# REVIEW COVID-19's Effects on Macroeconomic Indicators in Ethiopia: Systematic Review of Articles

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Introduction: In the midst of the COVID-19 crisis, it might be difficult to provide the most vulnerable people with access to essential services. The main objective of this article is to lay the foundation for future solutions by collecting the results of previous published articles.

Methods: This study used a systematic and integrated method that began by searching relevant literature in professional and generally published journal databases from March 2019- December 2021.

Results: According to the results of the review, COVID-19 has had a significant effect on real and forecasted key macroeconomic variables such as economic growth, unemployment, inflation, poverty levels, and fiscal and monetary policy. In addition, this review reflects the sectorial effect of COVID-19 on health, factor productivity, domestic trade, exports, tourism, international aviation, remittances, the education sector, foreign direct investment, and the Ethiopian economy.

**Conclusion:** While appropriate social distance and personal protective equipment strategies exist in all types of markets across the country, the government should take precautions against the recurrence of Covid-19 by disseminating credible information. Finally, fiscal optimization should be seen as a broader intervention in the economy as a whole.

Keywords: macroeconomic indicators, effects, COVID-19, pandemics, review

#### Introduction

Coronavirus disease 2019 (COVID-19) is a respiratory disease that can be transmitted from person to person. It is caused by the SARS-CoV-2 virus and belongs to the same coronavirus family that caused the outbreak of severe acute respiratory syndrome (SARS) in 2003 and the outbreak of MERS in 2012. COVID-19 is a pandemic that began in China in 2020 and is now spreading throughout China through person-to-person contact. In early January 2020, Wuhan, a city in Hubei province, saw the outbreak of this pandemic.<sup>1–5</sup>

The COVID-19 pandemic can be caused by one of the most serious global recessions in decades. World trade declined by 5% in the first quarter of 2020 and by 20% throughout the year. International passenger air traffic has declined significantly since mid-March.<sup>6,7</sup>

Pandemics also affect economic activity.<sup>8</sup> However, the economic effect of a pandemic may not last long if the root cause is quickly contained. The new coronavirus strain (COVID-19) has the potential to significantly slow down the global economy.<sup>9-11</sup> The country's inflation macroeconomic situation tends to exacerbate the welfare effect of pandemics, especially for these nutritionally poor households. The country faces the COVID-19 pandemic because it sacrifices lives, restricts passenger traffic, and forces businesses to shut down or reduce production capacity.

Numerous articles have been published and are publicly available on the actual and possible economic and socioeconomic effects of the COVID-19 pandemic. The majority of these articles highlight the devastation a pandemic causes on a national and international scale. However, the detailed effects of the COVID-19 pandemic on Ethiopian macroeconomic variables need to be investigated for firm policy intervention to come out of the stress that occurred nationwide economy, specifically, on GDP, exports and imports, production, employment, saving, etc. Therefore, this articles review sought to examine the macroeconomic and socio-economic effects of COVID-19 in Ethiopia.

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#### Methodology

In terms of methodology, the literature review started with a search for relevant literature in Google search, Google Scholar, The impact of the Coronavirus on the economy and macroeconomic indicators, as well as the pandemic of Covid-19. Systematically, the literature search began by searching for related literature in Google Scholar, COVID-19, and Macroeconomic indicators, using the following search terms: The effect of the Coronavirus on the economy and macroeconomic indicators, as well as the pandemic of Covid-19.

In this review, major macroeconomic and socio-economic variables such as Ethiopian economic growth(GDP), unemployment, inflation, health, education, finance and money, and the potential for economic instability or crisis as a result of the Ethiopian coronavirus outbreak. The search was limited to English articles. Then, data were triangulated and narrated to come up with sound policy decisions.

#### Macroeconomics and COVID-19 in Ethiopia

The world is currently experiencing catastrophic economic turmoil that we have never seen. A COVID-19 pandemic is a different form of economic shock than the previous one. The economy has never seen such a complete closure. Many people lose their jobs and salaries and companies go bankrupt. The government's ability to subsidize will be pushed to its limits. Eateries, pubs, hotels, taxicabs, and other businesses will cease operations in their area, and mass transportation services, resulting in significant financial losses and possibly considerable difficulties. Exporters of flowers, textiles, coffee, oilseeds, Ethiopian Airlines, freight services, and banks, as well as the country's national transporter and freight service, would be extremely cautious.<sup>12</sup>

## Effect of COVID-19 on Economic Growth (GDP)

Even though COVID-19 has shrunk in the last three months, the Ethiopian economy has experienced a tremendous shock, with main macroeconomic factors drastically lowered. To give you a few numbers, headline inflation is currently 23%, while food inflation is 26%; Birr was significantly devalued by the government, from around 32% a few weeks ago to around 34.34%; the percentage of government debt (excluding recent donor commitments, which are significant) is now over 55%; the export-import gap is still considerable because we import more than we export; The gap between exports and imports remains significant The government also estimated that food insecurity and needs could affect around 30 million people this year alone (half of them due to the COVID effect).<sup>13</sup>

As a result, the pandemic is wreaking havoc on the country's economy amid such vulnerable economic conditions. As a result, COVID-19's economic and social impact will exacerbate this difficult macroeconomic situation. The effects of COVID-19 on aggregate macroeconomic indicators such as inflation, gross domestic investment, import reserve in months, gross domestic saving, real GDP, budget deficit, trade balance, and total debt can be determined by comparing the change with and without the epidemic. According to a study by the famous University of Addis Ababa, Ethiopia's economic growth could shrink by 5.6 to 11% due to the coronavirus epidemic.<sup>13</sup>

According to a projection by the United Nations Economic Commission for Africa (UNECA), the GDP of the continent will decline by 1.4 percentage points, or \$29 billion (from US\$ 66 billion in 2019 to US\$ 37 billion in 2020). This fiscal year, COVID-19 is anticipated to lower Ethiopia's economic growth by 2.9 percentage points.<sup>14</sup>

According to,<sup>13</sup> the first economic impacts of the virus are concentrated in a few parts of the economy, particularly in the exporters, banks, hospitality sector, and selected industries, due to the limited spread of the virus to date. Most have not yet been affected, and this could continue if containment efforts manage to maintain a limited virus spread scenario. Even if only the current selection of sectors is affected, the economic consequences will be considerable: According to our forecasts, growth in the next year will be 2.5 percentage points lower (to 5%), with a net balance sheet burden of around 1.5 billion US dollar can be many orders of magnitude higher than shown here if a broader and more severe domestic virus transmission scenario is anticipated and the overall recovery is extended.

For 2019–2020, the coronavirus would have a maximum impact of 1 percentage point of economic growth, since twothirds of the financial year, until February 2020 are practically unaffected and only a small subset of comparatively small sectors (amounting to around 10 - 12% of economic growth) is severely affected in the remaining third of the year. This means that growth will only be 7 percentage over the 2019–2020 period, up from the previous estimate of 8%. Given the impact of the full year, we expect the impact (effects) to be 2.5% points of GDP greater in the next fiscal year. Therefore, we would lower our growth forecast from 7.5% in early 2020 to just 5.0% and the potential number of people affected between 750,000 and 1.5 million over a full year, estimates of the income/expenditure related to the wages involved assume that the impact from this source alone is likely to be in the range of 0.8 to 1.6% of economic growth.<sup>13</sup>

#### Effects of COVID-19 on Unemployment

There were two discussions in Ethiopia about the effects of the coronavirus disease: first, an optimistic outlook that encourages import substitution; these positively affected innovations for national industries creating new products to fight the epidemic and protect consumers. The negative outlook runs counter to the mantra stay at home and a closed economy. Put simply, in a coronavirus environment, the poor get poorer and the rich get richer, leading to unemployment, income inequality, unequal distribution, and increasing poverty.<sup>15,16</sup>

The COVID-19 pandemic will have a huge impact on employment; it will stifle job creation while increasing unemployment. As global value chains collapse, businesses close and small businesses fail under the pressure of prolonged closings, job losses are expected in the construction, manufacturing, and service sectors, job losses due to severe mobility restrictions to limit the spread of the virus, redistribution of capital budgets and cuts, supply shocks and lost demand will have serious economic and political consequences for an economy like Ethiopia's which already shows significant youth unemployment. Because there is a substantial percentage of informal self-employment in the country (40% of employed), the COVID-19 outbreak might quickly turn into a social disaster in the country. To save jobs and lessen the impact on a vulnerable population, immediate action is essential. According to preliminary estimates from the Jobs Creation Commission, 1.41 million jobs are at risk during the next three months, based on a medium projection.<sup>15</sup>

Unemployment is estimated that employment in the African continent will drop by 48% due to the reduction in production.<sup>17,18</sup> As global value chains break, businesses close, and small businesses fail under pressure longer shutdown, the COVID-19 pandemic will have a significant impact on employment, job creation will decline and unemployment will rise. Job losses are anticipated in the service, construction, and manufacturing sectors.

Employment losses due to serious restrictions on mobility to the spread of the virus, the implementation of the capital budget, the supply shock, and the failed demand have serious economic and political implications for economic efficiency such as Ethiopia, which already has considerable youth unemployment. The COVID-19 epidemic in the country could quickly turn into a social crisis as the country has a high informal self-employment rate 40% of the workforce are self-employed and this high level of informality puts the country in a potentially severe social crisis. Immediate action is essential to protect employees and reduce the impact on a vulnerable population. According to preliminary estimates by the Job Creation Commission, an average forecast over the next three months is 1.41 million jobs at risk.<sup>15</sup>

#### Effects of COVID-19 on Inflation

Due to supply disruptions (especially the locust invasion) and pressure on the exchange rate, annual inflation, both food and non-food, is expected to intensify. Given the scale and combination of factors currently at play, a jump in food inflation well above the current rate of 26.9% to 30% is likely to translate into a sharp increase in non-food inflation, which is approaching 20%. In 2020, the consumer price index (CPI) as a whole could well exceed 20%. In the absence of more shocks, a major decline in 2021 is possible, albeit single digits appear overly ambitious.<sup>17,19,20</sup>

## Effects of COVID-19 on Health and Nutrition

The world is currently facing the coronavirus pandemic, COVID-19, the fifth pandemic of the 21st century. We do not know enough about how COVID-19 affects children or pregnant women because it is a new virus. We know that anyone of any age can be infected with and spread the virus, although older people and/or people with pre-existing health conditions appear to be more susceptible to serious illness. Viral infection can cause acute respiratory distress syndrome, and the general health of the person who catches the virus can be worsened by pre-existing illnesses. Increased disease

rates are predicted to put pressure on Ethiopia's healthcare quality, with probable service saturation and significant pricing and accessibility constraints for impoverished households.<sup>21</sup>

# Effects of COVID-19 on Poverty

Due to a slowdown in economic activity, the pandemic has had a significant impact on poverty. Poverty is anticipated to rise, particularly in the severe scenario, with over half of the population falling into extreme poverty as a result of the severe economic slump and long pandemic duration. Poverty will rise dramatically both in rural and urban areas.<sup>22–24</sup>

## Effects of COVID-19 on the Education

Every worker's efficiency is increased through education, which is an essential component of a nation's human capital. This enables economies to advance beyond manual labour and straightforward industrial procedures. In light of the scope and severity of the COVID-19 pandemic, non-pharmaceutical solutions, like closing schools, are prioritized over education.<sup>21,25</sup> As of the beginning of March 2020, 120 countries have shuttered their schools, affecting roughly 1 billion students who had their classes closed for varied amounts of time. Most governments have temporarily shut down educational institutions around the world to stop the COVID-19 epidemic from spreading. Due to school closings, over 91% of students worldwide were compelled to stay at home, with various degrees of E-learning potential. Numerous other nations have implemented regional closures that will impact millions more students.<sup>17</sup>

# Effects of COVID-19 on Impact Channels

The productivity figures were based on a reduction in the number of days firms were open as a consequence of World Bank phone surveys.<sup>26,27</sup> After that, productivity impacts were incorporated to highlight the differentiating capabilities of enterprises across the two fiscal years. The epidemic was anticipated to have put limits on the usage of both capital and manpower in non-agricultural industries in 2019/20. Restrictions are still in place across the supply chains for 2020/21, prohibiting enterprises from becoming fully operating until the middle of the year. This means that capital productivity will continue to be constrained; but, enterprises will have more flexibility in terms of labor utilization (no productivity reduction). Factor productivity in agriculture has remained unchanged because no explicit limits have been implemented. Nonetheless, increases in input production costs have an impact on agriculture.<sup>28</sup>

# COVID-19 and Internal Trade

Annualized internal trade margins were increased by 5% to reflect the higher cost of transportation and storage during the last months of 2019/20.<sup>28–30</sup> report a 15% increase in transportation costs for the impacted months. Starting from this value, we determined the effect on trade costs in annual terms.

# Export, Tourism, and International Aviation Demand

Ethiopian Airlines focuses on freight as well as stopping passenger flights. Exports of products such as flowers, coffee, and other products are halted because global logistics are already at a standstill. There have been notable arrests and gradual lockdowns. National testing of pandemic capacity is limited. Therefore, the number of people infected could be high, assuming infectious cases arrive at the American, Spanish, Chinese, French, Italian, and Iranian levels, it would be extremely distressing. Although the government and civilians must be prepared and strive to manage all potential levels with unexpected dedication and hard work.<sup>12,31</sup>

# Effects of COVID-19 on the Monetary and Fiscal Economy

COVID-19 will have dual fiscal impact/effects, with opposing forces at work. First, there will be pressure to spend more to deal with the socio-economic and health effects of the pandemic, which is already happening with an increased budget of Birr 5 billion approved by Parliament. Second, revenue collection is expected to be compromised due to lower economic growth and lower trade taxes due to lower exports and imports. This will reduce fiscal space but can be overcome by lowering fiscal targets for the current and next fiscal years, as well as by identifying non-inflationary sources of funding such as substantial new subsidized or near-subsidized external funding. Subsidized and debt relief (not

just temporary relief, which would increase repayment obligations in years to come). In its most recent economic outlook, the International Monetary Fund reduced its GDP growth forecast from 9% in 2019 to 3.2% in 2020.<sup>32</sup>

## Conclusions

Following the COVID-19 pandemic, the world has come to the conclusion that humans need to invest significantly more in health research and that development in a small number of developed nations is insufficient to shield the entire world from pandemics.

Most pandemics, by their nature, are "democratic" because they attack all human beings regardless of color, sex, race, and age. COVID-19 teaches us one thing, which is unity: to be together, to work together, and to live together. The main uses of reviewing the effect of COVID-19 on Macroeconomic indicators in Ethiopia are that it shows the way to control the COVID-19 pandemic. The government will reboost the economy depending on the review results. The government will measure the policy option. COVID-19 has affected Ethiopia's economic growth, causing high unemployment, low tourism and exports, and high poverty. It also affected monetary and fiscal policies that have long-term effects on Ethiopian macroeconomic development, which has a vicious effect on the peace and security of the country.

#### Recommendations

The general effects of the COVID-19 pandemic on macroeconomic variables in Ethiopia were discovered by this review of the articles.

The world should pay due to attention to its health facilities. There may be costs that can be avoided through global collaborative investments in public health and health research and development. Urgent need for immediate and coordinated action at sub-regional and global levels to increase mutual trust, share information and experiences, and secure the supply and delivery of medical supplies and equipment to increase confidence in the ability of all countries to fight the virus.

The National Bank of Ethiopia should consider easing the reserve rate to improve bank liquidity. The National Bank of Ethiopia will start discussions to reduce interest rates to stimulate the economy. Engage in discussions with financial institutions to support exporters by increasing foreign trade credits, deferring loan repayments, and extending debt renewal.

In addition, the government should encourage imports of goods to avoid the inflationary effects of the expansionary fiscal policy on basic consumption and capital goods due to the shortage of supply. In this regard, the incentive of the transport and logistics sector can help resolve the main economic fallout from the uncertainty shock effect of COVID-19 on the supply chain. Policy interventions can address this problem through a combination of legal, bureaucratic, and financial policies/strategies/guidelines that facilitate efficient export and import trade, which is essential to mitigate macroeconomic instability and close the gap between the aggregate demand and supply of consumer and investment goods.

Finally, while supporting its growing expenditures, the government must consider viable financing options. Consequently, the financing of public expenditure must be done in such a way as not to weigh on the economic prospects in the medium and long term. Fiscal optimization should be considered as part of broader interventions in the economy through divergent policy instruments so that retargeting or reprogramming of already running public projects/ programs is possible when the need arises.

# **Ethics Approval and Consent to Participate**

Ethical permission was granted for this study by the Wolaita Sodo University of Research Ethics Committee.

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## Disclosure

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