

CoVID-19: The Global Scenario

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We are in the age of information. The age where technological advancement is at its peak. We are inches away from developing a full-fledged quantum computer, and yet the world is again struggling with a micro unseen organism or as we call it the pandemic of CoVID 19. The question still arises – how a disease with R_0 of most likely in between 2.49 - 2.63 became a pandemic that closed the whole world for more than a month? The answer is really simple though – The modern era of science and technology hasn't seen something like this for a long period. Of course, mankind has experienced numerous health hazards in the process of evolution across the world. But CoVID 19 is a little different scenario. In this century, the world is not a big place to live in. People travel across the world within days & such a pace is more than enough for a microbe to travel across the world and infect everyone on it.

The history of CoVID 19 is well known to everyone, so this article will not discuss the historical background of the virus nor the biochemical pathways it uses to live and infect everyone. The primary focus of this paper is to study the impact of CoVID 19 pandemic on international grounds concerning prime factors such as

- i. global strategies to handle this pandemic,
- ii. economic impact,
- iii. role of internet globally,
- iv. vaccine development & it's fair access
&
- v. it's impact on international relations in every possible way.

Global pandemics are not new to the human race. The first notable global pandemic that the world suffered was the ANTONINE Plague that occurred during 165 AD. This plague was also known as the Plague of Galen. This pandemics alone killed around 5 million people. Then, there was the PLAGUE OF JUSTINIAN (541-542). This pandemic has a death toll of 25 million of people. Then came the BUBONIC Plague which is also known as THE BLACK DEATH (1346-1353). This has a mortality range of 75 – 200 million. Then numerous other pandemics occurred such as THIRD CHOLERA PANDEMIC (1852–1860), FLU PANDEMIC (1889-1890), SIXTH CHOLERA PANDEMIC (1910-1911), FLU PANDEMIC (1918), ASIAN FLU (1956-1958), FLU

PANDEMIC (1968), and the most recent one was the HIV/AIDS PANDEMIC (AT ITS PEAK, 2005-2012). Till now AIDS has a death toll of 36 million across the globe. Then came the Corona Virus disease 2019, beginning in December 2019, in the region of Wuhan, China, a new ("novel") coronavirus began appearing in human beings. It has been named Covid-19, a shortened form of "coronavirus disease of 2019." This new virus spreads incredibly quickly among people, due to its newness – no one on earth has an immunity to Covid-19, because no one had Covid-19 until 2019. While it was initially seen to be an epidemic in China, the virus spread worldwide within months. As the virus got the passport and travelled across the globe, WHO declared Covid-19 a pandemic in March, and by the end of that month, the world experienced more than a half-million people infected and nearly 30,000 deaths. At the time of writing this article, CoVID 19 has affected 5,976,648 people and has a death toll of 364,544.

Governments of various countries have taken significant methods to handle this global pandemic. The first and foremost decision was to close down all the international gateways so that there will be less international movements. Breaking further down, it can be seen that the fast actions taken by the government can be divided into four major categories -

- i. Monetary measures,
- ii. Fiscal measures,
- iii. Public health measures, and
- iv. Human control measures.

Table 1: Some fast policy response during the 2020 global recession			
	Type	Fast policy response adopted by policymakers	Countries
1	Monetary policy measures	Granting (i) regulatory forbearance to banks, and (ii) principal or interest moratorium to debtors affected by COVID-19	Ireland, China, Nigeria and Italy
		Central banks' provision of liquidity to financial (bond and equity) markets	China and US
		Central banks' purchase of bonds and securities that were plunging in value rapidly	Australia, EU and Canada
		Lowering interest rates by Central banks	Turkey, US, New Zealand, Japan and the UK, Nigeria, South Korea and Canada
		Sustained flow of credit to banks, SMSEs, public health sector, individuals and essential businesses	Australia, Nigeria, US and UK
2	Fiscal measures	Governments approving a large federal stimulus package for sectors and industries most affected by the COVID-19 pandemic	UK, US, Australia and Nigeria
		Provision of income support for individuals	Australia, US, UK and India

3	Public health measure	Social welfare payments to support each household	Australia, US
		Public quarantine	India, US, UK and almost every country
		Border quarantine	Poland, Vietnam, India, UK, US, Pakistan, Australia and Colombia
		Issuing a stay-at-home policy	Italy, Iran, Nigeria and the UK
4	Human control measures	Social distancing policy	South Africa, US, UK, UAE, Singapore, Nigeria, Japan, China, India, Germany, Pakistan, Australia, South Korea and Israel
		Temporary release of prisoners from overcrowded prisons	Iran and US
		Shut-down of air, land and sea borders	Taiwan, India, Mexico, US, Germany, Serbia and Nigeria
		Shutdown of schools	UK, Spain, Italy, South Africa, Nigeria and US
		Using the military to enforce a coronavirus stay-at-home lockdown	Malaysia, Italy, the US, Israel, South Africa and Spain
		Travel ban	EU, US, Argentina, Austria, Australia, Bolivia, Cambodia, Canada, China, Cape Verde, Cambodia, Colombia, Croatia, Denmark, Egypt, Germany, Greece and Haiti
		Visa denial and suspension	South Africa, Canada, Singapore, China, Nigeria, Ghana, Kenya, Bolivia and Brazil

Apart from the stated above, two vital factors is helping the world to fight against this pandemic. The first one is the resourceful use of internet –

Internet has played a major role in fighting CoVID 19 scenario. Imagine the world with SARS COV 2 and without or less access to the internet! It is unimaginable. Not only this would have stopped the world literally, but will also cause more frustration among people and a major loss in every aspect of life. As far as goes, this is the first time for world science community along with the governments of all the parts of the world that has initiated and took necessary steps to make every CoVID 19 related research open to everyone. Scientists are reviewing, editing, analysing and publishing manuscripts and data related to this pandemic at record speeds and in large numbers. This intense communication may have allowed an unusual level of collaboration and efficiency among scientists. On the same note, Francis Collins stated that while he hasn't seen research move faster, the pace of

research "can still feel slow" during a pandemic. The typical model for research has been considered too slow for the "urgency of the coronavirus threat".

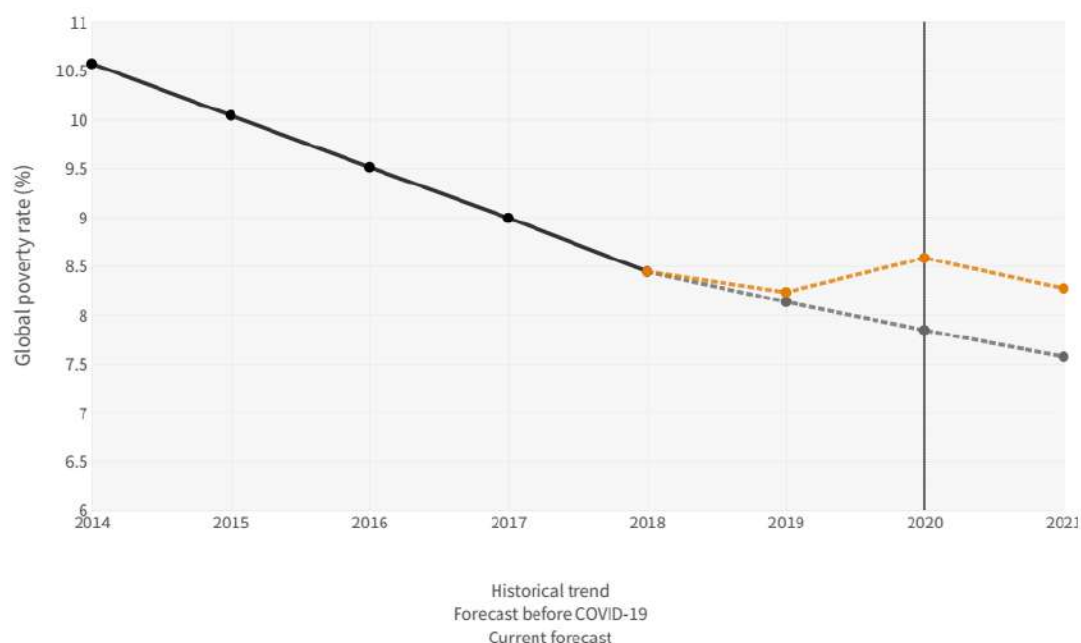
And the second one is the collaboration seen within the governments of the world to help and support other countries. One primary sector that can be seen under this criteria is the share and distribution of testing kits for CoVID 19. A primary supplier of the swabs used for collecting nasopharyngeal samples, Copan, is based in Northern Italy. The reagents used to extract virus RNA from collected cells are produced mainly by Qiagen, a German company with a complex global supply chain. And foreign companies make roughly half of the ventilators in the United States; one-third come from Europe. An increase cooperation in production and distribution, using global supply chains as effectively as possible very needs of the hour. Pooling resources and equipments so that they can be allocated as the need for them shifts from one country to another is also a major component for the same. China, for example, is now donating ventilators to the United States and exporting masks.

On the other hand, CoVID 19 pandemic is pushing every normal aspect of society into a corner. Let it be education or economic condition. By estimation, Corona outbreak will send around 40 - 60 million people to extreme poverty throughout the world. PovcalNet (an online tool provided by the World Bank for estimating global poverty) has estimated that COVID-19 is likely to cause the first increase in global poverty since 1998. When the Asian Financial Crisis hit. With the new forecasts, global poverty—the share of the world's population living on less than \$1.90 per day—is projected to increase from 8.2% in 2019 to 8.6% in 2020, or from 632 million people to 665 million people. Compare this with the projected decline from 8.1% to 7.8% over the same period using the previous World Economic Outlook forecasts. The slight change from 8.2% to 8.1% for 2019 happens because the revised growth forecasts also changed for non-COVID reasons for some countries. Taking this into account, it means that COVID-19 is driving a change in our 2020 estimate of the global poverty rate of 0.7 percentage points — $(8.6\% - 8.2\%) - (7.8\% - 8.1\%)$. On a simpler note, the estimates suggest that COVID-19 will push 49 million people into extreme poverty in 2020.

The places where the virus is taking its highest toll depends primarily on two factors: 1) the impact of the virus on economic activity and 2) the number of people living close to the international poverty line. IMF projects that advanced economies will contract by around 6% in 2020 while emerging markets and developing economies will contract by 1%. Yet with more people living close to the international poverty line the developing world, low- and middle-income countries will suffer the greatest consequences in terms of extreme poverty.

“As Covid-19 cases surge worldwide, the survival of pregnant women and children is at great risk due to strained healthcare systems, and the disruption of life-saving health services,” said Dr Stefan Peterson, associate director and global chief of health at the United Nations International Children's Emergency Fund. Researchers at the Johns Hopkins Bloomberg School of Public Health warn, for example, that the impact of the pandemic to new-born, child, and adolescent health and nutrition services might lead to the deaths of 1.2 million children — a 45% increase over existing child mortality levels. The overall death toll among the young may be exponentially higher according to a recent report from the

The Impact of COVID-19 on Global Poverty



Source: [PovcalNet](#) • The global poverty rate is measured as the share of the world's population living on less than \$1.90 per day.

Christian aid organization, World Vision. An analysis of 24 countries with existing humanitarian crises — from Afghanistan to Yemen — found that as many as 30 million children's lives are at risk from other diseases, like diphtheria, whooping cough, and tetanus, if health care systems are swamped by the pandemic and resources are diverted from immunizations. "We are wrong if we think this is not a children's disease," said Andrew Morley, World Vision's president and chief executive. "Experience tells us that when epidemics overwhelm health systems, the impact on children is deadly." Among youths, girls will suffer most according to a recent analysis by Plan International, an aid organization that advocates for children's rights and equality for girls. Since women and girls undertake more than three-quarters of unpaid care and, in rural communities and low-income countries, spend up to 14 hours a day on such work,

girls will likely be at greater risk of infection. But this is just one type of collateral damage. “Covid-19 shutdowns will disrupt early learning, formal education and livelihoods,” according to the report. “Measures to curb the disease have worsened existing inequalities, forcing girls out of school and placing them at heightened risk of violence in their home.”

As stated above CoVID 19 has disrupted the economy in many ways. Implementation of fast policies to tackle the situation by different governments of the world has far positive and negative impacts as well. Fiscal Policy measures were also introduced in different countries to mitigate the negative economic impact of COVID-19, as shown below –

Table2: Fiscal Policy Measures to Combat Spread of Coronavirus					
Countries	Total Increase in Direct Spending	% of GDP	Fiscal Support via Loans and Loan Guarantees	% of GDP	Remarks
US	USD \$484bn	2.4	USD2.3tn	9.3	Measures announced
UK	GBP 350bn	11.8	GBP330bn	10.7	Measures announced
Canada	C\$ 107bn	6.2	-	-	Measures announced
Czech	CZK 100bn	1.8	CZK900bn	15.9	Measures announced
Poland	ZL 212bn	9	ZL700mn	0.1	-
Romania	RON 9bn	0.9	EUR 400mn	0.2	-
Russia	RUB 1.4tn	0.3	-	-	Measures announced
Egypt	EGP 50bn	0.8	EGP50bn	0.8	-
Israel	ILS 2.8bn	0.4	-	-	-
Saudi Arabia	SR 120 billion	3.9	-	-	-
Turkey	100 billion LIRA	185	-	-	Increased credit, lower taxes and deferred payments
Nigeria	NGN3.5tn	2.3	\$6.9bn	7.5	Measured announced
India	₹1.7 lakh crore	967	\$1 billion	0.04	World bank loan
Source: Media reports and Central Banks' press release					

Money supply measures were also adopted by many central banks through bond purchases programs or as direct coronavirus relief funds. Table 3 below shows the total central bank spending by some central banks to stimulate the economy.

Table 3: Central bank spending

S/N	Central Bank	Amount	Covid-19 Policy response
1	Reserve bank of India	\$50 billion	India adopted a 'whatever it takes' policy which suggest an uncapped spending
2	Central bank of Russia	300-billion ruble (\$4 billion)	Anti-coronavirus crisis fund
3	Bank of Canada	C\$1.0 billion (US\$703 million)	Purchase of government bonds, beginning with purchase of C\$5 billion per week
4	ECB	€750bn (£637bn) (\$796.2billion)	Emergency fund for bond purchase program for EU member countries
5	Bank of England	200 billion pounds (\$248 billion)	First round of quantitative easing. An additional round of QE is currently being considered
6	Federal reserve	more than \$3 trillion	For loans and asset purchases. FED said its balance sheet had exceeded US\$3 trillion
7	People bank of china	500billion yuan (\$79 billion)	To rescue a virus-weakened economy
8	Reserve Bank of South Africa	-	Fiscal authorities are taking the lead on this, not central bank
9	Bank of France	45 billion euros (\$48.9billion)	Country allocation from the ECB rescue fund
10	Central bank of Italy	25 billion euros (\$27.2billion)	Country allocation from the ECB rescue fund
11	Reserve bank of Australia	A\$90 billion (\$56 billion)	Coronavirus support fund
12	Central bank of Brazil	1.2 trillion reais (\$231 billion)	Financial support to counter the effects of COVID-19
	Total	\$4.541 trillion	

It can be seen that most of the countries have adopted different frameworks to fight. From the above, it is clear that monetary policies can not solve the situation. Yes, the expansion of monetary policies has encouraged to undertake different economic activities but economic agents were unable to engage because of the social distancing measures and of course the fear of getting infected by the virus.

To find out the post-CoVID 19 economic scenario, i.e. trading performance and GDP growth, the WTO Global Trade Model has been used. Based on historical data collected, future trade performance has been tried to summarize. It is, thus best understood in terms of two distinct scenarios:

- a relatively optimistic scenario, with a sharp drop in trade followed by a recovery starting in the second half of 2020, and
- a more pessimistic scenario with a steeper initial decline and a more prolonged and incomplete recovery.

Table 4:- Merchandise trade volume and real GDP, 2018-2021 ¹

Annual % change

	Historical		Optimistic scenario		Pessimistic scenario	
	2018	2019	2020	2021	2020	2021
Volume of world merchandise trade ²	2.9	-0.1	-12.9	21.3	-31.9	24.0
Exports						
North America	3.8	1.0	-17.1	23.7	-40.9	19.3
South and Central America	0.1	-2.2	-12.9	18.6	-31.3	14.3
Europe	2.0	0.1	-12.2	20.5	-32.8	22.7
Asia	3.7	0.9	-13.5	24.9	-36.2	36.1
Other regions ³	0.7	-2.9	-8.0	8.6	-8.0	9.3
Imports						
North America	5.2	-0.4	-14.5	27.3	-33.8	29.5
South and Central America	5.3	-2.1	-22.2	23.2	-43.8	19.5
Europe	1.5	0.5	-10.3	19.9	-28.9	24.5
Asia	4.9	-0.6	-11.8	23.1	-31.5	25.1
Other regions ³	0.3	1.5	-10.0	13.6	-22.6	18.0
Real GDP at market exchange rates	2.9	2.3	-2.5	7.4	-8.8	5.9
North America	2.8	2.2	-3.3	7.2	-9.0	5.1
South and Central America	0.6	0.1	-4.3	6.5	-11.0	4.8
Europe	2.1	1.3	-3.5	6.6	-10.8	5.4
Asia	4.2	3.9	-0.7	8.7	-7.1	7.4
Other regions ³	2.1	1.7	-1.5	6.0	-6.7	5.2

1 Figures for 2020 and 2021 are projections.

2 Average of exports and imports.

3 Other regions comprise Africa, Middle East and Commonwealth of Independent States (CIS) including associate and former member States.

Source: WTO Secretariat for trade and consensus estimates for historical GDP. Projections for GDP based on scenarios simulated with WTO Global Trade Model.

Under both scenarios, all regions will suffer double-digit declines in exports and imports in 2020, except for “Other regions” (which is comprised of Africa, Middle East and Commonwealth of Independent States (CIS) including associate and former member States). This relatively small estimated decline in exports stems from the fact that countries from these regions rely heavily on exports of energy products, demand for which is relatively unaffected by fluctuating prices. If the pandemic is brought under control and trade starts to expand again, most regions could record double-digit rebounds in 2021 of around 21% in the optimistic scenario and 24% in the pessimistic scenario.

The stated situation is inevitable if proper measures are not taken. As of writing this article, there are three medications Trusted Source had received emergency use authorization (EUA) from the Food and Drug Administration (FDA) — the anti-malaria drugs chloroquine and hydroxychloroquine, the anti-viral remdesivir and a drug used to sedate people on a ventilator. Along with that, there are 224 treatments are in consideration and 145 numbers of vaccines are in the developmental stage. These drugs are still being tested in clinical trials to see if they are effective against COVID-19. Scientists across the globe have identified three stages of infection at which the coronavirus could be targeted: keeping the virus from entering our cells, preventing it from replicating inside the cells, and minimizing the damage of the organs. Many of the drugs being developed or tested for COVID-19 are antivirals. These would target the virus in people who already have an infection. Whatever the situation will be, it will take time to deliver the medications even after their proper development.

CoVID 19 has not only disrupted the international movements, but it has also affected mankind in every possible way. But, there is always a hope that it will come to an end sooner or later. Meanwhile, there have been researches about the positive outcome of CoVID 19 pandemic. For instance, governments of different countries are trying to cooperate. There are a higher number of collaborations in many aspects. Another positive aspect is that because of CoVID 19, most of the industries throughout the world are closed and that is helping to lower the CO₂ emissions and at the same time providing nature enough time to heal itself. International relations among countries can be seen clearly. While few countries have adopted some decisive strategies to procure a benefit for their political future. Describing it as Coronavirus autocracy, Hungary has become the first country to suspend existing laws under the justification of the coronavirus epidemic, Government can now suspend existing laws and rule by decree for an indefinite period. On the same note, there has been another important speculation about the use of technology related to CoVID 19 pandemic. While there are countries that are using technology to identify and monitor patients and related outbreaks with the help of different mobile applications, surveillance systems and whatnot. Researches show some of these methods can be decisive or can be used for a different purpose rather than that it was intended for. For example, some countries have made mandatory to use apps to track CoVID 19 related cases near to them. It has been proven to be a scientific way and the app will be accurate even if 60% of the total population uses this application. To sustain this, codes of these apps should be open-sourced and there should be clear privacy laws for user access of the application. For instance, India has AROGYA SETU app for

tracking CoVID 19 related patients. But neither this app is open-sourced nor there are clear privacy protection laws in this country to protect the privacy of its user. In this case, imposing an app with such a high access to user privacy without solving the stated two problems, cannot be said as a propitious decision. In contrast, Singapore's Trace Together app and the contact tracing app used by the United Kingdom's National Health Services, are both open-sourced.

Impact of CoVID 19 is not only limited to the stated criteria. Because of this pandemic, Thirty countries and multiple international partners and institutions have signed up to support the COVID-19 Technology Access Pool (C-TAP) an initiative aimed at making vaccines, tests, treatments and other health technologies to fight COVID-19 accessible to all. The COVID-19 (Technology) Access Pool will be voluntary and based on social solidarity. It will provide a one-stop-shop for scientific knowledge, data and intellectual property to be shared equitably by the global community. There are five key elements to the initiative:

- Public disclosure of gene sequences and data;
- Transparency around the publication of all clinical trial results;
- Governments and other funders are encouraged to include clauses in funding agreements with pharmaceutical companies and other innovators about equitable distribution, affordability and the publication of trial data;
- Licensing any potential treatment, diagnostic, vaccine or other health technology to the Medicines Patent Pool - a United Nations-backed public health body that works to increase access to, and facilitate the development of, life-saving medicines for low- and middle-income countries.
- Promotion of open innovation models and technology transfer that increase local manufacturing and supply capacity, including through joining the Open CoVID Pledge and the Technology Access Partnership (TAP).

From the above study, it can be seen as SARS-COV-2 has a far-reaching impact on mankind. As long as there are negative impacts globally, it has also helped mankind to clear its perception about everything. Within this last couple of months, human has learnt that it is not the superstitions but the science that is keeping us alive; it is not the industries but the very bond that people have within themselves throughout the globe that is keeping us safe. After a long time, mankind is re-learning the same old saying that we are not above all, that we are not above nature, that we are just a fragment of evolution within this greater universe or maybe the multiverse (!), that has a long way to learn...

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