Impact of COVID-19 in Africa: A scenario analysis to 2030 (July 2020)
Comparative outcomes: V, U and L scenarios

Jakkie Cilliers
## Comparative outcomes: V, U and L scenarios

### Summary impact

Chart 13 provides a summary of the impact of COVID-19 on changes in poverty, average GDP per capita, additional deaths and size of the economy.

### Chart 13: Summary impact of scenarios relative to reference scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Year</th>
<th>Change in poverty using US$ 1.90</th>
<th>Change in GDP per capita in US$ 2017</th>
<th>Additional deaths from COVID and other causes</th>
<th>Difference in economic activity in US$ 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>2020</td>
<td>14,000,000</td>
<td>-5303</td>
<td>471,000</td>
<td>-$194bn</td>
</tr>
<tr>
<td></td>
<td>2025</td>
<td>24,000,000</td>
<td>-234</td>
<td>152,000</td>
<td>-$239bn</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>37,000,000</td>
<td>-287</td>
<td>191,000</td>
<td>-$335bn</td>
</tr>
<tr>
<td>U</td>
<td>2020</td>
<td>14,000,000</td>
<td>-5303</td>
<td>1,000,000</td>
<td>-$194bn</td>
</tr>
<tr>
<td></td>
<td>2025</td>
<td>34,000,000</td>
<td>-317</td>
<td>196,000</td>
<td>-$335bn</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>51,000,000</td>
<td>-389</td>
<td>312,000</td>
<td>-$471bn</td>
</tr>
<tr>
<td>L</td>
<td>2020</td>
<td>14,000,000</td>
<td>-5303</td>
<td>1,600,000</td>
<td>-$194bn</td>
</tr>
<tr>
<td></td>
<td>2025</td>
<td>44,000,000</td>
<td>-428</td>
<td>251,000</td>
<td>-$440bn</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>70,000,000</td>
<td>-513</td>
<td>419,000</td>
<td>-$617bn</td>
</tr>
</tbody>
</table>

Source: IFs version 7.45

The forecast taken from the IFs model is that debt is expected to increase by about 5 percentage points of GDP in 2020 compared to the Reference scenario. In the worst case, the L scenario, debt is likely to increase by about nine percentage points of GDP by 2022 compared to the Reference scenario.

The impact of additional social grants to offset the impact of COVID-19 is to marginally reduce inequality as measured using the Gini index. But once these fall away, inequality increases and reverts to the 2019 average only several years later.

Net aid receipts in Africa are likely to decrease in 2020 (or 2021 given that current budgets are probably set) when compared to 2019 since the economies of donor countries are expected to contract. Thereafter, aid will probably resume its slow increase in absolute numbers, consistent with the historical trend.
However, because of the large contraction in the economies of Africa, the importance of aid as measured in its contribution to GDP and to government revenues will in all likelihood increase. Africa will, for several years, become more and not less dependent on aid. Because most aid flows to low-income countries, these countries will experience a large decline in aid receipts to the extent that aid may also decline in its contribution to GDP.

Impact on key SDG targets and goals

The short-term impact of COVID-19 on extreme poverty is particularly severe, given the large economic growth shock in 2020. When compared to the pre-COVID-19 trajectory, an additional 14 million more Africans will live at incomes below the US$1.90 extreme poverty threshold in 2020 alone.

In the V, U and L scenarios, in 2021 an additional 25 million, 29 million or 30 million Africans respectively would drop below US$1.90 per person per day compared to the pre-COVID-19 poverty forecast. The country-level estimates for the pre-COVID-19, V, U and L scenarios for 2019 (pre-COVID-19), 2020, 2025 and 2030 are in Annex B.

Although it has been evident for several years that Africa will miss the headline SDG goal of eliminating extreme poverty by 2030 [1], the impact of COVID-19 is set to widen the gap. Our findings are slightly more optimistic than those of the World Bank. [2]

The impact of the three scenarios on extreme poverty at the continental level is presented in Chart 14. Whereas roughly 570 million Africans (33% of total population) would probably still live in extreme income poverty in 2030 in the Reference scenario, the impact of COVID-19 is to increase that number to 607 million (V scenario), 621 million (U scenario) or 640 million (L scenario), ranging from 35.7% to 37.6% of the total population.
Before COVID-19, in the Reference scenario, extreme poverty in Africa would have declined by 2.5 percentage points from 2019 to 2030; equivalent to an increase of 101 million people given Africa’s rapid population growth. [3]

In the V scenario extreme poverty will only decline by 0.6 percentage points (an increase of 138 million people). In the U and L scenarios, the per cent of extremely poor Africans will actually increase above the 2019 rate (reflecting an increase of 152 million and 171 million people respectively), reflected in Chart 14.

The countries that are most negatively affected under all three scenarios are Nigeria, the DR Congo, Ethiopia, Niger and Tanzania. Nigeria and Ethiopia are the two most populous countries in Africa while the DR Congo and Tanzania rank fourth and fifth respectively. Niger on the other hand has the most youthful population on the continent (at a median age below 16 years) with some of the lowest human development indicators, which would probably deteriorate even further.

Annex C presents a summary of progress towards selected SDG goals and targets by 2030 under each of the four scenarios. Africa is already projected to miss most of the SDG targets and the impact of COVID-19 is set to further constrain progress. For example, whereas the percentage of Africa’s undernourished population would have modestly declined to 221 million people (or 13% of total population) by 2030 in the Reference scenario, it is now set to increase. [4] Infant mortality will, by 2030, be three times higher than the target set by the UN.

Although Africa is making good progress in primary education enrolment, primary education completion rates are more than 10 percentage points below the target. Secondary and tertiary enrolment and completion rates are significantly off track. While in 2030 Africa was expected to achieve an upper secondary education graduation rate of 40% (compared to
the SDG target of 97%), the impact of COVID-19 will reduce progress by two percentage points.

Access to improved water infrastructure, essential to combat COVID-19, would have improved to 83% by 2030. However, that too is likely to reduce by at least a percentage point. The associated SDG target is 98% access.
Endnotes


2. According to the World Bank: ‘The 2020 downturn will likely increase the SSA poverty rate by at least 2 percentage points. This would mean that an additional 26 million people in SSA would fall into extreme poverty (defined as those living under US$1.90 per day in 2011 PPP). This projected increase in the poverty rate would return SSA to 2015 poverty levels, effectively wiping out 5 years of progress reducing impoverishment.’ J Montes et al, Poverty & Equity Notes, World Bank Group, Number 20, May 2020, 3.

3. Africa's population is currently at 1.343 billion and should increase to 1.710 billion by 2030.

4. To 233 million, 239 million or 247 million in the V-, U- and L scenarios respectively.

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About the authors

Dr Jakkie Cilliers is the ISS's founder and former executive director. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute. His 2017 best-seller Fate of the Nation addresses South Africa's futures from political, economic and social perspectives. His three most recent books, Africa First! Igniting a Growth Revolution (March 2020), The Future of Africa: Challenges and Opportunities (April 2021), and Africa Tomorrow: Pathways to Prosperity (June 2022) take a rigorous look at the continent as a whole.

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