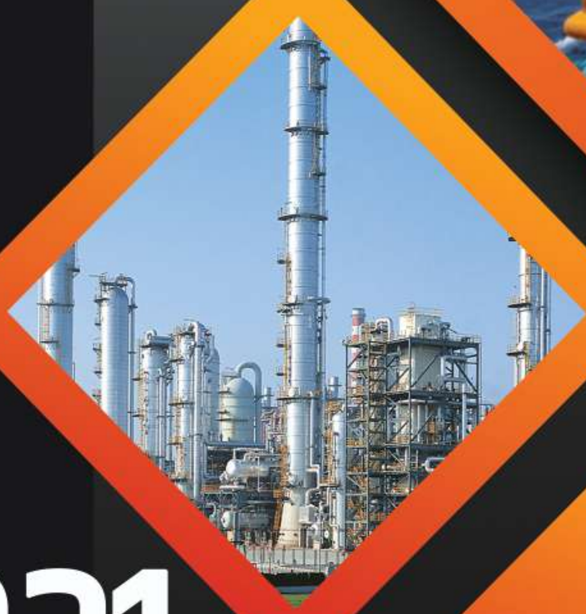
FIPI

Federation of Indian Petroleum Industry

# POLICY & ECONOMIC REPORT OIL AND GAS MARKET



# JULY - 2021

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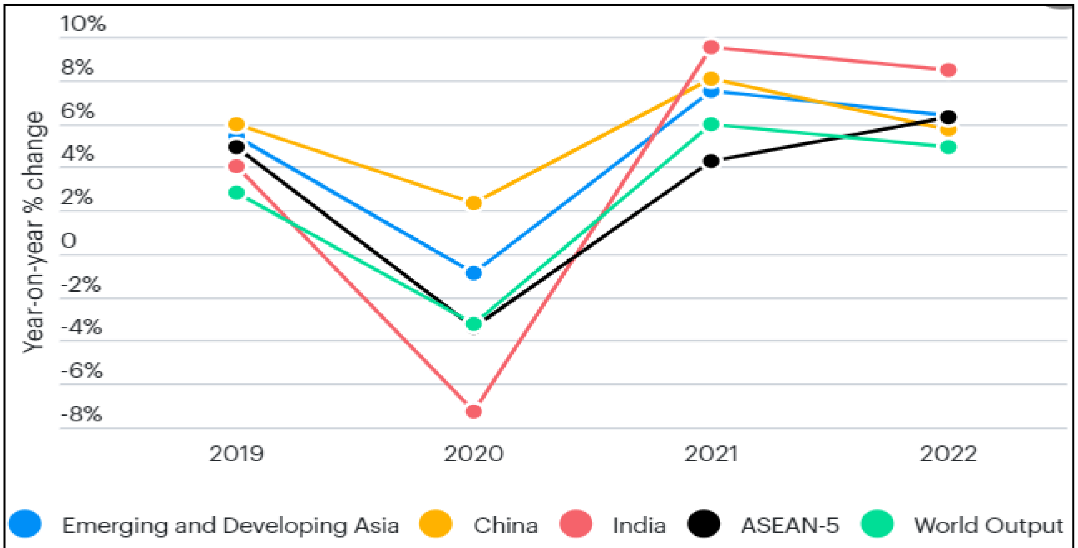
## Executive Summary

The global number of new cases reported in week (19-25 July 2021) was over 3.8 million, an 8% increase as compared to the previous week; an average of around 540 000 cases were reported each day over the past week as compared to 490 000 cases reported daily the week before. This trend is largely attributed to substantial increases in the Americas and Western Pacific Regions. The number of deaths reported this week increased sharply with over 69 000 deaths, a 21% increase when compared to the previous week; the greatest number of new deaths were reported from the Americas and South-East Asia Regions

Despite surge in covid cases, vaccinations have become widely available particularly for the most advanced economies. WHO has been emphasizing a massive global push to vaccinate against Covid 19, with at least 10% of the population of every country by September 2021 and 40% by the end of the year. The opening up of economies is driving both growth and inflation higher. The U.S. and U.K. have been in the lead among major economies, which has led to an acceleration of growth and economic outperformance. In response to this changed dynamic, Europe has picked up its pace of vaccination, and, more recently, China has begun to quickly close the gap. Developments in emerging markets are very mixed, but generally lag those in developed markets.

Against this backdrop, World Bank estimates that, the global economy is expected to expand 5.6% in 2021, the fastest post-recession pace in 80 years, largely on strong rebounds from a few major economies. Macro and prudential policies remain very accommodative and are now providing strong tailwinds to the recovery. Fiscal support in the form of direct transfers continues in the U.S. and most of Europe is seeing payments to businesses contingent on keeping workers on the payroll. Monetary support remains extraordinary, with most major central banks keeping policy rates near the effective lower bound, continuing to purchase government bonds to hold down yields, and, in some cases, intervening in corporate credit markets to ensure liquidity and manage spreads.

The IMF expects global GDP to grow by 6% in 2021 and 4.9% in 2022 as countries begin to recover from the economic downturn caused by the COVID-19 pandemic.

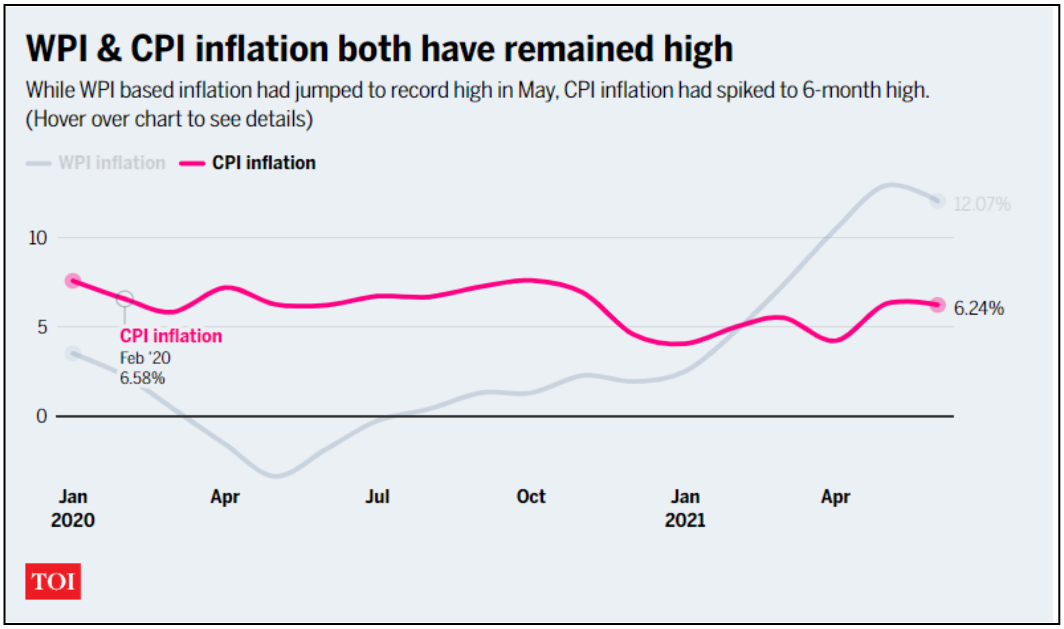



Source: International Monetary Fund (IMF) World Economic Outlook Update, July 2021

In India, highest number of cases in a day were 4,14,188; reported on 7 May 2021. Since then, there has been a continuous decline in daily cases, now India reports 28 daily cases per million population. Containment measures are being eased by respective state governments cautiously as possibility of third wave looms. The Centre plans to inoculate 40% of the adult population by August and the entire adult population by end-December.

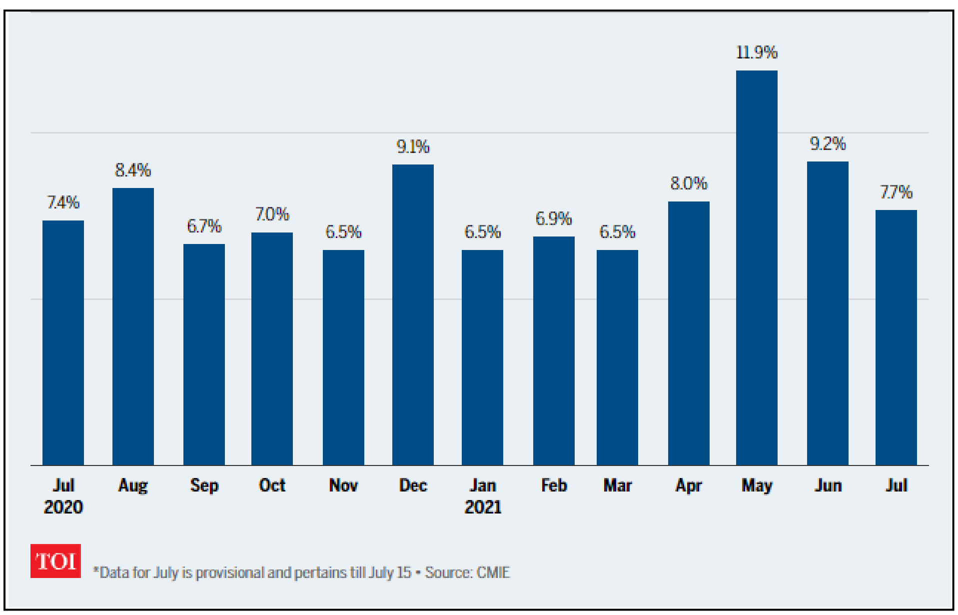
The gradual fall in Covid-19 cases and subsequent aggressive vaccination drive across the country has brightened India's economic growth prospects for the near-term, a report by the Reserve Bank of India (RBI). The RBI said there had been a rise in mobility indicators and attendance at workplaces, as well as jumps in advance tax payments, power consumption, digital transactions and other indicators in the month of June, all of which it considered forerunners to a revival in business and consumer confidence. Sentiment levels regarding output, profitability and employment all were down from February, but remained higher than the record lows set in June 2020. On the supply side, agricultural conditions are turning buoyant with the revival in the monsoon. Kharif Sowing gradual lifting of Covid restrictions provided rural workers with alternative employment opportunities

India's retail inflation eased slightly to 6.26 per cent in June, but stayed above the Reserve Bank's tolerance range (2 per cent-6 per cent) for the second straight month, according to the government data released. Inflation based on Consumer Price Index (CPI) remained elevated due to soaring fuel prices and costlier items in the food basket. Inflation in 'fuel and light' category stayed high at 12.68 per cent during the month as against 11.58 in the previous month, driven by LPG, kerosene, firewood and chips and dung-cake and impacting both rural and urban consumers.



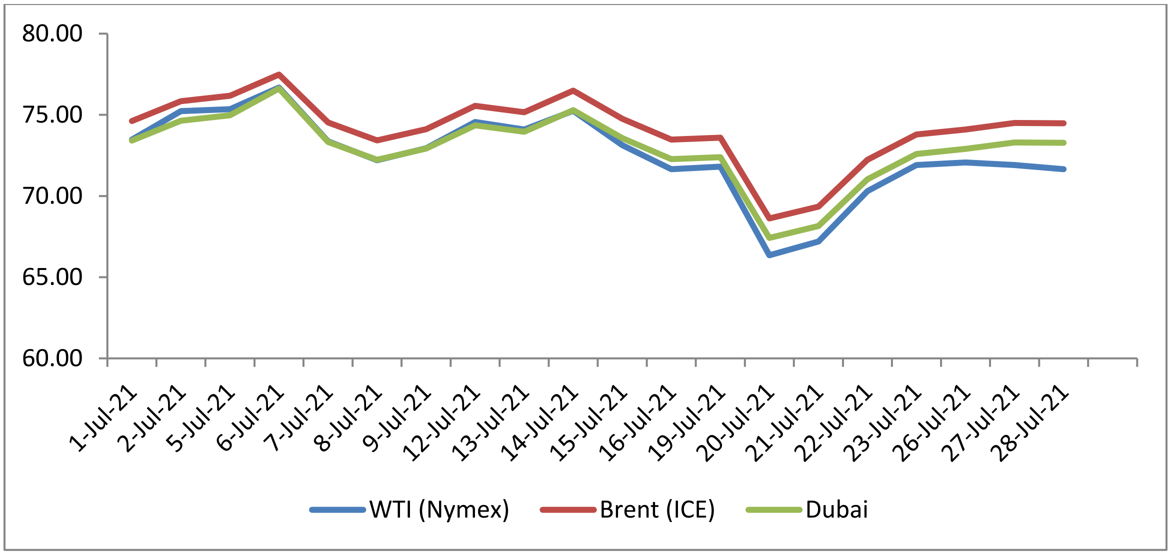

*Source: IHS Markit*

According to the Centre for Monitoring Indian Economy (CMIE), India's unemployment rate fell to 9.17% in June after a spike to 11.9% in May from 7.97% in April due to the second Covid wave. The urban unemployment rate fell, but still remained high at 10.07% compared with 14.73% in May. Rural unemployment rate in June stood at 8.75% from 10.63% in May. In the rural space, the demand for work under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was lower by 21.5% in June 21 over last year.




*Source: CMI*

Crude oil benchmarks reached a 2-year-high in the first week of July touching the 78-dollar mark after seeing spike for sixth straight week. WTI benchmarks continued to increase in the second week of July due to big withdrawal in US crude stocks and gasoline stocks. In the third week of July, OPEC decided to increase its production and this led to immediate fall in all major crude benchmarks. While the crude prices recovered owing to rising demand, spread of Delta variant has impacted the crude price's rally. For the month, average Brent, WTI and Dubai basket crude prices in July went up by 1.39 %, 1.62 % and 2.72 % respectively from their June prices. Indian crude basket price averaged $ 73.38 per barrel in July 2021, up by 2.19 % on Month on Month (M-o-M) and by 74.02 % on a year on year (Y-o-Y) basis, respectively.



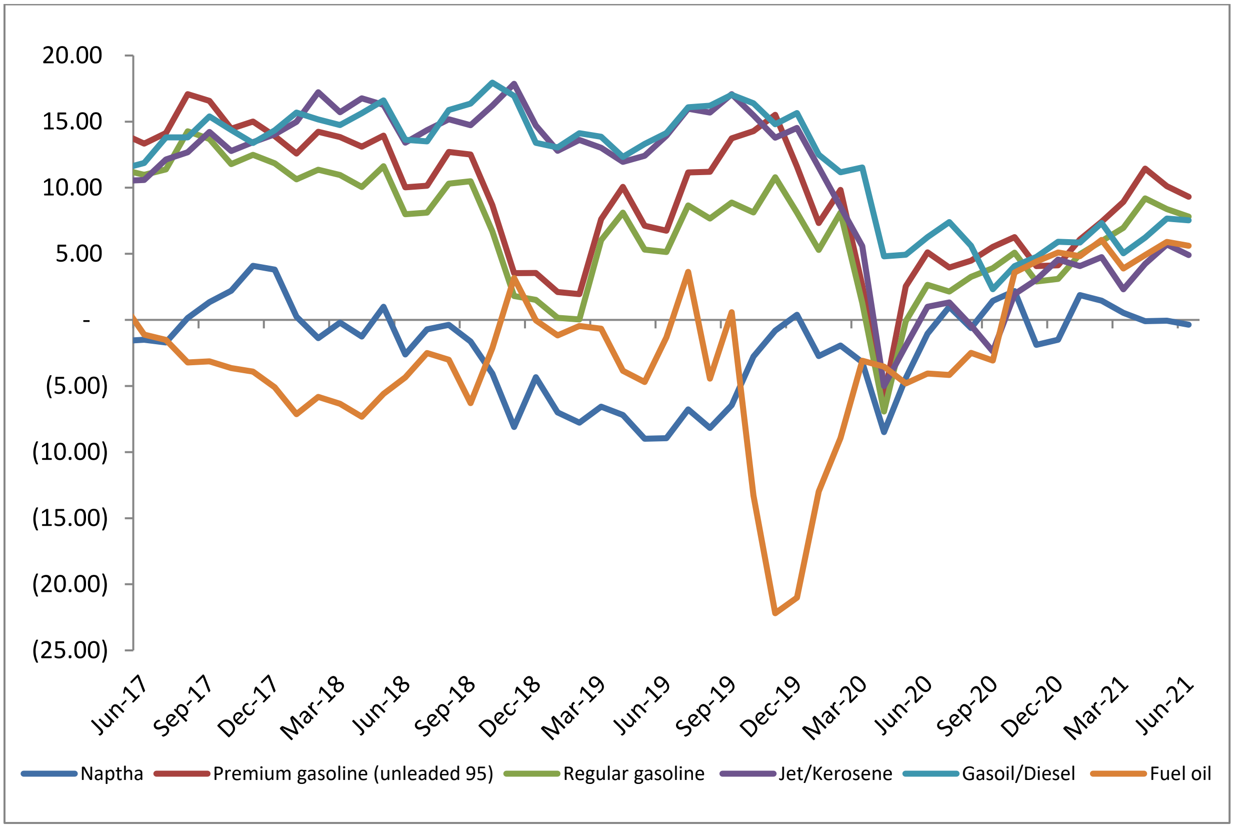

*Source: EIA, Oil Price.com*

Global rig count for the month of June went up by 63. From May's rig count of 1,262 it climbed to 1,325 as increasing oil price boosted the companies to go ahead with exploration activities. Significant jump came from Canada as Rig count went up by 44. Onshore rig went down up 57 and offshore rigs went up by 6. Indian drilling rig count went up by 2 in the month of June to reach 76. Out of the 76 active rigs, 59 were onshore rigs and the rest 17 were offshore rigs.

In 2021, world oil demand growth was kept at 6.0 mb/d, unchanged from last month's forecast, although there have been some regional revisions. Total demand is foreseen to reach 96.6 mb/d. In OECD, Oil demand is anticipated to rise by 2.7 mb/d to reach 44.7 mb/d of total demand. US will drive the demand with recovery of gasoline and diesel demand. In the non-OECD region, oil demand is anticipated to rise by 3.3 mb/d to reach 51.9 mb/d of total demand in 2021.

Asian product markets margins lost some ground by smallest magnitude as compared to other regions, pressurized by stronger product outputs. Despite the improvement in fuel fundamentals in India, stronger crude price coupled with high throughputs in Chia and lower product exports led to weaker refining economics in the region. Refinery margins for Oman in Asia lost 52¢ m-o-m to average 94¢/b in June and was higher by $1.69 y-o-y.

**Figure: Product crack spreads vs. Dubai crude**




*Source: OPEC, FIPI*

In June 2021, consumption of petroleum products increased by 8 % m-o-m and by 0.3 % on y-o-y as the nation entered unlocking after a month-long lockdown.

Natural gas prices saw an increase trend in all major gas trading hubs due to recovery in demand. Natural gas price in the Henry hub went up by 11.8 % to reach $ 3.23 /MMBtu in the month of June as demand in natural gas for cooling purpose went up.  Natural Gas price in Europe went up by 15.6% in the month of June as compared to May to reach USD 10.30/ MMBtu. The rise in price was driven by strong demand for gas in heating due to lower than average temperatures and increase in use of natural gas for power purpose.  Asian spot LNG prices continued to rise for the third month in a row as buyers in the region sought to replenish the stock before the arrival of winter.  Asian LNG price reached $14/MMBtu due to robust demand and it is at 8-year seasonal high. LNG prices for August delivery stood up around USD 12.5/MMBtu. Japan LNG benchmark went up by 1.6% to reach USD 9.06/MMBtu.

# Economy in Focus

### 1. A snapshot of the global economy: Recovery catches, fueled by vaccinations

The global number of new cases reported in week (19-25 July 2021) was over 3.8 million, an 8% increase as compared to the previous week ; an average of around 540 000 cases were reported each day over the past week as compared to 490 000 cases reported daily the week before. This trend is largely attributed to substantial increases in the Americas and Western Pacific Regions. The number of deaths reported this week increased sharply with over 69 000 deaths, a 21% increase when compared to the previous week; the greatest number of new deaths were reported from the Americas and South-East Asia Regions

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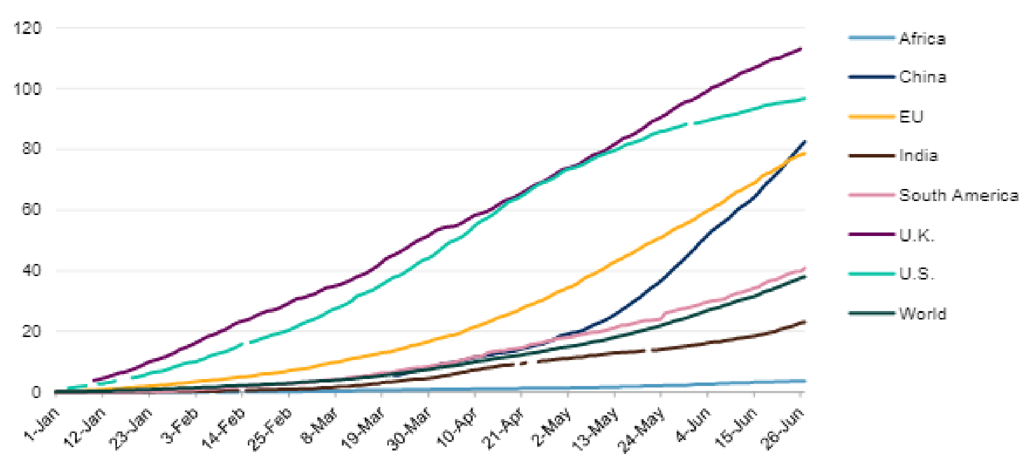
COVID-19 Vaccine Doses Per 100 Population




Source: Our World in Data.



The combination of vaccines (leading to opening up) and better management of the economic impact of the virus has led to stronger-than-expected performance so far this year. Growth was almost universally better than anticipated in the first quarter across both advanced and developing economies. The main reason was services–especially in the U.S., but more prevalent in advanced economies–while tech and commodity exports provided support, primarily in emerging economies.

As vaccinations have accelerated and COVID-19 cases have dropped, the following global economic changes have been observed: -

- The opening of key service sectors–food and beverage, hospitality, and travel and tourism–leading to higher confidence and spending is happening across many of the advanced economies, and some emerging markets.
- World merchandise trade has soared and is already well above the pre-pandemic level.
- The global industrial production has seen a V-shaped recovery since the middle of last year.
- The prices of key raw materials, such as copper, iron ore and lumber, reached record levels in the second quarter of 2021. Crude oil prices climbed to a 2-year high above $70 per barrel in June.
- The capital flows to developing countries have rebounded since late 2020, driven by extraordinarily accommodative monetary conditions, abundant global liquidity, and strong risk appetite among investors.

Against this backdrop, World Bank estimates that, the global economy is expected to expand 5.6% in 2021, the fastest post-recession pace in 80 years, largely on strong rebounds from a few major economies. Macro and prudential policies remain very accommodative and are now providing strong tailwinds to the recovery. Fiscal support in the form of direct transfers continues in the U.S. and most of Europe is seeing payments to businesses contingent on keeping workers on the payroll. Monetary support remains extraordinary, with most major central banks keeping policy rates near the effective lower bound, continuing to purchase government bonds to hold down yields, and, in some cases, intervening in corporate credit markets to ensure liquidity and manage spreads.

- Among major economies, U.S. growth is projected to reach 7% this year, reflecting large-scale fiscal support and the easing of pandemic restrictions. Despite the improved outlook, the labor market still has a long way to go before it recovers the ground lost from COVID-19. The recovery in U.S. jobs growth remains soft, despite recent job gains, and the labor market is 7.6 million jobs short of the pre-pandemic peak. Inflation pressure is rising more than expected on the back of the strong rebound.
- A lower incidence of COVID-19 and the broad rollout of vaccines across Europe is enabling governments to lift most restrictions to economic activity, paving the way for a strong restart this summer. It is expected that GDP to increase 4.4% this year and 4.5% in 2022, from 4.2% and 4.4% previously. In the labor market, with job postings rebounding even in the most affected sectors, like retail and hospitality, eurozone employment is set to recover.
- Growth in other advanced economies is also firming, but to a lesser extent. Among emerging markets and developing economies, China is anticipated to rebound to 8.5% this year, reflecting the release of pent-up demand. Exports are contributing to upward revisions to growth forecasts for some economies in 2021.

*The US*

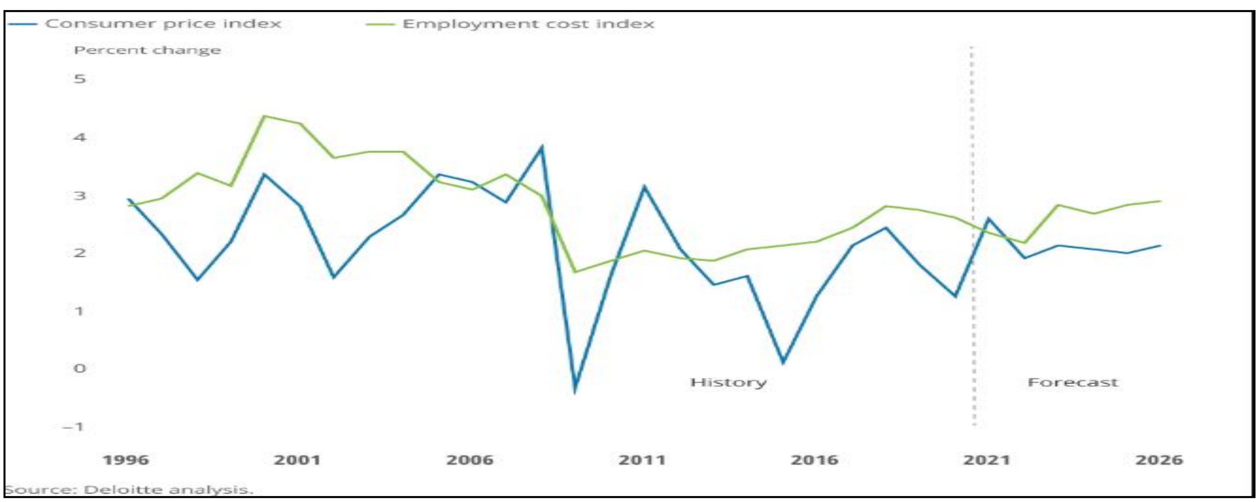
The massive fiscal stimulus and a rapid vaccine rollout are boosting economic activity in the United States as IMF has raised its 2021 U.S. growth projection sharply to 7.0% far higher than the previous projection made in April for 4.6% growth.

U.S. private sector companies reported a further substantial expansion in business activity during July. That said, the rate of growth eased for the second month running to the softest since March, as firms continued to report widespread capacity constraints. The IHS Markit Flash U.S. Composite PMI Output Index posted 59.7 in July, down from 63.7 in June. The rate of output growth was the slowest for four months, but robust nonetheless and among the fastest recorded over the survey's 14-year history. Manufacturers registered a slight acceleration in the pace of expansion in production, but service providers recorded a further loss of growth momentum amid labor shortages.

At the same time, cost burdens rose robustly once again in July. With the exception of record rates of input price inflation seen in May and June, the pace of increase was the sharpest. Alongside reports of higher raw material and transportation prices, firms also noted greater wage bills as staff were enticed with higher pay in an effort to reduce backlogs of work. As a result, the rate of selling price inflation for goods and services remained historically steep in July, as firms sought to pass on higher costs to clients. The pace of increase was the third-sharpest on record.

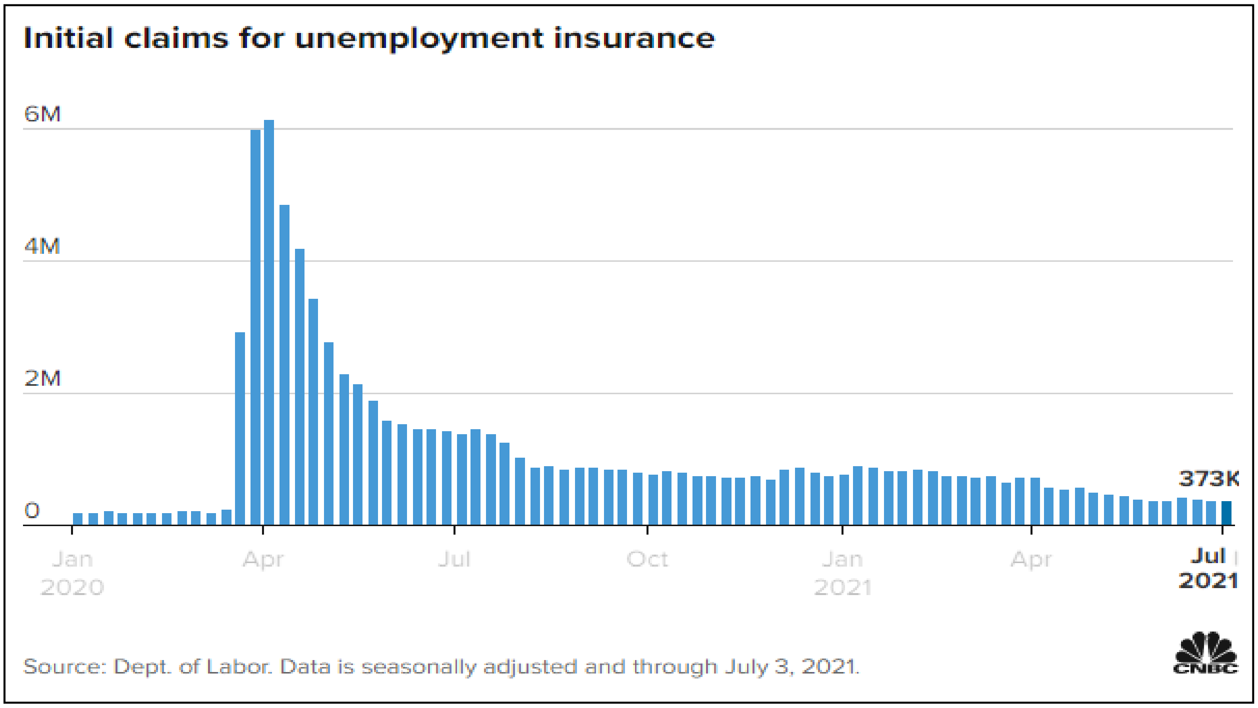
With inflation at roughly five per cent in the U.S, United States Federal Reserve Chair Jerome Powell announced that while the key benchmark interest rate will remain close to zero, he mentioned there could be two interest-rate increases by the end of 2023.

**US Prices**




**US Labor markets**: -

Initial filings for unemployment insurance unexpectedly rose, that shows the rapid job growth seen in the first half of 2021 could face hurdles in the months ahead, according to the U.S. Labor Department. First-time jobless claims totaled 373,000 for the week ended July 3, compared with the 350,000 Dow Jones estimate. The previous week's level was revised up by 7,000 from 364,000 to 371,000.



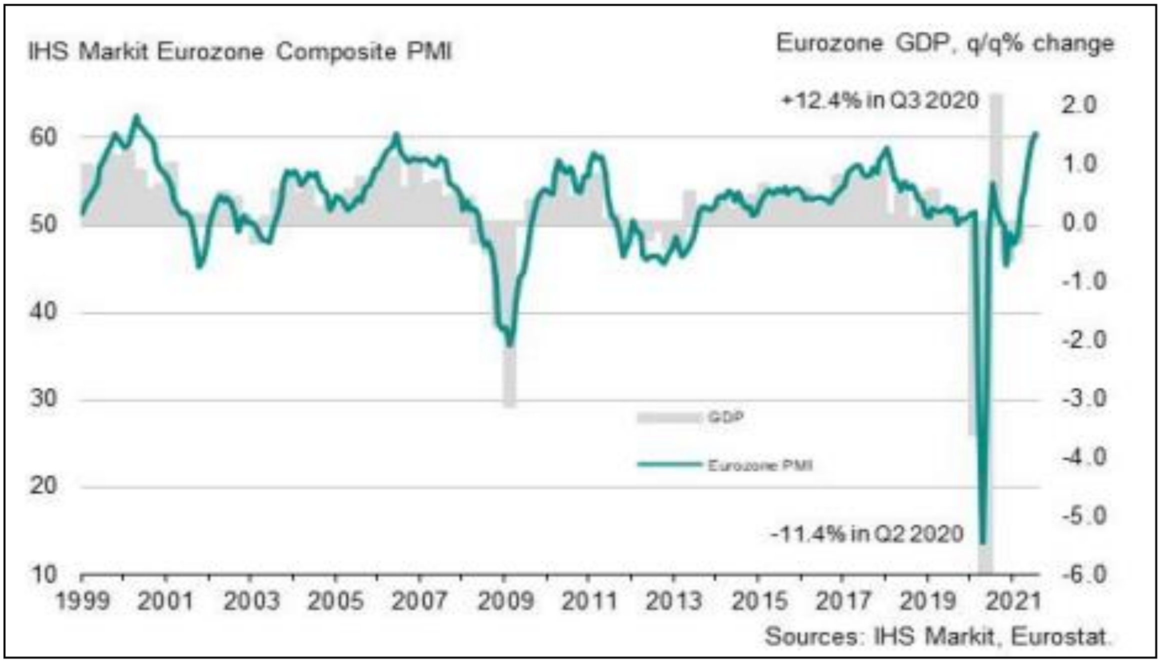

It was also reported that nonfarm employers added a better-than-expected 850,000 last month, it also revealed that the U.S. unemployment rate ticked higher to 5.9% compared with the 5.6% estimate. Federal enhanced benefit programs expire in September, and many states already have halted their own as Covid-19 vaccines are distributed and businesses resume normal activity. However, there are still more than 10 million Americans enrolled in pandemic-related programs.

***EuroZone***

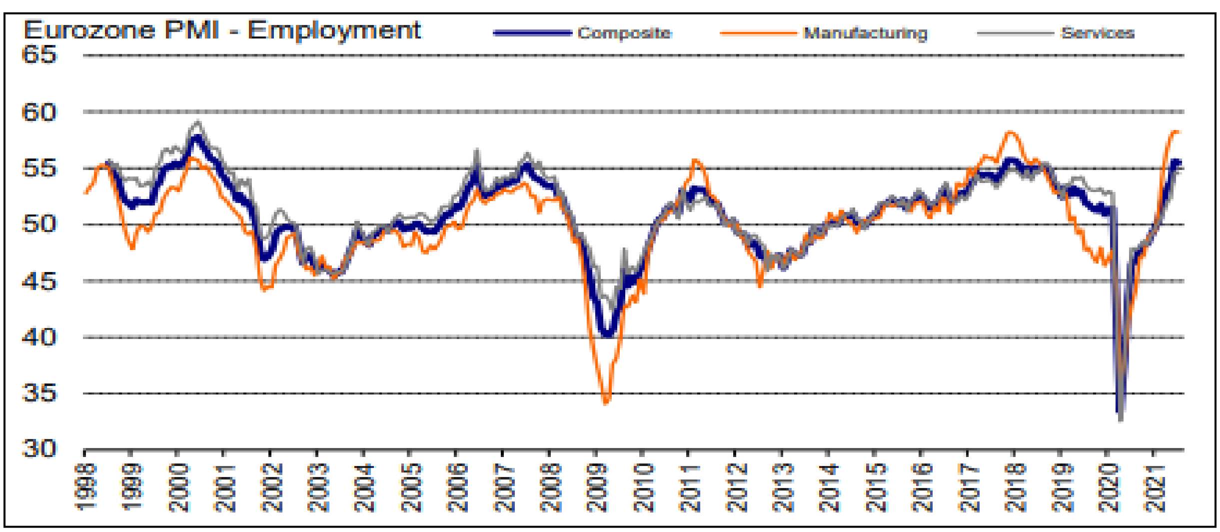
The contours of the European economic recovery are changing, from one led by a rebound in industrial activity to a more services-based pickup. A lower incidence of COVID-19 and the broad rollout of vaccines across Europe is enabling governments to lift most restrictions to economic activity.

The eurozone economy is expected to grow about 4.5% this year, compared with around 7% in the U.S. Inflation was about 1.9% in the eurozone last month, compared with 5.4% in the U.S. The European Central Bank signaled that it would support the eurozone economy by keeping interest rates low for longer as a surge in Covid-19 cases driven by the highly contagious Delta variant triggers new social restrictions and weighs on the region's large tourism industry. The ECB's move is in part a response to its new policy framework, unveiled two weeks ago, which aims to give bank officials broader powers to stimulate the economy when inflation is too low. The ECB also reiterated its pledge to buy eurozone debt under an emergency €1.85 trillion bond-buying program, equivalent to $2.2 trillion, through at least March 2022. The ECB is currently buying about €80 billion of eurozone bonds a month under an emergency bond-buying program launched in March 2020.

The IHS Markit Eurozone Composite PMI rose from a 15-year high of 59.5 in June to 60.6 in July, its highest since July 2000. The July reading indicated a fourth consecutive month of accelerating business activity. The strongest rise in service sector activity for 15 years was tempered, however, by a slowing in manufacturing output growth, linked in many cases to worsening supply lines. Prices charged for goods and services meanwhile rose at a pace unseen prior to June as demand again outstripped supply. Backlogs of work rose at a joint-survey record rate amid capacity constraints.




However, the recent surge in demand continued to put pressure on operating capacity to a degree unprecedented in the survey's history. The resulting steep rise in backlogs of uncompleted work matched the record increase seen in June. Firms hired additional staff for a sixth straight month to meet the upturn in demand. The net gain in employment was the second-steepest since January 2018, and among the largest recorded over the last two decades, though moderated compared to June.

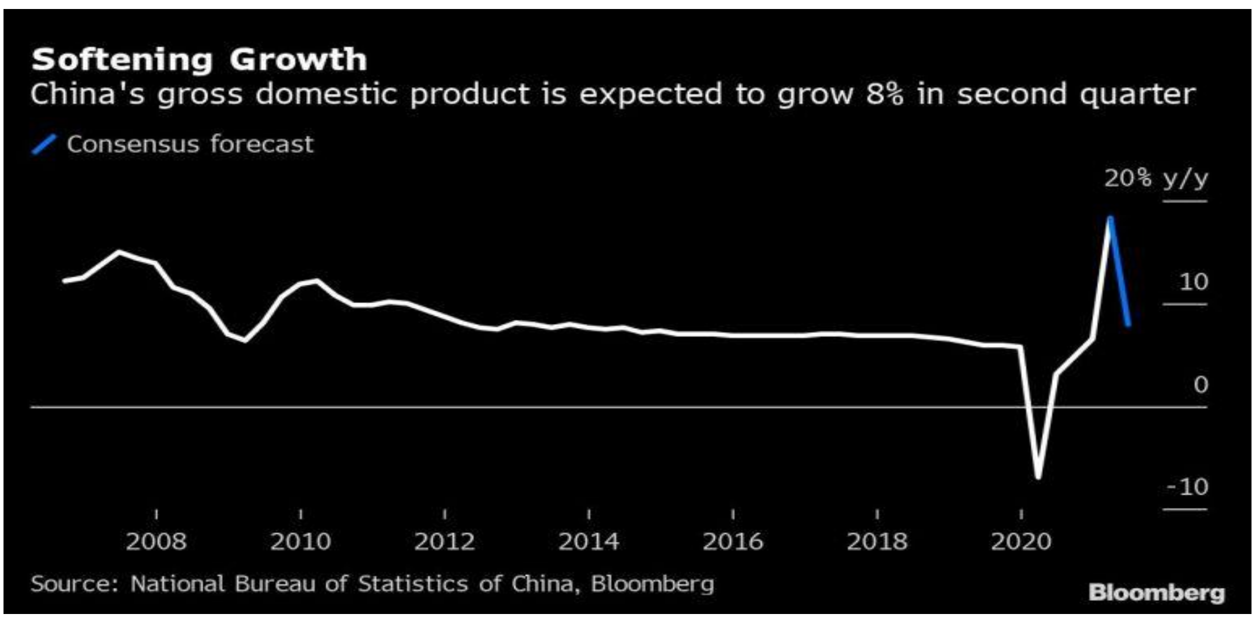


***China***

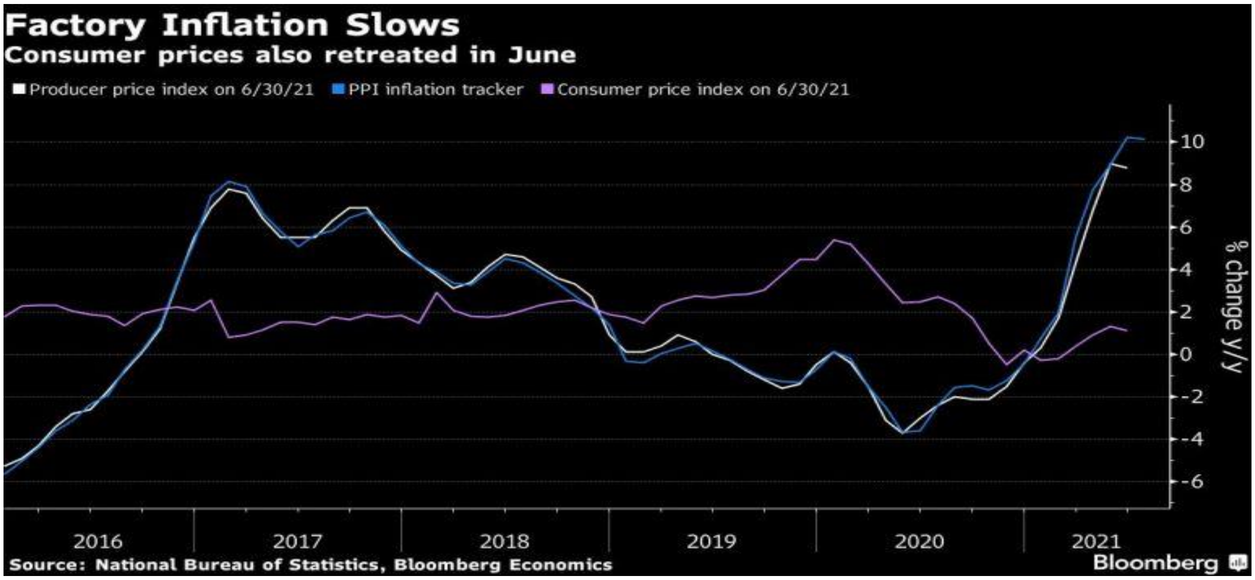
China's growth eased in the second quarter to 8% from the record gain of 18.3% in the first quarter. This is on account of slowdown in manufacturing activity due to higher raw material costs and supply shortages; and new COVID-19 outbreaks that weighed on consumer spending. The key readings of retail sales, industrial production and fixed asset investment are all set to moderate too.

China's Central Bank has announced to cut the required reserve ratio (RRR) of commercial lenders by 0.5 percentage points, a move that will release a long-term capital of about 1 trillion yuan ($154 billion) into the monetary market. This is the first RRR cut rolled out by the People's Bank of China (PBC) in more than 15 months and the move will optimize the capital structure of financial institutions, enhancing their capacity to provide financial services, and better supporting the real economy in the second half of the year. The bulk commodity prices have seen a considerable hike since the beginning of 2021, and small and micro- Chinese enterprises have encountered surging production costs and other operational difficulties.

According to the PBC, the RRR cut will reduce the capital cost of financial institutions by 13 billion yuan each year, which will translate and help reduce the comprehensive financing cost of the society through transmission from financial institutions. Thus, with strict regulatory policies in place on mortgage loans, the increasing liquidity won't have much impact on the housing prices. The central bank stressed that it will maintain its stable and prudent monetary policy, and to support small and medium-sized enterprises, green growth, as well as science and technology innovation.




China's slowing recovery also reinforces the view that factory inflation has likely peaked and commodity prices could moderate further. China's growth slowdown should mean near-term disinflation pressures globally, particularly on demand for industrial metals and capital goods.




**2. IMF slashes Asian economic forecasts due to latest Delta wave**

The International Monetary Fund (IMF) has downgraded its growth forecasts for emerging Asian economies due to the recent wave of Delta coronavirus infections across the region which has weighed heavily on its economic recovery. Economic growth in emerging and developing Asian economies is expected at 7.5% in 2021 and 6.4% in 2022, down from the IMF's previous projection of 8.6% and 6.8% made in April, respectively.

India's growth forecast for 2021 has been slashed to 9.5%, down from the previous forecast of 12.5%, following the severe COVID-19 wave during March-May. The impact of the second COVID-19 wave in India is likely to be concentrated in the second quarter, beyond which, tailwinds such as strong global growth, and an increased pace of vaccination should help GDP growth, Japan's Nomura Global Markets Research said.

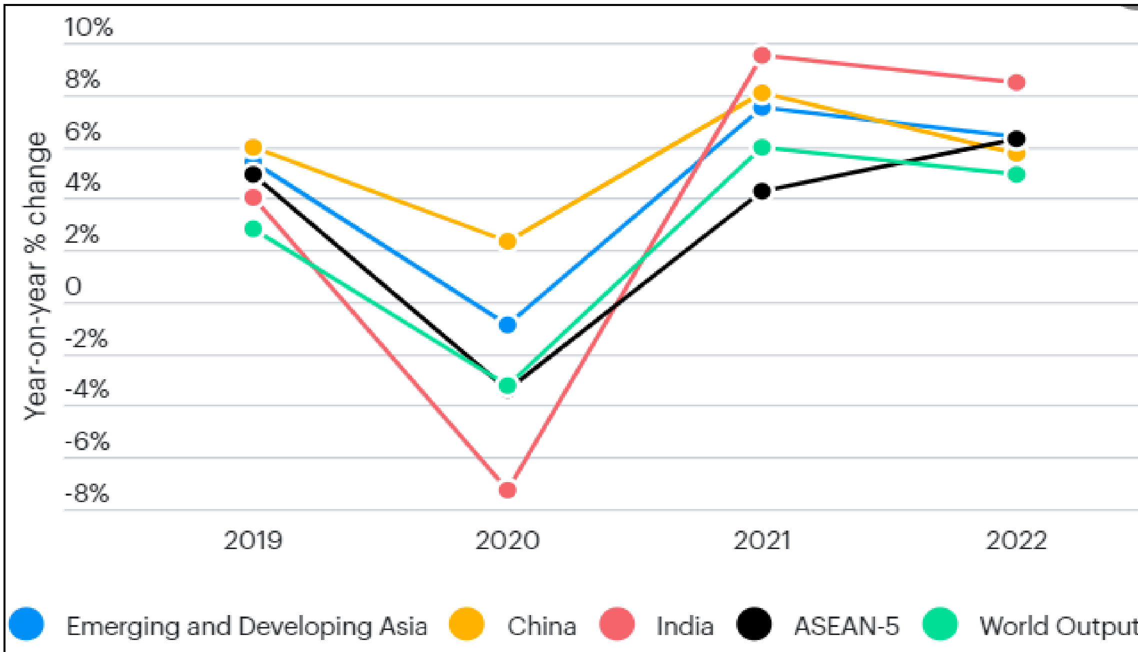
"Similar dynamics are at work in the ASEAN-5 group (Indonesia, Malaysia, Philippines, Thailand, Vietnam), where recent infection waves are causing a drag on activity," the IMF said in its World Economic Outlook Update report. Economic growth in the ASEAN-5 was marked down to 4.3% in 2021 from the previous projection of a 4.9% expansion.

Meanwhile, China’s 2021 forecast was revised down 0.3 % point to 8.1% on a scaling back of public investment and overall fiscal support. The IMF downgraded its forecast for all emerging economies by 0.4% in 2021 in comparison to its April WEO prediction because of growth markdowns for Asia. Emerging market and developing economies are projected to see growth of 6.3% in 2021 from the 2.1% contraction last year.

Close to 40% of the population in advanced economies has been fully vaccinated, compared with less than half that number in emerging market economies and a tiny fraction in low-income countries, according to the IMF.

"Vaccine access is the principal fault line along which the global recovery splits into two blocs: those that can look forward to further normalization of activity later this year (almost all advanced economies) and those that will still contend with prospects of resurgent infections and rising COVID death toll," it said.

"Sub-Saharan Africa is now in the grip of a third wave, parts of Latin America continue to see high levels of new deaths, and concerns still remain about the situation in parts of South and Southeast Asia," the IMF added.



Source: International Monetary Fund (IMF) World Economic Outlook Update, July 2021

The IMF expects global GDP to grow by 6% in 2021 and 4.9% in 2022 as countries begin to recover from the economic downturn caused by the COVID-19 pandemic.

**3. IMF urges countries to shift from economic rescue to reforms**

The International Monetary Fund called on countries to pivot from saving their economies from collapse to reviving growth-oriented policy reforms to boost their recovery prospects and make them more sustainable. Pro- growth reforms are needed that allow for faster restructurings and resolution of unviable businesses and labor policies to help retrain workers and line them up with job openings can help shift workers and capital to more promising, dynamic parts of the economy. Improved competition policy frameworks such as those being debated in Europe and the United States can reduce the concentration of market power among a few firms and create more dynamic competition and innovation.

The call for a renewed focus on reforms comes as the IMF is shifting from non-conditional emergency COVID-19 pandemic financing toward the negotiation of more traditional IMF loan programs, which require recipient countries to meet policy reform benchmarks.

The Fund has approved a new, $1.5 billion, three-year Extended Credit Facility arrangement for the Democratic Republic of Congo, which includes reforms to boost revenue collections, improve natural resource management governance and strengthen the country's monetary policy framework to ensure central bank independence. The IMF is also negotiating a new Extended Fund Facility with Argentina, which has struggled under a $57 billion IMF loan, arranged in 2018, the Fund's largest-ever.

The IMF estimates that comprehensive growth-enhancing reforms in product, labor and financial markets could lift annual GDP per capita growth by over 1 percentage point in emerging market and developing economies in the next decade. For advanced economies, pro-growth reforms that target the supply side could guard against persistent inflationary risks caused by excess demand pressures.

**4. Green finance set to touch $2.36 trillion globally by 2023: Report**

The concept of green bonds in the global finance ecosystem is fast catching up. Green bonds valued at $106.86 billion were issued in just the first quarter of 2021, according to a report published by the British non-profit Climate Bonds Initiative. A green bond is a type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects.

The issuance of green bonds across the world rose to a record high of $269.5 billion in 2020 (60 percent growth rate since 2015) despite COVID-19, as per the Climate Bonds Initiative report. It crossed the $1-trillion milestone in 2020 and is estimated to grow to $2.36 trillion by 2023, the report said.

Britain’s finance minister Rishi Sunak is expected to announce plans for 15-billion pounds ($21 billion) green savings bonds this fiscal. This is likely to be the most ambitious green sovereign bond issue planned by any country of a similar stature. With the US back to supporting the Paris Agreement under President Joe Biden, many countries are renewing their pledges to meet climate risk mitigation and sustainability goals. Countries such as the UK, China, Kazakhstan and Uzbekistan are seeing investors backing 'green finance' initiatives. As Japan aims to achieve a target of carbon neutrality by 2050, its central bank launched its first green investment fund in June 2021. In September 2020, Climate Action 100+, an initiative supported by 500 plus global institutional investor groups managing over $47 trillion in assets, gave notice to 161 mining, transport and other sector companies using fossil fuels.

In India, Ambani has mentioned about his plans to transform each of the units under the Reliance Group in order to achieve a target of net carbon-zero emissions by 2035. The Reliance Group is expected to have earmarked a budget Rs 750 billion (Rs 75,000 crore) with respect to its carbon-zero aim. The Adani Group also aspires to add 5GW green energy a year for the next 10 years to become the world’s largest solar power company and help India to become one of the world's largest renewable energy producers.

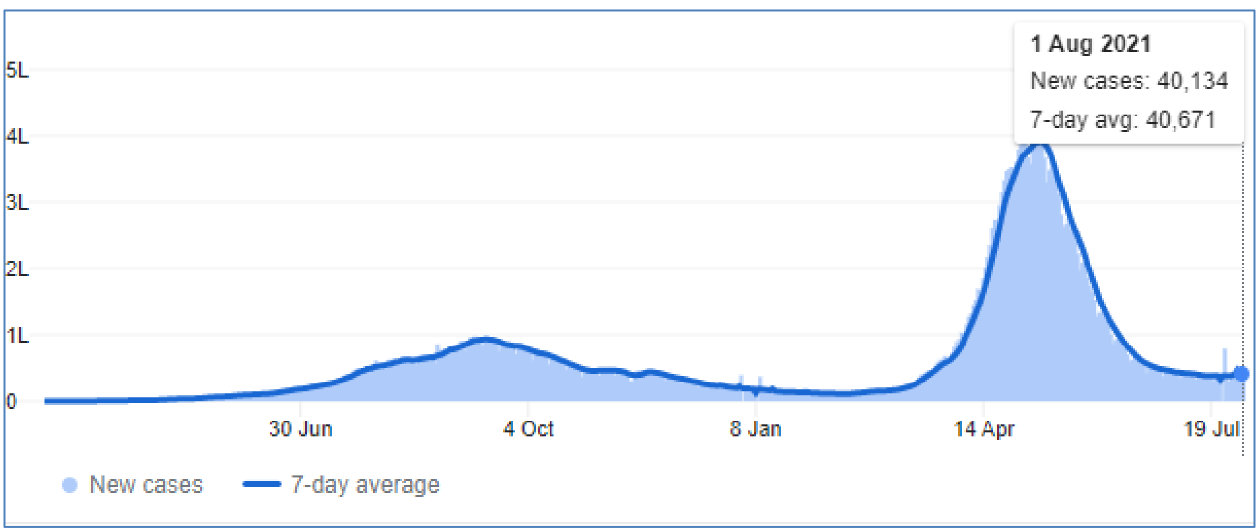
**5. Electricity demand rebound will require more fossil fuel generation -IEA**

Global electricity demand is growing faster than renewable energy capacity can be rolled out and will require more power to be generated from the burning of fossil fuels, according to International Energy Agency (IEA). After falling by about 1% in 2020 when the COVID-19 pandemic curbed industrial activity across the world, power consumption is set to grow by close to 5% in 2021 and by 4% in 2022 as economies recover, according to the IEA Report. Nearly half of the increase will have to be met by burning fossil fuels, notably coal, which could push carbon dioxide emissions from the sector to record highs in 2022, the agency said, adding it expects particularly strong demand in the Asia Pacific region, primarily China and India.

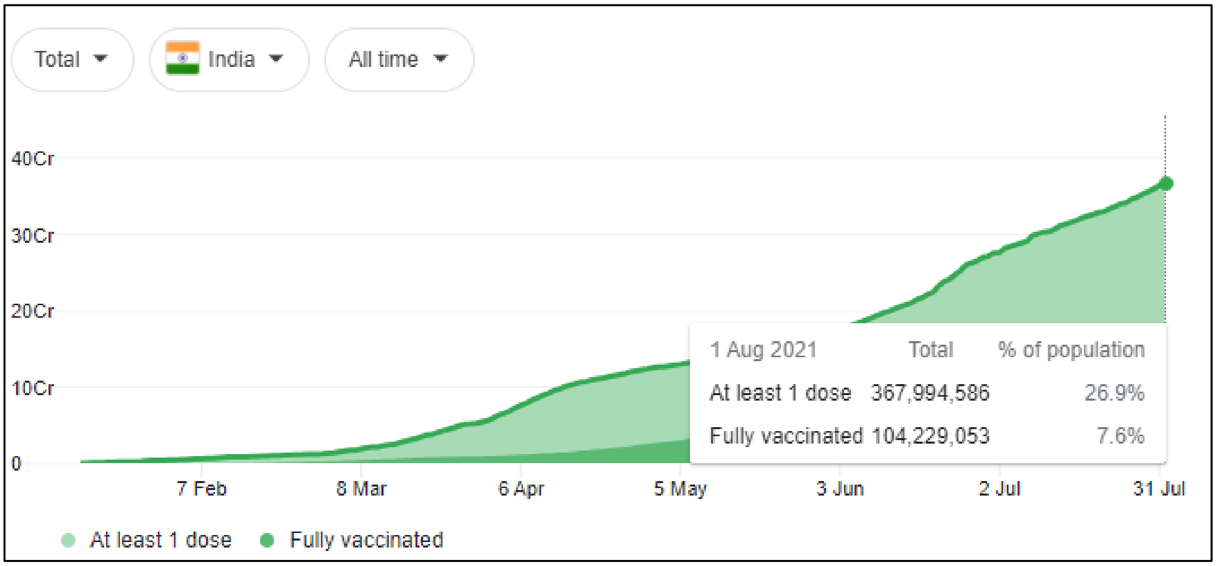
Renewables are expanding quickly as the global community addresses the need to reduce carbon pollution, but the IEA's report shows the process will have to accelerate if cleaner energy is to keep up with overall demand. Renewable capacity, including hydropower, wind and solar photovoltaics, is on track for 8% growth in 2021 and more than 6% in 2022, while virtually emissions-free nuclear will increase by 1% and 2% respectively. "Even with this strong growth, renewables will only be able to meet around half the projected increase in global electricity demand over those two years," the IEA said. "To shift to a sustainable trajectory, we need to massively step-up investment in clean energy technologies - especially renewables and energy efficiency. CO2 emissions from burning coal and gas were likely to increase by 3.5% in 2021 and by 2.5% in 2022, it predicted. Turning to wholesale power prices, the IEA noted a rise of 54% in first half 2021 in advanced economies, compared with the same period in 2020.

***India***

In India, highest number of cases in a day were 4,14,188; reported on 7 May 2021. Since then, there has been a continuous decline in daily cases, now India reports 28 daily cases per million population.



Containment measures are being eased by respective state governments cautiously as possibility of third wave looms. The Centre plans to inoculate 40% of the adult population by August and the entire adult population by end-December.

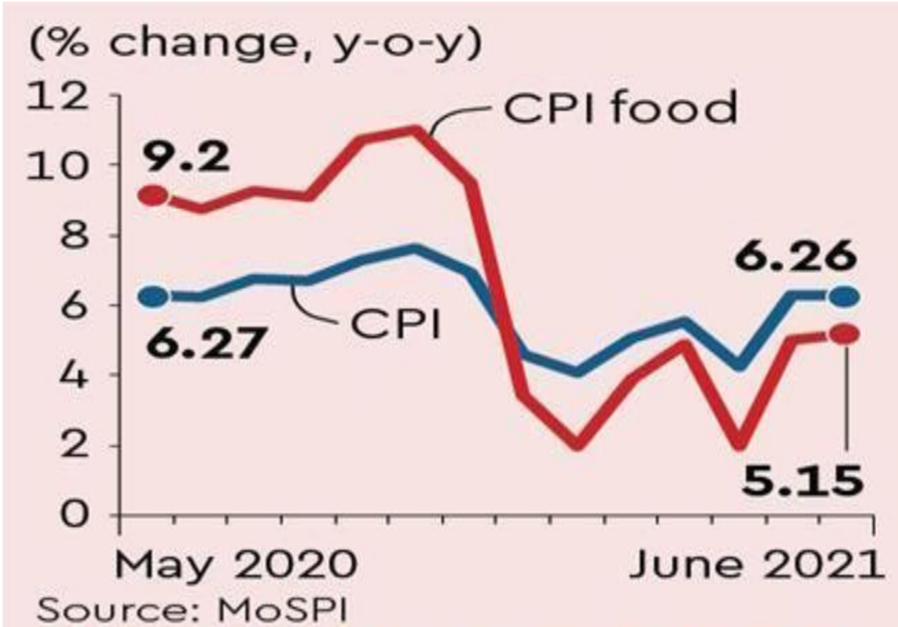



The gradual fall in Covid-19 cases and subsequent aggressive vaccination drive across the country has brightened India's economic growth prospects for the near-term, a report by the Reserve Bank of India (RBI). The daily new cases of Covid-19 in India showed a declining trend since mid-May, indicating tapering of the second wave that wreaked havoc across the country. The following economic impacts can be seen in India: -

- The RBI said there had been a rise in mobility indicators and attendance at workplaces, as well as jumps in advance tax payments, power consumption, digital transactions and other indicators in the month of June, all of which it considered forerunners to a revival in business and consumer confidence.
- However, firms see supply-chain bottlenecks and subdued market confidence as threats to the positive outlook.
- Sentiment levels regarding output, profitability and employment all were down from February, but remained higher than the record lows set in June 2020.
- On the supply side, agricultural conditions are turning buoyant with the revival in the monsoon. Kharif Sowing gradual lifting of Covid restrictions provided rural workers with alternative employment opportunities

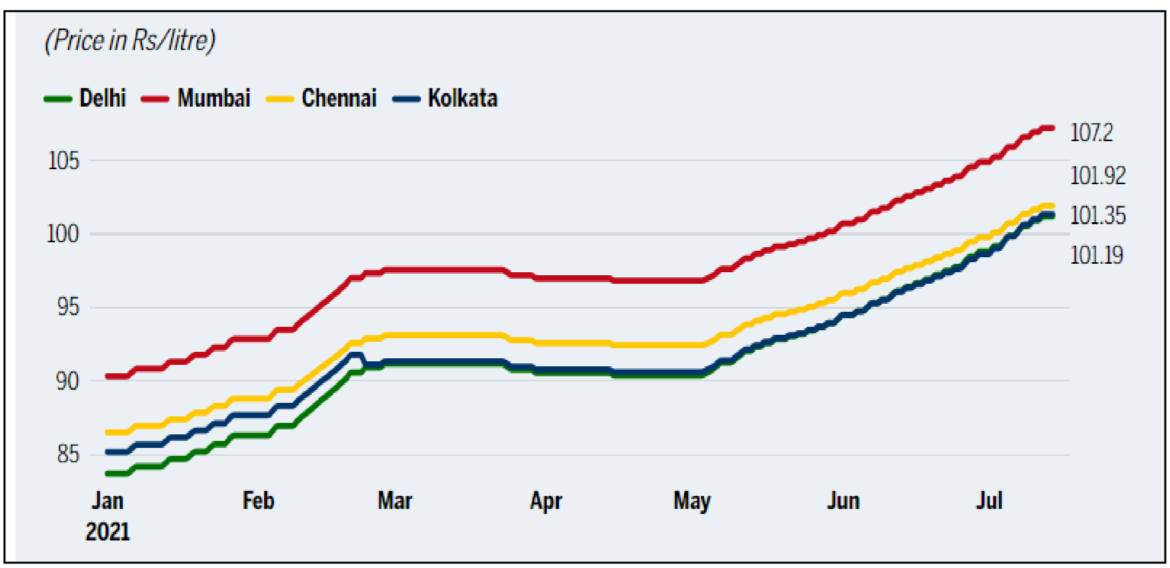
**Inflation In India:**

India's retail inflation eased slightly to 6.26 per cent in June, but stayed above the Reserve Bank's tolerance range (2 per cent-6 per cent) for the second straight month, according to the government data released. Inflation based on Consumer Price Index (CPI) remained elevated due to soaring fuel prices and costlier items in the food basket.




Food inflation in June accelerated to 5.15 per cent from 5.01 per cent in May. Within the food items, the rate of fall in vegetables prices was at (-) 0.7 per cent in June, as against (-) 1.92 per cent in the previous month. Meanwhile, the inflation rate in Food and beverages was at 5.58 per cent.

Inflation in 'fuel and light' category stayed high at 12.68 per cent during the month as against 11.58 in the previous month, driven by LPG, kerosene, firewood and chips and dung-cake and impacting both rural and urban consumers.  Petrol prices in all major cities exceeded Rs 100 per litre in the first half of July 2021 with record high at Rajasthan and Odisha.

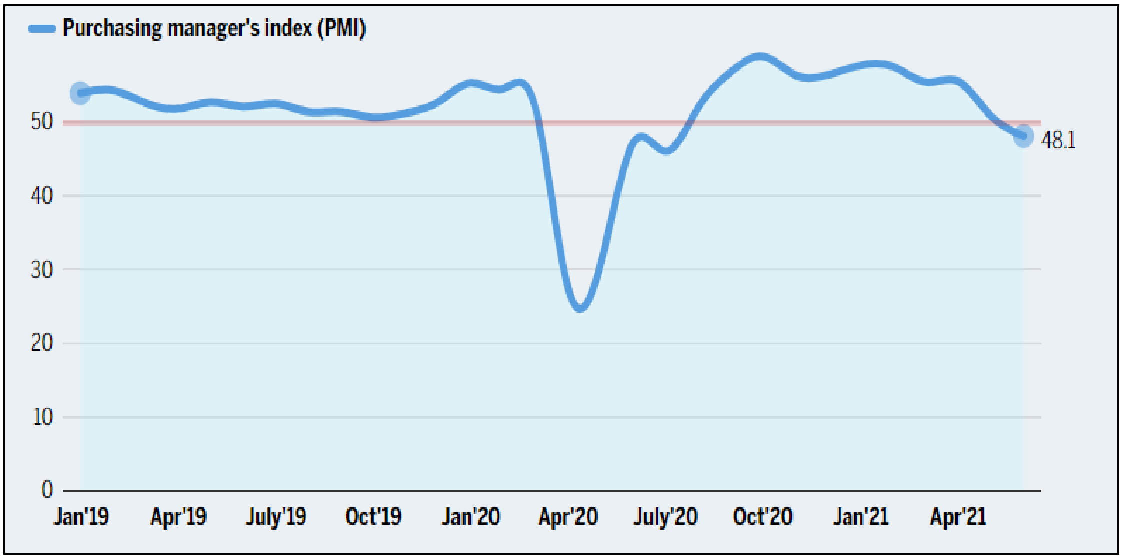



*Source: Petroleum Planning and Analysis Cell*

Thus, from above, the impact of the increase in prices of petrol and diesel can be seen in their impact on inflationary trend measured by Wholesale Price Index (WPI). The weightage of petrol, diesel and LPG in the WPI index is 1.60 percent, 3.10 percent and 0.64 percent respectively.

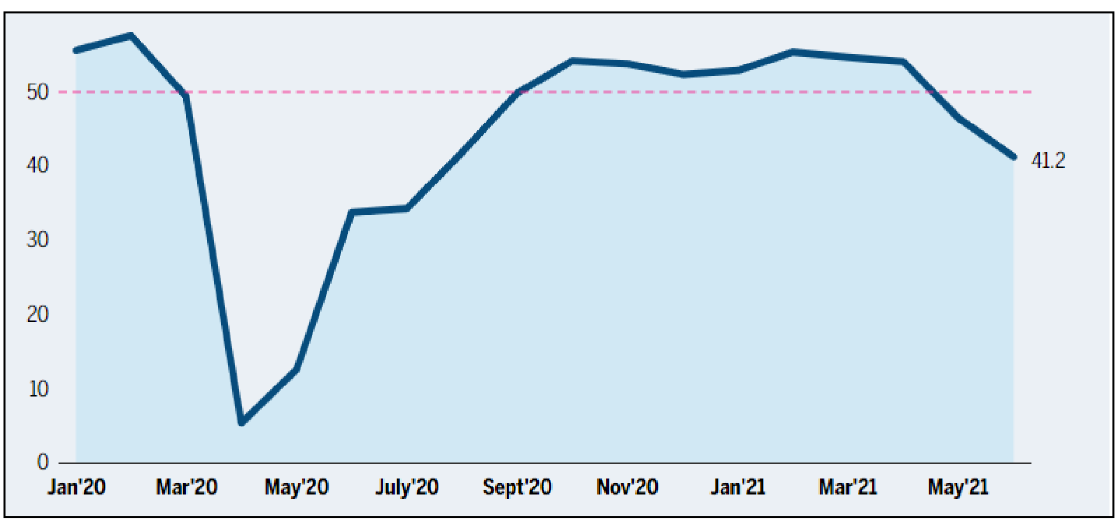
**Purchasers Managers Index**

Tumbling under the weight of the second wave, the headline m manufacturing PMI suffered contraction for the first time in last 11 months, with a reading of 48.1 in June 2021 as against 50.8 a month ago. According to RBI, manufacturing output and new orders lost the most, contributing to the overall decline in the index.




*Source: IHS Markit*

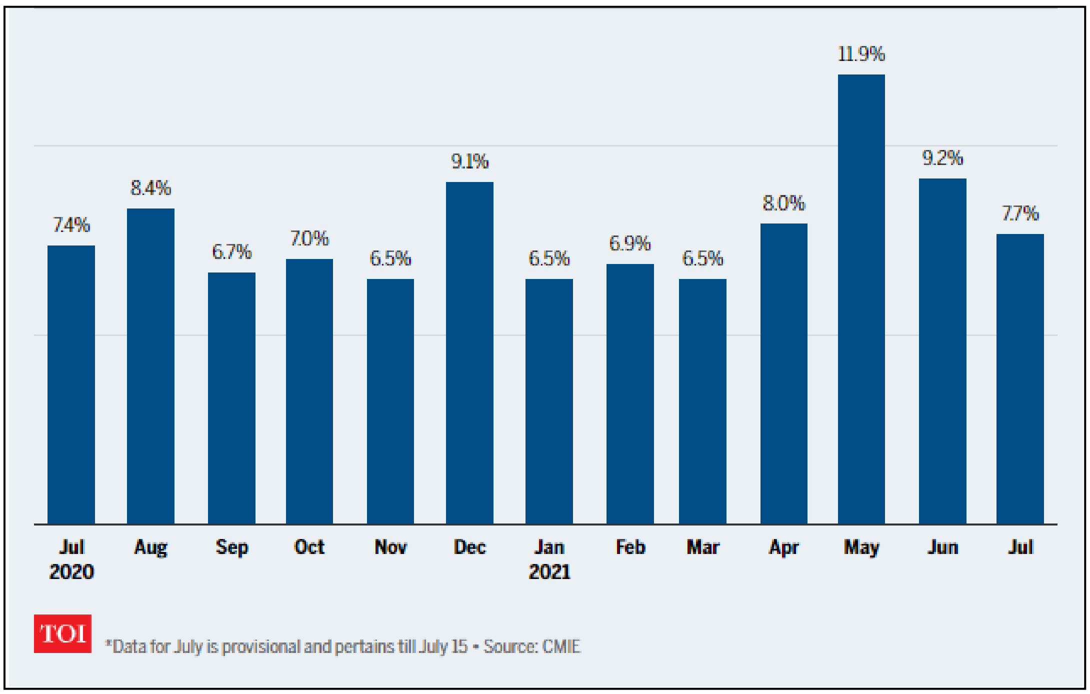
Services PMI also contracted for the second consecutive month to 41.2 in June from 46.4 a month ago. RBI cited subdued demand and business closures amidst the second wave as the primary reasons for contraction.



**Unemployment in India**

According to the Centre for Monitoring Indian Economy (CMIE), in June 2021, urban unemployment rate fell, but still remained high at 10.07% compared with 14.73% in May. Rural unemployment rate in June stood at 8.75% from 10.63% in May. In the rural space, the demand for work under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was lower by 21.5% in June 21 over last year. Kharif Sowing gradual lifting of Covid restrictions provided rural workers with alternative employment opportunities. India's unemployment rate fell to 9.17% in June after a spike to 11.9% in May from 7.97% in April due to the second Covid wave.

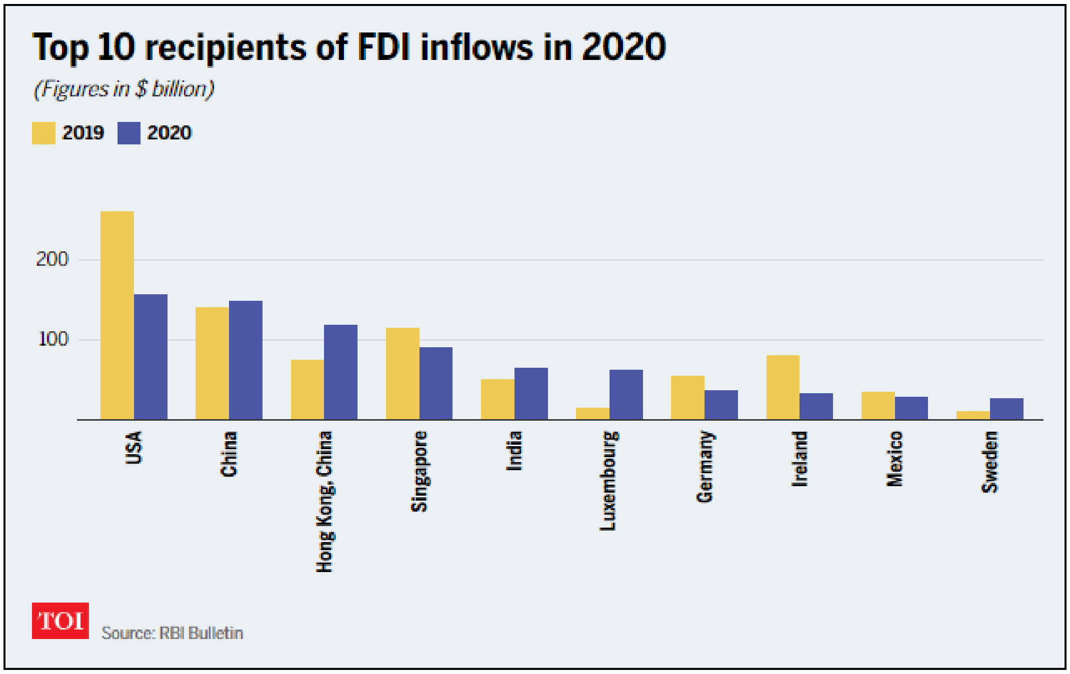
With gradual withdrawal of partial lockdown amidst declining number of people getting affected are pushing workforce back into work, resulting in reduction in unemployment rate amidst a slight recovery in the labour force participation rate (LFPR). From 40.5% in the week ended May 16, LFPR stood at 39.6% in the week ended June 27. The average LFPR in 2019-20 was 42.7%.




*Source: CMIE*

**India: Fifth largest recipient of FDI**

As per United Nations Conference on Trade and Development's (UNCTAD) World Investment Report 2021, India became the fifth largest recipient of foreign direct investment (FDI) inflows in the world in 2020. Gross FDI inflows have amounted to $32 billion in the first five months of 2021 (January to May), that is 37% of the entire inflows in 2020.




**Rise in Forex reserves:**

The country's foreign exchange reserves rose by $835 million to touch a record high of $612.73 billion in the week ended July 16, 2021 which is equivalent to 18.4 months of 2020-21 imports, RBI data showed. The increase in forex reserves was on account of the rise in foreign currency assets (FCA). The FCA, a major component of the overall reserves, rose by $463 million to $568.748 billion. Expressed in dollar terms, foreign currency assets include the effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves. The special drawing rights (SDRs) with the International Monetary Fund (IMF) were up by $1 million at $1.548 billion.

**India diversifies its crude procurement; First shipment from Guyana arrives next month**

India is set to receive its first shipment of one million barrels of Liza Crude Oil from Guyana. This is the first purchase of Guyanese crude oil from the Government of Guyana’s share of oil by an Indian PSU refiner – Indian Oil Corporation Ltd (IOCL). According to the Indian Mission in that country, the oil tanker left the shores on July 4-5, 2021 and will be reaching the Paradip Port in India in the first week of August.

This purchase was possible because of the Indian Mission’s active coordination with the Ministry of Petroleum and Natural Gas and Ministry of Natural Resources of the Government of Guyana.

Indian High Commissioner Dr KJ Srinivasa said, “The crude oil purchase from Guyana marks an important step in diversification of crude sourcing by India. It is also the beginning of a future roadmap of extended collaboration in the oil and gas sector with Guyana.” This collaboration could potentially extend and include acquiring oil blocks, long-term agreement for sourcing crude from Guyana, training and capacity building in the oil and gas sector, gas to power sector, etc.,” he added.

India has been looking to diversify its crude sourcing and it was earlier this year that the Guyana government was approached seeking a long term deal to buy crude from a Caribbean nation. Guyana's Liza oil – "light sweet crude" seems to be well suited for Indian refineries. Such purchase arrangements are helpful to both countries because the Governments are in a position to save incurring costs on commission and marketing fee to the 3rd party agencies and can also further fortify India-Guyana bilateral partnership.

**Household debt jumps to 37.3% of GDP in FY21**

In four years since FY18, the household debt has jumped by 720 bps — from 30.1 percent in FY18 which was the year of GST implementation, to 31.7 percent in FY19, 32.5 per cent in FY20 and to a massive 37.3 percent in FY21, according to the report by SBI Research. This confirms the deeper financial impact of COVID-19 and also warned that the ratio may rise further this fiscal due to the second wave of the pandemic.

Household debt includes retail loans, crop loans and business loans from financial institutions like banks, credit societies, non-banks and housing finance companies. The decline in bank deposits in FY21 and the increase in health expenditure may result in further increase in household debt to GDP ratio in FY22, as per the report. The household debt to GDP ratio in India is still lower than most other countries, highest at 103.8 percent in Korea, 90 percent in Britain, 79.5 percent in the US, 65.3 percent in Japan, 61.7 percent in China, and the lowest in Mexico at 17.4 per cent.

During the initial lockdowns in 2020, deposits of all commercial banks increased due to less avenues to spend. However, subsequently they declined marginally in the festive months. The beginning of the second wave, however, has resulted in significant deposit outflows from banking system. Higher household debt indicates the falling household financial savings rate due to the rise in consumption and health spends. It is expected that the decline in bank deposits and the increase in health expenditure may result in further increase in household debt to GDP in FY22.

**ADB cuts India's FY22 economic growth forecast to 10%; inflation seen rising marginally to 5.5%**

The Asian Development Bank (ADB) has downgraded India's economic growth forecast for the current financial year to 10 per cent from 11 per cent projected earlier this year, mainly on account of the adverse impact of the coronavirus pandemic.

ADB commented that the second wave of the pandemic induced many state governments to impose strict containment measures. New COVID-19 cases daily peaked at more than 4,00,000 in early May, then fell to a little over 40,000 in early July. Early indicators show economic activity resuming quickly after containment measures eased. The growth projection for FY2021 (ending March 2022), downgraded from 11 per cent to 10 per cent, reflects large base effects.

Further, Indian consumer price inflation rose to 6.3 per cent year-on-year in May as both food and fuel inflation outpaced expectations. "This Supplement raises the inflation forecast for India in FY2021 (fiscal ending March 2022) by 0.3 percentage points to 5.5 per cent while keeping the forecast for FY2022 at 4.8 per cent," ADB said.

The growth projection for FY2022 (ending in March 2023), by which time much of India's population is expected to be vaccinated, is upgraded from 7 per cent to 7.5 per cent as economic activity normalizes.

Further, ADB commented that on top of containment and vaccination measures, phased and strategic rejuvenation of economic activities -- for instance, trade, manufacturing, and tourism -- will be key to ensure that the recovery is green, inclusive, and resilient.

ADB said even as the pandemic persists, developing Asia is forecast to sustain its strong rebound broadly in line with the April forecasts of the Asian Development Outlook (ADO). Recovery is under way in developing Asia, but with the growth projection for this year revised down slightly from 7.3 per cent in the Asian Development Outlook 2021 in April, to 7.2 per cent following renewed virus outbreaks in some economies. The projection (developing Asia) for 2022 is upgraded from 5.3 per cent to 5.4 per cent.

**IMF slashes India's economic growth forecast for FY22 to 9.5%**

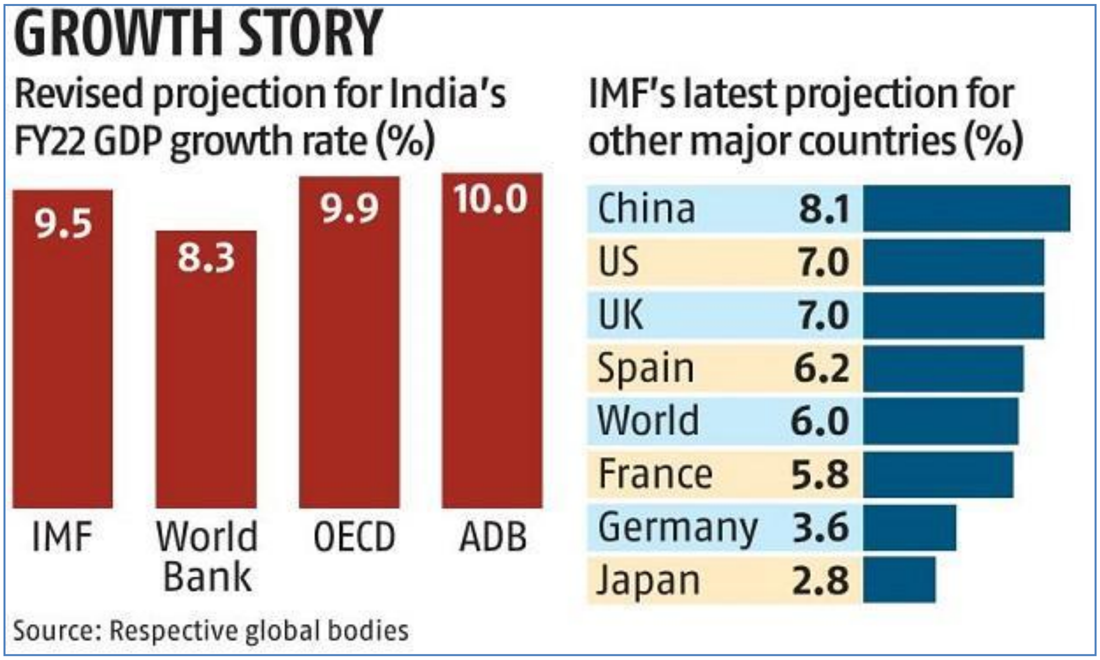
The International Monetary Fund (IMF) has sharply scaled down India's economic growth projection by 300 basis points to 9.5 per cent for the current financial year from 12.5 per cent estimated earlier in April. IMF said the downward revision is owing to "lack of access to vaccines" and possibility of renewed waves of coronavirus.

"Growth prospects in India have been downgraded following the severe second Covid wave during March–May and expected slow recovery in confidence from that setback," IMF said in the latest edition of its flagship World Economic Outlook (WEO) report.

The World Bank projected India's economy to grow at 8.3 per cent in 2021 and 7.5 per cent in 2022, even as its recovery is being hampered by an unprecedented second wave of the COVID-19.

However, IMF sees India's gross domestic product (GDP) growing by 8.5 per cent, 160 basis points higher than its earlier projection, in the next financial year (FY23). Should that happen, India would become the most rapidly expanding large economy in the world with the closest competitor, China, is projected to grow by 5.7 per cent.

According to the forecast, in countries with high vaccination coverage, such as the United Kingdom and Canada, the economic impact would be mild, meanwhile countries lagging in vaccination, such as India and Indonesia, would suffer the most among G20 economies. The protracted weakness in activity is assumed to inflict persistent damage on economies' supply capacity, it said.




IMF's Chief Economist Gita Gopinath said, "Faster-than-expected vaccination rates and return to normalcy have led to upgrades, while lack of access to vaccines and renewed waves of Covid-19 cases in some countries, notably India, have led to downgrades."

IMF said that the growth prospects for emerging market and developing economies have been marked down for 2021, especially for emerging Asia. By contrast, the forecast for advanced economies has been revised upwards. These revisions reflect pandemic developments and changes in policy support.

Gopinath emphasized on multilateral action needed to ensure rapid, worldwide access to vaccines, diagnostics, and therapeutics. This would save countless lives, prevent new variants from emerging, and add trillions of dollars to global economic growth, she said.

She cited IMF staff's recent proposal to end the pandemic by setting a goal of vaccinating at least 40 per cent of the population in every country by the end of 2021 and at least 60 per cent by mid-2022, alongside ensuring adequate diagnostics and therapeutics at a price of $50 billion.

To achieve these targets, at least 1 billion vaccine doses should be shared in 2021 by countries with surplus vaccines, and vaccine manufacturers should prioritize deliveries to low- and lower-middle income countries. Besides, it is important to remove trade restrictions on vaccine inputs and finished vaccines and make additional investment in regional vaccine capacity to ensure sufficient production, said Gopinath

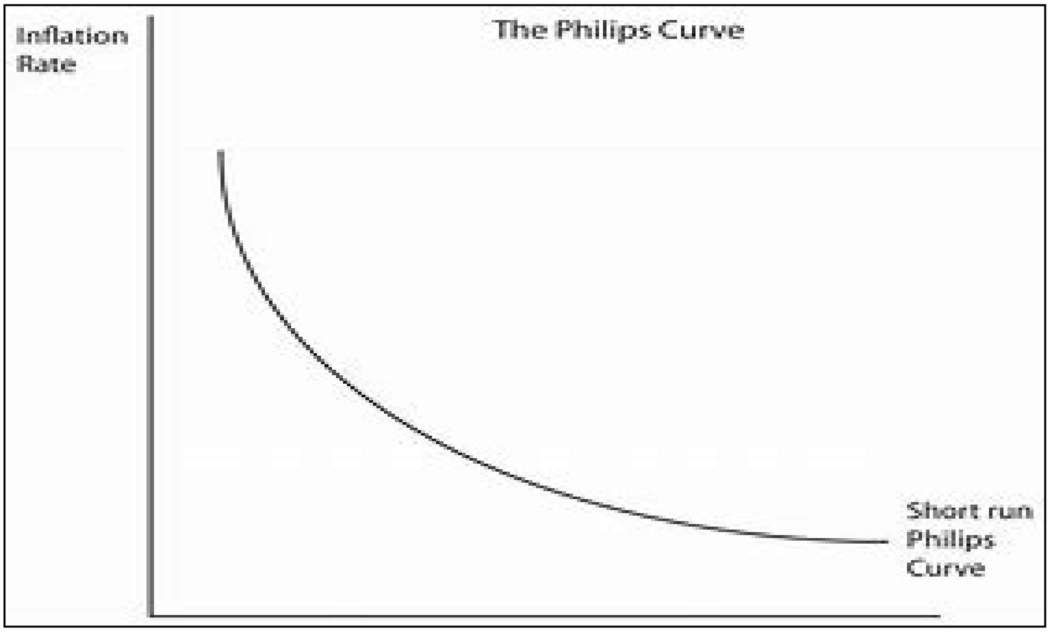
It is essential to also make available upfront grant financing of around $25 billion for diagnostics, therapeutics, and vaccine preparedness for low-income developing countries, she suggested.

## Lesson from Economics

**The Phillips Curve and Stagflation**

The Phillips curve is an economic concept developed by A. W. Phillips stating that inflation and unemployment have a stable and inverse relationship. Higher inflation is associated with lower unemployment and vice versa. The inverse relationship between unemployment and inflation is depicted as a downward sloping, concave curve, with inflation on the Y-axis and unemployment on the X-axis.

Figure showing Short-run Phillips Curve




The phenomena of short run Phillips Curve explains that any fiscal stimulus would increase aggregate demand and initiate an increase for labour, subsequently the pool of unemployed workers decreases and companies increase wages to compete and attract a smaller talent pool. The corporate cost of wages increases and companies pass along those costs to consumers in the form of price increases, resulting in inflation.

The Phillips curve offered potential economic policy outcomes: fiscal and monetary policy could be used to achieve full employment at the cost of higher price levels, or to lower inflation at the cost of lowered employment.

The Phillips curve was a concept used to guide macroeconomic policy in the 20th century, but was called into question by the stagflation of the 1970's. Stagflation occurs when an economy experiences stagnant economic growth, high unemployment and high price inflation. The United States experienced stagflation in the 1970s, when rising unemployment did not coincide with declining inflation as suggested by Phillips Curve. Between 1973 and 1975, the U.S. economy posted six consecutive quarters of declining GDP and at the same time tripled its inflation.

**The Great Inflation**

The Federal Reserve has a dual mandate to promote maximum sustainable employment and price stability.

- **Maximum sustainable employment** can be thought of as the highest level of employment that the economy can sustain while keeping inflation stable.
- **Price stability** can be thought of as low and stable inflation, where inflation refers to a general, sustained upward movement of prices for goods and services in an economy. U.S. monetary policymakers believe an inflation rate of 2% is consistent with price stability, hence the Fed's 2% inflation target.

Thus, managing the above two goals, the U.S. Federal Reserve has been raising short-term interest rates. These rate hikes are designed to prevent inflation from trending upward from the low levels prevalent in U.S. over the past several years. However, it is worthwhile to reflect on an earlier period of U.S. history when inflation performance was not so good and account for the rise of U.S. inflation during the 1960s and 1970s. ("Great Inflation")

A major disruptive force had occurred in U.S. that increased oil costs and sapped U.S. growth. The first crisis was an Arab oil embargo that began in October 1973 and lasted about five months. During this period, crude oil prices quadrupled to a plateau that held until the Iranian revolution brought a second energy crisis in 1979. The second crisis tripled the cost of oil. An oil supply disruption has pushed higher inflation notably originating in food and energy markets. Many developed economies thus experienced rapid inflation and high unemployment as a result of an oil shock. This phenomenon was termed as Stagflation. It was also used to describe the recessionary period in the 1970s following the oil crisis, when the U.S. underwent a recession that saw six quarters of negative GDP growth. Inflation doubled in 1973 and hit double digits in 1974; unemployment hit 9% by May 1975.

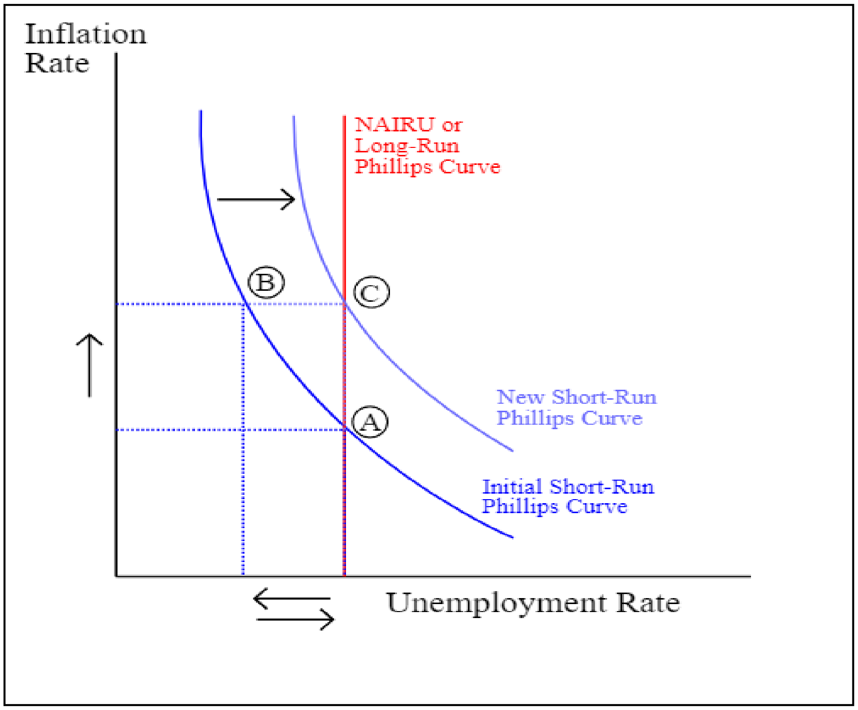
Thus, the stable trade-off between inflation and unemployment as described by the theory of Phillips Curve proved unstable and did not exist. Both inflation and unemployment became unacceptably high resulting in era of Stagflation.

**Phillips Curve in the Long Run:**

It was observed that the stability of the Phillips curve was suitable only in the short run. The expansionary efforts to decrease unemployment below natural rate of unemployment would change worker and consumer expectations about inflation, who will adjust their nominal wages to meet these expectations in the future. Thus, in the long run the Phillips curve itself can shift outward.

So, in the long run, if expectations can adapt to changes in inflation rates, then the long run Phillips curve resembles a vertical line at the **non-accelerating inflation rate of unemployment** (NAIRU); monetary policy simply raises or lowers the inflation rate after market expectations have worked themselves out.

The natural rate of unemployment theory, also known as the non-accelerating inflation rate of unemployment (NAIRU) theory, was developed by economists Milton Friedman and Edmund Phelps. According to NAIRU theory, expansionary economic policies will create only temporary decreases in unemployment as the economy will adjust to the natural rate. Moreover, when unemployment is below the natural rate, inflation will accelerate. When unemployment is above the natural rate, inflation will decelerate. When the unemployment rate is equal to the natural rate, inflation is stable, or non-accelerating.




In the above figure, although the economy starts with an initially low level of inflation at point A, attempts to decrease the unemployment rate are futile and only increase inflation to point C. The unemployment rate cannot fall below the natural rate of unemployment, or NAIRU, without increasing inflation in the long run.

The NAIRU theory was used to explain the stagflation phenomenon of the 1970's, when the classic Phillips curve could not. According to the theory, the simultaneously high rates of unemployment and inflation could be explained because workers changed their inflation expectations, shifting the short-run Phillips curve, and increasing the prevailing rate of inflation in the economy. At the same time, unemployment rates were not affected, leading to high inflation and high unemployment.

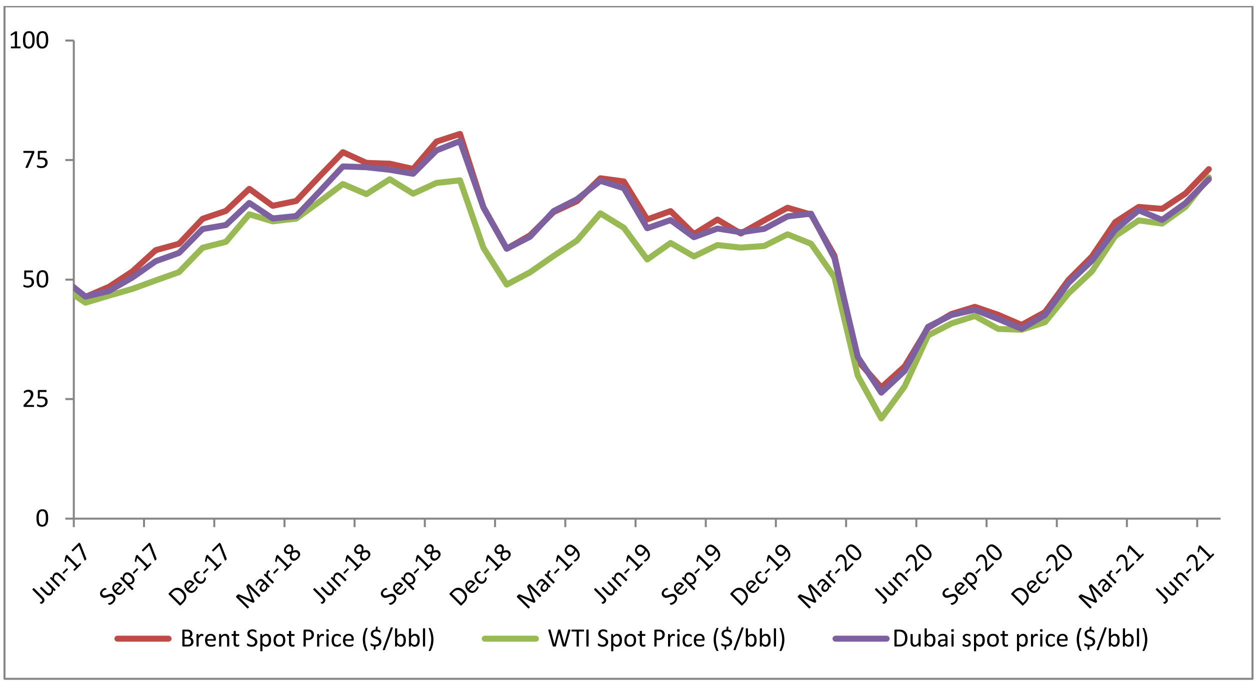
Therefore, the short-run Phillips curve illustrates a real, inverse correlation between inflation and unemployment, but this relationship can only exist in the short run. The idea of a stable trade-off between inflation and unemployment in the long run has been disproved by economic history.

# Oil Market

## Crude oil price – Monthly Review

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.

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




*Source: WORLD BANK*

- Brent crude price averaged $ 73.10 per bbl in June 2021, up by 7.5 % on a month on month (MoM) and by 83.2 % on year on year (YoY) basis, respectively.
- WTI crude price averaged $ 71.40 per bbl in June 2021, up by 9.5 % on a month on month (MoM) and by 86.4 % on year on year (YoY) basis, respectively.
- Dubai crude price averaged $ 71.00 per bbl in June 2021, up by 7.6 % on a month on month (MoM) and by 77.1 % on year on year (YoY) basis, respectively.

**Table 1: Crude oil price in June, 2021**

| Crude oil | Price ($/bbl) in June 2021 | MoM (%) change | YoY (%) change |
|---|---|---|---|
| **Brent** | 73.10 | 7.5% | 83.2% |
| **WTI** | 71.40 | 9.5% | 86.4% |
| **Dubai** | 71.00 | 7.6% | 77.1% |

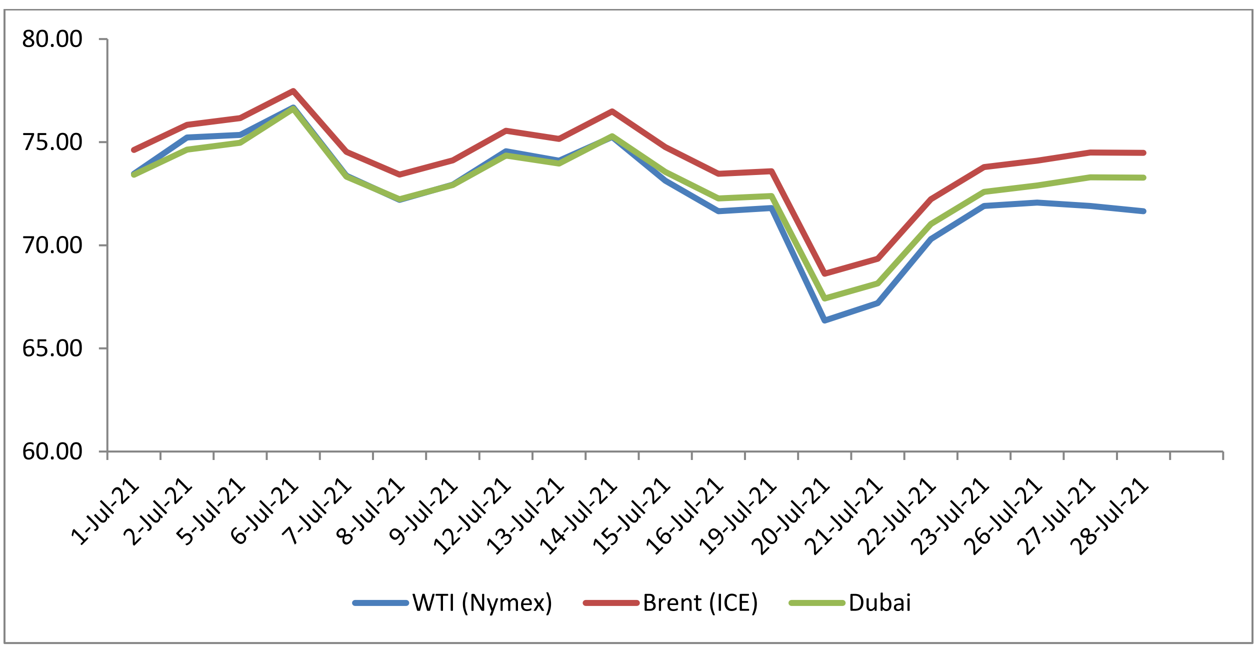
*Source: WORLD BANK*

**OPEC's decision pulls down Oil's rally in July and Delta variant slows down oil imports**

Crude oil benchmarks reached a 2-year-high in the first week of July touching the 78 dollar mark after seeing spike for sixth straight week. WTI benchmarks continued to increase in the second week of July due to big withdrawal in US crude stocks and gasoline stocks. In the third week of July, OPEC members met to discuss about rising the oil production and at the end of meeting, OPEC decided to increase its production to ease the pressure on crude oil price and economy. This led to immediate fall in all major crude benchmarks. While the crude prices recovered owing to rising demand, spread of Delta variant has impacted the crude price's rally.

For the month, average Brent, WTI and Dubai basket crude prices in July went up by 1.39 %, 1.62 % and 2.72 % respectively from their June prices.

**Figure 2: Crude oil price in July 2021**

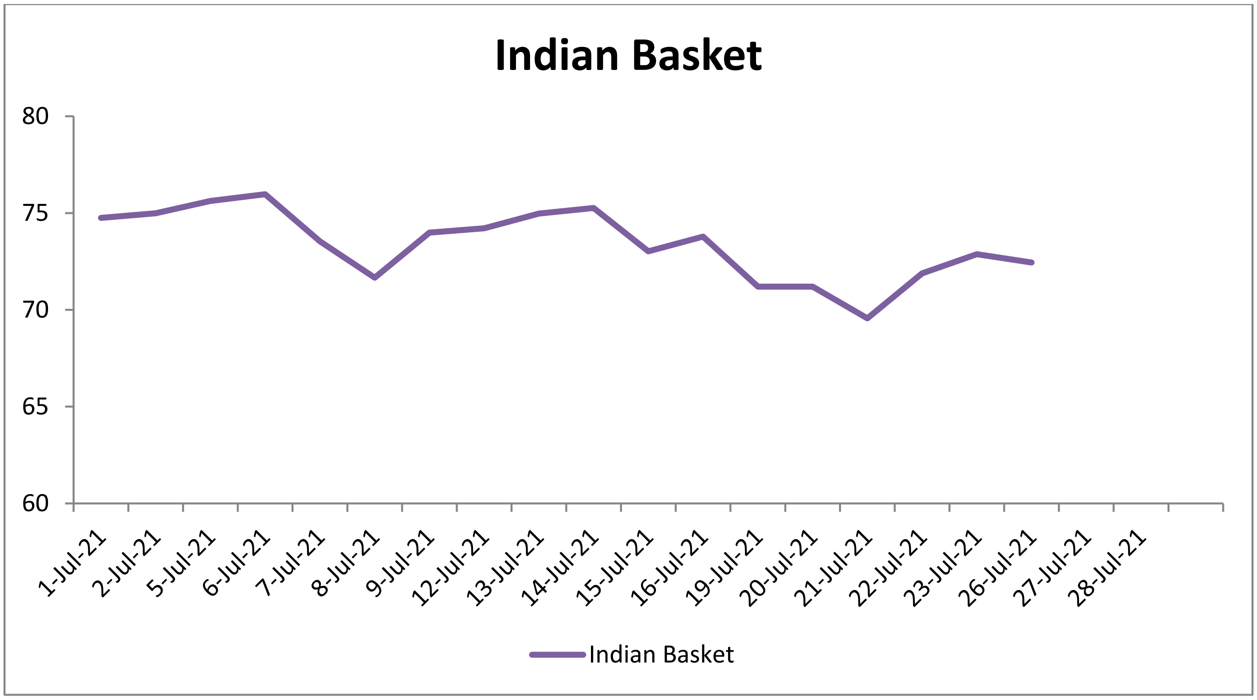



*Source: EIA, Oilprice.com*

# 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 July corresponding to the rise in the global crude benchmarks.

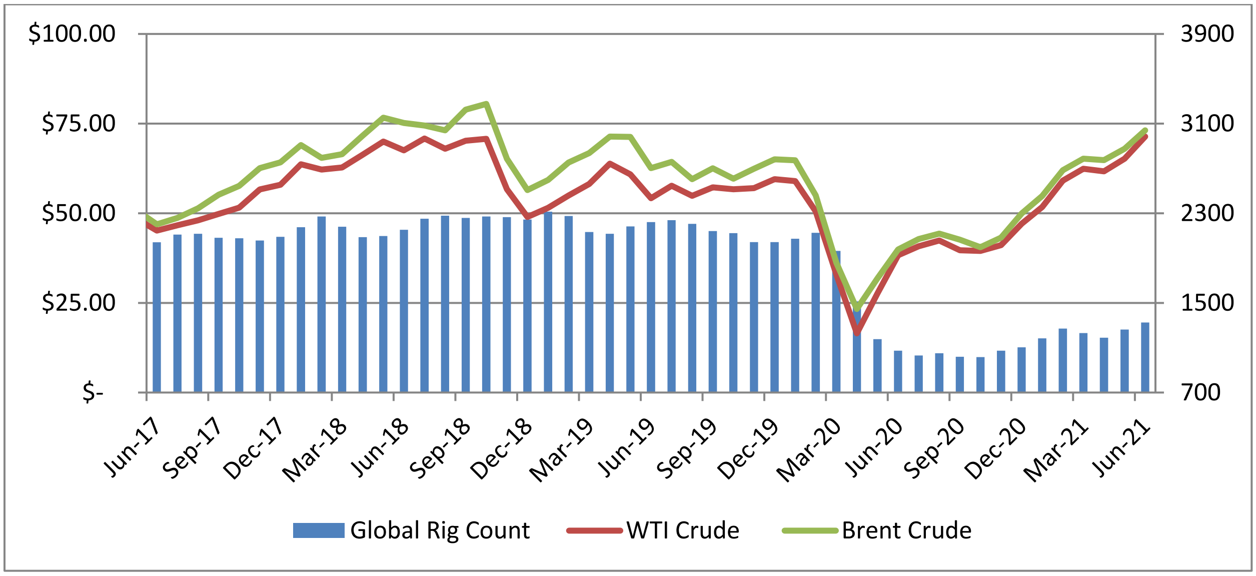
- Indian crude basket price averaged $ 73.38 per barrel in July 2021, up by 2.19 % on Month on Month (M-o-M) and by 74.02 % on a year on year (Y-o-Y) basis, respectively.

# 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*

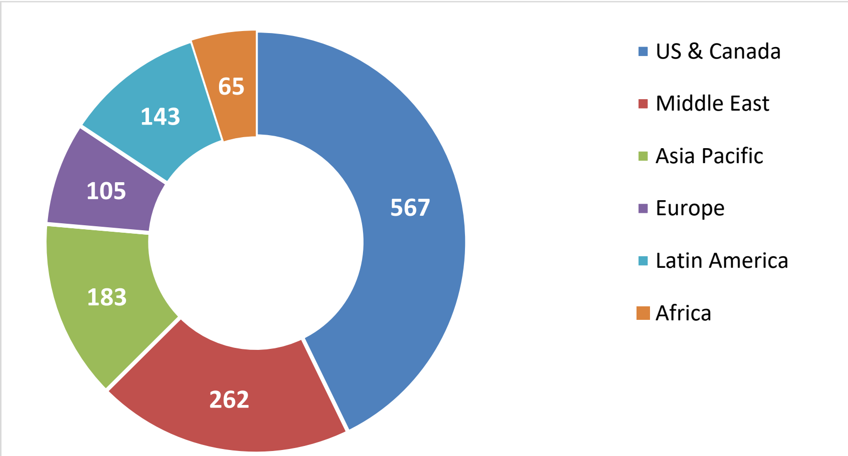
Global rig count for the month of June went up by 63. From May's rig count of 1,262 it climbed to 1,325. Active rig count went up in US, Canada, Europe, Latin America and in Africa as increasing oil price boosted the companies to go ahead with exploration activities. Significant jump came from Canada as Rig count went up by 44. Rig count in Asia Pacific stood unchanged, while rig count in Middle East declined by 4. Onshore rig went down up 57 and offshore rigs went up by 6.

**Table 2 : Global Drilling Rig Count**

| Rig Type | Count in June 2021 | MoM (%) change | YoY (%) change |
|---|---|---|---|
| **Land** | 1,124 | 5.34% | 29.94% |
| **Offshore** | 201 | 3.08% | -3.37% |
| **Total** | 1,325 | 4.99% | 23.49% |

*Source: Baker Hughes*

**Figure 5 Geography-wise Rig count - June 2021**




*Source: Baker Hughes*

**Indian Drilling Rig Count**

Indian drilling rig count went up by 2 in the month of June to reach 76. Indian rig count decreased by 26.92 % on Y-O-Y basis. Out of the 76 active rigs, 59 were onshore rigs and the rest 17 were offshore rigs.

**Figure 6 Indian Rig Count vs. Indian Basket Crude Price**

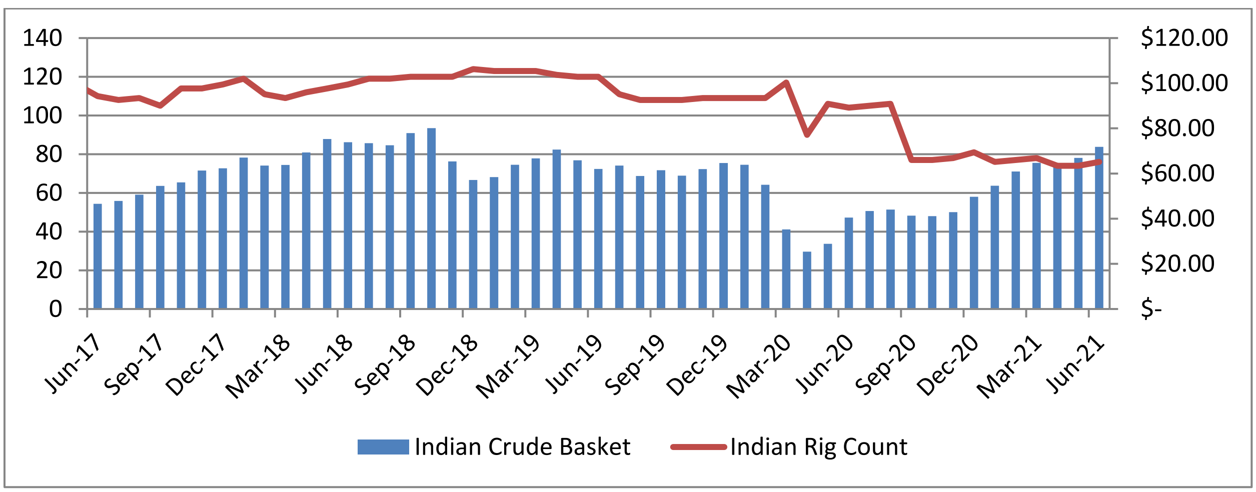



**Table 3 : Indian Rig Count**

| Rig Type | Count in June 2021 | MoM (%) change | YoY (%) change |
|---|---|---|---|
| **Land** | 59 | -6.35% | -13.24% |
| **Offshore** | 17 | 54.55% | -52.78% |
| **Total** | 76 | 2.70% | -26.92% |

*Source: Baker Hughes*

## Oil demand & supply

Preliminary data indicates that global oil supply in June 2021 increased by 1.10 mb/d m-o-m to average 94.49 mb/, compared to May 2021. Non-OPEC supply (including OPEC NGLs) was up in June by 0.52 mb/d m-o-m to average 68.46 mb/d in June 2021. On Y-o-Y basis, it was an increase of 2.76 mb/d. The preliminary increase in production came from OECD countries which saw 0.46 mb/d more production compared to 0.08 mb/d from non-OECD countries. In May 2021, share of OPEC crude oil in total global production went down by 0.3% to 27.6%.

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 at 6.0 mb/d, unchanged from last month's forecast, although there have been some regional revisions. Total demand is foreseen to reach 96.6 mb/d.

1Q21 was revised lower amid slower than anticipated demand in the main OECD consuming countries. This was countered by better-than-expected data from OECD Americas in 2Q21 which is now projected to last through 3Q21. Oil demand is anticipated to rise by 2.7 mb/d to reach 44.7 mb/d of total demand. US will drive the demand with recovery of gasoline and diesel demand. This is 3 mb/d lower than total demand in 2019, due to limited recovery in transportation fuel, especially jet fuel. Light distillates are also projected to support demand growth this year.

In the non-OECD region, oil demand is anticipated to rise by 3.3 mb/d to reach 51.9 mb/d of total demand in 2021. This is 0.4 mb/d lower than 2019, despite expectations of full recovery in demand in China and India. A steady increase in industrial and transportation fuel demand supported by recovering economic activity in projected to boost demand in 2021.

| Table 4: World Oil demand in mbpd | 2020 | 1Q2021 | 2Q2021 | 3Q2021 | 4Q2021 | 2021 | Growth | % |
|---|---|---|---|---|---|---|---|---|
| **Total OECD** | **42.06** | **42.58** | **44.63** | **45.61** | **45.97** | **44.72** | **2.65** | **6.31** |
| ~ *of which US* | **18.44** | **18.99** | **20.11** | **20.34** | **20.45** | **19.98** | **1.54** | **8.33** |
| **Total Non-OECD** | **48.56** | **50.23** | **50.69** | **52.62** | **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** | **90.62** | **92.80** | **95.32** | **98.24** | **99.82** | **96.58** | **5.9** | **6.57** |

*Source: OPEC monthly report, July 2021*

*Note: *2020 = Estimate and 2021 Forecast*

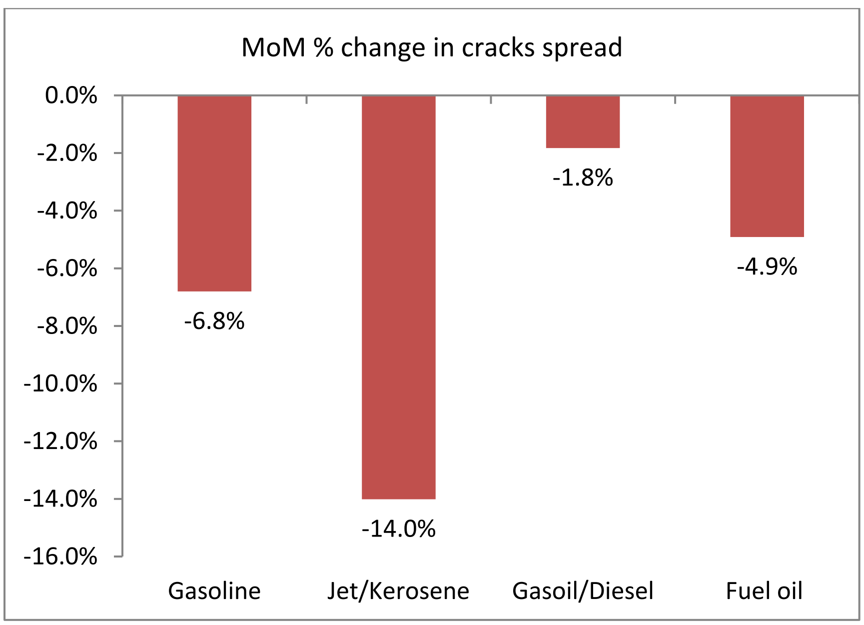
## Global petroleum product prices

Asian product markets margins lost some ground by smallest magnitude as compared to other regions, pressurized by stronger product outputs. Despite the improvement in fuel fundamentals in India, stronger crude price coupled with high throughputs in Chia and lower product exports led to weaker refining economics in the region. Refinery margins for Oman in Asia lost 52¢ m-o-m to average 94¢/b in June and was higher by $1.69 y-o-y. Refinery utilization rates in June averaged 88.9 % in selected Asian markets comprising of Japan, China, India and Singapore. Compared to the previous month, the throughputs were up by 4.1 % and by 1.2 mb/d. On Y-o-Y, they were up by 2.9 % and by 974 tb/d.

Asian gasoline 92 cracks suffered losses despite the improvement in India's fuel consumption. However, mobility declines in Vietnam, Taiwan and in other Asian countries has impacted the gasoline earnings. Singapore Gasoline cracks averaged $ 7.31 /b against Oman in June, down by 66 ȼ m-o-m but up by $ 5.27 y-o-y.

Jet/kerosene cracks spread in Asia lost some ground pressured by stronger jet fuel availability, amid lower exports despite continued regional requirements for domestic air travel mainly in China. International flights remain suspended due to the border restrictions and outbreak of Delta variant of Covd-19. Jet fuel supplies in the region have grown as refiners have increase jet/kerosene production. The Singapore jet/kerosene crack spread against Oman averaged minus $ 4.41 /b, up by 89 ȼ m-o-m but up by $ 3.96 y-o-y.

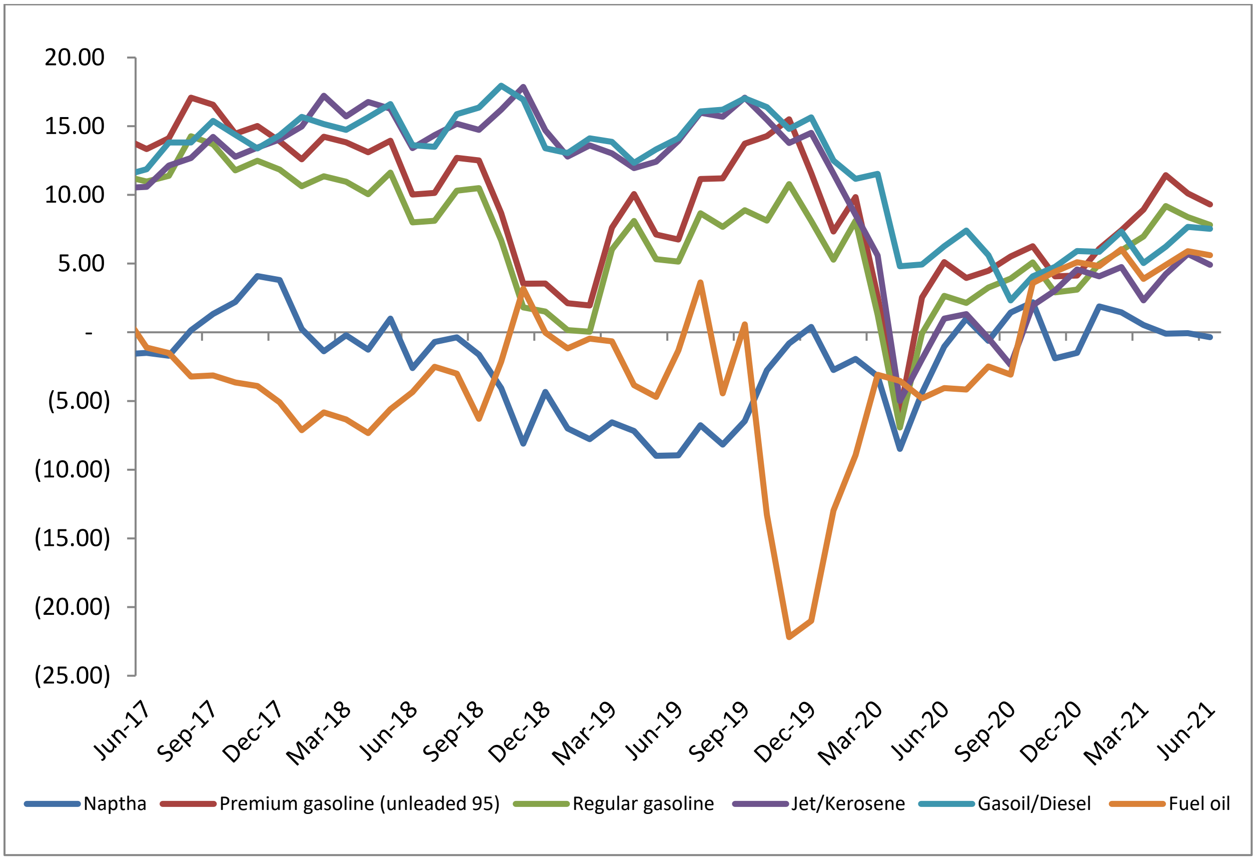
The Singapore gasoil crack spreads moved lower as well with a strong rise in exports of gasoil/diesel from region's largest exporters such as India, China, Korea and Taiwan. In Japan, lack of local demand has resulted in considerable diesel stock builds. Singapore gasoil crack spread against Oman averaged minus $ 4.81/b, up by 46 ȼ /b m-o-m and but down by $2.71 y-o-y.




*Source: OPEC Monthly Report*

The Singapore fuel oil crack spread continued to trend downwards, affected by stronger crude output rates. China's decision to impose consumption taxes on light cycle oil and government's push to reduce crude import quotas for independent refineries will likely be supportive to domestic fuel oil markets going forward. Singapore fuel oil cracks against Oman averaged minus $ 8.88/b, down by 17 ȼ m-o-m, and by $ 2.83 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 June 2021 | MoM (%) change | YoY (%) change |
|---|---|---|---|
| **Naphtha** | **70.64** | 7.1% | 80.8% |
| **Premium gasoline (unleaded 95)** | **80.31** | 5.5% | 77.6% |
| **Regular gasoline (unleaded 92)** | **78.81** | 6.0% | 84.4% |
| **Jet/Kerosene** | **75.91** | 5.9% | 84.7% |
| **Gasoil/Diesel (50 ppm)** | **78.53** | 6.6% | 69.4% |
| **Fuel oil (180 cst 2.0% S)** | **76.61** | 6.6% | 112.6% |
| **Fuel oil (380 cst 3.5% S)** | **62.62** | 8.5% | 80.7% |

*Source: OPEC*

# Petroleum products consumption in India

**Monthly Review:**

- In June 2021, consumption of petroleum products increased by 8 % m-o-m and by 0.3 % on y-o-y as the nation entered unlocking after a month long lockdown.
- Consumption of refined petroleum products for June 2021 stood at 16,335 MT.
- Petrol consumption spiked up by 21.0 % on monthly basis as reopening of offices and other business establishments led in increase in road transport. On year-o-year basis, Petrol consumption was up by 5.6 %.
- Diesel consumption in the month of June went up by 12.0 % as resumption of commercial transportation drove the demand for Diesel.
- ATF consumption declined for the second straight month as government regulations mandated thinning down of flight operations. ATF consumption declined in the month by 3.7%. ATF consumption on Y-o-Y basis was up by 16.2 %.
- LPG consumption went up by 4.4 %. LPG consumption stood around 2,263 MT in May 2021.
- Suspension of major infrastructure activities continued to impact the consumption of other petroleum products likes Bitumen, Petroleum Coke etc. Bitumen consumption was down by 4.2 % on M-o-M basis.

**Table 6: Petroleum products consumption in India, June 2021**

| Petroleum products | Consumption in '000 MT June 2021 | MoM (%) change | YoY (%) change |
|---|---|---|---|
| **LPG** | 2,263 | 4.4% | 9.0% |
| **Naphtha** | 1,193 | -4.3% | 2.2% |
| **MS** | 2,409 | 21.0% | 5.6% |
| **ATF** | 258 | -3.7% | 16.2% |
| **HSD** | 6,203 | 12.0% | -1.6% |
| **LDO** | 93 | 21.7% | 53.6% |
| **Lubricants & Greases** | 288 | 13.0% | -11.5% |
| **FO & LSHS** | 533 | 13.5% | 5.5% |
| **Bitumen** | 509 | -4.2% | -27.2% |
| **Petroleum coke** | 1,604 | 3.3% | 0.5% |
| **Others** | 844 | -4.7% | -5.1% |
| **TOTAL** | 16,335 | 8.0% | 0.3% |

*Source: PPAC*

# Natural Gas Market

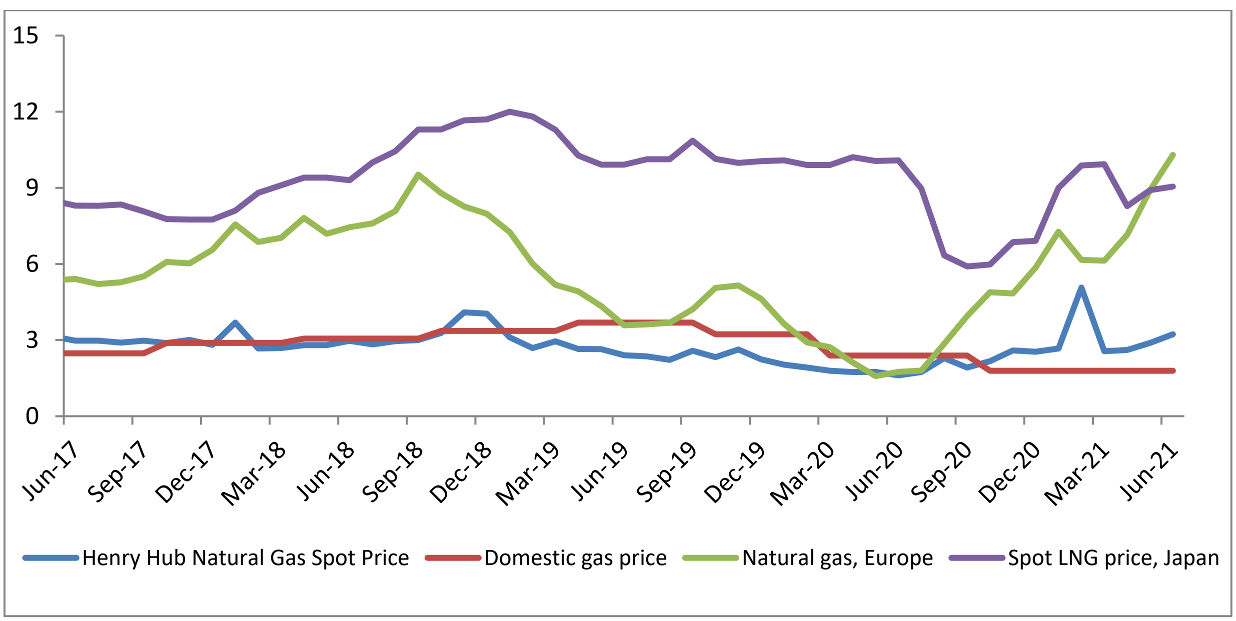
## Natural Gas Price – Monthly Review

Natural gas prices saw an increase trend in all major gas trading hubs as the demand for Natural gas saw a new high. Natural gas price in the Henry hub went up by 11.8 % to reach $ 3.23 /MMBtu in the month of June as demand in natural gas for cooling purpose went up. A hotter June month spiked the need for cooling across the US. Widening storage of natural gas also led to an increase in price in the month of June. For 2021, Henry Hub gas price is estimated to average $ 3.21 / MMBtu as per EIA estimates.

Natural Gas price in Europe went up by 15.6% in the month of June as compared to May to reach USD 10.30/ MMBtu. On Y-o-Y basis, gas price was up by 488.6%. The rise in price was driven by strong demand for gas in heating due to lower than average temperatures and increase in use of natural gas for power purpose. With economic activity recovering close to pre-Covid level, the demand is further expected to increase.

Asian spot LNG prices continued to rise for the third month in a row as buyers in the region sought to replenish the stock before the arrival of winter. Asian LNG price reached $14/MMBtu due to robust demand and it is at 8-year seasonal high. The demand was driven by strong demand in power sector as requirement of cooling went up due to higher-than-normal temperature in the region. LNG prices for August delivery stood up around USD 12.5/MMBtu. Japan LNG benchmark went up by 1.6% to reach USD 9.06/MMBtu.

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




*Source: EIA, WORLD BANK*

Table 7: Gas price

| Natural Gas | Price ($/MMBTU) in June 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** | 3.23 | 11.8% | 100.6% |
| **Natural Gas, Europe** | 10.30 | 15.6% | 488.6% |
| **Liquefied Natural Gas, Japan** | 9.05 | 1.6% | -10.2% |

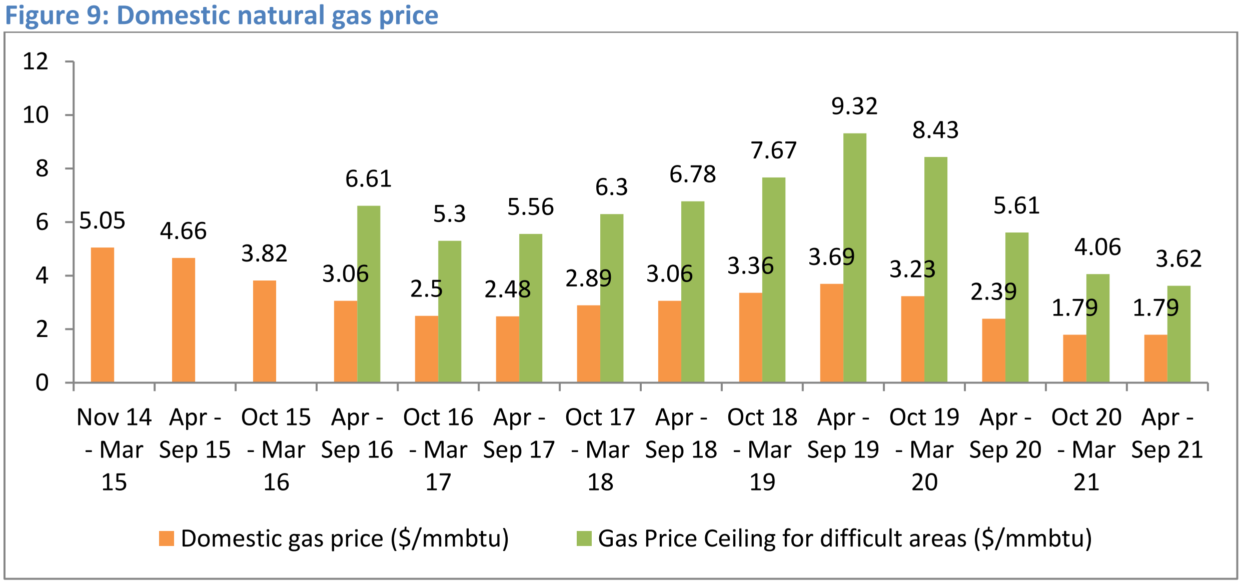
*Source: EIA, PPAC, World Bank*

**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



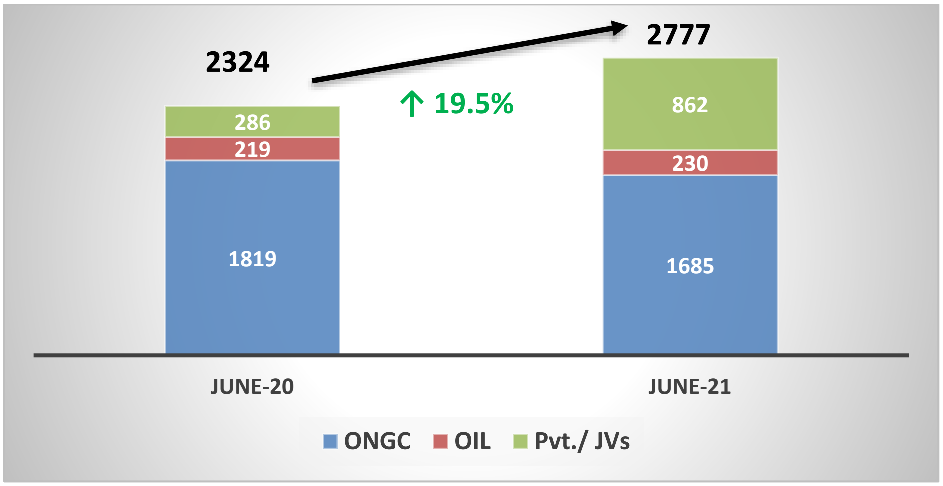

*Source: PPAC*

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

### 1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of June 2021 was 2777 MMSCM (increase of 19.5% over the corresponding month of the previous year 2324 MMSCM)

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

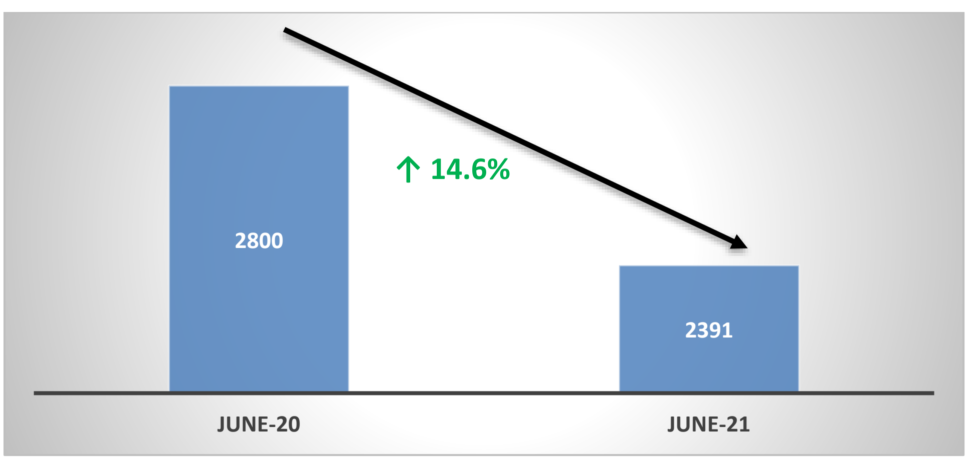



*Source: PPAC*

### 2. LNG imports:

Total imports of LNG (provisional) during the month of June 2021 were 2391 MMSCM (decrease of 14.6% over the corresponding month of the previous year 2800 MMSCM).

**Figure 11: LNG imports (Qty in MMSCM)**

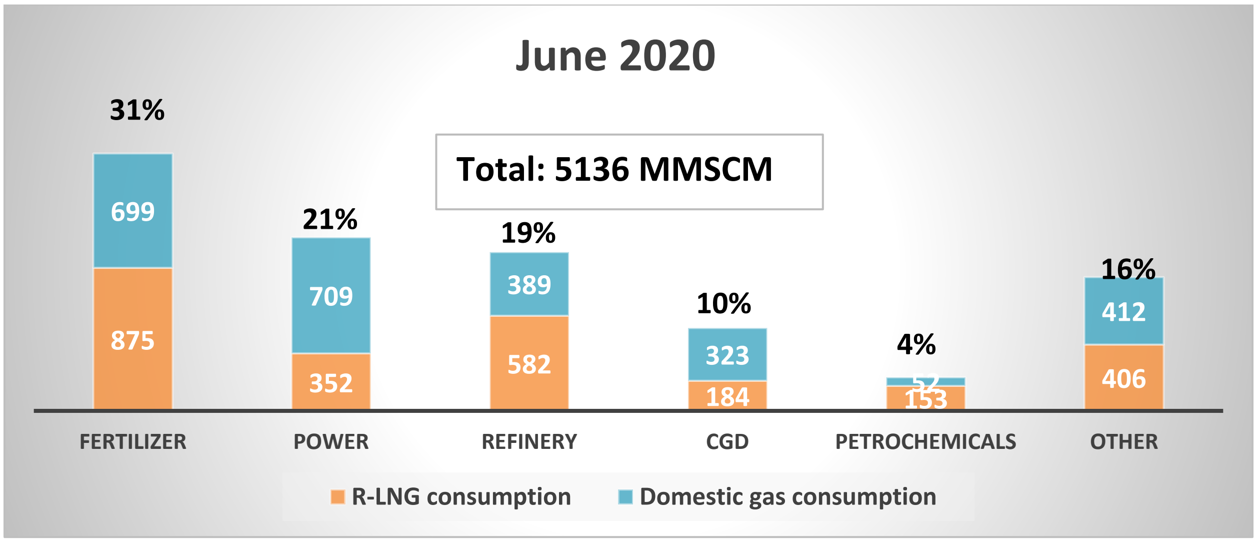



*Source: PPAC*

### 3. Sectoral Consumption of Natural Gas:

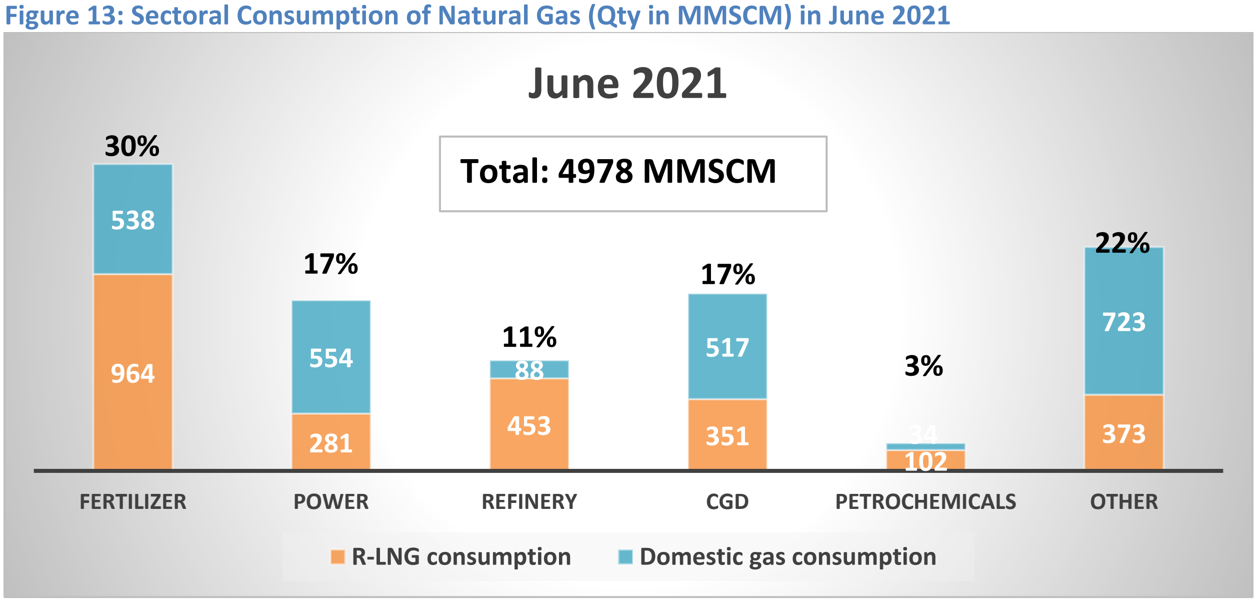
Total consumption of natural gas during June 2021 was 4978 MMSCM (decrease of 3.2% over the corresponding month of the previous year 5136 MMSCM). Major consumers were fertilizer (30%), power (17%), refinery (11%), City Gas Distribution (CGD) (17%) and petrochemicals (3%).

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




*Source: PPAC*

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




*Source: PPAC*

# Key developments in Oil & Gas sector during July 2021

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

### 1. Production of Crude Oil

**Crude oil production** during June 2021 was 2481.66 TMT, which is 2.26% lower than target for the month and 1.79% lower when compared with production of June 2020. Cumulative crude oil production during April-June, 2021 was 7412.87 TMT, which is 2.24% and 3.42% lower than target for the period and production during corresponding period of last year respectively.

### 2. Production of Natural Gas

**Natural gas production** during June 2021 was 2777.43 MMSCM, which is 19.52% higher when compared with production of June 2020 but 5.26% lower than the monthly target. Cumulative natural gas production during April-June, 2021 was 8168.56 MMSCM, which is 20.39% higher than production during corresponding period of last year but 3.52% lower when compared with target for the period.

### 3. Crude Oil Processed (Crude Throughput)

**Crude Oil Processed** during June 2021 was 18400.07 TMT, which is 4.92% higher than June 2020 but 4.01% lower than the target for the month. Cumulative crude throughput during April-June, 2021 was 57254.84 TMT, which is 17.74% higher when compared with the production of corresponding period of last year but 2.74% lower than target for the period.

### 4. Production of Petroleum Products

**Production of Petroleum Products** during June 2021 was 19172.25 TMT, which is 2.39% higher than production of June 2020 but 5.18% lower when compared with target for the month. Cumulative production during April-June, 2021 was 59991.63 TMT, which is 15.45% higher when compared with the production of corresponding period of last year but 2.97% lower than target for the period.

- **Shri Hardeep Singh Puri takes charge of the Ministry of Petroleum and Natural Gas as the cabinet minister; Shri RameswarTeli took charge as the Minister of state in the ministry**

Shri Hardeep Singh Puri today took over the charge of the Ministry of Petroleum and Natural Gas as the cabinet minister. Shri RameswarTeli took charge as the minister of state in the ministry.

Shri Puri on the occasion made the following statement:

"Today, I feel honoured by the trust reposed by the Hon'ble Prime Minister, Shri Narendra Modi Jee who has made me the Cabinet Minister of this important ministry. Shri Dharmendra Pradhan Jee's are big shoes to fill.

The work of this Ministry touches each and every citizen in the country directly or indirectly. The energy issues in this Ministry have immense potential and several challenges. The need to adapt to changing times, adopt new technologies and to be in consonance with the energy transition taking place across the world, provides a fascinating opportunity.

As we transform towards a 5-Trillion economy, energy availability and consumption will be of paramount importance. My focus will be on increasing domestic production of crude and natural gas, in line with the Prime Minister's vision of Aatamnirbhar Bharat.

I will also work towards development of a natural gas-based economy in the country and increase the share of natural gas in primary energy mix of the country to 15% by 2030 as announced by Hon'ble PM."

- **Directorate General of Hydrocarbons overhauls oilfield approval processes, cuts down paperwork**

In a major overhaul, DGH has made it easier for firms to explore and produce oil and gas in the country by limiting the requirement of statutory approvals to only extension of contracts, sale of stake and annual accounts while allowing self-certification and deemed approval for the rest. The Directorate General of Hydrocarbons (DGH), the government's technical arm overseeing upstream oil and gas production, said procedures and processes for oil and gas blocks awarded under nine bids round of New Exploration Licensing Policy (NELP) and pre-NELP blocks are being simplified and standardised.

DGH undertook a review of processes of various approvals and submission of documents under Production Sharing Contracts (PSC) for NELP and pre-NELP blocks. As many as 37 processes and procedures were required to be followed by a firm exploring oil and gas in a block awarded under NELP or pre-NELP rounds. These have now been cut to just 18. Self-certification has been allowed in half of them, including for declaring a discovery as commercially viable as well as on requirement of submission of quarterly reports, insurance and indemnity and bank guarantees. DGH has allowed deemed approval on expiry of 30 days of submission of self-certified documents on the annual work programme, appraisal and field development plan or its revision.

- **Govt permits 100% FDI in oil & gas PSUs approved for disinvestment**

The Department for Promotion of Industry and Internal Trade (DPIIT) issued an executive order to allow 100 per cent foreign direct investment (FDI) under automatic route for oil and gas PSUs, in case an in-principle approval for strategic disinvestment has been approved by the government.

The development was followed by the Union Cabinet's approval regarding the same on July 22. The move will expand the scope for FDI in the privatisation of Bharat Petroleum Corporation Ltd (BPCL) and enable the sale of the government’s 52.98 per cent stake in the company to a foreign buyer. It will also open the door for FDI in other public sector companies in the oil sector put up for privatisation.

“The above decision will take effect from the date of FEMA notification,” an official statement said.

The policy will be applicable to ‘exploration activities of oil and natural gas fields, infrastructure related to marketing of petroleum products and natural gas, marketing of natural gas and petroleum products, petroleum product pipelines, natural gas/pipelines, LNG regasification infrastructure, market study and formulation and petroleum refining in the private sector, subject to the existing sectoral policy and regulatory framework in the oil marketing sector and the policy of the government on private participation in the exploration of oil and the discovered fields of national oil companies'.

The FDI limit will be 49 per cent, via automatic route, for ‘petroleum refining by the PSUs without any disinvestment or dilution of domestic equity in the existing PSUs’. Before the changes were made, 49 per cent FDI was allowed in the public sector refining and 100 per cent in the private sector.

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