JUNE
2021

FIPI

Federation of Indian Petroleum Industry

POLICY & ECONOMIC REPORT OIL AND GAS MARKET

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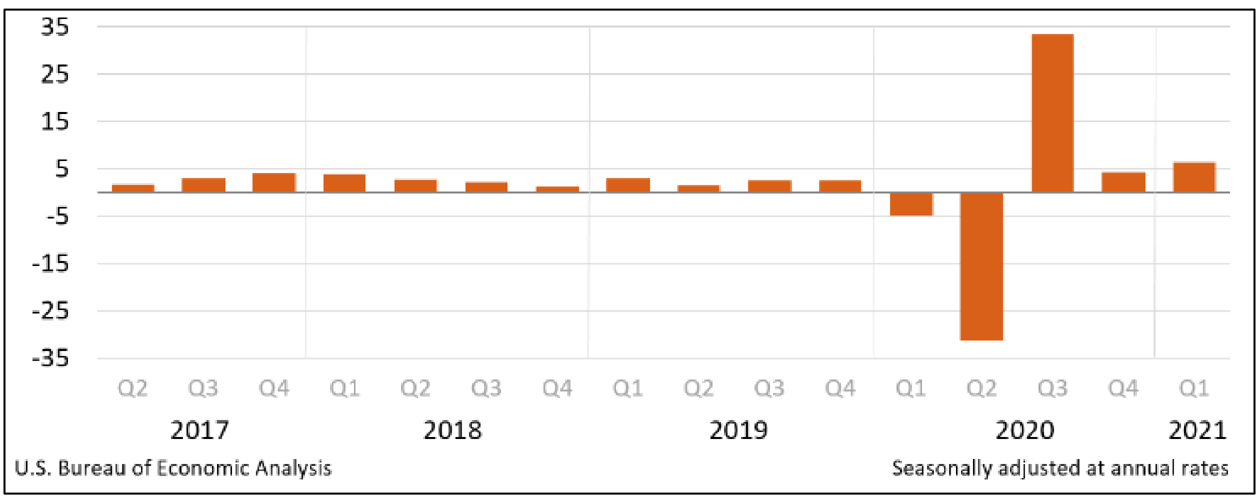
Executive Summary

The global number of new cases over the past week (21-27 June 2021) was over 2.6 million, a similar number compared to the previous week. The number of weekly deaths continued to decrease, with more than 57 000 deaths reported in the past week, a 10% decrease as compared to the previous week. This is the lowest weekly mortality figure since those recorded in early November 2020. Globally, COVID-19 incidence remains very high with an average of over 370 000 cases reported each day over the past week. The cumulative number of cases reported globally now exceeds 180 million and the number of deaths is almost 4 million. This week, the African region recorded a sharp increase in incidence (33%) and mortality (42%) when compared to the previous week. The Eastern Mediterranean and European Regions also reported increases in the number of weekly cases. All Regions, with the exception of the African Region, reported a decline in the number of deaths in the past week.

The global output is rebounding and is projected to strengthen to 5.6% in 2021-its strongest post-recession pace in 80 years, following a 3.5% contraction in 2020. Vaccination has helped limit the spread of the virus, but progress is highly unequal and concentrated in advanced economies. Advanced economies are expected to grow at 5.4% in 2021, with substantial fiscal support and faster than expected vaccinations in the U.S. adding fuel to the rebound. Growth in Emerging market and developing economies (EDMEs) is also projected to strengthen reaching 6% in 2021 on the back of improving external demand and elevated commodity prices.

Figure showing an increase in real GDP in U.S. for first quarter of 2022

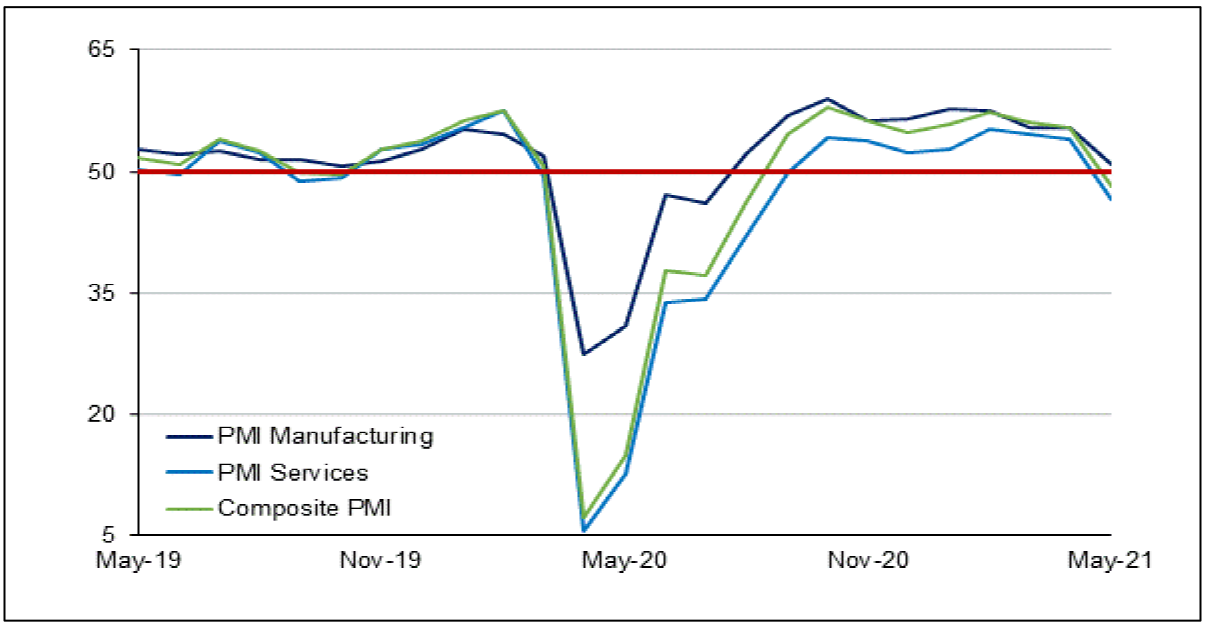


In India, highest number of cases in a day was 4, 14,188; reported on 7th May 2021. Since then there is continuous decline in daily cases. Currently, India reports 13% of new COVID cases reported globally and has recorded the second highest daily number of cases with 48,434 daily cases after Brazil 70,381 daily cases. In the past week (23-29 June), as compared to previous week (16-22 June), all states/UTs have shown a decrease in COVID cases except Delhi, Arunachal Pradesh, Maharashtra and Nagaland.

The Monetary Policy Committee (MPC) has decided to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. The marginal standing facility (MSF) rate and the bank rate remain unchanged at 4.25%. The reverse repo rate also remains unchanged at 3.35%. India's retail inflation has spiked sharply to 6.3 per cent in May after easing to 4.23 per cent in April. Retail inflation, measured by the Consumer Price Index (CPI), has jumped primarily due to supply disruptions caused by renewed lockdowns and higher food and fuel prices.

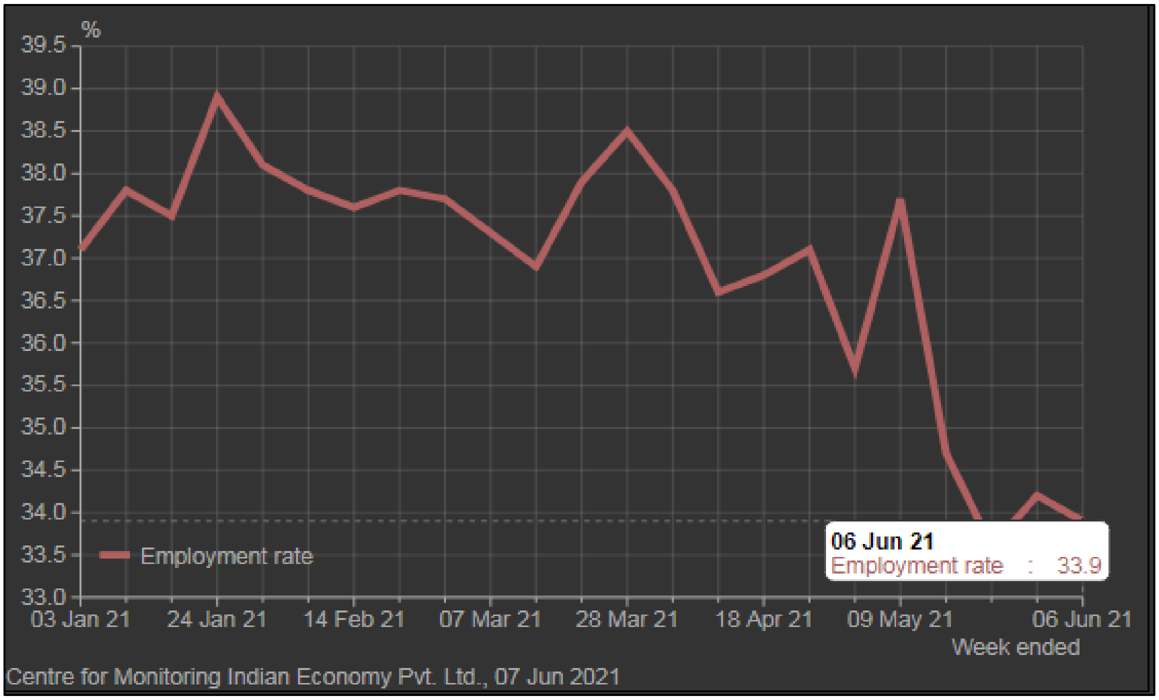
The composite Purchasing Managers' Index (PMI) produced by IHS Markit fell to 48.1 in May from 55.4 in April. As a result, the PMI moved below the 50-threshold, indicating a decrease in business activity from the previous month.

Figure showing Purchasing Managers' Index (PMI)



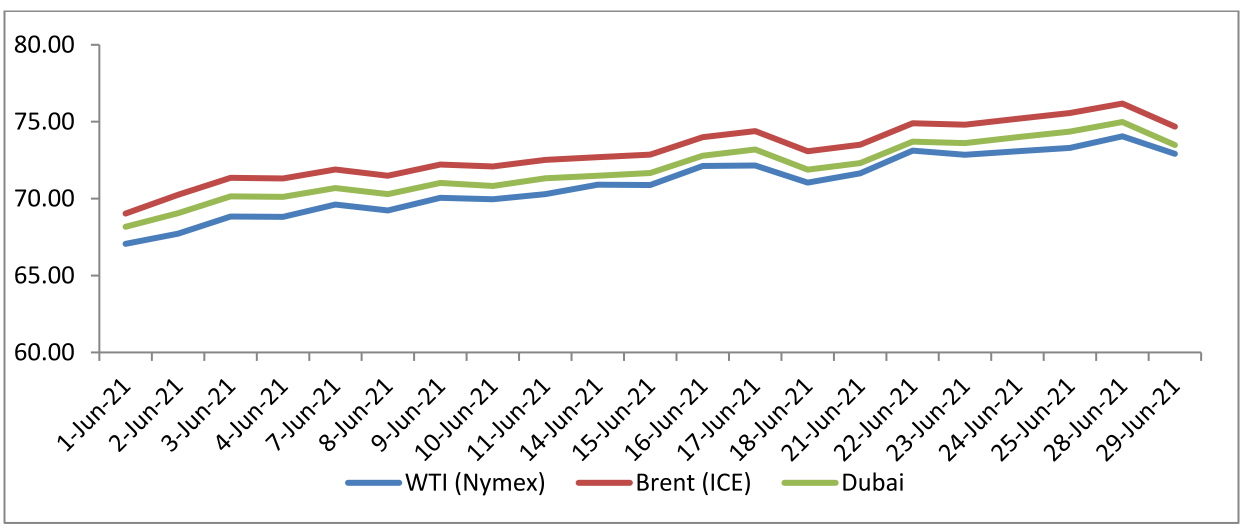
Source: - IHS Markit

The unemployment rate that reached 11.9 per cent in May 2021 continued to rise into early June. The employment rate which had fallen to 35.3 per cent in May dropped to 33.9 per cent by June 6, 2021.



Crude oil benchmarks hit 2-year-high in the mid of June by climbing up for 5th straight week. Expectation of crude oil demand outstripping the supply has sent the crude prices to a new high since October 2018. Bolstered by the vaccination rollouts and economies reopening in the US, Europe and China, crude oil demand is showing a strong demand recovery. For the month, crude benchmarks increased significantly. Average Brent, WTI and Dubai basket crude prices in June went up by 7.42 %, 8.79 % and 8.88 % respectively from their April prices. Indian crude basket price averaged $ 71.81 per barrel in June 2021, up by 7.34 % on Month on Month (M-o-M) and by 77.35 % on a year on year (Y-o-Y) basis, respectively.

Figure showing Crude oil price in June 2021



Source: EIA, Oilprice.com

Global rig count for the month of May went up by 73. From April's rig count of 1,189 it climbed to 1,262. Active rig count went up in all regions as the oil price looked stabilized with recovering demand for crude oil. Significant jump came from Latina America, which saw an increase of 18 rigs in the month of May. Onshore rig went down up 57 and offshore rigs went up by 16. Indian drilling rig count stood unchanged in the month of May. Out of the 74 active rigs, 63 were onshore rigs and the rest 11 were offshore rigs.

Global oil supply in May 2021 increased by 0.63 mb/d m-o-m to average 93.67 mb/d and was higher by 5.63 mb/d Y-o-Y. In 2021, world oil demand growth was kept unchanged at 6.0 mb/d, unchanged from last month's forecast. Total demand is foreseen to reach 96.6 mb/d.

Asian product markets margins trended downwards for the second straight month, with most of the pressure coming from top and bottom of the barrel. Sufficient product availability and waning product import requirements from outside the Asia impacted the margins. Refinery margins for Oman in Asia lost 19 ȼ on m-o-m to average $ 1.46 /b in May and were higher by $ 5.18 on y-o-y basis. Refinery utilization rates in May averaged 89.78 % in selected Asian markets comprising of Japan, China, India and Singapore.

In May 2021, consumption of petroleum products went down by 11.3 % m-o-m but was up by 3.1 % on y-o-y due to the implementation of strict lockdown across the nation.

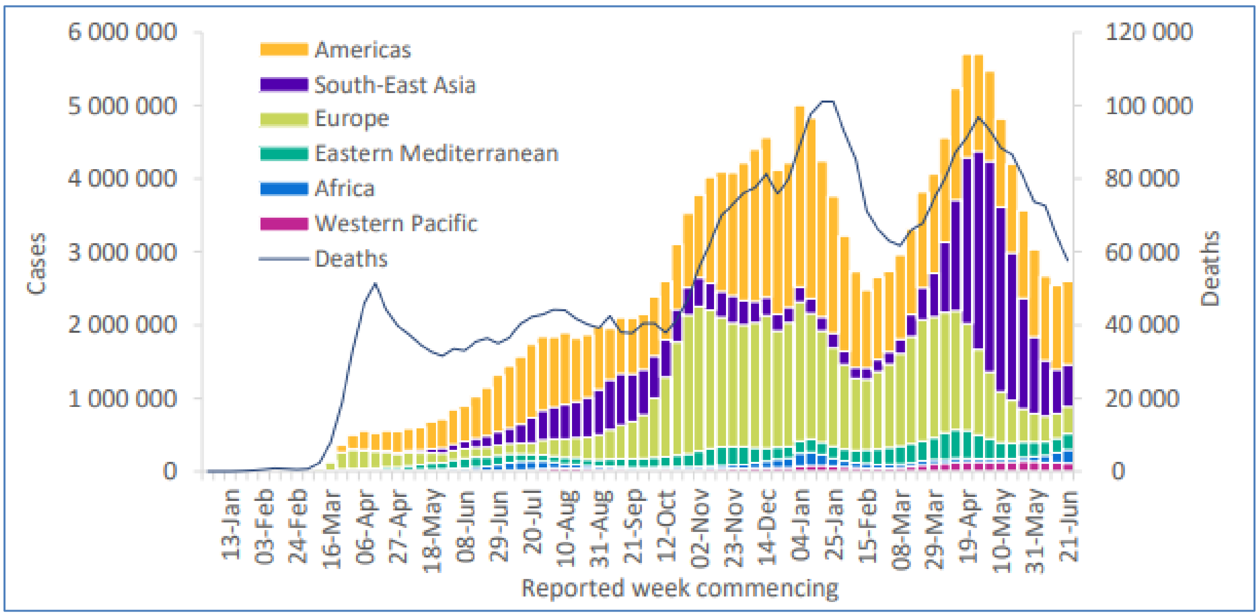
Natural gas prices saw an increase trend in all major gas trading hubs due to recovery in the economic activities. Natural gas price in the Henry hub went up by 10.7 % to reach $ 2.89 /MMBtu in the month of May as demand for gas went up outside of the power sector and increase in LNG exports. Natural Gas price in Europe went up by 24.6% in the month of May as compared to April to reach USD 8.91/ MMBtu. On Y-o-Y basis, gas price was up by 463.9%. Colder than normal weather, record high carbon prices and weak pipeline import drove the demand for Natural Gas in May. Asian spot LNG prices continued to rise for the second straight month as buyers stocked-up LNG for power generation due to warmer than-usual summer. A warmer summer is likely to push the power demand due to the spur in air-conditioning needs. Temperature in cities namely Beijing, Tokyo, Seoul, and Shanghai are expected to remain high. LNG prices for July delivery was around USD 10.3/ MMBtu. Japan LNG benchmark went up by 1.3% to reach USD 8.06/MMBtu.

Economy in Focus

1. A snapshot of the global economy: Recovery catches pace despite surge in virus cases

The global number of new cases over the past week (21-27 June 2021) was over 2.6 million, a similar number compared to the previous week. The number of weekly deaths continued to decrease, with more than 57 000 deaths reported in the past week, a 10% decrease as compared to the previous week. This is the lowest weekly mortality figure since those recorded in early November 2020. Globally, COVID-19 incidence remains very high with an average of over 370 000 cases reported each day over the past week. The cumulative number of cases reported globally now exceeds 180 million and the number of deaths is almost 4 million. This week, the African region recorded a sharp increase in incidence (33%) and mortality (42%) when compared to the previous week. The Eastern Mediterranean and European Regions also reported increases in the number of weekly cases. All Regions, with the exception of the African Region, reported a decline in the number of deaths in the past week.

Global COVID-19 cases



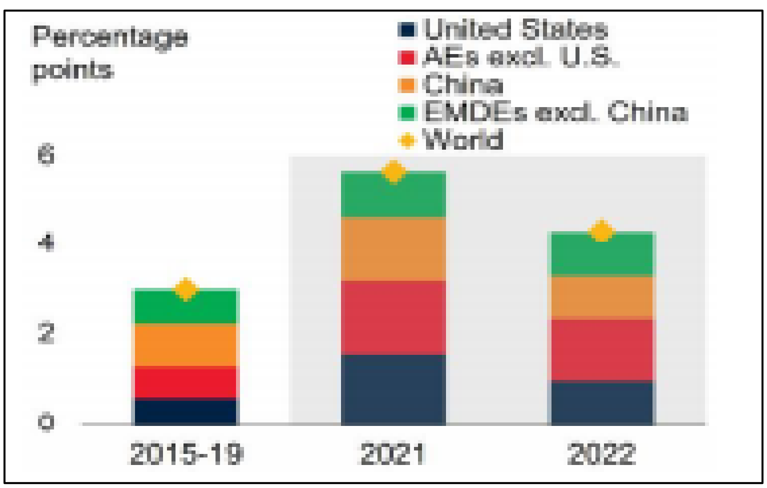
Source: World Health Organization (WHO)

The global output is rebounding and is projected to strengthen to 5.6% in 2021-its strongest post-recession pace in 80 years, following a 3.5% contraction in 2020. Vaccination has helped limit the spread of the virus, but progress is highly unequal and concentrated in advanced economies. Advanced economies are expected to grow at 5.4% in 2021, with substantial fiscal support and faster than expected vaccinations in the U.S. adding fuel to the rebound. Growth in Emerging market and developing economies (EDMEs) is also projected to strengthen reaching 6% in 2021 on the back of improving external demand and elevated commodity prices.

Global trade has continued to rebound; however, the strength of the global trade growth is set to be dampened by shifting activity from manufacturing to the low-trade intensity domestic services sector in countries where Covid 19 impact has been declining. The surge in growth envisaged for 2021 is mainly driven by ongoing macroeconomic policy support and the release of pent-up demand associated with easing of pandemic.

- The US growth is projected to reach 6.8% in 2021 reflecting additional large-scale fiscal relief and the ongoing easing of pandemic restrictions. Surging personal income has boosted consumption, which is expected to firm as households reduce their savings rate from historically high levels.
- In Euro Area, growth in 2021 is projected to react at 4.2% and pick up further to 4.4% in 2022 as member countries steadily unwind pandemic controls, enabling the continues release of pent-up demand. A slow and inconsistent vaccine rollout has constrained the pace of recovery in the first half of the year.
- Japanese output is expected to expand 2.9% in 2021 reflecting firming domestic economic activity alongside robust external demand.
- In case of India, RBI has projected real GDP growth at 9.5% in FY22 [from earlier projection of 10.5%] consisting of 18.5 per cent in Q1; 7.9 per cent in Q2; 7.2 per cent in Q3; and 6.6 per cent in Q4 of FY22 emphasizing that upside risks to inflation emanate from persistence of the second wave and consequent restrictions on activity on a virtually pan-India basis.
- In case of China, after expanding 2.3% in 2020, output in China has continued to recover gradually, broadening from public investment and exports to domestic consumption. China's growth is forecast to rebound to 8.5% this year, reflecting the release of pent-up demand.

Figure showing country-wise contribution to global growth forecast

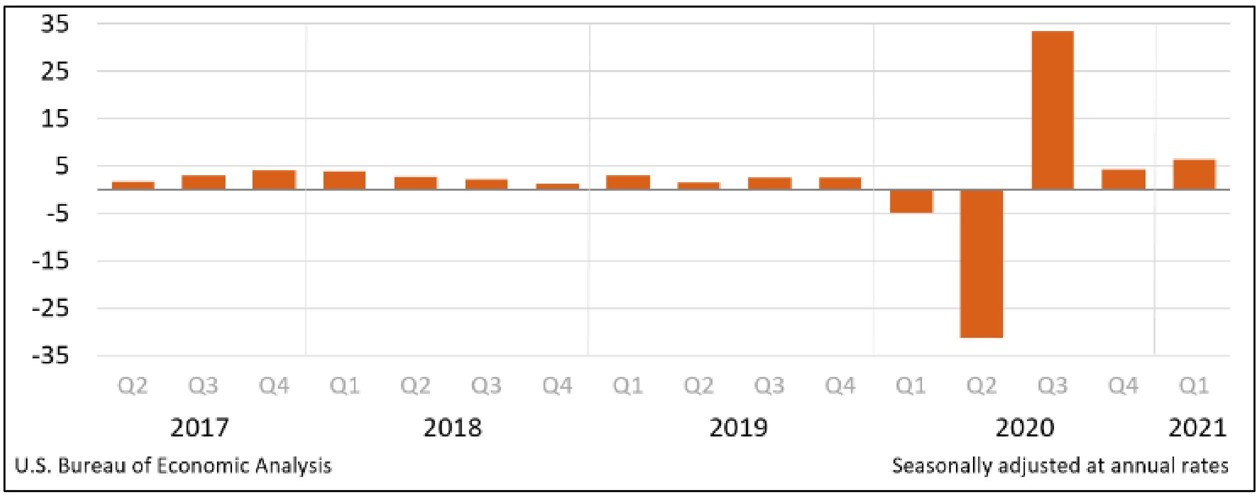


Source: - World Bank

The US

Real gross domestic product (GDP) increased at an annual rate of 6.4 percent in the first quarter of 2021, reflecting the continued economic recovery, reopening of establishments, and continued government response related to the COVID-19 pandemic. The increase in real GDP in the first quarter reflected increases in personal consumption expenditures (PCE), nonresidential fixed investment, federal government spending such as direct economic impact payments, expanded unemployment benefits, and Paycheck Protection Program loans, were distributed to households and businesses through the Coronavirus Response and Relief Supplemental Appropriations Act.

US Real GDP

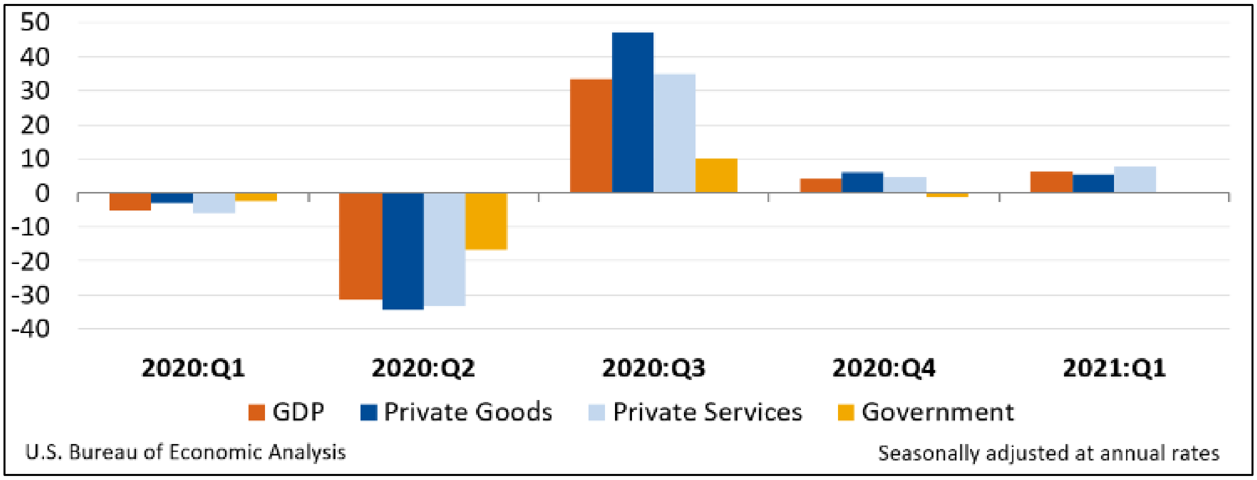


Analyzing real GDP by industry, private goods-producing industries increased 5.4 %, private services-producing industries increased 7.7 %, and government increased 0.2 %. The increase in private goods-producing industries primarily reflected an increase in durable goods manufacturing (led by computer and electronic products, fabricated metal products, and machinery). The increase was partly offset by decreases in nondurable goods manufacturing (led by petroleum and coal products) and agriculture, forestry and fishing.

The increase in private services-producing industries primarily reflected increases in professional, scientific, and technical services; information (led by data processing, internet publishing, and other information services); administrative and waste management services (led by administrative and support services); real estate and rental and leasing; and retail trade. These increases were partly offset by decreases in other services (which includes activities of political organizations); healthcare and social assistance (led by ambulatory health care services); and utilities.

The increase in government reflected increases in federal as well as state and local.

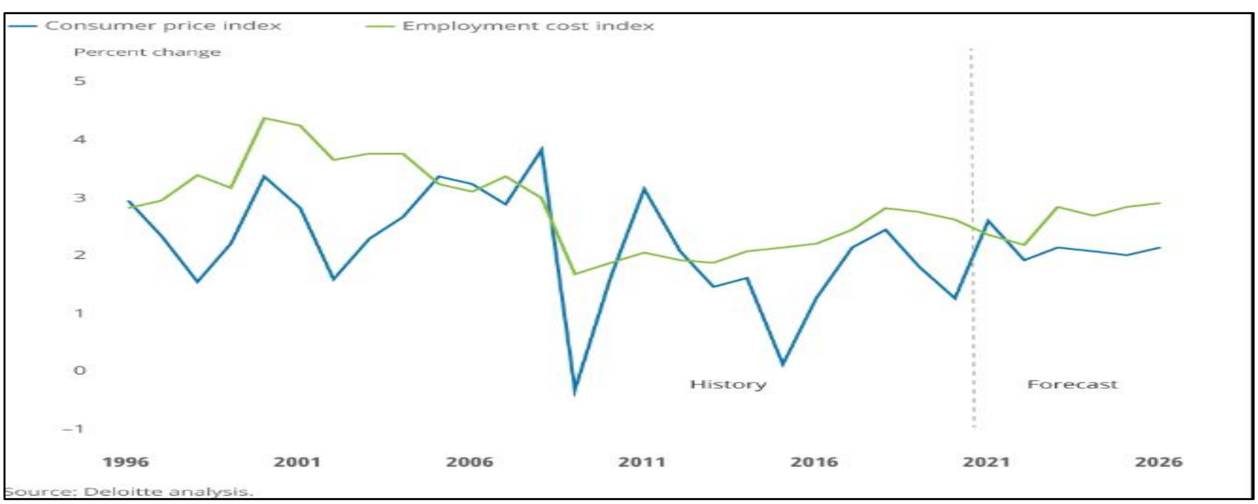
US Real GDP by sector



Thus with buoyant growth in private sector businesses, IHS Markit US Composite PMI index is 63.9 in June signaling a historically elevated rate of expansion in output across the private sector.

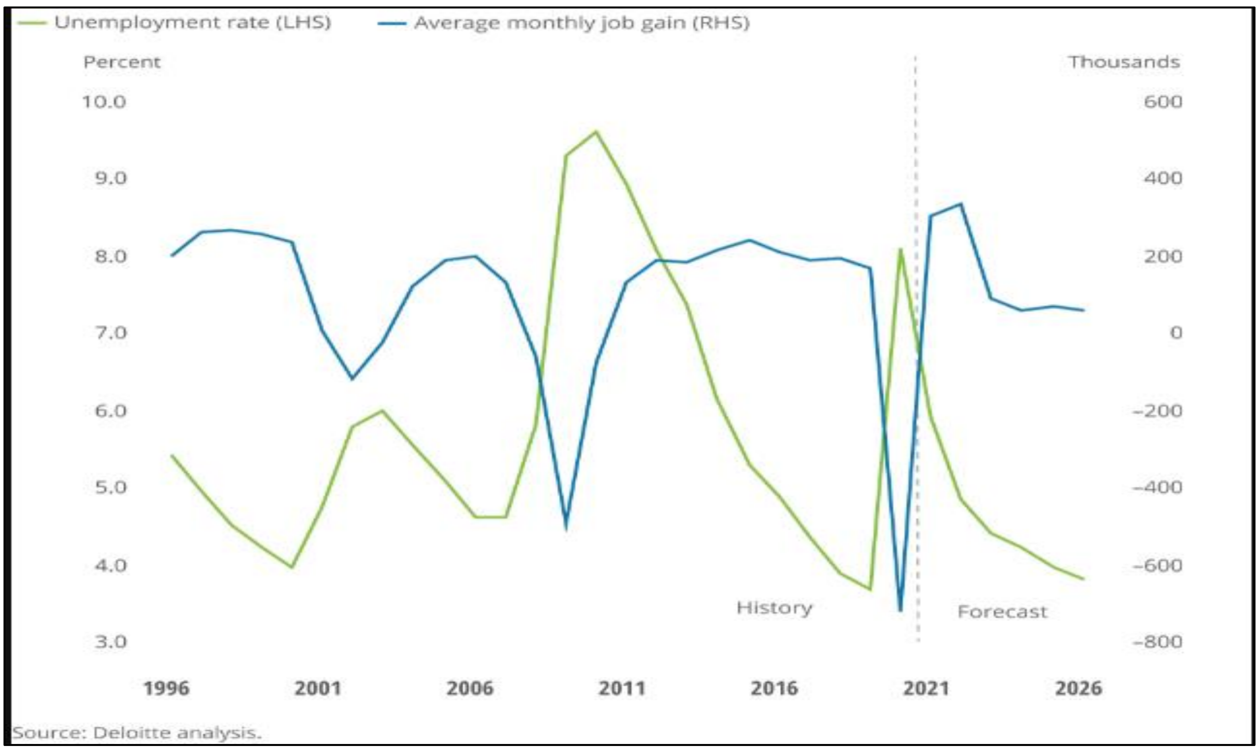
Further, a rapid demand driven increase in the United States absent large supply side improvement would generate sustained inflation pressures and cause inflation expectations. Higher costs were commonly passed on to clients through a steep rise in output charges during June. The increase in selling prices was the second sharpest since data collection began in October 2009. The Central Bank held the target range for its benchmark policy rate unchanged at zero to 0.25% -- since March 2020 and pledged to continue asset purchases at a $120 billion monthly pace until 'substantial further progress' had been made on employment and inflation. But amid rising inflationary pressures, with consumer prices jumped 5 % in May, Federal Reserve officials have signaled they expect two increases by the end of 2023, pulling forward the date of liftoff as the economy recovers.

US Prices



US Labor markets: - Employment issues remained prevalent during June, as employers were finding difficult to get suitably trained candidates for current vacancies. Although the rate of job creation remained strong overall, growth in backlogs of work was also among the highest seen over the past decade. About half of the decline in the labor force is among people 55 and older. Many of these people have probably retired, in the sense of expecting to remain permanently out of the labor force, but some can likely be enticed back with the right compensation packages and flexible working hours and conditions. Slow labor force growth and continued high demand had already created conditions that required companies to offer higher wages to lower-skilled workers. The unemployment rate falls, albeit slowly at first as people reenter the labor force. Over the longer horizon, labor force growth slows to just 0.2% per year, presenting continuing challenges for employers.

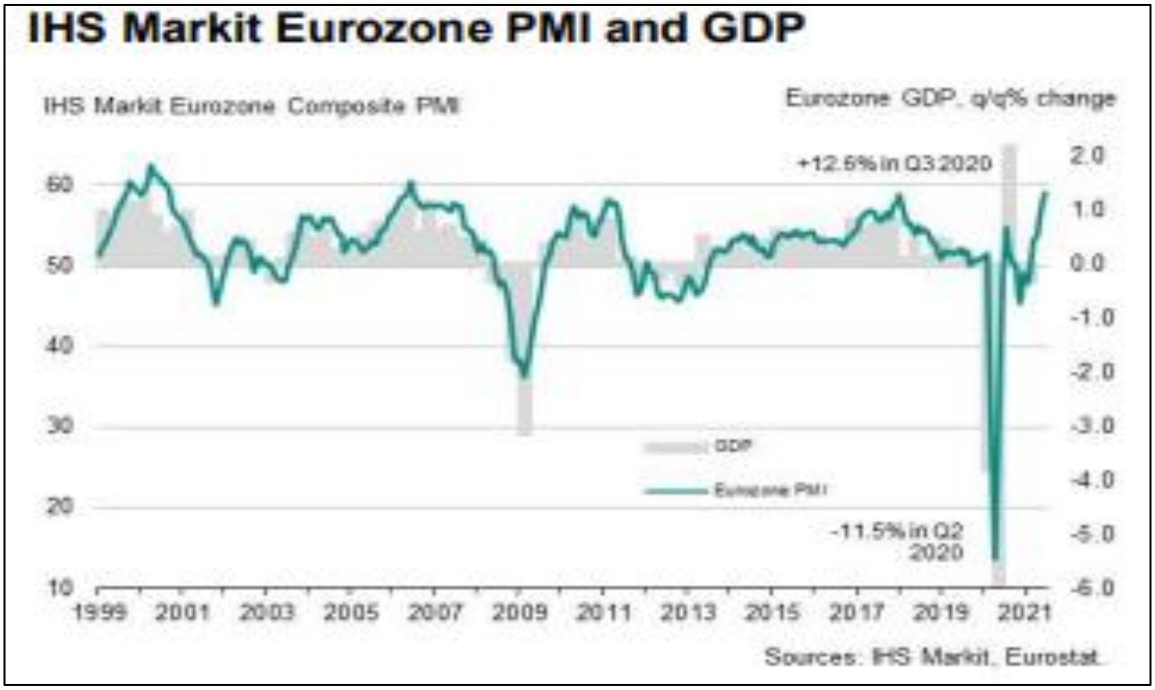
US Labor markets



Euro Zone

Eurozone business activity grew at the fastest rate for 15 years in June as the economy re-opened further from virus-fighting restrictions and vaccine progress boosted confidence. Prices charged for goods and services rose at an unprecedented rate, however, as demand continued to outstrip supply. IHS Markit Eurozone Composite PMI increased from 57.1 in May to 59.2 in June, it’s highest since June 2006. Business confidence in the outlook meanwhile rose to the highest buoyed by the recent surge in demand and prospects of the economy opening up further in coming months.

Manufacturing continued to lead the upturn, reporting a twelfth successive month of output growth with the rate of expansion picking up again. Production growth was again sharpest in Germany, with France lagging the rest of the region amid a slower rate of new order growth. Although manufacturing reported the stronger pace of growth, it was the service sector that again reported the biggest improvement in performance



There was rise in employment during the month, with job gains in both manufacturing and services hitting the highest since 2018. Infact manufacturing sector witnessed fastest rise in staffing levels for almost three and a half years.

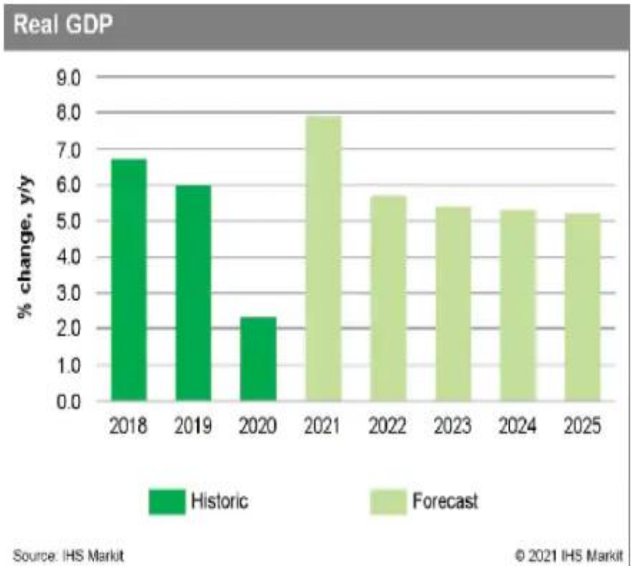
Amid these signs of demand continuing to run ahead of supply for many goods and services, inflationary pressures increased again in June. Average input prices rose at a rate exceeded only once (in September 2000) over the 23-year survey history. A record increase in manufacturers' material prices was accompanied by the steepest increase in service sector costs since July 2008, the latter reflecting widespread reports of higher supplier prices, increased fuel and transport costs plus rising wage pressures.

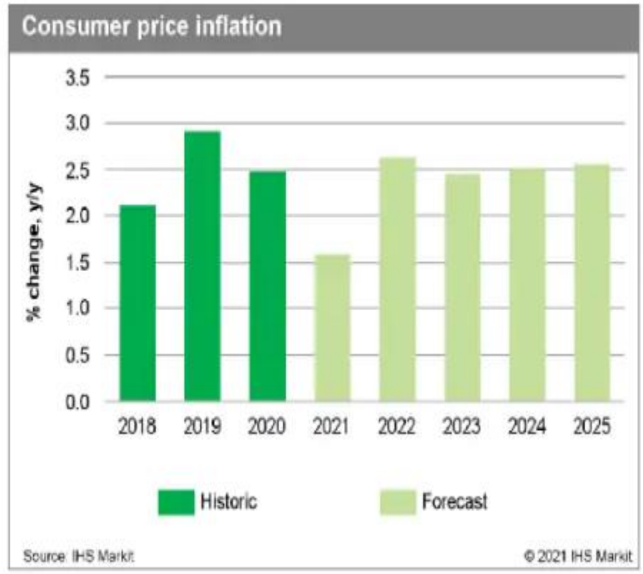
China

China's economy continued to recover in the first quarter of 2021. Real GDP surged 18.3% year on year (y/y) in the quarter, up from 6.5% y/y in the fourth quarter of 2020. The elevated growth was mostly owing to extreme low base effect, as mainland China's economic output cratered in the first quarter of 2020, owing to the lockdown to contain the COVID-19 pandemic.

Further, Industrial sector continued to lead the recovery over the service sector on the supply side, as industrial sector activities are less restricted by pandemic control measures.

The supply-demand gap will keep consumer price inflation pressure at bay, despite rising producer price inflation. The unwinding of mainland China's stimulus measures should also keep inflation under control.





Thus, China's economic growth has returned to its long-term growth trajectory but the growth is likely to decline to 5.4 percent, returning to the path the country was on over the five years leading up to the pandemic. There's a shift in the Chinese economy from growth driven by public investment and net exports during the first phase of recovery toward growth very much driven by domestic consumption and private investment. The consumption has contributed two thirds to economic growth as shoppers return to malls, restaurants and auto and property firms while investment remains robust.

However, an aging population is definitely one of the most daunting challenges. China's seventh population census reveals there are some 191 million people aged 65 and above, accounting for 13.5 percent of the country's population. That's an 8.9 percent increase from the sixth census launched a decade ago. The aging society, in addition to a falling birth rate, will probably cause a strain on China's economic growth going forward. Thus the contribution that the demographic dividend had made to economic growth over recent decades is diminishing, and so China needs to invest more in human capital to improve the overall skills of its population.

2. World Bank Warns of 'Uncertain' Economic Outlook for Europe, Central Asia

The World Bank says that Europe and Central Asia continue to grapple with containing the coronavirus pandemic, which is clouding the economic outlook for the region.

The Washington-based lending arm of the International Monetary Fund (IMF) said in its latest Global Economic Prospects report, released on June 8, that economic growth for the 23 countries in the region is projected to reach 3.9 percent in 2021, with firming external demand and elevated industrial commodity prices offsetting the negative impact of recent resurgences in new COVID-19 cases. The World Bank warned, however, that the outlook remains “uncertain,” with uneven vaccine rollouts and the withdrawal of domestic macroeconomic support measures weighing on the regional recovery. Several countries in Central Asia, Eastern Europe, and the Western Balkans face bottlenecks related to the production, procurement, or delivery of vaccines secured through the COVAX facility or other agreements. The World Bank also noted that recent currency depreciations have put further upward pressure on prices, a growing concern for some economies that are still trying to shake off the effects of decades of Soviet-era planning. As a result of inflationary pressures, policy interest rates have been raised in one-third of the region’s economies thus far in 2021,” the bank said, pointing to Armenia, Belarus, Georgia, Kyrgyzstan, Russia, Tajikistan, Turkey, and Ukraine. The Russian economy is projected to grow 3.2 percent in 2021, while the Western Balkans is expected to rebound to 4.4 percent annual growth. Central Europe is seen as the weakest area in the Europe-Central Asia region, with economic output seen expanding at just 1.9 percent this year.

3. Global economic rebound will increase remittances- World bank

With the rebound in economic growth, remittances to low-middle-income countries will increase 2.6 % in 2021 to 553 billion dollars, according to the World Bank Report. The report also pointed out that by 2022 these shipments can grow 2.2 % and reach 565 billion dollars, according to estimates included in the Resilience report. Despite the health and economic crisis of Covid-19 and what was estimated when the pandemic began, remittance flows demonstrated resilience and decreased less than expected in 2020.

The document specified that low-middle-income nations received officially registered monetary remittances from migrants for 540 billion dollars in 2020, just 1.6 percentage points below the total of 548 billion in 2019. Those revenues increased in Latin America and the Caribbean, South Asia, the Middle East and North Africa, while they fell in East Asia and the Pacific, Europe, Central Asia and Sub-Saharan Africa.

It is estimated there are more than 270 million migrant workers worldwide, who send an average of 15 % of their income to their places of origin, despite receiving lower wages relative to locals, and being more exposed to economic crises. These remittances managed to withstand the impact of the pandemic and as a result, in 2020 they exceeded the volumes of foreign direct investment (259 billion dollars) and foreign assistance for the development of multilateral organizations (179 billion dollars).

The President of the International Fund for Agricultural Development (IFAD), Gilbert F. Houngbo considers that the money received is essential to help millions of people in poverty, since the 200 - 300 dollars that each migrant sends represents around 60 % of the family's household income. Half of that money goes directly to rural areas, where three-quarters of the poor and the food-insecure live, according to statistics from the United Nations agency.

4. Africa's share in India's oil imports hits 7-month high: Report

Africa's share in India's oil imports surged to a seven-month high in April as refiners boosted purchases from small regional players such as Ghana and Congo on better economics and less competition from China. The share of African oil in India's crude imports rose to 16.3% in April. Overall, India's oil imports in April declined 3.7% from the previous month as state-run Hindustan Petroleum Corp did not receive oil for its Mumbai refinery, which was fully shut for revamp.

Refiners shipped in about 4.2 million barrels per day (bpd) oil in April, a decline of about 8.7% from the same month last year.

Compared to last year, Indian refiners cut intake of long-haul oil from Latin America, the United States and Canada, and raised imports from Kuwait. Higher purchases from Kuwait raised the share of Middle Eastern oil to about 67.9% in overall imports, the highest in nine months.

India's oil imports in May could decline as refiners cut crude runs towards the end of April after a second Covid-19 wave forced several states to impose mobility restrictions, hammering fuel demand and leading to larger stockpiles. Domestic sales of gasoline and diesel by state-run refiners plunged by a fifth in May from a month earlier, preliminary data showed.

In April, Iraq continued to be the top oil supplier to India followed by Saudi Arabia and the United Arab Emirates. Kuwait improved its ranking by two notches to No. 4, replacing the United States which tumbled to No. 6. Nigeria continued to be the fifth biggest supplier to India. Higher imports of Middle Eastern and African oil raised the share of OPEC oil in India's imports to a six-month high of about 77.5%.

India’s crude oil imports situation amid Corona Virus:-

India's crude oil imports are so far keeping pace with seasonal norms but a fresh surge in coronavirus cases with new lockdowns hit fuel demand and temper crude buying.

Total crude oil discharged so far in April has averaged 4.87 million b/d, according to preliminary data from IHS Markit Commodities at Sea. This compares with 4.69 million b/d in March and 4.32 million b/d in February. India heavily relies on imports of energy commodities with its crude import dependency at 86% in March, up from 83% a year earlier.

India, the world's third biggest oil importer, in March directed refiners to diversify crude sources after the Organization of the Petroleum Exporting Countries (OPEC) and its allies, led by top exporter Saudi Arabia, ignored New Delhi's call to ease supply curbs. The share of Middle Eastern crude in India's oil imports fell to a 25-month low in May, as refiners tapped alternatives in response to the government's call to diversify supplies. Asia's third-largest economy imported about 4.2 million barrels per day (bpd) of oil in May, just below the previous month but about 31.5 per cent higher than a year earlier, the data showed. The Middle East's share dropped to 52.7 per cent, the lowest since April 2019 and down from 67.9 per cent in April, the data showed.

Imports from Saudi Arabia, India's second-largest supplier after Iraq, slipped by about a quarter from a year earlier, while supplies from the United Arab Emirates, which dropped to No. 7 position from No. 3 in April, fell by 39 per cent, the data showed.

Table showing Country wise import of crude oil as on April 2021

India's Crude Oil Imports										
by Origin (kbd)	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2020 H1	2020 H2	Feb-21	Mar-21	Apr-21	2021 Q1
Iraq	1,038	830	1,059	1,116	934	1,088	1,074	1,137	1,592	1,158
Saudi Arabia	697	613	938	842	655	890	524	677	909	871
USA	205	246	205	254	226	229	645	601	418	352
UAE	466	276	498	479	371	489	505	408	501	523
Nigeria	278	252	231	261	265	246	346	347	258	309
Kuwait	168	121	293	281	145	287	214	259	475	259
Angola	52	59	122	61	55	91	-	193	49	94
Oman	32	57	65	126	44	96	110	165	153	177
South Africa	-	15	-	22	8	11	44	145	-	39
Mexico	215	154	118	98	184	108	121	141	57	150
Brazil	87	35	12	133	61	72	39	99	155	103
Russia	159	135	73	66	147	69	145	92	52	66
Other	705	467	688	680	586	684	558	425	253	637
Total	4,101	3,259	4,301	4,418	3,680	4,360	4,324	4,688	4,872	4,736

Source: IHS Markit

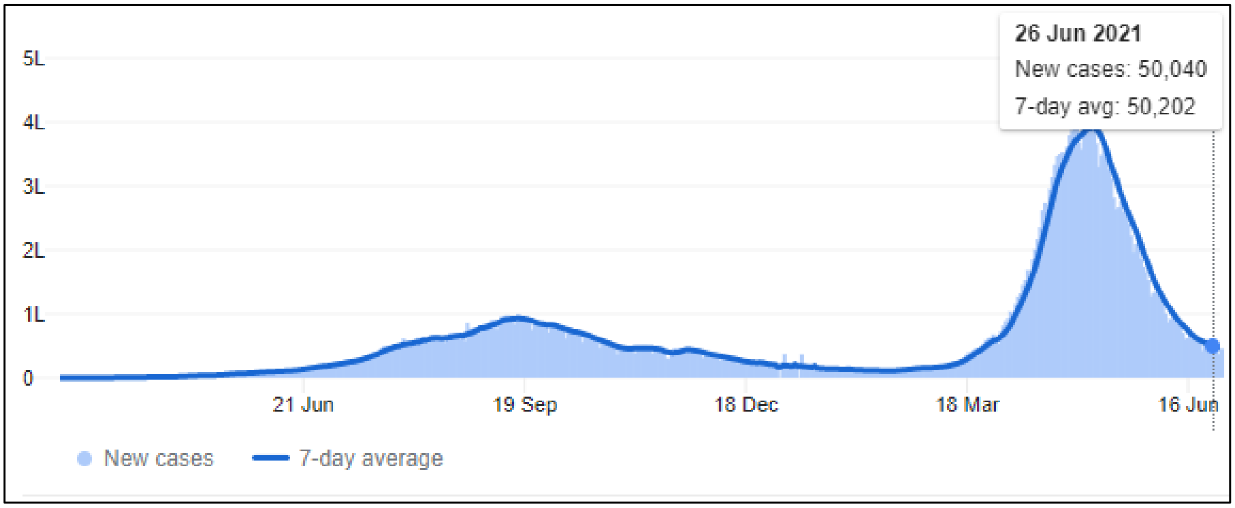
5. India, UK to promote industrial energy efficiency

India and the UK have launched a new work stream to promote industrial energy efficiency, under the Clean Energy Ministerial (CEM) Industrial Deep Decarbonization Initiative (IDDI) coordinated by the United Nations Industrial Development Organization (UNIDO). The IDDI initiative has been supported by Germany and Canada, with more countries expected to join soon. The objective is to infuse green technologies and stimulate demand for low-carbon industrial material. India is committed to cutting emissions intensity per unit of GDP by 33-35 per cent by 2030.

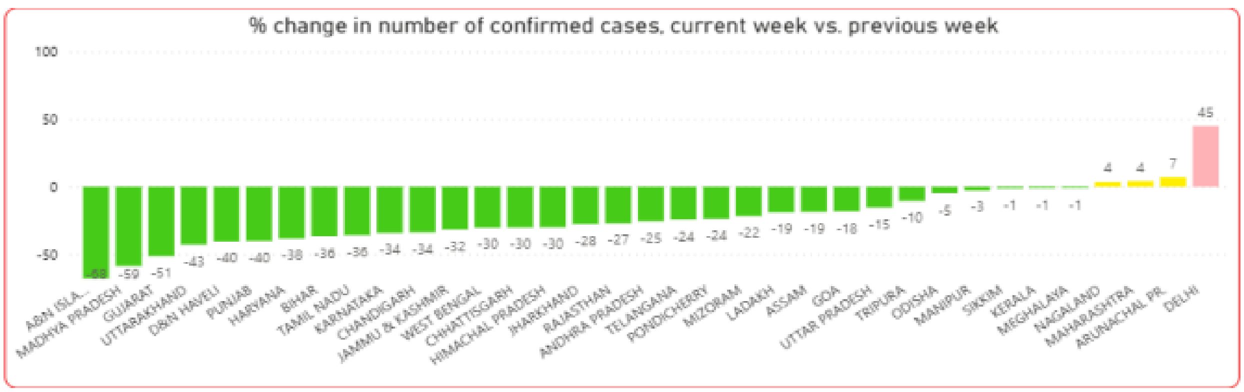
The commitment hinges on the effective deployment of low carbon technologies in energy-intensive sectors like iron and steel, cement and petrochemicals. The power ministry stated that government policies have resulted in substantial savings in energy on the demand side.

6. Snapshot of Indian Economy: continues decline in COVID cases

In India, highest number of cases in a day was 4, 14,188; reported on 7th May 2021. Since then there is continuous decline in daily cases. Currently, India reports 13% of new COVID cases reported globally and has recorded the second highest daily number of cases with 48,434 daily cases after Brazil 70,381 daily cases **India COVID-19 cases**



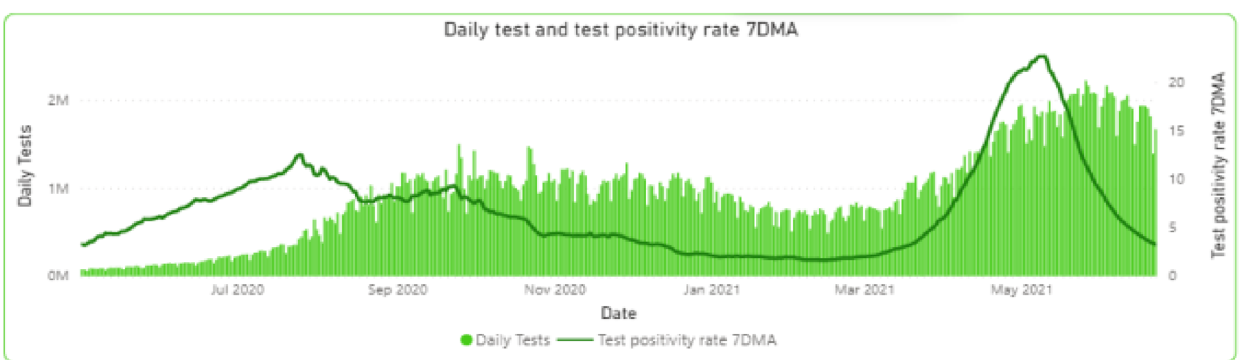
In the past week (23-29 June), as compared to previous week (16-22 June), all states/UTs have shown a decrease in COVID cases except Delhi, Arunachal Pradesh, Maharashtra and Nagaland.



Source: - WHO

Vaccinations in India:-

As of 29 June 2021, India has so far tested more than 398 million samples. Tests include both, RTPCR and Rapid Antigen. India's current test positivity rate (7DMA) is 2.75% **Testing-National Level**



Source: - WHO

India continued to drive Covid-19 vaccinations among various age groups with preconditions and the details are as under:-

Cumulative Coverage Report of Covid-19 vaccination

Beneficiaries vaccinated		
1st dose	2nd dose	Total doses
27,40,13,600	5,88,40,927	33,28,54,527

Source: WHO

India: Current GDP Situation

The Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) held on 4th June 2021 having taken stock of the evolving macroeconomic and financial conditions as well as the impact of the second wave of the pandemic announced to maintain status quo, keeping the policy repo rate unchanged at 4%. The MPC also decided to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. The marginal standing facility (MSF) rate and the bank rate remain unchanged at 4.25%. The reverse repo rate also remains unchanged at 3.35%.

The annual retail inflation rate rose 6.30% year-on-year in May, up from 4.29% in April and sharply above analysts' estimate of 5.30%. The wholesale price inflation rate rose 12.94%; it's highest in at least two decades.

RBI Governor Shaktikanta Das said though the GDP growth in FY21 contracted to 7.3%, the forecast of a normal south-west monsoon, the resilience of agriculture and the farm economy, the adoption of COVID compatible operational models by businesses, and the gathering momentum of global recovery are forces that can provide tailwinds to revival of domestic economic activity when the second wave abates.

Taking all factors into consideration, the RBI has projected real GDP growth at 9.5% in FY22 [from earlier projection of 10.5%] consisting of 18.5 per cent in Q1; 7.9 per cent in Q2; 7.2 per cent in Q3; and 6.6 per cent in Q4 of FY22 emphasizing that upside risks to inflation emanate from persistence of the second wave and consequent restrictions on activity on a virtually pan-India basis. Taking into consideration all factors, CPI inflation has been projected at 5.1% during FY22: 5.2%in Q1; 5.4% in Q2; 4.7% in Q3; and 5.3% in Q4 of 2021-22, with risks broadly balanced.

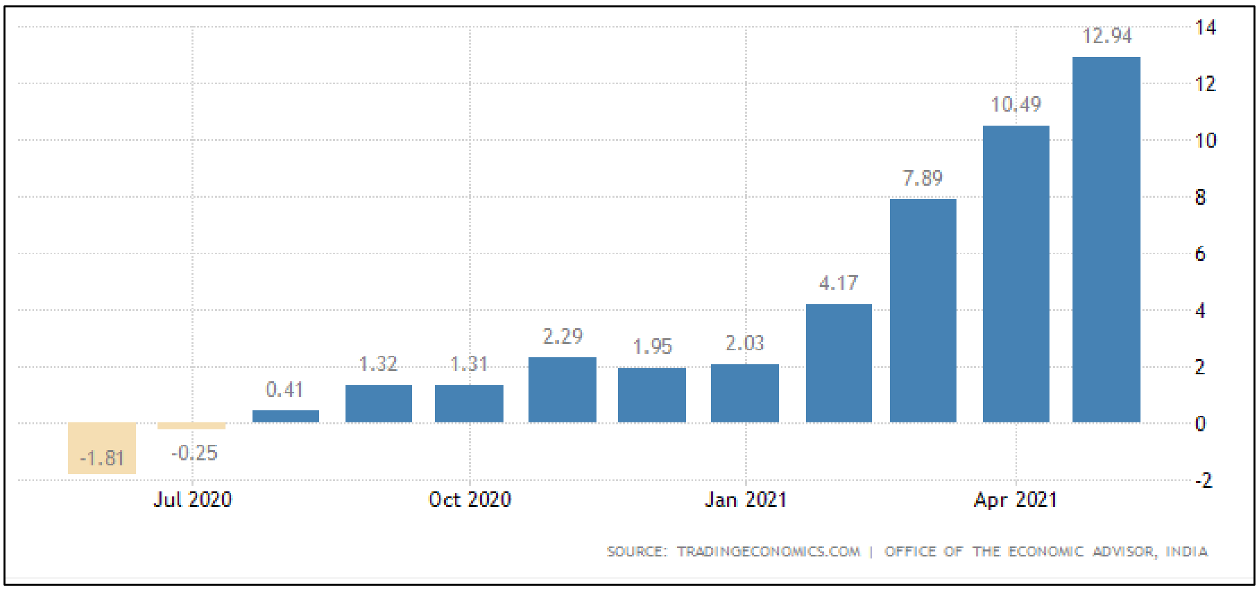
Further, another operation under Government Securities Acquisition Program 1.0 (G-SAP 1.0) for Rs 40,000 Crore purchase will be conducted by the RBI. Also, G-SAP 2.0 worth Rs 1.2 lakh Crore will be taken in the second quarter (Q2) of FY22 to support the market. RBI's foreign exchange reserve is in touching distance of the $600 billion mark. This gives the RBI great confidence to deal with challenges arising out of global spillovers.

Inflation in India

India's retail inflation has spiked sharply to 6.3 per cent in May after easing to 4.23 per cent in April, as per data released by the government. Retail inflation, measured by the Consumer Price Index (CPI), has jumped primarily due to supply disruptions caused by renewed lockdowns and higher food and fuel prices. It has breached the Reserve Bank of India's target range of 2-6 per cent for the first time in five months.

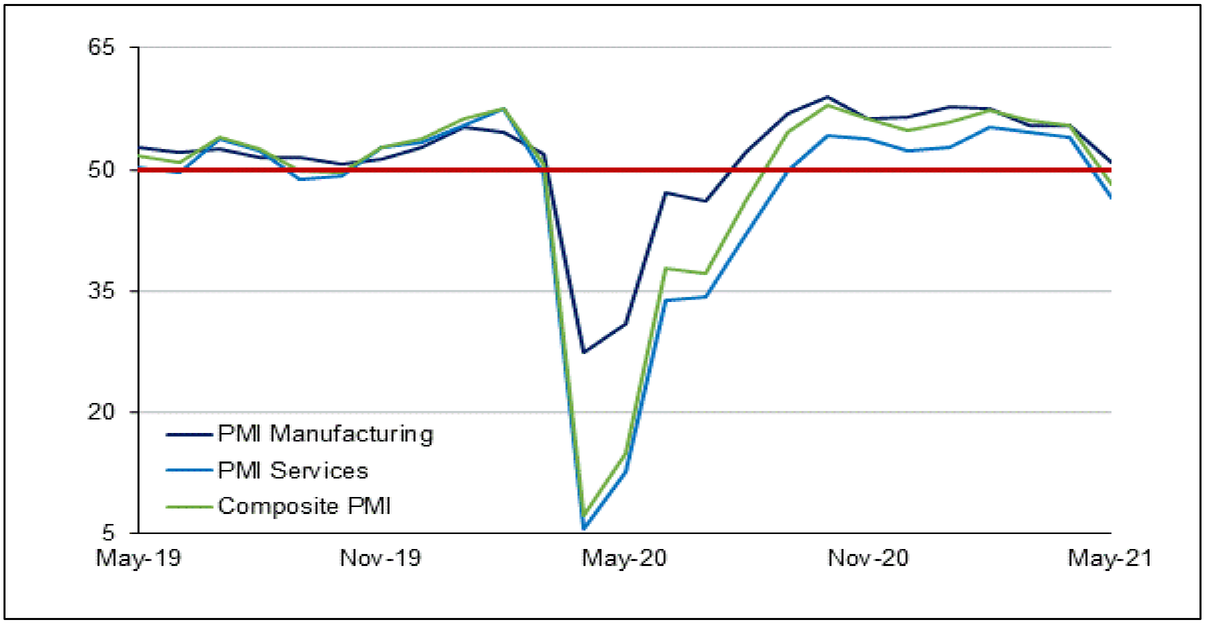
Further, the wholesale price-based inflation data released indicated that it had surged to a record high of 12.94 per cent in May due to rising prices of crude oil and manufactured goods. Biggest increase came from cost of fuel and power (37.61 percent vs. 20.94 percent in April), followed by primary articles (9.61 percent vs. 10.16 percent), namely food (4.31 percent vs. 4.92 percent) and manufactured products (10.83 percent vs. 9.01 percent)

Whole sale Price Inflation in India



Purchasing Manager's Index (PMI)

The composite Purchasing Managers' Index (PMI) produced by IHS Markit fell to 48.1 in May from 55.4 in April. As a result, the PMI moved below the 50-threshold, indicating a decrease in business activity from the previous month.



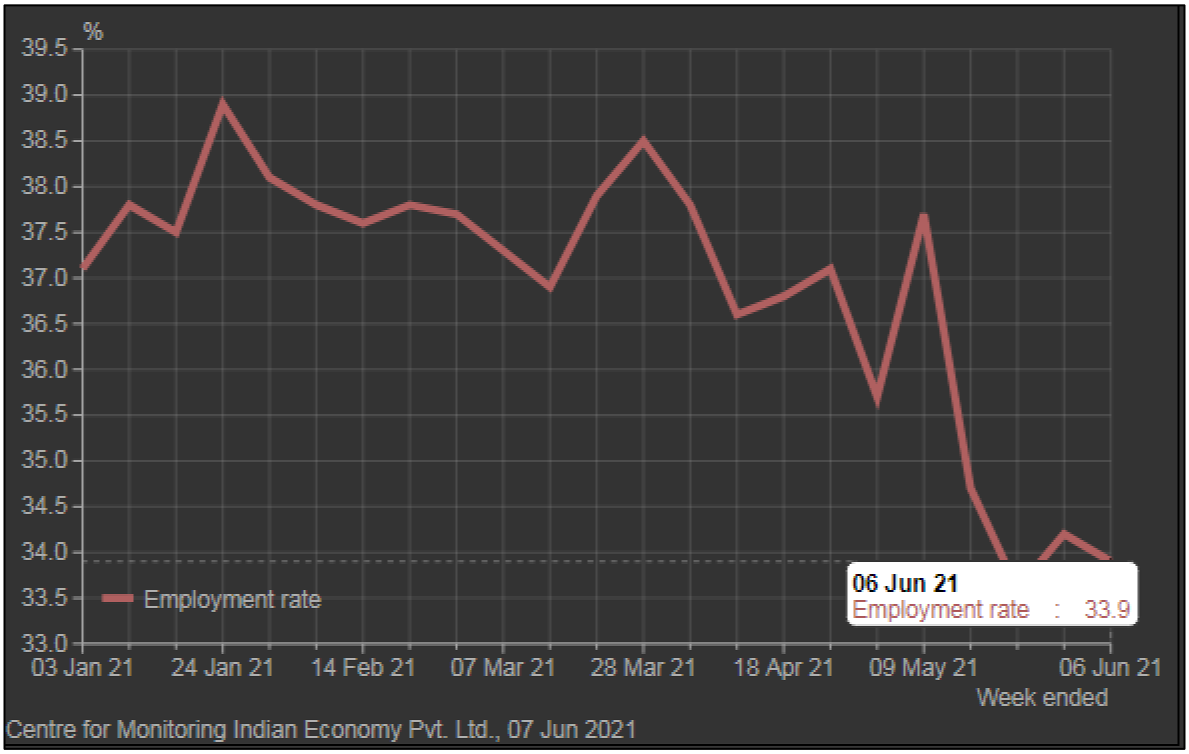
Source: - IHS Markit

The services PMI fell from 54.0 in April to 46.4 in May, as the surge in domestic Covid-19 cases and ensuing restrictions caused both new orders and output to decline. The intensification of the Covid-19 crisis and associated restrictions suppressed domestic and international demand for Indian services. On the manufacturing side, the PMI fell from 50.8 in May to 48.1 in June amid slower rises in output and new orders, and faster job shedding.

Unemployment in India

The unemployment rate that reached 11.9 per cent in May 2021 continued to rise into early June. The 30-day moving average unemployment rate as of June 6, 2021 was 13 per cent. Further, the employment rate which had fallen to 35.3 per cent in May dropped to 33.9 per cent by June 6, 2021. Low and falling labor participation rate and high unemployment rate imply a fall in the employment rate and a fall in absolute employment. The employment rate fell from 36.8 per cent in April 2021 to 35.3 per cent in May 2021. This translated into a loss of 15.3 million jobs. As mentioned earlier, this fell to 33.9 per cent measured by the 30-day moving average on June 6.

Employment rate in India



India's Trade Deficit

India's trade deficit narrowed to an eight-month low in May at $6.3 billion as rising external demand kept exports ticking and the pandemic caused imports to dip. Merchandise exports remained above the $30 billion mark for the third month in a row at $32.2 billion, while merchandise imports fell steeply to its lowest in six months at $38.5 billion, according to preliminary trade data released by the commerce ministry. This is mainly due to slack in domestic demand for both gold and oil due to Covid induced regional lockdowns.

The top increases in exports in May, as compared to the same month a year ago, were in petroleum (200%), engineering goods (53%) and gems & jewelry (179%). The fact that the growth came from labor-intensive sectors such as Gems & Jewelry, Engineering goods, Cotton yarn, handloom products, Marine products, Spices, Carpets, and Man-made yarn augurs well for the job scenario.

The major declines were in drugs and pharm (-5.4%), fruits and vegetables (-10.6%) and oil seeds (-7%). In contrast, the top increases in imports were in petroleum products (164%), precious stones (490%) and electronic goods (48%), while the top declines were in silver (-95%), transport equipment (-15%) and iron and steel (-3%).

7. Moody's slashed India's growth projection to 9.6% for 2021, from its earlier estimate of 13.9%

Moody's Investors Service on Wednesday slashed India's growth projection to 9.6 per cent for 2021 calendar year, from its earlier estimate of 13.9 per cent, and said faster vaccination progress will be paramount in restricting economic losses to June quarter. Moody's suggested that the virus resurgence adds uncertainty to India's growth forecast for 2021; however, it is likely that the economic damage will remain restricted to the April-June quarter and it is currently expected that India's real GDP will grow at 9.6 per cent in 2021 and 7 per cent in 2022.

Moody's said the 10 states that have been hardest hit by the second wave collectively account for more than 60 per cent of the pre-pandemic level of India's GDP. Four states - Maharashtra, Tamil Nadu, Uttar Pradesh and Karnataka - contributed the largest shares among all states in financial year 2019-20.

Further, Moody's said faster vaccination progress will be paramount in restricting economic losses to the current quarter. As of the third week in June, only about 16 per cent of the population had received one vaccine dose; of those, only about 3.6 per cent had been fully vaccinated. The government recently announced a strategy to centralize vaccine procurement in order to boost vaccinations, which if successful, will support the economic recovery as per Moody's report.

Moody's expects the overall hit to India's economy to be softer than that during the first wave last year. However, the pace of recovery will be determined by access to and delivery of vaccines, and the strength of the recovery in private consumption, which could be hampered by the deterioration of balance sheets of low- and middle-income households from job, income and wealth losses.

8. India's Finance Minister announced relief measures amid the second coronavirus wave in India

Union Finance Minister Nirmala Sitharaman announced eight sets of economic relief measures, including one on health infrastructure, amid the ongoing Covid pandemic. These measures are worth Rs. 6,28,993 crore.

As part of the measures, the Central government announced 1.1 lakh crore Loan Guarantee Scheme for Covid affected sector, including Rs. 50,000 crore for Health Sector aimed at up scaling medical infrastructure targeting underserved areas.

The balance Rs. 60,000 crore for other sectors, include a plan to support over 11,000 registered tourist guides and travel agencies so they can survive the second wave's adverse effects. Working capital or personal loans will be provided to people in the sector to discharge liabilities and restart businesses affected by COVID-19. Loans will be provided with a 100% guarantee under the scheme to be administered by the Ministry of Tourism. Enlarging the scope of the Emergency Credit Line Guarantee Scheme (ECLGS), the Central government announced additional 1.5 lakh crore. The scheme was launched as part of Atma Nirbhar Bharat package in May, 2020.

The breakup of Government's Rs. 6,28,993 Crore COVID Economic Relief Measures is as under:-

- Loan Guarantee Scheme for COVID Affected Sectors – Rs 1,10,000 Crore.
- Emergency Credit Line Guarantee Scheme (ECLGS) – Rs 1,50,000 Crore.
- Credit Guarantee Scheme for Micro Finance Institutions – Rs 7,500 Crore.
- Free One Month Tourist Visa to 5 Lakh Tourists – Rs 100 Crore.
- Additional Subsidy for DAP & P&K fertilizers – Rs 14,775 Crore.
- Free food grains under PMGKY from May to November, 2021 – Rs 93,869 Crore.
- New Scheme for Public Health – Rs 15,000 Crore.
- Revival of North Eastern Regional Agricultural Marketing Corporation (NERAMAC) – Rs 77 Crore.
- Boost for Project Exports through NEIA – Rs 33,000 Crore.
- Boost to Export Insurance Cover – Rs 88,000 Crore.
- Broadband to each village through BharatNet PPP Model – Rs 19,041 Crore.
- Reform Based Result Linked Power Distribution Scheme (Budget Announcement) – 97,631.

Lesson from Economics

The Great Depression and Economic Theories

The Great Depression was a severe worldwide economic depression that took place mostly during the 1930s, beginning in the United States. The timing of the Great Depression varied across the world; in most countries, it started in 1929 and lasted until the late 1930s. It was the longest, deepest, and most widespread depression of the 20th century. The Great Depression started in the United States after a major fall in stock prices that began around September 4, 1929, and became worldwide news with the stock market crash of October 29, 1929. The initial decline in U.S. output have stemmed from tight U.S. monetary policy aimed at limiting stock market speculation. The 1920s was a prosperous decade with stock prices had raised more than fourfold from the low in 1921 to the peak in 1929. In 1928 and 1929, the Federal Reserve had raised interest rates in hopes of slowing the rapid rise in stock prices. These higher interest rates depressed interest-sensitive spending in areas such as construction and automobile purchases, which in turn reduced production. Thus, the fundamental cause of the Great Depression in the United States was a decline in spending or aggregate demand, which led to a decline in production as manufacturers and merchandisers noticed an unintended rise in inventories.

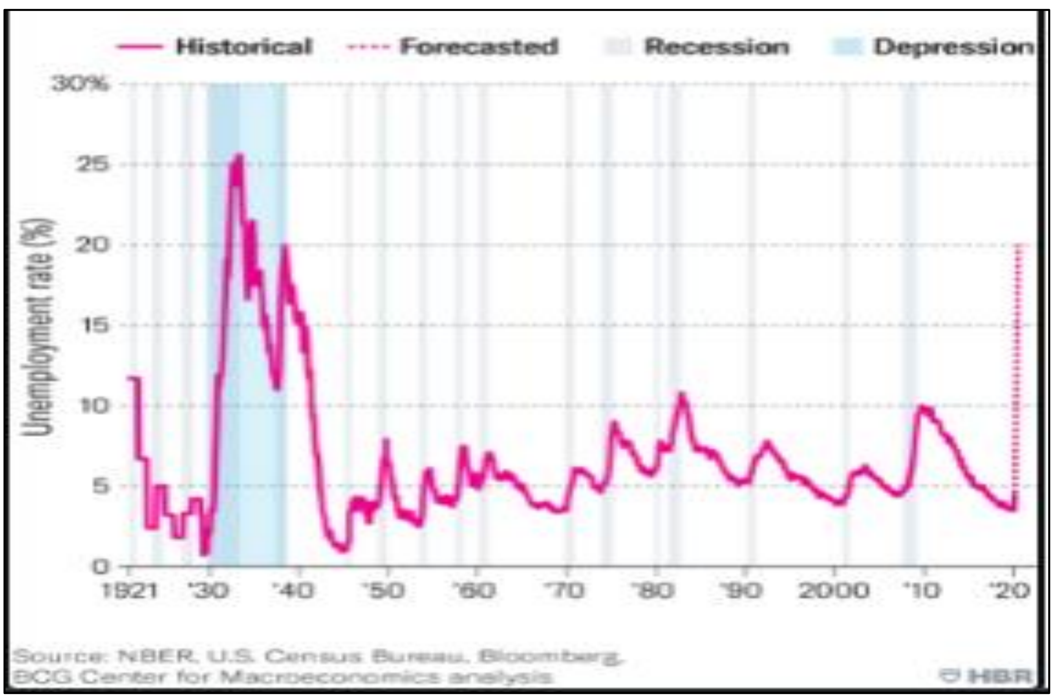
There were devastating impacts of Great Depression on the world economy particularly, US.

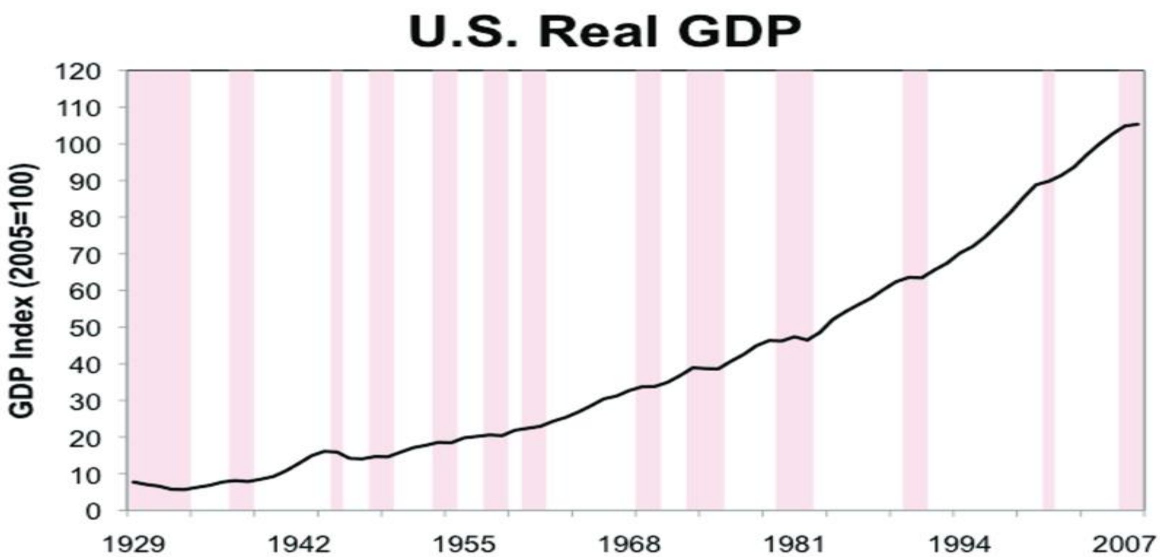
- Between 1929 and 1932, industrial production in the United States declined 47% and real gross domestic product (GDP) fell by an estimated 30%.
- Most damaging was a breakdown in world trade, which caused the country's revenue to plummet.

- Despite its shrinking income, the government still had to make interest payments on a sizeable national debt and provide essential services to the public.
- Widespread unemployment during the 1930s exacerbated an already difficult situation with one-fourth of the labour force in industrialized countries was unable to find work in the early 1930s. Unemployment in the U.S. rose to 23% and in some countries rose as high as 33%.
- Real per capita disposable income sank nearly 40%.
- Real gross private domestic investment plunged nearly 80% between 1929 and 1932.
- The government doubled income tax rates in 1932. Total government tax revenues as a % of GDP shot up from 10.8% in 1929 to 16.6% in 1933. Higher tax rates tended to reduce consumption and aggregate demand.
- Further, a banking panic arose when many depositors simultaneously lose confidence in the solvency of banks and demand that their bank deposits be paid to them in cash. This rise in the currency-to-deposit ratio was a key reason why the money supply in the United States declined 31 percent between 1929 and 1933. Further to reduce the money supply in U.S., Federal Reserve also deliberately contracted the money supply and raised interest rates in September 1931.

With contractionary fiscal and monetary policy adopted by the Governments, produced a recessionary gap.

U.S. Unemployment rate- Unemployment peaking near great Depression in 1930





Sources: Bureau of Economic Analysis (BEA), National Bureau of Economic Research (NBER).

The Recessionary Gap faced by the world was ended when the pressures of World War II forced sharp increase in aggregate demand for defense. Government adopted expansionary fiscal and monetary policy as budget deficit rose sharply because of the military build-up in the face the war. This expansionary fiscal policy quickly returned the economy to its trend path and reduced the unemployment rate to below its pre-Depression level.

The experience of the Great Depression, therefore, showed that the market forces did not work as well as the classical economists had believed. The unemployment rate in the United States rose to above 25 % of the labour force. Also wages fell substantially, but the lower wages did not re -establish full employment.

The experience of the Great Depression was consistent with Keynes's argument (explained below). It was Keynesian fundamentals that stress the use of expansionary fiscal and of monetary policy to close such recessionary gaps.

Keynesian Solution to Great Depression: -

The Great Depression played a crucial role in the development of macroeconomic policies intended to temper economic downturns and upturns.

- On one hand, the Classical economists primarily David Ricardo emphasized that the Government does not need to intervene as in the long run, the economy will reach the natural level of employment and potential output on its own. The central tenet of the classical argument says that supply can always create demand, and that surpluses will result in price reductions to the point of consumption. Thus, people have infinite needs and the market will self-correct to the aggregate demands and available resources.

- On the other hand, British economist John Maynard Keynes suggested that increases in government spending, tax cuts, and monetary expansion could be used to contract depressions. He stated that markets are imperfect and will not always self-correct. Keynes theorized that natural inefficiencies in the market will see goods that are not met with demand. This wasted capital can result in market losses, unemployment, and market inefficiency. Keynes insisted that markets do need moderate governmental intervention through fiscal policy (government investment in infrastructure and reduction in taxes) and through monetary policy (interest rates reduction) to make up for the shortfall in private aggregate demand and private investment.

Instance of Keynesian economics in current Indian scenario

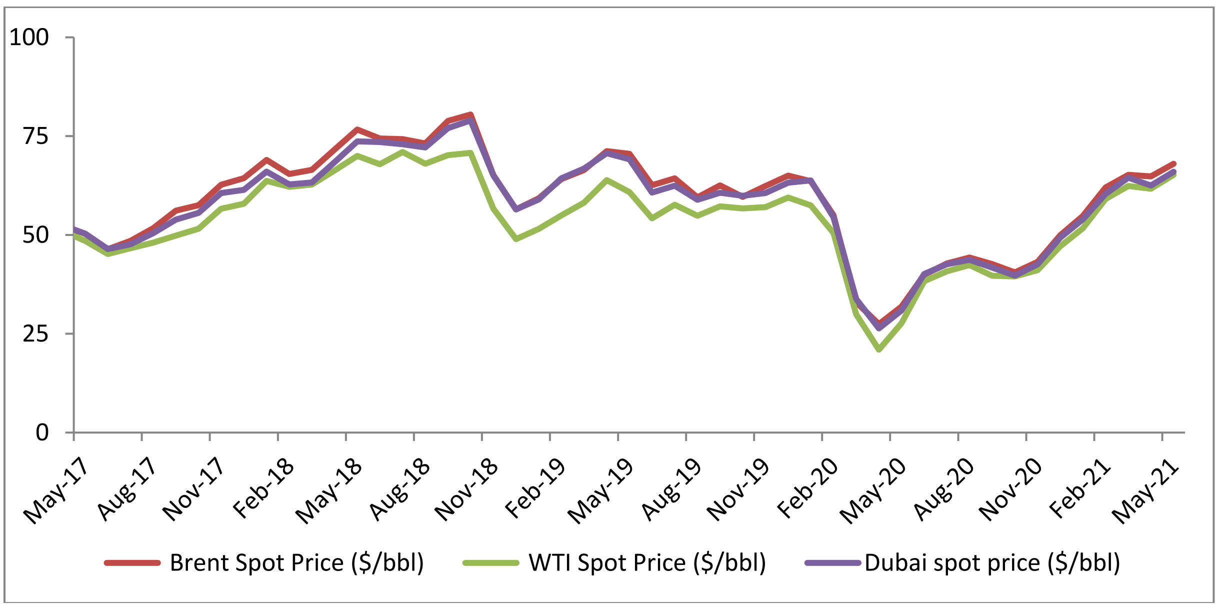
At present, in the Covid era, the unemployment level in India is hovering around 24 percent. The poverty level is rising fast and the rural- urban gap is increasing. At present, the private sector does not have the potential to fill this gap. The financial stimulus packages announced by the Modi government to offer some relief to the agricultural sector, MSMEs, street vendors, NBFCs, DISCOMs and real estate sector are very much in line with Keynesian economics, as the government has intended to spend more, create more agro-infrastructure, put more money in the hands of the people. Thus India, as a large population cannot survive and grow without the active intervention of the State. The government needs to adopt more ideas from Keynesian economics to provide more white-collar employment in the public sector like at schools, universities, healthcare, and security sectors to the young and educated, in order to create demand in the economy. The Government must go ahead with massive spending in infrastructural development and mass state employment at all levels of state. It would certainly work as a multiplier effect on the economy, and would create huge demand, which would kick start industrial production and generate revenue for the government eventually.

Oil Market

Crude oil price – Monthly Review

Crude oil benchmarks fluctuated in the range of USD 60 during the month of May. Strong recovery in China and Japan propelled the demand for crude oil in the first fortnight of May month. There was a minor dip in crude prices as the prospect of Iran's return to market fueled a possibility of increase in crude supply. However, it vanished after US denied resumption of talks with Iran on lifting sanctions on Iran. In the last week of May, withdrawal of crude in US inventory boosted the crude oil benchmarks. US crude oil inventory stood below the average of last five years. For the month, crude benchmarks went down with marginal decline. Average Brent, WTI and Dubai basket crude prices in May went up by 4.9 %, 5.7 % and 5.6s % respectively from their April prices.

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



Source: WORLD BANK

- Brent crude price averaged $ 68.00 per bbl in May 2021, up by 4.9 % on a month on month (MoM) and by 113.5 % on year on year (YoY) basis, respectively.
- WTI crude price averaged $ 65.20 per bbl in May 2021, up by 5.7 % on a month on month (MoM) and by 135.9 % on year on year (YoY) basis, respectively.
- Dubai crude price averaged $ 66.00 per May in May 2021, up by 5.6 % on a month on month (MoM) and by 113.6 % on year on year (YoY) basis, respectively.

Table 1: Crude oil price in May, 2021

Crude oil	Price ($/bbl) in May 2021	MoM (%) change	YoY (%) change
Brent	68.00	4.9%	113.5%
WTI	65.20	5.7%	135.9%
Dubai	66.00	5.6%	113.6%

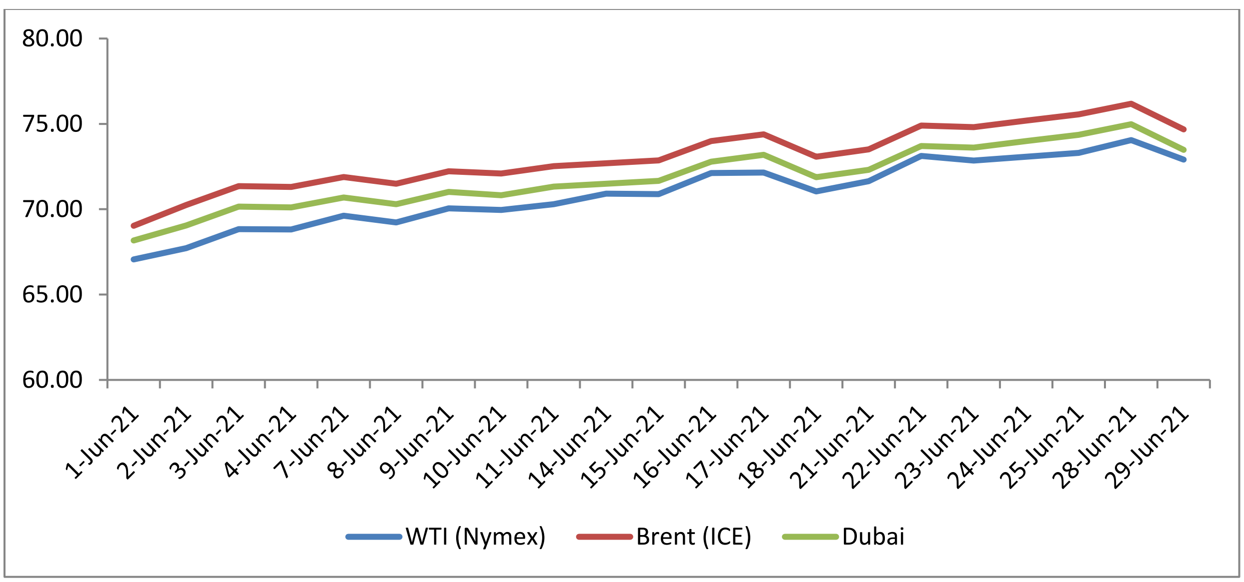
Source: WORLD BANK

Vaccination Rollouts and Reopening Economies put crude at 2 year-high

Crude oil benchmarks hit 2-year-high in the mid of June by climbing up for 5th straight week. Expectation of crude oil demand outstripping the supply has sent the crude prices to a new high since October 2018. Bolstered by the vaccination rollouts and economies reopening in the US, Europe and China, crude oil demand is showing a strong demand recovery. There was a minor fall in benchmarks due to the prospect of lifting sanctions from Iran, however it short-lived. With OPEC+ set to meet on July first week, the chance of increasing the crude supply by a smaller volume to keep the market tight.

For the month, crude benchmarks increased significantly. Average Brent, WTI and Dubai basket crude prices in June went up by 7.42 %, 8.79 % and 8.88 % respectively from their April prices.

Figure 2: Crude oil price in June 2021

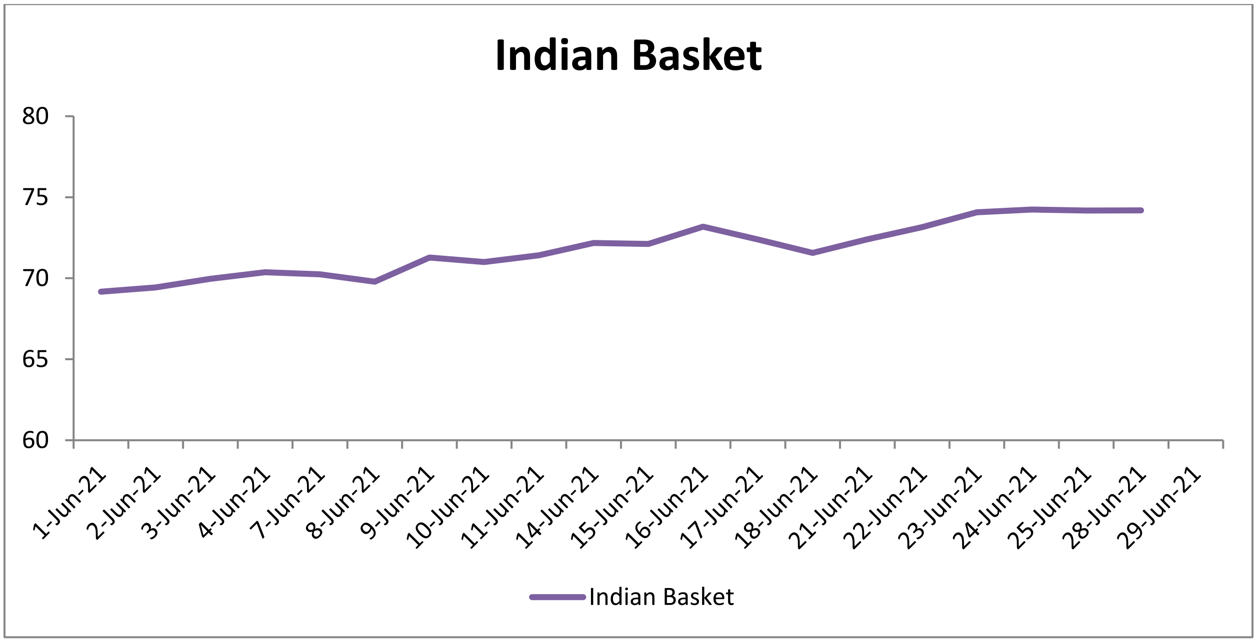


Source: EIA, Oilprice.com

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 saw increasing trends in the month of June corresponding to the rise in the global crude benchmarks.

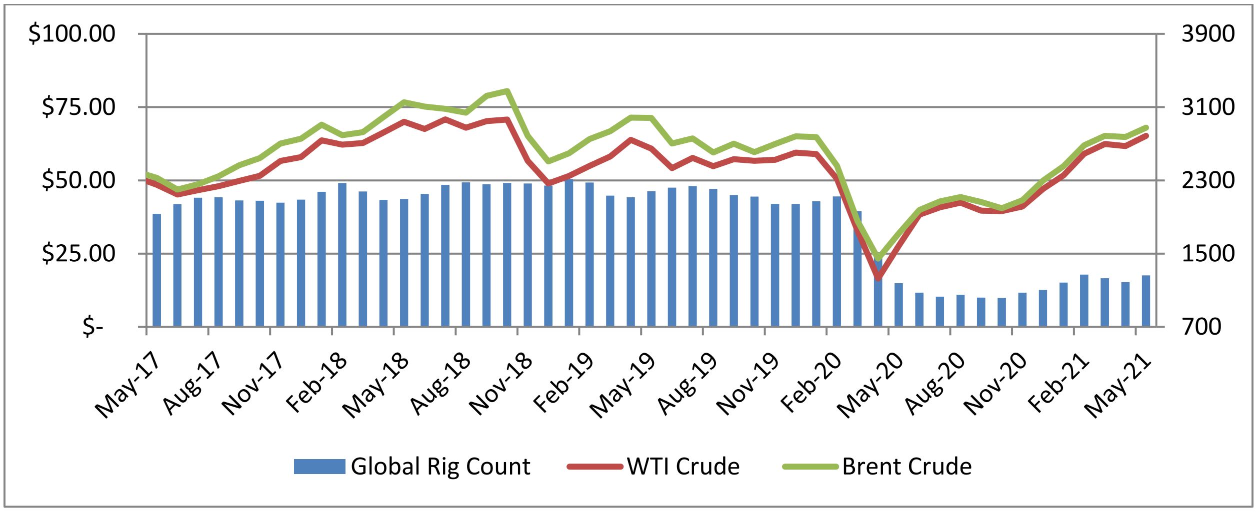
- Indian crude basket price averaged $ 71.81 per barrel in June 2021, up by 7.34 % on Month on Month (M-o-M) and by 77.35 % on a year on year (Y-o-Y) basis, respectively.

Upstream activity & Rig count

Global rig count

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

Figure 4 Global Rig Count vs. Crude Prices



Source: Baker Hughes

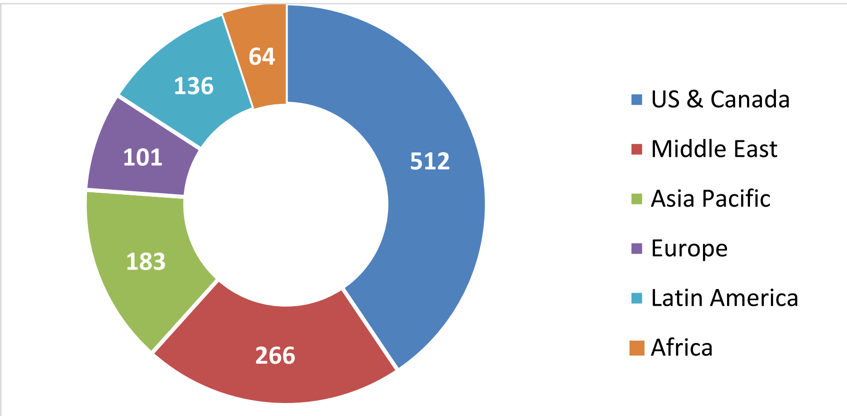
Global rig count for the month of May went up by 73. From April's rig count of 1,189 it climbed to 1,262. Active rig count went up in all regions as the oil price looked stabilized with recovering demand for crude oil. Significant jump came from Latina America, which saw an increase of 18 rigs in the month of May. Rig count in Asia Pacific went up by 16 and in the Middle East rig count went up by 14. Shale region in the US saw an increase in drilling activity as the WTI hit 2-year-high. . Onshore rig went down up 57 and offshore rigs went up by 16.

Table 2 : Global Drilling Rig Count

Rig Type	Count in May 2021	MoM (%) change	YoY (%) change
Land	1,067	5.64%	10.46%
Offshore	195	8.94%	-7.14%
Total	1,262	6.14%	7.31%

Source: Baker Hughes

Figure 5 Geography-wise Rig count - May 2021



Source: Baker Hughes

Indian Drilling Rig Count

Indian drilling rig count stood unchanged in the month of May. Indian rig count decreased by 17.78 % on Y-O-Y basis. Out of the 74 active rigs, 63 were onshore rigs and the rest 11 were offshore rigs.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

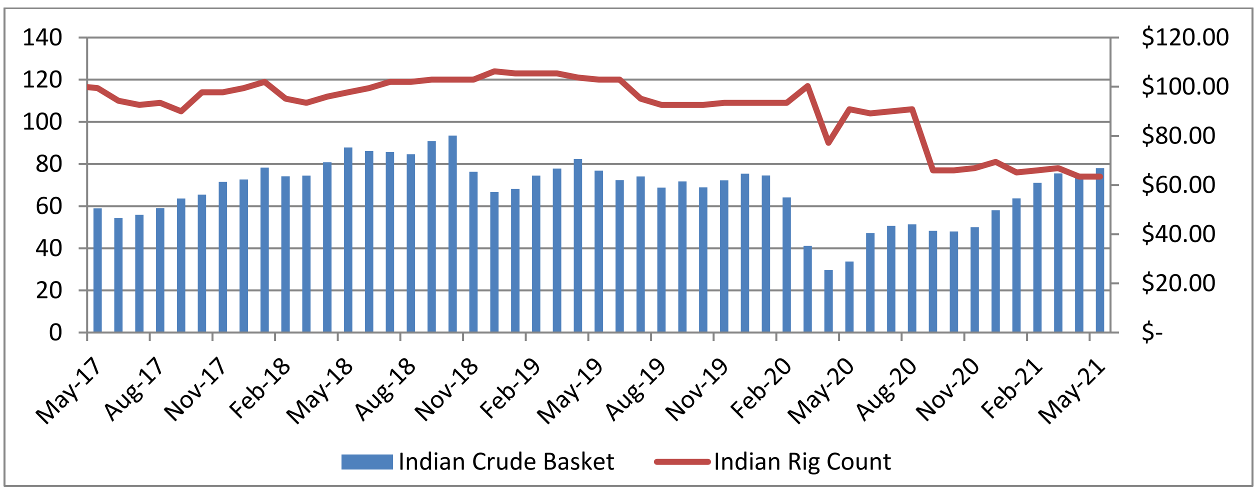


Table 3 : Indian Rig Count

Rig Type	Count in May 2021	MoM (%) change	YoY (%) change
Land	63	0.00%	-4.55%
Offshore	11	0.00%	-72.50%
Total	74	0.00%	-30.19%

Source: Baker Hughes

Oil demand & supply

Preliminary data indicates that global oil supply in May 2021 increased by 0.63 mb/d m-o-m to average 93.67 mb/d and was higher by 5.63 mb/d Y-o-Y. Non-OPEC supply (including OPEC NGLs) was up in May by 0.24 mb/d m-o-m to average 68.21 mb/d in May 2021. On Y-o-Y basis, it was an increase of 4.30 mb/d. The preliminary decrease in production mainly came from the US, the UK, Brazil and Guyana. In May 2021, share of OPEC crude oil in total global production went up by 0.2% to 27.2 %. 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.

In 2021, world oil demand growth was kept unchanged at 6.0 mb/d, unchanged from last month's forecast. Total demand is foreseen to reach 96.6 mb/d.

Slower-than-anticipated demand in OECD Americas and Europe in 1Q21 led to the revision of OECD crude oil demand on the lower side. Positive developments in mobility due to easing of Covid-19 restrictions and opening of borders in 2Q21 led to upward revision of the OECD crude oil demand. The upward revision of 2Q21 data offset the larger part of 1Q21 downward revision.

OECD oil demand in projected to increase by 2.7 mb/d in 2021 with most of the gains coming in the second half of 2021. OECD Americas led by the US will give the biggest contribution to the oil demand growth in 2021 due to rebounding demand for transportation fuels. However, the demand is unlikely to recover to the pre-Covid levels. OECD oil demand for 2021 is forecasted to be 44.72 mb/d, an increase of 2.65 mb/d from the 2020 levels.

In the non-OECD region, oil demand was revised marginally upwards on annualized basis, offsetting all the downward revision in the OECD region due to positive 2Q21 data from the Middle East. Oil demand in non-OECD is forecasted to rise by 3.3 mb/d in 2021 with significant demand coming from India, China and other Asian nations. Rebound in economic activities is likely to stimulate the industrial fuel demand and the demand for petrochemicals feedstock.

Table 4: World Oil demand in mbpd	2020	1Q2021	2Q2021	3Q2021	4Q2021	2021	Growth	%
Total OECD	**42.07**	**42.77**	**44.54**	**45.52**	**45.97**	**44.72**	**2.65**	**6.31**
~ of which US	**18.44**	**19.15**	**19.96**	**20.24**	**20.45**	**19.96**	**1.51**	**8.21**
Total Non-OECD	**48.56**	**50.16**	**50.72**	**52.65**	**53.85**	**51.86**	**3.30**	**6.79**
~ of which India	*4.51*	*4.94*	*4.52*	*4.91*	*5.61*	*5.00*	*0.49*	*10.82*
~ of which China	13.19	12.95	14.27	14.93	15.05	14.30	1.11	8.43
Total world	**90.63**	**92.93**	**95.26**	**98.18**	**99.82**	**96.58**	**5.95**	**6.57**

Source: OPEC monthly report, June 2021
*Note: *2020 = Estimate and 2021 Forecast*

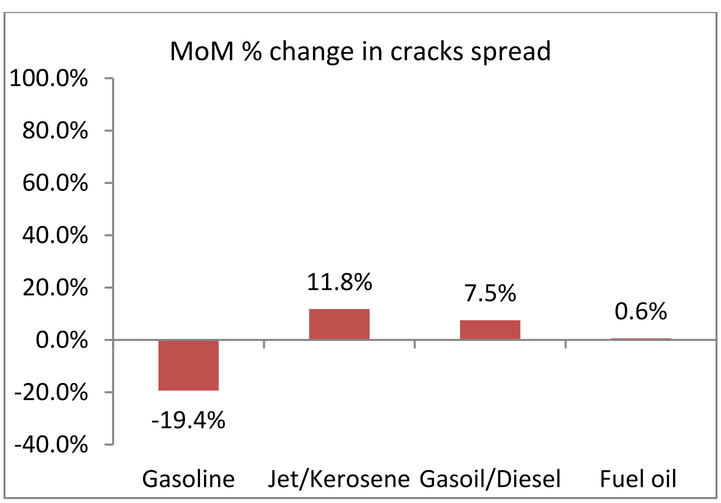
Global petroleum product prices

Asian product markets margins trended downwards for the second straight month, with most of the pressure coming from top and bottom of the barrel. Sufficient product availability and waning product import requirements from outside the Asia impacted the margins. Increase in Covid-19 rate in Vietnam, India, Taiwan impacted the transportation fuel consumptions levels. Refinery margins for Oman in Asia lost 19 ȼ on m-o-m to average $ 1.46 /b in May and were higher by $ 5.18 on y-o-y basis. Refinery utilization rates in May averaged 89.78 % in selected Asian markets comprising of Japan, China, India and Singapore. Compared to the previous month, the throughputs were up by 0.1 % and by 20 tb/d. On Y-o-Y, they were up by 5.3% and by 1.8 mb/d.

Asian gasoline 92 cracks suffered losses as gasoline sales in India collapsed the lowest level in a year as a devastating wave of Covid-19 impacted the daily consumption. Average daily consumption in May was down by 20% as compared to April. Mobility restrictions in Vietnam, Taiwan and other Asian nations impacted the margins. Singapore Gasoline cracks averaged $ 7.97 /b against Oman in May, down by 80 ȼ m-o-m but up by $ 7.51 y-o-y.

Jet/kerosene cracks spread in Asia gained some ground with the support from continued regional requirements for domestic air travel, mainly in China. However, with prolonged border restrictions due to the outbreak of new Covid-19 variant, majority of international flights remain suspended in the region. Jet fuel supply is limited due to the cap in production by refiners. End of winter in Northeast Asia and the decline in demand for kerosene consumption for heating could weigh further on jet/kerosene market. The Singapore jet/kerosene crack spread against Oman averaged $ 5.30 /b, up by $ 1.48 m-o-m and by $ 6.71 y-o-y.

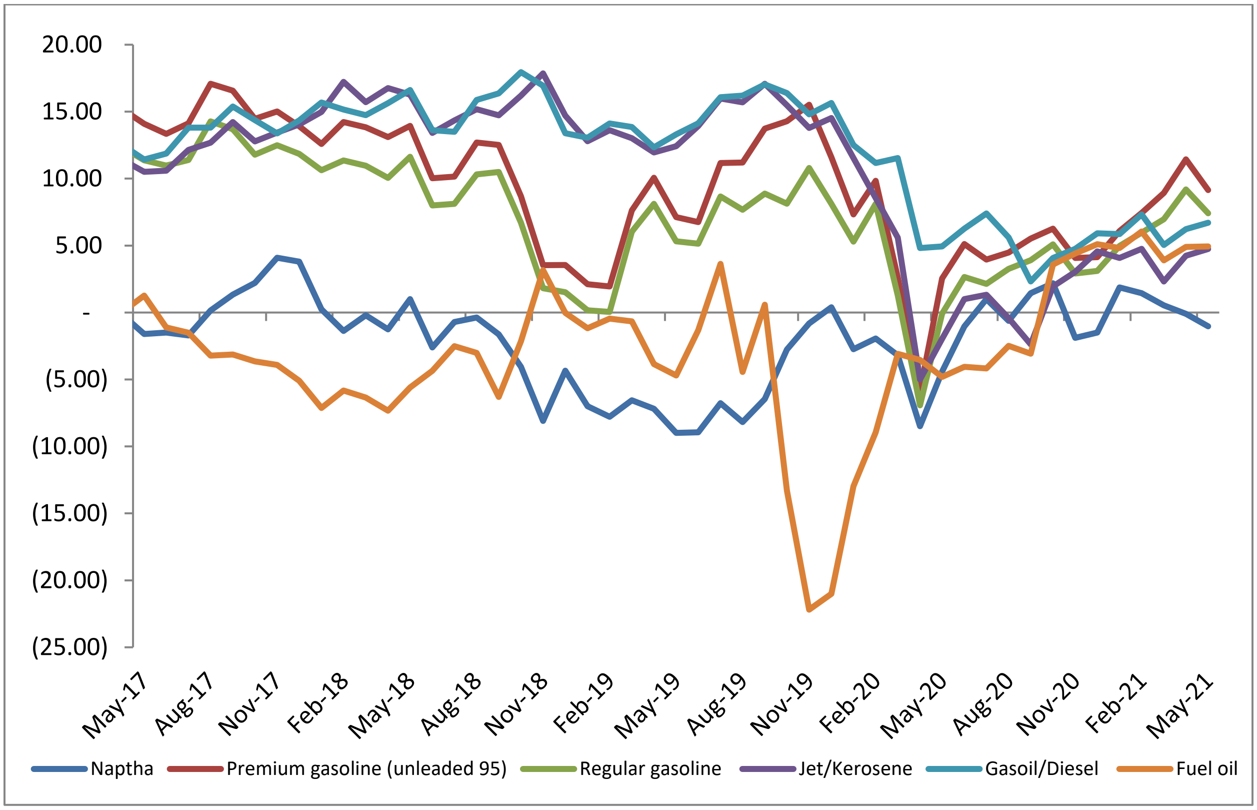
The Singapore gasoil crack spreads moved higher as well with a strong rise in exports of gasoil/diesel from regions' largest exporters such as India, China, Japan, Taiwan and South Korea, where lack of local demand led to considerable build in diesel stocks. Singapore gasoil crack spread against Oman averaged $ 5.70/b, up by 89 ȼ /b m-o-m and up by $2.01 y-o-y.



Source: OPEC Monthly Report

The Singapore fuel oil crack spread continued to trend downwards, affected by stronger crude intake levels, which had an adverse effect on fuel oil prices and led to weaker cracks. Singapore fuel oil cracks against Oman averaged minus $ 8.71 /b, down by $ 2.87 m-o-m, and by $ 3.28 y-o-y.

Figure 7: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

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

Products	Price ($/b) in May 2021	MoM (%) change	YoY (%) change
Naphtha	**65.94**	5.7%	148.9%
Premium gasoline (unleaded 95)	**76.11**	2.9%	127.6%
Regular gasoline (unleaded 92)	**74.38**	3.8%	141.4%
Jet/Kerosene	**71.71**	7.4%	147.8%
Gasoil/Diesel (50 ppm)	**73.67**	7.2%	105.6%
Fuel oil (180 cst 2.0% S)	**71.9**	6.7%	175.6%
Fuel oil (380 cst 3.5% S)	**57.7**	1.1%	134.4%

Source: OPEC

Petroleum products consumption in India

Monthly Review:

- In May 2021, consumption of petroleum products went down by 11.3 % m-o-m but was up by 3.1 % on y-o-y due to the implementation of strict lockdown across the nation.
- Consumption of refined petroleum products for May 2021 stood at 15,106 MT.
- Petrol consumption was down 16.6 % on monthly basis mobility was restricted on a higher level due to the second wave of Covid-19 that swept the nations. On year-o-year basis, Petrol consumption was up by 12.5s %.
- Diesel consumption in the month of May went down by 17.2%. Except for the essential services, the rest of commercial vehicles stood off the road leading to significant drop in Diesel consumption.
- Government regulations mandated the reduction of flight frequency by 50% which led to decline in ATF consumption by 36.3%. ATF consumption on Y-o-Y basis was up by 136.4 %.
- LPG consumption was an exception as its consumption went up by 2.6%. LPG consumption stood around 2,168 MT in May 2021.
- Suspension of major infrastructure activities impact the consumption of other petroleum products likes Bitumen, Petroleum Coke etc. Bitumen consumption was down by 19.3 % on M-o-M basis.

Table 6: Petroleum products consumption in India, May 2021

Petroleum products	Consumption in '000 MT May 2021	MoM (%) change	YoY (%) change
LPG	2,168	2.6%	-6.4%
Naphtha	1,247	-2.1%	15.0%
MS	1,990	-16.6%	12.5%
ATF	263	-36.3%	136.4%
HSD	5,535	-17.2%	0.7%
LDO	77	-19.9%	11.5%
Lubricants & Greases	255	-1.5%	-0.2%
FO & LSHS	470	-13.4%	-1.9%
Bitumen	532	-19.3%	-6.9%
Petroleum coke	1,552	-4.4%	1.9%
Others	880	0.5%	11.2%
TOTAL	15,106	-11.3%	3.1%

Source: PPAC

Natural Gas Market

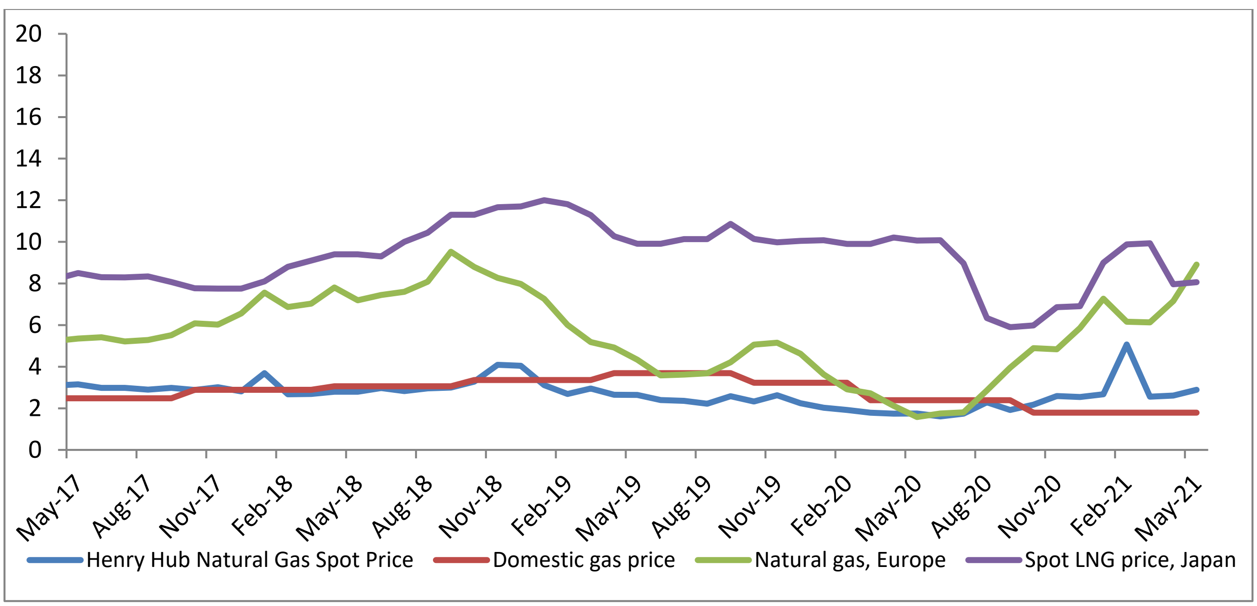
Natural Gas Price – Monthly Review

Natural gas prices saw an increase trend in all major gas trading hubs due to recovery in the economic activities. Natural gas price in the Henry hub went up by 10.7 % to reach $ 2.89 /MMBtu in the month of May as demand for gas went up outside of the power sector and increase in LNG exports. As large numbers of electric generators are moving from Coal to Natural gas, the demand for natural gas is expected to increase. For 2021, Henry Hub gas price is estimated to average $ 3.11 / MMBtu.

Natural Gas price in Europe went up by 24.6% in the month of May as compared to April to reach USD 8.91/ MMBtu. On Y-o-Y basis, gas price was up by 463.9%. Colder than normal weather, record high carbon prices and weak pipeline import drove the demand for Natural Gas in May. Strong spot purchases and supply outages from Australia is also impacting the price. European gas storage inventory is around 32% of the capacity.

Asian spot LNG prices continued to rise for the second straight month as buyers stocked-up LNG for power generation due to warmer than-usual summer. A warmer summer is likely to push the power demand due to the spur in air-conditioning needs. Temperature in cities namely Beijing, Tokyo, Seoul, and Shanghai are expected to remain high. LNG prices for July delivery stood up around USD 10.3/ MMBtu. Japan LNG benchmark went up by 1.3% to reach USD 8.06/MMBtu.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

Natural Gas	Price ($/MMBTU) in May 2021	MoM (%) change	YoY (%) change
India, Domestic gas price (March 21)	1.79	-0.00%	-25.1%
India, Gas price ceiling – difficult areas (Mar 21)	3.62	-10.83%	-35.47%
Henry Hub	2.89	10.7%	65.1%
Natural Gas, Europe	8.91	24.6%	463.9%
Liquefied Natural Gas, Japan	8.06	1.3%	-19.9%

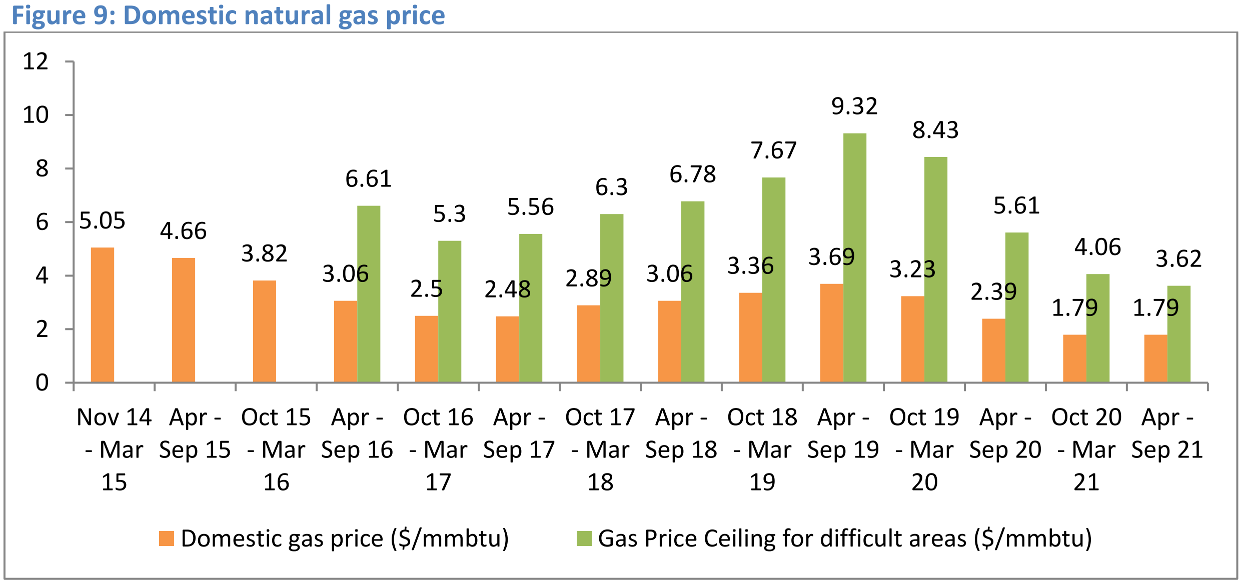
Source: EIA, PPAC, World Bank

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 April 2021 to September 2021 is $1.79 per MMBTU. It remained unchanged but was 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 April 2021 to September 2021 period, the price of gas from such areas has been notified at $3.62 per MMBTU, 10.8 % down from last revision and 35.4% down from last year.

Figure 9: Domestic natural gas price



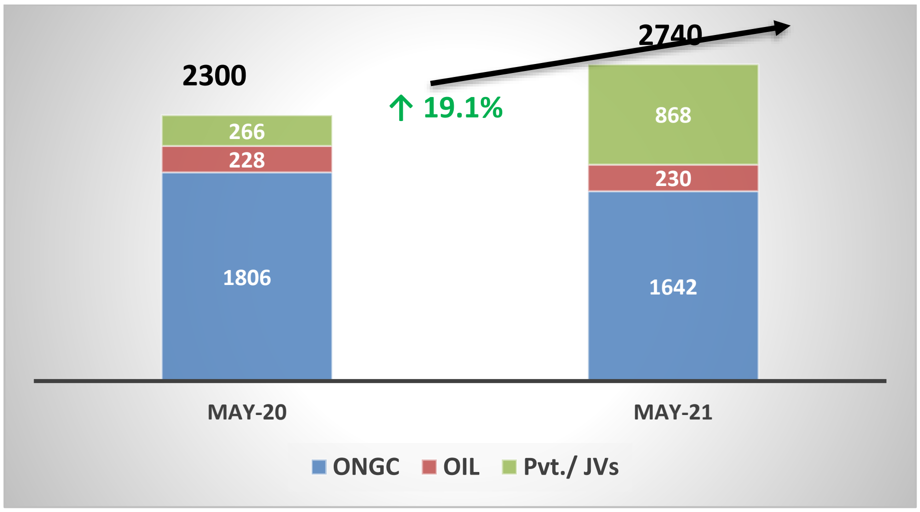
Source: PPAC

Monthly Report on Natural gas production, imports and consumption – May 2021

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of May 2021 was 2,740 MMSCM (increase of 19.1 % over the corresponding month of the previous year 2,300 MMSCM)

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

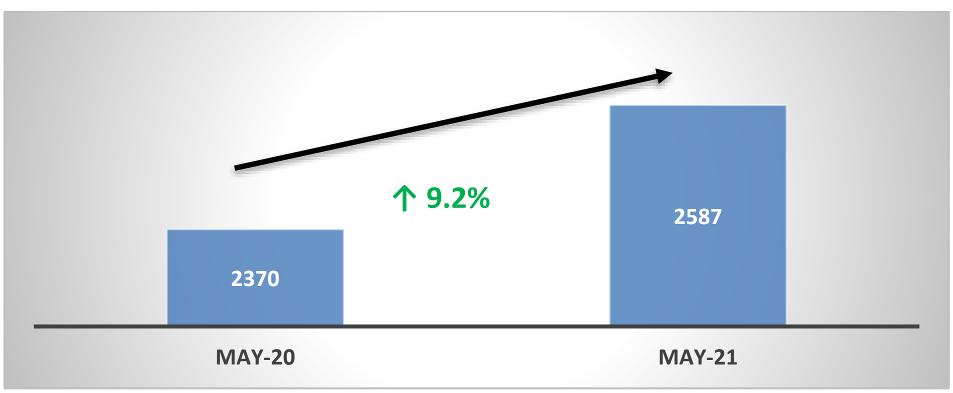


Source: PPAC

2. LNG imports:

Total imports of LNG (provisional) during the month of May 2021 were 2587 MMSCM (increase of 9.2% over the corresponding month of the previous year 2370 MMSCM).

Figure 11: LNG imports (Qty in MMSCM)

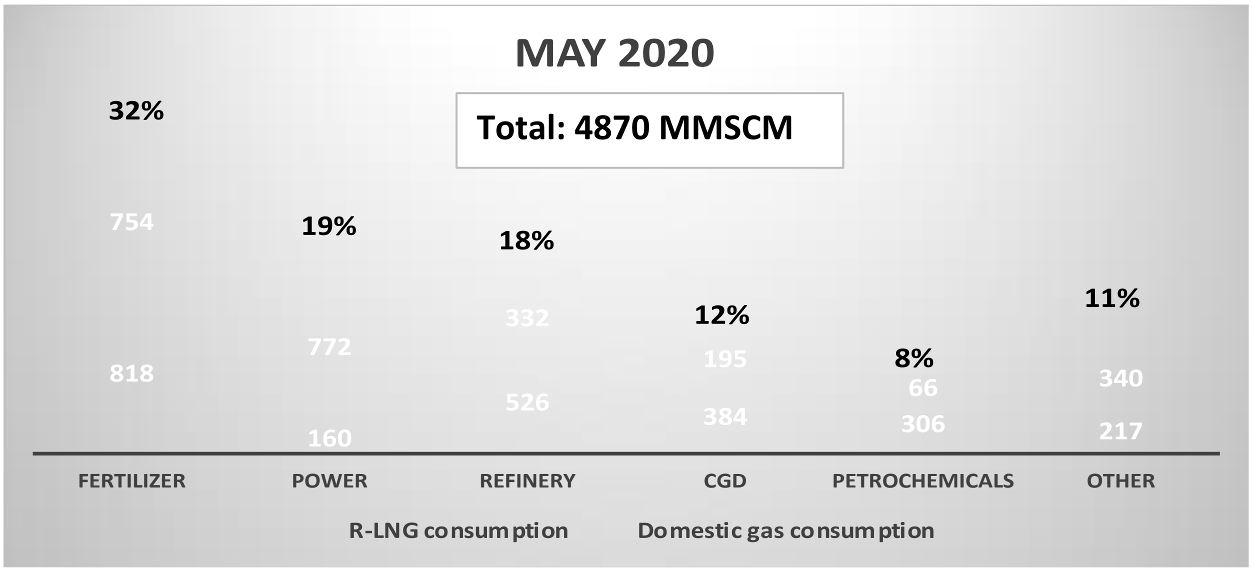


Source: PPAC

3. Sectoral Consumption of Natural Gas:

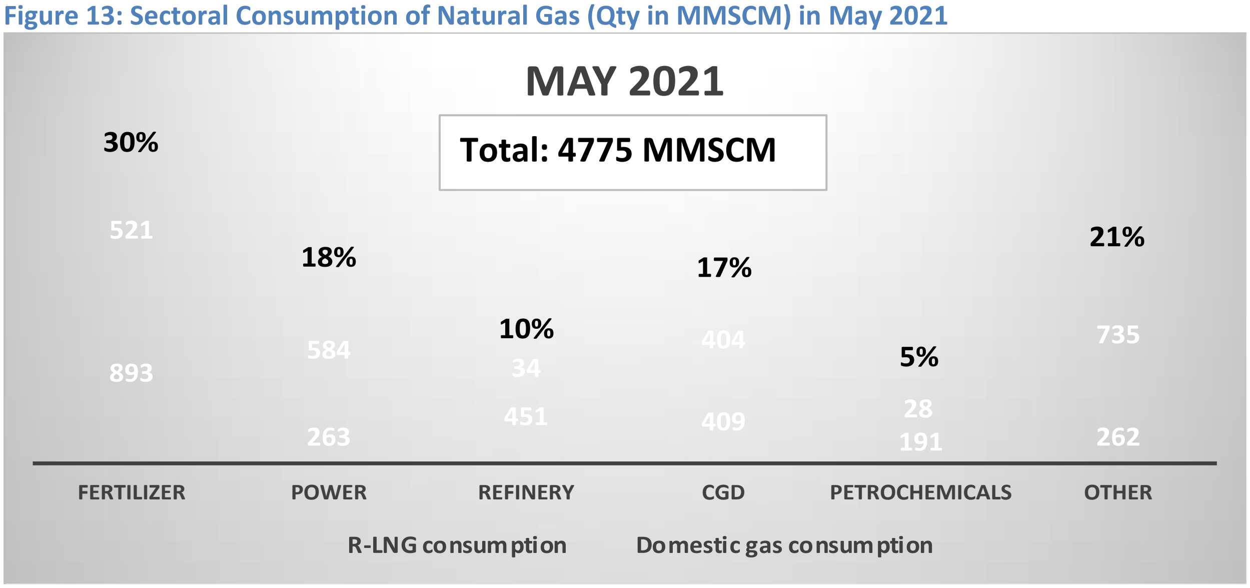
Total consumption of natural gas during May 2021 was 4775 MMSCM (decrease of 2% over the corresponding month of the previous year 4870 MMSCM). Major consumers were fertilizer (30%), power (18%), refinery (10%), City Gas Distribution (CGD) (17%) and petrochemicals (5%).

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



Source: PPAC

Figure 13: Sectoral Consumption of Natural Gas (Qty in MMSCM) in May 2021



Source: PPAC

Key developments in Oil & Gas sector during June 2021

- **Monthly Production Report for May, 2021**

1. Production of Crude Oil

Crude oil production during May, 2021 was2437.96 TMT which is5.47% lower than target for the monthand6.32% lower when compared with production of May, 2020.Cumulative crude oil production during April-May, 2021 was 4931.21 TMT which is 2.23% and 4.22% lower than target for the period and production during corresponding period of last year respectively.

2. Production of Natural Gas

Natural gas production during May,2021 was 2739.65MMSCM which is 19.11% higher when compared with production of May, 2020 but 4.09% lower than the monthly target. Cumulative natural gas production during April-May, 2021 was 5391.14MMSCM which is 20.84% higher than production during corresponding period of last year but 2.61% lower when compared with target for the period

3. Crude Oil Processed (Crude Throughput)

Crude Oil Processed during May, 2021 was 18970.06 TMT which is 16.05% higher than May, 2020but 5.93% lower than the target for the month. Cumulative crude throughput during April-May, 2021 was38854.76 TMT which is 24.97% higher when compared with the production of corresponding period of last year but 2.12% lower than target for the period.

4. Production of Petroleum Products

Production of Petroleum Products during May, 2021 was 19927.81 TMT which is 15.33% higher than production of May, 2020 but 4.79% lower when compared with target for the month. Cumulative production during April-May, 2021 was 40819.39 TMT which is 22.81% when compared with the production of corresponding period of last year but 1.89% lower than target for the period.

- **Shri Dharmendra Pradhan presided over a slew of initiatives around Compressed Bio Gas to give fillip to SATAT scheme**

Union Minister of Petroleum and Natural Gas & Steel Shri Dharmendra Pradhan today presided over a virtual ceremony in which a number of initiatives were launched to provide major fillip to the SATAT initiative, and help India leap ahead towards a greener tomorrow.

This included signing of a Cooperation Agreement by Oil and Gas majors including IndianOil, HPCL, BPCL, GAIL and IGL, for the promotion and development of the SATAT (Sustainable Alternative Towards Affordable Transportation) scheme. The SATAT scheme aims to set up Compressed Bio-Gas production plants and make CBG available in the market for use as a green fuel.'SATAT', launched on 1.10.2018, envisages to target production of 15 MMT of CBG from 5000 plants by 2023.Besides the potential to boost availability of more affordable transport fuels, better use of agricultural residue, cattle dung and municipal solid waste, the 5000 CBG plants will provide an investment of 1.75 lakh crore, an additional revenue source to farmers, and 75,000 direct job opportunities and lakhs of indirect jobs.

The Cooperation agreement provides for establishing a strong network for marketing the entire produced quantity of CBG Plants through various channels. The agreement also has provision for associate implementers to join the SATAT movement. As per the agreement, IndianOil shall act as coordinator under the SATAT scheme and liaison with the Government and other agencies on behalf of Industry members. GAIL shall serve as the coordinator for the implementation of the CBG-CGD synchronization scheme.

During the event, the Ministry of Petroleum & Natural Gas also signed MoUs with Essar Capital Limited, XEMX Projects, Knowledge Integration Services, and Global Green Growth Institute, Seoul to set up new CBG Plants across the country.

Shri Pradhan laid the foundation stonesof 5 upcoming CBG Plants. These plants are being set up across Gujarat(2), Uttar Pradesh(2)and Punjab(1) by CNM Energy Solution Pvt Ltd, CarboneuPvt Ltd, Cities Innovative Biofuels Private Limited and CEF Budhana Energy Private Ltd.

Shri Pradhan also dedicated to the nation the newly commissioned CBG plants of Solika Energy Pvt. Ltd. In Hyderabad and T R Mega Foods and Beverages LLP in Ludhiana. He also dedicated new CBG selling retail outlets at Hyderabad (Masab Tank Service Station), Bengaluru (Jai Bheem) and Ludhiana (Sharma Filling Station) to the nation.

A website to provide a digital boost to the SATAT programme was also unveiled during the event. The website www.satat.co.in shall be a resource centre for new and existing CBG Plants providing details on CBG & SATAT, enablers under the SATAT scheme and FAQs. The portal also contains a section on the learning modules where handy presentations and videos have been made accessible.

Speaking on occasion, Union Petroleum Minister Shri Dharmendra Pradhan said that the Government of India is committed to harnessing the full potential of biofuels to realize the Hon'ble Prime Minister's vision of reducing import dependence and ensuring a sustainable energy future for the nation. He said that steps taken by India for containing the global warming as per the commitment made in COP-21 have been well appreciated. These included providing LPG connections to 8 crore people, surge in the Ethanol blending to almost 9% in the current Sugar year, progress in Bio-diesel programme, Aluminium Air battery.

Shri Pradhan said that the CBG programme under the SATAT has gained momentum, but the growth has to be exponential, not incremental. He said that this requires Oil and Gas PSUs to play more responsible role, debottlenecking, setting up of infrastructure, handholding of small entrepreneurs, and convincing the big companies to set up mega-clusters for the CBG. The Minister said that India should play a global leadership role in energy conversion, as we convert agro-residues/municipal wastes and other green wastes into energy, and make the farmers and rag-pickers important stakeholders in the process. He said that this will help in reducing oil imports, improving environment, saving foreign exchange, enriching our poor, and also brand building. The Minister said that there is a large potential of harnessing usable Hydrogen from CBG in an economically-viable manner.

Speaking on occasion, Secretary Petroleum Shri Tarun Kapoor said that the agreement among Govt PSUs will inspire confidence among the entrepreneurs putting up CBG plants, and remove doubts about the marketing responsibility of gas from these plants. He said that injection of CBG into the CGD pipeline network is an important milestone. He said that the Government is in discussion with the state governments to sort out various issues concerning these plants, and also with the Fertilizer department for the marketing of manure produced in these plants. Shri Kapoor called for quick installation of SATAT plants.

- **Shri Dharmendra Pradhan dedicated to the nation 201 CNG stations across the country**

Minister for Petroleum & Natural Gas and Steel Shri Dharmendra Pradhan today dedicated to the nation GAIL group's 201 CNG stations across the Country. Shri Pradhan also inaugurated the commencement of PNG supply in Jhansi and Mobile Refueling Units (MRUs)for refueling vehicles at Raigad.

Sh. Dharmendra Pradhan interacted with PNG consumer family in Jhansi who expressed their happiness about the unhindered and cheaper supply of PNG in the house. Sh. Pradhan also interacted with MRU operators in Raigad and Delhi and witnessed the filling of CNG in vehicle through MRU.The MRUs inaugurated today belong to IGL and Mahanagar Gas Limited.

Speaking on the occasion, Sh. Pradhan said that till now, CNG stations and Piped Natural Gas (PNG) were things belonging to metro cities and with the Government efforts these are now reaching cities and towns across the country. The Minister said that Hon'ble Prime Minister Shri Narendra Modi is committed to the cause of climate change mitigation and his efforts have given the world, leadership and enhanced India's standing in the world. Shri Pradhan added that for us, bringing innovation in energy retailing is not only a business decision, but is also aligned to PM's vision of a greener future. He also spoke about the PM's efforts towards enhancing ease of living for citizens and said that today's inauguration is another step towards this twin objective of a greener future and enhancing ease of living for people.

Asserting that the future of fuel retail is mobile, he spoke about various measures to give boost to this ecosystem including setting up mobile refilling CNG facility. He also outlined the benefits of mobile fuel retailing which includes cost advantage as well as advantage in terms of reaching out to consumers at shopping malls, offices and other places. He also said that going forward, mobile battery swapping should also be explored. "We are bringing in innovation in energy retailing and making it mobile and delivering at the doorsteps", Shri Pradhan added.

Shri Pradhan said that India has committed to achieve 15% share of natural gas in the primary energy mix by 2030 for a more sustainable energy use which will help reduce environmental pollution, fulfillndia's commitment to COP-21. Greater use of natural gas will reduce dependence on fossil fuel and consequently reduce import bill and import dependence, he added.

Sh. Pradhan said that the Ministry is pushing for greater adoption and utilisation of cleaner and greener fuel including Hydrogen, CBG, Ethanol Blended Petrol (EBP) and LNG. He stated that IOCL is soon going to launch Hydrogen dispensing station at its refinery and Vadodara. India has launched the E-100 pilot project for production and distribution of ethanol across the country and is committed to meeting its target of 20 per cent ethanol blending in petrol by 2025.

Shri Pradhan said that CGD sector has emerged as a major sector for natural gas consumption. The demand is only going to increase as more GAs become operational**.** He exhorted the CGD entities to keep working hard to reach 10,000 CNG stations and 5 crore PNG connections in coming 7-8 years. He said that there is a need for conversion of diesel/petrol vehicles to CNG/LNG for ensuring lesser emissions and cleaner environment. In that direction, Mobile Refueling Unit (MRU) will help achieve supply of CNG in areas not yet connected through pipelines or at places where there is scarcity of land parcels to set up conventional CNG stations. It can store up to 1,500 kg CNG and can fill 150 to 200 vehicles per day. He stressed upon the need to expedite commissioning of more MRUs in the Country to increase mobility of fuel availability through their deployment at various.

Shri Pradhan emphasized that the aim of the government was to move towards the concept of energy retailer where all different transport fuels – Hydrogen, diesel, petrol, CNG/CBG, LNG or EV batteries swapping facility shall be available at a single point.

- **Discovered Small Field Bid Round-III launched**

Discovered Small Field (DSF) bid round-III for international competitive bidding was launched today, at an event chaired by Shri Dharmendra Pradhan, Minister of Petroleum & Natural Gas and Steel. The virtual event was attended by more than 450 participants including major E&P players, prospective new entrants and service providers.

Delivering his keynote address on the occasion, Shri Pradhan asked DG, Hydrocarbons & the Petroleum Ministry to devise innovative ways for early resource monetisation, including expediting production timelines under DSF I & II. He urged that the work on DSF should be done at exponential speed and on a mission-mode to monetise our natural resources for greater public welfare. He said that inauguration of DSF bid round III is one more concrete step towards unlocking resources.

The Secretary, MoPNG, Director General, DGH and Additional Secretary (Exploration) also spoke on the occasion.

DSF bid round-III is offering 32 Contract Areas which comprise of 75 discoveries. These fields are spread over 9 sedimentary basins covering more than 13,000 square kilometers with Inplace Hydrocarbon estimated to be around 230 MMT. Geoscientific data for fields on offer will be showcased through Data Room with interpretation facilities which would assist the potential bidder in making informed decision. An online pre-bid conference will be scheduled on 30th June 2021 to clarify the doubts of bidders. The bidders will be able to submit their bids till 31st August 2021.

Encouraged by the success of DSF bid rounds-I &II, the Government of India has extended the DSF Policy by launching DSF bid round-III. Previous two DSF rounds had a resounding success. In DSF Round – I launched in 2016, 134 bids were submitted for 34 contract areas by 47 companies. 30 Revenue Sharing Contracts were signed. In DSF Round – II launched in 2018, 145 bids were submitted for 24 contract area. 24 Revenue Sharing Contracts were signed.

Government of India had launched Discovered Small Field (DSF) Policy in 2015 which was a monumental step for awarding discovered acreages and monetize the unmonetized discoveries. The DSF policy has multiple attractive features like revenue sharing contract model with low regulatory burden, no minimum biddable work programme, no prior technical qualification required, no upfront signature bonus, etc.

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