

Optimizing COVID-19 Stimulus Spending in Malawi

Brett Crowley
Frederic Tremblay

Abstract:

We apply the methodology developed in Cotton et al (2021) to compare the economic outcomes under alternative COVID-19 stimulus spending policies in Malawi.

Author Affiliations: Brett Crowley is a Project Coordinator at Limestone Analytics. Frederic Tremblay is a Researcher at Limestone and a Ph.D. Candidate at Queen’s University.

Project Background and Funding: Limestone Analytics provided financial support for this modeling exercise and the development of the STUDIO economic model and scenario planning analysis on which it builds. The economic modeling methodology is presented in Cotton et al. (2021). The scenario planning exercise on which the analysis builds was conducted with support from the Malawi National Planning Commission and Copenhagen Consensus Center. This report is prepared by the authors independently and does not reflect the views and policies of the National Planning Commission or the Copenhagen Consensus Center.

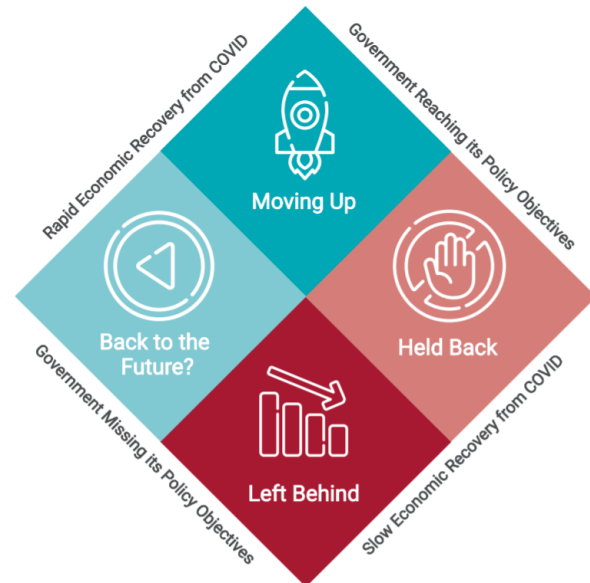


About the JDI Policy Paper Series: The John Deutsch Institute for the Study of Economic Policy (JDI) works to build connections between academic researchers and policymakers. The JDI Policy Paper Series includes reports conducted by faculty on behalf of governments and institutions, research summaries and policy briefs written by Queen’s researchers in an effort to inform decisions, and academic working papers that may be of relevance to policymakers and practitioners.

Optimizing COVID-19 stimulus spending in Malawi

Background

In late 2020 and early 2021, Limestone Analytics conducted a [scenario planning study](#) in collaboration with Malawi's National Planning Commission (NPC) and the Copenhagen Consensus Centre (CCC). The scenario planning study was designed to inform the development of Malawi's national COVID-19 Socioeconomic Recovery Plan. By reviewing the literature and industry reports and surveying over 100 Malawian professionals from a range of sectors and organizations, Limestone crafted four alternative possible scenarios of how the next five years in Malawi might unfold.

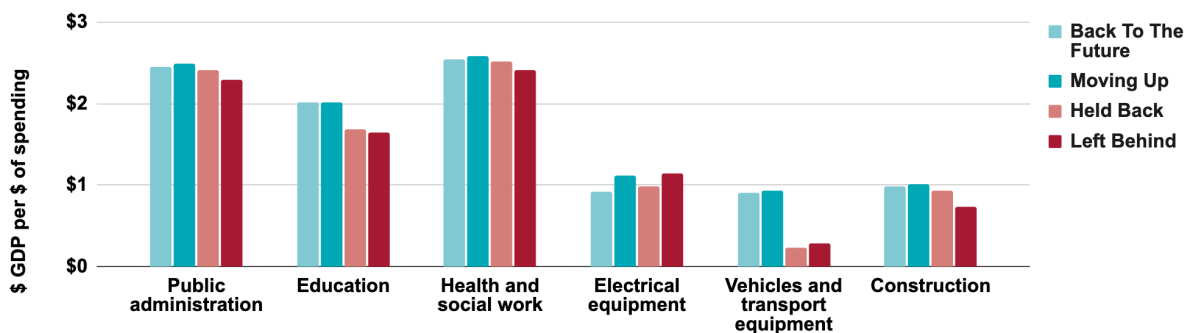


The four scenarios represent possible combinations of outcomes along two major spectrums of uncertainty. The first spectrum is the rate at which Malawi and the global economy is capable of recovering from the effects of the COVID-19 pandemic. The second spectrum is the degree to which the Government of Malawi is able to achieve its stated policy objectives. Limestone then used its STUDIO model to provide projections around Malawi's employment and GDP for each of these four scenarios to estimate the potential impact of COVID-19 on the economy.

This brief builds on our scenario planning work to consider how the Government of Malawi might stimulate Malawi's economic recovery by strategically prioritizing marginal spending toward commodities that will yield the greatest incremental value addition to the country's economy.

Smart stimulus spending

The chart below shows the incremental GDP that would be generated by a marginal dollar of domestic spending on each of five different commodity categories by the Government of Malawi. The estimates are the short-run GDP response from the increased demand and exclude the long-run impact on GDP from economic growth. The four bars for each estimate represent the range of values that may be achieved depending on which of the four possible scenarios that emerged from our scenario planning analysis is realized.



Note that the STUDIO model analysis focuses on short-to-medium run impacts, and excludes long run changes in productivity and growth. Spending on electrical equipment, vehicles and transport equipment, and construction increases the stock of physical capital while spending on education, health and social work increases the stock of human capital. Both would be expected to have a positive effect on long-run GDP through economic growth, but the magnitude of this effect is unknown and is therefore not included in the estimates above.

The results suggest that the Government of Malawi will see a substantially larger economic return from increases in domestic spending on healthcare and social work, public administration, and education commodities than the other categories regardless of the scenario, at least over the short term. The aggregate economic returns from spending in other categories is likely to be small, or negative (i.e. one additional dollar of government spending would yield less than a dollar of value added to the economy). The reason for this is that many of the inputs used in domestic production of these commodities are imported, and therefore much of the spending on these commodities would flow out of the country in order to procure the inputs needed for domestic production.

Planning for COVID-19 and beyond

Over the past year, Limestone's STUDIO model has enabled rapid assessment of alternative policies that are available to decision makers in the rapidly evolving circumstances of the COVID-19 pandemic. However, although most of the applications of STUDIO to date have focused on COVID-19 related policies, **STUDIO is not solely a COVID-19 tool**. The insights presented in this brief were produced in response to a request from the CCC and NPC for additional insights under the [Malawi Priorities](#) project.

This report is prepared by Frédéric Tremblay and Brett Crowley.

The bibliography includes sources directly referred to in the analysis and related policy briefs that informed the research team’s analysis, including reference to updated, publicly available versions of the health projections that were shared with the research team.

References

Brady, Cecilia, Christopher S. Cotton, Brett Crowley, Bahman Kashi, Huw Lloyd-Ellis, and Frederic Tremblay (2021), “Emerging from Crisis: Applying Scenario Planning in Malawi,” Limestone Analytics and JDI Policy Paper 20-1201.

Consultants to the National Planning Commission, Inception Report: Preparation of the Malawi COVID-19 Socioeconomic Recovery Plan, 2021-2023

Cotton, Christopher, Brett Crowley, Bahman Kashi, Huw Lloyd-Ellis, and Frederic Tremblay (2021), “Quantifying the Economic Impacts of COVID-19 Policy Responses on Canada's Provinces in (Almost) Real Time,” Canadian Journal of Economics, forthcoming.

Cotton, Christopher, Brett Crowley, Bahman Kashi, Huw Lloyd-Ellis, and Frederic Tremblay (2020), “COVID-19 PLanning for 2021: Comparing the Economic Impact of Alternative Recovery Scenarios,” Limestone Analytics and JDI Public Policy Paper 20-1202.

Cotton, Christopher, Brett Crowley, Bahman Kashi, Huw Lloyd-Ellis, and Frederic Tremblay (2021b), “Will a Candian Shield Lockdown Save Jobs in Ontario?” Limestone Analytics and JDI Public Policy Paper 21-0101.

Cotton, Christopher, Brett Crowley, Bahman Kashi, Huw Lloyd-Ellis, and Frederic Tremblay (2021c), “New Variants of COVID-19: What are the Economic Costs?” Limestone Analytics and JDI Public Policy Paper 21-0201.

Gondwe, Grace (2020), Assessing the Impact of COVID-19 on Africa’s Economic Development, UN Conference on Trade and Development.

Malawi Confederation of Chambers of Commerce and Industry (2020), Impact of Corona Virus (COVID-19) on Businesses in Malawi.

World Bank (2020), Malawi Economic Monitor, July 2020: From Crisis Response to a Strong Recovery.

World Bank (2020), Malawi Economic Monitor, Dec 2020: Doing More with Less - Improving Service Delivery in Energy and Water.