A new decade for social changes
Covid-19 Global, Pandemic impact on World Economy

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Abstract. This exploratory study is carried out in April, 2020, when corona virus is spread all over the world and become Economic crisis 2020. The objective of this study is to answer some questions arise in mind, how many countries infected and reduce their economic activities? What are effective fiscal and monetary policies at international level to address the crisis? Is monetary and fiscal policy used as vaccine to prevent the world economy from crisis? It is a hot topic these days when world is facing this covid-19. Researcher get information from different website, international monetary fund(IMF), Organization of economic cooperation and development (OECD) Standard & poor’s, (S&P) rating agencies, and some past papers to explain the impact of Corona virus on world economy. Further explain the losses from one industry to another industry. And finally concluded that world economy is fighting with dual nature crisis. On one hand Death of million people from corona, other is fall down of economy. First challenge is to save the people from death, and secondly to save the world from economic crisis. But these two challenges are contradicted. If want to save people lives then implemented stay at home, social distancing policy, and shut down the country. But we can save our people live but economy fall down sharply because of shut down all businesses in the country. If save economic crisis then people should go out and work as usual, world economy will boost but soon we will lose million or billion of people live which also effect the fall down economy. Policy maker, doctors and health care manufacturer should sit together find ways which is benefits for both people live and save economic crisis.

Keywords. Covid-19, outbreak, pandemic, monetary policy measures, and fiscal policy measures, liquidity provision

1. Introduction
At the end of 2019, a germ called severe acute respiratory syndrome (SARS-CoV-2), causes Corona virus (COVID-19). The occurrence of this Respiratory infection was initially exposed in Wuhan city, China. Dr Li was the first personality who identified corona virus epidemic in the untimely days of its outbreak. He become aware of during his research there is a virus like SARS which is a worldwide epidemic 2003. Initial cases of Corona virus came from Hunan
seafood marketplace and patient were quarantine in hospital. Dr Li inform his other medical practitioner by sending messages, but unluckily after the three days of this message Wuhan police warned Dr Li to stop such kind of rumors. Later Dr Li catch this Corona virus from his patient and died. Later on the ground realities Chinese health officials announced about this Corona virus and its symptoms and precaution. It is important to note that Wuhan is a mid city of China and this Corona virus start at the time of spring festival in China. During this festival all Chinese people visit to their home town to meet their parents, friends, relatives and enjoy spring festival vacation with their loved ones by eating, dancing. This is the peak time for travelling in whole China. Before the Chinese official announcement millions of people travelled through Wuhan and infected of this Corona virus. This is a biggest reason of Corona virus spread very quickly and within a day’s millions of people infected by this virus.

This speedy outburst raised solemn awareness at nationwide and worldwide levels and within weeks, later it is familiar as an epidemic by the World Health Organization (WHO), voyage Wuhan and in a hurry disseminating in 200 countries/regions worldwide. According to World master info at present on 04th April 2020, total numbers of Corona patient is 1,700,378, out of this 102,755 death cases and recovered case are 376,548.

Due to globalization all countries of the world are closed incorporated. If something occurs in one part of the world, it would have medium or high impact on the others related economies. Especially the leading economies China extensively impact on other economies of the globe.

China is the 2nd largest economy in the world. Its worth is $13.6 trillion. Approximately 16% of the total world GDP is contributed by China. It is the biggest exporter of the world. Most of the world biggest companies depend on China for backward and forward linkage.

Due to Epidemic Corona virus in China mostly factories closed in China which impact on the world economy.

According to (Bentolila, 2018) (Bagliano, 2012), literature on the causes of world economy recession is in huge amount. But global recession 2020 is new in the modern history, which is called a recession due to (coV-19), if we see in past, According to (Sachs, 1998) crisis of Asian debt in 1997 was due to fall down of Thai baht, which shaped fright and caused an economic recession and financial crisis in Asia.

Further According to (Allen, Carletti, 2010) financial crisis in 2008 was due to fragile monetary policy, free regulatory structure and high leverage in banking sectors. While in Nigeria 2016, recession was due to deficit Balance of payment, and prices of crude oil down up to minimum level. But in this exploratory study we will discuss how corona virus impact on other economy of the world. According to World meter statistics on (covid-19) shows number of confirmed case, death cases and recovered cases.
Table 1

| Countries     | Confirmed cases | Confirmed death | Confirmed recovered |
|---------------|-----------------|-----------------|---------------------|
| World         | 1,700,870       | 102,789         | 376,796             |
| USA           | 503,177         | 18,761          | 27,314              |
| Spain         | 158,273         | 16081           | 55668               |
| Italy         | 147,577         | 18849           | 30455               |
| France        | 124,869         | 13197           | 24932               |
| Germany       | 122,171         | 2736            | 53913               |
| China         | 81953           | 3339            | 77525               |
| UK            | 73758           | 8958            | 344                 |
| Iran          | 68192           | 4232            | 35465               |
| Turkey        | 47029           | 1006            | 2423                |
| Belgium       | 26667           | 3019            | 5568                |
| Switzerland   | 24551           | 1002            | 11100               |
| Netherlands   | 23097           | 2511            | 250                 |
| Canada        | 22148           | 569             | 6013                |
| Brazil        | 19943           | 1074            | 173                 |
| Portugal      | 15472           | 435             | 233                 |

Source: World meter statistics as on 10th April, 2020

According to (world health organization, 2020) report, Europe has highest numbers of Corona virus cases. Table 2 shows the confirmed cases, total death cases on territory or region basis.

Table 2

| Territory/Region          | Confirmed case | New case | Total death | New death |
|---------------------------|----------------|----------|-------------|-----------|
| Western pacific region    | 117,245        | 1395     | 3978        | 34        |
| European Region           | 799,696        | 40095    | 66213       | 4697      |
| South East Asia Region    | 12978          | 1405     | 569         | 101       |
| Mediterranean Region      | 88659          | 3307     | 4607        | 148       |
| Region of America         | 493,173        | 38400    | 17038       | 2264      |
| African Region            | 8789           | 452      | 382         | 33        |
| International conveyance  | 712            | 11       |             |           |
| (Diamond Princess)        |                |          |             |           |
| Total                     | 152,1252       | 85054    | 92798       | 7277      |

Source: World Health Organization (WHO) Report

2. Impact of Corona virus on World economy:
In beginning it was a prophecy that corona virus (covid-19) pandemic is only in China. But later because of the movement of peoples it extend worldwide, now more than 200 countries effected by this corona virus. The world health organization precautionary measure, it is announced that corona virus is spreading around the world, and it is easily transfer from person to person. Everyone should keep distance from each other. Further they said it necessary to stay at home to avoid this corona virus. Every country in the world took precaution measure to safe the nation from corona virus, due to which whole world is lock down. All the industries in the
whole world lock down instead of some basic good producing factories. According to (Horowit, 2020) and (Elliot, 2020) all countries are disconnected from each other which affect the aviation industry badly. Along with cancellation of major sports events like PSL (Pakistan super league) also affect the sports industry. Covid-19 crisis 2020 not only destructive but also spillover implication on the world economy due to shocks of supply and demand in every sector of companies said by (El-Erian, 2020).

According to US Federal Reserve monetary policy report, it is clearly mention that global economy and US will be highly affected due to size of Chinese economy. China total GDP share to the world economy is 13.6% which is highest after US economy, which is 16.8%. Some economist forecast GDP of world developed economies and shows that in year 2020, GDP will grow less as compared to the year 2019. It depends on the government abilities how to fight with covid-19-20. According to John Detrixhe GDP forecast table of the world are given below.

| Sr no. | Countries      | 2019 GDP in % | 2020 GDP in % | Change % |
|-------|----------------|---------------|---------------|----------|
| 1     | World          | 2.9           | 2.5           | -0.5     |
| 2     | USA            | 2.3           | 1.9           | -0.4     |
| 3     | UK             | 1.4           | 0.8           | -0.6     |
| 4     | China          | 1.4           | 0.8           | -0.6     |
| 5     | Euro Countries | 1.2           | 0.8           | -0.4     |
| 6     | South Korea    | 2.0           | 2.0           | 0        |
| 7     | South Africa   | 0.3           | 0.6           | 0.3      |

Source: John Detrixhe forecast for change in GDP

According to Above GDP forecast table shows that GDP in world economy is fall down from 2.9 in 2019 to 2.5 in 2020. Which shows decrease in the world GDP with negative 0.5. International monetary fund (IMF) managing director (Tao Zhang) said currently world economy in front of three biggest challenges, which contain tension on trade front, financial and fiscal risk, how to achieve inclusive growth. He believed global economy sun is still shining. But world largest economy US and China have trade war, diverse models try to access both economy impact on probable trade war, and to mitigate the possible effective measures. But condition truth is much complex than predicted model. Difference or disagreements at all essential points need to resolve with cooperative approach. If not, then trade tension would consequence in global economy losses. Zhang says about financial or fiscal risk, he elaborated that total world debt was recorded $164 trillion in 2016. But currently in 2020 crisis, it is superior to the level seen in 2008 crisis. Countries must awake of their fiscal conditions and maintain economic growth. Some countries approaches like fully employment, government expenditures will definitely reduce the risk to sustainability. Economies should focus on innovative ideas and there is a potential for financial technology and implement these ideas to bring efficiency gain.

The rapid increase the virus in china, shows that more than 3000 death and more than 80 thousand infected people of the world 2nd largest economy implicit to lockdown the domestic and international travel. Which result in declining the economy of China and ultimately affect the world economy? According to S&P rating agency China shows that 20% of worldwide manufacturing output in 2018, which is now expected to decline approximately from 5% to 5.7% due to outbreak of corona virus. Government of china injected 1.2tn Yuan in financial
market by reducing the rate of interest to support the economy. Further China also reduced the tariff by halved on US goods, and taxes also reduced by 5% instead of 10%, now it reduced more from 2.5% instead of 5%. Fed notice that Asian economies will affected due to Corona virus spread. According to head of European central bank (Lagarde, 2020) Virus intimidation is a novel risk to economic stance, replacing China-US trade war.

2.1 Impact on the tourism industry:
The Corona virus is spread more than 200 countries. The situation is panic in the whole world. Government of all countries restrict their people to unnecessary travel domestic or internationally. Mostly countries suspended tourist visa, residential visa and work visa. If we take an example of Kingdom of Saudi Arabia(KSA) which is Holy Country for all Muslim world. Every year millions of people visit Makah (city of Saudi Arabia) to perform Hajj, which is one pillar of Islam. As per the government statistics of KSA, last year in 2019, approximately 2.5 million Muslim around the world visit for Hajj prayer. But this year KSA announced to stop Hajj application to prevent people from (covid-19). Same as other countries wholly prohibited inbound and outbound travel. Government forced travel restriction impact on numbers of passenger decreases in the whole world. With a reduction of number of passengers some airlines stopped their operations, such as polish airline, Baltic airline. These travel restrictions will affect the tourism industry worldwide and approximately $200 billion losses foreseeable. As per the IATA estimate, Aviation industry losses cross the figure of 113 $billion. American Airlines Seeks $ 50 Billion Compensation.

According to World travel and tourism council (WTTC) mention that due to corona virus pandemic situation more than 50 million jobs cut down in travel industry. Tourism industry contributes 10% for Global GDP. After the epidemic of corona virus tourism industry need 10 month for revival of tourism industry. Further WTTC said that Asia is mainly affected continent. According to Virginia Messina (WTTC Managing Director) said policies are general and not verified to be effectual to hold the virus. She further said tourism restriction could also affect not only to medical supplies delivery but also on medical experts travel. Messina said every month more than 850,000 citizens take a trip from Europe to USA. This is comparable to $3.4 billion monthly payment to US economy. She said out of 50 million employment lost, near about 30 million is from Asia, 7 million from Europe, 5 million from Americas and other territories. It’s comparable to a loss of 3 month of global travel 2020. WTTC recommend that countries should make trouble-free policies regarding visa process, and trim down the taxes on travelling and initiate incentives later than the epidemic situation.

2.2 Impact of corona virus on global hospitality industry:
Hospitality industry largely affected due to corona virus epidemic situation. Various countries government announced the slogan “social distancing” and “Stay at home” lead to shutdown the restaurant, parks, cafes, hotels, to prevent the spread of covid-19. Hotels from all around the world witnessed booking termination value billions of dollars, and the hotel industry bailout $150bn. Executives of Restaurant and hotel industry lost their jobs and trying to find a new job. According to STR (Smith travel research) weekly reports shows that metrics are ongoing to catch worse because of pandemic Covid-19. This information based on 9.2 millions rooms and 68000 properties around the globe. Reports shows that in comparisons to last year 2019, tenancy is extremely down approx 95% in Italy, 67% in UK, 68% in China, 59% down in USA, and in Singapore its down level is 48%. As we know that China is a earliest market to deal with corona virus and luckily successfully defeat the Corona virus and now hospitality industry in China is forwarding to stabilization. Now 87% hotels are opened in whole china, which was only 40%
in past 2 months. Tenancy is turned to positively, in February it was 10%, at the end of march it increase up to 22% and beginning of April it approx increase to 30%. But if we talk about the world, still there is worse condition in hospitality industry until they stop covid-19. In USA still tenancy is 30%, which is not a good signal. The Tenancy in US hotel industry did not fall down quickly as compared to other countries like China, Italy; the reason is US government did not announce lock down policy. Still people travelling in USA, and not practice the social and physical distancing. That's the reason corona virus infection rate is much high in USA as compared to other countries.

According to Revenue per available room (Rev.PAR) performance measure in hospitality industry, shows statistics that now the hospitality industry fall down more as compared to financial crisis in 2008, and terror attack on 11 September. In China Rev.PAR, declines up to 85%, while in Europe it drop 69.5%, and in US it drop up to 44%. According to STR, Rev.PAR break the record of declining of last 30 years. Cumulative data of top 25 markets in USA shows major declining, aggregate occupancy down more than 66% to 26%.and Rev.PAR down from 80% to 27%. STR declared about the collapsed of occupancy in his report. According to Jasper Palmqvist STR area director predict the recovery phase with hope that it almost take 6 months for v shaped recovery which also seen in SARS crisis.

2.3 Impact of Corona virus on the global sports industry:
The impact of corona virus on sports industry is very high. According to sports global value analysis currently sports market contribute annually US$756bn, which include US$420bn by USA and remaining by Europe accounted US$250bn. Below this China is the most growing sports industry which makes US$150billion annually. If we see all major sports events in the world from athletes, leagues, teams, media and broadcast stopped or delayed due to pandemic covid-19. Football leagues in Scotland and England announced to instantaneously postponement of football matches till 30th April. In USA National Basketball Association (NBA) temporarily stopped their season and Revenue lost amount is 350 million to 450 million US dollar. The world biggest sports event is Olympic Games, which is planned in Japan Tokyo at the end of July 2020, but due to corona virus International Olympic Committee (IOC) decided to delay this event till 2021. Now it starts from 23 July to 8th of august in 2021. Japan suffers a losses approx 597 billion yen which it already invested to host this sports event. Marathons race was listed to get put on 26th April also postponed until October. World Athletics championship planned to organized in august 2021. But now it is delayed in July 2022, to avoid contradictory with the diary of Olympic Games. Formula one also stopped their events due to corona virus. In Portugal government stated emergency in the countryside and Motorsport game occasion and other events postponed. World snooker championship also postponed. A cricket league in Pakistan PSL (Pakistan Super league) postponed due to corona virus. In golf sector, LPGA rescheduled its event and resulting billions of dollars Revenue loss. According to (SimonDenyer), chief executive of television and internet sports streaming said, in 75 years it is a biggest disaster in sports industry.

2.4 Impact of Corona virus on global Education industry:
According to United Nations Educational, Scientific and Cultural Organization (UNESCO), approx 290 million students or learner affected because of corona virus covid-19. Mostly countries have temporarily closed their educational institutions to control the Corona virus from spread. It damages the education industry with $600 billion. According to UNESCO observation, 188 countries have nationwide or completely closure their educational sectors. And 5 other countries closure educational institutions on local basis. Total impact is 99.4
percent of the world student’s population. Cambridge international Examinations have cancelled all their examination for all level worldwide. Corona virus had severe impact on those schools wherever the lack of online education platform. A credit rating agency (Moody’s) downgrades the USA education system which is outburst from stable to downbeat. The reason is that more than 30% universities and colleges in US have low operating performance. So it is not easy for these institutions to adapt academic and financial changes which are necessary to manage with corona virus. Italy and Spain Nigeria, France, Israel, and Egypt closure all their schools, while Australia closures some of their schools. This worse condition in educational sectors creates unemployment for most of the teachers. Government of Netherland also temporary suspended all examination for students. The positivity of this condition is it increase the value of online education and distance learning, but it is noted that a very small proportion of institution to provide online educations. In USA only 15% undergraduates who studied online classes and get degrees in 2019. Other countries like Canada, UK bear billions of dollars lost in education Revenue because foreign students suspend their studies and went back home. According to Deloitte report, due to cancellation of Federation of English language teaching organization (FELTOM) monthly financial loss is near about Euro 1.4 million, whereas Malta’s economy cost is Euro 3.4 million per month.

2.5 Impact of Corona virus on Health industry:
As other sectors, hospital sectors are on the front line to fight with corona virus pandemic. Hospital industry faces supply chain dispute and knock to its revenue from the termination of elective surgeries. Mostly countries have increased the services with higher level of demand but if we talk about testing equipment which are in greater numbers in private hospitals. China has closed all its hospital in Wuhan, while in Iran hospital are doing more struggles to fight with this corona virus. In Spain government nationalized all private hospitals and healthcare centers to fight with spreading of corona virus. Singapore has sufficient equipment and health facilities to control corona virus. Further Ministry of health (MOH) in Singapore advised to all doctors in private and public sectors not to accept any foreigner patient. Pharmaceutical industry suffers billions of dollar losses because supply chain affected of medicine companies. Major drug making companies import ingredient from Chinese companies. Approx before the Corona outbreak, china produce the 60% ingredients of world pharmaceutical industry. After the outbreak of Corona virus all pharmaceutical ingredient stopped due to multiple reasons. Firstly china had shut down its factories which make drugs. And secondly there is a big supply chain problem; thirdly various countries cancelled their contract to import these ingredients from china. The excessive dependence or trust on Chinese manufacturer raises the considerable risk to the worldwide pharmaceutical industry, and outbreak of Covid-19 proved it. The rating agency S&P shows that health industry fell down up to 7% in the start of March, 2020 which indicates that health investor felt industry hit severely. Moody’s rating agency show that cash flow is very low as compared to 2019. further he said nonprofit and public sectors of healthcare go downgraded from stable to negative cause of the Corona virus Covid-19.

3. Policy Responses to Covid-19:
Different countries implemented different policies with regard to monetary and fiscal policy, human Control policies, and health policies to sustain the economy of their countries. More than 200 countries affected with covid-19. Human control policies which are implemented by all affected countries include shutdown the airbase, sea border and land border. Some countries temporary release the prisoner from overcrowded prison. Some countries nationwide closed all
universities, colleges and schools to break the chain of virus. Some countries impose “Curfew” in the whole country with slogan to stay at home. Countries suspended all tourist visas, residential visa for temporary time. Some countries ban to travel inside or outside the country. Public health policies include public quarantine, border quarantine, stay at home, social distancing. It is not possible to explain the Monetary and Fiscal Policy responses of all countries around the globe. Research randomly select some developed and some developing countries, and explain their Policies against covid-19 situation. Below table 4 shows the monetary and fiscal policies of some random selected companies.
| Countries | Monetary Policy Measures | Fiscal Policy Measures |
|-----------|--------------------------|------------------------|
| **USA**   | Lowered 150bp to 0-0.25bp, purchase treasury and agency securities, expand term repos, lower cost of lending discount, reduce swap cost, temporary repo facility for foreign n international monetary, federal reserve support facility flow of credit, which include primary dealer credit facility, mutual market liquidity facility, corporate credit facility, asset back security loan, paycheck protection liquidity facility, street lending program, municipal liquidity facility, | $2.3 trillion (11% of GDP) relief for corona aid, include 1 time tax rebate to individual is US$250 billion, unemployment benefit US$ 250 billion, food safety US$ 24 billion, provide loan, guarantees to corporate bankruptcy prevent US$ 510 billion, SME loan US$ 359 billion to retain worker, hospital US4100 billion, state n local government US$ 150 billion, corona virus preparedness act response US$ 8.3 billion, families first response act US$ 83.4 billion, |
| **Spain** | ECB provide monetary policy support include buy asset (€120 billion) until last of 2020 with APP program, auction of full allotment, fixed rate, liquidity facility at deposit facility rate, €750 billion for asset purchase for pandemic emergency, relaxation for euro system refinancing (MROs, LTROs, TLTROs), provide loans to SMEs, individual and household. ECB allowed institution to operate below pillar 2 guidance. Liquidity coverage ratio, new rule on composition of capital, release countercyclical capital buffer, relaxation for non performing loan, €100 billion government loan for companies and self employed, €2 billion for exporter, loan maturity extension for farmers, €83 billion leverage to help private sector, €10 billion for other institutions funding, €400 million 3 month mortgage payment. | 13.9% (1% GDP) key measures, contingency budget support fund to health ministry (€1 billion), region health services (€2.8 billion), research funding for covid-19 vaccine and drug (€110 million), unemployment benefits for worker laid off, increase 60 to 75% sick pay for quarantined or infected workers, allowance self employed workers for suspension of activities, subsidy for household employees up to 70%, monthly allowance €430 to workers for expiring their contract during these emergency days, extra budget fund is €300 million, €25 million for meal of kids affected by school, landlord provide energy provison, 50% exemption for employer social security, deferral tax payment for SME amount (€14 billion), |
| **Italy** | ECB provide monetary policy support include buy asset (€120 billion) until last of 2020 with APP program, auction of full allotment, fixed rate, liquidity facility at deposit facility rate, €750 billion for asset purchase for pandemic emergency, relaxation for euro system refinancing (MROs, LTROs, TLTROs), provide loans to SMEs, individual and household. ECB allowed institution to | Government adopted €25 billion (1.4% of GDP), for emergency package. (€3.2 billion) Fund to strengthen Italian health system, €10.3 billion to preserve job and help income laid off worker, €6.4 billion for deferral tax and postponement of utility bills payment, €5.1 billion for supply of credit, €400 billion (25% of GDP) for liquidity decree for state guarantees, €750 billion liquidity for household and business. |
| Country | ECB Monetary Policy Support |
|---------|-----------------------------|
| France  | ECB provide monetary policy support include buy asset (€120 billion) until last of 2020 with APP program, auction of full allotment, fixed rate, liquidity facility at deposit facility rate, €750 billion for asset purchase for pandemic emergency, relaxation for euro system refinancing (MROs, LTROs, TLTROs), provide loans to SMEs, individual and household. ECB allowed institution to operate below pillar 2 guidance. Liquidity coverage ratio, new rule on composition of capital, release countercyclical capital buffer, relaxation for non performing loan, €100 billion government loan for companies and self employed, €2 billion for exporter, loan maturity extension for farmers, €83 billion leverage to help private sector, €10 billion for other institutions funding, €400 million 3 month mortgage payment. Decrease the counter cyclical bank capital buffer to 0%, which was increase from 0.25% to 0.5% which is effective from April. Fully banned on sale of short stock till April. |
| Germany | ECB monetary policy support release counter cyclical capital buffer from 0.25 to 0%, further €100 billion refinance for SME to short term liquidity, financial stabilization €100 |

Authorities announced €100 billion more than (4% of GDP), to fight with corona virus, include liquidity measure, include more €45 billion in annual budget which is expected to introduce 13 April to 17 April, 2020, €312 billion for guarantees of bank loan and credit reinsurance, which include boosting health insurance for caregiver or sick, rise in the health spending, postponed for tax payment for firms, liquidity support for social security, support worker wager under reduced hours schedule, financial help for small enterprises, individual worker and professional, postpone for utility bills and rent for small business, grant exceptional bonuses, extend the unemployment benefits expiration during this emergency.

Federal government adopted additional budget €156 billion, (4.9% of GDP), include R&D vaccine for covid-19, health care supplies and equipment, short term worker access, subsidy to preserve jobs and workers income, increase childcare benefits for low income parents, support of self employed with income benefits, €50 billion grant for
| Country | Measures | Details |
|---------|----------|--------|
| China | Monetary measure include, decrease bank rate by 65 bps, expand the UK government bond which hold by central banks and also expand the pound 200 billion of non financial corporate bonds. Planned new funding scheme to reinforce the rate cut. More incentives for lending to real estate economy. Use of government overdraft account with BOE to provide liquidity. Joint BOE and HM treasury for corporate financial facility with business loan scheme to give loan and guarantees of pound 330 billion. Activate repo for liquidity facility. Lower UK countercyclical rate to 0 %. | RMB 2.6 trillion (2.5% of GDP) financing plan announced by China, out of 2.5 GDP, 1.2% of GDP implemented in first quarter of 2020, which include increase the amount on prevention control from covid-19, to expand medical equipment production, accelerate unemployment insurance disbursement, relief on taxes and social security payment, expand overall fiscal measures. Improvement in public health management system for emergency. |
| UK | Monetary measure includes, decrease bank rate by 65 bps, expand the UK government bond which hold by central banks and also expand the £200 billion of non financial corporate bonds. Planned new funding scheme to reinforce the rate cut. More incentives for lending to real estate economy. Use of government overdraft account with BOE to provide liquidity. Joint BOE and HM treasury for corporate financial facility with business loan scheme to give loan and guarantees of £330 billion. Activate repo for liquidity facility. Lower UK countercyclical rate to 0 %. | UK fiscal measure include, £5.7 billion for charities and public services, £27 billion for business support, means property tax holidays, grant for most affected sectors, sick pay leave compensation, £7 billion for social safety for people, introduce corona virus interruption for business loan scheme with the help of British business bank and government, on large and small scale. For next quarter deferred VAT payments, provide 80% earning of self employed which is £2500 is given for initial three months. £150 million to IMF for catastrophe relief trust. |
| Pakistan | State bank of Pakistan (SBP) cut the policy rate from 225bps to 11.0%. Introduce two refinancing facilities. One is (TERF) temporary economic refinancing facility with worth of PKR 100 billion to invest in buying latest manufacturing equipment and plants at 7% fixed for next 10 years. Secondly (RFCC) refinance facility for PKR 1.2 trillion relief package announced by authorities. Remove the import duties on health equipment. PKR 200 billion for daily wages worker, PKR 150 billion allocated to low income families cash support, PKR 100 billion for export industry to relief on tax refund. PKR 100 billion support to SMEs, PKR 280 billion for wheat procurement resources, PKR 50 billion for utility stores. | PKR 2.6 trillion (2.5% of GDP) financing plan announced by China, out of 2.5 GDP, 1.2% of GDP implemented in first quarter of 2020, which include increase the amount on prevention control from covid-19, to expand medical equipment production, accelerate unemployment insurance disbursement, relief on taxes and social security payment, expand overall fiscal measures. Improvement in public health management system for emergency. |
| Country    | Measures                                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Turkey     | CBRT decrease the policy rate from 100bps to 9.75%. provide liquidity facilities, provide instrument for longer term at discounted rate. Requirement for reserve of foreign currency decrease by 500bps. Facility for exporter and SMEs. Maturities for exporter inventory extend and give discount credit. Limit of LTV on mortgages increase from 80 to 90%. Provide 3 month moratorium for repayment of bank loans. Companies’ bankruptcy has been suspended. | Turkey announced TL100 billion packages to support his economy. Which include TL75 billion or $11.6 billion (1.5% of GDP) used for fiscal measure. Other TL25 or $3.8 billion (0.5% of GDP) used for increase the credit funds. Some other measures include increase pension of fund, and provide cash to needy families. Employment protection with the help of short term work allowance rules. Postpone or reduced taxes for different sectors industries which major affected by covid-19. Support Turkish airline. Increase the extension of personal corporate income tax. |
| Afghanistan| Financial stability committee monitoring risk regarding monetary and indicated to bank to provide liquidity. Provide uninterrupted financial services, enhanced foreign currency transaction and remote services which are closure.                                                                                                                        | 1.9 billion (0.1% GDP) budget for health emergency, testing lab, medical supplies, 57% rise (0.55% GDP), social relief packages for household, cut down non-essential spending, get finance from World bank, Asian development bank, Islamic development bank, IMF |

4. **ISSUES in Policy Responses:**

The world affected the corona virus pandemic took some policy measure with regard to monetary policy, fiscal policy, human control policy and healthcare policies. There are some issues regarding these measures due to which these measures cannot stop the recession. Firstly if we talk about the monetary policy in which central bank, International monetary fund reduces the rate of interest, to increase the supply of money in market. But on the other side demand for money is not high, people are staying at home, all business shut down. Businessman not interested to take a loan even at low interest rate. There is a slogan stay at home and social distancing stopped people to go outside and buy anything. If no customer or consumer then there is no business, if no business then no need of capital to invest. Now situation is, banks are ready to give loan, but cannot find an investor to take this loan on low interest rate. So this monetary policy step is not beneficial for global economy. Mostly economist said that monetary policy is not a vaccine to stop recession. Various countries took different monetary policies to increase the economic activities. But to save people life government also imposed stay at home and social distancing. Which result a fear in the mind of people, and all economic agent are powerless to interact with each other regarding economic activities. Covid-19 is now a big political issue in most of the countries with regard to fiscal policy. It is difficult for government to take some fiscal measures, like which sector are more deserving for packages and which sectors are less important. Currently it is a big debatable issue in developed and underdeveloped
economies like USA and UK. Now every sector of the industry trying to get more packages from government to keep sustain from this covid-19. Some big businesses argue that government is giving more packages to banking industry, education industry, health industry, manufacturing industry as compared to entertainment industry, hospitality industry. They protested against government and saying why government did not consider other sectors like entertainment and hospitality industry significant contributor to the economy.

5. Conclusion and recommendation
Whole world is suffering covid-19 and the policy maker in central bank and other biggest institution who introduce new policies to alleviate the global economy are at high pressure. Previous crisis in 2008 is just a challenge to fight with financial crisis. But currently covid-19 crisis is dual nature. First to save the people, second is to save the economy. Both measure is difficult to achieve because if we choose to save the people means took measure like stay at home, social distancing, shut down the country to protect our people from death, it is ultimately we cannot save the economy globally. Because all business shut down, from lower wages worker to executives suffer from this shut down and economy fall down quickly. But on the other side if we save economy then government need to ignore the precautionary measure from covid-19, everything is going as usual. No shutdown in the countries. No social distancing and stay at home. With this second step maybe our economy will go up but we cannot save the lives of people, it is expected millions of people died if they infected with this corona virus. If we see in the long term, millions of people death will also directly affect the fall of economy. But if we save our people, it is chance we can boost our economy near future. There is a big challenge for policy maker to take such measure which not only save the people but also save the economy. This is a time to work together, all policies failed if there is no health precautionary measures. Doctors, economist, policy maker should sit together and implement those measure which have dual effect like it not only save people but also save economy.

| Abbreviation used in this study |
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| 1. IMF International monetary fund |
| 2. OECD Organization for Economic cooperation and development |
| 3. S&P Standard & poor’s financial services |
| 4. SARS severe acute respiratory syndrome corona virus |
| 5. WHO World health organization |
| 6. PSL Pakistan super league |
| 7. KSA Kingdom of Saudi Arabia |
| 8. IATA International air transport association |
| 9. WTTC World travel & tourism council |
| 10. STR Smith Travel Research |
| 11. Rev.PAR Revenue per available room |
| 12. NBA National Basketball Association |
| 13. IOC International Olympic committee |
14. LPGA Ladies professional golf association
15. UNESCO The United Nations Educational, Scientific and Cultural Organization
16. FELTOM Federation of English Language Teaching Organizations Malta
17. MOH Ministry of Health
18. ECB European Central Bank
19. BOE Bank of England
20. KFW Kreditanstalt Für Wiederaufbau (German Development Bank).
21. VAT Value Added Tax
22. SBP State bank of Pakistan
23. TERF Temporary economic refinancing facility
24. RFCC Refinance facility for combating covid-19
25. NDMA National Disaster Management Authority
26. CBRT Central bank of Republic of Turkey

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