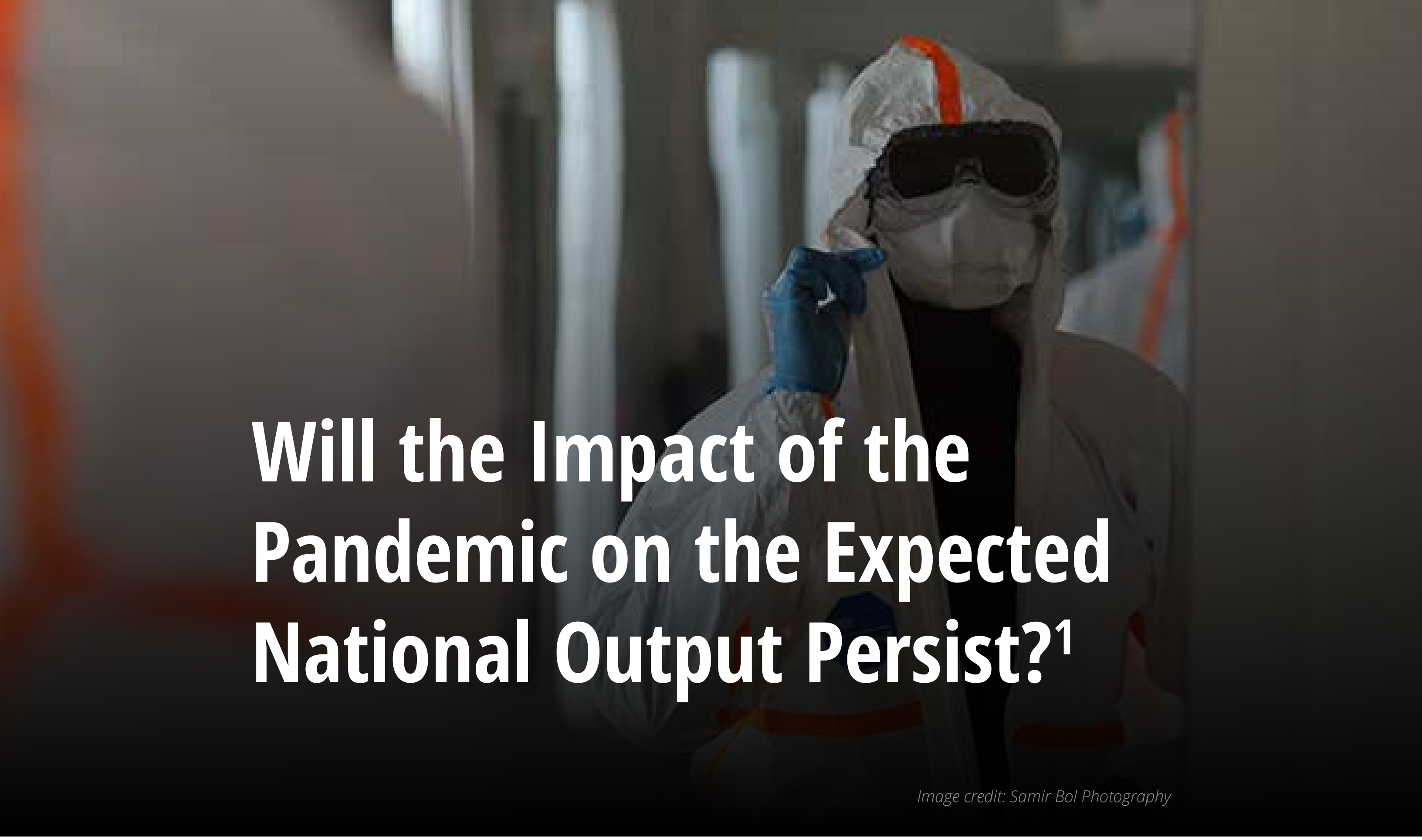

Will the Impact of the Pandemic on the Expected National Output Persist?[1]

Image credit: Samir Bol Photography

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Introduction

Though many countries declared national emergencies and imposed restrictions, including travel bans in March 2020 due to the COVID-19 pandemic,[2,3] the subsequent waves of the health crisis remain detrimental. Global infections

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[2] Cheng, C. et al. 2020. "Covid-19 Government Response Event Dataset." (CoronaNet v.1.0). *Nature Human Behaviour* 4, 756–768.

[3] Falk. M. T., and E. Hagsten. 2020. "The unwanted free rider: Covid-19, Current Issues in Tourism." DOI: 10.1080/13683500.2020.1769575.

While restrictions have saved lives, they have also triggered recessions.

and deaths, for example, continue to rise, with some countries experiencing third or fourth waves, and counting. In addition, authorities across the globe have taken swift measures to cushion against the devastating impacts of the pandemic with different reaction functions. In many instances, government responses remained conditional on the level of national fiscal space, with some strongly supporting vulnerable households and injecting huge liquidity into the banking sector, saving jobs, keeping firms operating, checking bankruptcies and shielding many citizens from spiraling into poverty.

The pandemic has hampered growth, international travel, trade, migration and remittances, which are the lifelines in some countries. While restrictions have saved lives,[4] they have also triggered recessions.[5,6] As Ozili and Arun have noted,[7] the Covid-19 pandemic brought the global economy to its knees through two channels. First, the infections necessitated the imposition of social distancing measures, which forced financial markets, businesses and a broad range of economic activities to shut down. Second, the indirect consequences of the first-round effects hit even harder, convincing Ozili and Arun[8] (p.1) that "the exponential rate at which the virus was spreading, and the heightened uncertainty about how bad the situation could get, led to flight to safety in consumption and investment among consumers, investors and international trade partners." While the containment measures curbed infections, they also affected the global economy, leaving permanent scars — referred to as *hysteresis*[9] effects — in many areas.[10]

[4] Deb, P. et al. 2020. "How the Great Lockdown Saved Lives." IMF Blog, June 2, 2020.

[5] International Monetary Fund. (2020). World Economic Outlook: Statistical Appendix, October 2020. Washington, D.C.

[6] World Bank. 2020. "Lasting Scars of the Covid-19 Pandemic," Chapter 3. Global Economic Prospects. June 2020. Washington, D.C.: World Bank.

[7] Ozili, P.K., and T. Arun. 2020. "Spillover of Covid-19: Impact on the Global Economy." SSRN: https://ssrn.com/abstract=3562570 or http://dx.doi.org/10.2139/ssrn.3562570.

[8] *Ibid.*

[9] Hysteresis is a Greek word for "to be late or come behind," and was manifested through many channels.

[10] Cerra, V. et al. 2020b. "Fighting the Scarring Effects of Covid-19." IMF Working Paper 20/73, Washington, D.C.

The pandemic also exposed pre-existing vulnerabilities in public health systems, revenue bases, petroleum sectors and public infrastructure.[11,12]

The Covid-19 pandemic disrupted economic activity in South Sudan.[13] To contain the spread of the virus, Juba — the governmental nexus — imposed containment measures before the first case was reported in April 2020. The cases, however, have continued to rise, estimated at nearly 11,000 infections and more than 100 deaths, respectively, as of July 5, 2021.[14] The containment measures implemented have included the closure of churches, mosques, schools and universities, as well as public gatherings. Government authorities collaborated with their international partners in an effort to support vulnerable households. On its part, the Bank of South Sudan (BSS) supported businesses by adopting accommodative monetary policy measures, including the reduction of reserve requirements and the cutting of policy rates to provide liquidity to the banking sector. BSS also suspended the requirement to raise paid-up bank capital and encouraged banks to restructure loans to financially distressed customers with viable businesses.

Notwithstanding the authorities' good intentions, South Sudan entered the crisis with weak fundamentals. In this context, monetary policy bore the brunt of the adjustments necessary to mitigate the crisis in a financially constrained country; adverse effects have tilted toward output, employment, price stability and social welfare. Some of these pre-existing challenges forced South Sudan to reopen the economy earlier than many of its peers.[15] It has been observed that South Sudan was basically open through end-2020, even as restrictions were announced officially, with only schools remaining essentially locked down.

This review contributes to the debate on how the Covid-19 pandemic-induced hysteresis effects could negatively impact growth in South Sudan. It addresses

11 Garang. J. A. 2020. "Limitations of Covid-19 Pandemic Containment Measures in Fragile Context: The Case of South Sudan." Washington, D.C. 3 Nov. 2020.

12 World Food Programme (WFP). 2020. "Covid-19: Potential impact on South Sudan: A WFP analysis of the market and food security implications of the pandemic." WFP. 20 Apr. 2020.

13 Mayai, A. T. et al. 2020. "Economic Effects of the Covid-19 Pandemic in South Sudan." The Sudd Institute.

14 See South Sudan Ministry of Health Statistics, July 2021.

15 See Garang, J.A. 2020; and also, Hobdari, N. A., and A. Lahreche. 2020. "Four Things to Know About How Fragile States Like South Sudan are Coping with Covid-19." IMF Country Focus. 20 Nov. 2020.

two related questions: What channels would transmit the scarring effects of the pandemic to the ultimate national output? What can public policy do to support recovery?

The rest of the review proceeds as follows: Section 2 examines the literature on the hysteresis. Section 3 lays out the theoretical framework, relying on Keynesian economics to shed light on key factors affecting output. Section 4 discusses potential channels through which such effects could be transmitted to the output. Section 5 outlines a few policy implications and concludes the review.

Covid-19 pandemic versus global financial crisis and potential sources of hysteresis

The Global Financial Crisis (GFC; 2007-2008), which later metamorphosed into the Great Recession (2007-2009), differs markedly from the current coronavirus (Covid-19)-related downturn.[16] The latter has been accompanied by extraordinary domestic containment measures and policy support, running the gamut of fiscal, monetary, financial and structural considerations, limiting trade and mobility factors. Both crises — the financial and Covid-19 emergencies — will be noted for shedding jobs, reversing gains made over the years and locking in swift policy actions. However, the "Great Lockdown" will be remembered for the loss of lives and the deep scarring of productive capacities. The lockdown differs across economies and human sectors, with vulnerable countries and their populations bearing the brunt of the inequities.

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While both crises have exhibited a level of uncertainty, the GFC did not experience the sharper global contractions evidenced in the ongoing, almost-two-years-long Covid-19 crisis. In addition to a more pronounced decline in output, the Covid-19

[16] Shibata, I. 2020. The Distributional Impact of Recessions: The Global Financial Crisis and the Pandemic Recession. The IMF Working Paper No. 20/96.

crisis has also witnessed a relatively quicker rebound in global activity, at least in some jurisdictions and countries such as China and United states. The international work force, for instance, is estimated to have lost close to four times the number of working hours than those that disappeared during the GFC of 2009[17]. During the current Covid-19 crisis, firms have shifted to digitalization, moving to e-commerce operations, bringing greater technological advances to simple business processes, allowing employees to work from home, enhancing delivery methods necessitated by enforced mobility restrictions and more. Though the ability to telework from home, and the access to such technology tools, differs across the globe and by regions and demographics, the deployment of digital platforms has been faster and more effective than during the GFC, oftentimes the result of technological advances that have resulted in tools being available today that were not in existence just 10 years ago. Furthermore, many central banks have moved more quickly to institute policy measures during the Covid-19 crisis than was the case previously. The U.S. Federal Reserve, for example, acted quickly and appeared more proactive than it was during the early phase of the GFC when it allowed a few firms — for example, global financial services giant Lehman Brothers — to fail.[18] The idea of saving from financial doom those corporations "too big to fail" came later, after the proverbial horse had bolted. Further, global regulatory architecture that was instituted as a necessary tool to address the GFC crisis, underscored the notion that international financial institutions and monetary standard-setters acted in a timely manner. It was truly a crisis like no others; today's pandemic has taken the place of the GFC crisis as one of even greater significance and consequences.

> **The International Monetary Fund (IMF) projects that the global economy contracted to -4.5 percent in 2020, a downturn from 2.8 percent in 2019. For Sub-Sahara Africa, growth declined to -3.0 percent in 2020 from 3.2 percent in 2019. In South Sudan, economic growth was projected to be 4.1 percent in 2020, up from 0.9 percent in 2019.**

[17] ILO. 2021. "Covid-19 and the world of work." ILO Monitor. Updated estimates and analysis, 7th Edition.

[18] Boskin, J. M. 2020. "How Does the Covid Recession Compare?" *Project Syndicate*. August 24, 2020. Retrieved from: https://www.project-syndicate.org/commentary/Covid-economy-lessons-from-recessions-past-by-michael-boskin-2020-08.

For illustration purposes, the global economic impact of the pandemic has been large. The havoc wrecked remains severe and continues to mount; for one, it has retarded growth prospects among oil-producing countries. The International Monetary Fund (IMF) projects that the global economy contracted to -4.5 percent in 2020, a downturn from 2.8 percent in 2019. For Sub-Sahara Africa, growth declined to -3.0 percent in 2020 from 3.2 percent in 2019. In South Sudan, economic growth was projected to be 4.1 percent in 2020, up from 0.9 percent in 2019. Whereas recovery is anticipated in 2021, it remains uneven across countries and regions and will take time before a return to pre-Covid-19 levels.[19,20]

To illustrate the magnitude of the current global contraction, and the accompanying potential for additional scarring, Cerra, Fatás and Saxena[21] report that:

> **"Cumulatively, output losses [as a result of the pandemic] are projected to grow from $11 trillion through next year to $28 trillion over the next five years (IMF, 2020a). These large losses are the result of the scars left by the crisis, and it represents a setback to the pace of improvement in living standards, as the cumulative growth in per capita income is projected to fall by several percentage points for all country groups in the medium-term."**

The global economy witnessed significant job losses, with firms laying off workers and some businesses closing permanently.[22] For countries lacking sufficient fiscal-relief packages, job losses were most apparent among contact-intensive workers, women, youth and the elderly. For oil-dependent economies, the pandemic exacted losses in fiscal revenues and resulting in deeper reductions in spending, with implications in other critical areas as well. These fiscal challenges have forced countries to borrow externally, exacerbating debt dynamics for many, particularly those whose public debt positions were already deemed unsustainable during the pre-crisis period.

[19] International Monetary Fund. 2021. "World Economic Outlook: Statistical Appendix." April 2021. Washington, D.C.

[20] See also the ILO. 2021.

[21] Cerra, V. et al. 2020b. "Fighting the Scarring Effects of Covid-19." IMF Working Paper 20/73. Washington, D.C.

[22] *Ibid.*

Studies have shown that the aftermath of pandemics is usually correlated with higher inequalities, especially for low-skilled workers.[23] Second, those who lack facilities to work from home suffer, underscoring that the loss of gainful employment forces many households into poverty. Large job losses in the informal sector, especially for women and youth, is pushing millions into abject poverty. Preliminary estimates indicate that about 71 million people worldwide may have been pushed into poverty with the onslaught of the coronavirus in 2020.[24]

An economic crisis arises from any quarter. It could be a financial or political crisis or public health pandemic. Crises tend to cause large drops in economic activity, either in hours worked or income earned. This is what the Covid-19 pandemic did to the global labor market (Table 1):

TABLE 1. WORKING-HOUR LOSSES BY WORLD AND INCOME GROUPS IN 2020

INCOME GROUP	TOTAL	QUARTERLY ESTIMATES (IN PERCENTAGES)			
	2020	2020Q1	2020Q2	2020Q3	2020Q4
World	8.8	5.2	18.2	7.2	4.6
Low-income countries	6.7	2.5	13.4	7.6	3.3
Lower-middle-income countries	11.3	2.5	29.0	9.3	4.5
Upper-middle-income countries	7.3	8.4	11.5	5.6	3.9
High-income countries	8.3	3.0	15.8	7.3	7.0

Source: International Labor Organization (ILO) nowcasting model (see Technical Annex 1), January 2021.

The International Labor Organization (ILO),[25] for example, estimated that close to 8.8 percent of working hours were lost globally in 2020, relative to the fourth quarter of 2019. This loss is the equivalent of about 255 million full-time (FTE) jobs. Of the total employment loss estimated at 114 million jobs — not working hours — thirty-three million workers were pushed to unemployment, while another 81 million became inactive. Unfortunately, the world entered 2021 with economically

[23] Cerra, V. et al. 2020a. "Hysteresis and Business Cycles." IMF Working Paper 20/73. Washington, D.C.

[24] *Ibid.*

[25] ILO. 2021. "Covid-19 and the world of work." ILO Monitor. Seventh edition. Updated estimates and analysis, January 25, 2021.

taxing workplace restrictions in effect. ILO estimates indicate that about 93 percent of global workers were living in countries with workplace restrictions by January 2021, compared to 94 percent of global workers in September 2020.

TABLE 2. WORKING-HOUR LOSSES FOR 2020, PROJECTIONS FOR 2021 BY WORLD AND INCOME GROUPS

	PERCENTAGE WORKING HOURS LOST (%) Relative to Q4/2019				EQUIVALENT NUMBER OF FULL-TIME JOBS LOST (48 hours/week; in millions)			
	2020	Baseline 2021	Pessimistic 2021	Optimistic 2021	2020	Baseline 2021	Pessimistic 2021	Optimistic 2021
World	8.8	3	4.6	1.3	255	90	130	36
LICs	6.7	1.8	3.4	1.1	12	4	6	2
LMICs	11.3	2.6	4.7	1.2	110	26	46	12
UMICs	7.3	2.9	4.2	1.1	90	36	50	14
HICs	8.3	4.7	5.7	1.8	39	22	27	14
BY REGION								
Africa	7.7	2.5	4.2	1.4	29	10	16	5
Americas	13.7	5.9	7.1	2.6	50	22	27	10
Arab States	9.0	2.9	3.8	1.3	5	1	2	1
Asia and Pacific	7.9	2.1	3.7	0.8	140	36	65	14
Europe and Central Asia	9.2	5.7	7.0	2.0	30	18	22	7

Source: ILO, January 2021

(LIC: Low-income countries; LMIC: Lower-middle-income countries; UMIC: Upper-middle-income countries HIC: High-income countries)

According to the ILO January 2021 projections, drawing on the IMF's economic forecasts for October 2020, the baseline scenario projects a 3 percent loss in working hours in 2021 from the fourth quarter of 2019.[26] This translates to 90 million FTE jobs. In the pessimistic scenario above, however, working-hour losses

[26] ILO. 2021. "Covid-19 and the world of work." Updated estimates and analysis. Seventh edition.

in 2021 are expected to remain at 4.6 percent, or 130 million FTE jobs, relative to the fourth quarter of 2019. The optimistic scenario, assuming more favorable conditions, projects a loss of 1.3 percent of global working hours (or 36 million FTE jobs) over working hours lost in the fourth quarter of 2019.

Full recovery from any crisis — a crisis, for our purposes, being defined as financial collapse, world war, natural disaster and health pandemic, among other conflagrations having a disastrous social, economic and financial impact on individuals, society and the corporate sphere — takes time and plays out in different forms, including what economists refer to as recognition, decision and implementation lags. Crises can also leave permanent scars on the economy through specific channels. The first apparent channel is the labor market, with recession leading to loss of labor demand. Recessions and job losses translate into idle labor, which can result in human capital decay. Long-term unemployment discourages workers and causes underutilization of factors of production. Further, some labor market policies impede emotional and physical adjustments necessary in the return to full employment, causing frictions and consequently lowering participation rates. A paper by Güriş et al in 2017, for example, confirmed the presence of unemployment hysteresis in Turkey.

Second, hysteresis comes from the slowdown in capital investment in times of crises. Recession induces low expectations for future returns, and it undermines ongoing or robust investment. From the Keynesian perspective, reduction in investment decreases aggregate demand and lowers productivity. According to Kozlowski et al,[27] permanent damage can arise from the scarring on beliefs and the changes of behavior or perceptions. The researchers argue that "even if a vaccine cures everyone in a year, the Covid-19 crisis will leave its mark on the US economy for many years to come." (p.2) For illustration, Richards tests the effect of financial-related hysteresis in Alberta dairy investment in Canada and confirms presence of such scarring, with farmers observing longer periods in which herds do not grow or periods of contraction.[28]

[27] Kozlowski, J. et al. 2020. "Scarring body and mind: The long-term belief-scarring effects of Covid-19." *Covid Economics*, 8 (22), April 2020. CEPR Press.

[28] Richards, J. T. 1996. "Economic Hysteresis and the Effects of Output Regulation." *Journal of Agricultural and Resource Economics*, 21(1):1-17.

Third, disruption in learning as a result of school closures reduces the pace of human-capital formation. It is more severe for the less-privileged, who lack the necessary facilities and/or technical tools to learn from home. Some students may ultimately leave schooling, impeding social advancement. From Central African Republic to Mexico to South Korea, young learners have cited as barriers to their continued schooling the lack of educational facilities during the lockdowns, according to the interviews conducted by Human Rights Watch in April 2021.[29]

Fourth, the pandemic has disrupted supply chains of vital commodities, disturbing global trade. One such example is the toilet paper crisis that occurred in the U.S. in early 2020 when consumers could not find toilet paper on shelves in supermarkets. Other necessary products were similarly missing, as production and supply chain could not keep up with consumer demand and the belief that they would be unable to secure certain items — supply and demand in many cases led to hoarding, which, in turn, exacerbated demand. And, if the belief was that a lockdown or quarantine was inevitable, again, supply could not meet increased demand. To this end, the pandemic initially disrupted supply chains for manufacturing, the airline industry and more — some are still much-impacted, even in light of some restrictions being loosened. Concerted deglobalization and involuntary curtailing of trade have negative implications for the global and national economies. A World Bank paper[30] examining these issues concluded they are long-lasting challenges. The findings argue that deep recessions, which the pandemic has caused, will likely leave permanent scars through multiple channels by (1) lowering investment and innovation; (2) eroding the human capital

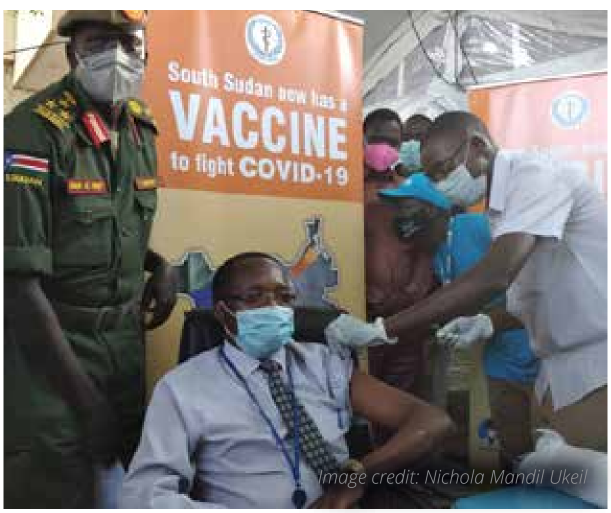


Image credit: Nichola Mandil Ukeil

[29] Human Rights Watch. 17 May 2021. Problems with education around the world during Covid-19. Under the theme "Years Don't Wait for Them: Increased Inequalities in the Right to Education Due to the Covid-19 Pandemic." Retrieved from: https://www.hrw.org/report/2021/05/17/years-dont-wait-them/increased-inequalities-childrens-right-education-due-covid

[30] See World Bank. 2020.

of the unemployed; and (3) disintegrating global trade and supply linkages. Once destroyed, replacing such stock capital is not easily re-established.

Fifth, permanent scars could occur through the loss of trust in key institutions and leaders, if they are assumed to be uncaring, untrustworthy, or unreliable. Low trust in public health officials can make it difficult to effectively address the crisis, and once the crisis is over, authorities may find it just as challenging to implement meaningful reforms. On a positive note, people have responded favorably when queried about their governments' and public institutions' actions during the Covid-19 crisis, especially in terms of the immediate support received from these public agencies.[31] Such favorable sentiments waned or returned to the previous skepticism in 2021 as restrictions were lifted.

Sixth, the rise in inequalities exacerbated during the pandemic may lead to permanent scars. A rise in such inequities is likely to lead to low productivity and create vicious cycles of low growth and an equilibrium trap, underscoring that at any low levels of per capita income, households find it difficult to save and invest much, and such low levels of investment translate into low rate of growth in a given national income.

In "Enhancing Access Opportunities," the IMF and World Bank argued in the May 2020 paper that the disadvantaged groups are more likely to suffer, with inequality shown to be rising in some jurisdictions.[32]

In light of the foregoing, efforts to enhance recovery and reduce the scarring effects come to fore.[33,34,35] Governments have come to mobilize resources, including the securing of external financial assistance from the IMF and other international financial institutions (IFIs). The speed of the IFIs' response and the size of emergency financing demonstrate the sensitivities of the international

[31] OECD. 2020. "Measuring public trust after a pandemic and economic crises," Webinar. 22 June 2020.

[32] IMF and World Bank. 2020. "Enhancing Access to Opportunities." Washington, D.C.

[33] See Cerra et al. 2013

[34] Fatás, A., and L. H. Summers. 2018. "The permanent effects of fiscal consolidations." *Journal of International Economics*, 238–250.

[35] See Jordà et al. 2020.

community to tackle global problems. The recently approved Rapid Credit Facility (RCF) for South Sudan, for example, was among the responses aimed at building confidence in the Public Financial Management (PFM), improving governance and accountability, ensuring debt sustainability and helping the country deepen relations with the donor community.[36] Relative to other countries in the region, these have been areas where South Sudan has lagged in recent years, and the country's efforts merit improvements. To this end, the ongoing staff-monitored program (SMP) for South Sudan remains geared toward supporting economic and financial exchange (FX) reforms, with further implications to deepen relations.

While the RCF was on-lent to Ministry of Finance and Planning (MoFP) to augment the Covid-19 response efforts and support the budget,[37] authorities have made arrangements to build FX from this and to support reforms. In this context, half of the amount has been assigned to budget support, and another half has been earmarked to supplement FX reserves. MoFP has sold its share to BSS, which uses the foreign exchange (FX)to intervene in the foreign exchange rate. Preliminary findings now indicate the FX market has broadly stabilized, through regular auctions to banks and forex bureaus.

Theoretical framework

Proponents of Keynesian economics have long argued that the short-run effects of a given crisis are primarily revealed in the long-run problems affecting economic growth and undermining a return to pre-recession-growth levels, contrary to neoclassical economists, who preach efficient market hypothesis. So, barring the rationale for self-correcting markets, the late economist Keynes saw laissez-faire economic policy as ineffective in the face of economic crisis, justifying government interventions to stimulate the aggregate demand. Keynes further posited those lower wages reduce consumption, engendering a paradox of thrift. This also induces a fear in the minds of workforce members who are concerned

[36] Bromley, D. W. et al. 2020. "The First Loan from The IMF Under The RCF: An opportunity to stabilize and restore confidence in the South Sudanese economy." Ebony Center for Strategic Studies. 16 Nov. 2020.

[37] IMF. 2021. "IMF Executive Board Approves US $174.2 Million Emergency Assistance for South Sudan to Address the Covid-19 Pandemic." Retrieved from: https://www.imf.org/en/News/Articles/2021/03/31/pr2194-south-sudan-imf-execboard-approves-us-174-2m-emergency-assistance-address-covid19.

about impending job loss. Spending less to avoid disaster and to protect — as bet they can — their future, consumption numbers sink across the board. The same goes for the corporate or business community; crises such as the current pandemic induce lower investment due to perceived, reduced future profitability. Lower household consumption and reduced private investment can create a trap unless the government intervenes to stimulate the slackened demand. Efforts to draw down on precautionary savings have sometimes come into play.

An unemployment rate may fail to return to a path of equilibrium, thereby resulting in skills atrophy, where the unemployed lose productive efficiency. Research has shown that skills atrophy can act as a signaling effect, where firms prefer to hire workers with a steady employment history. Cognitive dissonance — that mental unease that comes with holding conflicting beliefs, values, attitudes — is also a concern; unemployed workers may become disillusioned with their current job prospects or conditions and exit the labor force. Unemployment rates also spark capital depreciation, where capital goods, including factories, may wear and tear over time while shifting aggregate supply to the left, or upward. Finally, trade penetration, where domestic producers lose ground to foreign competitors, creates a significant impact on financial equilibrium. These may generate protectionist tendencies, mostly inherent under the classic infant-industry arguments, according to the international trade theory, which states that new industries require protection from international competition until they become mature, stable and competitive.

Suppose an unemployment rate shows the presence of the hysteresis. This means that past unemployment rates tend to cause the expected value of unemployment today — and in the future — to deviate from the steady state path. Drawing from the work of others, including Blanchard and Summers and O'Shaughnessy[38,39] hysteresis is, therefore, considered a unit root process, meaning that it shows an unpredictable pattern over time.

[38] Blanchard, O. J., and L. H. Summers. 1987. "Hysteresis in Unemployment." *European Economic Review* 3(1), 288-295.

[39] O'Shaughnessy, T. 2011. "Hysteresis in Unemployment." *Oxford Review of Economic Policy* 27(2), 312–337.

Potential channels of the hysteresis effects on the national output in South Sudan

South Sudan was among the first countries to take swift measures to contain the virus, beginning in March 2020. It was also among the first countries to ease restrictions and reopen the economy (Table 3).[40] Given the later nature and rise of infections, restrictions were imposed again in February through April 2021.

TABLE 3. SOUTH SUDAN AS EARLY EASER, INITIAL SPENDING RELATIVE TO EAST AFRICAN COMMUNITY AND SUDAN

Country	Covid-19 spending (as % of GDP)	Speed to reopening (lockdown date-reopening date)
Burundi	0.5	N/A
Kenya	0.3	March 15 - August 1, 2020
Rwanda	3.2	March 18 - July 29, 2020
South Sudan	0.2	March 24 - May 7, 2020
Tanzania	-	March 17 - May 21, 2020; June 8*[41], 2020
Uganda	0.36	March 18 - September 20, 2020
Sudan	0.24	March 13 - July 10, 2020

Source: Author's compilation; Collaborative Africa Budget Reform Initiative, 2020.

The presence of the high poverty rates, weak health systems, high informality and lack of social safety nets accounted for South Sudan's early reopening. The weak healthcare system and substantial informality have limited and continue to hamper the effectiveness of the containment measures in the country.

[40] Waakhe, S. "South Sudan Lifts Covid-19 Restrictions Despite Rise in Cases." The VOA News. 8 May 2020. Retrieved from: https://www.voanews.com/Covid-19-pandemic/south-sudan-lifts-Covid-19-restrictions-despite-rise-cases.

[41] * Shows when Tanzania was declared Covid-free and stopped reporting cases; around June 8, 2020.

The presence of the high poverty rates, weak health systems, high informality and lack of social safety nets accounted for South Sudan's early reopening. The weak healthcare system and substantial informality have limited and continue to hamper the effectiveness of the containment measures in the country. As observed, most people prefer to visit the nearest drugstore whenever they feel unwell; this is the result of inefficiencies and the lack of basic facilities available at public hospitals. The absence of a reliable health system to ensure contact tracing and testing has also raised the likelihood of increased cases of "silent spreaders" — those that go unreported — in the community during the pandemic.

Image credit: Nichola Mandil Ukeil

Further, the dependency ratio, at 82 percent in South Sudan, remains one of the highest, buoyed largely by the extended family system. This means that a given household has more people than expected, which limits the effectiveness of social distancing. Those affected can spread the virus easily to others in a crowded household.

Broadly, the Great Lockdown was ineffective in South Sudan because of the country's lack of social safety nets. As a corollary, families dependent on remittances from abroad were impacted substantially during the pandemic; loss of income in host countries also meant sending less home. In this connection, South Sudan might have "imported" lockdowns in more advanced economies, through its migrant workers — presumably a large share are working in less-skilled, contact-intensive sectors that may have been impacted by the Covid-19 crisis — for example, in the hospitality, manufacturing or production factories. If this is the case, then there may be a risk that South Sudan also imports the hysteresis from advanced economies.

The Covid-19 crisis hit South Sudan where it hurt the most: the oil sector. The shock was not only a health crisis, but it also evolved into a proper economic crisis, undermining the containment measures and inflicting long-term damage on the economy. With a budget crisis, it is even more difficult to keep paying people, to increase health spending or to ensure innovative education policies and to continue to invest in the future. So, the hysteresis effect becomes really encroached.

Without facilities to work from home, and lacking social safety nets, households have been caught between a rock and a hard surface. Some found themselves facing tough decisions: either they stay home and starve, or come out and risk infection. Many chose the latter; some suffered a fatal ending from Covid-19, but went uncounted, partly due to the lack of contact tracing and limited testing.

While the duration and magnitude of the pandemic remain uncertain, five hysteresis effects could arise in South Sudan. A word about each is in order.

The Covid-19 crisis hit South Sudan where it hurt the most: the oil sector. The shock was not only a health crisis, but it also evolved into a proper economic crisis, undermining the containment measures and inflicting long-term damage on the economy.

First, with public schools closed and pupils lacking opportunities to learn from home, human capital acquisition has interrupted for millions. Before the Covid-19 crisis hit, South Sudan was already lacking many basic needs and was among the countries in Africa with the lowest human-development indicators. A bit of digression is necessary to contextualize historical political development for the reader. South Sudan has been the victim of tumultuous past conflicts, starting with the first civil war with Sudan, from 1955-1972, and later with the same adversary, from 1983-2005. Both led to the loss of unfathomable numbers of innocent lives, destruction of national assets and the decay of nascent institutions of governance. For close to 50 uninterrupted years, South Sudan has been involved in a military conflict, either during the liberation war with Sudan or internal strife.[42]

Sadly, South Sudan quickly descended into internal conflict in 2013 following the euphoric independence from Sudan in 2011. The bloody conflict ran from December 2013 through September 2018 and only came to an end when the Revitalized Agreement on the Resolution of the Conflict in South Sudan (R-ARCSS) was

[42] Nyaba, P. A. 1996. "The Politics of Liberation in South Sudan." Kampala: Fountain Publisher.

negotiated with the support of the Africa Union and signed in Khartoum. While the internal conflict has had a deleterious effect on the country, including the reduction of primary school enrollment by at least 80 percent from 2013 through 2016, according to Mayai[43,44] the Covid-19 pandemic has also compounded such challenges. Director of research at The Sudd Institute in Juba, Mayai, notes that pupils forced out of school are exposed to greater dangers, including early marriages for the case of girls. An effort to foster learning was hampered, even when pupils were advised in 2020 to turn on TV to receive lessons or to listen to local radio stations for coursework; many households were unable to take advantage of the opportunity for lack of access to the resources.

Second, labor market participation rate was affected, with working hours reduced. At public sector offices (critical services such as those provided at Juba Teaching Hospital and other critical facilities such as the John Garang Infectious Diseases Unit — this is where critical Covid-19 patients have been treated — are exceptions), working hours declined from eight to just three or four hours daily. This reduction between 50 and 60 percent of the eight-hour workday lasted throughout 2020. Despite the history of wage arrears, South Sudan managed to pay some staff, though the pandemic negatively impacted these workers' purchasing power. The public budget became even more constrained, and some public employees lost their incomes. Qualitative data indicators point to worsened outcomes. In this context, reducing labor market participation voluntarily or involuntarily could bear negatively on the country's output.

Third, the pandemic has pushed many into poverty. While it was high before Covid-19 struck, poverty has increased to even greater levels. At 51 percent in 2009,[45] the poverty rate rose to 82 percent in 2019 due to war, and was exacerbated by the pandemic, increasing to 88 percent in 2020.[46] This escalation has implications for meeting Sustainable Development Goals (SDGs). The pandemic has also widened

43 Mayai, T. A. 2020a. "The Economic Impacts of Covid-19 Pandemic in South Sudan: An Update." The Sudd Institute Policy Brief. 26 Jan. 2020.

44 Mayai, T.A. 2020b. "The Covid-19 Outbreak in South Sudan." The Sudd Institute Policy Brief and National Secretariat for HLFT. 20 May 2020.

45 National Bureau of Statistics. 2009. South Sudan National Baseline Household Survey.

46 See IMF. 2019; 2020.

the inequality among the haves and have-nots in the country. In a recent phone-based household survey the World Bank[47] conducted in June 2020 with a sample of 1,213 people, two out of three households reported loss of income. This means the households suffered from the pandemic through loss on basic income, which for some translates into loss of shelters and basic health services, among others.

Fourth, the impact of environmental damage on potential output is another channel delivering the impacts of hysteresis. As South Sudan relies on oil revenue, the pandemic has considerably affected global oil consumption, leading to a drop in oil prices, which has reduced government oil revenues and affected income of many of those who rely on federal salaries and business contracts. Without salaries, a number of civilians and soldiers have had to take jobs that negatively impact the health of the environment; illegal logging is one such "industry," while charcoal production and attendant trading are other activities now sought as a means to fend for their families. Soldiers and civilians along the Juba-Nimule Road Corridor, for example, and along many other accessible trade routes in South Sudan, have resorted to illegal logging and the cutting of trees for the production of building materials, fuel for home fires and charcoal for cooking, just to make ends meet. These illegal activities, which have increased due to the pandemic, have led to social and environmental impacts; women and children are not immune to the plight and are the victims of exploitation as they are forced to find viable incomes. The onset of the pandemic has constrained other sources of income, pushing land to charcoal production. In fact, preliminary findings of a study conducted recently by The Sudd Institute — in a collaboration with the University of Cambridge's Center of African Studies and similar institutions in Kenya, Tanzania and Uganda — show that large swathes of land have been cut for charcoal in the last several years, posing a threat to the biodiversity of the region.

Image credit: Nichola Mandil Ukeli

[47] Fatima, F. et al. 2020. "Monitoring Covid-19 Impacts on Households in South Sudan, Report No. 1." Results from a high-frequency phone survey of households. World Bank. 24 Nov. 2020.

A fifth impact of hysteresis in South Sudan regards public investment, particularly in the flourishing construction and road network during the postwar period of 2006-2012. Reduced investment has negative implications on the economy, through Keynesian multipliers. Therefore, the impact of the pandemic will likely be felt on the output in the future. For the case of this review, we examined public investment, particularly capital investment over the last five years, and observed that it remains erratic. The pandemic period has seen a huge reduction in planned investments (Table 4; see also Figure 2).

TABLE 4. EVOLUTION OF SOUTH SUDAN INVESTMENT EXPENDITURES, FY2016/17-2020/21,

	AS PERCENT OF OVERALL BUDGET		
Fiscal year	**Capital budget**	**Investment expenditures (on roads and Juba International Airport)**	**Other capital costs (on vehicles)**
FY 2016/2017	4.17	0.87	2.71
FY 2017/2018	3.05	0.26	2.79
FY 2018/2019	10.68	0.14	10.54
FY 2019/2020	58.82	44.23	14.59
FY 2020/2021	26.00	9.81	16.19

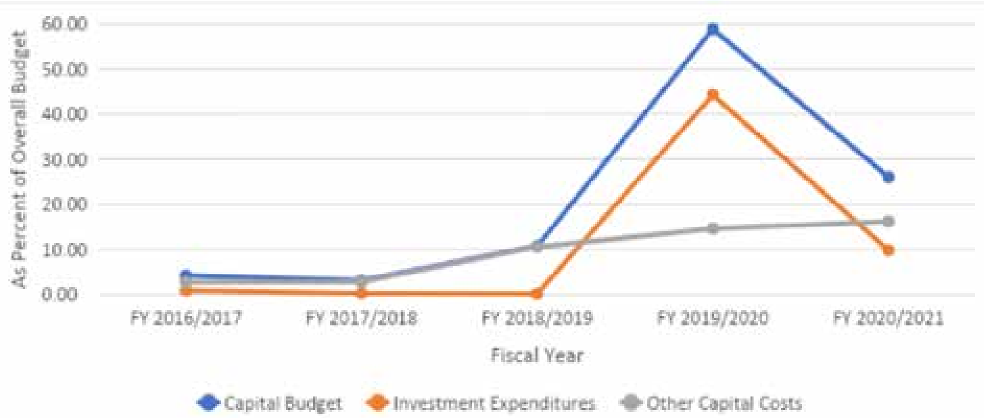
Source: South Sudanese Authorities, February 2021.

The FY2019/2020 capital budget shows a sizeable increase in investment and other capital costs; this comes following the signing of the Revitalized Agreement or R-ARCSS. The government saw it as vital to invest more resources in infrastructure, seen especially in its allocation of some 30k barrels of oil per day (bpd) to fund road projects. This explains the jump in the capital budget and the increased investment on roads in the subsequent years. Yet, when Covid-19 struck, it affected oil prices, causing a decline in production volumes, which, in turn, reduced the share of crude oil and the value accrued to the contractors. Further, the government also reduced oil consumption for road and airport expenditures from 30k bpd to 10k bpd, which, again, accounts for a significant reduction in investment from FY2019/2020 through FY2020/2021.[48]

[48] Though unapproved by the Parliament, the FY2020/2021 budget that bears presidential sanction is largely executed and ended on June 30, 2021. Readers should also note usual data caveats and rounding errors here.

Government priorities change. Roads and the Juba airport were among the victims of reductions in investment due to effects of the pandemic. Spending on vehicles, due to the expansion of the South Sudanese government following the Revitalized Agreement,[49] added to the country's spending priorities. The argument that the Covid-19 pandemic might have placed a dent in South Sudan's investment trajectory is evident in Figure 1 below.

FIGURE 1. SOUTH SUDAN CAPITAL BUDGET AND INVESTMENT, FY2016/17 - 2020/21



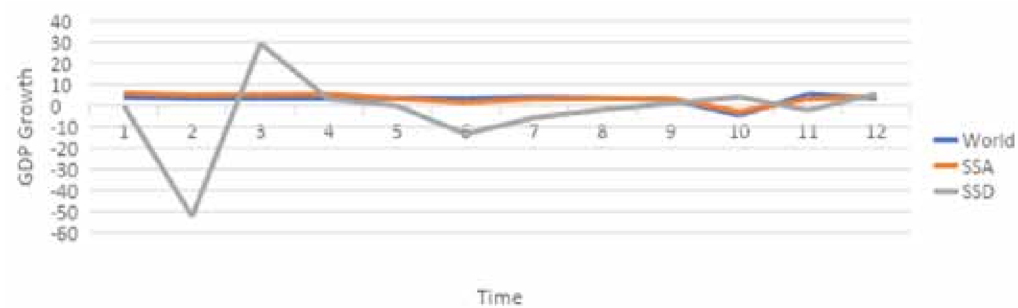
Source: The South Sudanese Authorities, 2021.

The impact of the pandemic is further evidenced by the drop in oil prices. Consider this single cause-and-effect scenario: The government's ability to create and provide safety-net program funding for those impacted by the pandemic becomes greatly restricted when a primary source of revenue — oil — is affected. The lack of federal support — more accurately, the government's inability to provide support — has forced vulnerable populations to leave their homes in search of employment; these jobseekers, desperate for work at nearly any cost, have been further exposed to pandemic dangers. This conundrum underlines the existence of the need for South Sudan to institute functioning social safety nets, and the fact that none exists has had negative implications. It has been observed that even the statutory national schemes such as the country's social security funds, pensions, severance and health insurance, among others, exist only on paper; there is little

49 The Unity Government was formed in February 2020 before the Covid-19 lockdown.

that takes place in regards to the application of such assistance, further testimony to the inadequacy or lack of South Sudan's financial safeguards.

FIGURE 2. SOUTH SUDAN'S GDP GROWTH OVER THE YEARS



Source: IMF World Economic Outlook, October 2020 (Average GDP growth: 2002-2011; Actual Per annum growth: 2012-2019; Projections: 2020-2025).

Figure 2 shows that the recovery in South Sudan followed a V-shaped pattern after the 2012 conflict with Sudan, with growth picking up quickly in 2013. However, the December 2013 conflict dealt a huge blow to the economy — recovery to pre-war levels did not occur until 2019. While full implementation of the Revitalized Agreement could boost recovery, the impact of the Covid-19 pandemic points to an uncertain outlook. That said, if oil prices recover, and market confidence picks up in light of the glimmer of hope from the ongoing foreign exchange market and the fiscal and monetary reforms under the staff-monitored program(SMP,) it is likely that growth in South Sudan could follow a V-shaped recovery, similar to the rebound from the 2012 conflict.

Conclusion and policy implications

A survey of the literature points to an unescapable conclusion that the pandemic aggravated macroeconomic outcomes by reducing fiscal receipts, affecting external sectors, impeding public investment, intensifying inflationary pressures, and triggering both income and job losses in the private and public spaces. Broadly, the Covid-19 pandemic has exacerbated already-existing weak fundamentals in South Sudan, subsequently worsening macroeconomic and social indicators. The pandemic will likely leave enduring scars on the economy through the several channels highlighted above, with serious implications on the expected national output.

In an effort to foster inclusive recovery from the pandemic, the authorities have prioritized immediate needs while keeping an on eye on the medium-term objectives, indicating that the government in Juba continues to face multiple challenges and competing needs. Broadly, these challenges include the alleviation of a humanitarian crisis, implementation of the R-ARCSS and the stabilization of the macroeconomy, all while responding to the continued myriad threats of the pandemic. Convinced that these four key objectives are intertwined, the government has embarked on providing limited resources to train and integrate the national army; establishing state governments; improving security conditions, working on delivering a permanent constitution and building public confidence among peace partners — all of which remains difficult. On the humanitarian front, the focus has been to mobilize resources from the donor community to support the vulnerable households. The South Sudan Safety Net Project (SSSNP), running through November 2022, is among those championed to ensure social protection through World Bank support.

Furthermore, the authorities in South Sudan are also moving to ensure key deliverables. In this context, MoFP has set up the Cash Management Committee. The government continues to reinforce PFM reforms, including the enhancement of electronic staff payments, consolidation of Single Treasury Accounts (TSA) and a more effective and efficient transmission of non-oil revenues. The National Revenue Authority (NRA) has also been empowered to improve tax administration and operationalize other functionalities, including staffing, while adopting digitized platforms. These good-faith efforts notwithstanding, NRA faces connectivity and capacity constraints and policy slippages. On the other hand, the Bank of South Sudan continues to intervene in the foreign exchange market to stabilize rates while working to enhance supervisory roles and asset quality. Once the pandemic abates, the BSS intends to advise other such institutions to proceed with their capitalization plans. The BSS would resume the policy in place before Covid-19 struck, which will entail the requirement that banks raise new paid-up capital, merge with others, or voluntarily liquidate.

Conducting a prudent monetary policy that prioritizes price and financial stability, improving the business environment and supporting full employment are proven measures that strengthen an economy.

Finally, considering the scarring effects of the pandemic, strengthening public systems to enhance recovery prospects and to withstand future shocks remains of vital importance. Targeted fiscal, monetary and structural reforms will be needed to ensure recovery. This must include investing in health systems, enhancing spending efficiency, facilitating digital technology to provide vulnerable households with access to resources, and intensifying revenue mobilization to safeguard fiscal and debt sustainability in the medium term. Conducting a prudent monetary policy that prioritizes price and financial stability, improving the business environment and supporting full employment are proven measures that strengthen an economy. To avoid overwhelming South Sudan's already-stretched capacities, such reforms must be incremental, prioritized and focused. Above all, they must be recognized as imperative, and must garner a meaningful commitment to succeed.

About the author

James Alic Garang is a co-founder and scholar at The Sudd Institute, an independent research organization focused on informed and accountable policy and practice that responds to the needs, wants and well-being of the South Sudanese people. Garang's areas of interest include macroeconomics, development economics, financial sectors and financial inclusion. He has held a number of academic and professional positions, including internships at the African Development Bank in Tunisia (2009-2010), as a lead evaluator on the banking sector during the "Comprehensive Evaluation of the Government of South Sudan, 2006-2010," a consultant with the World Bank (2013-2014) and as a board member serving on a variety of charitable organizations and academic affiliations.

A former McNair Scholar and a member of the Omicron Delta Epsilon international economic honor society, Garang holds a Ph.D. in economics from the University of Massachusetts, Amherst. He has served as Deputy Dean of Faculty for Economic and Social Studies at Upper Nile University, and as Senior Economist at the Ebony Center for Strategic Studies in Juba. Garang is currently a Senior Advisor to the Executive Director of the IMF Executive Board in Washington, D.C.