central Asia seeing the steepest fall. Consequent to these declines, the number of international migrants is likely to fall in 2020 – for the first time in modern history – as new migration has slowed and return migration has increased.

Globally, remittance flows are projected to shrink in 2020 and partially recover by 2021

Remittance flows to each region (US$ billion)



Source: KNOMAD-World Bank staff estimates (October 2020). See appendix in Migration and Development Brief 32 for forecast methods (World Bank 2020c) • Note: Data for 2019 are estimates, data for 2020-2021 are forecasts; f = forecast

WORLD BANK GROUP

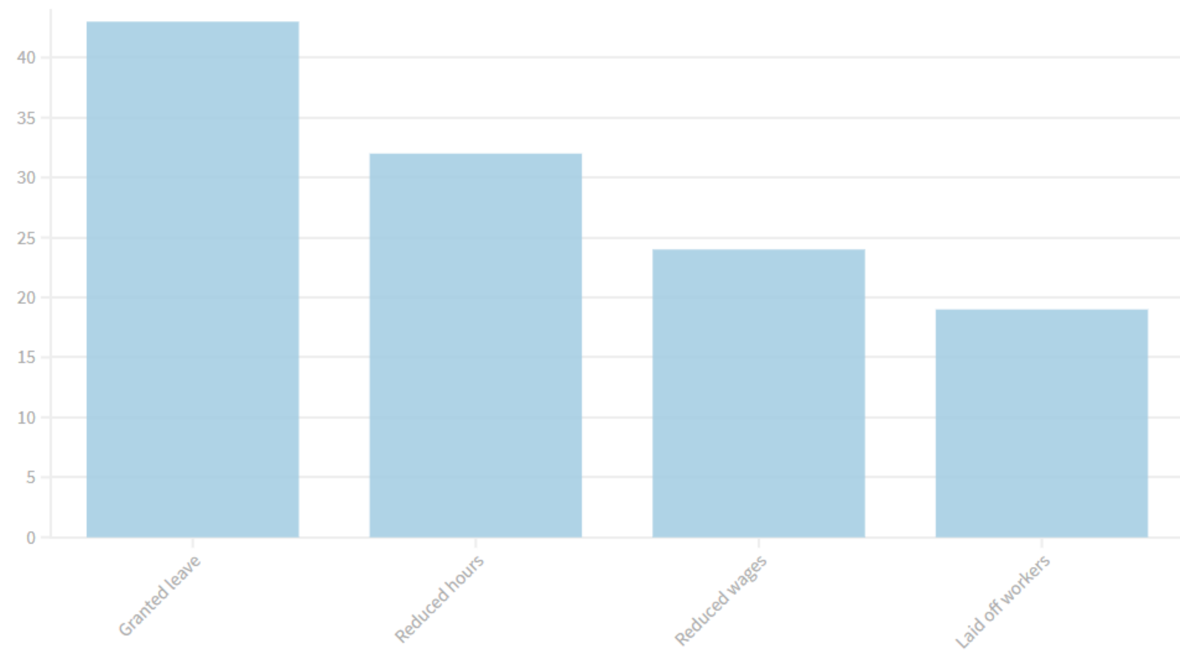
The drop in remittances have pushed many families in developing countries to the verge of poverty. Migrants' remittances are crucial to households around the world, and as they decline, experts fear that poverty will rise, food insecurity will worsen, and households risk losing the means to afford services like healthcare.

Debilitating impact on businesses and jobs

The ongoing pandemic has deeply impacted the micro, small, and medium enterprises (MSMEs) in the developing world. The sector also accounts for majority of the employment for the most vulnerable class, leading to rampant unemployment in many countries.

Firms thus far have been more likely to reduce hours or wages than fire workers

Share of firms (%) by employment adjustment



Source: World Bank COVID-19 Business Pulse Surveys • Note: Columns show the share of firms that reported making each adjustment in the 30 days prior to the survey.

WORLD BANK GROUP

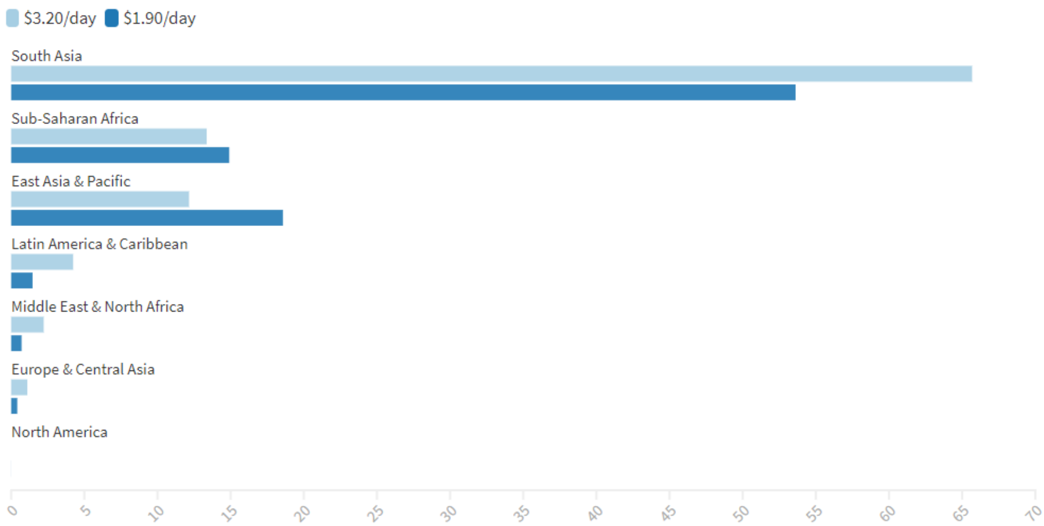
Reduced family income due to the pandemic is expected to push additional pressure on developing economies and place human capital at great risk. With less money, families will be forced to make trade-offs and sacrifices that could harm health and learning outcomes for a generation.

Struggling healthcare systems

The pandemic has re-emphasized the need for an effective, accessible and affordable health care system. The pandemic has weighed heavy not only on the healthcare systems in developing countries but also some of the most developed economies. Even before the crisis began, people in developing countries paid over half-a-trillion dollars out-of-pocket for health care. This costly spending causes financial hardship for more than 900 million people and pushes nearly 90 million people into extreme poverty every year – a dynamic almost certainly exacerbated by the pandemic.

Tens of millions of people are being pushed into extreme poverty by health spending

Number of people pushed into poverty due to health spending, by poverty line



Source: SDG Atlas 2020, World Health Organization and World Bank. 2019. Global Monitoring Report on Financial Protection in Health 2019

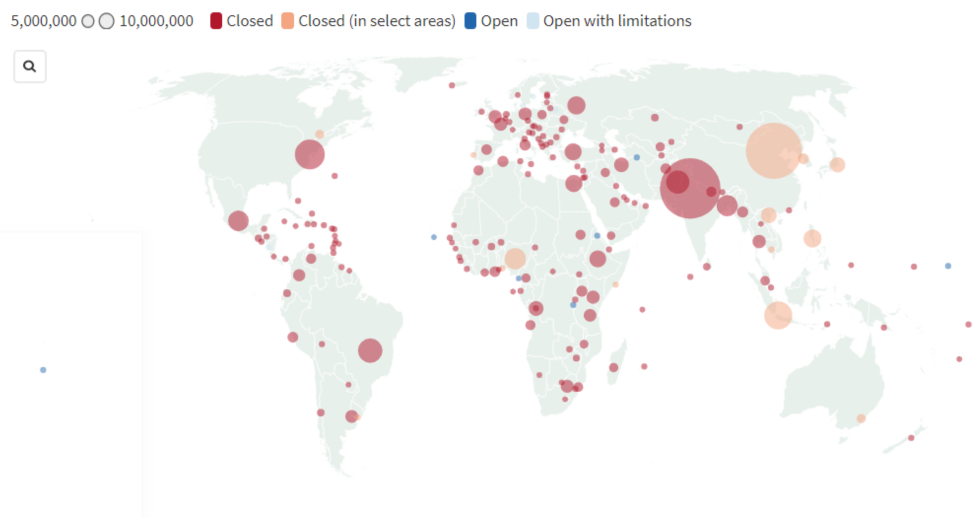
WORLD BANK GROUP

Schools remained shut

The COVID-19 virus has forced countries to shut down the schools, restricting over 1.5 Billion children and youth in 160 countries to their homes.

At least 1.5 billion students were out of school at the peak of the pandemic

Number of students enrolled in each country, by school closure status (date: March 27, 2020)



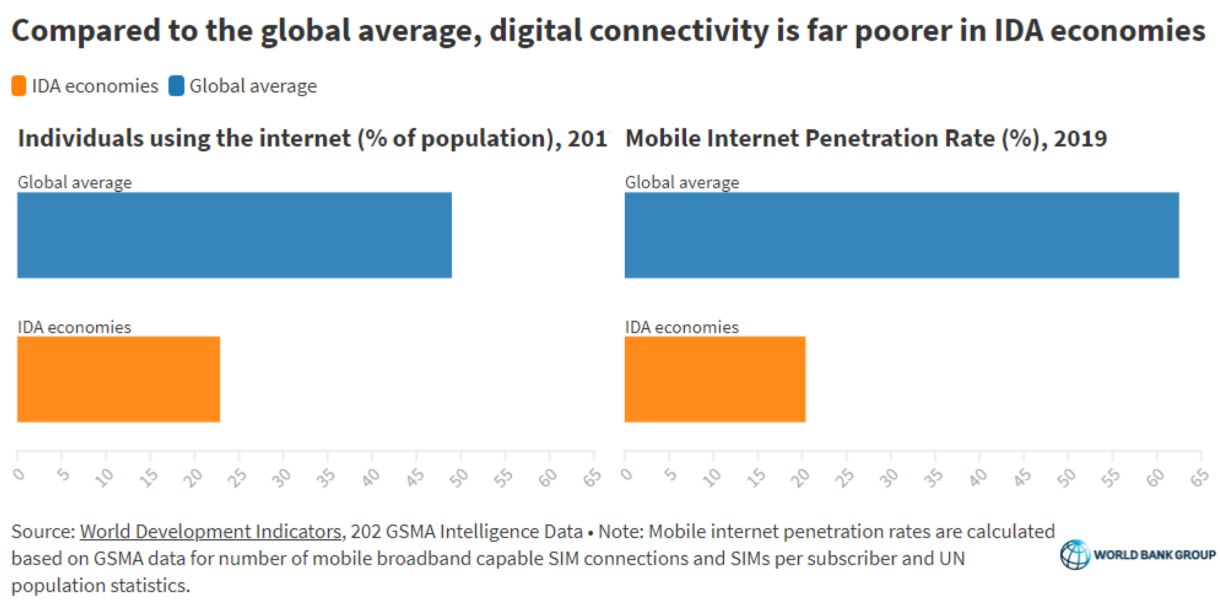
Source: World Bank EduAnalytics;, Enrollment data from UIS as of March 17th 2020, downloaded from World Development Indicators • Notes: Data is presented for March 27, 2020 - the day when most students had either full or partial school closure.
Enrollment data includes pre-primary, primary, secondary and tertiary school enrollment numbers.

WORLD BANK GROUP

The pandemic has not only caused a disruption to education in the short run, but also diminishing economic opportunities for this generation of students over the long term. Due to learning losses and increases in dropout rates, this generation of students stand to lose an estimated USD 10 trillion in earnings, or almost 10 percent of global GDP, and countries will be driven even further off-track to achieving their Learning Poverty goals – potentially increasing its levels substantially to 63 percent, equivalent to an additional 72 million primary school aged children. As economic conditions force families to make difficult decisions on household spending, concerns about student dropout rates have grown. To mitigate these losses and try to sustain learning amid the crisis, countries are exploring options for remote learning – with mixed results. In many places, a key obstacle is a lack of high-quality, affordable broadband.

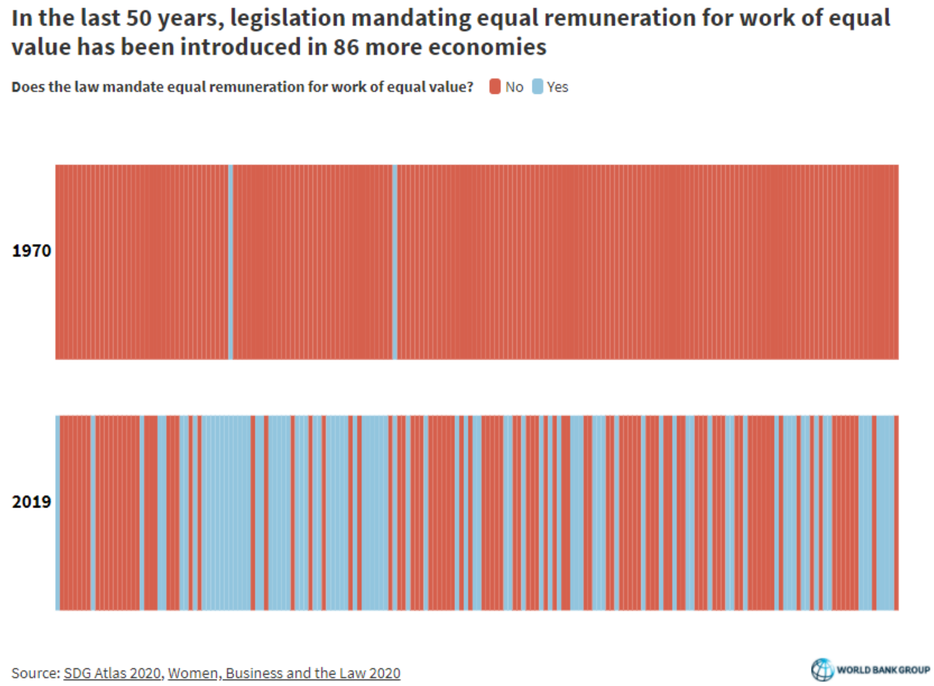
Internet – now a necessity

The Coronavirus pandemic have brought to light the importance of internet to the human kind. The internet is the gateway to many essential services, such as e-health platforms, digital cash transfers, and e-payment systems, digital cash transfers, and e-payment systems. Unfortunately, access to digital infrastructure and connectivity remains severely limited in the world's poorest countries, which are eligible for grants and concessional lending from the World Bank's International Development Association (IDA)



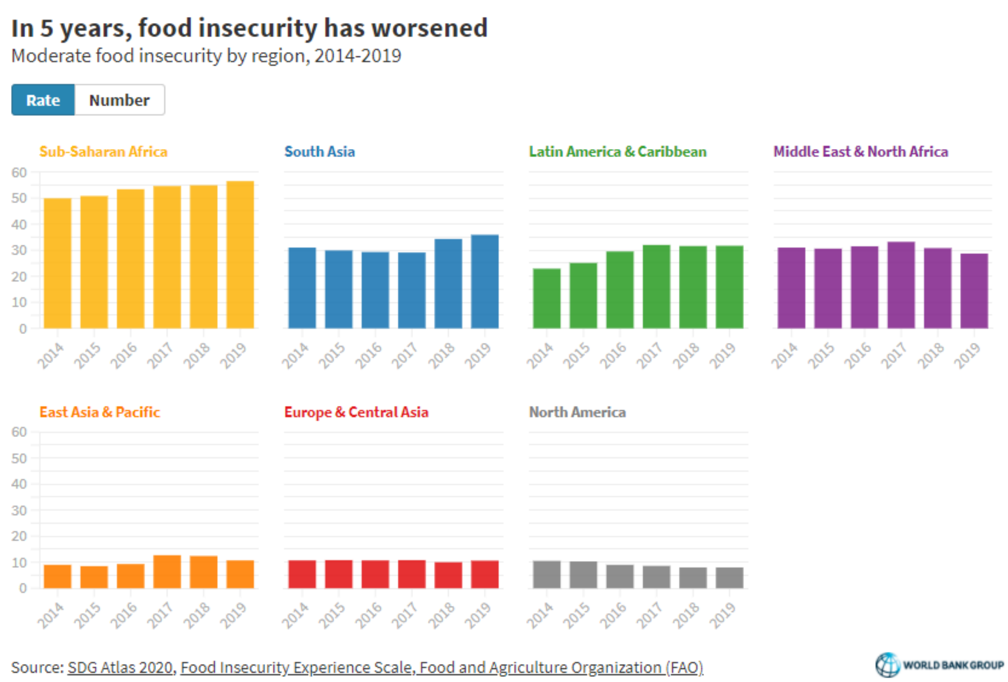
Increasing gender inequality

The pandemic has raised serious concerns over gender divide. Most economist feel that gender gaps could widen because of the pandemic. This could reverse women's and girls' decades-long gains in human capital, economic empowerment, and voice and agency.



Food security at risk

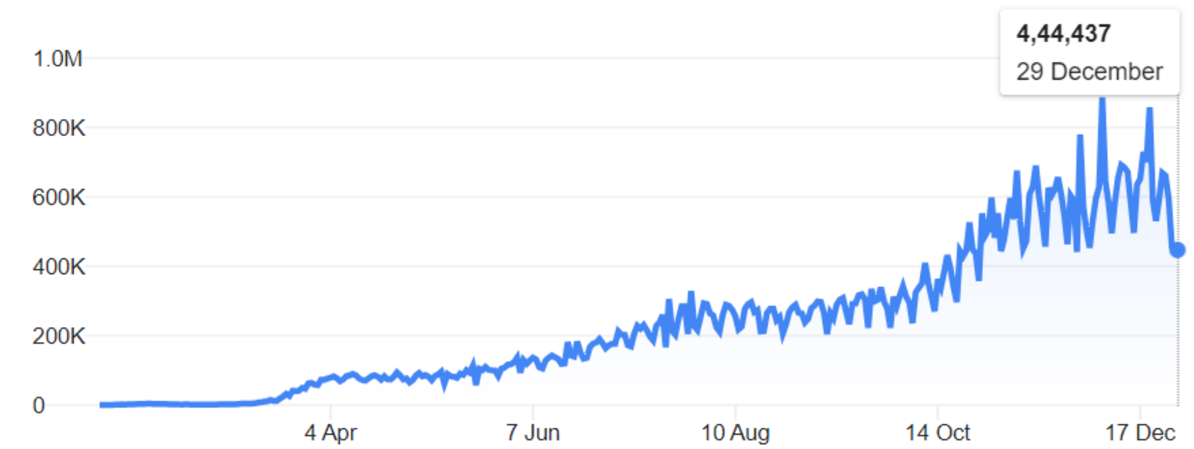
Children, male and female are all vulnerable to global rise in food security. Food insecurity is affecting people in both urban and rural regions. The World Bank's World Development Indicators show that even before COVID-19 emerged, the number of people who were undernourished has increased after the spread of the pandemic.



The pandemic may add between 83 and 132 million people to the total number of undernourished in the world in 2020, according to a preliminary assessment by our partners at the UN Food and Agriculture Organization (FAO).

2. A Snapshot of Global Economy: Optimism on vaccine role out visible in global recovery

As we enter the New Year the world is still grappling with the horrors of COVID-19. As on 31 December, 2020, the number of COVID cases worldwide has reached over 82.7 million and has claimed the lives of over 1.8 million globally.



Source: World Health Organization (WHO)

The number of COVID cases that started rising in the month of October, resulting in the some forms of lockdowns implemented in some parts of Europe and the US. The month of December, brought some relief for the world economy as vaccines have now been approved and most Governments across the world are set to roll out the vaccination programme from January.

Global economy

In all major economies the results of the third quarter of 2020, brought some respite from the otherwise gloomy year. Growth was certainly lifted by extraordinary fiscal and monetary stimulus measures across the globe. In addition, forced private household savings in 1H20 mainly in OECD economies supported pent-up demand. This was reflected in quickly recovering consumption, leading to improving global trade and also to some extent rising investment. This dynamic was also reflected in the rebound in global consumer confidence.

The manufacturing sector has continued to show marked improvement. While the sector is a representative of recovery, it accounts for only a minor share of the GDP for most developed countries. The labour market and the services sector, which contribute to major share of the economy in developed countries, have remained low during the month. The extraordinary stimulus packages offered by the Government have proven successful in controlling the onslaught of the pandemic.

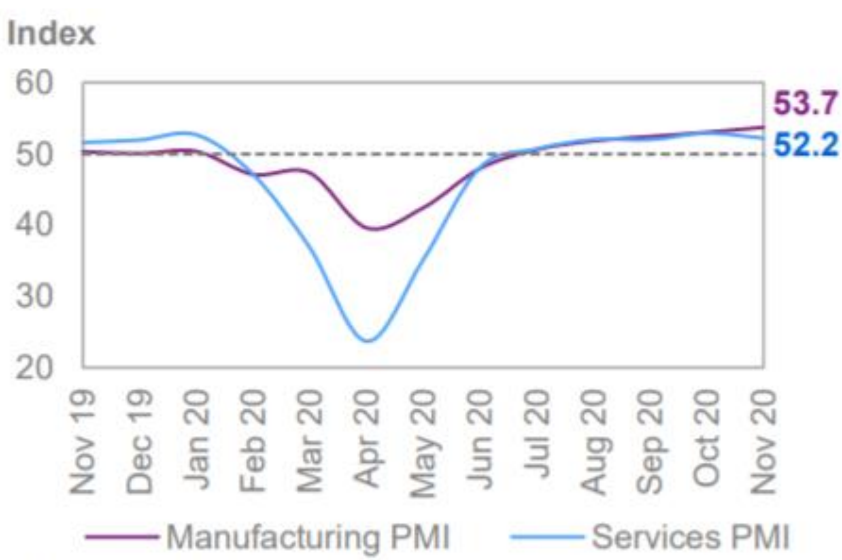
World trade volume level declined by 1.6 per cent y-o-y in September, compared with -4.5 per cent in August and -6.5 per cent in July.

Global Trade

Sources: Netherlands Bureau for Economic Policy Analysis, Haver Analytics and OPEC.

The Purchasing Manager's Index (PMI), published by IHS Markit, supports the ongoing recovery globally. In November, global manufacturing PMI rose to 53.7 compared to 53 in October and 52.4 in September. PMI for the services sector remained at almost the same level for four consecutive months.

Global PMI



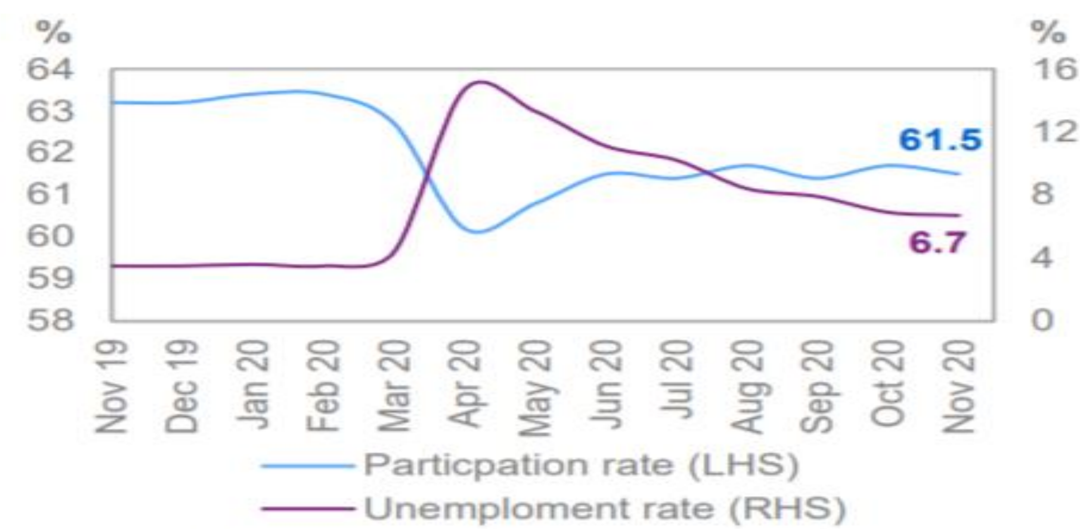
Sources: JP Morgan, IHS Markit, Haver Analytics and OPEC.

The US

After recovering a swift recovery during the third quarter, the recovery seems to have slowed down in the fourth quarter. The ending of major stimulus measures, especially social welfare measures, seems to have had a considerable impact on the most recent slowdown. The consumer confidence in the country dropped to 96.1 in November compared to 101.4 in October. Despite improvements in the labour market, consumer confidence has picked up only gradually from April's trough, when it stood at 85.7. The important wealth factors of equity and housing markets continued to perform very well. This was strongly supported by intensive monetary stimulus.

The industrial sector in the US recorded a slight improvement in October, after a slowdown was seen in September. It rose by 1.1 per cent m-o-m in October, compared with -0.4 per cent m-o-m in September. In November, exports from the country also improved from a decline of 14.9 per cent in September yoy to 5.3 per cent in October. Recovery was also noticed in the labour market as the unemployment rate stood at 6.7 per cent.

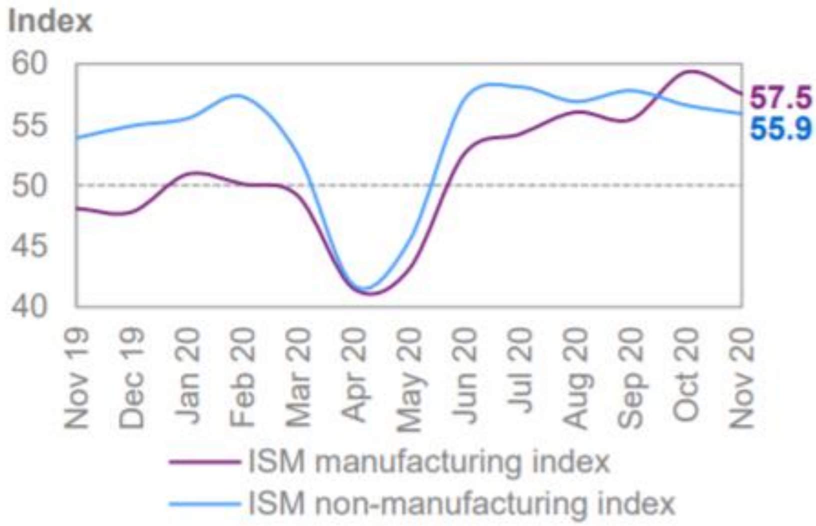
US Monthly Labour Market



Sources: Bureau of Labor Statistics and Haver Analytics.

The economy's recovery is reflected in November PMI levels. The manufacturing sector PMI stood at 57.5 in November, compared with 59.3 in October. The services sector index retracted slightly to 55.9 in November, compared with 56.6 in October.

US PMI



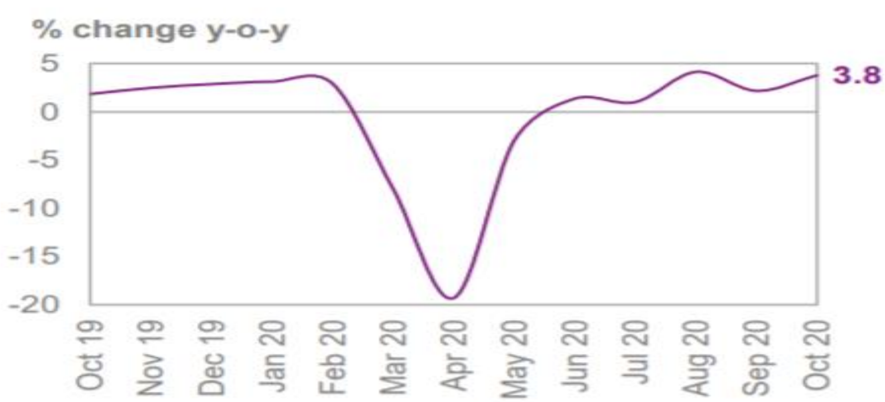
Sources: Institute for Supply Management and Haver Analytics.

Euro-Zone

The Euro-zone economy has recovered sharply in the third quarter of the year. GDP growth in the third quarter was reported at 12.6 per cent q-o-q. During the fourth quarter, the social distancing and severe lockdowns have taken a toll on the region's economy resulting in a deceleration. As a response to this slowdown, the European Central Bank (ECB) has increased its accommodative monetary policy measures. The ECB announced that it will increase the size of its pandemic emergency purchase programme (PEPP) by 500 billion euros, from 1.35 trillion to 1.85 trillion euros.

The monetary support provided by the Government and the social welfare measures have supported the labour market in the Euro zone. These measures have successfully managed the unemployment rate at a relatively modest level. The unemployment rate declined to 8.4 per cent in November, compared to 8.5 per cent in October.

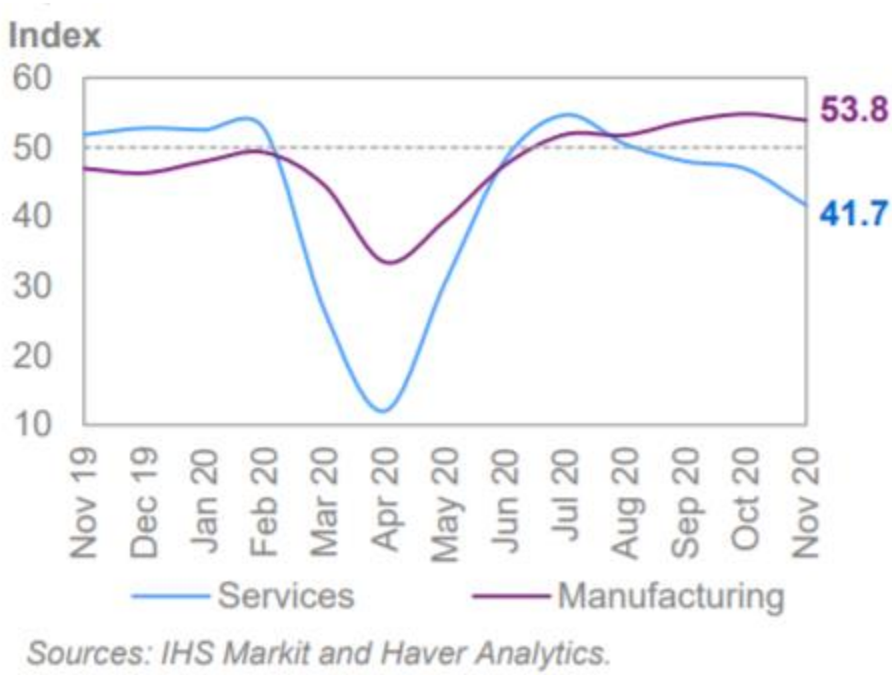
Euro-Zone Retail Sales



Sources: Statistical Office of the European Communities and Haver Analytics.

The November PMI for the Euro-zone economy reflects the ongoing 4Q20 contraction. The manufacturing PMI fell to 53.8, compared with 54.8 in October and 53.7 in September. The PMI for services, the largest sector in the Euro-zone, fell considerably, to a level of 41.7, compared to 46.9 in October.

Euro Zone PMI

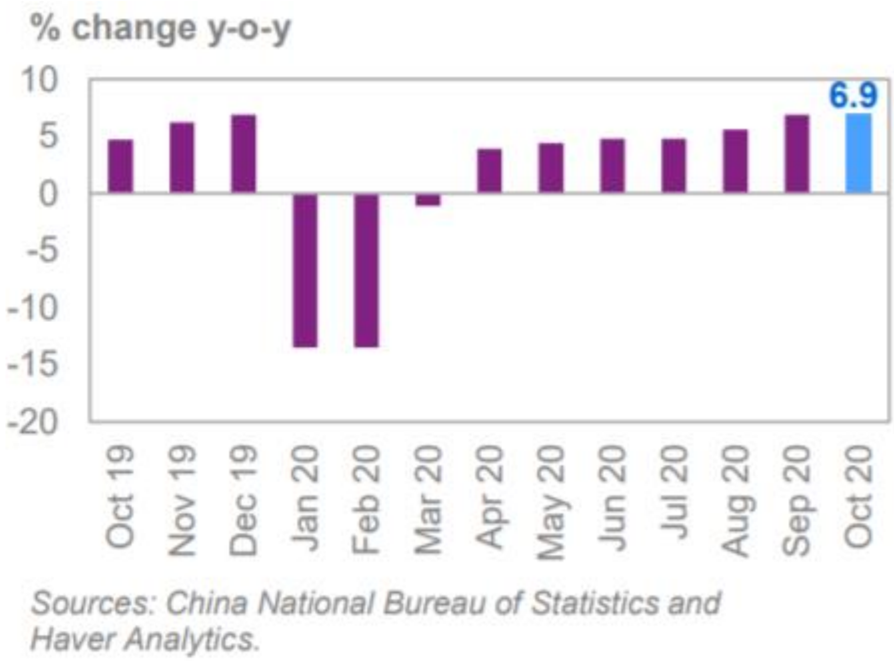


China

Riding on the private consumption and fixed asset investments, the Chinese economy continued to recover through the fourth quarter of the year. Meanwhile, growth in industrial value added remained unchanged on a month to month base, however it is back to the pre-pandemic level. Retail trade in the country grew increased by 4.3 per cent y-o-y in October 2020, the sharpest increase since December 2019. Automobile sales in China increased to 12 per cent in October compared to 11.2 per cent in October. Sale of oil and gas products in the country continued to fall at a slightly slower rate, declining by -11 per cent y-o-y compared to -11.8 per cent.

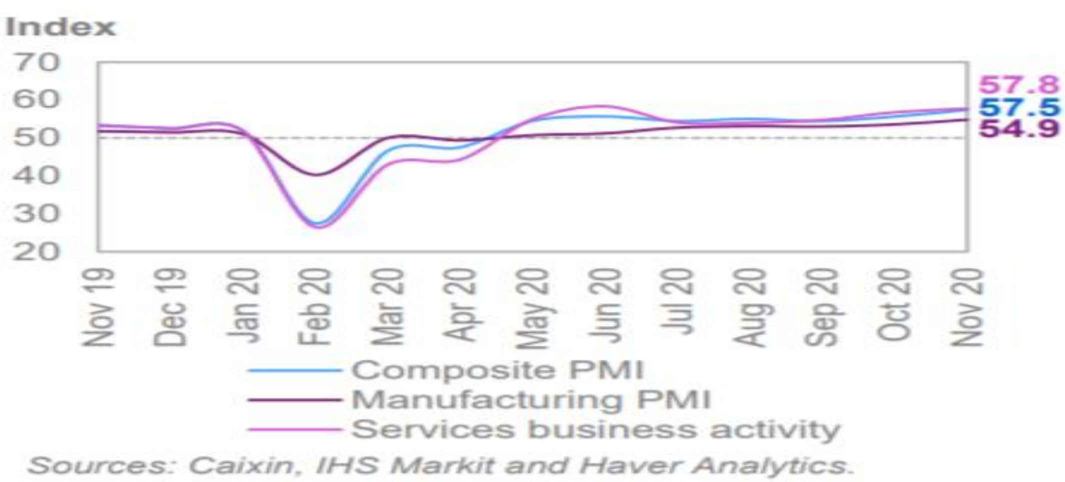
China's industrial production climbed 6.9% y-o-y in October 2020, same as in the previous month, as activity continued to recover from the COVID-19 shock. In 2H20, the industrial sector has seen an impressive turnaround, supported by robust exports.

China Industrial Production



The recovery in the Chinese economy is also captured in the PMI indices. The PMI rose significantly in the month of November. Manufacturing PMI increased to 54.9 in November 2020 from 53.6 in October, while the PMI of the services sector improved to 57.8 in November against 56.8 in October.

China PMI



3. Four key trends put in motion by the COVID-19 pandemic

The COVID-19 virus that was first detected in China in the month of November 2019, has taken the size of a global pandemic as we close the year 2020. According to WHO, there have been 78 million+ infections worldwide, and 1.7 million plus deaths so far. The dreaded resurgence of the virus in some parts of the world, have forced many countries to implement a second round of lockdown. As all major economies are set to roll out the vaccination programme, expecting a return to normalcy in 2021, the pandemic will leave the below mentioned three permanent impacts on the global economy:

Diversification of supply chains

For more than over two decades, China has evolved as the manufacturing hub of the world. The country has been manufacturing everything from batteries to toys, from high-end gadgets to kitchen appliances. Even before the pandemic set in, many manufacturing companies have been discussing the options to diversify supply chains and exploring new bases for manufacturing outside of China. The US Government and its policies under President Donald Trump could be attributed for this change. The cost of tariffs imposed by the Trump administration on China made the cost of China-made products more expensive.

Another reason for this change in mindset for the companies is the reluctance to keep all eggs in one basket. With the Chinese government bringing in more laws to combat pollution, the relative advantage of China as a cheap manufacturing base was on the decline. According to a recent report by Gartner, 33 per cent of the global supply chain leaders are set to move their manufacturing base to other countries. It is likely that there will be regional production networks.

The economic efficiencies derived from a world factory will disappear and it is likely that the era of low prices is over. However, if manufacturing is going to move to multiple geographies, this means some of the economic benefits that accrued to China from being the world's manufacturing hub, will be derived by other regions.

Rise of satellite cities

If we look at the history of the pandemics, it is clear that they have led to the rise of small towns and country life for city dwellers. After the Spanish flew of 1918, many city dwellers, who could afford, moved out in large numbers to country sides of big cities to avoid the over-crowded cities. Globally, as the COVID-19 inflicted lockdowns came into effect, more and more people started operating from homes. For this section of the workforce, geography has now become history. A similar trend is visible across the world. Mega cities like London, San Francisco, New York, and Mumbai – traditionally magnets for the ambitious, have suddenly lost their sheen. People have moved back to communities where they feel most secure, to environments that allow for social distancing.

It is the responsibility of the respective Governments now to ensure infrastructure in these satellite towns viz a viz health, internet, school and water etc. to handle this sudden influx of people. As the large mega cities reduce in population, there will be a rise in mini cities that allow a cleaner, healthier and more affordable lifestyle for people. Rather than having a few large cities that are engines of the economy, nations will have a number of smaller engines that drive growth. It is up to the governments to recognize this trend and build for it.

Rich will get richer

The rise in economic inequality and the call for increased regulation of transnational corporations– informal economies, the world over, have been devastated by Covid-19. Women, labourers, gig workers, are amongst the worst impacted. United Nations Development Programme (UNDP) has already warned that if the Governments do not take the necessary actions in time, over a billion people will be pushed into poverty by 2030.

The only people seem to have benefited from the pandemic are the super-rich. A report by Pricewaterhouse Coopers and the Swiss Bank UBS, revealed that billionaires increased their wealth by almost 25 per cent at the height of the pandemic.

Greater awareness about environment

COVID pandemic has shown that the world could be run without polluting it. It is now clear that much of what environmentalists have been advocating terms of a more sustainable way of running the world could be practiced. Going forward, sustainability will need to become part of our economic lexicon. If there is one good thing that has come out of the pandemic, it is the knowledge that sustainability is not an impossible dream. That drive towards sustainability will be a different kind of boost to the economy.

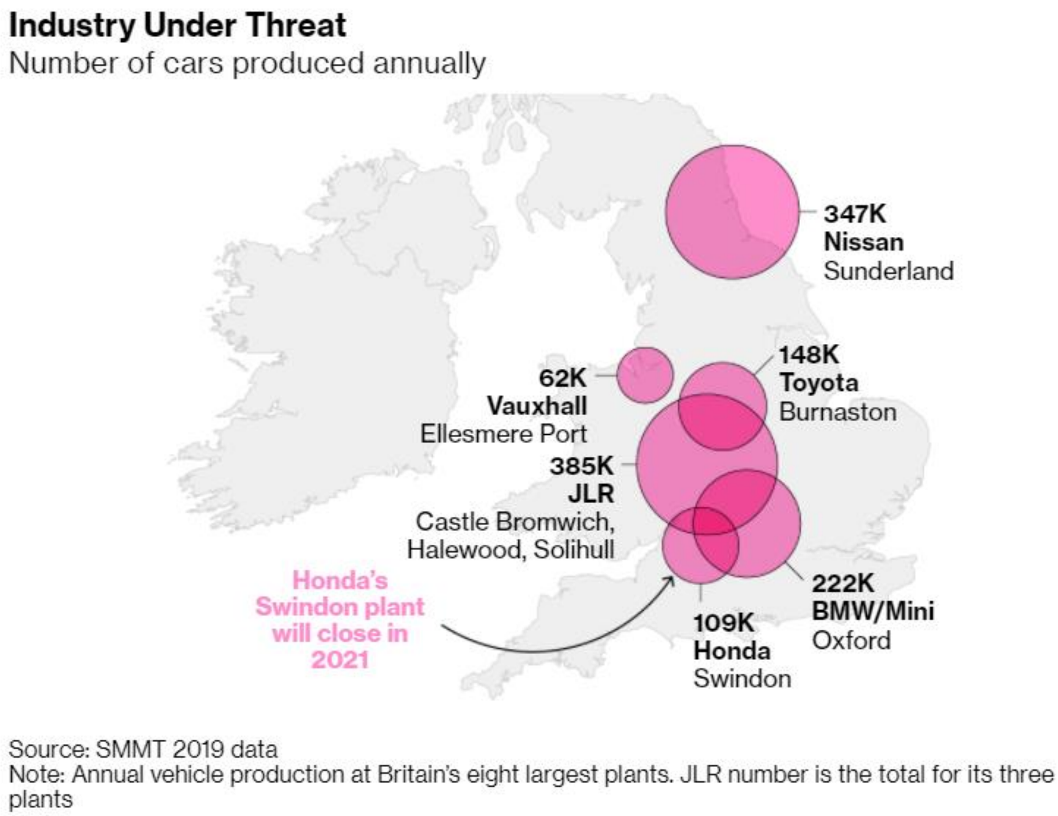
4. Brexit deal – a mixed bag of opportunities for the UK

Britain may have successfully signed the trade deal with the European Union, the British businesses are still facing the heat of the difficult changes. The Brexit agreement that has been prepared over a period of four years manages to avoid the worst case scenario of new tariffs and quotas. This has come as a major relief and provides the companies with a greater scope of work for containing the damage from the COVID-19 pandemic.

The separation of the UK and the EU will still lead to significant disruption for a range of industries. Mutual recognition of standards, which would have allowed firms to make products in the U.K. and market them in the EU without any extra certification process, isn't part of the deal. Similarly, the workers in the service industry of Britain, which constitutes 80 per cent of the economy, faces new costs and bureaucracy as their professional qualifications will no longer be automatically recognized in the EU. With the full text of the agreement being made public only days before it comes into force, large number of the businesses have voiced the need for a grace period to comply with the changes.

Automobile Sector

Auto manufacturer in the UK generated revenue of EUR 79 billion pounds in 2020 and employed over 180,000 people. Car makers are now faced with the difficult choice of whether to go ahead with investment in new models and production capacity that had been put on hold for years. Car manufacturer Vauxhall had been holding future investments in its plant at Ellesmere Port. Nissam Motors has also decided against manufacturing electric vehicles in Northern England. Many experts feel that the deal will prove to be a good news and because it mostly avoids tariffs and gives electric-car makers sufficient time to phase in the new requirements.



Below are some of the key requirements for rules of origin that determine the indigenous component in manufacture of cars:

- Parts made in the U.K. as well as the EU count as local content.
- Gasoline and diesel cars need to be made with at least 55 per cent local content to avoid tariffs
- Electric vehicles and hybrids will need 40 per cent local content, 10 percentage points more than what the U.K. had asked for.
- Until 2023, batteries can have as much as 70 per cent overseas content, and EVs and hybrids can have as much as 60 per cent foreign content.
- From 2024 to 2026 -- when European battery production is expected to be much more advanced -- batteries can have 50 per cent overseas content and EVs and hybrids 55 per cent content.

Manufacturing Sector

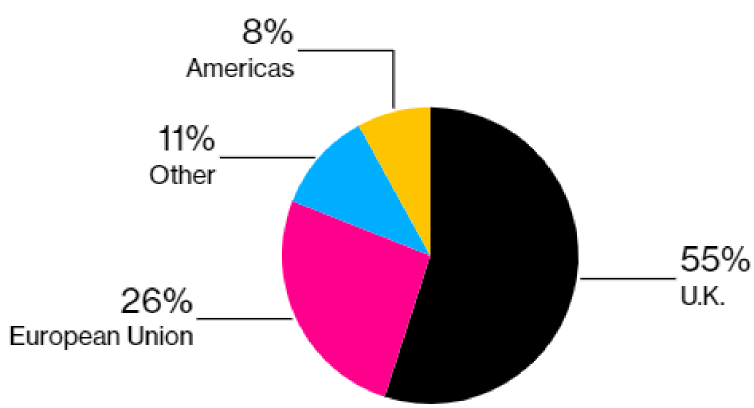
Manufacturing sector contributes to roughly 10 per cent of the UK's GDP. No new tariffs have been levied on this sector. However, the sector is faced with a plethora of paper work and new standards regulations which could create substantial pressure across the country on its first day outside the single market and customs union. On standards, there is no mutual recognition of conformity assessments in the deal, meaning manufacturers will have to get their products approved separately by regulators in both markets. In case the specifications in the UK and the EU differ, the companies operating in the sector will also have to run two separate production processes. Further, the prospect of trucks turning up without the correct post-Brexit forms raises worries about serious traffic snarls. The port city of Dover on the south-east coast has warned of 17-mile (27-kilometer) lines of vehicles on both sides of the English Channel if its average customs clearing is slowed by just two minutes.

Retail sector

The issue of tariffs has been a major concern area for British retailers as higher import costs in a low-margin sector would have had to be passed on to consumers during a recession. The issue of tariffs is of particular interest for the super markets such as Tesco Plc and J Sainsbury Plc as the UK only produces half the food it consumes, while the rest is imported from the EU.

U.K. Food Origins

About a quarter of food consumed in the U.K. hails from the EU



Source: Defra data as of 2019

In a relief for the British wine merchants, they will only be requiring minimum paper work in transporting wine between the UK and EU. In the scenario of a no deal Brexit, wines from the EU would have required expensive laboratory tests and other documentation, adding costs.

However, retailers still face a raft of new non-tariff barriers stemming from costs and staffing needed to manage extra customs paperwork which, in time, could filter down to the prices paid by shoppers at checkouts. Any upheaval could aggravate the impact the pandemic has had on consumer spending.

Pharma Sector

The pharmaceutical industry has long been asking for a mutual recognition agreement to safeguard the industry against unnecessary duplication and costs. The deal has partially achieved this with inspections of drug manufacturing facilities to be valid in both regions. However, the deal has not considered another demand from the industry to recognize batch testing. This suggests U.K. safety tests on medicines may need to be conducted again before they can be sold in the EU, which would add time and cost burdens. Both UK and the EU have agreed for a one year phase in period for implementing regulation in Northern Ireland to give companies time to prepare to adjust packaging and distribution route.

Aerospace sector

Aerospace, a heavily regulated industry, contributes in the upwards of EUR 20 billion to the UK economy. The sector has been long haunted by standards where the smallest change in a design or machine used to make an aircraft component leads to entire safety reassessment. The Brexit agreement includes an accord on safety that maps out an approach based on mutual recognition and cooperation. This is essential as some parts across the English Channel multiple times during the process of building a plane.

In the new year UK is set to introduce its own aircraft safety regime. That means the Civil Aviation Authority will be responsible for the flights for the first time in decades. There's a question of whether it will be able to take on so much work quickly enough to avoid disruption. This will raise serious concerns for some of the airline companies operating across the English channel.

Trucking

Truckers will be faced with new regulations when moving within UK and across to the EU. Previously, U.K. drivers could do unlimited trips between EU countries, and as many as three deliveries within a single country in the bloc. An extra delivery within a country is known as a "cabotage" trip. After Brexit, British operators can only do two extra journeys when they move goods to the EU, and can only make one cabotage trip.

Chemicals Sector

The chemicals sector, with an annual turnover of over EUR 31.5 Billion, is the UK's biggest manufacturing export sector. While the document of the deal claims that the cooperation between the UK and the EU continue, Brexit may lead to serious troubles for the chemical industry in the UK. Chemical makers have yet to be told how aligned the U.K.'s new standalone regulatory framework will be with Europe's Registration, Evaluation and Authorization of Chemicals regime, considered the gold standard for the safety and control of more than 22,000 substances and fluids that are key in industries from aerospace to electronics.

The Brexit agreement directs for cooperation between the two on sharing of data. However, the absence of a firm arrangement means companies may yet face having to repeat the time- and money-consuming process of repeating all that paperwork to operate in both markets.

Services Sector

The services sector account for 80 per cent of the UK economy. Over the years UK has emerged as a hub for services including IT, law, accountancy, insurance, consulting and architecture. The UK has emerged as the largest supplier of services for the EU. The absence of automatic recognition of the professional qualifications will prove to be a setback for the country. Short-term business travel between the U.K. and EU will continue unimpeded, but U.K. business visitors will only be able to travel to the EU for 90 days in any 180-day period.

5. Despite lockdown in the Euro-Zone, Global GDP contraction revised to 3.7 per cent

A recent report published by the global rating agency Fitch claims that the global economic recovery will strengthen by the middle of next year as coronavirus vaccines are rolled out and social distancing starts to unwind.

The latest Global Economic Outlook (GEO) by Fitch expects the world GDP to contract by 3.7 per cent this year compared to its earlier estimates of 3.7 per cent. The upward revision of the GDP has come amid expectation of renewed falls in GDP in 4Q20 in the euro zone and the UK - following the recent tightening of restrictions. The revision is indicative of the fact that global activity rebounded much more quickly than expected in 3Q20.

The rating agency has revised up its 2021 global growth forecast to 5.3 per cent (from 5.2 per cent) with stronger growth through 2H21 partly offset by weakness in the immediate months ahead. In 2021, it expects the US GDP to expand by 4.5 per cent and China by 8 per cent. As result of the fresh round of lockdowns in the Euro-zone, the growth prospects have now been curtailed by 4.7 per cent in place of earlier predictions of 5.5 per cent.

Fitch has also revised up its global growth forecasts for 2022 to 4.0 per cent from 3.6 per cent reflecting the anticipation of reduced social-distancing disruptions once immunization programmes have broadened. The 2022 forecasts also incorporate expected grant disbursements from the EU's Next Generation EU recovery fund. These are likely to provide a sizeable boost to public investment and we have raised our euro-zone growth forecast for 2022 to 4.4 per cent from 3.2 per cent in the September GEO. US GDP is now expected to grow by 3.5 per cent in 2022. It is expected that the US GDP will grow by 3.5 per cent in 2022.

Developments in the past few months have thrown more light on the unprecedented economic impacts of the pandemic. Strong and faster-than-expected recoveries in 3Q20 illustrated the boost to activity from re-opening, even if a true 'V'-shaped rebound remained elusive. While the recent second wave of lockdowns is not compressing activity anywhere near as sharply as in April, base effects will lift sequential growth markedly when restrictions are eased in 2021.

The role of unparalleled macro policy easing and sovereign support in cushioning the impact of the pandemic has also become clearer. Aggregate household-sector disposable incomes have remained broadly stable in Europe - and have increased significantly in the US - owing to huge fiscal transfers. Unemployment rates in Europe have risen only modestly due to the extension of massive furlough schemes, and small business failures have yet to surge.

6. China to topple US as largest economy by 2028; India to replace Japan at the 3rd spot in early 2030s: Report

China is all set to overtake United States as the largest economy in the world by 2028. China will be achieving this feat five years prior to the previously estimated timeline of 2033. This has been made possible due to the contrasting recoveries of the two countries from the Covid-19 pandemic.

The annual report of the Centre for Economics and Business Research mentioned that for some time, an overarching theme of global economics has been the economic and soft power struggle between the United States and China. The spread of the COVID-19 pandemic and the different tracks of recovery have pushed the balance towards China. The report further said that the skillful handling of the pandemic by China with its strict early lockdown, and hits to long-term growth in the West meant China's relative economic performance had improved.

AT the end of 2020, China is set to grow at an annual rate of 5.7 per cent a year 2021-25. The country's economy is expected to see a mild slowdown only in 2025-30, when it is poised to grow at 4.5 per cent. While the United States was likely to have a strong post-pandemic rebound in 2021, its growth would slow to 1.9 per cent a year between 2022 and 2024, and then to 1.6 per cent after that.

According to the report, Japan is expected to remain the world's third-biggest economy, until the early 2030s when it would be overtaken by India, pushing Germany down from fourth to fifth position.

The United Kingdom presently holding the fifth spot will be pushed to sixth by 2024. Despite the UK's decision to separate itself from the EU single market, British GDP is expected to remain 23 per cent above France's in 2021. This has been made possible due to UK's lead in digital economy. Europe accounted for 19 per cent of output in the top 10 global economies in 2020 but that will fall to 12 per cent by 2035, or lower if there is an acrimonious split between the EU and Britain.

The report further highlights that the impact of the pandemic will be more visible on the global economy through higher inflation and not slower growth. The report forecasts for an economic cycle with rising interest rates in the mid-2020s. This is expected to present a significant challenge to governments which have borrowed massively to fund their response to the COVID-19 crisis. The report highlights that the pandemic has also put in motion the favorable trends for a greener and more digitalized world by 2030.

7. A snapshot of Indian Economy: With falling COVID cases, private consumption drives the recovery

A remarkable fall in the number of new COVID-19 cases were recorded in India in December. The daily Coronavirus cases that rose to close to a lakh every day in September dropped to below 20,000 by end of December. As on 31 December, the country has recorded over 10.3 million new cases with the death toll reaching 149,000.

Daily COVID-19 cases in India

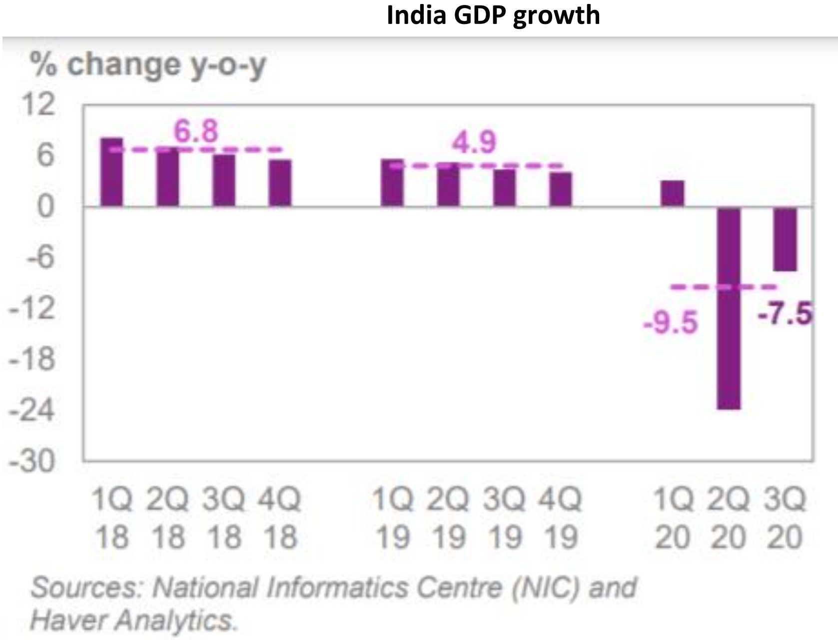
Source: World Health Organization (WHO)

The Government of India and all respective states are at an advanced stage in to finalize the roll out of vaccination programme in the country by end of January. The general mood in the country seems optimistic for the upcoming year and the same also reflects on most economic parameters.

Indian Economy

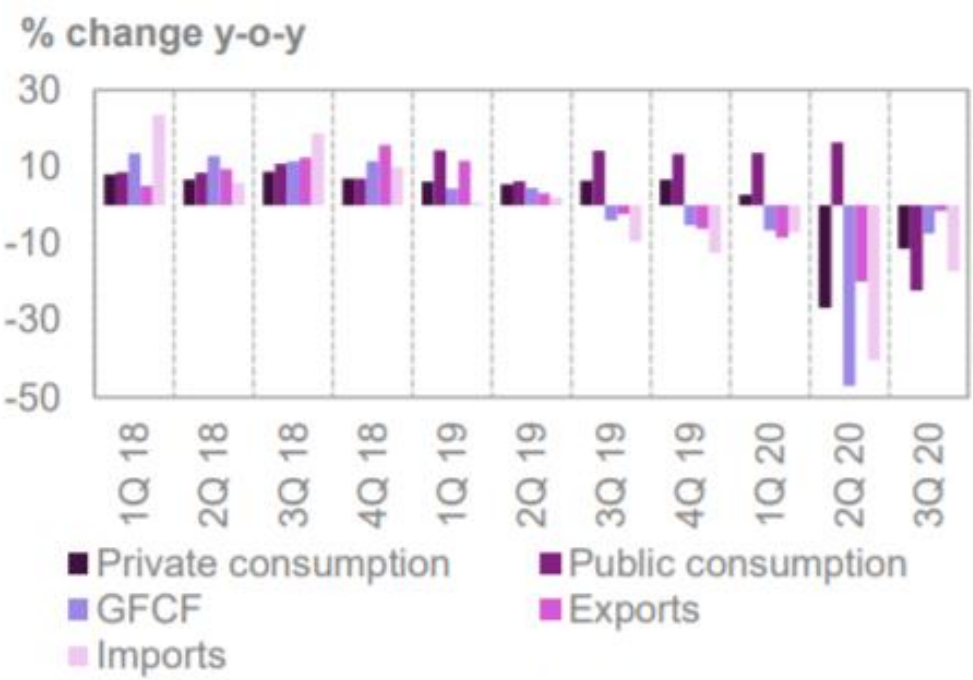
After witnessing a sharp decline in the Indian economy, of almost 24 per cent, in the second quarter, India's real GDP contracted only 7.5 per cent during the third quarter of the year. This is indicative of a much expected V-shaped recovery for the country. Higher private demand was recorded during the festival season, in addition to a notable recovery in manufacturing and utilities output, which benefitted from a resumption in economic activity starting in June. The recovery recorded in the third quarter has been fuelled more by private consumption while the public consumption has taken a back seat.

India GDP growth



Regarding the GDP contribution from demand, private consumption contracted by 11.3 per cent y-o-y in 3Q20 following a fall of 26.7 per cent y-o-y in 2Q20. Fixed capital formation contracted by 7.3 per cent y-o-y in 3Q20 following a double-digit contraction of 47 per cent y-o-y in 2Q20, driven by a higher rate of capacity utilization in addition to inventory restocking. During this period, investment shrank by 7.3 per cent y-o-y, compared with a sharp contraction of 47.1 per cent y-o-y in 2Q20 showing a remarkable recovery in the sector. Exports contracted by 1.5 per cent y-o-y in 3Q20 following a plunge of 19.8 per cent y-o-y in 2Q20, while imports fell by 17.2 per cent in 3Q20, compared with a contraction of 40.4% in 2Q20.

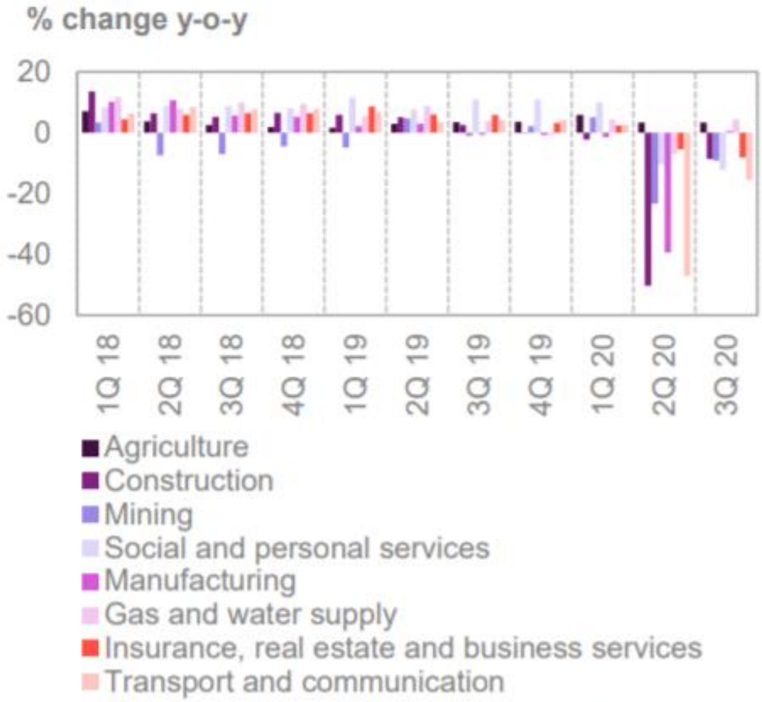
India GDP growth from demand side



Sources: Central Statistics Office and Haver Analytics.

In the supply side of the economy, agriculture was the only sector to record growth of 3.4 per cent y-o-y in 2Q20, manufacturing output recorded a sharp expansion of 0.6 per cent y-o-y in 3Q20, following a collapse of 39.3 per cent y-o-y over the April to June period. Utilities in the country grew by 4.4 per cent during the third quarter after contracting by 7 per cent during the second quarter. Only finance, real estate and professional activities shrank faster in 3Q20, by 8.1 per cent y-o-y compared with a contraction of 5.3 per cent y-o-y in 2Q20.

India GDP growth from supply side

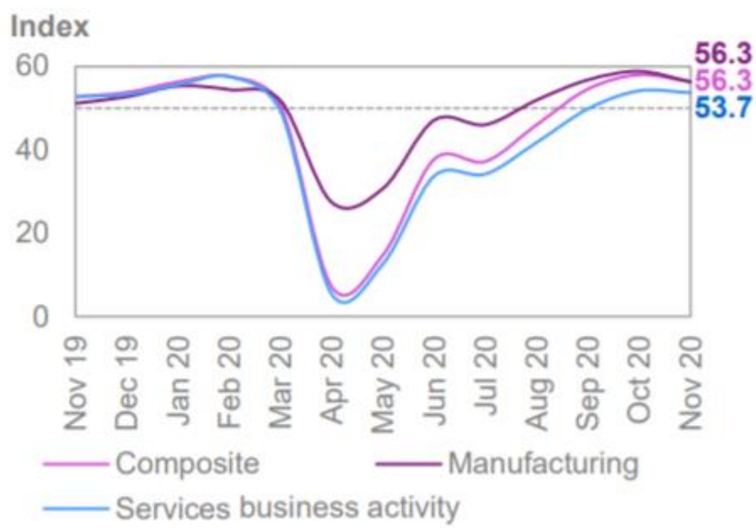


Sources: Central Statistics Office and Haver Analytics.

PMI

The November, PMI indices for the country marginally dropped for both manufacturing and services sectors. India Manufacturing PMI fell to 56.3 in November from 58.9 in October, while the services PMI decreased to 53.7 in November from 54.1 the previous month.

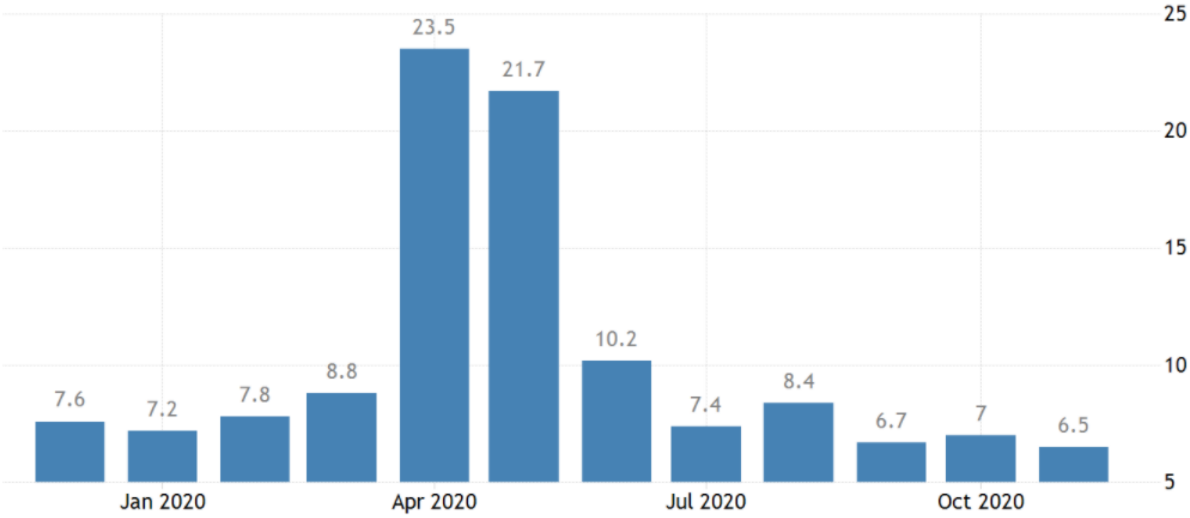
India PMI



Sources: Nikkei, IHS Markit and Haver Analytics.

Unemployment

The unemployment rate in the country fell significantly in November to 6.5 per cent from 7 per cent in October, 2020.

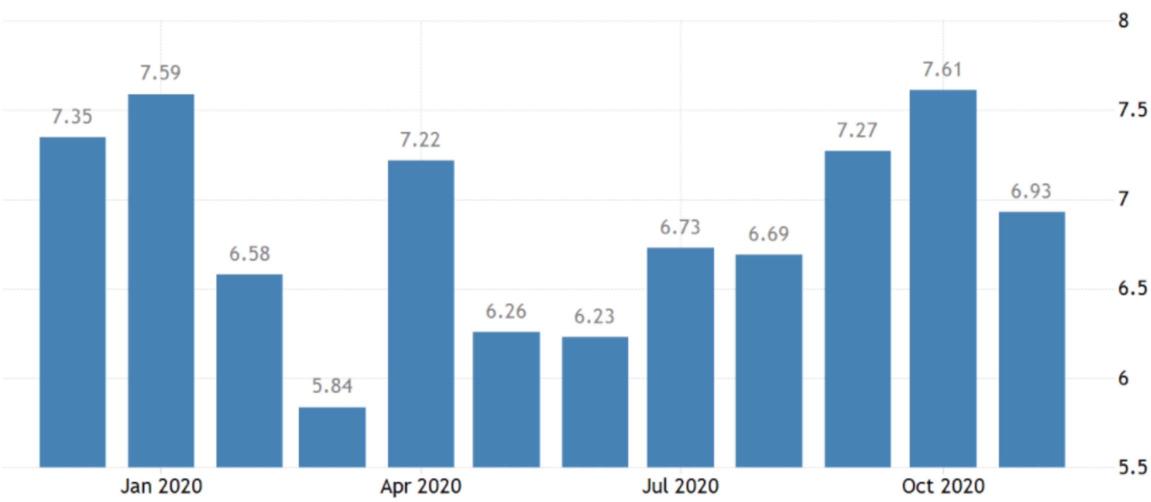


Source: Centre for Monitoring Indian Economy (CMIE)

Inflation

India's retail price inflation fell to 6.93 percent in November 2020, after reaching the six year high of 7.61 percent in October. Sill, inflation remained above the Reserve Bank of India's (RBI) 2-6 percent target range for an eight straight month.

India Inflation



Source: Ministry of Statistics and Programme Implementation, Government of India

8. Indian economy in 2020: A brief review of the past year

During the year, Indian economy went through turmoil, rarely seen in the history of human kind. As we approach to close this year, below is a collection of all major events and occurrences affecting the Indian economy during the year

December

UN Report claims Indian economy to remain ‘most r

A report published by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has forecasted that the Indian economy will emerge as the ’most resilient’ in the sub-region of South and South-West Asia over the long term. The report mentions “India's economy could prove the most resilient in the sub-region over the long term. FDI inflows have been steadily increasing and positive, albeit lower, economic growth after the pandemic and India's large market will continue to attract market-seeking investment”

The report titled “Foreign Direct Investment Trends and Outlook in Asia and the Pacific 2020/2021” underlines that during the first three quarters of 2020, even though greenfield FDI inflows declined in South and South-West Asia by 43 per cent. During this period, greenfield investment in India alone dropped by 77 per cent. The report claims that while the overall FDI in the region dropped by 2 per cent in 2019, these inflows were chiefly driven by India. The report also noted that the outward FDI flow from the sub-region saw a modest increase in 2019, rising from $14.8 billion in the previous year to $15.1 billion.

November

Diwali festive season places Indian economy on track for strong recovery

The Indian economy showed strong signs of recovery in the month of October increasing the likelihood that it will soon exit the pandemic-induced recession in the final quarter of this year. Demand during the festival season helped boost three of the eight high-frequency indicators designed by Bloomberg. The index measuring so-called ‘Animal Spirits’ remained steady at 5, a level arrived at by using the three month weighted average to smooth out volatility in the single-month readings. A steady pace of recovery from the month ago will help the economy alter course, after output likely posted its second straight quarter of contraction in the July-September period.

Economic activity in the dominant service sector of the country registered a sharp rise in November after eight straight months of contraction. The IHS Markit India Services Purchasing Managers’ Index rose to 54.1 last month, the highest since February, riding on renewed increase in new work orders with business optimism also rising. During the last month manufacturing activities in the country too continued to expand at a steady pace. The manufacturing PMI touched 58.9, the highest since May 2010. Both the manufacturing and services sector in the country faced broad price pressures which will likely keep the inflation-targeting central bank from resuming interest-rate cuts next month.

October

Indian Economy to contract by 9.6 per cent in 2020-21: World Bank

World Bank expects Indian GDP to contract by 9.6 per cent in this fiscal year as result of the national lockdowns and the income shock experienced by households and firms due to the COVID-19 pandemic. In it's recently released South Asia Economic Focus report World Bank forecasts for sharper than expected economic slump across the region, with regional growth expected to contract by 7.7 per cent in 2020, after topping 6 per cent annually in the past five years. The bank predicted that the country GDP is set to contract by 9.6 per cent in the 2020-21 fiscal year. Taking into account the population growth, however, income-per-capita in the region will remain 6 per cent below 2019 estimates. The Indian economy saw a 25 per cent drop in the GDP in the second quarter of the years that was also the first quarter of the fiscal year. The report mentioned that the spread of the coronavirus and containment measures have severely disrupted supply and demand situation in India.

September

Indian GDP shrinks by 23.9 per cent in the April to June quarter

Official data released by Ministry of Statistics and Programme Implementation (Mospi) indicated that the Indian GDP contracted by 23.9 per cent in the second quarter of the year. The contraction reflects the severe impact of the COVID-19 lockdown, which halted most economic activities, as well as the slowdown trend of the economy even pre-COVID-19. Economists expect this to contribute to a contraction in annual GDP this year, which may be the worst in the history of independent India.

In line with the consumption shock forecast by the Reserve Bank of India on account of the pandemic, private final consumption expenditure contracted by 27 per cent. RBI, in its annual report released last week, had flagged the adverse impact of the pandemic on discretionary spending as well as the record low consumer confidence levels that suggested recovery in demand may take longer. Gross fixed capital formation — an indicator of investment demand in the economy — contracted by 48 per cent in the quarter.

August

Financial market turn bullish amid otherwise gloomy economic outlook

The halt in business operations reflected across all major global stock markets and primary indexes such as Dow Jones Industrial Average, Nasdaq Composite, Sensex, Nikkei, FTSE100, etc fall by over 20 per cent. In India, the primary indices Nifty 50 and S&P BSE Sensex recorded a fall of over 25 per cent each to 8200 and 28000 respectively. This period also witnessed the highest ever selling by foreign institutional investors. Due to the continued extension in lockdowns and GDP downgrade was being expected to drag the Indian equity markets to further lows. However, against all expectations, Indian stock markets have registered a strong rebound since.

The Indian share markets have recorded one of the best rebounds from the March lows globally while battling some of the world's worst economic data. The unprecedented surge has pushed the valuations to a record high and the investors are now looking past the grim realities of the market and rising COVID cases in the country to invest in the Indian markets.

July

<u>Introduction of much awaited National Education Policy</u>

The Union Cabinet has approved the new National Education Policy (NEP), 2020 with an aim to introduce several changes in the Indian education system - from the school to college level. The NEP proposes sweeping changes including opening up of Indian higher education to foreign universities, dismantling of the UGC and the All India Council for Technical Education (AICTE), introduction of a four-year multidisciplinary undergraduate programme with multiple exit options, and discontinuation of the M Phil programme. In school education, the policy focuses on overhauling the curriculum, "easier" Board exams, a reduction in the syllabus to retain "core essentials" and thrust on "experiential learning and critical thinking".

June

<u>India's investment volume shrinks to 94 per cent</u>

During the First six months of 2020, the investment volume in the country shrank by 94 per cent. A report released in June by Knight Frank suggests that commercial investment transactions, which include investment of big funds and HNIs in commercial properties reduced by USD 44.1 Billion or 52 per cent during the last five years. According to the report, India, Hong Kong and Singapore have recorded 94 per cent, 83 per cent and 88 per cent YoY decline over the last five months. During this period, China witnessed 34 per cent YoY decline. The report further shows that many commercial deals were cancelled or postponed in Mumbai, Delhi, Bangalore, Jakarta, Singapore and Tokyo.

May

<u>India announces INR 20 lakh crore fiscal package to alleviate the pains of COVID affected economy</u>

The Indian Government announced a mega stimulus package of INR 20 lakh crores in May to save the country's economy after an almost two months long COVID induced lockdown. The combined package amounts to nearly 10 per cent of the GDP, making it among the most substantial in the world after the financial packages announced by the United States (13 per cent of GDP) and Japan (21 per cent).

Experts believe that, to make the stimulus more effective, the government needs to deliver its policy response in multiple phases. In the present survival phase, the cash flow shock must be addressed to prevent permanent damage to the economy. As the infection curve is brought under control, the government should step in via a demand stimulus for consumption and investment to rejuvenate. growth. Fixing the financial plumbing will require recapitalization of PSBs, and a comprehensive onetime solution to deal with the bad debt situation. Though the structural reforms do not address the near term challenges, they will play a crucial role in turbocharging the economy in the long run.

April

Crude prices fall to lowest ever, amid nationwide lockdown in India

The May futures contract of West Texas Intermediate (WTI) crude fell into unchartered territory on 21 April, with sellers willing to pay buyers USD 37.63 a barrel to take delivery. The big problem, of course, was that there is hardly any storage capacity available, so buyers were shying away as well. Since there are more settlement options for Brent crude futures, their prices haven't fallen as sharply.

Even so, Brent crude, which is the more relevant benchmark for India, has dropped over 60 per cent so far in 2020. Still, with the ongoing impact of covid-19 related lockdown, the gains from lower crude oil price get offset to a large extent. It is imperative to note that the current fall in global crude oil prices is not a pure positive supply shock, which benefits oil consumers like India but is also a result of a weak demand induced shock and hence the positive impact on growth gets somewhat offset. The benefits from lower crude prices to India's fiscal position will be limited as tax collections to the government from the petroleum sector get affected due to slowdown in economic activities owing to Covid-19 shock.

March

The lockdown and the relief package

On 23 March, 2020, the Hon'ble Prime Minister of India announced a nationwide lockdown for a period of 21 days to stop the spread of the deadly COVID-19 virus. The nationwide lockdown brought the entire economy to a standstill, affecting people's livelihoods, jobs and income. The lockdown triggered a reverse migration of the labourers from the urban parts of the country to their hometowns.

Under such circumstances, Government of India provided a relief package on 26 March to alleviate the economy. The Hon'ble Finance Minister, Ms Nirmala Sitharaman announced for an INR 1.7 lakh crores relief package for the poor to help them tide over the disruptions. On 27 March, the RBI Governor, Mr Shaktikanta Das not only brought down the repo rate to the lowest ever but also allowed EMI and working capital holiday (not waiver), trying to provide some respite to individuals and companies, many of whom are staring at an imminent drought in cash flow or income compression.

February

Hon'ble Finance Minister presents a forward looki

The Hon'ble Finance Minister Smt. Nirmala Sitharaman presented the Union budget for financial year 2020-21 in Lok Sabha on February 1, 2020. Apart from the introduction of 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

January

Economic survey forecasts India to grow at 6 – 6.5 per cent in FY 2020-21

The Government of India released its economic survey for FY 2020-21 on 21 January, 2020. The report forecasted that the country is poised to grow at a rate of 6 – 6.5 per cent during the financial year 2020-21. Although this was lower than the growth that India had in previous years, this growth estimate was considered to be a satisfactory one compared to the current recession.

Oil Market

Crude oil price- Year in Review

Global crude oil benchmarks was in the range of USD 60 at the beginning of 2020. In the month of February, spread of Covid-19 in China, led to the drop in crude price. At this time, spread of virus was limited to China only. Hence decline in consumption of crude in China led to to the overall decline in crude prices. By March, crude benchmarks were down by almost 50% from January's price as the virus spread across the entire world . Implementation of lockdown, restriction of transport, closure of borders led to the decline in demand for crude oil globally. Crude benchmarks saw a new low since the second Gulf war. In April, Spot WTI crude benchmarks entered the negative territory on the grounds of excessive supply and reduced demand. Brent & Dubai entered the USD 20 range due to the decline in demand.

In the month of May, OPEC producers and allies met to discuss the course of action required to lift the crude oil price. At the end of meeting, a systematic production cut plan was agreed for the year 2020 extending up to 2021. Crude prices benchmarks recovered as OPEC and allies trimmed down production to remove the surplus crude oil from market. In the second half of 2020, crude benchmarks continued to trade in the range of USD 40/bbl.

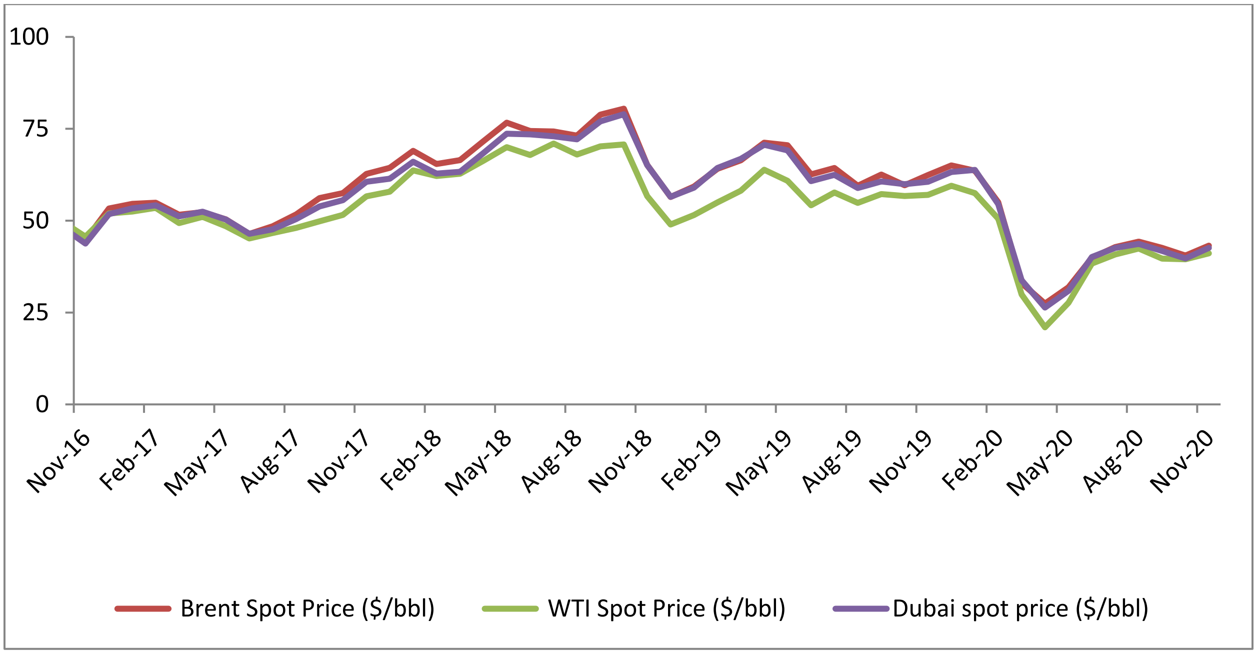
In the month of November, UK became the first country to approve vaccines for COVID-19.Hope of vaccine and resumption of economic activities helped the crude oil prices to recover significantly in the month of December. Brent touched USD 50 mark, for the first time since March. However, average Brent, WTI and Dubai basket crude prices in December 2020 were down by 23.2 %, 21.2 % and 22.4% per cent respectively from their 2019 prices. India crude oil benchmark was down by 23.00 % on Y-o-Y basis.

Crude oil price – Monthly Review

Crude benchmarks saw a good comeback in the month of the November and countered last month's decline. Driven by strong demand in the Asian market, crude prices went up week over week in the month and Brent price index reached the highest price since March 2020. Boosted by the hope of Covid-19 vaccine, crude benchmarks saw a sustained increase in the second half of the month. In the US, inventory drop pushed the WTI benchmark to 8-month high.

For the month, crude benchmarks went up strongly. Average Brent, WTI and Dubai basket crude prices in November went up by 6.7%, 4.1 % and 7.3% respectively from their October prices.

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



Source: WORLD BANK

¶ Brent crude price averaged $ 43.20 per bbl in November 2020, up by 6.7 % on a month on month (MoM) but down by 30.8 % on year on year (YoY) basis, respectively.

¶ WTI crude price averaged $ 41.10 per bbl in November 2020, up by 4.1% on a month on month (MoM) but down by 27.9 % on year on year (YoY) basis, respectively.

¶ Dubai crude price averaged $ 42.60 per bbl in November 2020, up by 7.3% on a month on month (MoM) but down by 29.7 % on year on year (YoY) basis, respectively.

Table 1: Crude oil price in November, 2020

Crude oil	Price ($/bbl) in November 2020	MoM (%) change	YoY (%) change
Brent	43.20	6.7%	-30.8%
WTI	41.10	4.1%	-27.9%
Dubai	42.60	7.3%	-29.7%

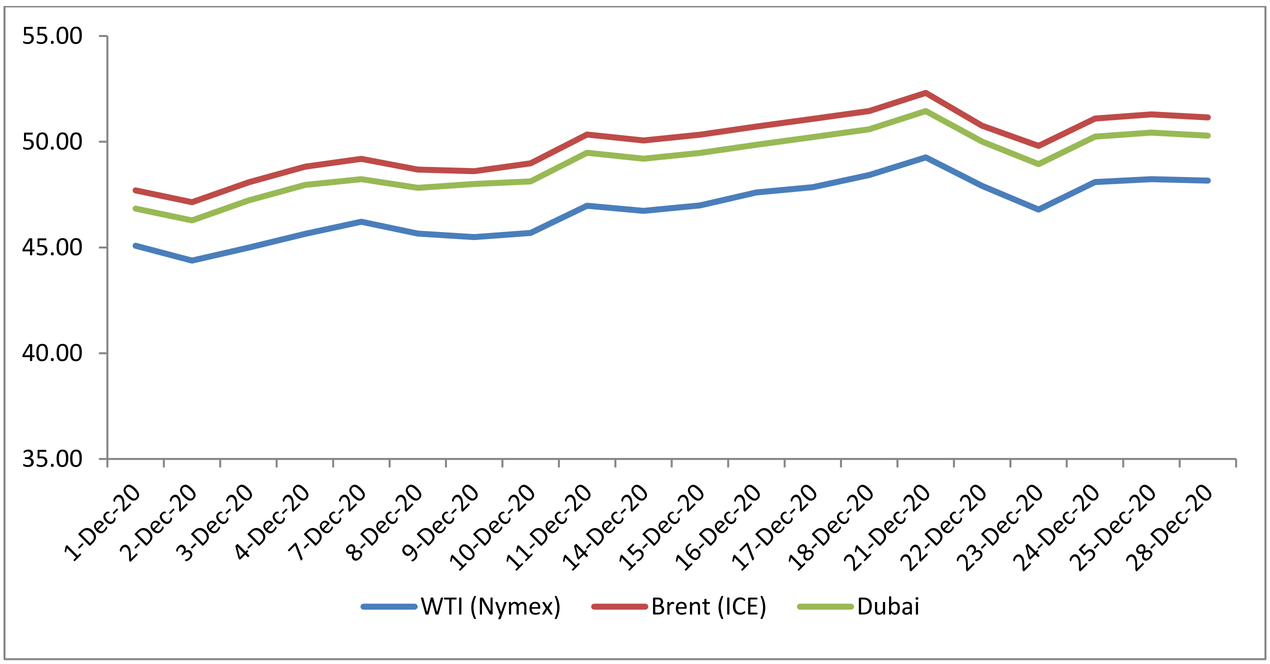
Source: WORLD BANK

Oil Prices rises on the hope of Covid-19 vaccine and strong demand

Global crude benchmarks saw a significant rise in the month of December as the hopes of Covid-19 vaccine led to the optimism of crude demand recovery. This was further bolstered by the demand recovery in major crude consumer like China and India, where the economic activities are in the path of recovery to reach pre-covid-19 levels. In the second week of December, Brent touched USD 50/barrel mark, highest since March 2020. In the third week of December, crude benchmarks fell on the account of new strain of Covid spread in UK.

For the month, crude benchmarks went up with significant percentage rise. Average Brent, WTI and Dubai basket crude prices in December went up by 15.58%, 13.99 % and 15.21 % respectively from their November prices.

Figure 2: Crude oil price in December 2020

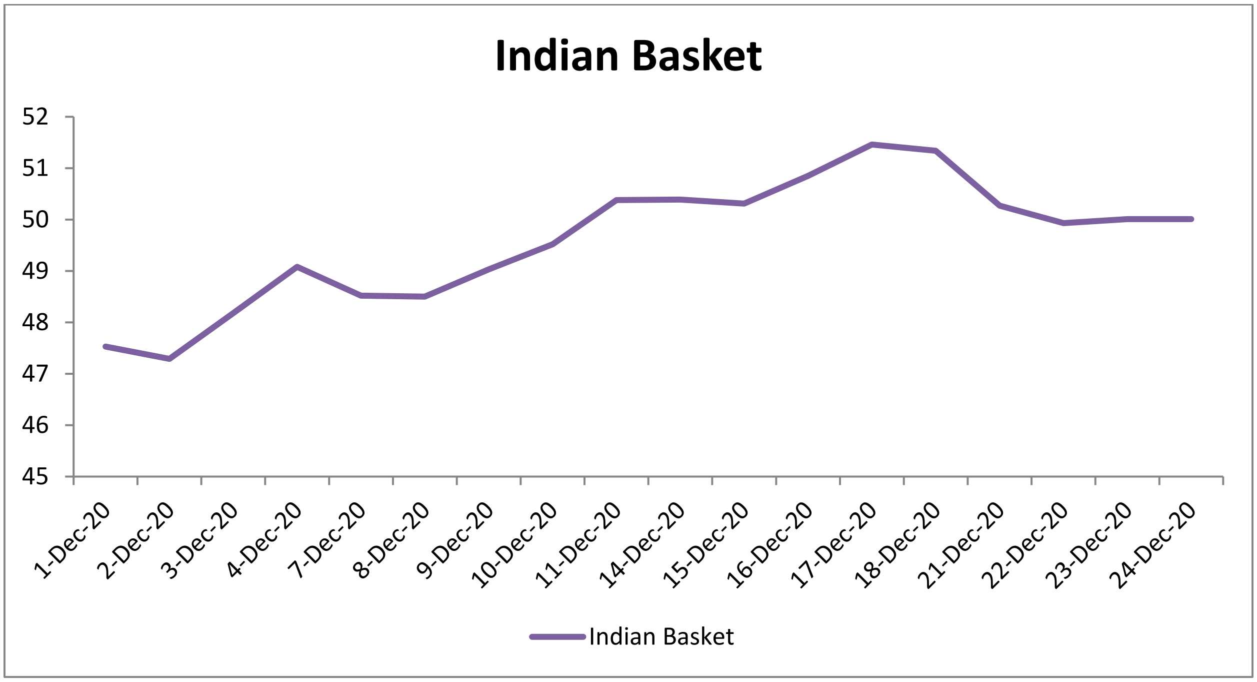


Source: EIA, Oilprice.com, PPAC

Indian Basket Crude oil price

¶ The Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and Sweet grade (Brent Dated) of Crude oil processed in Indian refineries in the ratio of 74.77:25.23 during 2017-18.

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



Source: Petroleum Planning & Analysis Cell

- Indian crude oil benchmark prices increased as the reference crude benchmarks for the month of December went up in the global market.

- Indian crude basket price averaged $49.74 per barrel in December, up by 15.93 % on Month on Month (M-o-M) but down by 23.04 % on a year on year (Y-o-Y) basis, respectively.

Upstream activity & Rig count

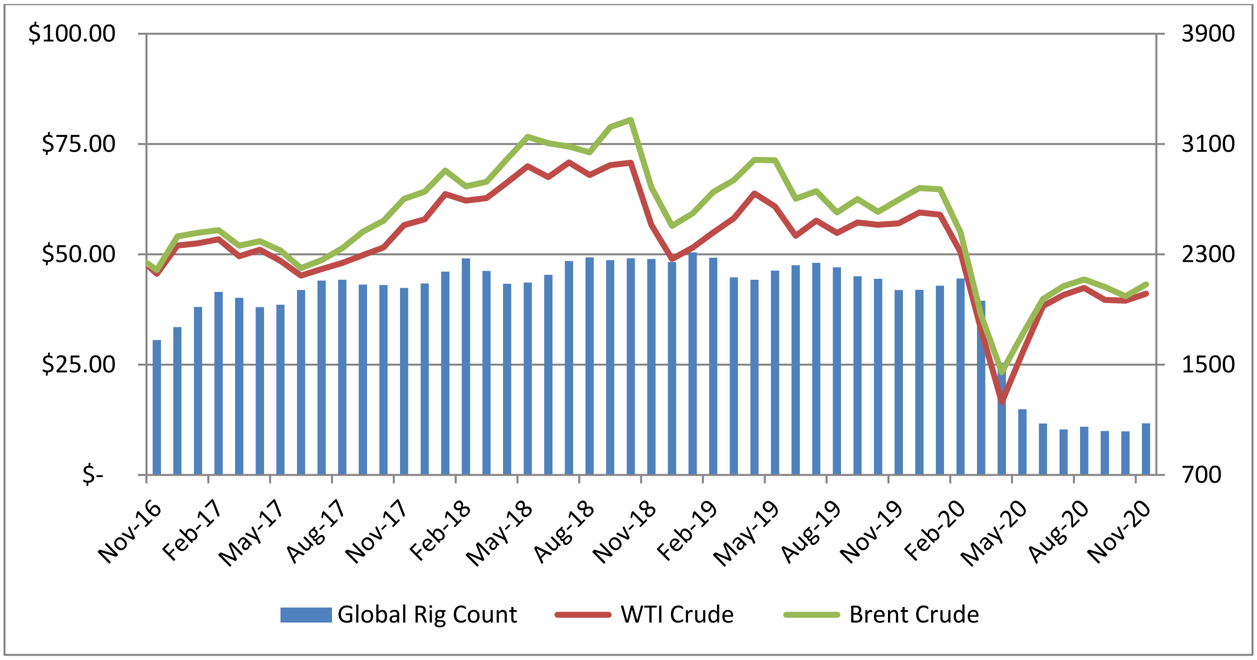
Global rig count

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.

Yearly Review:

Global rig count stood at 2,073 at the start of 2020. Buoyed by the stronger oil price and seasonality, it climbed to 2,125 in February. With the fall in oil price and reduction in demand for crude due to Covid-19, E&P companies restricted their exploration activities to save cash flow. With budget cuts, rig count continued to decline in a rapid phase, losing close to 1,000 rigs by May. Global rig count was globally down by 50% in the mid of 2020. Recovery of oil prices gave a momentum for E&P operators to increase the exploration activity. By the end of 2020, rig count stood at 1074, lower by 47.43% on Y-o-Y basis

Figure 4 Global Rig Count vs. Crude Prices



Source: Baker Hughes

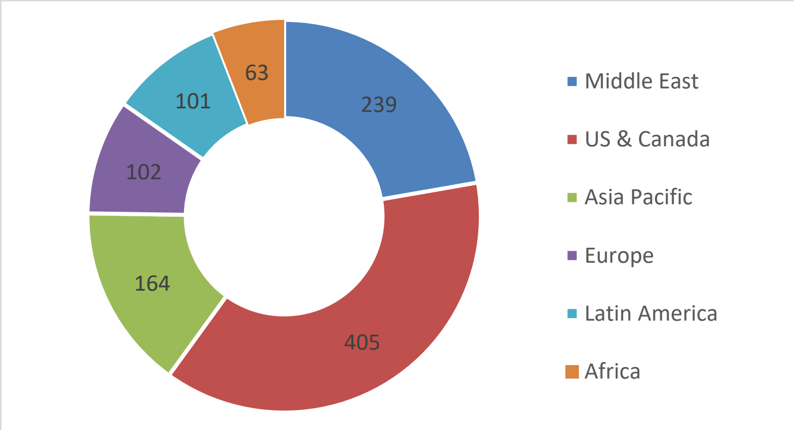
Global rig count for the month of November went up by 58. From October's rig count of 1,016, it went up to 1,074. Recovery in crude oil prices bolstered the confidence of E&P players to resume the E&P activities. Rig count went up in Latin America, Africa, Europe and in North America. Rig counts decline in Middle East and Asia Pacific. US rig count was up by 30 from 280 to reach 310, while rig count in Canada went up by 15 from 80 to reach 95. Onshore rig went up by 55 and offshore rigs went up by 3.

Table 2 : Global Drilling Rig Count

Rig Type	Count in November 2020	MoM (%) change	YoY (%) change
Land	901	6.50%	-49.12%
Offshore	173	1.76%	-36.16
Total	1,074	5.71%	-47.40%

Source: Baker Hughes

Figure 5 Geography-wise Rig count -November 2020



Source: Baker Hughes

Indian Drilling Rig Count

Indian drilling rig count changed marginally in the month of November. Rig count went up by 1 to reach 78. Indian rig count decreased by 28.44% on Y-O-Y basis. 65 were onshore rigs and the rest 13 were offshore rigs.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

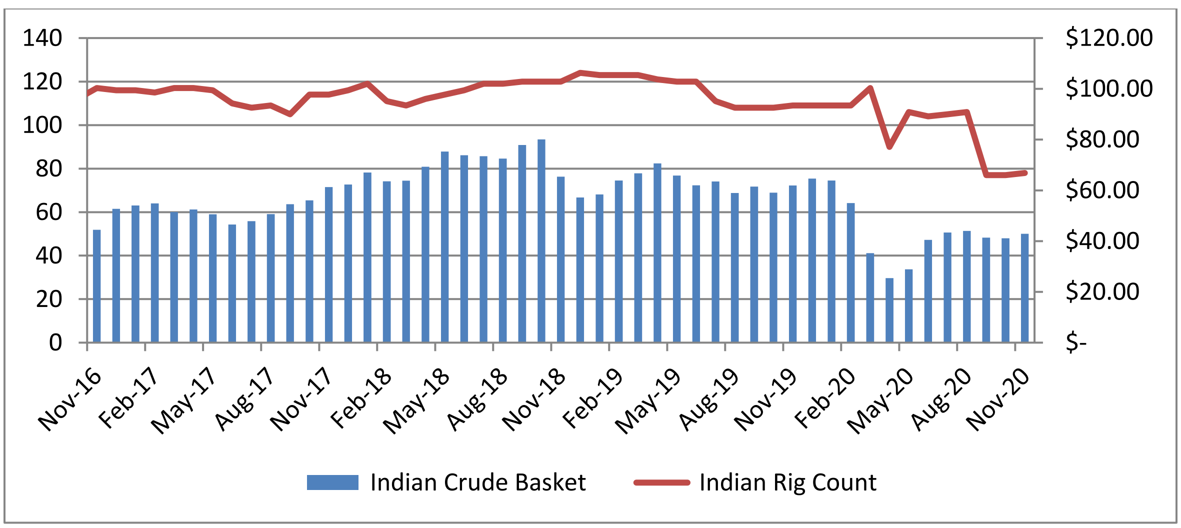


Table 3 : Indian Rig Count

Rig Type	Count in November 2020	MoM (%) change	YoY (%) change
Land	65	1.56%	-15.88%
Offshore	13	0.0%	-59.38%
Total	78	1.30%	-28.44%

Source: Baker Hughes

Oil demand & supply

In 2020, average global oil demand was down by 9.77 mb/d from 2019 and stood at 89.99 mb/d. In Q1 2020, oil demand was down to 92.71 mb/d from 2019's demand of 99.67 mb/d. Spread of Covid-19 and the implementation of lockdown impacted the demand of crude oil globally. In Q2 2020, demand was down to 82.57 mb/d, down by close to 20%. With relaxation of lockdown and resumption of economic & industrial activities, crude oil demand recovered gradually in Q3 & Q4 of 2020. On Y-o-Y, crude oil demand was down by 9.79%.

Monthly Review:

Preliminary data indicates that global oil supply in November rose by 1.62 mb/d m-o-m to average 92.53 mb/d and down by 8.78 mb/d Y-o-Y. Non-OPEC supply (including OPEC NGLs) increased in November by 0.91 mb/d m-o-m to average 67.42 mb/d in November 2020. On Y-o-Y basis, it was lower by 4.80 mb/d. The preliminary increase in production was driven by Canada, Norway and the US. In November, share of OPEC crude oil in total global production went up by 0.3% to 27.1%.

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.

World oil demand in 2020 is revised lower by 0.02 mb/d with annual decline of 9.8 mb/d. Total global oil demand is now little lower than 90.00 mb/d. In the OECD, demand forecast was adjusted by a reduction of 0.18 mb/d in 2020. Weaker-than-expected recovery in OECD during 3Q20 due to lower transportation fuel demand in the US and OECD Europe has led to the downward revision of around 0.18 mb/d.

Better-than-expected oil demand in China, amid a steady recovery across various economic sectors and improved oil demand from India has given an upward revision among the non-OECD countries. This has offset the decline in demand from OECD nations.

Total global oil demand is estimated to be 89.99 mb/d in 2020. Oil demand forecast for Q4 2020 was revised down by 0.2 mb/d to reach 93.47 mb/d.

For 2021, world oil demand growth is revised lower by 0.35 mb/d , to a growth of 5.90 mb/d. There is an uncertainty caused by the impact of Covid-19 which has reduced the demand forecast for 2021. With improvement in economic activities, demand for petrochemical feedstock and industrial fuels are forecasted to gain momentum in 2021.

Table 4: World Oil demand in mbpd	2019	1Q2020	2Q2020	3Q2020	4Q2020	2020	Growth	%
Total OECD	**47.75**	**45.44**	**37.56**	**42.49**	**43.56**	**42.27**	**-5.48**	**-11.48**
~ of which US	**20.86**	**19.66**	**16.38**	**18.79**	**19.98**	**18.70**	**-2.16**	**-10.35**
Total Non-OECD	**52.02**	**47.27**	**45.02**	**48.67**	**49.91**	**47.73**	**-4.29**	**-8.25**
~ of which India	*4.84*	*4.77*	*3.51*	*3.94*	*4.34*	*4.14*	*-0.70*	*-14.52*
~ of which China	13.30	10.70	12.85	13.67	13.98	12.81	-0.49	-3.70
Total world	**99.76**	**92.71**	**82.57**	**91.16**	**93.47**	**89.99**	**-9.77**	**-9.79**

Source: OPEC monthly report, November 2020
*Note: *2019 = Estimate and 2020 Forecast*

Global petroleum product prices

Yearly Review:

Refinery margins went for a toss in 2020 as the demand for refined products decline due to the pandemic. Refinery margins for Oman in Asia lost 10¢ m-o-m to average $ 1.05/b in November. On Y-o-Y basis, refinery margin was higher by $ 1.64 despite the downturn faced in 2020. In the selective Asian markets comprising of India, Singapore, South Korea, Japan and China, refinery utilization rate was down by 4.6% from 92.6% from 2019 to reach 88 %

Monthly Review:

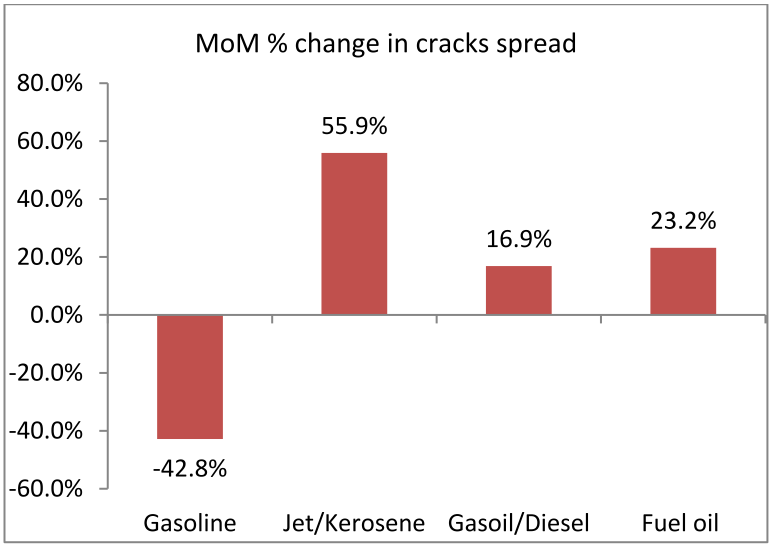
Asian product markets weakened slightly, due to the surge in crude oil prices amid strong refinery processing rates. Improvements in jet/kerosene and gasoil cracks were insufficient to overturn the gasoline weakness. As the export outlets for middle distillates remain scare, the refining economics are expected to remain subdued in near future. Refinery margins for Oman in Asia lost 10¢ on m-o-m to average $1.05/b in November and were higher by $1.64 on y-o-y basis. Refinery utilization rates in November averaged 87.26 % in selected Asian markets comprising of Japan, China, India and Singapore.

Asian gasoline 92 cracks spread fell due to record high Chinese crude intakes recorded in the previous month. It boosted gasoline exports from China and caused an oversupply environment in the region. Singapore Gasoline cracks averaged minus $2.18/b against Oman in November, down by $1.91 m-o-m and by $7.30 y-o-y.

Jet/kerosene cracks spread in Asia climbed to their highest levels since March 2020 supported by a surge in demand for aviation and firmer winter. The Singapore jet/kerosene crack spread against Oman averaged $2.31/b, up by $1.36 m-o-m, but down by $10.67 y-o-y.

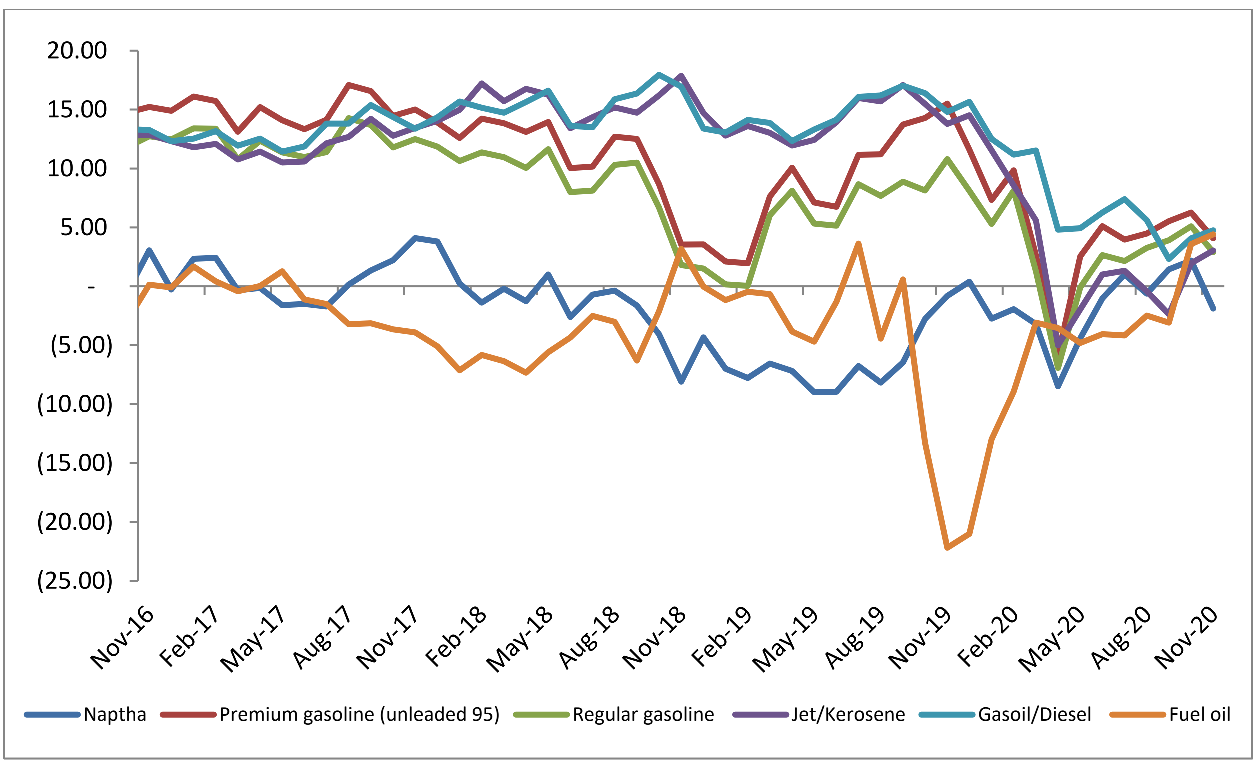
The Singapore gasoil crack spread strengthened its upward trend to reach a 3-month high in November as gasoil consumption recovered due to the demand growth in factory activities of China and South Korea. Singapore gasoil crack spread against Oman averaged $3.82/b, up by $1.09/b m-o-m but down by $9.67 y-o-y.

The Singapore fuel oil crack spread strengthened in November backed by robust bunkering demand with strong demand coming from Pakistan and South Korea. Closure of coal-fired power plants in South Korea due to fine-dust management policy is likely to boost the imports of LSFO in coming months. Singapore fuel oil cracks against Oman averaged minus 61 ȼ/b, up by $1.19 m-o-m and by $23.11 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 Novembers 2020	MoM (%) change	YoY (%) change
Naptha	40.71	-2.8%	-31.9%
Premium gasoline (unleaded 95)	45.96	1.5%	-38.7%
Regular gasoline (unleaded 92)	45.51	1.6%	-36.3%
Jet/Kerosene	45.64	9.6%	-38.6%
Gasoil/Diesel (50 ppm)	47.356	8.2%	-37.2%
Fuel oil (180 cst 2.0% S)	47.01	8.6%	22.4%
Fuel oil (380 cst 3.5% S)	42.72	9.8%	11.9%

Source: OPEC

Petroleum products consumption in India

Yearly Review:

On yearly basis, petroleum product consumption in India was down by 3.5%. Impact of lockdown was instantly felt on the petroleum products as the consumption declined sharply. Transportation fuels like Petrol, Diesel saw a decline in consumption by more than 50% in the month of April as the lockdown restricted movements of all vehicles except the service and emergency vehicles. Closure of air space and air traffic stalled the consumption of ATF. Closure of industries impacted the consumption industrial fields and greases. With first phase of unlocking, consumption of petroleum products recovered slowly from its decline in the month of April. With further phases of unlocking, consumption climbed up gradually. In November, petroleum product consumption reached the pre-Covid levels due to the strong recovery in economic activities and consumer activities.

Monthly Review:

¶ In November 2020, demand for petroleum products saw a marginal growth of 0.3% to achieve a 9-month high demand.
¶ On yearly basis, petroleum product consumption was down by 3.5%.
¶ Transport fuels namely Petrol and Diesel saw a small growth in demand by 0.4% and 0.7% respectively on monthly basis. On year-o-year basis, Diesel consumption was down by 7% despite the festive season.
¶ ATF consumption went by 4.9% as airlines gradually increased their flight utilization in month due to an improved demand for air travel.
¶ ATF consumption on Y-o-Y basis was down by 47.5%. Once airlines start scaling up the operations, the demand is likely to go up in coming months
¶ LPG consumption went down by 2.9% % as the demand looked stagnated in the month of November.

- Resumption of road projects improved the demand for Bitumen and its consumption went up by 4.5% on comparison with the previous month.
- Increase in industrial activity helped in improvement of Naphtha consumption. Naphtha consumption went up by 3.5% on monthly basis and 7% on yearly basis.

Table 6: Petroleum products consumption in India, November 2020

Petroleum products	Consumption in '000 MT November 2020	MoM (%) change	YoY (%) change
LPG	2,353	-2.9%	4.1%
Naphtha	1,345	3.5%	7.0%
MS	2,665	0.4%	5.1%
ATF	372	4.9%	-47.5%
HSD	7,042	0.7%	-7.0%
LDO	67	-1.7%	33.3%
Lubricants & Greases	315	-0.3%	7.8%
FO & LSHS	502	-5.6%	9.1%
Bitumen	692	4.5%	18.4%
Petroleum coke	1,402	0.6%	-16.4%
Others	924	-1.8%	3.2%
TOTAL	17,834	0.3%	-3.5%

Source: PPAC

Natural Gas Market

Natural Gas Price – Year in Review

Natural gas price faced the turmoil caused by the Covid-19 pandemic. Lockdown and closure of industrial activities led to the decline in demand for LNG and CNG globally. In Henry Hub, gas price was lower by 0.8% on Y-o-Y to reach USD 2.61/MMBtu. Lowest price recorded in Henry hub in 2020 was USD 1.61/MMBtu, in June. Europe gas market saw unseen decline in gas price due to decline in demand for gas in major markets like Italy, Germany, France and the UK. In May 2020, natural gas price in Europe reached a new low of USD 1.58/MMBtu. However, it recovered later as the industrial consumption improved and arrival of winter bolstered the demand for natural gas. On Y-o-Y basis, European gas price is lower by 6.00 % while Japanese LNG benchmark was down by 37.8% on Y-o-Y in 2020. Asian spot LNG prices stood at two-year high on the account of stronger winter demand, delivery price for January 2021, stood around $8.10/MMBtu. In India, domestic gas price was changed twice in 2020 as per the gas pricing formula. Domestic gas price for April 2020 to September 2020 was $2.39/MMBTU and price for deep water, ultra-deep water, and high-pressure high temperature field was $ 5.61/MMBtu. Domestic gas price for October 2020 to March 2021 is $1.79/MMBTU and price for deep water, ultra-deep water, and high-pressure high temperature field is $4.06/MMBtu.

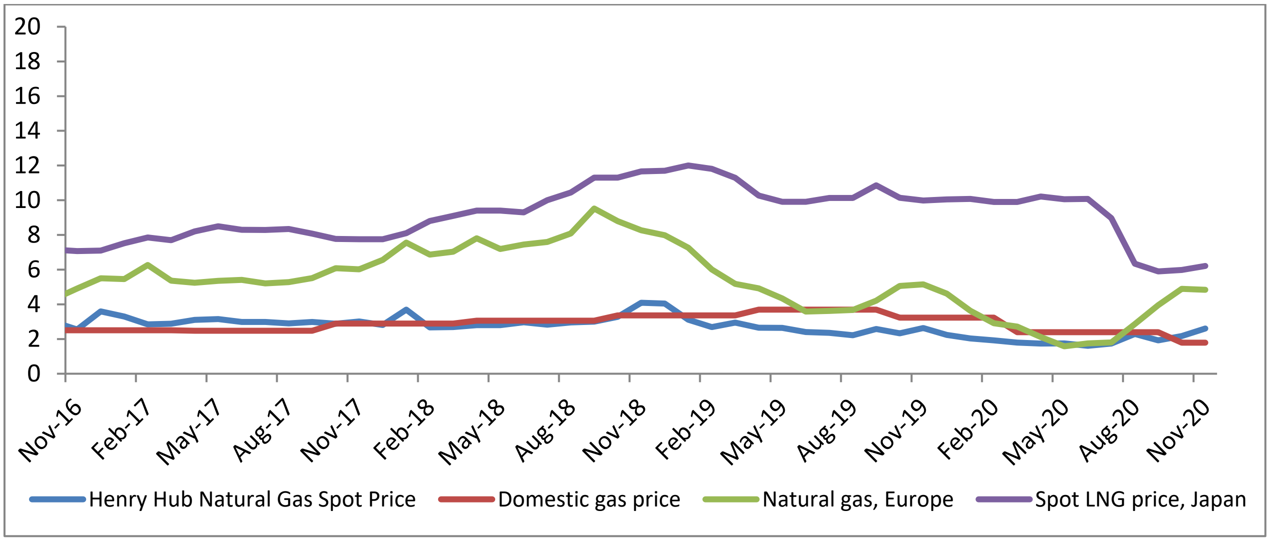
Natural Gas Price – Monthly Review

Natural gas prices went up in the month of November in Henry Hub and in Japan, while Europe hub saw minor decline in the price. Natural gas price in the Henry hub went up by 20.3 % to reach $2.61/MMBtu in the month of November. Henry hub gas prices went up for second straight month. Stronger demand in the domestic market due to the prevailing winter and improved LNG exports led to the decrease in price. If the current situation is set to continue, natural gas price is expected to go beyond $ 3.50/MMBtu.

Natural gas prices in Europe saw a minor decline in the month of November followed by stronger price growth in previous three months. Gas price in the hub declined by 1.0%, to reach $4.85 / MMBtu. Russian gas entering the Europe is at its highest volume in 2020 with a flow of 13.18 Bcm in November. Other factors are mild winter, high gas storage stocks that led to change in market dynamics mildly.

Asian spot LNG prices went up further in the month of November and stood at two-year high on the account of stronger winter demand. Delivery price for January 2021, stood around $8.10/MMBtu. Surge in South Korean LNG imports for power generation due to closure of coal-fired power plants to reduce the dust emission has pushed the price up. Japan LNG benchmark went up by 3.8%, on the ground of strong winter.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

Natural Gas	Price ($/MMBTU) in November 2020	MoM (%) change	YoY (%) change
India, Domestic gas price (Apr 20)	1.79	-25.1%	-44.6%
India, Gas price ceiling – difficult areas (Apr 20)	4.06	-27.62%	-51.8%
Henry Hub	2.61	20.3%	-0.8%
Natural Gas, Europe	4.84	-1.0%	-6.0%
Liquefied Natural Gas, Japan	6.21	3.8%	-37.8%

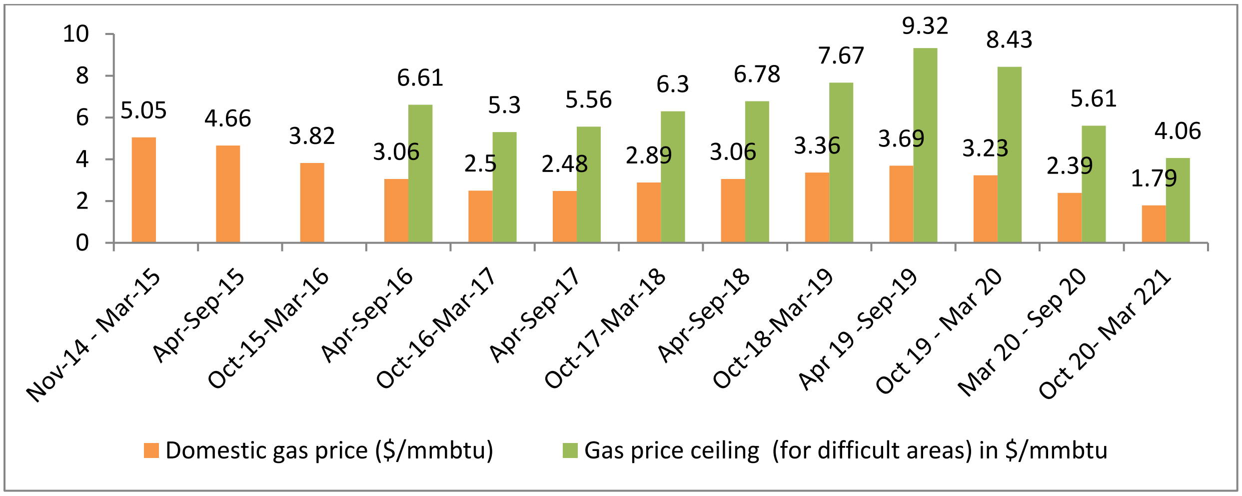
Source: EIA, PPAC, World Bank

Indian Gas Market

Domestic natural gas price which takes into account international benchmarks including Henry Hub, Alberta hub, Russia and UK National Balancing Point. With global gas price declining, India's latest gas price revision saw significant decline, thus capturing the international gas price trends. Domestic gas price for October 2020 to March 2021 is $1.79 per MMBTU and it is down by 25.10 % as compared to last revision and down by 44.58 % on Y-o-Y basis.

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 2020 to March 2021 period, the price of gas from such areas has been notified at $4.06 per MMBTU, 27.62 % down from last revision and 51.8% down from last year.

Figure 9: Domestic natural gas price



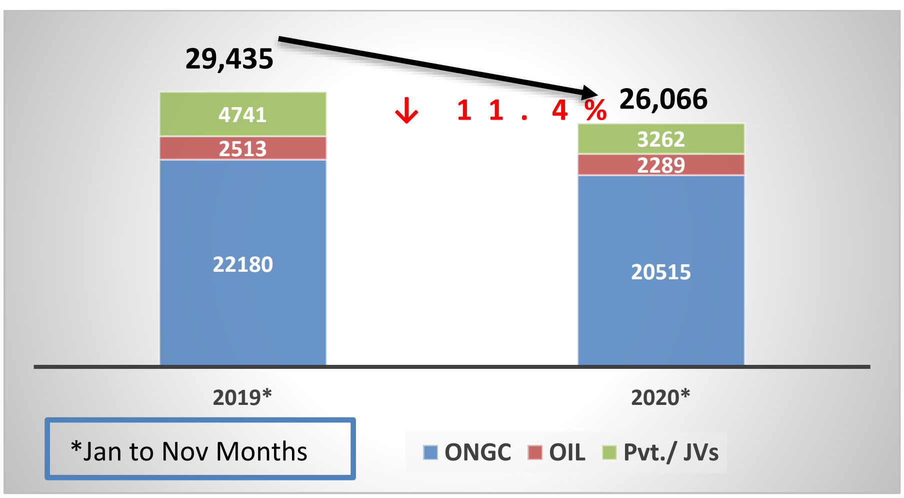
Source: PPAC

Yearly Report on Natural gas production, imports and consumption –2020

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the year 2020 (Jan-Nov'20) was 26,066 MMSCM (decrease of 11.4% over the previous year which was 29,435 MMSCM)

Figure 10: Domestic natural gas Gross production (Qty in MMSCM)

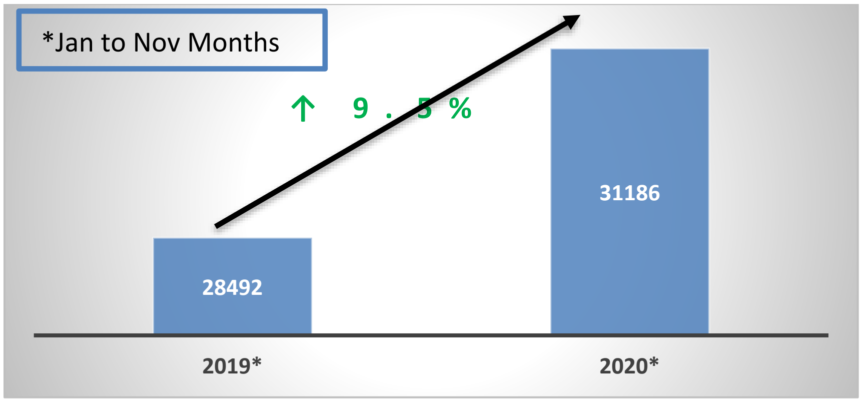


Source: PPAC

2. LNG imports:

Total imports of LNG (provisional) during the year 2020 (Jan-Nov'20) was 31,186 MMSCM (increase of 9.5% over the previous year which was 28,492 MMSCM).

Figure 11: LNG imports (Qty in MMSCM)

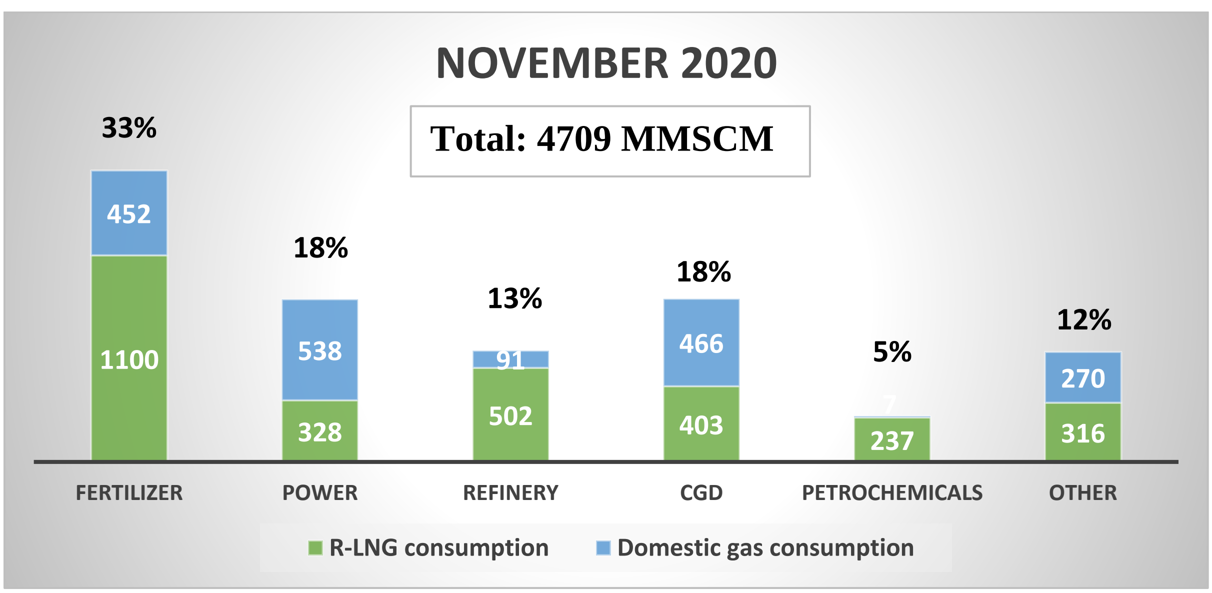


Source: PPAC

3. Sectoral Consumption of Natural Gas:

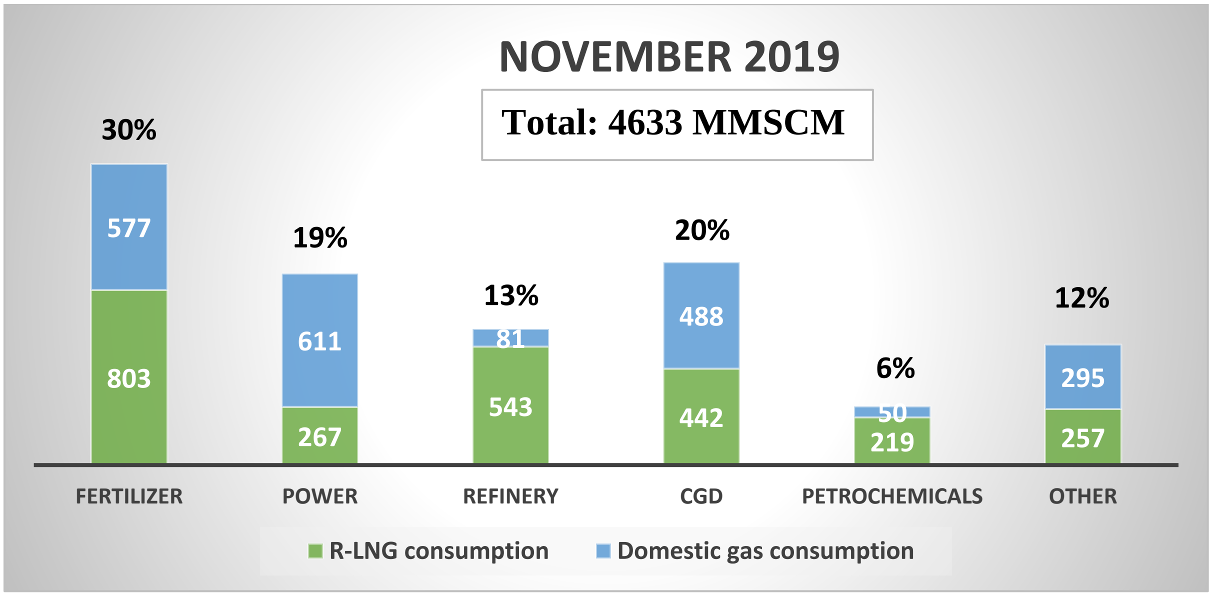
Total consumption of natural gas during November 2020 was 4709 MMSCM (increase of 1.6% over the corresponding month of the previous year 4633 MMSCM). Major consumers were Fertilizer (33%), Power (18%), City Gas Distribution (CGD) (18%), refinery (13%), and petrochemicals (5%).

Figure 12: Sectoral Consumption of Natural Gas (Qty in MMSCM) in November 2020



Source: PPAC

Figure 13: Sectoral Consumption of Natural Gas (Qty in MMSCM) in November 2019



Source: PPAC

Key developments in Oil & Gas sector during the year 2020

- **ONGC opens India's Eighth Hydrocarbon Basin**

ONGC on 20 December opened India's eighth hydrocarbon producing basin when it started oil flow from a well in the Bengal basin. Oil production commenced from the well Asokenagar-1 in 24 Pargana district. The well Asokenagar-1 was completed as an oil producer under an early-monetisation plan issued by the Government of India," it said. With this ONGC has discovered and put to production seven out of the eight hydrocarbon producing basins of India, covering 83 per cent of established oil and gas reserves. These comprise appraisal programme of Asokenagar discovery for an area of about 739 square kilometres including 3D seismic, low frequency passive seismic (LFPS) survey and drilling of two wells

- **Reliance , BP joint venture begins gas production from ultra deep-water field in Eastern offshore**

Reliance Industries and BP Plc started production from the R-cluster, ultra-deep-water gas field in block KG D6 off the east coast of India on 18th of December. RIL and BP are developing three deep-water gas projects in block KG D6 - R-cluster, Satellites cluster and MJ – which together are expected to meet around 15% of India's gas demand by 2023. The commissioning of the R-Cluster is the first of three deep-water projects. It is expected to reach plateau gas production of about 12.9 million standard cubic meters per day in 2021.

¶ **Shri Dharmendra Pradhan inaugurated H-CNG Plant and Launches trials in Delhi**

On 20th October, Shri Dharmendra Pradhan, Union Minister of Petroleum & Natural Gas and Steel, inaugurated Indian Oil's compact reformer plant and launched the much-awaited trial run of Delhi's buses on Hydrogen-blended CNG (HCNG) at the Rajghat Bus Depot-I of DTC.

In India's quest to promote Hydrogen as a clean fuel for the mobility sector, Hydrogen-blended HCNG is emerging as an excellent interim technology for achieving emissions reduction and import substitution. Refueling of H-CNG blends in vehicles can be performed with minimum modifications in the infrastructure that is currently under use for dispensing CNG

- **Natural Gas Marketing Reforms**

On October 7th, The Cabinet Committee on Economic Affairs chaired by the Prime Minister Shri Narendra Modi has approved 'Natural Gas Marketing Reforms', taking another significant step to move towards gas based economy. The objective of the policy is to prescribe standard procedure to discover market price of gas to be sold in the market by gas producers, through a transparent and competitive process, permit Affiliates to participate in bidding process for sale of gas and allow marketing freedom to certain Field Development Plans (FDPs) where Production Sharing Contracts already provide pricing freedom. The policy aims to provide standard procedure for sale of natural gas in a transparent and competitive manner to discover market price by issuing guidelines for sale by contractor through e-bidding. This will bring uniformity in the bidding process across the various contractual regimes and policies to avoid ambiguity and contribute towards ease of doing business. The policy has also permitted Affiliate companies to participate in the bidding process in view of the open, transparent and electronic bidding. This will facilitate and promote more competition in marketing of gas. However, rebidding will have to be done in case only affiliates participate, and there are no other bidders. The policy will also grant marketing freedom to the Field Development Plans (FDPs) of those Blocks in which Production Sharing Contracts already provide pricing.

- **Round 5 of OALP**

5th round of OALP was conducted in the month of October. The 11 blocks under this round are spread across eight sedimentary basins and include eight on-land blocks (six in Category I basin and one each in Category II and III basins), two shallow-water blocks (one each in Category I and II basins), and one ultra-deep-water block (Category I basin). The current round has opened up approximately 19,800 square kilometres for investors are located in Western Offshore (Saurashtra & Mumbai) & Eastern Offshore (Cauvery) and also spread across the states of Rajasthan, Gujarat, West Bengal, Odisha, Arunachal Pradesh and Assam over eight sedimentary basins. ONGC & Oil India won 7 & 4 blocks respectively. 11 blocks were offered in the OALP Bid Round-V and this is expected to generate an immediate exploration work commitment of around $400-450 million.

¶ **PNGRB simplified gas pipeline tariff**

PNGRB has simplified the country's gas pipeline tariff structure to make the fuel more affordable for distant users and to attract investment for building gas infrastructure. The Petroleum and Natural Gas Regulatory Board (PNGRB) has notified regulations for a 'unified' tariff structure for over a dozen pipelines that form the National Gas Grid which will lead to a 20-30 per cent rise in transportation charges paid by users near the source but a reduction for consumers in the hinterland.

Currently, the tariff is levied in proportion to the distance transported - the longer the distance, the higher is the charge. This resulted in consumers away from the coast paying higher charges as compared to those near it. PNGRB has now notified a two-zone tariff structure - Zone-1 will be 300-km from the source of gas (gas field or LNG import terminal) and Zone-II will be beyond that

¶ **Gas Exchange: India's Maiden Online Gas Trad**

On 15th June 2020, Minister of Petroleum and Natural Gas & Steel Shri Dharmendra Pradhan launched India's first nationwide online delivery-based natural gas trading platform in an e-ceremony. Shri Pradhan said that the gas trading platform will play a vital role to discover our own price benchmark for gas, address demand supply gaps, accelerate investments in the value chain. The transparency, reliability, flexibility, and competitiveness of our gas markets will contribute in reviving India's industrial and economic growth.

For the first phase of the launch there will be three nodes, with ex-terminal prices at two of India's busiest LNG terminals Dahej and Hazira in Gujarat on the west coast along with some domestic gas in Oduru, Andhra Pradesh on the east coast.

¶ **Easing of LNG distribution and regulation by PNGRB**

Early in June, PNGRB has clarified that any entity can set up an LNG filling station in any Geographical Area (GA) or anywhere else, even if it is not the authorized entity for that GA. This development could potentially provide a big boost to the sector to promote green fuels like LNG and will promote the participation of more players across the value chain starting from OEMs and the fleet operators to the LNG dispensing infrastructure.

About 350 LNG filling stations will be needed to cover the full length of the golden quadrilateral highway, as per the initial plan and switching heavy-duty vehicles to LNG can help reduce emissions from the transport sector. LNG is an attractive alternative to diesel for Heavy-Duty Vehicles (HDV). LNG as a transport fuel is costs competitive with diesel and also leads to lower emissions and a significant reduction of engine noise. As a result, LNG as a fuel for trucks, also known as Auto LNG, has been gaining traction in major markets.

- **O V L Myanmar project gets go-ahead from the Cabinet**

On 24th June, The Cabinet Committee on Economic Affairs, chaired by Prime Minister Shri Narendra Modi, has approved additional investment of US$ 121.27 million (about Rs.909 crore) by ONGC Videsh Ltd (OVL) towards further development of blocks A-1 and A-3 Blocks of Shwe oil & gas project in Myanmar. ONGC Videsh Ltd. (OVL) has been associated with exploration and development of Shwe project in Myanmar since 2002, as part of consortium of companies from South Korea, India and Myanmar. The Indian PSU, GAIL, is also an investor in this project. OVL has invested US$ 722 million till 31st March 2019 in this project. The first gas from the Shwe Project was received in July 2013 and plateau production was reached in December 2014. The Project has been generating positive cash flows since FY 2014-15.

- **ONGC begins production from KG-DWN 98/2 field**

In April 2020, ONGC achieved early first gas from the $5bn KG-DWN-98/2 project in Krishna Godavari basin offshore India. The production of first gas from the offshore Indian project was announced by McDermott International, which alongside Baker Hughes, a GE company (BHGE), and L&T Hydrocarbon Engineering (LTHE) won a $1.6bn subsea contract in October 2018. Considered to be the largest subsea project in India, block 98/2 is expected to have a total peak gas production rate of around 16 million metric standard cubic meter per day (MMSCMD), with peak oil production rate estimated to be 80,000 barrels per day (BPD).

- **Self-certification of PSC work programme and Field Development Plan**

In April 2020, government simplified procedures for oil and gas exploration and production by providing for self-certification for a host of compliance, such as a discovery notification and deemed consent for investment in fields in a stipulated time. Work programme and field development plan or their revisions will be deemed to be approved on expiry of 30 days of submission of documents under self-certification. Only issues requiring government nod will be grant of petroleum exploration or mining license, transfer of stake and extensions. Following this, the processes have been divided into three categories - process where documents shall be accepted on self-certification basis and no approval is required; processes where approval will be deemed on expiry of 30 days of submission of documents under self-certification; and processes where approval shall be required. With a view to make it easier to do business, the government has provided that notification of a discovery and tests to confirm them will not require approval and documents will be accepted on self-certification basis.

- **Signing of Contracts for Round 4 of OALP**

On 2nd January 2020, 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.. The total area awarded today in the 7 Onland blocks is 18,510 sq.km. The blocks are spread across 3 sedimentary basins.

****

Research, analysis & compilation by:

Economic Policy & Planning Team -FIPI

Email: prai@fipi.org.in