The Covid-19 outbreak, a Failure of Social Protection System: A Policy Perspective of Energy and Economic Recovery

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ABSTRACT

COVID-19 has proliferated personage suffering around the world. The virus is contagious medically and economically as well. The study's main aim is to examine the failure of the social protection system caused by the COVID-19 pandemic. Three major dimensions of the social protection system have been addressed in this research—a shock to the labor market, health emergency, and massive change in energy usage. Covid pandemic had cost the world economy more than $2 trillion. The labor market is badly affected significantly; workers engaged in the informal economy. The Director-General (WHO) has declared the COVID-19 pandemic as a public health emergency of international concern. It is one of the highest levels of alarm by WHO in history. Global Energy Review 2020 shows that those complete lockdowns have a 25% decline in the energy demand per week. As economic activity slowdown due to the closure of the industry, banned transportation, and lockdown. Conclusively, it is examined that the coronavirus pandemic has brought a worldwide failure of social protection system required a comprehensive policy and a firmed leadership to stand against the outbreak.

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1. Introduction

The COVID-19 outbreak is one of the most significant public health crises and economic shocks worldwide (Ahani and Nilashi 2020; Cascella et al. 2020). The COVID-19 shock will prompt the recession in most parts of the world and decelerate the annual global growth rate below 2.5%. The growth rate is taken as a recessionary threshold for the world economy. It would worse the global
economy and cost trillions of dollars (International Monetary Fund 2020). Three factors can determine the duration and depth of crisis: (a) how far and fast the virus spread; (b) how long before the vaccine is found and (c) how effective policy is designed to reduce to cost to health, economy, and well-being. One other major factor is panic, uncertainty, and fear, which will shape the crisis outcomes. The COVID-19 outbreak has two possible economic consequences: firstly, the shock has a great potential to upset the economies, but a sound policy at hand can mitigate the original threat to a renewed economic confidence. Bring an optimistic growth forecast for the following year. If the outbreak is short-lived, then a combination of both monetary policy and the automatic fiscal stabilizer would be practical to mitigate the economic shock of COVID-19. Reduction in central banks rate will give “V” shape recovery as observed in the SARS virus shock of 2003.

Contrary to that, if the crisis is prolonged, it will probably distract the economy's supply side. Squeezing the profit margins, crippling the production networks, and hope of recovery will have vanished. Coordinated liquidity preference by central banks and more active fiscal policy would be an effective tool in boosting free trade and foreign investment. Secondly, the economic crisis linked with the pandemic crisis is the most paramount concern of time and confidence but a more significant concern of (political) leadership and (policy) coordination. The crisis is crashing fragile economies as well as highly financialized world economies. There is a more significant policy challenge as consumers and investors lose confidence because of this contagion spread. Assets prices are deflating, aggregated demand is puny, debt distress is high, and income distribution is worsening. During the last six months of 2020 and before the COVID-19 outbreak, the global economy faced slower growth across all the regions. It was expecting that world will gradually improve by 2020 by leading world economies to achieve the potential growth rate by 2021. However, there is still room for policy maneuvers to fill the gap between reality and offer a bold policy suggestion on joint monetary tweaking and structural reforms.

It is a matter of fact that various reports on COVID-19 impact on the economy and health fail to present a robust policy explicitly addressing how to mitigate the harmful effect of the pandemic to strengthen the development. In order to fulfill the said purpose, states, international stakeholders, and other agencies instituted various contemporary pandemic policies. The implementation of such policies has provoked some progress in the economy, health, and energy sector. Many factors and immediate responses can ascribe the recovery of the shock of coronavirus. However, developing countries lack a sound infrastructure, supportive machinery, and skilled workforce, which plays a vital role in developing these projects effectively.

Moreover, lockdown/quarantines and uncertainty and fear also hinder the success rate of policies to cope with the pandemic. To give this world economies a solid and hopeful economic and health recoveries and efficient use of energies, the states need to take more mature and long-lasting policy decisions, which could pave the way forward for sustainable development globally. Although this coronavirus pandemic's numerous challenges are facing today, it must be firmly addressed and thoroughly recognized. This study intends to contribute to the descriptive analysis of the energy and economic depression and health crises due to COVID-19. We measure the country and sector-wise analysis of economic loss due to COVID-19. Furthermore, we provide a way forward for economic recovery caused by implementing robust policies during pandemic.

The rest of the paper is organized as follows; section 2 contains world/regional GDP analysis and projections about growth. Section 3 includes labor market conditions and the status of the social protection system after a massive shock of coronavirus outbreak. Section 4 describes the health crisis
caused by this pandemic. The last section is the comprehensive study of the perspective of the energy sector in response to coronavirus.

2. How far the Economic Disruption Channelizes?

It is a persistent worry for policymakers when stiffly pecuniary, and profoundly independent global economies are contagion from shocks, particularly the developing economies for whom the only protective measure of choice is the reserve accumulation. On the other hand, the most vulnerable economies are infrequently the source of the financial virus. Considering the 2nd half of 2019 and earlier the pandemic of the COVID-19 crisis, it is progressively clear that the world economy is facing more troubles water. It includes the slower growth beyond all regions and economic activity contracted in the final quarter. There is limited room for policy maneuver based on widely shared expectations about the improvement and intensity of the global economy by 2020, led by the cosmic emerging economies, with a bridge to stagnant global growth by 2021.

Source: UNCTAD calculations based on IMF, WEO, October 2019

Figure 1: World GDP Growth 1995-2020

It will cost almost $900 billion in the loss in productivity by a percentage drop-in growth rate. Forecast for a 1.7% growth rate because of the pandemic virus will cost approximately $2 trillion. The pandemic virus disrupts the economic scenario by three channels: Demand; Supply, and Finance. Three sectors of the economy were at high risk: the service sector, tourism, entertainment, public events, and catering services at the demand side. The manufacturing activity has been halted in most affected regions, and the reduced production caused the global supply chain. In the 2019 October Outlook of IMF, it was forecasted that commodity-exporting countries would help to push global growth up to 2.7% by 2020. However, the COVID-19 has altered the scenario of all forecast for 2020 are being revised downward.
Table 1: Real GDP growth (Year-on-year % change)

|          | 2019            | 2020            | Difference from November EO | 2021            | Difference from November EO |
|----------|-----------------|-----------------|-----------------------------|-----------------|-----------------------------|
| World    | 2.9             | 2.4             | -0.5                        | 3.3             | 0.3                         |
| G20      | 3.1             | 2.7             | -0.5                        | 3.5             | 0.2                         |
| Australia| 1.7             | 1.8             | -0.5                        | 2.6             | 0.3                         |
| Canada   | 1.6             | 1.3             | -0.3                        | 1.9             | 0.2                         |
| Euro Area| 1.2             | 0.8             | -0.3                        | 1.2             | 0                           |
| Germany  | 0.6             | 0.3             | -0.1                        | 0.9             | 0                           |
| France   | 1.3             | 0.9             | -0.3                        | 1.4             | 0.2                         |
| Italy    | 0.2             | 0               | -0.4                        | 0.5             | 0                           |
| Japan    | 0.7             | 0.2             | -0.4                        | 0.7             | 0                           |
| Korea    | 2               | 2               | -0.3                        | 2.3             | 0                           |
| Mexico   | -0.1            | 0.7             | -0.5                        | 1.4             | -0.2                        |
| Turkey   | 0.9             | 2.7             | -0.3                        | 3.3             | 0.1                         |
| United Kingdom | 1.4 | 0.8 | -0.2 | 0.8 | -0.4 |
| United States | 2.3 | 1.9 | -0.1 | 2.1 | 0.1 |
| Argentina | -2.7           | -2              | -0.3                        | 0.7             | 0                           |
| Brazil   | 1.1             | 1.7             | 0                           | 1.8             | 0                           |
| China    | 6.1             | 4.9             | -0.8                        | 6.4             | 0.9                         |
| India    | 4.9             | 5.1             | -1.1                        | 5.6             | -0.8                        |
| Indonesia| 5               | 4.8             | -0.2                        | 5.1             | 0                           |
| Russia   | 1               | 1.2             | -0.4                        | 1.3             | -0.1                        |
| Saudi Arabia | 0         | 1.4             | 0                           | 1.9             | 0.5                         |
| South Africa | 0.3       | 0.6             | -0.6                        | 1               | -0.3                        |

Figure 2: Interim growth projections based on different countries.
2.1 Highly Uncertain Growth Aspects

Based on the epidemic peak in the first quarter of 2020 in China, it was expected that the intercontinental growth rate would be bottom by around ½ percentage during the year. As a whole, world GDP is gauged to drop by 2.4% in 2020. The growth rate was already weak by 2.9% in 2019. Before improving the growth rate by 6% in 2021, China will experience a growth rate below 5%. Due to panic and uncertain situations, a lost confidence supply chain will face downward revision in all G20 economies in 2020, primarily related to China, Japan, Korea, and Australia. The virus outbreak would weaken the prospects considerably as it spread widely in the Asia-Pacific region, Europe and America.

2.2 The Labor market shock and Social Protection System

The COVID-19 widespread has a significant probability of accessing the greater proportion of global natives. This pandemic has already infected almost 3,110,702, with 215,231 casualties in more than 190 countries up to 28-04-2020 (Webmeter 2020). Because of its colossal spread, it is forecasted that 40 to 70% of world’s natives could be infected. This health crisis would negatively affect supply (production of goods and services) and demand-side (consumption and investment). Already the supply chain is affected because of constrained production. This pandemic has adversely affected businesses nonetheless of their size. Businesses are countering momentous challenges, especially in tourism industries, with a real threat of decline in revenue and job security. Small and Medium Enterprises (SME) are at risk as they cannot sustain their business operation (ILO 2020a). Borders are sealed, traveling is banned, lockdown and curfew, and many other quarantine measures restrict the movement of people from one place to another place. They are leading to a contagion effect on the incomes of casually employed workers. Import and export are halted even consumer in many countries are reluctant to buy goods and services. This contemporary phenomenon brings uncertainty and fear in public which is most likely to interrupt investment, production of goods and recruitment of workforce.

2.3 COVID-19 effect on the world of work

The collision of COVID-19 on the labor market will be far-reaching. The virus is affecting workers’ health, leading to reduced labor productivity, but also cause shock in the world of work, especially for daily wages labor force and those relating to the service sector. There are three critical dimensions of the impact of COVID-19 on the labor market. The dimension defines the scenario of employment and underemployment caused by COVID-19. The virus outbreak caused a rise in the unemployment rate globally. In the baseline scenario, it is preliminarily estimated that global unemployment will rise by 5.3 million. It is estimated that in the middle scenario, the figure of unemployment will be 13 million (ILO 2020a).

Table 2: Global losses in working hours and employment

| Nature of employment                                      | Percentage change | Nature of change | Equivalence                                           |
|-----------------------------------------------------------|-------------------|------------------|-------------------------------------------------------|
| Working hours                                             | 6.7%              | Decline          | =195 million full-time workers                        |
| Businesses (tourism, food services, retail trade, manufacturing, business, and administrative activities) | 37.5%             | At-Risk          | A large proportion of part/full-time workers          |
| Employed in countries with workplace closures             | 81%               | Mandatory closure| 3.3 billion workers of the global workforce           |

Sources: (ILO 2020b)
Full or partial closure of the workplace has affected almost 81% of the global workforce. Taking it as more than four people out of five lost their jobs. In different parts of the world, the nature and proportion of job loss were noticed, like the Arab States (8.1 percent, equivalent to 5 million full-time workers) and Europe (7.8 percent, or 12 million full-time workers). Meanwhile, Asia and the Pacific lost 125 million full-time workers, comprising 7.2% of the labor force. It is expected to have massive losses in different income groups, especially in upper-middle-income countries where 100 million laborers lost their full-time work (7.0 percent). This crisis has surpassed the outcomes of the 2008-9 financial crisis.

Table 3 Region wise COVID-19 causes devastating losses in working hours and employment

| Worldwide and Regional change | A decline in Working Hours (%) | Full-time equivalent (40 Hours, Millions) | Full-time equivalent (48 Hours, Millions) |
|-----------------------------|------------------------------|------------------------------------------|------------------------------------------|
| World                       | 6.7                          | 230                                      | 195                                      |
| High Income countries       | 6.5                          | 36                                       | 30                                       |
| Upper-middle income countries | 7                            | 100                                      | 85                                       |
| Lower-middle income countries | 6.5                          | 80                                       | 70                                       |
| Low Income countries        | 5.3                          | 14                                       | 12                                       |
| Africa                      | 4.9                          | 22                                       | 19                                       |
| Americans                   | 6.3                          | 29                                       | 24                                       |
| Arab States                 | 8.1                          | 6                                        | 5                                        |
| Asia and the Pacific        | 7.2                          | 150                                      | 125                                      |
| Europe and Central Asia     | 6                            | 24                                       | 20                                       |

Sources: (ILO 2020b)

The COVID-19 pandemic is “the worst universal crisis since World War II” (ILO 2020b). Quarantine measures casing decline in the supply of labor, posing a real threat to universal economic activity. Up to a point, according to pilot estimate (up to 10th March) argued that workers being affected by the virus had already bygone nearly 30,000 work months leading to the successive loss of income (for unprotected workers). Having a lousy impact on employment infer significant income losses for workers. Overall the expected losses in labor income due to pandemic are expected in between $860 and $3,440 billion. Lower consumption of goods and services followed by the lower income, which is harmful to the progression of businesses and ensuring that economies are resilient.
2.4 Social Protection System

During the COVID-19 pandemic, the social protection responses were very scattered around the globe. The affected countries responded differently for this purpose; however, there was a severe issue to maintain a balance between health crises, economic crises, and social crises at the same time. Figures 3 and 4 indicate the region-wise and sector-wise responses in this regard.

**Figure 3:** World and different regions Social protection responses in response to COVID-19.

**Figure 4:** Responses of Various functions of the social protection system during Covid-19 worldwide.

2.5 Health Care in Pandemics

The current COVID-9 crisis augmented the risk of a long-lasting health care system. There is a collapse of global health infrastructure under the extreme pressure of the dramatic spike of the pandemic. Testing is the only and foremost tool to examine the extent of COVID-19 transmission in any geographical region. Developing countries have a low ratio of testing compared to developed countries which may disguise the coronavirus cases. This low capacity for testing coronavirus is an alarming and life-threatening situation globally. Still, in most developing countries, the testing strategy of the

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**Special Allowance/grants**

**Income/job protection**

**Several Functions**

**Unemployment**

**Health**

**Housing/basic services**

**Food and Nutrition**

**Children and Family**

**Pension**

**Sickness**

**Access to Education**

**Maternity/paternal**

**Employment injury**
government is based on the assumption that there is no community transmission. Testing only those people reaching from infected areas abroad may bring unintended consequences. At the same time, inter-city and inter-sates movements may also a significant threat to the spread of the epidemic. There is a chance of potential explosion of cases and transmission of the virus if testing on the massive level will be neglected.

On 1st January 2020 WHO set up the IMST (Incident Management Support Team) in order to deal with the outbreak on emergency basis. It was the first step by WHO for handling the global health crisis. On 5\textsuperscript{th} January 2020, WHO published its first ‘Disease Outbreak News’ on the Novel coronavirus. It was a top publication and public health response of its types containing risk assessment and advice on the contagion spread of the virus. On 30\textsuperscript{th} January, the Emergency Committee was reconvened by WHO. The committee recommended and declared the novel coronavirus outbreak a PHEIC (Public Health Emergency of International Concern). Since International Health Regulations (IHR) succeed in 2005, a PHEIC was declared 6\textsuperscript{th} time by WHO. Another milestone activity by WHO is the Global Outbreak Alert and Response Network (GOARN). GOARN partners raise public awareness through collaborative models, mainly when every single country facing identical health threats at the same time.

![Figure 5: growth of Coronavirus cases Worldwide](image-url)

2.6 Impact on Energy Sector

The energy sector is more predominantly affected due to this pandemic resulting from the slowing of trade operations, transport, and economic activity. The report of Global Energy Review 2020 exhibits that those economies that are incomplete lockdown have a 25\% decline in the energy demand per week, while on the other side, the partially lockdown countries are experiencing an 18\% decline in energy. The moral implications of COVID-19 for the clean energy systems are still evolving, but the three areas have much significance regarding this pandemic. The first one is the energy security that remains the central part of the global economy during the most challenging times. The second one is the electric security and resilient energy system that is more crucial for the economy. The third one is the clean energy transition that is the cornerstone of economic recovery. Here, there is a need to cope with all these challenges to build up a sustainable economic system.

Clean energy can dispense affordable solutions in line with climate targets and help reduce the effects of the COVID-19 crisis on people’s livelihoods and local economies. The energy for
household and health centers are critical at the forefront of the battle against COVID-19. However, 840 million people have limited access to electricity, out of which about 570 million live in sub-Saharan Africa. This remote area has one in four clinics with no energy at all, and 28% don’t have consistent access. Coping this adverse situation Solar for Health program has been capitalizing principally by the Global Fund to counter AIDS, TB, and Malaria. UNDP and its partners look for expertise to underpin countries to promote clean energy investments. Clean energy can furthermore address several health risks that might make people too vulnerable to respiratory diseases such as COVID-19. Approachable energy also generates social distancing policies applicable by powering the technologies and devices that assist people to stay in touch with each other. This unrestricted access to energy and technology engages the public in online education and work from home. It can also provide definitive access to clean energy, a crucial element in times of COVID-19.

Table 4: Statistical description of various commodities during COVID-19

|        | Average Value | Median | Max   | Min  | S.D   | Skewness | Kurtosis | J-Bera |
|--------|---------------|--------|-------|------|-------|----------|----------|--------|
| ALL COMMOD | 136.761***    | 127.193| 202.798| 85.322| 28.997| 0.414    | 1.894    | 13.606 |
| ENERGY  | 171.594**     | 163.580| 312.413| 74.375| 50.570| 0.334    | 2.248    | 7.206  |
| FOOD    | 105.2274*     | 102.126| 132.802| 75.853| 13.089| 0.143    | 2.206    | 5.074  |
| METALS  | 144.5114**    | 141.336| 234.688| 85.259| 33.061| 0.453    | 2.800    | 6.127  |

***, **, * shows the ≤ 1%, ≤ 5%, and 10% level of significance.

3. Need of Monetary Policy in virus Outbreak

The monetarists give a supportive monetary policy to deal with flurry and variability related to the pandemic coronavirus. It is suggested that interest rates remain low on a long-term basis (Baker 2010; Blanchard 2019). Withal, in fiscal and structural policy support absenteeism, a low-interest rate on a long-term basis has a modest impact on demand and inflation. There is a partial prerequisite to additional reduction in policy interest rate depending on the current growth projection. (Anon 2007; Blanchard, Furceri, and Pescatori 2014; Buera and Nicolini 2014; Li 2013). Japan and many European countries may need to contrivance extra unconventional measures because there is less substantial affluence monetary policy. Meanwhile, other emerging-market economies like Brazil, India, and Mexico better choose to extend relaxed monetary policy and flexible exchange rate framework, and pliable exposure to foreign currency-dominated debt. There is room for opportunity to enhance investor confidence by undertaking fiscal and structural measures (OEDC 2020).

Fiscal policy needs to be considered exceptionally to strengthen demand when interest rates are low. It contains a separate portion of momentary expenditures to mitigate the impact of pandemic coronavirus on vulnerable social groups and commercials. There are some macroeconomic measures on which the coronavirus outbreak starts to fade. These are cyclical development, debt sustainability measures, the volume of fiscal stabilizers, and the requirement to rebalance the policy mix. Various advanced economies, i.e., Canada, Germany, Japan, Korea and the United Kingdom, had already undertaken flexible fiscal policy before the COVID-19 outbreak. Extra stimulus measures are expected to be taken without endangering debt sustainability by a panel country. Still, there is a limitation on the scope of sizeable discretionary fiscal easing. Still, the government can privilege the public by changing the spending structure and tax burden to support economic growth that the effects of virus outbreaks will hinder. The objective to safeguard social transfers to low-income groups and sustenance of public-
private investment is essential in most emerging-market economies, including Brazil and India. The implication of tight fiscal policy with substantial constrictions on the quasi-fiscal measures practices is indispensable.

In the long term and short term, the government should support the households to reduce the energy demand to achieve an efficient setup. Governments need to promote energy efficiency appliances directly. It is the prime necessity of the governments to fraternize with the public and give them recommendations on how in the short and long run, the energy reduction measures will benefit. During this pandemic, it is observed that government measures are implemented in a convalescent way with the help of public participation, and issues are well understood. Thus, as countries look to resume their economies, the stakeholders (government, health department, policymakers) must continue to provide details on preventing the spread of COVID-19 and discover various approaches on how the public can diminish their energy outline and become more perceptive about the climate change.

4. Conclusion

The pandemic affected worldwide, not only specific regions, mainly China, France, Italy, Germany, the United States, the United Kingdom, Iran, and Third World, namely Pakistan, India, Bangladesh, Sri Lanka, and Afghanistan, some African countries. The social and economic impacts of some countries have been severely affected. In contrast, some countries have been moderately affected due to the timely implementation of preventive measures by following the guidelines that are issued by the World Health Organization and national health ministries. The market has been closed indefinitely, the stock market has collapsed, and the unemployment rate has promptly jumped to the historical pinnacle due to the COVID-19 pandemic. This pandemic resembles the financial crisis that was happened in 2007-2008.

- Ensuring well-resourced health plans to thwart infection and contagion. During this outbreak, execute well-targeted policies to subsidize the health care system.
- Supportive monetary and fiscal policy can assist the confidence of stakeholders and recover the demand as the outbreak is comforts. However, all the disruption, shutdown, and travel restrictions caused by the outbreak can’t be offset immediately.
- For the more extended period, if growth remained weaker then health policies with coordination of multilateral actions, funding developing economies, supportive fiscal policy, and containment and mitigation would help as an effective means of destabilizing confidence and supporting incomes.

4.1 Proposed Policy Response of IMF for COVID-19

Quarantine, lockdown, shutdown, and self-isolation strategies inferred reducing economic activity. These strategies have both economic and human costs likely to higher in developing countries. Developing countries are already surviving on reduced health care capacity, less fiscal space, superficial financial markets, most economic activities based on the large informal sector, and poor governance. In order to avoid unintended consequences, a vigilant response to epidemiological evidence of virus spread is inevitable, and policymakers will necessitate weighing prudent effectiveness and socioeconomic consequences to containment and mitigation policies. The short-term economic policy required emergency relief to the most vulnerable proportion of the population and affected businesses. Short-term economic policy during this epidemic does not stimulate the economy—which is impossible, but mass layoffs and bankruptcies can be avoided somewhat—ease of lockdown restriction and retaining restriction on movement on massive gathering. Like Australia has adopted three steps plan to relax COVID-19 restrictions. Educational institutions, i.e., schools/colleges, are reopened and restaurants and
entertainment venues have opened for the public with restrictions to support education and the food and hospitality industry. Indian has relaxed geographical areas designated as non-hotspot areas. Pakistan has introduced newly developed Standard Operating Procedures (SOPs) to reopen low-risk industries and small retail shops. A selective and smart lockdown strategy is implemented, and sealing the high-risk areas is the short-term strategy to avoid undesirable consequences.

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