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FEDERATION OF INDIAN PETROLEUM INDUSTRY

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POLICY & ECONOMIC REPORT OIL & GAS MARKET

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Executive Summary

In the throes of the biggest lockdown ever experienced, the global economy is set to witness its worst year since the Great Depression of the 1930s. The International Monetary Fund which had forecasted a moderate global growth of 3.3 per cent this year, way back in January 2020, before COVID-19 disrupted normal life and emerged as a great threat to public health, has now stated that there is all possibility of a 3 per cent shrinkage in the global economy this year, before rebounding in 2021 with 5.8 per cent growth. The rebound is of course subject to the nature and pace of recovery. The economic activity has been brought to a total standstill with far-reaching measures to contain the pandemic such as lockdowns, business shutdowns, social distancing and travel restrictions. It is estimated that the cumulative loss to global gross domestic product is expected to be around USD 9 trillion.

Adding panic to pandemic, the havoc created by crude prices has affected oil-exporting countries to a grave extent. With demand shriveling up due to closure of world’s economies, shipments are being turned away due to storage gluts.

Unfortunately, for India, gains from lower crude oil prices could not be realized due COVID-19 related lockdown since the current fall in global crude oil prices is not a pure positive supply shock, which benefits oil consumers like India but is also a result of a weak demand induced shock and hence the positive impact on growth gets somewhat offset. The benefits from lower crude prices to India’s fiscal position will be limited as tax collections to the government from the petroleum sector get affected due to slowdown in economic activities owing to Covid-19 shock.

Crude oil production during March 2020 was 2697.42 TMT, which is 13.97% lower than target, and 5.50% lower when compared with March 2019.

Natural gas production during March 2020 was 2411.16 MMSCM, which is 21.89% lower than the monthly target and 14.38% lower when compared with March 2019. Cumulative natural gas production during April-March, 2019-20 was 31179.96 MMSCM, which is 9.76% and 5.15%, lower than target for the period and production during corresponding period of last year respectively.

Refinery production during March 2020 was 21203.58TMT, which is 8.59% lower than the target for the month and5.74% lower when compared with March 2019. Cumulative production during April-March, 2019-20 was 254385.82 TMT, which is 0.14% and 1.1% lower than target for the period and production during corresponding period of last year respectively.

More than 1.51 crore free LPG cylinders have been distributed so far to the PMUY beneficiaries under the Pradhan Mantri Garib Kalyan Yojana(PMGKY) in this month. Under the PMKGY, several relief measures have been announced by the central Government for the welfare of poor, and one of the important component of the Yojana is to provide 3 LPG cylinders (14.2 kg) free to over 8 crore beneficiaries of the Pradhan Mantri Ujjawala Yojana(PMUY) over the period of April to June 2020.

In perhaps the most far-reaching easing of rules, the government has simplified procedures and gas exploration and production by providing for self-certification for a host of compliance, such as a discovery notification and deemed consent for investment in fields in a stipulated time.

COVID-19 is pushing many countries towards a very sudden and unprecedented recession and is set about to make huge changes. Few industries will avoid being reformed, restructured or removed. Agility, scalability and automation will be the watchwords for this new era of business, and those that have these capabilities now will be the winners. COVID-19 will force a rebirth of many industries as we all sit at home in lockdown, re-assessing and re-imagining modes of consumption, supply, interaction and productivity.

Policy & Economic report – Oil & Gas Market

Economy in Focus

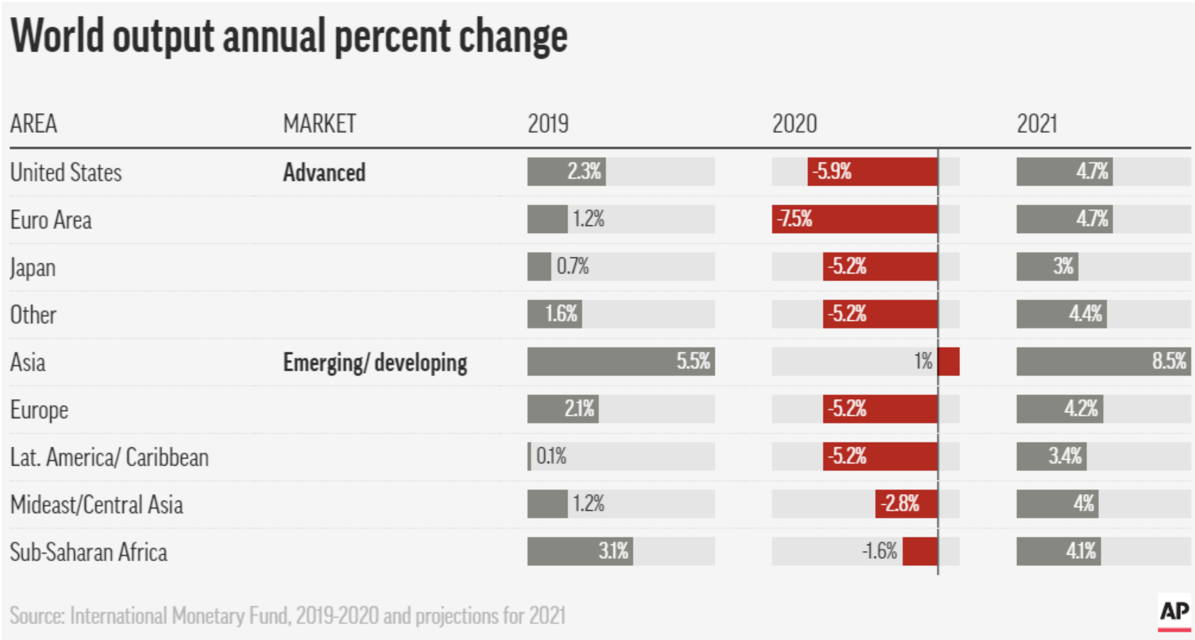
1. Worst recession since Great Depression to shrink global economy by 3 per cent: IMF

The International Monetary Fund (IMF) has forecasted that, in 2020, the global economy is set to witness its worst year since the Great Depression of the 1930s.

A recent IMF report mentions that the global economy may shrink 3 per cent this year — far worse than its 0.1 per cent dip in the Great Recession year of 2009 — before rebounding in 2021 with 5.8 per cent growth. It acknowledges, though, that prospects for a rebound next year are clouded by uncertainty.

The report represents a sharp downgrade by the IMF. In its previous forecast in January, before COVID-19 emerged as a grave threat to public health and economic growth worldwide, the international lending organization had forecasted moderate global growth of 3.3 per cent this year. But far-reaching measures to contain the pandemic — lockdowns, business shutdowns, social distancing and travel restrictions — have suddenly brought economic activity to a near-standstill across much of the world. The cumulative loss to the global gross domestic product, the broadest gauge of economic output, could amount to USD 9 trillion — more than the economies of Germany and Japan combined.

In its latest outlook, the IMF expects economic contractions this year of 5.9 per cent in the United States, 7.5 per cent in the 19 European countries that share the euro currency, 5.2 per cent in Japan and 6.5 per cent in the United Kingdom. China, where the pandemic originated, is expected to grow at 1.2 per cent growth this year. The world's second-biggest economy, which had gone into lockdown, has begun to open up well before other countries. Worldwide trade will plummet 11 per cent this year, the IMF predicts, and then grow 8.4 per cent in 2021.



The report underlines that emerging markets and low-income nations across Africa, Latin America and much of Asia were at especially high risk. In April, IMF has already approved USD 500 million to cancel six months of debt payments for 25 impoverished countries.

The IMF cautioned that its forecast is shrouded by unknowns. They include the path that the virus will take; the effectiveness of policies meant to contain the outbreak and minimize the economic damage; and uncertainty over whether, even many months from now, people will continue to isolate themselves and depress spending as a precaution against a potential resurgence of the virus.

On the brighter side IMF noted that policymakers in many countries have engineered what it calls a “swift and sizable” response to the economic crisis. For some countries, which can’t afford sufficiently aggressive rescue plans, IMF is prepared to commit its USD 1 trillion in lending capacity to support nations that need help in dealing with the pandemic.

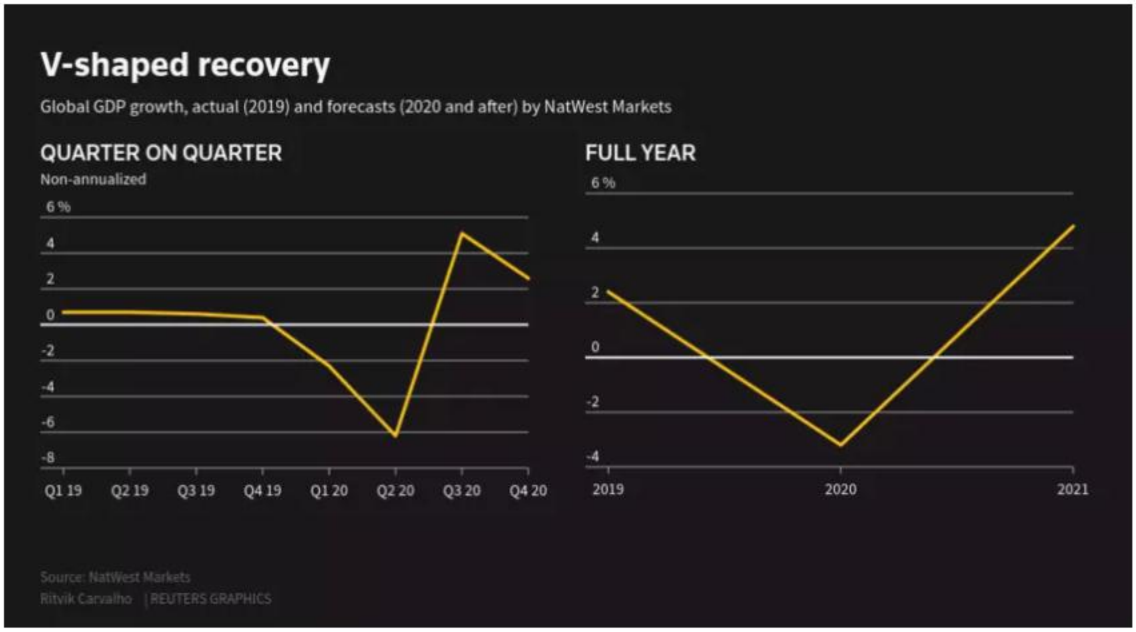
2. Possible recovery scenarios from COVID’19 downturn

In a recently conducted poll of 50 economists by Reuters, some forecast the world economy will shrink as much as 6 per cent in 2020. The other extreme was a prediction for 0.7 per cent growth. The average was a 1.2 per cent contraction. Mr Carsten Brzeski, global head of macro at ING Research, dubbed the picture “a virus-driven ice age”. “It is an abrupt stop of economic activity, from 100 to zero in just a few days or weeks,” he added

Below are some of the discussed scenarios:

a. “V” shaped recover

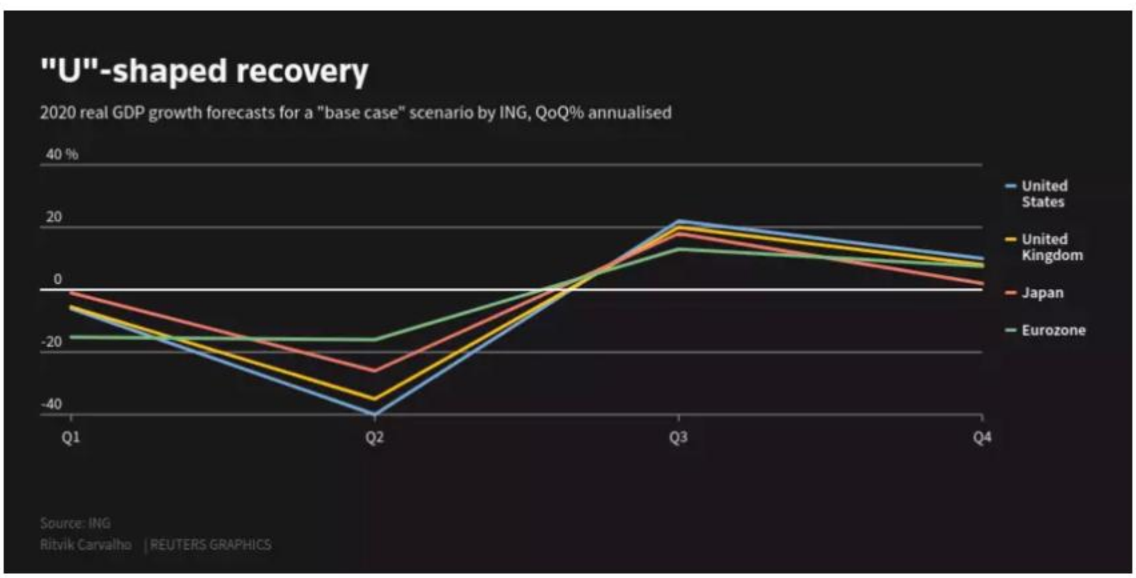
The best case outcome: when a growth plunge is followed by an equally sharp recovery. The April-June GDP contraction will likely be on a scale not seen for decades. But fiscal and monetary stimulus - over USD 10 trillion and counting - could aid an equally swift rebound.



Source: NatWest Bank

b. "U" shaped recovery

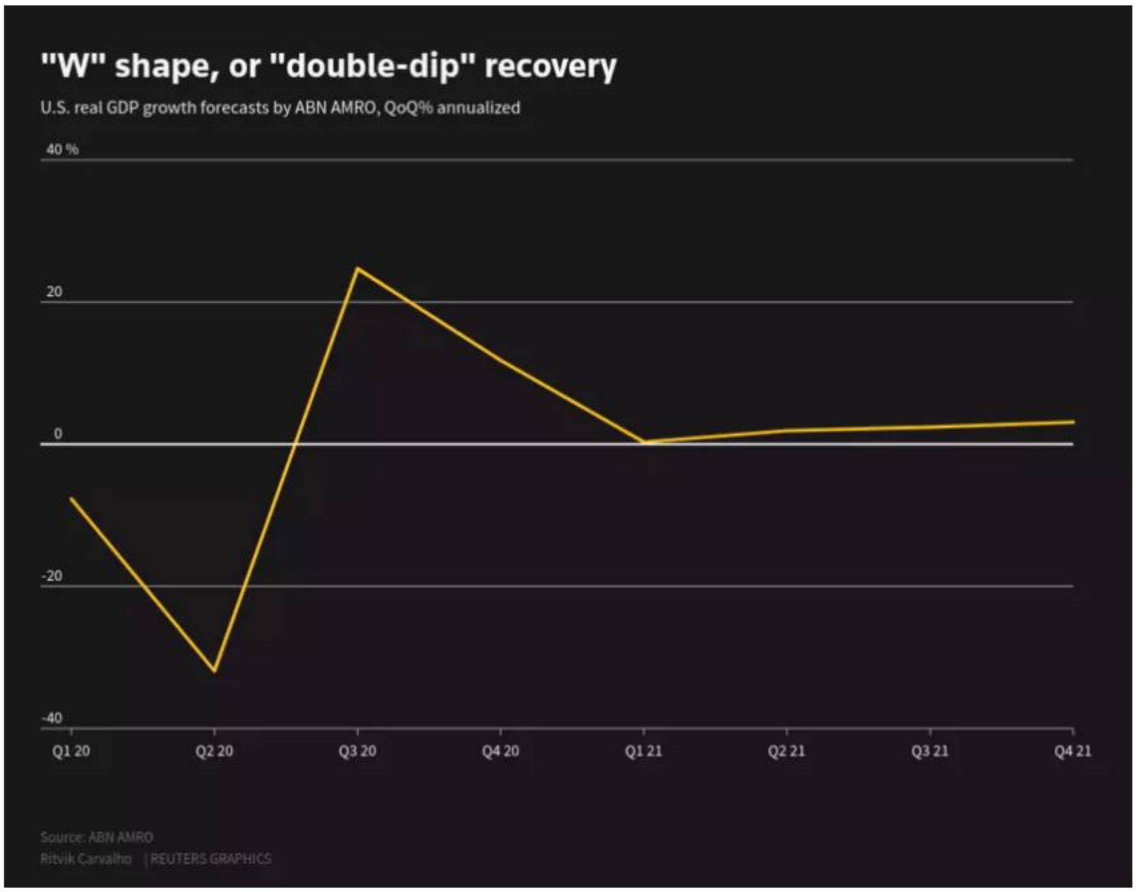
When recovery takes more than a couple of quarters. Because economies have suffered a faster and deeper contraction than in 2008-09, this may be the likeliest outcome. U is the base case for many experts who believe that the lockdowns' impact will last for a while after they are lifted.



Source: Natwest bank

c. "W" shaped recovery

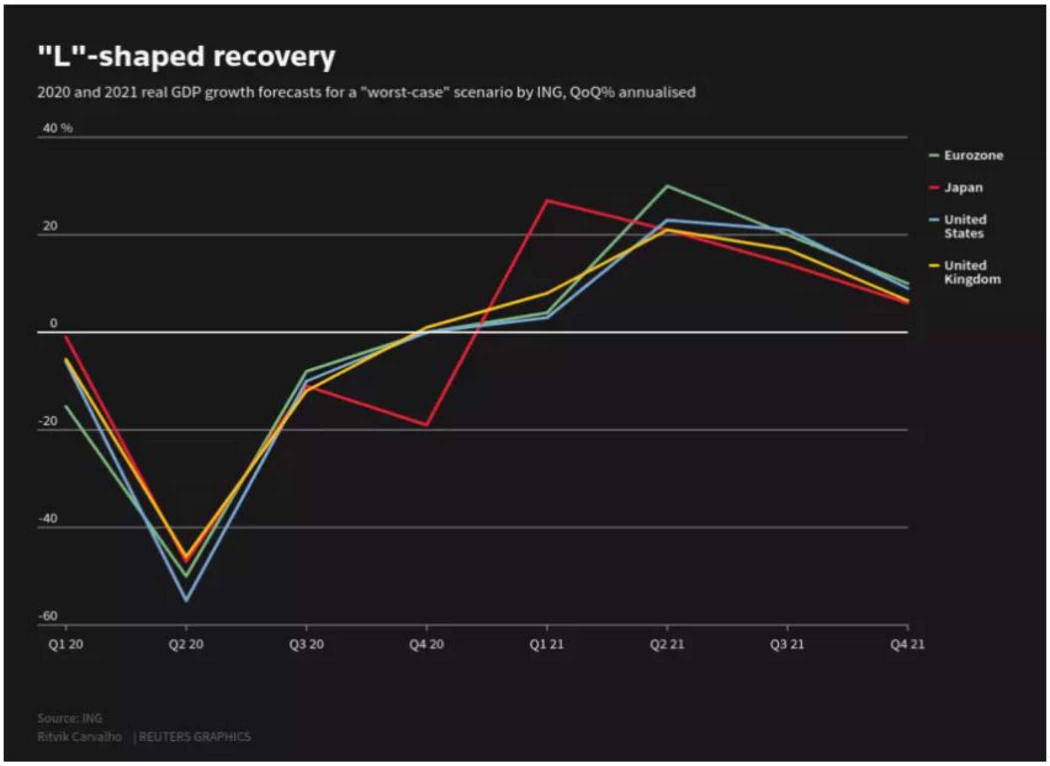
Double-dip - if the easing of lockdown restrictions initially boosts activity but the effects of unemployment and corporate bankruptcies then start to filter through. This may happen also if new coronavirus cases emerge as has been the case in some Asian countries.



Source: NatWest Bank

d. "L" shaped recovery

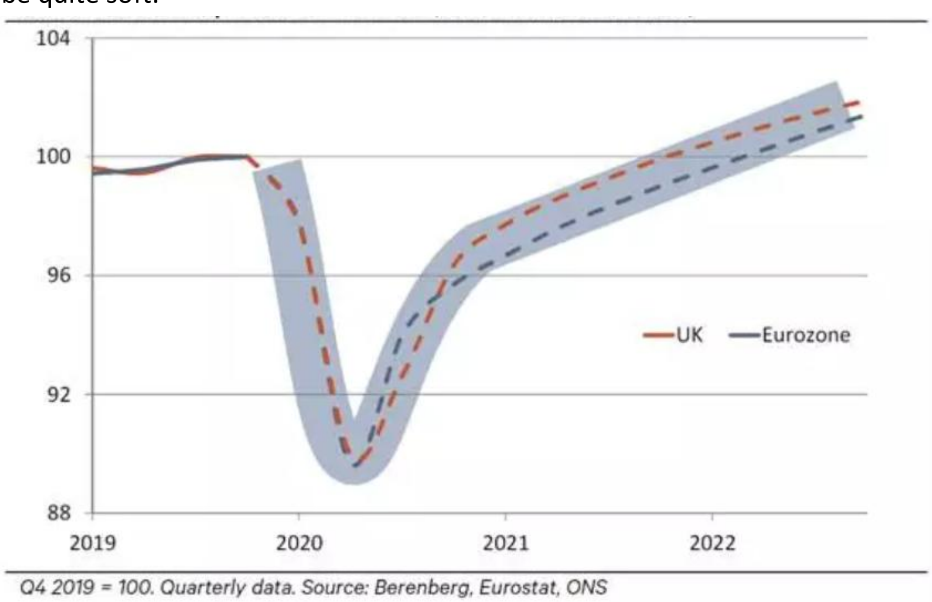
When growth plunges and does not recover for some time. For this to occur, the global coronavirus tally needs to continue rising, forcing protracted lockdowns. That scenario looks unlikely, given Wuhan, the Chinese city where the virus emerged, has ended lockdowns after just over two months. But L-shaped outcomes may be a risk for those emerging markets less able to engage big stimulus and often rely on commodity exports.



Source: NatWest Bank

e. **"Swoosh"**

That implies a sharp downturn, then gradual recovery as lockdowns are eased more gently than they were imposed. With consumer spending possibly impaired by a higher propensity to save and serious potential curbs on investment, we think the likeliest scenario is for the world economy's rebound post lockdown to be quite soft.



Source: World Economic Forum

3. Historically low crude prices to weigh heavy on oil exporting economies

The West Texas Intermediate, the benchmark for U.S. crude prices, tumbled into negative territory on April 21, 2020 for the first time in history and touched USD - 37.63 per barrel. The collapse of oil prices, stirred by the pandemic and the Saudi-Russia price war, leaves the world's top oil-exporting countries facing an uncharted recovery path to navigate.

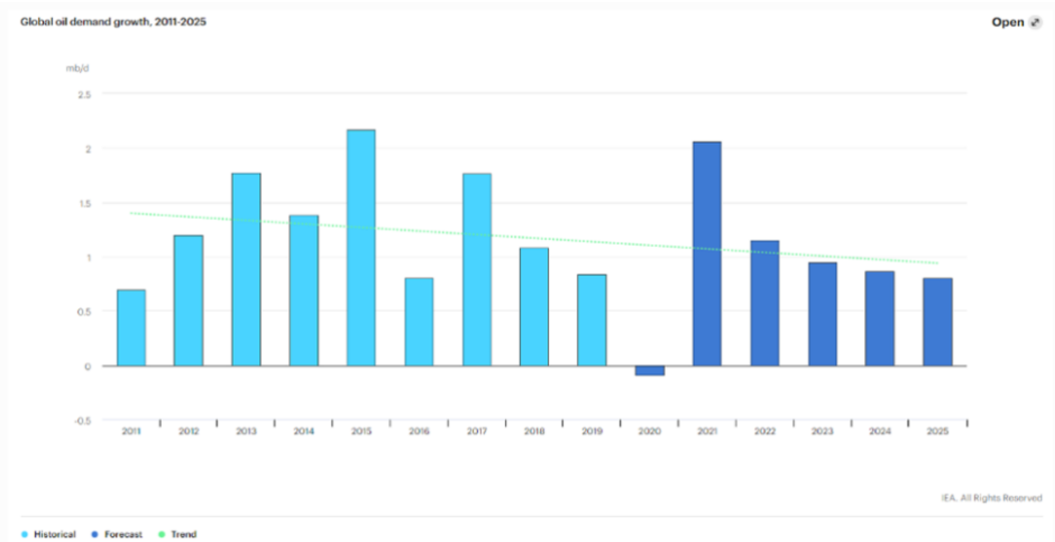
Countries like Saudi Arabia, UAE and Kuwait depend on higher oil prices for government spending and social programs. Iraq, Iran and Venezuela face the added threat of possible social unrest if oil prices remain at current levels. In Africa, the pandemic stopped the Nigeria growth story. In North America, the U.S. and Canada appear poised to weather the storm but the path to recovery will be painful.

A return to sustainable prices will require a recovery of the global economy as well as disciplined production by OPEC and other major producers. The longer prices remain at these extreme lows, the more capital-starved the operations become, reducing production capacity. This may well prove to be the beginning of what will be a challenging period for the industry.

What led to the fall in demand?

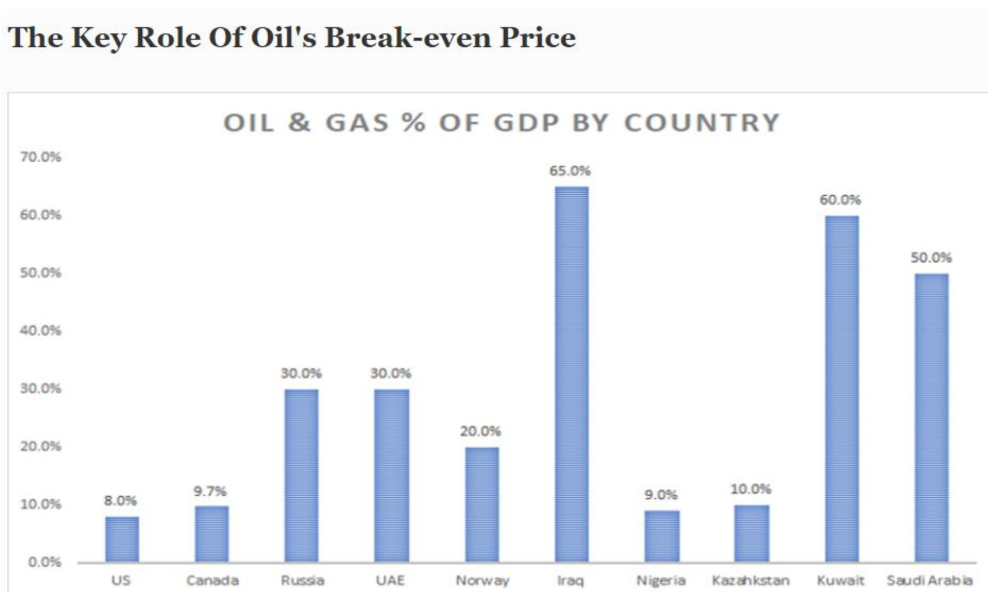
Demand has shriveled with the world's economies shut down by the pandemic, according to the International Energy Agency’s market report for April. The USA, Europe, India, and China are turning away shipments because of storage gluts. Exporters have little choice but to pay midstream gathering and logistics oil companies to take the commodity off their hands. Companies like Enterprise Product Partners in Texas have begun to convert facilities to accommodate the demand slipover.

Global Oil Demand Growth (Mbpd)



The International Energy Agency predicts low oil demand through 2020, but rising into 2021 and ... [+]
IEA

China canceled 10 shipments from Saudi Arabia for April and May. OPEC countries Nigeria, Angola and Iraq as well as Russia, not in the oil-producing cartel, are facing additional cancellations. The IEA suggests that oil demand will remain negative at least until the second half of 2020. In the coming weeks, analysts expect additional emergency measures from the G20 nations and OPEC, as efforts in the preceding two weeks have fallen short. The historic price swoon, with no end in sight, threatens the stability of the entire oil industry, a crucial cog in the seized up global economy and a central player in any recovery effort. In this scenario of low oil demand, the supply glut from oil exporting countries will increase the revenues and margins for terminal and large crude oil vessel owners in Q2 2020.



Oil is a significant part of the GDP for the top oil-producing countries according to Trading ... [+] TRADING ECONOMICS

The fiscal break-even price for oil — the price needed to balance a country's budget — is of central importance to exporting countries. Low crude prices threatens the economic stability and spending budgets of most oil-producing countries. Especially vulnerable countries like Venezuela, which is almost entirely dependent on oil revenue, could see additional political turmoil or renewed shortages of basic necessities.

The fiscal break-even oil prices for the leading Middle-Eastern countries needed to balance their budgets are the following: Saudi Arabia at USD 91, Oman at USD 82, Abu Dhabi USD 65, Qatar at USD 55, Bahrain at USD 96, Iraq at USD 60; and Iran at USD 195.

In Africa, Algeria needs USD 109 per barrel, Libya requires USD 100 per barrel, Nigeria needs USD 144 per barrel, and Angola requires USD 55 per barrel, according to IMF data.

For the non-OPEC countries of Russia, Mexico, and Kazakhstan, an average per barrel, Brent crude price of USD 42, USD 49 and USD 58, respectively, is needed this year to balance their budgets.

The oil-exporting industries in the USA, Canada, and Norway need USD 48, USD 60, and USD 27 per barrel, respectively, to survive.

US and Canada

It is still unclear how many of the 10 million oil and gas sector jobs in the U.S., nearly 6 per cent of total employment, will disappear because of falling prices. For the U.S. and Canada, oil industry jobs impact consumer spending, which in turn drives GDP. Oil and gas jobs in the U.S. average USD 102K annually. The COVID-19 pandemic destroyed demand across the entire energy market, and the actions of Saudi Arabia and Russia intensified the already difficult market conditions. With energy companies contributing 8 per cent of the US GDP and 2.6 per cent of the S&P 500 Index, the impact on the US will be felt into 2020 and maybe beyond. The average earner in the energy sector resides securely in the upper-tier of the middle-class. The structural damage to the industry will lead to significant job losses and negatively impact consumer spending to a greater degree than meets the public eye.

Russia

The pandemic triggered deep reductions in demand from Russia's largest customers China and the European Union. The cuts were particularly painful as Russia depends on oil shipments for nearly half of total annual exports. Current oil prices undermine Russian efforts to protect its economy, including the recent landmark deal with Saudi Arabia to cut crude production as well as a government's stimulus package.

With approximately USD 124 billion in its sovereign wealth fund, the state-owned investment fund, Russia claims it can survive oil prices between USD 25 and USD 30 per barrel for up to a decade. This price range, however, will result in an annual budgetary headwind between USD 40 billion and USD 50 billion. The oil sector accounts for 30 per cent of Russian GDP, putting at risk over one-million jobs or 1.5 per cent of the workforce. The World Bank's preliminary assessment is that the pandemic could negatively impact to Russia's GDP and send unemployment skyrocketing.

Saudi Arabia

Saudi Arabia's oil industry accounts for 70 per cent of export earnings and half of GDP. With approximately USD 500 billion in their sovereign wealth fund the Saudis have the cash to ride out low oil prices for some time, according to independent analysis from the Acuity research.

Saudi Arabia expects a rebound to USD 40 per barrel as a result of its deal with Russia. With oil at this price, the kingdom planned to take a loss of USD 40 billion annually from total revenues. Even before the Russia-Saudi price war, the government had asked for state agencies to cut their budgets by up to 30 per cent. The Saudi government will likely cut capital expenditures and put on hold major programs to diversify the country's dependence on hold like Prince Mohamed Bin Salman's Vision 2030. With over 1 million people employed by the oil industry, the government will have to increase spending from its sovereign wealth fund. Given the population's reliance on social programs, Saudi Arabia faces internal unrest if cuts run too deep.

Iraq

After Saudi Arabia, Iraq is the second-biggest oil exporter in OPEC. The Iraqi government currently employs nearly 8 per cent of the country's population with 90 per cent of government spending coming from Iraqi oil revenues. Similar to Iran, the pandemic effectively closed the Iraqi private sector economy since March. Iraq does not have sovereign wealth funds like many of its Middle-Eastern counterparts to fall back on. Essential public services like healthcare, education and policing, among others, do not exist. If oil continues to remain low, Iraq may see more social unrest even after the pandemic ends.

UAE, Qatar, and Kuwait

The unemployment rates across the UAE, Kuwait, and Qatar could rise because of the pandemic, but sovereign wealth funds in the countries provide a short-term cushion. The IMF expects the region's economies to contract this year. "Vulnerabilities are high in certain countries, especially those with high levels of unemployment and low growth," said Jihad Azour, the IMF's Middle East and Central Asia director.

Mexico

Mexican President Andres Manuel Lopez Obrador said on Tuesday Mexico would take more austerity measures in the face of the oil price collapse. He also vowed there would be no layoffs of government employees. It was only in March that the Mexican oil industry seemed to defy the Saudi-Russia price war with Pemex (Petroleos Mexicanos) staying on track to double drilling to 423 wells by 2020.

Nigeria

Low prices put the brakes on Africa's fastest-growing economy. With oil making up roughly 9 per cent of GDP, Nigeria has a break-even oil price of USD 57 according to independent analysis from the oil and gas research team at Acuity Knowledge Partners. Oil accounts for over 90 per cent of exports, a third of banking sector credit, and half of government revenues. A recent IMF report expects Nigeria's GDP to drop below zero by 3.4 percentage points this year, with the country holding up to 50 million barrels of unsold crude oil by May. Unemployment will rise by about 25 per cent to approximately 25 million people in 2020, up from 20 million people in 2018. Nigeria has the largest population in Africa with a population estimated at 205 million by the United Nations.

Nigeria's economy will be further hobbled following the lowering of the country's credit rating by the S&P rating firm, which will limit capital investment. The country has a small sovereign wealth fund of approximately USD 2 billion that will used spending. The government is considering deep cuts given the oil glut.

4. Post pandemic world will bring tectonic shift to workplaces

COVID-19 is pushing many countries towards a very sudden and unprecedented recession. This crisis is set to bring about some huge changes. Few industries will avoid being either reformed, restructured or removed. Agility, scalability and automation will be the watchwords for this new era of business, and those that have these capabilities now will be the winners.

Thanks to government stimulus packages, liquidity is coming back to the market. It will keep enough of the economy afloat so that it can climb out of recession rapidly once the various lockdowns are lifted. But the way much of it is structured means that it will likely benefit already better capitalized larger businesses, over the smaller operators who may struggle.

Indeed, one could see the current times as the first real test of the digital-first business mantras that have been extolled over the first part of this century. COVID-19 will force a rebirth of many industries as we all sit at home in lockdown, re-assessing and re-imagining modes of consumption, supply, interaction and productivity. It could well be expected that there will be paradigm shifts rather than just existing trends either accelerating or decelerating.

For instance, the shift from cash to digital payments is clearly accelerating. Over 31 countries have lifted contactless payment limits this year to support social distancing measures. In the UK, ATM usage was already falling between 6 per cent and 14 per cent a year, but has now plummeted by more than half.

Workplaces are already seeing a super-charging of the nascent 'bring your own device' trend in business technology. As people scramble to work and socialize remotely, previously niche tools such as Zoom, Slack, Microsoft's Teams, and even the Houseparty app, are suddenly supporting millions of personal and corporate interactions every minute.

Those businesses that have designed their solutions to use the full potential of cloud computing, will not buckle under the pressure. For instance, the cloud gives businesses easy access to digital payment methods. It has enabled companies to continue working, by rapidly and securely providing access to business applications to their employees working at home. Yet it also provides financial flexibility, allowing those seeing a slow-down to wind down the technology costs of business lines that are facing challenges.

Meanwhile, supply chains are having to reconfigure themselves in real time. As the demand for personal protective equipment (PPE), ventilators and other medication spikes, manufacturers are having to retool and reinvent themselves. For instance, the Royal Mint turned its hand to producing medical visors, while Dyson and many other manufacturers, large and small, are producing ventilators or PPE.

As large grocery retailers struggle to manage queues of disgruntled customers, smart local restaurants have been quick to turn themselves into retailers – repurposing their restaurant supply chains towards end consumers.

This combination of scalable and agile capabilities is what will define the short and medium-term success of businesses, whether large or small. But in the longer term, change will have to be more fundamental. Resilience, combined with agility, must be the new focus of business leaders as we all emerge from this crisis.

To create long-term resilience we will likely see further robotic automation and artificial intelligence (AI) within our supply chains. These technologies reduce manual intervention and hand-offs, cutting transmission risks, and reducing the reliance on humans to work face-to-face. They can also enable production to scale and shrink in response to sudden demand.

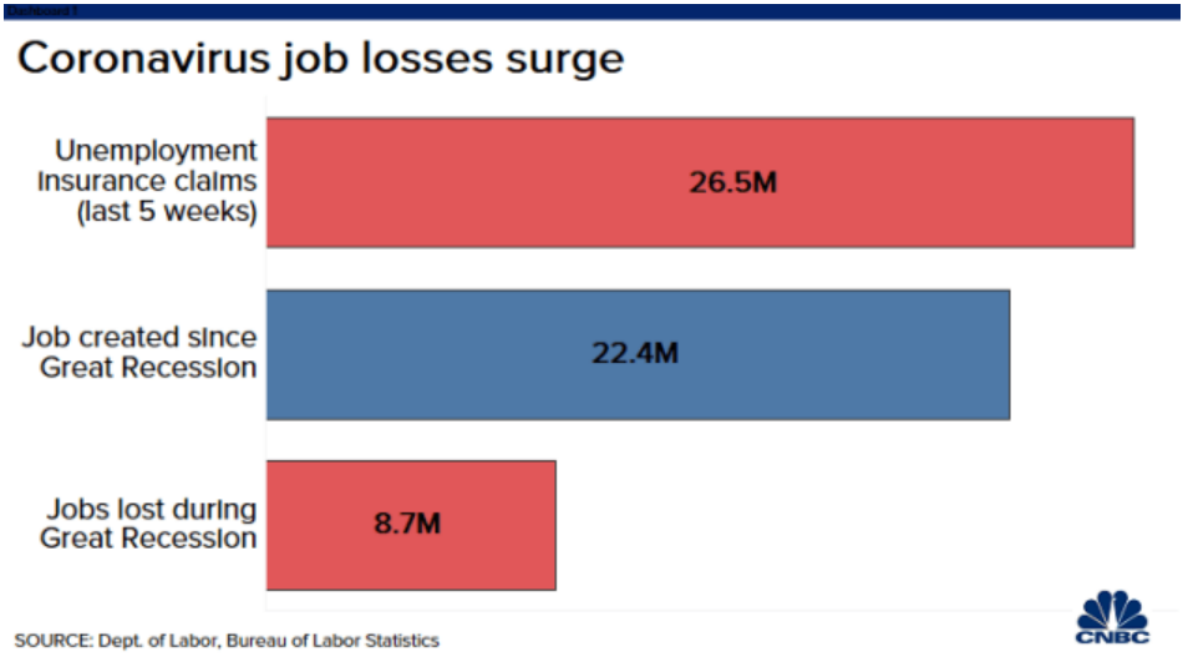
Indeed, Government interventions may have unintentionally accelerated this trend. Many countries' fiscal stimuli would amount to the largest scale experiment in Universal Basic Income (UBI) to date. UBI is considered by many to be a prerequisite for a successful AI-driven economy – by enabling businesses to potentially replace humans without impacting their welfare.

It's clear that this crisis will cull a lot of outdated practices, yet many more than we might think will continue. We will always want to travel, to eat out, to be entertained, and to have experiences in person. In a post COVID world, many of these activities will either change or will be delivered by different brands, which we are still unaccustomed to.

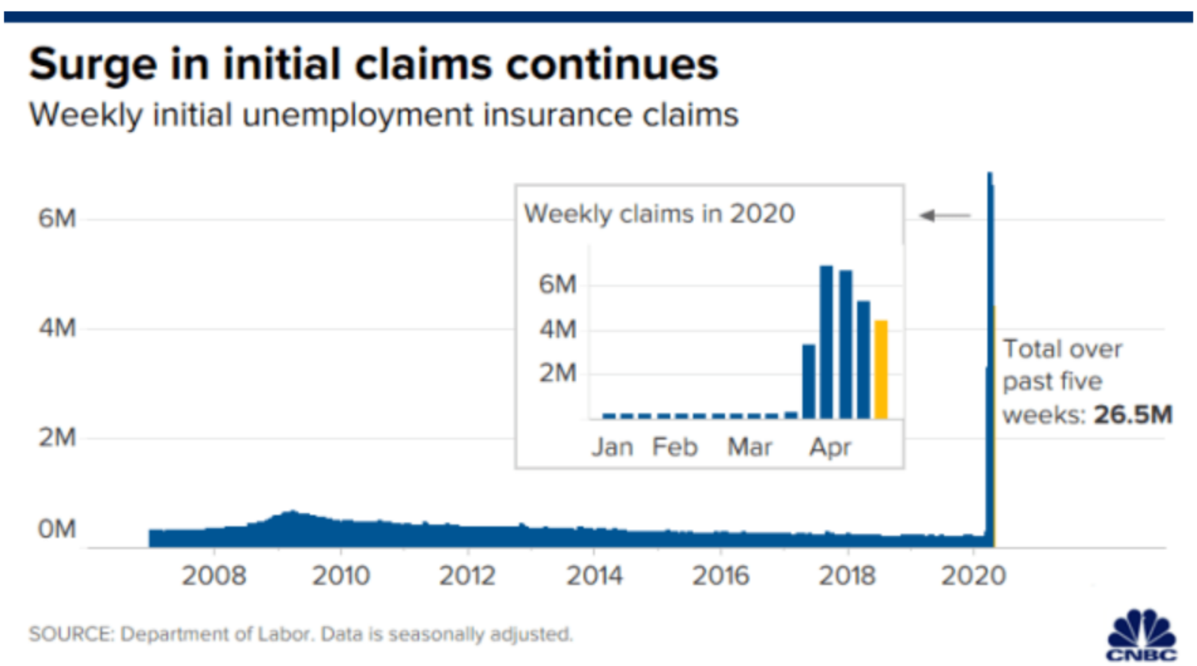
The world will emerge from this period stronger, wiser and more connected as a global society. Resilience will be at the forefront of every strategy, yet it is agility that will ensure competitiveness, and an ability to respond to the unexpected. To achieve this, businesses will have to re-evaluate where they must be strong and where they must be flexible.

5. COVID 19 wipes off jobs gained over a decade within 5 weeks in the US

It took only five weeks for the US economy to wipe out all the job gains it added over the last 11 years. Coronavirus-induced business closures throughout the US have fueled the number of Americans applying for state unemployment benefits. In the last week of April, new jobless claims totaled 4.42 million, the US Labour Department reported.



Combined with the four prior jobless claims reports, the number of Americans who have filed for unemployment over the previous five weeks is 26.45 million. That number exceeds the 22.44 million positions added to nonfarm payrolls since November 2009, when the U.S. economy began to add jobs back to the economy after the Great Recession.



The rise in job losses is unprecedented and has wiped out more than a decade's worth of gains in just five weeks. The Labour Department's latest nonfarm payrolls report for March showed droves of layoffs at restaurants and bars, which have been closed by stay-at-home directives. The March nonfarm report showed payrolls plunged by 701,000 last month, marking the first decline since 2010 and the worst fall since March 2009. The unemployment rate jumped nearly a full percentage point to 4.4 per cent from 3.4 per cent. As the economy begins to reopen in May, whether the local shop or the factories that are lining up to do so in coming weeks, US is likely to see the peak in claims as people get back to work.

6. COVID 19 – An existential threat for Women and Minority owned businesses in the US

Small businesses in the US are facing two major crises. The first is the sudden shock to small businesses induced by COVID-19—is acute and immediate. A recent analysis indicates that over 50 per cent of small businesses with employees face immediate or near-term risks due to the pandemic. The second crisis—the structural racial and gender disparities in business ownership is continuous and long-standing, but equally damaging. People of colour represent about 40 per cent of the population, but only 20 per cent of the US's 5.6 million business owners with employees. The US could have millions more businesses if women and minorities became entrepreneurs at the same rate as white men.

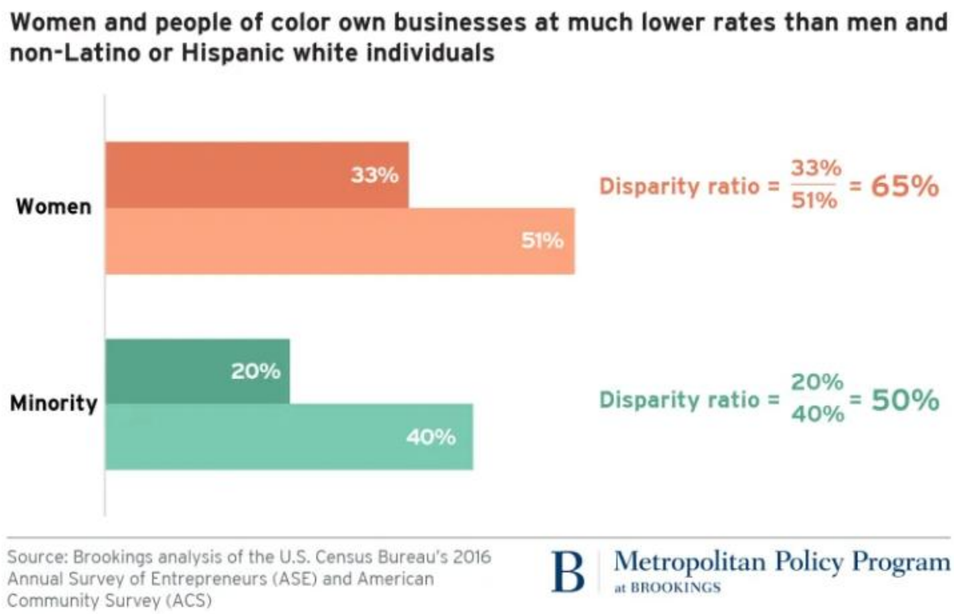
Both crisis result in millions of "missing businesses," but one has generated far more attention than the other. The COVID-19 small business crisis has inspired a historic policy response because the nation is facing a massive potential disruption to a well-known status quo. Structural exclusion that limits entrepreneurship is no less insidious than COVID-19's impact on small businesses, but because it is already a status quo that's been built up over decades, there is not the same urgency to address it even if closing these disparities would result in millions of new small businesses.

This brief reviews how these two crises are interlinked and mutually reinforcing. It recaps the state of racial and gender equity within business ownership, the challenges that minority- and women-owned business enterprises (MWBEs) faced during the depths of the Great Recession, and how the COVID-19 small business crisis may disproportionately impact MWBEs.

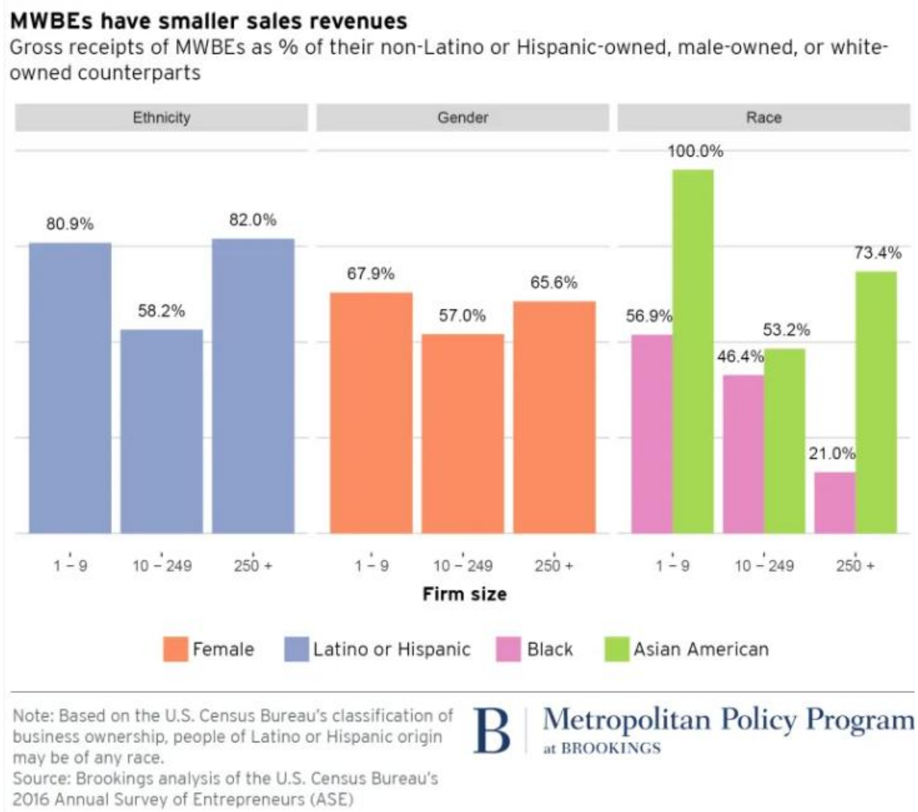
Millions of 'Missing Businesses'

Demographic disparities in business ownership are well-documented. Research shows that a variety of factors limit women and people of colour as they consider starting and growing businesses, including disparities in educational attainment, personal wealth, and access to capital. These are structural impediments to entrepreneurship, and do not reflect the inherent entrepreneurial abilities or interests of different groups.

Historical discrimination that persists today has further exacerbated the problem. It has been found that highly rated businesses in Black-majority neighbourhoods earn less revenue than businesses with similar ratings outside of Black neighbourhoods. This translates to a nationwide annual revenue loss as high as USD 3.9 billion. This structural exclusion has served as a drag on overall business ownership. As stated earlier, people of colour are about 40 per cent of the population, but only 20 per cent of the nation's 5.6 million business owners with employees. If ownership shares matched population shares, people of colour would own 50 per cent more businesses than they currently do now. Put another way, the "disparity ratio"—the ratio of business ownership share to population share—is 50 per cent for people of colour. Similarly, women are 51 per cent of the U.S. population but only 33 per cent of business owners with employees, a disparity ratio of 65 per cent.



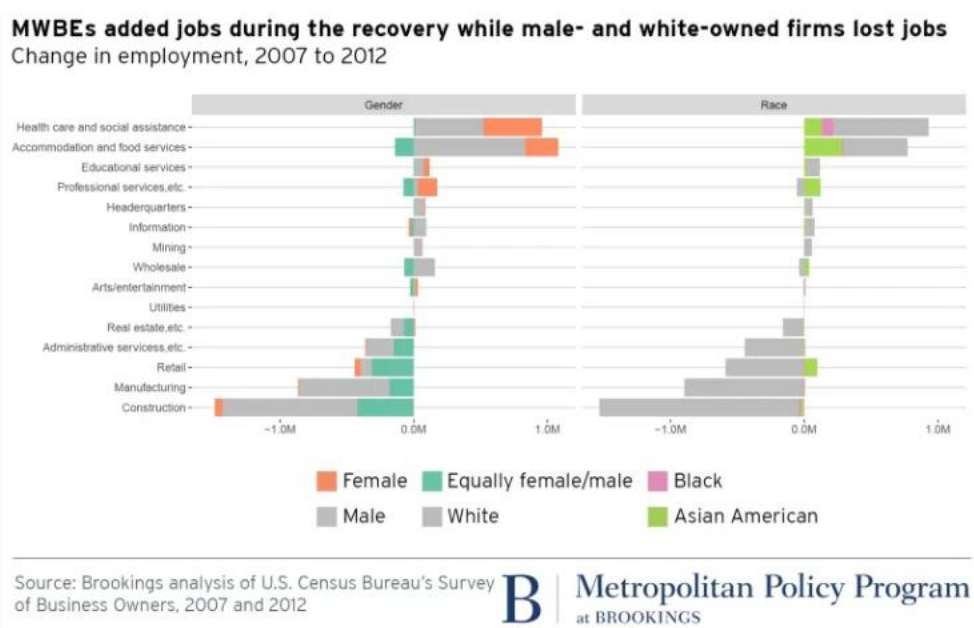
These same forces also limit the growth and expansion of MWBEs. On average, MWBEs have 30 per cent fewer employees compared to male- or white-owned businesses. Average sales of an MWBE are about 50 per cent to 90 per cent of their counterparts, controlling for employment size. All this adds up to lost jobs, lost income, and lost wealth-building among these groups and for the economy overall.



Economic shocks such as COVID-19 or the Great Recession have disproportionate impacts across sectors, communities, and individuals. To understand what happened to MWBEs during the last economic shock, we examined the outcomes for all businesses (regardless of size) owned by women and people of colour during the Great Recession. Importantly, most of these businesses are small—the average MWBE has eight employees, and 98 per cent of all MWBEs had fewer than 50 employees as of 2016.

Small businesses experienced disproportionate job losses during the Great Recession, but the pain was even greater for female- and Black-owned businesses. In one study, the Census Bureau found that about 60 per cent of white-owned businesses that existed in 2002 "survived" until 2011, compared to 49 per cent of Black-owned businesses. Similarly, 61 per cent of male-owned businesses survived until 2011, compared to 55 per cent of female-owned businesses. The unique, housing-induced nature of the Great Recession likely played a role; Black owners relied more on home equity to provide capital for their business, and were therefore more exposed as housing prices declined.

Although MWBEs were more likely to shutter during the Great Recession, they helped stabilize the economy during the recovery period. Nationally, MWBEs added 1.8 million jobs from 2007 to 2012, while firms owned by white males lost 800,000 jobs, and firms equally owned by white men and women lost another 1.6 million jobs. Industry trends and demographic differences in ownership rates within industries partly explain this phenomenon. The Great Recession stalled the construction and manufacturing industries, two sectors that have high shares of white and male owners. Meanwhile, the recovery was largely fuelled by growth in the health care, accommodation, and food services industries, which have higher shares of MWBE ownership.

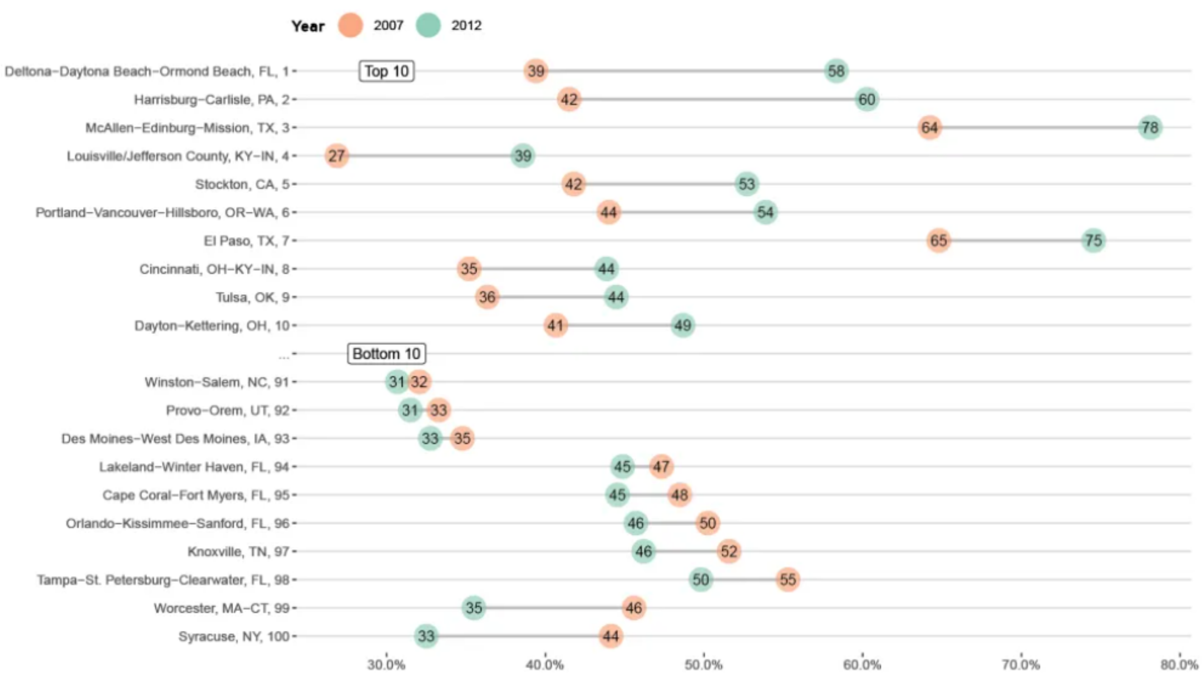


This demographic shift in business ownership was also a response to the fact that people of color experienced higher unemployment rates during the Great Recession. One study examining employment transitions during the recession suggested that those who are unemployed are more likely to start a business during a recession as a means to avoid prolonged unemployment and financial hardship.

The stronger growth of minority-owned businesses in the wake of the Great Recession may also reflect the fact that the non-white population is increasingly responsible for the nation's net population growth. But even after controlling for this changing demographic structure, many metro areas achieved noticeable improvements in their entrepreneurship disparity ratios between 2007 and 2012.

To recap, a disparity ratio of 100 per cent means that the share of people of colour that own businesses is the same as the share of people of colour in the overall metro area's population. While no metro area has achieved full equity, many are showing gains. Between 2007 and 2012, Deltona, Fla. and Harrisburg, Pa. improved their disparity ratio from around 40 per cent to 60 per cent.

Most metro areas made progress in closing the minority business ownership gap, while few deteriorated
Metro areas ranked by changes in minority disparity ratio (%) , 2007 to 2012



Source: Brookings analysis of U.S. Census Bureau's Survey of Business Owners, 2007 and 2012

B Metropolitan Policy Program at BROOKINGS

Congress's signature small business relief program for COVID-19—the Paycheck Protection Program—relies on mainstream financial institutions to deliver loans to small businesses. While this approach allows for scale (and hopefully speed), it also favours existing customers at large banks and may be less relevant to under-banked and unbanked MWBEs. Large banks approve about 60 per cent of loans sought by white small business owners, 50 per cent of loans sought by Latino or Hispanic small business owners, and 29 per cent of loans sought by Black small business owners, according to 2018 data from the Small Business Credit Survey.

Supplemental small business relief funds and technical assistance providers at the local level can help maximize the chances that MWBEs connect to national stimulus. Hybrid rapid response solutions that involve local lenders, community-based organizations, and entrepreneurs can serve as a down payment for longer-term infrastructure to support businesses owned by people of colour.

It's clear that people of colour are underrepresented in entrepreneurship, accounting for only about 30 to 80 per cent of their "fair share" of business ownership across the nation. Now, this long-standing crisis is intersecting with the coronavirus-induced small business crisis. As in the aftermath of the Great Recession, the resilience of MWBEs will be fundamental to the nation's economic recovery, so it is critical for policymakers to maintain their commitments to building more inclusive local economies.

7. Gigabyte Broadband and 5 G will be key to kick start UK economy: Report

A recent report claims that delivering Gigabit connectivity to every corner of Britain could help rebuild the UK economy after the coronavirus lockdown. The report, commissioned by Huawei and featuring input from CityFibre, Mobile UK, Openreach, techUK, Three UK, and Virgin Media, claims that if the UK sticks to its pledge to make the country fully 5G and full-fiber connected by 2025, this could provide a EUR 51.4 billion boost to the economy in the next five years, and EUR 68.8 billion boost by 2030.

However, Assembly Research warned that even a 12-month delay would mean the UK misses out on EUR 9.7bn of productivity benefits, while a two-year delay would see a missed opportunity of EUR 28.7bn.

The report, titled "Delivering Gigabit Britain: Broadband for all", outlines six recommendations to be considered by policymakers in order to reach the 2025 target, such as enabling the right regulatory environment, ensuring sufficient funding for all parts of the country, and committing to a technology-neutral approach to reach the hardest parts of the country in a timely and cost-effective way.

The report also recommends that the government makes the cost of deployment as low as possible, encourage take-up and helps lower investment risk, and supports the market entry and expansion by alternative network operators, while also recognising that competition will vary based on geographical location.

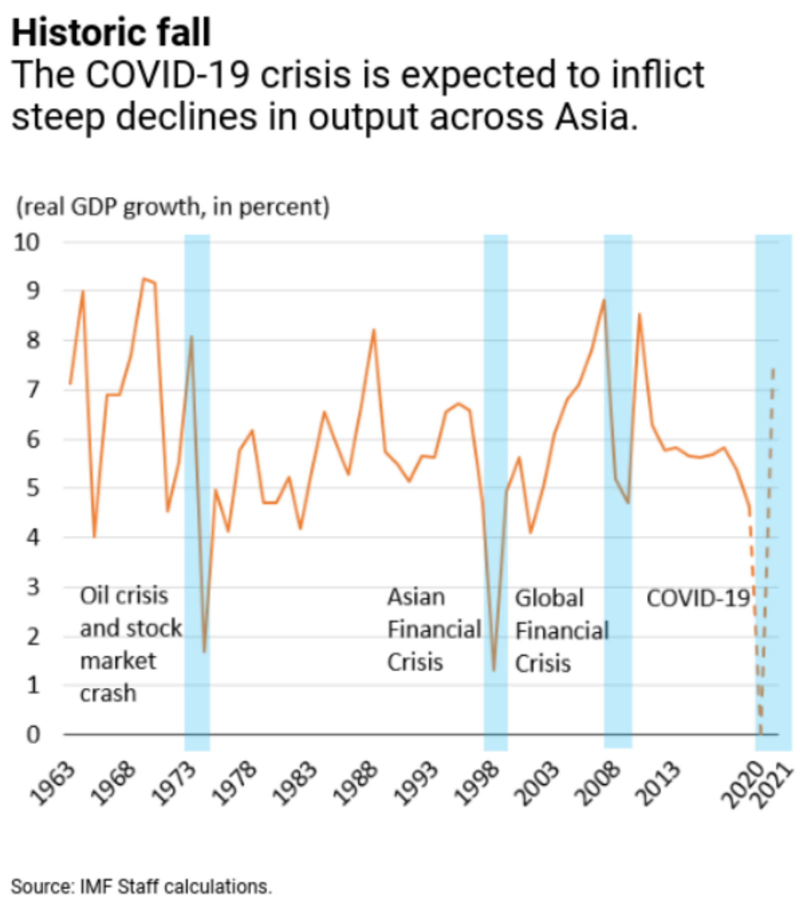
According to Matthew Howett, the founder and principal analyst at Assembly Research, "more work needs to be done to focus on the demand side, to encourage take-up and to help lower the investment risk for the operators". He added "the final recommendation that we make as part of the report is not to just obsess with the supply side when it comes to broadband policy."

Experts feel that the government has a very important role to play as part of this. The government can be a big demand aggregator when it comes to these networks moving more services online. According to them, tax is also a significant challenge for telecommunications companies. About 1.2 million homes a year are getting connected. That means if we're going to reach 29 million homes by 2025, the deployment rate needs to increase rapidly. We're also going to hit labour shortages and need the right skilled workers to do that job," he said. "I think that that inevitably leads us to some sort of technology neutrality. And I think that's probably the biggest roadblock for me."

Victor Zhang, vice president of Huawei, which was earlier this year granted a "limited role" in the construction of the UK's 5G network infrastructure, added "We are committed to supporting our customers as they build better infrastructure for the UK. It's now more vital than ever to focus on delivering high-speed digital networks. "Having been a key player and supplier to Britain's telecoms sector since 2001, we stand ready to play our part in the industry's future."

8. Asia-Pacific region to witness its worst growth in 60 years due to COVID-19

This is a crisis like no other. It is worse than the Global Financial Crisis, and Asia is not immune. While there is huge uncertainty about 2020 growth prospects, and even more so about the 2021 outlook, the impact of the coronavirus on the region will be severe and unprecedented. Growth in Asia is expected to stall at zero percent in 2020. This is the worst growth performance in almost 60 years, including during the Global Financial Crisis (4.7 per cent) and the Asian Financial Crisis (1.3 per cent). That said, Asia still looks to fare better than other regions in terms of activity.



Downward revisions are substantial, ranging from 3.5 percentage points in the case of Korea—which appears to have managed to slow the spread of the coronavirus while minimizing prolonged production shutdowns—to over 9 percentage points in the case of Australia, Thailand and New Zealand—all hit by the global tourism slowdown, and in the case of Australia by lower commodity prices. Within the region, Pacific Island countries are among the most vulnerable given the limited fiscal space, as well as comparatively underdeveloped health infrastructure.

In addition to the impact from domestic containment measures and social distancing, two key factors are shaping the outlook for Asia:

The Global slowdown: The global economy is expected to contract in 2020 by 3 percent—the worst recession since the Great Depression. This is a synchronized contraction, a sudden global shutdown. Asia's key trading partners are expected to contract sharply, including the United States by 6.0 percent and Europe by 6.6 percent.

China slowdown: China's growth is projected to decline from 6.1 per cent in 2019 to 1.2 per cent 2020. This sharply contrasts with China's growth performance during the Global Financial Crisis, which was little changed at 9.4 per cent in 2009 thanks to the important fiscal stimulus of about 8 per cent of GDP. We cannot expect that magnitude of stimulus this time, and China won't help Asia's growth as it did in 2009.

Prospects for 2021, while highly uncertain, are for strong growth. If containment measures work, and with substantial policy stimulus to reduce "scarring," growth in Asia is expected to rebound strongly—more so than during the Global Financial Crisis. But there is no room for complacency. The region is experiencing different stages of the pandemic. China's economy is beginning to get back to work, other economies are imposing tighter lockdowns, and some are experiencing a second wave of virus infections. Much depends on the spread of the virus and on how policies respond.

Policy Priority

This crisis requires a comprehensive and coordinated policy response. The first priority is to support and protect the health sector to contain the virus and introduce measures that slow contagion. If there is not enough space within countries' budgets, they will need to re-prioritize other spending.

Containment measures are severely affecting economies. Targeted support to hardest-hit households and firms is needed. This is a real economic shock—unlike the Global Financial Crisis—and requires protecting people, jobs, and industries directly, not just through financial institutions.

The pandemic is also affecting financial markets and how they function. Monetary policy should be used wisely to provide ample liquidity, ease financial stress of industries and small and medium-sized enterprises, and, if necessary, relax macro-prudential regulations temporarily.

External pressures need to be contained. Where needed, bilateral and multilateral swap lines and financial support from the multilateral institutions should be sought. In the absence of swap lines, foreign-exchange market interventions and capital controls may be the alternatives.

Targeted support, combined with domestic demand stimulus in a recovery, will help to reduce scarring, but it needs to reach people and smaller firms.

Asian economies have taken several initiatives in this direction with direct support for health sectors, direct fiscal stimulus packages—which in some advanced Asian economies are substantially bigger than the response during the Global Financial Crisis. And many economies have put in place measures aimed at helping small and medium-sized enterprises.

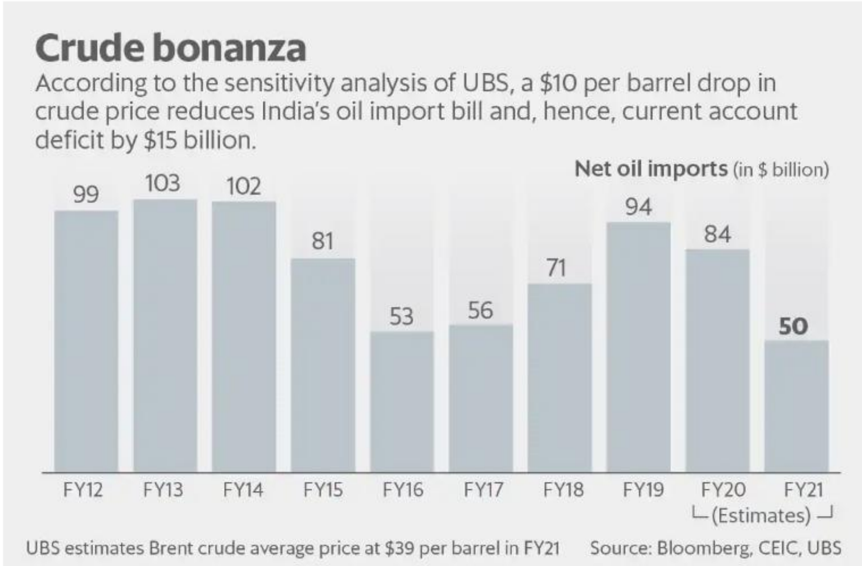
Central banks across the region have moved to provide ample liquidity, cut interest rates and some have used quantitative easing. For example, the Bank of Japan has expanded its repurchase operations, coordinated with other central banks around the world in efforts to ensure smooth functioning of the market, and introduced measures to facilitate corporate financing.

But additional actions may be needed for emerging-market Asian economies that have limited space for increased spending in their budgets. If the situation deteriorates, many emerging economies may to be forced to adopt a "whatever it takes" approach, despite their budget constraints and non-internationalized currencies. In many cases, they will face policy trade-offs. For example, central bankers are considering buying government bonds in the primary market to support critical financial lifelines to smaller firms and households to avoid mass layoffs and defaults. An alternative to direct monetization could be to use the central bank's balance sheet more flexibly and aggressively to support bank lending to small and medium-sized enterprises through risk-sharing with the government. In doing so, there can be a role for temporary outflow capital controls to help ensure stability in the face of large capital flows, balance sheet mismatches, and limited scope to use other policy tools.

9. Due to low fuel demand, India fails to monetize historically low crude oil prices

The May futures contract of West Texas Intermediate (WTI) crude fell into unchartered territory on 21 April, with sellers willing to pay buyers USD 37.63 a barrel to take delivery. The big problem, of course, was that there is hardly any storage capacity available, so buyers were shying away as well.

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



Crude bonanza.

Of course, India runs a current account deficit and hence will gain from lower crude prices, as the oil import bill will narrow. Besides, lower oil prices will soothe inflation. But severe mobility restrictions due to the lockdown means consumption of petroleum products has fallen sharply. Also, savings from lower fuel costs in the hands of consumers is unlikely to result in a boost to consumption and hence growth.

The government has also been known to raise excise duties and taxes on auto fuels whenever global oil prices fall in order to supplement its revenue collections, which prevents any sharp decline in retail prices. From here on, analysts anticipate a gradual recovery in oil prices, as economies start easing restrictions and demand-supply balance is restored over the medium term. In the interim, low oil prices would cast a shadow on the fortunes of state-run oil producers Oil and Natural Gas Corp. Ltd (ONGC) and Oil India Ltd (OIL).

10. COVID'19 lockdown may have a debilitating impact on India's power distribution sector

The power distribution sector in India is passing through a turbulent phase due to large accumulated dues to be paid to generators, liquidity issues due to restricted cash flow, uncertain revenue due to closure of industrial and commercial operations and the prevailing low power demand in the sector in the wake of the ongoing lockdown due to the coronavirus outbreak.

Discoms in the country owed INR 92,602 crore to the generation companies as of February, 2020. Rajasthan has the highest discom dues of around INR 23,695 crore, followed by Uttar Pradesh with dues worth INR 13,768 crore and Tamil Nadu with dues of INR 13,132 crore. The Aggregate Technical and Commercial (AT&C) losses in the country stand at 19.01 per cent. However, there are regions far exceeding the national average and registering losses of up to 47.88 per cent in Jammu and Kashmir, 36 per cent in Jharkhand and 34.32 per cent in Bihar.

The commercial and industrial sector in India consumes around 52 per cent of electricity, followed by 24 per cent by domestic households and 18 per cent by agriculture sector. The pricing by distribution utilities is set below the actual cost for agricultural sector and domestic households in order to make power affordable for them and the gap is met through a combination of direct subsidy transfers and cross-subsidy from higher tariffs applied to the industrial and commercial sector.

However, the ongoing lockdown has impacted the financial health of discoms. India's daily power demand has declined by 25 to 28 percent since the beginning of the nationwide lockdown, driven primarily by factory and office closures in the commercial and industrial sectors. The price discovered on the exchange platform during the lockdown period has averaged around INR 2.40 per unit with supply bids at the exchange far outstripping the demand. Credit rating agency India Ratings and Research said that the lockdown will have a significant impact on the discoms' collections and cash-flows in April due to low demand from industrial consumers; higher-than-expected aggregate technical and commercial (AT&C) losses and higher dependence on direct collections from consumers compared to subsidy.

With load reduction from the industrial consumers, the share of subsidizing consumers has declined while that of the subsidized consumers has increased, thereby impacting collections and the overall tariff design. The credit rating agency further added that the inability to increase tariffs immediately could increase the leverage of the discoms given that they would either delay payments to the generating companies or resort to higher borrowings. The distribution companies would have to incur higher AT&C losses than the levels specified by the regulators, as the transmission & distribution loss incurred on the low tension (LT) residential consumers is far higher than that incurred on the high tension (HT) industrial and commercial consumers, which could result in under-recovery of cash collection.

According to a recent report, the lockdown until 3 May 2020 could result in total demand compression of approximately 33 to 36 billion units of electricity, implying a net revenue loss of INR 25,000 to INR 30,000 crores at the discom level. This could further increase the liquidity crunch to approximately INR 45,000 to 50,000 crores, taking into account expected delays in payments.

According to Sambitosh Mahapatra, Sector Lead, Power and Utilities at PwC India, COVID-19 will aggravate the financial stress on electricity utilities with overall fall in demand of 30 per cent on account of industrial and commercial consumption going down by 50 per cent for 3 months at least. Prabhajit Sarkar, MD & CEO at Power Exchange India Limited said the discoms are facing tremendous financial stress. Furthermore, the Metering, Billing and Collection (MBC) operations, which in most states is handled through manual interventions, has been severely hampered. With limited off-take requirements from discoms, the supply side will also be impacted which could be devastating for the entire value chain.

The liquidity shortfall will exacerbate the problems of the power sector. Notwithstanding recent initiatives such as UDAY, the power distribution sector is beleaguered with mounting losses, huge liquidity challenges and high AT&C losses with several private Independent Power Producers in financial stress and operating with low plant load factors. The discom debt has also gone back to pre UDAY levels and the dues to generators of over INR 90,000 crores are also higher than pre UDAY levels.

Source: UDAY dashboard, CRISIL report

In March, a moratorium was announced by the Reserve Bank of India which allowed discoms to defer payments to generators for three months. To ensure liquidity in the sector by minimizing the cash outflows, it has been recommended to extend debt servicing moratorium from 3 to 6 months, extending credit to generators by Coal India for 30-45 days for coal procurement and allowing deferral of payments of indirect taxes such as electricity duty and coal cess.

11. Policy support for MSME will be imperative for India's recovery from COVID induced recession

Our world has changed dramatically over the last few months. The novel coronavirus pandemic has resulted in unimaginable loss to the global economy and the loss of human lives has been unprecedented in an era of global peace. Not only are the numbers alarming but, the speed at which the challenges have emerged is intimidating. Governments and health professionals are constantly calibrating the response to this pandemic and frequent strategic adjustments are being done.

We are now in lockdown, exploring novel medical treatments and are on the hunt for a vaccine that will stop this virus in its tracks. And since the scenario is grim, doctors, scientists, and governments are working on an accelerated mission mode.

Unprecedented losses

First, let us get an understanding of the economic impact of the novel coronavirus. The Asian Development Bank has estimated that the global economic cost of the virus is a whopping USD 2 to USD 4 trillion. Going by the damages estimated by some legal firms, the figure goes up to an unimaginable USD 6.5 trillion. Back home, the economy is being battered as well. Under complete lockdown less than a quarter of India's USD 2.8 trillion economy is functional. We are expected to lose over INR 32,000 crore every day during the lockdown.

Huge Human Cost

While the impact of novel coronavirus on businesses has been devastating worldwide, the human cost has also been staggering. In India, those with savings and access to shelter and food have managed to weather the storm albeit with difficulty.

However, the impact on a large proportion of the 40 million migrant labourers, those who provide the muscle to power India's construction, agriculture and other sectors, has been especially heart-wrenching. After the extension of lockdown on April 14, in a desperate bid to get home, vast numbers of migrants started to move. With no public transport available, lakhs of labourers started trudging home along the highways.

Some were coaxed to stay at government shelters where food and shelter were provided and many others were convinced to return to their place of work and stay put. Helped by local communities and government agencies, they have managed to cope with the lockdown. The saga of their journeys will be told over time and there will be plenty to learn from their experience.

Green Shoots

The tsunami of novel coronavirus has impacted most business sectors from aviation to hospitality, from real estate to apparel, from agriculture to poultry, from petroleum to shipping. The list is long and comprehensive and no sector has been spared. Yet the captains of the industry are cautiously upbeat about the recovery.

First priority - defeating COVID-19

We may be stating the obvious but it is worthwhile reiterating that the greatest challenge before us is tackling the effects of the COVID-19 pandemic. The top priority is finding a way to defeat or neutralize the effects of the virus. All other battles can be handled once we cross this particular challenge. Thanks to the timely action initiated by our government, India, has outperformed most other countries in slowing down the pandemic.

Racing to build infrastructure at great cost

Despite the early setbacks, the response from our healthcare sector, both private and government, has been robust and proficient. Testing has been ramped up quickly and more than half a million samples have been tested as of April 22 throughout the country. Nationwide a total of 586 hospitals have been marked as dedicated COVID-19 hospitals with a capacity of over 100,000 isolation beds and 11,500 ICU beds reserved for coronavirus patients.

At Apollo, we have 590 dedicated negative pressure beds for COVID-19 patients across our hospitals and in partnership with leading corporates and hotels chain, Project Stay I (Isolation) rooms have been created, with readiness to scale to up to 5000 if needed. Using extraordinary innovation, train compartments have been prepared to serve as isolation wards and our military too is prepared for an untoward eventuality.

Doctors, nurses, administration, and support staff have shown that they can rise spectacularly to the occasion. All this has come at a great financial cost to the entire sector. Unless the health sector is supported generously, it will not be able to deliver its full potential. The next phase of human development will depend on ensuring that our population is a healthy and prudent investment in the health facilities will make that a greater reality.

Get Set, Go

Next, we must focus on re-booting the Indian economy. For the past few years there has been a decline in India's GDP growth rates and the problem has been further exacerbated by the COVID-19 pandemic. The Indian economy is expected to languish in the 1% to 2% zone next year. When the crisis ends, and when the economy starts running again, the first few countries to get off the starting block will be at an advantage.

Can the industry manage to get up and start sprinting on its own? No, every government in the world will have to lend their industry a hand. We in India will need a high octane financial boost. But we all know that governments have taken a beating as far as tax revenues and foreign remittances are concerned. Therefore, governments will have to focus on those sectors that will deliver the biggest bang for the buck.

Getting India to work again

Luckily for us, our agricultural backbone that accounts for almost 14% of our GDP can recover quickly and in fact, grow next year. But they must be supported by logistics and storage. The expected normal monsoon this year will help the sector maintain its momentum. Once the threat of the virus recedes, the service industry, the number one contributor to our GDP will start cruising again. We cannot underplay the impact of the COVID-19 pandemic but unlike geophysical disasters and wars, the physical infrastructure of the industry has survived without damage.

Therefore, most industries can quickly become operational if they have the labour force back and the working capital to restart their business.

Sectorial boost

The Micro, Small and Medium Enterprises (MSMEs) sector, which contributes to 30 per cent of India's GDP, is one of the key drivers of the Indian economy. Today, almost all MSMEs are out of action due to the lockdown, they are unable to pay their employees and several don't have the financial resources to re-start their businesses. The government is contemplating a INR 20,000 crore relief package for this sector. The other sectors that need help urgently are tourism, aviation, automobile, and real estate.

These sectors will put people back to work and build some traction in the recovery of our economy. This may all sound simple, but obviously there is no easy fix to this unprecedented crisis. What is most important for us is to get people safely back to work and that will be possible only when we can provide the best possible healthcare to our citizens, as there cannot be a lockdown on medical care, ever. The COVID-19 pandemic and the consequent situation has shaken us all, but what we need now is a judicious mix of optimism and caution.

Civilization has endured several crises in its history which we have put behind us, we will overcome again. This too shall pass.

Oil & Gas Market

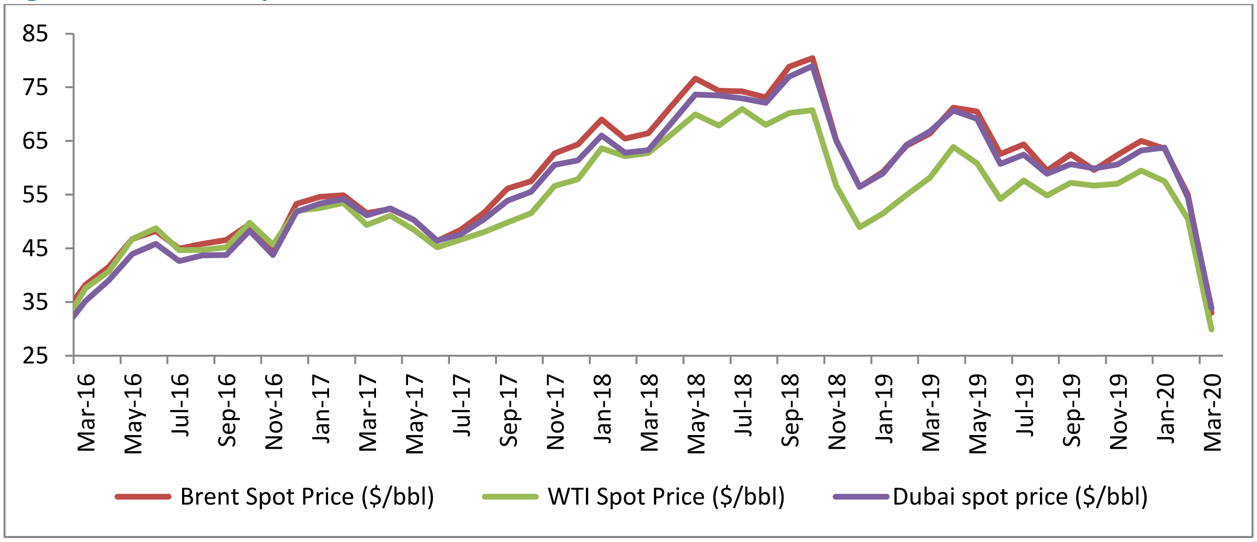
Crude oil price

Crude benchmarks were under pressure due to decline in demand forecast and outbreak of coronavirus. These factors continued to impact the crude oil benchmarks in the first week of March as the prices fell further. With significant travel ban in China to contain the spread of virus, the demand for refined products declined in China, the second largest consumer of crude oil. With widening gap between crude oil demand and supply, the price decline due to supply glut. OPEC countries and other oil producing countries like Russia met on 6th of March in Vienna, Austria to deal with the supply glut. However, no solution was reached to decide where the production cuts will come from. On 7th March, Saudi Arabia announced massive discounts to its crude oil prices for April triggering the price war. Saudi Arabia announced its intention to produce more oil and increase its production above 10 mbpd from current level of 9.7 mbpd with a capacity to produce 12.5 mbpd.

By third week of march several nations started banning air travel. United States, the largest consumer of crude oil banned all aircraft movements from the Europe. With an intention to contain the spread of COVID-19 countries like India, China, France, Italy, New Zealand, Poland and UK implemented large scale lockdown and quarantine programs leading to temporary closing/reduction of industrial activities, internal movements etc. This further reduced the demand for Crude oil across the globe.

Average Brent, WTI and Dubai basket crude prices went down by 40.00 %, 40.79% and 37.89 % respectively in the month of March

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



Source: WORLD BANK

- Brent crude price averaged $ 33.00 per bbl in March 2020, and was down by 40.00 % and 50.31 % on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged $ 29.9 per bbl in March 2020, and was down by 40.79 % and 48.58 % on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged $ 33.8 per bbl in March 2020, and was down by 37.98 % and 49.40% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in March, 2020

Crude oil	Price ($/bbl) in March 2020	MoM (%) change	YoY (%) change
Brent	33.00	-40.00%	-50.31%
WTI	29.9	-40.79%	-48.58%
Dubai	33.8	-37.98%	-49.40%

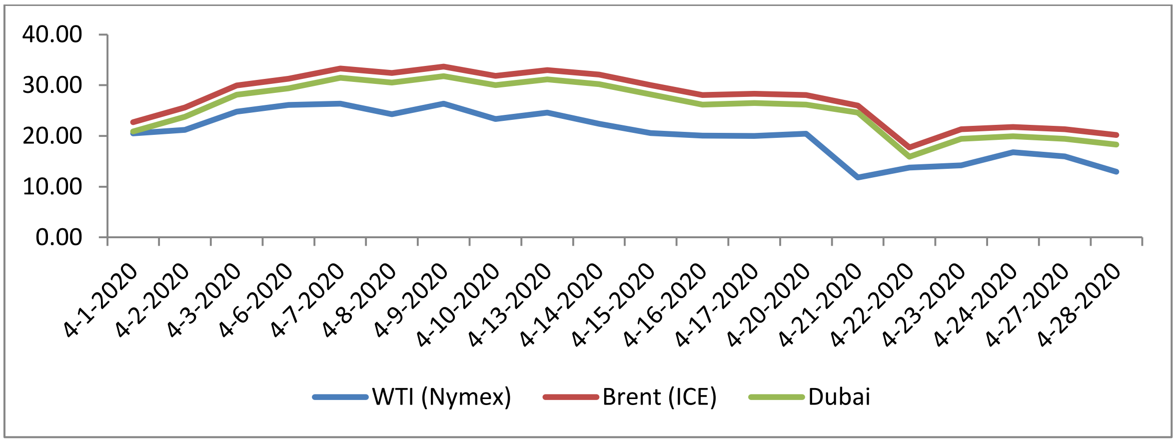
- *Source: WORLD BANK*

Oil Market in tailspin, WTI reaches its lowest

Following the sudden shock faced by the oil market on the outbreak of coronavirus and market being oversupplied with cheaper crudes, crude price started with decline in the month of April. With supply overweighing the demand, there was call from all oil producers to balance the market equilibrium. By April, OPEC nations and other big producers arrived at a solution to cut production by 9.8 mbpd of crude oil per day from 1st of May for an initial period of two months, followed by an adjustment of 7.7 mbpd until the end of year and 5.8 mbpd until 30th April 2022 to stabilize the market. However, it had little impact and oil price declined further.

By third week of April, Brent crude benchmark fell below USD 20 per barrel, its lowest in twenty years. WTI spot prices fell below zero in the third week of April for the first time due to the oil glut as the contracts were expiring and the storages were close to full. Future Brent Oil contracts for June and July stood at USD 18.6 per bbl and USD 23.2 per bbl respectively. Future WTI contracts for June and July at USD 12.7 per bbl and USD 20.4 per bbl respectively. Though future contracts stayed positive, spot WTI hit negative territory for the first time on 21st of April. With crude storages close to full, buyers denied to source more crude oil. With no takers, crude nose-dived and entered the negative territory.

Figure 2: Crude oil price in April 2020 (June Contracts)



- *Source: EIA, Oilprice.com, PPAC*

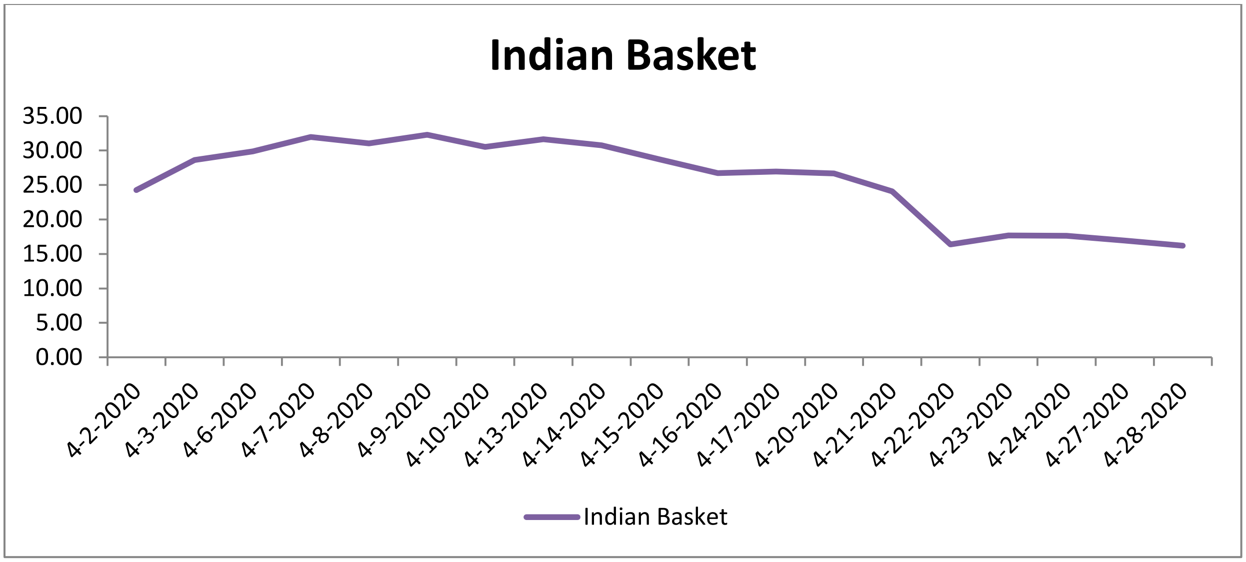
By the last week of April, crude price further declined as the demand for crude continued to decline as governments across the globe are restricting transportation to contain the spread of corona virus. The corona virus pandemic and the collapse in oil price has caused a big scale economic calamity for the countries which are heavily reliant on oil production for their survival. They are forced to change their policies that does not make support the budget anymore. For nations relying on oil sales, the combination of covid-19 outbreak and oil price collapse has created new threats of poverty and political instability from Iraq to Venezuela.

Average Brent, WTI and Dubai basket crude prices went down by 24.19 %, 36.26% and 23.483 % respectively from their March prices.

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

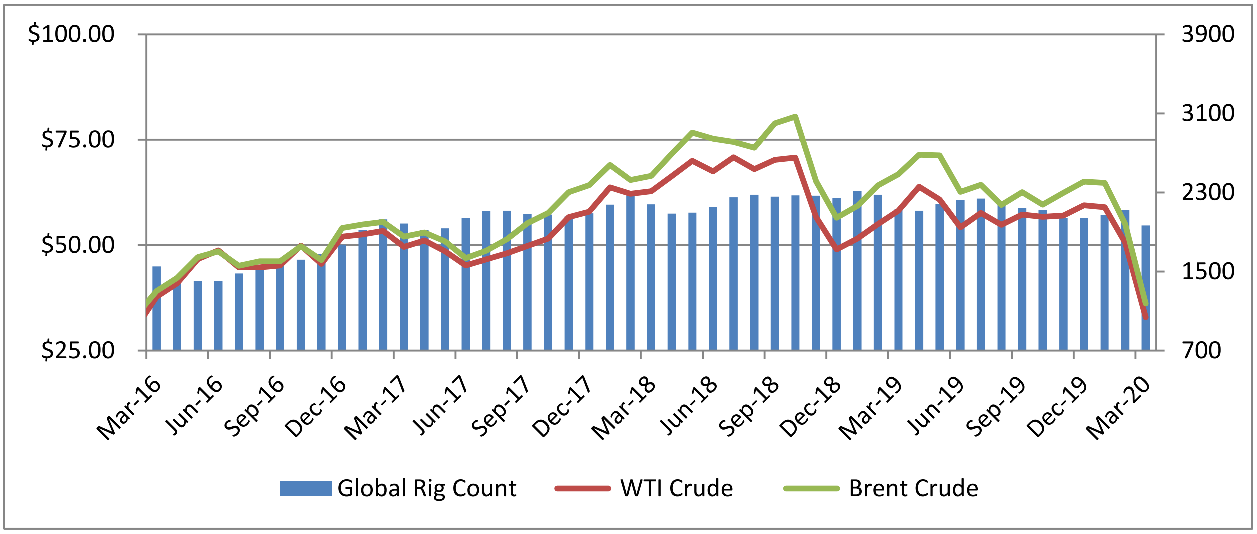
- Indian crude oil benchmark prices declined as a result of decline in major global benchmarks which are used as reference.
- Indian crude basket price averaged $25.43 per April in March, down by 27.86 % on Month on Month (M-o-M) and 64.18 % on a year on year (Y-o-Y) basis, respectively.

Upstream activity & Rig count

Global rig count

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

Figure 4 Global Rig Count vs. Crude Prices



Source: Baker Hughes

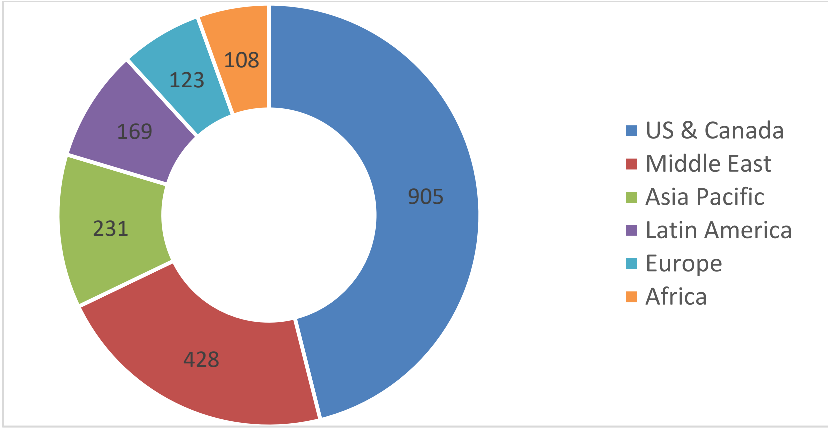
In March 2020, global drilling rig count declined by 161 from February 2020 and stood at 1,964. Onshore rig count decreased by 157 and offshore rig count went down by 4. Major chunk of the reduction in rig counts came from Canada, down by 116 rigs. Rig count declined in Europe, Latin America, Africa and in the USA. Rig count increased in Middle East and in Asia Pacific. Rig count in the United States was down by 19. 752 were onshore rigs and 20 were offshore rigs. US & Canada and the Middle East count for about 2/3rd of the global rig count.

Table 2 : Global Drilling Rig Count

Rig Type	Count in March 2020	MoM (%) change	YoY (%) change
Land	1,698	-8.46 %	-12.61 %
Offshore	266	-1.48 %	-1.48 %
Total	1,964	-7.58 %	-11.25%

Source: Baker Hughes

Figure 5 Geography-wise Rig count -March 2020



Source: Baker Hughes

Indian Drilling Rig Count

Indian rig count increased in the month of March 2020 by 8. On Y-O-Y basis, Indian rig count declined by 4.88 % in 2020 as compared to March 2019. 80 were onshore rigs and the rest 37 were offshore rigs.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

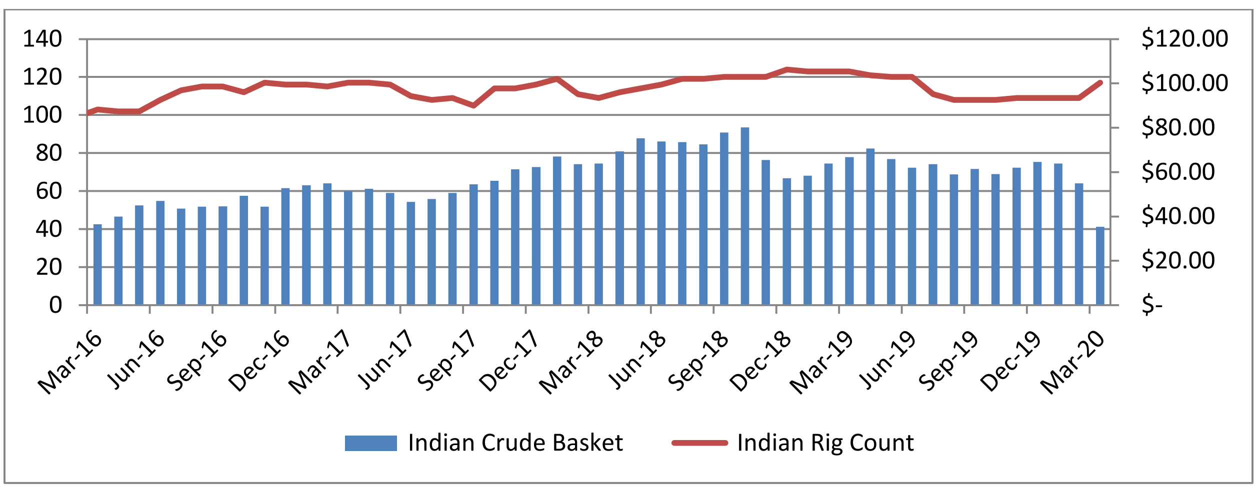


Table 3 : Indian Rig Count

Rig Type	Count in March 2020	MoM (%) change	YoY (%) change
Land	80	3.90 %	-5.88 %
Offshore	37	15.63%	-2.63 %
Total	117	7.34%	-4.88 %

Source: Baker Hughes

Oil demand & supply

Preliminary data indicates that global oil supply increased by 0.62 mb/d m-o-m to average 99.86 mb/d in March 2020, compared with the previous month. Non-OPEC supply (including OPEC NGLs) decreased by 0.20 mb/d m-o-m to average 71.25 mb/d in March. The share of OPEC crude oil in total global production increased by 821 tb/d to average 28.61 mb/d in March 2020 compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Non-OPEC oil supply growth in 2020 is also revised down by 3.26 mb/d from March's assessment and the forecast is at 1.50 mb/d. The production is revised in Norway, Brazil, Guyana and Australia, while the decline comes from the US, China, Mexico, Colombia, Russia, Thailand, Indonesia, Oman, Azerbaijan and Malaysia.

World oil demand was revised lower by 6.9 mb/d showing a historic decline due to the prevailing lockdowns across many countries. Demand for oil in 2020 is forecasted to reach 92.82mb/d. Covid-19 pandemic is now affecting the oil demand in many countries and regions across the globe. Lockdown and travel restrictions in many areas as governments across the globe seek to contain the spread of virus is impacting the oil requirements, particularly in transportation fuels. Aviation fuel will also face a serious challenge with respect to demand and airlines have grounded aircrafts due to closure in airports and significant reduction in flight operations. Industrial fuels will be impacted. Reduced vehicle usage have led to decline in demand for Gasoline and High Speed Diesel. With unprecedented decline in demand for the refined products in the transport sector, refineries are reduced their throughput and operating at a significantly reduced utilization rate. Major refineries are reducing their crude intakes as their storage are close to full.

Based on the prevailing lockdowns and considering the recovery time for nations, revised demand forecast for crude oil in Q2 2020 is 86.70 down by 12 mbpd. Demand is likely to recover in Q3 2020 to reach 94.28 mbpd, while in Q4 2020, demand forecast is 97.30 mbpd. As a result of plunge in demand and prevailing lower oil price, OPEC and other major oil producers arrived at a deal to cut 9.7 mbpd of crude oil per day from 1st of May for an initial period of two months , followed by an adjustment of 7.7 mbpd until the end of year and 5.8 mbpd until 30th April 2022.

Table 4: World Oil demand in mbpd	2019	1Q2020	2Q2020	3Q2020	4Q2020	2020	Growth	%
Total OECD	**47.91**	**45.53**	**38.37**	**45.17**	**46.55**	**43.92**	**-3.99**	**-8.33**
Dev. Countries	**33.08**	**31.92**	**30.56**	**31.42**	**32.00**	**31.48**	**-1.60**	**-4.84**
~ of which India	*4.84*	*4.74*	*4.00*	*4.04*	*4.93*	*4.43*	*-0.41*	*-8.52*
Other regions	**18.68**	**15.47**	**17.77**	**17.69**	**18.75**	**17.43**	**-1.25**	**-6.71**
~ of which China	13.07	10.27	12.75	12.57	13.38	12.25	-0.83	-6.33
Total world	**99.67**	**92.92**	**86.70**	**94.28**	**97.30**	**92.82**	**-6.85**	**-6.87**

Source: OPEC monthly report, April 2020

*Note: *2019 = Estimate and 2020 Forecast*

Global petroleum product prices

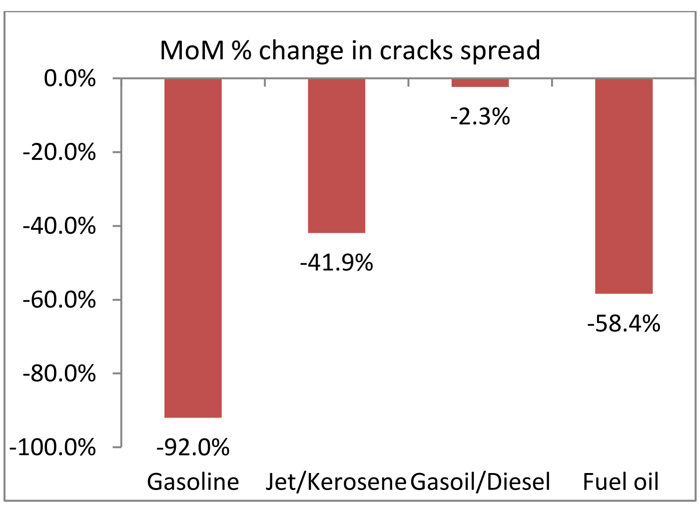
Prices in the Asian Gasoline-92 market saw a decline in price by 44 % in the month of March as the demand declined due to lockdown and transport restriction in the region to control the spread of Covid-19. Refinery margins plunged in the Asian market during the month of March and re-entered negative margin as the demand side weakness continues to weigh on gasoline and jet fuel markets. While the activities in China picked up as infections fell, containment measure in other larger consumer India has led to decline. Refinery margins for Oman in Asia lost $3.01 on m-o-m to average minus 29 cents in March and were lower by $5.33 on y-o-y basis.

Singapore Gasoline cracks averaged $1.30/b against Oman, down by $ 7.07 m-o-m and by $4.62 y-o-y in March. Refinery utilization rates in March averaged 82.59 % in selected Asian markets comprising of Japan, China, India and Singapore.

Jet/Kerosene prices went down by 37.5 % in March as many countries in the region went into lockdown and the flights were grounded. Plunge in global jet demand led to rise in stocks which were intensified by bearish signals triggered by rising refinery intakes in China. The Singapore jet/kerosene crack spread against Oman averaged $ 5.61 /b, down by $23.19 m-o-m and by $ 7.30 y-o-y.

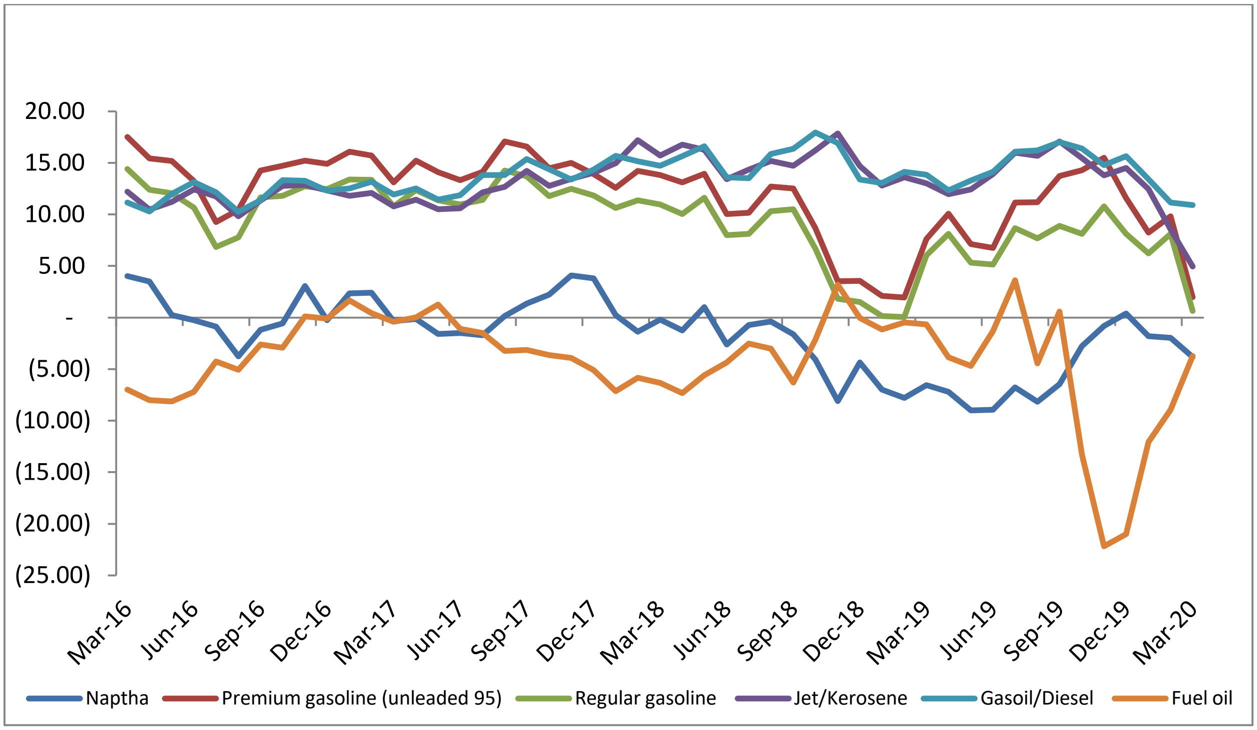
The Singapore gasoil crack spread posted gain in the month of March due to fuel's long-term storage suitability amid the worldwide contango structure. This was reflected in the strong arrivals of gasoil in the region which reached a record volume of 515 tb/d in March, up by 75%. In March, gasoil price declined by 20.45%. Singapore gasoil crack spread against Oman averaged $10.64/b up by 23 cents m-o-m but lower by $3.11 y-o-y.

The Singapore fuel oil crack spread extended the upward trend of the previous month and inched closer to positive territory. This development in attributed for favorable pricing signals for VLSFO as it is generally trading solidly above gasoline and jet fuel. Singapore fuel oil cracks against Oman averaged minus $3.07, up by $5.62 m-o-m, but down by $2.30 y-o-y.



Source: OPEC monthly report

Figure 7: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

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

Products	Price ($/b) in March 2020	MoM (%) change	YoY (%) change
Naptha	30.6	-41.8%	-49.2%
Premium gasoline (unleaded 95)	36.42	-43.4%	-51.1%
Regular gasoline (unleaded 92)	35.08	-44.0%	-51.8%
Jet/Kerosene	39.39	-37.5%	-50.7%
Gasoil/Diesel (50 ppm)	45.33	-31.0%	-43.8%
Fuel oil (180 cst 2.0% S)	30.71	-32.6%	-53.6%
Fuel oil (380 cst 3.5% S)	30.06	-10.3%	-54.1%

Source: OPEC

Petroleum products consumption in India

- March 2020 saw a decline in overall consumption of petroleum products by 11.7% due to implementation of lockdown in the last week of March to contain the spread of Covid-19.
- LPG consumption increased by 9 % on M-o-M basis in March 2020, as there was an increase in distribution of LPG cylinders under PMUY scheme.

- Consumption of gasoline decreased by 14.1% on M-o-M and by 16.4% on Y-o-Y due to restriction on the road transportation.
- Demand for diesel declined by 21.1 % on M-o-M basis in the month of March as majority of the trucks were off road in last week of March on the account of lockdown.
- On yearly basis, petroleum product consumption was down by 14.8%,

Table 6: Petroleum products consumption in India, March 2020

Petroleum products	Consumption in '000 MT March 2020	MoM (%) change	YoY (%) change
LPG	2,306	9.0%	1.7%
Naphtha	1,386	8.4%	6.5%
MS	2,156	-14.1%	-16.4%
ATF	484	-29.9%	-34.1%
HSD	5,651	-21.1%	-24.2%
LDO	49	-9.6%	5.3%
Lubricants & Greases	296	-9.1%	-22.7%
FO & LSHS	482	-4.0%	-9.9%
Bitumen	525	-21.6%	-35.9%
Petroleum coke	1,680	-5.9%	10.2%
Others	917	-3.1%	-2.5%
TOTAL	16,083	-11.7%	-14.8%

Source: PPAC

Natural Gas Price

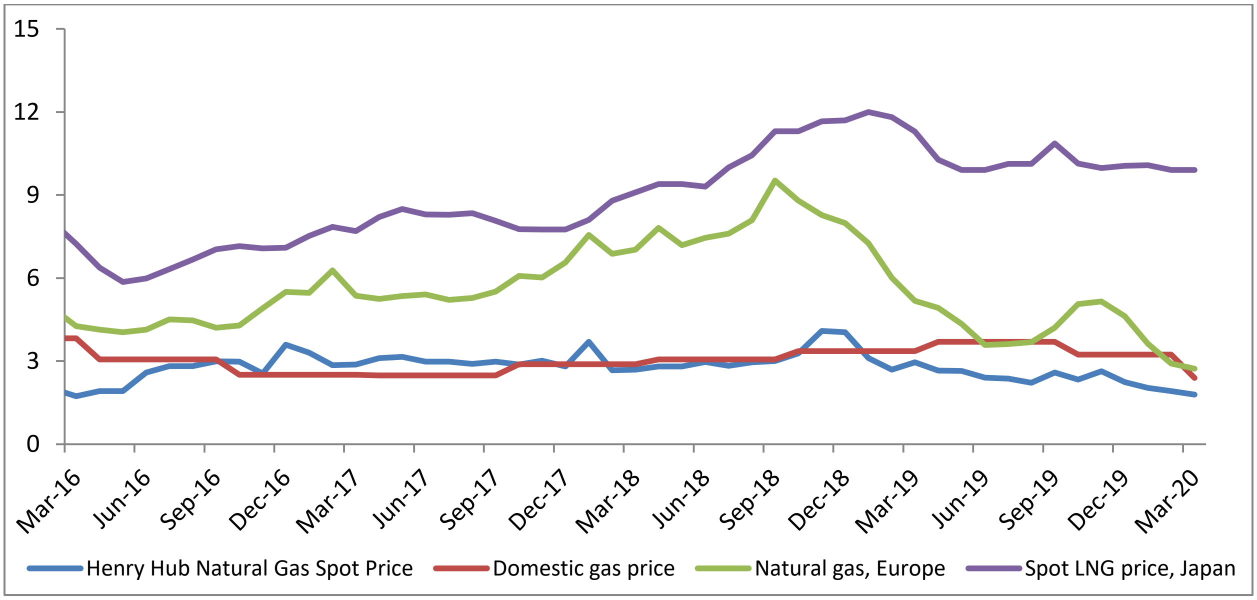
Globally, decline in oil price and demand reduction for natural gas in several nations due to lockdown has led to the decline in natural gas price globally.

In March, natural gas price at the Henry Hub decreased by 6.77 % to reach $1.92/MMBtu. Warmer-than-normal temperature in March reduced the demand for heating and put downward pressure on prices. Decline in gas consumption for industrial usage due to the mandatory shutdowns for non-essential business to control spread of corona virus added further pressure to price. With the total gas storage estimated to be 2.0 Tcf, 17% more than in the last five years, natural gas price is expected to stay lower.

Natural gas prices in Europe fell by around 6% in March 2020 following a 50% fall in the previous month. Lockdown prevailing in Italy, Spain, Germany, France as governments look to contain the spread of Covid-19, demand for Natural gas in power generation and industrial consumption has declined.

Asian spot LNG price crashed below $3 per MMBtu in the last week of March reversing three weeks of gains after Indian buyers cancelled/diverted the LNG cargoes as lockdown caused demand to slump. Indian LNG importers namely Petronet LNG, GAIL, GSCP issued force majeure notices to suppliers in last week of March as the demand and port operations were hit. The force majeure in turn has caused a floor of LNG supply in the spot market depressing prices. Average LNG for May delivery in the North East Asia was estimated to be $2.80 per MMBtu, down by 70 cents from 3rd week of March.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

Natural Gas	Price ($/MMBTU) in March 2020	MoM (%) change	YoY (%) change
India, Domestic gas price (Apr 20)	2.39	-26.00 %	-35.23%
India, Gas price ceiling – difficult areas (Apr 20)	5.61	-33.45 %	-39.8%
Henry Hub	1.79	-5.4%	-28.6%
Natural Gas, Europe	2.72	-19.8%	-51.6%
Liquefied Natural Gas, Japan	9.89	-1.8%	-16.2%

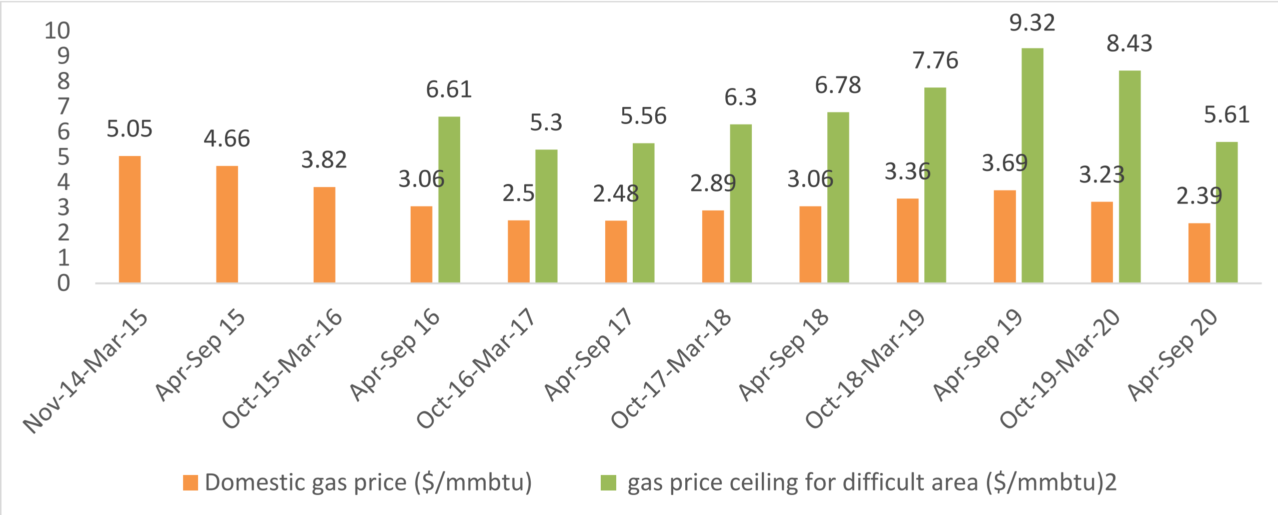
Source: EIA, PPAC, World Bank

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 2020 to September 2020 is $2.39 per MMBTU has decreased around 35.23 % as compared to 2019. Gas price for difficult area has declined by 33.45 % on M-o-M basis and by 39.8% 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 2020 to September 2020 period, the price of gas from such areas has been notified at $5.61 per MMBTU, 33.45% down as compared to the last year.

Figure 9: Domestic natural gas price

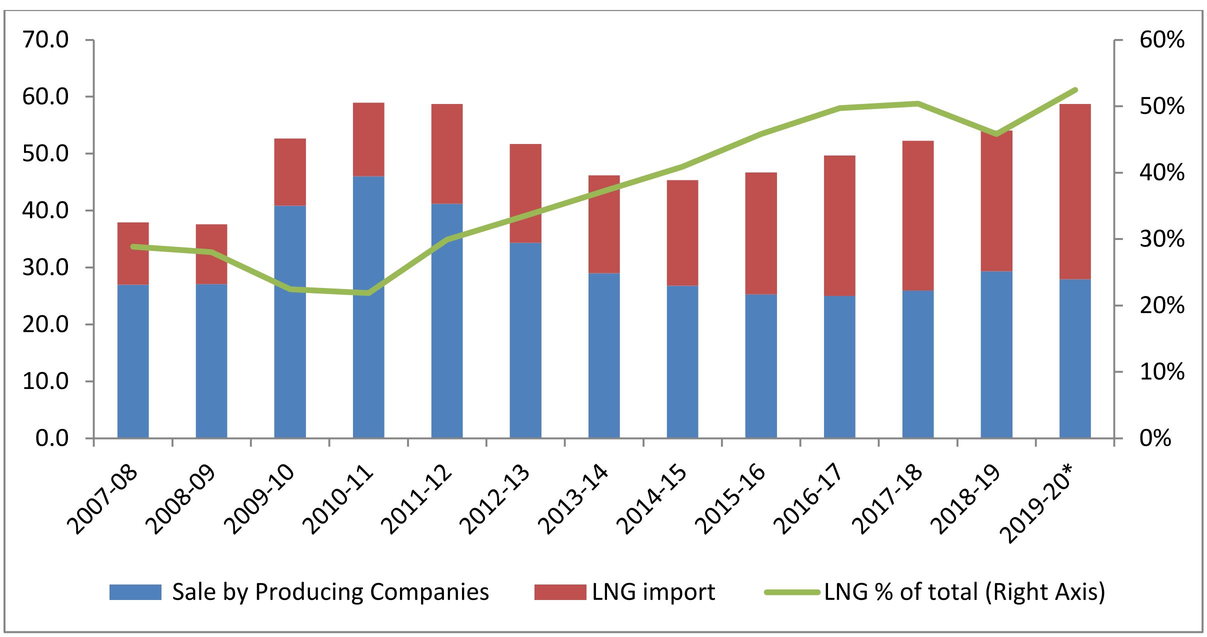


Source: PPAC

Natural gas production, consumption and import in India

- Natural gas constitutes for 5.8% of total energy primary mix of India
- Natural gas consumption in India has increased consistently over last five years.
- LNG imports have gone by up by 34.37 % over last five years.

Figure 10: Domestic natural gas consumption, domestic production and LNG import in BCM



Source: PPAC

1. Sale by producing companies includes internal consumption 2. 2019-20 data up to Feb 2020

Key developments in Oil & Gas sector during April 2020

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

Crude oil production during March,2020 was 2697.42 TMT which is13.97% lower than target and5.50% lower when compared with March2019.Cumulative crude oil production during April-March, 2019-20 was 32169.27 TMT which is 8.20% and 5.95% lower than target for the period and production during corresponding period of last year respectively.

Natural gas production during March,2020 was 2411.16 MMSCM which is 21.89% lower than the monthly target and 14.38% lower when compared with March, 2019. Cumulative natural gas production during April-March, 2019-20 was 31179.96MMSCM which is 9.76% and 5.15% lower than target for the period and production during corresponding period of last year respectively.

Refinery production during March, 2020 was 21203.58TMT which is 8.59% lower than the target for the month and5.74% lower when compared with March, 2019. Cumulative production during April-March, 2019-20 was254385.82 TMT which is0.14% and 1.1% lower than target for the period and production during corresponding period of last year respectively.

- **G20 Extraordinary Energy Ministers Meeting**

Shri Dharmendra Pradhan, Minister of Petroleum and Natural Gas and Steel, participated in the G20 Extraordinary Energy Ministers' virtual Meeting on 10th April 2020. The meeting was called by Saudi Arabia, in its capacity as the G20 Presidency, and chaired by Saudi Arabia Energy Minister Prince Abdulaziz. The meeting was attended by Energy Ministers of G20 countries, guest countries and heads of international organizations including OPEC, IEA and IEF.

The G20 Energy Ministers' focused on ways and means to ensure stable energy markets, which are affected due to demand reduction as result of the COVID-19 pandemic and the ongoing surplus production -related matters. During the meeting, Shri Pradhan reiterated Prime Minister Shri Narendra Modi's call for G20 taking a human-centric approach for overcoming challenging hardships, especially for the vulnerable.

In this context, the Minister highlighted the decision of Hon'ble Prime Minister, under the aegis of the Ujjwala scheme, to provide 80.3 million poor families free LPG cylinders, as part of a 23 billion dollars relief package. He emphasized that India was, and will continue to be, the global energy demand centre. He also highlighted Government of India's efforts to fill in our Strategic Petroleum Reserves.

In terms of the ongoing energy market fluctuations, the Minister stated that India has always advocated for a stable oil market, which is reasonable for producers and affordable for consumers. He appreciated the collective efforts of OPEC and OPEC-plus countries to balance the supply-side factors which is imperative for long-term sustainability. He has, however, urged that oil prices should be targeted to affordable levels to allow for a consumption-led demand recovery.

The G20 Energy Ministers' meeting will be adopting a Joint Statement, which inter alia, proposes to establish a Task Force to advise the G20 Energy Ministers on the next steps, and agreed to remain engaged in the coming days.

- **Over 1.51 Crore free LPG cylinders distributed so far to the PMUY beneficiaries under the Pradhan Mantri Garib Kalyan Yojana(PMGKY)**

More than 1.51 Crore free LPG cylinders have been distributed so far to the PMUY beneficiaries under the Pradhan Mantri Garib Kalyan Yojana(PMGKY) in this month. Under the PMKGY, several relief measures have been announced by the central Government for the welfare of poor, and one of the important component of the Yojana is to provide 3 LPG cylinders (14.2 kg) free to over 8 crore beneficiaries of the Pradhan Mantri Ujjawala Yojana(PMUY) over the period of April to June 2020. For the seamless implementation of the scheme, the Oil Marketing Companies have been transferring an advance equal to the RSP of one 14.2 kg refill or one 5 kg refill depending upon the type of package to the linked bank account of PMUY customer. The customer can use this advance money to take LPG refill. The Oil Marketing Companies (OMCs) are distributing 50 to 60 lakh cylinders per day, which includes about 18 lakh free cylinders to PMUY beneficiaries.

Petroleum and Natural Gas & Steel minister Shri Dharmendra Pradhan took part in a webinar on 16th April with over 800 LPG cylinder delivery boys, in which the Secretary, MoPNG, Officials of the MoPNG and OMCs took part. Describing the LPG delivery boys as the frontline soldiers and Corona fighters in the time of unprecedented crisis due to Covid-19 pandemic, Shri Pradhan said that the whole nation acknowledges their contributions. Appreciating their sincerity, hard work and dedication to the duty, he said that in such times, they are delivering up to 60 lakhs cylinders daily, sometimes even endangering their own lives. Shri Pradhan called upon them to take due precautions while discharging their duties. He said that by rising to the occasion, they have gained special respect from the society, and are getting blessing from the poor.

- **Government simplified oil, gas block processes; provides for self-certification, deemed approval**

In perhaps the most far-reaching easing of rules, the government has simplified procedures and gas exploration and production by providing for self-certification for a host of compliance, such as a discovery notification and deemed consent for investment in fields in a stipulated time. With a view to make it easier to do business, the government has provided that notification of a discovery and tests to confirm them will not require approval and documents will be accepted on self-certification basis, according to the notification issued on April 25.

Work programme and field development plan or their revisions will be deemed to be approved on expiry of 30 days of submission of documents under self-certification. Only issues requiring government nod will be grant of petroleum exploration or mining license, transfer of stake and extensions. The Directorate General of Hydrocarbons (DGH) has issued a detailed notification, simplifying procedures and process under Production Sharing Contract (PSC) for pre-NELP and NELP oil and gas blocks.

The areas or blocks awarded under New Exploration Licensing Policy (NELP) since 1999 such as RIL's KG-D6 or fields given away in pre-NELP bid rounds like Cairn's Rajasthan oil block will benefit from the easing of rules. One of the critical aspects of the PSCs signed under pre-NELP and NELP, which also tends to be one of the most contentious, relates to cost recovery: the extent of cost recoverable by the operator from revenue generated in the oil and gas field.

Another important area of dispute is the investment multiple (IM) that determines profit sharing between the government and the contractor. Following this, the processes have been divided into three categories - process where documents shall be accepted on self-certification basis and no approval is required; processes where approval will be deemed on expiry of 30 days of submission of documents under self-certification; and processes where approval shall be required. The 22 processes where documents will be accepted on self-certification basis and no approval is required include information of discovery, potential commercial interest, bank guarantee, notification of discovery confirmation test, inventory report, submission of data, environment impact assessment report, contingency plan, appointment of auditor, notice for entering next phase or relinquishment and commercial discovery. Work programme and budget, appraisal programme or its revisions and field development plan or its revisions are the three processes where approval will be deemed after 30-days.

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