

**Review Article**

# Novel Corona Virus Covid-19: Impact on Economic Development and Mitigating Solution for Developing Countries

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**Abstract:** The outbreak of coronavirus named COVID-19 has disrupted the developing countries economy highly. According to World Health Organization (WHO) there have been 4,660,658 confirmed cases of COVID 19, including 309,710 death till May 16, 2020 globally. And 78,280 Confirmed cases and 2,624 Number of deaths in Africa. Data for the study was generated from desk review of secondary materials, online blogs and interview through social media chat. Findings of the study reveal that the outbreak and spread of covid-19 disease led to rapid shutdowns in cities and states across the country, which greatly affected the economic development. The evolution of the disease and its economic impact is highly uncertain which makes it difficult for policymakers to formulate an appropriate macroeconomic policy response. The article describes the impact of the COVID-19 virus on the economic development of developing countries and its mitigating solution. The scenarios in this paper demonstrate that even a contained outbreak could significantly impact the developing countries economy in the short run. These scenarios demonstrate the scale of costs that might be avoided by greater investment in public health systems in all economies but particularly in less developed economies where health care systems are less developed and population density is high. Among the suggested policy solutions are: proactive management approaches, health policy framework addressing many of the social determinants of health, education and health literacy, national and international shifts in investments, public and private partnerships and the establishment of the Developing countries Technical Council on Coronavirus. Effective implementation of these policy solutions will require full support of all stakeholders, including governments, the media, non- governmental organizations, health professionals, communities, and individuals.

**Keywords:** COVID-19, Corona Virus, Economic Development, Developing Countries, Business, Economic Development Scenario

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## 1. Background

A new coronavirus disease, now known as COVID-19, was first identified in Wuhan, People's Republic of China (PRC), in early January 2020. From the information known at this point, several facts are pertinent. First, it belongs to the same family of coronaviruses that caused the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 and the Middle East Respiratory Syndrome (MERS) outbreak in 2012. Second, the mortality rate (number of deaths relative to number of cases), which is as yet imprecisely estimated, is probably in the range of 1%–3.4%—significantly lower than

10% for SARS and 34% for MERS but substantially higher than the mortality rate for seasonal flu, which is less than 0.1%. Third, even though it emerged from animal hosts, it now spreads through human-to-human contact. The infection rate of COVID-19 appears to be higher than that for the seasonal flu and MERS, with the range of possible estimates encompassing the infection rates of SARS and Ebola [2]. COVID-19 poses crucial health and economic risks for Savings Groups as markets falter, mobility is restricted, and community gathering is restrained [12].

The impact of COVID-19 across the global economy will be profound. Markets and supply chains have been disrupted,

businesses are required to close or scale back operations, and millions have or will lose their jobs and livelihoods. ILO has estimated that full or partial lockdown measures now affect almost 2.7 billion workers, representing around 81% of the world's workforce, while the IMF projects a significant contraction of global output in 2020. COVID-19 is lurching the world economy towards a global recession, which will be strikingly different from past recessions. Emerging evidence on the impact of COVID-19 suggests that developing countries economic and productive lives will be affected disproportionately and differently from developed countries. As the COVID-19 pandemic unfolds, governments are attempting to reduce contagion rates at the expense of personal freedom and negative economic effects [31].

Across the globe, developing countries earn less, save less, hold less secure jobs. They have less access to social protections and are the majority of single-parent households. Their capacity to absorb economic shocks is therefore less than that of developed countries. There are several channels through which the COVID-19 outbreak will affect economic activity in developing countries, the rest of developing Asia, and the world. These include a sharp but temporary decline in domestic consumption and other outbreak-affected economies, and possibly investment if the outbreak affects views on future business activity; declines in tourism [22] and business travel; spillovers of weaker demand to other sectors and economies through trade and production linkages; supply-side disruptions to production and trade (which are distinct from demand-side shocks spilling over through trade and production linkages); and effects on health such as increased disease and mortality as well as shifts in health care spending. As each of these are taken in turn [2].

In a strongly connected and integrated world, the impacts of the disease beyond mortality (those who die) and morbidity (those who are incapacitated or caring for the incapacitated and unable to work for a period) has become apparent since the outbreak. Amidst the slowing down of the economy with interruptions to production, the functioning of global supply chains has been disrupted. Companies across the world, irrespective of size, dependent upon inputs from developing countries have started experiencing contractions in production. Transport being limited and even restricted among countries has further slowed down global economic activities. Most importantly, some panic among consumers and firms has distorted usual consumption patterns and created market anomalies. As McKibbin & Fernando 2020 global financial markets have also been responsive to the changes and global stock indices have plunged. Amidst [18]. The ILO has developed a policy framework based on four key pillars to fight COVID-19 based on international labour standards: 1) Protecting workers in the workplace, 2) Stimulating the economy and labour demand, and 3) Supporting employment and incomes and 4) relying on social dialogue for solutions [17]. The Jobs for Peace and Resilience Flagship Programme offers a response framework for fragile countries in order to address mainly Pillar 3: Supporting employment and incomes, while reinforcing simultaneously peace, social cohesion and

resilience but it is also relevant for promoting dialogue through pillar [17].

This paper uses the definition of IMF for the term 'developing countries', Hence a developing country (or a low and middle income country, less developed country, less economically developed country, medium-industrialized country or underdeveloped country) is a country with a less developed industrial base and a low human development index relative to other countries.

## 2. Impact of Novel Corona Virus Covid-19 on Economic Development

To begin with the definition of the term, Economic development is a policy intervention aiming to improve the well-being of people, economic growth is a phenomenon of market productivity and increases in GDP; economist Amartya Sen describes economic growth as but "one aspect of the process of economic development". Economists primarily focus on the growth aspect and the economy at large, whereas researchers of community economic development concern themselves with socioeconomic development as well. The University of Iowa's Center for International Finance and Development states that:

'Economic development' is a term that practitioners, economists, politicians, and others have used frequently in the 20th century. The concept, however, has been in existence in the West for centuries. Modernization, Westernization, and especially Industrialization are other terms people have used while discussing economic development. Economic development has a direct relationship with the environment.

There are many ramifications of the direct and indirect economic effects of the COVID-19: preparedness and prevention (practices that mitigate risk), the event itself (e.g., business continuity, supply chain disruption, public contagion avoidance behavior, trade and travel bans), and the event aftermath (e.g., permanently closed markets, long-term employment loss, impacts of lost education or being orphaned, etc.). There are increasing numbers of confirmed deaths. As these numbers are expected to surge when indirect costs due to lost productivity and comorbidities are taken into consideration [10]. The escalating pandemic has the potential to overwhelm healthcare systems and threatens to reverse the gains of economic development in many emerging markets. Considering the grave human, societal, and economic consequences, there is a critical need for health professionals and policy makers to recognize the magnitude of the COVID-19 epidemic and the potential devastation it may inflict, particularly in the developing world.

## 3. Literature Review

Many studies have found that population health, as measured by life expectancy, infant and child mortality and maternal mortality, is positively related to economic welfare and growth; [4, 5, 8, 9, 13, 26, 27], and [32].

There are many channels through which an infectious disease outbreak influences the economy. Direct and indirect economic costs of illness are often the subject of the health economics studies on the burden of disease [18]. The conventional approach uses information on deaths (mortality) and illness that prevents work (morbidity) to estimate the loss of future income due to death and disability. Losses of time and income by careers and direct expenditure on medical care and supporting services are added to obtain the estimate of the economic costs associated with the disease. This conventional approach underestimates the true economic costs of infectious diseases of epidemic proportions which are highly transmissible and for which there is no vaccine (e.g. HIV/AIDS, SARS and pandemic influenza). The experience from these previous disease outbreaks provides valuable information on how to think about the implications of COVID-19.

The effects of AIDS are long-term but there are clear prevention measures that minimize the risks of acquiring HIV, and there are documented successes in implementing prevention and education programs, both in developed and in the developing world. Treatment is also available, with modern antiretroviral therapies extending the life expectancy and improving the quality of life of HIV patients by many years if not decades. Studies of the macroeconomic impact of HIV/AIDS include [7, 8, 9, 13, 14], and [24]. Several computable general equilibrium (CGE) macroeconomic models have been applied to study the impact of AIDS [1] and [3].

The influenza virus is by far more contagious than HIV, and the onset of an epidemic can be sudden and unexpected. It appears that the COVID-19 virus is also very contagious. The fear of 1918-19 Spanish influenza, the “deadliest plague in history,” with its extreme severity and gravity of clinical symptoms, is still present in the research and general community [2]. The fear factor was influential in the world’s response to SARS – a coronavirus not previously detected in humans [29, 25]. It is also reflected in the response to COVID-19.

There are only a few studies of economic costs of large-scale outbreaks of infectious diseases to date: [29] is an example of an early analysis of the economic impact of influenza. Meltzer et al examine the likely economic effects of the influenza pandemic in the US and evaluate several vaccine-based interventions. At a gross attack rate (i.e. the number of people contracting the virus out of the total population) of 15-35%, the number of influenza deaths is 89 – 207 thousand, and an estimated mean total economic impact for the US economy is \$73.1- \$166.5 billion [19].

Bloom et al. use the Oxford economic forecasting model to estimate the potential economic impact of a pandemic resulting from the mutation of avian influenza strain. They assume a mild pandemic with a 20% attack rate and a 0.5 percent case-fatality rate, and a consumption shock of 3% [5] Scenarios include two-quarters of demand contraction only in Asia (combined effect 2.6% Asian GDP or US\$113.2

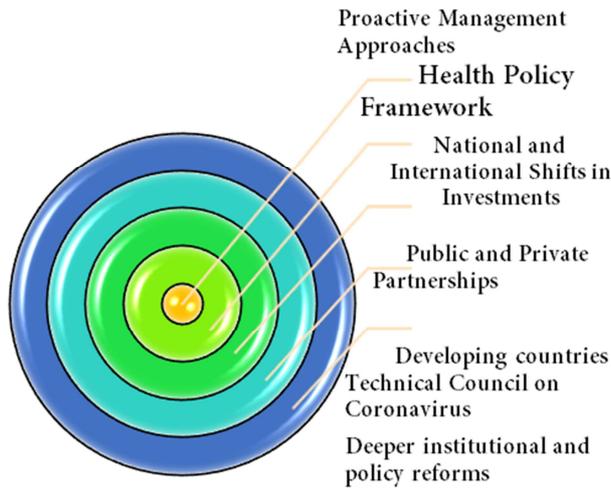
billion); a longer-term shock with a longer outbreak and larger shock to consumption and export yields a loss of 6.5% of GDP (US\$282.7 billion). Global GDP is reduced by 0.6%, global trade of goods and services contracts by \$2.5 trillion (14%). Open economies are more vulnerable to international shocks.

Another study by the US Congressional Budget Office examined two scenarios of pandemic influenza for the United States. A mild scenario with an attack rate of 20% and a case fatality rate (i.e. the number who die relative to the number infected) of 0.1% and a more severe scenario with an attack rate of 30% and a case fatality rate of 2.5%. The US Congressional Budget Office study finds a GDP contraction for the United States of 1.5% for the mild scenario and 5% of GDP for the severe scenario.

#### **4. Some policy suggestion to mitigate the Economic Impacts of COVID-19**

Many developing countries were slowing down in the final quarter of last year with several entering recession. However, the speed at which the economic shock to advanced economies has hit developing countries – in many cases in advance of the health pandemic -- is dramatic, even in comparison to the 2008 global financial crisis. The economic fallout from the Covid-19 shock is ongoing and increasingly difficult to predict but there are clear indications that things will get much worse for developing economies before they get better. First, the full effects of the health crisis have yet to hit many developing countries, and we have yet to reach the “end of the beginning” of the economic crisis in the advanced economies. The Covid-19 pandemic has resulted in mass production shutdowns and supply chain disruptions causing global ripple effects across all economic sectors in a manner that was never expected. It is projected that the spread of the disease will have serious humanitarian challenges to the countries of the world and especially Africa and Nigeria in particular. Economically, the effects have already been felt as demand for Africa’s raw materials and commodities in global market has declined and Africa’s access to industrial components and manufactured goods from other regions of the world has been hampered [22].

Policy responses shall focus on two immediate goals: Health protection measures and economic support on both the demand- and supply-side. Among the suggested policy solutions are: proactive management approaches, health policy framework addressing many of the social determinants of health, education and health literacy, national and international shifts in investments, public and private partnerships and the establishment of the Developing countries Technical Council on Coronavirus. Effective implementation of these policy solutions will require full support of all stakeholders, including governments, the media, non- governmental organizations, health professionals, communities, and individuals.



Source: Researcher Sketch

**Figure 1.** Suggested policy solutions to minimize the effect of Covi-19 on the economy.

#### 4.1. Proactive Management Approaches

Historically, humans have battled emerging diseases through early detection followed by coordinated quarantine, as demonstrated by the SARS outbreak in 2003, the Ebola outbreak in 2014 and the COVID-19 outbreak. Continued and improved coordinated international disease surveillance is important. A shift in both research and pandemic management efforts must be geared towards proactive management approaches. In due course, medical science needs an enhanced understanding of the origins of pandemic emergence, spillover, and post-spillover evolution so that the virus can be better diagnosed and prevented.

#### 4.2. Health Policy Framework

The coronavirus imposes a substantial burden for the patient and the society in terms of direct and indirect costs related to medical care, disability, early mortality, and negative employment consequences, such as loss of productivity due to presenteeism and absenteeism. Economic cost of illness-related productivity losses can be significant. These costs can create barriers in access to services, affect health outcomes and contribute to the financial burden of households. On the other hand, direct non-medical costs, such as food, accommodation and travel costs incurred when searching for and accessing health care services, may also be significant. Studies such as Olivera & Buitrago have suggested that a health policy framework addressing as many of the social determinants of health as possible may be crucial in containing such social costs [23].

#### 4.3. National and International Shifts in Investments

National and international shifts in investments would also pay large dividends for COVID-19 control. There is considerable evidence that the developing world will struggle to feed its growing populations due to the poverty trap of infectious disease [20, 16, 11, 6, 10]. However, ample

evidence also suggests that this trap could be broken via investments in health infrastructure and preventive chemotherapy [16] and [21]. Curing COVID-19 has the added benefit of potentially reducing the nutritional needs of cured individuals by stopping the feeding of their parasites [10].

#### 4.4. Public and Private Partnerships

Ending COVID-19 will demand intensified public-private funding, preferably delivered at the international level, to strengthen research, advocacy, and the global control effort. Public and private stakeholders at local, national and international levels must collaborate more systematically to ensure informed systems, and encourage cost-sharing strategies for disease prevention and preparedness where possible and provide optimal intervention strategies where necessary. Controlling the virus will require nothing less than such robust public-private partnerships.

#### 4.5. Developing countries Technical Council on Coronavirus

In order to better protect the Developing countries from COVID-19 and the untold attendant social and economic consequences, this article proposes the formation of a standing Developing countries Technical Council on Coronavirus. Its mission would be to control the spread of COVID-19 and reduce the attendant health, social, and economic risks. The Council would support to improve collaboration and make high-level, evidence-based recommendations to existing organizations such as AU, IGAD, WHO, national and international governments, and global non-profits Organizations. It would identify gaps in surveillance, outbreak readiness, biomedical countermeasures, and financing.

#### 4.6. Deeper Institutional and Policy Reforms

Deeper institutional and policy reforms are also required to strengthen demand-led recovery and build resilience through robust and universal social protection systems that can act as automatic economic and social stabilizers in the face of crises. This will also help to rebuild trust in institutions and governments.

## 5. Conclusion and Recommendation

This article has provided policy recommendation from previous pandemics and the literature. Most of these policy recommendation lie within the realm of government and other stakeholders with capacity for decision-making. Without a global 'call to action', however, COVID-19 will exact an increasingly shattering toll around the world. A range of policy responses will be required both in the short term as well as in the coming years. In the short term, central banks and Treasuries need to make sure that disrupted economies continue to function while the disease outbreak continues. In the face of real and financial stress, there is a critical role for governments. While cutting interest rates is a possible response for central banks, the shock is not only a demand

management problem but a multi-faceted crisis that will require monetary, fiscal and health policy responses. Quarantining affected people and reducing large scale social interaction is an effective response. Wide dissemination of good hygiene practices as can be a low cost and highly effective response that can reduce the extent of contagion and therefore reduce the social and economic cost.

Poverty kills poor people, but the outbreak of COVID-19 shows that if diseases are generated in poor countries due to overcrowding, poor public health and interaction with wild animals, these diseases can kill people of any socioeconomic group in any society. There needs to be vastly more investment in public health and development in the richest but also, and especially, in developing countries.

To fully curb the coronavirus pandemic, it is crucial for international agencies and national governments to take the leadership role in developing and implementing wide-ranging policies that make the diagnosis, therapeutics and vaccines for the virus a global and national priority.

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## References

- [1] Arndt, C. and J. D. Lewis (2001). The HIV/AIDS Pandemic in South Africa: Sectoral Impacts and Unemployment. *Journal of International Development* 13 (4): 427-49.
- [2] Bank, A. D. The Economic Impact of the COVID-19 Outbreak on Developing Asia., (2020).
- [3] Bell, C., S. Devarajan and H. Hersbach (2004). Thinking about the long-run economic costs of AIDS, in *The Macroeconomics of HIV/AIDS*, M. Haacker (eds). Washington DC, IMF: 96-144.
- [4] Bhargava, A. and et al., 2001. Modeling the Effects of Health on Economic Growth. *Journal of Health Economics* 20 (3), 423-40.
- [5] Bloom, D. E. and J. D. Sachs, 1998. Geography, Demography, and Economic Growth in Africa. *Brookings Papers on Economic Activity* 0 (2), 207-73.
- [6] Conteh, L., Engels, T., & Molyneux, D. H. (2010). Socioeconomic aspects of neglected tropical diseases. *The Lancet*, 375 (9710), 239-247.
- [7] Cuddington, J. T. and J. D. Hancock, 1994. Assessing the Impact of AIDS on the Growth Path of the Malawian Economy. *Journal of Development Economics* 43 (2), 363-68.
- [8] Cuddington, J. T., 1993a. Further results on the macroeconomic effects of AIDS: the dualistic, labour-surplus economy. *World Bank Economic Review* 7 (3), 403-17.
- [9] Cuddington, J. T., 1993b. Modeling the macroeconomic effects of AIDS, with an application to Tanzania. *World Bank Economic Review* 7 (2), 173-89.
- [10] Evans, O. (2020). *BizEcons Quarterly*. *BizEcons Quarterly*, 7 (March), 3–12.
- [11] Freire, S., 2004. Impact of HIV/AIDS on saving behaviour in South Africa. *African development and poverty reduction: the macro-micro linkage*, Lord Charles Hotel, Somerset West, South Africa.
- [12] Groups, S., International, C., Guidance, P., Harm, D. N., Actions, I., All, F., ... Ministry, N. (1991). *Savings Group Risk Mitigation, Support, and Engagement in Relation to COVID-19*.
- [13] Haacker, M., 2002a. The economic consequences of HIV/AIDS in Southern Africa. *IMF Working Paper W/02/38*, 41-95.
- [14] Haacker, M., 2002b. Modeling the macroeconomic impact of HIV/AIDS. *IMF Working Paper W/02/195*, 41-95.
- [15] Haacker, M., Ed. 2004. *The Macroeconomics of HIV/AIDS*. IMF, Washington DC.
- [16] Hotez, P. J., Fenwick, A., Savioli, L., & Molyneux, D. H. (2009). Rescuing the bottom billion through control of neglected tropical diseases. *The Lancet*, 373 (9674), 1570-1575.
- [17] ILO. (2020). A new decade for social changes. 6, 1–19.
- [18] McKibbin, W. J., & Fernando, R. (2020). The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. *SSRN Electronic Journal*, (January). <https://doi.org/10.2139/ssrn.3547729>
- [19] Meltzer, M. I., N. J. Cox, et al., 1999. The economic impact of pandemic influenza in the United States: priorities for intervention. *Emerging Infectious Diseases* 5 (5), 659-71.
- [20] Molyneux, D. H., Hotez, P. J., & Fenwick, A. (2005). "Rapid-impact interventions": how a policy of integrated control for Africa's neglected tropical diseases could benefit the poor. *PLoS medicine*, 2 (11).
- [21] Ngonghala, C. N., De Leo, G. A., Pascual, M. M., Keenan, D. C., Dobson, A. P., & Bonds, M. H. (2017). General ecological models for human subsistence, health and poverty. *Nature ecology & evolution*, 1 (8), 1153-1159.
- [22] Oruonye, E. D., & Ahmed, Y. M. (2020). An Appraisal of the Potential Impacts of Covid-19 on Tourism in Nigeria. *Journal of Economics and Technology Research*, 1 (1), 32–41. <https://doi.org/10.22158/jetr.v1n1p32>
- [23] Olivera, M. J., & Buitrago, G. (2020). Economic costs of Chagas disease in Colombia in 2017: a social perspective. *International Journal of Infectious Diseases*, 91, 196-201.
- [24] Over, M., 2002. The Macroeconomic Impact on HIV/AIDS in Sub-Saharan Africa. *African Technical Working Paper No. 3 Population Health and Nutrition Division*, Africa Technical Department, World Bank.
- [25] Peiris, J. S., Y. Guan, et al., 2004. Severe acute respiratory syndrome. *Nature Medicine* 10 (12 Suppl), S88-97.
- [26] Pritchett, L. and L. H. Summers, 1996. Wealthier Is Healthier. *Journal of Human Resources* 31 (4), 841-868.
- [27] Robalino, D. A., A. Voetberg, et al., 2002b. The Macroeconomic Impacts of AIDS in Kenya Estimating Optimal Reduction Targets for the HIV/AIDS Incidence Rate. *Journal of Policy Modeling* 24 (2), 195-218.
- [28] Robalino, D. A., C. Jenkins, et al., 2002a. The Risks and Macroeconomic Impact of HIV/AIDS in the Middle East and North Africa: Why Waiting to Intervene Can Be Costly. *Policy Research Working Paper Series: 2874*, 2002. The World Bank. [URL: [http://econ.worldbank.org/files/16774\\_wps2874.pdf](http://econ.worldbank.org/files/16774_wps2874.pdf)] URL.

- [29] Schoenbaum, S. C., 1987. Economic impact of influenza. The individual's perspective. *American Journal of Medicine* 82 (6A), 26-30.
- [30] Shannon, G. W. and J. Willoughby, 2004. Severe Acute Respiratory Syndrome (SARS) in Asia: A Medical Geographic Perspective. *Eurasian Geography and Economics* 45 (5), 359-81.
- [31] Stephany, F., Stoehr, N., Darius, P., & Braesemann, F. (2020). Which industries are most severely affected by the COVID-19 pandemic? A data-mining approach to identify industry-specific risks in real-time.
- [32] WHO Commission on Macroeconomics and Health, Ed. 2001. *Macroeconomics and Health: Investing in Health for Economic Development*. World Health Organization.