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RESEARCH FOR A PEACEFUL, JUST AND PROSPEROUS SOUTH SUDAN

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Weekly Review

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Will the Impact of the Pandemic on the Expected National Output Persist?

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1. Introduction

Though many countries declared national emergencies and imposed restrictions, including travel bans in March 2020 due to the COVID-19 pandemic (Cheng, Barceló, & Hartnett et al., 2020; Falk & Hagsten, 2020), the subsequent waves of the crisis remain detrimental.

Global infections and deaths, for example, continue to rise, with some countries experiencing third or fourth waves and counting. In addition, the authorities across the globe also took swift measures to cushion against 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 from falling 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, they have also triggered recessions (IMF WEO, 2020; World Bank, 2020). As Ozili and Arun (2020) note, the COVID-19 pandemic brought the global economy on its knees through two channels. First, the infections necessitated the imposition of social distancing measures, which forced financial markets, businesses, and broad range of economic activities to shut down. Second, the indirect consequences of the first-round effects hit even harder, convincing Ozili and Arun (2020, p. 1) to declare 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 hysteresis¹ effects—in many areas (Cerra, Fatás, & Saxena, 2020b). The pandemic also exposed preexisting vulnerabilities in public health systems, revenue bases, petroleum sectors, and public infrastructure (Garang, 2020; WFP, 2020).

¹ Hysteresis is a Greek word for “to be late or come behind” and was manifested through many channels.

The COVID-19 pandemic disrupted economic activity in South Sudan (Mayai et al, 2020). To contain the spread of the virus, Juba imposed domestic containment measures before the first case was reported in April 2020. The cases, however, continue to rise, estimated at 10,688 infections and 115 deaths, respectively, as of June 2, 2021 (see MoH, 2021). These containment measures include closure of churches, mosques, schools, universities as well as public gatherings. The authorities also collaborated with their international partners to support vulnerable households. On its part, the Bank of South Sudan (BSS) supported businesses by adopting accommodative monetary policy measures, including reducing reserve requirements and cutting policy rates to provide liquidity to the banking sector. The BSS also suspended the requirement to raise paid-up bank capital and encouraged banks to restructure loans to their 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 adjustment needed to mitigate the crisis in a financially constrained country, with adverse effects tilted towards output, employment, price stability, and social welfare. Some of these preexisting challenges forced South Sudan to reopen the economy earlier, compared to its peers (Garang, 2020; Hobdari & Lahreche, 2020). It was observed that South Sudan was basically open through end-2020 even as restrictions were announced officially, with only schools remaining essentially locked down.

This weekly review contributes to the debate on how the COVID-19 induced hysteresis effects could affect growth in South Sudan. It addresses two related questions: What channels would transmit the COVID-19 scarring effects to the 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.

2. The 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 (Shibata, 2020). The latter has been accompanied by extraordinary domestic containment measures and policy support, all running the gamut of fiscal, monetary, financial, and structural considerations, limiting trade and factor mobility. While both crises will be noted for shedding jobs, reversing gains made over the years and locking in swift policy actions, the Great Lockdown is also towering in terms of loss of lives and scarring of productive capacities. It differs across the economies and sectors, with vulnerable countries bearing the brunt.

The global impact remains severe, particularly for dampening growth prospects among oil producing countries. The IMF projects that the global economy contracted to -4.5 percent in 2020, from 2.8 percent in 2019. For Sub-Saharan Africa, growth declined to -3.0 percent in 2020, from 3.2 percent in 2019. In South Sudan, the growth was projected to 4.1 percent in 2020, from 0.9 percent in 2019, reflecting a start from the low base following conflict and higher forecasted growth

over 8 percent previously. Whereas the recovery is expected in 2021, it remains uneven across the regions and will take time before a return to pre-COVID levels (IMF, 2021). To illustrate the magnitude of the global contraction, with potential scarring, Cerra, Fatás, and Saxena (2020b) report that:

Cumulatively, output losses 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 closing permanently (Cerra, Fatás, & Saxena, 2020b). For countries lacking sufficient fiscal packages, job losses were apparent, among contact-intensive workers, women, youth, and elderly. For oil dependent economies, the pandemic exacted losses in fiscal revenues, underscoring that the fall in oil prices translated into deeper reductions in spending, with implications on other critical areas. These fiscal challenges have forced countries to borrow externally, exacerbating debt dynamics for many, particularly those whose public debt positions were deemed unsustainable during the pre-crisis period.

Studies have shown that the aftermath of pandemics is usually correlated with higher inequality, especially for low-skilled workers (Cerra, Fatás, & Saxena, 2020a). Second, those who lack facilities to work from home suffer, underscoring that losing work 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 could have been pushed into poverty by 2020 (Cerra, Fatás, & Saxena; 2020a; IMF, 2020).

An economic crisis arises from any quarter. It could be financial or political crisis or public health pandemic. Crises tend to cause large fall 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 2020	Quarterly Estimates (in percentages)			
		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: ILO nowcasting model (see Technical Annex 1), 2020.

The International Labor Organization (ILO, 2020), for example, estimated that close to 8.8 percent of the working hours were lost globally in 2020, relative to fourth quarter of 2019. This loss comes down to about 255 million full-time jobs. Thirty-three million were pushed to unemployment, while another 81 million became inactive. Unfortunately, the world entered 2021 with economically taxing workplace restrictions in effect.

Full recovery from crisis 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. First, the apparent channel is the labor market, with the 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 factor underutilization. Further, some labor market policies impede adjustment back to full employment, causing frictions, and lowering participation rates. Second, hysteresis comes from the slowdown in capital investment. Recession induces low expectations of future returns, and it undermines investment. From the Keynesian perspective, reduction in investment decreases aggregate demand and lowers productivity. According to Kozłowski, Veldkamp, and Venkateswaran (2020), permanent damage could arise from the scarring beliefs, and changes of behavior or perceptions. They 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). Third, disruption in learning through school closures reduces pace of human capital formation. It is more severe for less privileged who lack facilities to learn from home. Some children could find themselves dropping out, impeding social mobility.

Fourth, the pandemic disrupted supply chains of vital commodities, disturbing the global trade. Concerted deglobalization and involuntary curtailing of trade have negative implications for the global and national economies. A World Bank (2020) paper that examines these issues concludes that they are long lasting. It argues that deep recessions, which the pandemic has caused, will likely leave permanent scars through multiple channels, including by (1) lowering investment and innovation; (2) eroding the human capital of the unemployed; and (3) disintegrating global trade and supply linkages. Once destroyed, replacing such stock capital is not easy. Fifth, permanent scars could occur through 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 address the crisis, and once the crisis is over, the authorities may find it hard to implement meaningful reforms. Sixth, the rise in inequality may lead to permanent scars. Rising inequality could induce low productivity and create vicious cycles of low growth and equilibrium trap.

In light of the foregoing, efforts to enhance the recovery and reduce scarring effects come to fore (Cerra, Panizza, & Saxena, 2013; Fatás & Summers, 2018; Jordà et al., 2020). Governments have come to mobilize resources, including by securing external financial assistance from the IMF and other international financial institutions (IFIs). The speed of the IFIs’ response and size of emergency financing demonstrate the sensitivity of the international 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 (Bromley et al, 2020). Relative to the region, these have been areas where South Sudan has lagged in recent years, and they deserve careful scrutiny.

3. 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 level, contrary to the neoclassical economists who preach efficient market hypothesis. So, barring rationale for self-correcting markets, Keynes sees *laissez-faire*

economic policy as ineffective in the face of economic crisis, justifying government interventions to stimulate the aggregate demand. Keynes posits that lower wages reduce consumption, engendering a paradox of thrift. This also induces a fear in the workers' minds that they may lose their jobs in the future and begin to save for the rainy day. The same goes for firms, inducing 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 slacken demand. Efforts to draw down on precautionary savings have come into play sometimes.

An unemployment rate may fail to return to equilibrium path and induce skills atrophy, where the unemployed lose productive efficiency. It can act as a signaling effect, where firms prefer to hire workers with a steady employment history, or cognitive dissonance, where unemployed workers may become disillusioned with their job prospects and exit the labor force; capital depreciation, where capital goods, including factories, may wear and tear over time while shifting aggregate supply to the left; and finally, trade penetration, where domestic producers lose ground to foreign competition. These may generate protectionist tendencies, mostly under infant industry arguments.

Suppose an unemployment rate shows the presence of the hysteresis. This means that unemployment rate tends to cause the expected value of unemployment today and in future to deviate permanently. Drawing from the work of others, including Blanchard and Summers (1987) and O'Shaughnessy (2011), hysteresis is, therefore, considered as a unit root process.

4. 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 in March 2020. It was also among the first countries to ease restrictions and reopen the economy (Table 2; Waakhe, 2020, May 8). Given the nature of infections, restrictions were imposed again in February through April 2021. Further, the presence of the high poverty rates, weak health systems, high informality, and lack of social safety nets accounted for early reopening (Garang, 2020).

Table 2: South Sudan as Early Easer and Relative Spending to EAC + Sudan

Country	COVID Spending (as % of GDP)	Speed to Reopening (Lockdowns to Reopening Timelines)
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 ^{**2} , 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.

Without facilities to work from home and lacking social safety nets, households were 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 infections. Many chose the latter, with some people dying

² ** Shows when Tanzania was declared COVID free and stopped reporting cases around June 8, 2020.

from the COVID-19, partly due to lack of contact tracing and limited testing. While the duration and magnitude of the pandemic remain uncertain, five hysteresis effects could arise. First, with public schools closed and pupils lacking opportunities to learn from home, human capital acquisition was interrupted for millions. While the conflict has had a deleterious effect on the country, reducing primary school enrollment by at least 80 percent from 2013 through 2016 (Mayai, 2020a; 2020b), the COVID-19 pandemic has also compounded these challenges. Mayai (2020a) notes that pupils forced out of the 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 to turn on TV to receive lessons or listen to local radio stations, which were inaccessible to many households.

Second, labor market participation rate was affected. The number of working hours was reduced. For the public sector offices, except critical service sectors such as hospitals, the working hours declined from 8 to 3 or 4 hours. This reduction between 50 and 60 percent of 8-hour day lasted throughout 2020. Despite the history of wage arrears, South Sudan managed to pay some staff, though the pandemic affected their purchasing power. The budget became even more constrained and some public employees lost their incomes. While there is no official unemployment data available in South Sudan, qualitative data indicators point to worsened outcomes. In this context, reducing labor market participation voluntarily or involuntarily bears negatively on the output.

Third, while it was high before the COVID-19 pandemic struck, poverty rose further. At 51 percent in 2009 (NBS, 2009), poverty rate rose to 82 percent in 2019 due to war and was exacerbated by the pandemic to 88 percent in 2020 (IMF, 2019; 2020). This escalation has implication for meeting Sustainable Development Goals (SDGs). The pandemic also widened the inequality among the haves and have-nots. In a recent phone-based Household Survey that the World Bank conducted in June 2020 with a sample of 1,213 people, two out of three households reported loss of incomes or suffered in one way or another from the pandemic.

Fourth, the impact of environmental damage on potential output is another channel. As South Sudan relies on oil revenue, the pandemic considerably affected global oil consumption, leading to drop in oil prices, which reduced the government oil revenues, affecting income of many who rely on government for salaries and business contracts. Without salaries, a number of civilians and soldiers find themselves undertaking jobs that negatively affect the environment such as illegal logging and charcoal production and trading to fend for their families. Soldiers and civilians along the Juba-Nimule Road Corridor, for example, and in many other accessible trade routes in South Sudan, have resorted to illegal logging and cutting of trees to make logs and charcoal to make ends meet. These activities, which have increased due to the pandemic, have led to a lot of social and environmental impacts, with women and children being involved in such illegal production, suffering from exploitation. Preliminary findings of a study conducted recently by the Sudd Institute in collaboration with the University of Cambridge's Center of African Studies and similar institutions in Kenya, Tanzania, and Uganda, show that large swathes of lands have been cut for charcoal in the last several years, posing a threat to biodiversity of the region.

Fifth, public investment, particularly in the flourishing construction and road network during postwar period 2006-2012, has also been affected. 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 is erratic. In this connection, the pandemic years saw a huge reduction in the planned investment (Table 3; see also Figure 2).

Table 3: Evolution of Investment Expenditures FY2016/17-2020/21

Fiscal Year	As % of the Overall Budget		
	Capital Budget	Investment Expenditures (On Roads and Juba 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

Sources: South Sudanese Authorities, February 2021.

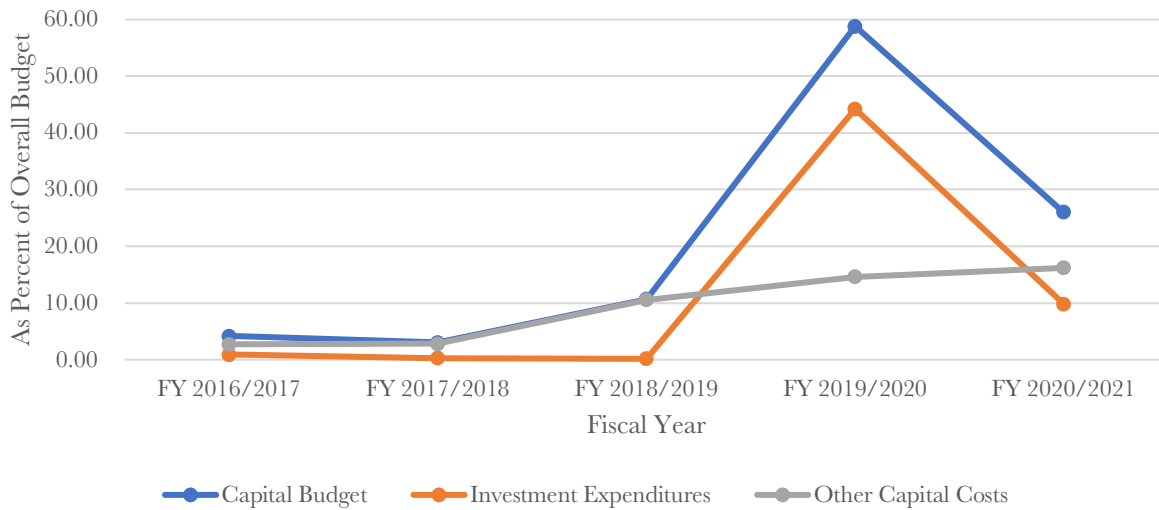
The FY2019/2020 budget shows a big jump in capital budget, investment and other capital costs following the signing of the Revitalized Agreement. The government saw it vital to invest more in infrastructure, especially when it allocated about 30k barrels per day (bpd) to fund road projects. This explains the jump in the capital budget and investment on roads in the subsequent years. Yet, when the COVID-19 struck, it affected oil prices and caused a slight decline in production volumes, reducing the share of crude oil and value accruing to the contractors. Further, the government also reduced allocations to roads to 10k bpd from 30k bpd, which again accounts for a huge reduction from FY2019/2020 through FY2020/2021.³

Expectedly, government priorities are subject to change. Thus, roads and Juba airport saw reductions in investment due to factors related to the pandemic. Spending on vehicles, due to the expanded government following to the Revitalized Agreement⁴, added to the priorities and remain steady. Therefore, the argument that the COVID-19 pandemic might have placed a dent in South Sudan's investment trajectory is self-evident (Figure 1).

³ Though unapproved by the Parliament, the FY2020/2021 budget bears presidential sanction is largely executed and ends on June 30, 2021. Readers should also note usual data caveats and rounding errors here.

⁴ The Unity Government was formed in February 2020 before the COVID-19 lockdown.

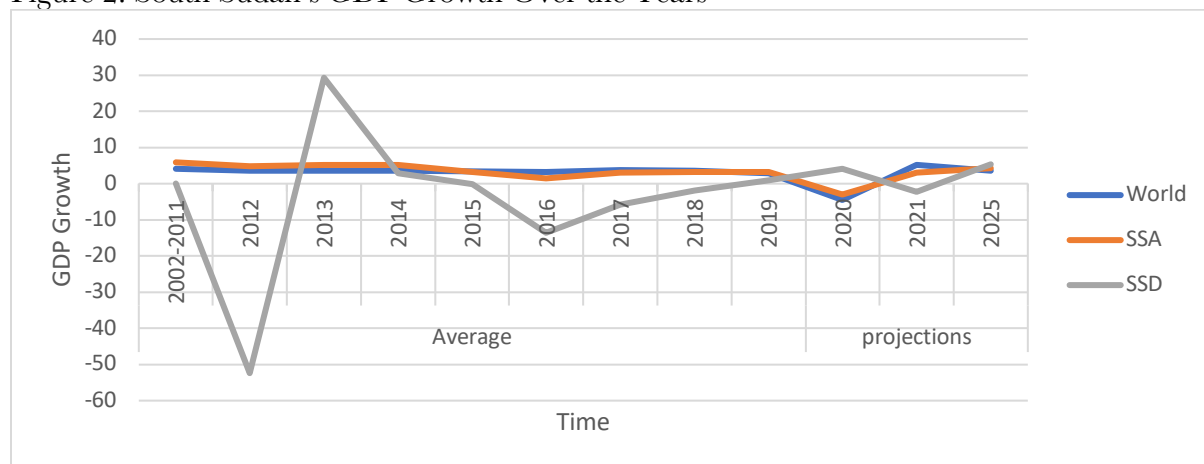
Figure 1: Graphical Representation of Capital Budget and Investment for FY2016/17-2020/21



Source: The South Sudanese Authorities, 2021.

The impact of the pandemic can even be vividly illustrated through drop in oil prices and runs thus. The collapse in prices made it difficult to enforce social distancing measures in South Sudan. Considering that South Sudan has limited fiscal space and lack national safety nets, it could not provide generous fiscal packages to its vulnerable households and public employees, which meant that many had to go out to work during the pandemic to provide for their families. This conundrum underlines the existence of the need for South Sudan to institute functioning social safety nets and the fact that none exists has negative implications. It has been observed that even the statutory national schemes such as the national social security funds, pensions, severance, and health insurance, among others, exist only on paper and not much in the way of application and safeguards.

Figure 2: South Sudan’s GDP Growth Over the Years



Source: IMF WEO, October 2020.

Figure 2 shows that the recovery in South Sudan followed a V-shaped pattern after 2012 conflict with Sudan, with growth picking up quickly in 2013. However, the December 2013 conflict dealt a huge blow to the economy, without recovering to pre-war level. While full implementation of the Revitalized Agreement could boost recovery, the impact of the COVID-19 pandemic points to 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 fiscal reforms, it is likely that growth in South Sudan could follow a V-shaped recovery, similar to how the economy responded following the 2012 conflict.

The weak healthcare system and substantial informality limited and continue to hamper the effectiveness of the containment measures in South Sudan. As observed, most people prefer to visit a nearest drugstore whenever they feel unwell due to inefficiencies and lack of basic facilities at the public hospitals. Lack of a reliable health system to ensure contact tracing and testing has also raised the likelihood of increased cases of “silent spreaders” in the community during the pandemic.

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 (Garang, 2020; Mayai et al, 2020). Those affected can spread the virus easily to others in the crowded household.

Furthermore, the Great Lockdown was ineffective in South Sudan because the country lacks social safety nets. As a corollary, several families that depend on remittances from abroad were impacted substantially during the pandemic because loss of income in host countries meant also sending less home. Broadly, South Sudan might have “imported” lockdowns in more advanced economies, through its migrant workers—presumably a large share is working in less-skilled sectors that may have been impacted by the COVID crisis, for example, in hospitality or manufacturing. If this is the case, there may be a risk that South Sudan also imports the hysteresis from advanced economies.

The COVID crisis hit South Sudan where it hurts the most: 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 ensure innovative education policies, and to keep investing in the future. So, the hysteresis effect becomes really encroached.

5. Conclusion and Policy Implications

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

Finally, considering this long-term impact of the pandemic, taking policy options to strengthen public systems to withstand future shocks and enhance the recovery remains essential. To this end, targeted fiscal, monetary, and structural policies will be needed to ensure recovery. This includes

investing in health systems, enhancing spending efficiency, facilitating digital technology to ease vulnerable households' 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 stability and financial sector resilience, as well as enhancing business environment and supporting full employment, are also a boon to the economy. Therefore, to avoid overwhelming the already stretched capacities, some reforms might need to be incremental, prioritized, and focused.

References

- Blanchard, O. J., & Summers, L. H. (1987). Hysteresis in Unemployment. *European Economic Review* 3(1), 288-295.
- Bromley, D. W., Deng, L. A., Devarajan, S., Michie, A., & Tjirongo, M. T. (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, November 16, 2020.
- Cerra, V., Fatás, A., & Saxena, S. A. (2020a). Hysteresis and Business Cycles. IMF Working Paper 20/73, Washington D.C.
- Cerra, V., Fatás, A., & Saxena, S. A. (2020b). Fighting the Scarring Effects of COVID-19. IMF Working Paper 20/73, Washington D.C.
- Cheng, C., Barceló, J., Hartnett, A.S. *et al.* (2020). COVID-19 Government Response Event Dataset (CoronaNet v.1.0). *Nature Human Behavior* 4, 756–768.
- Deb, P., Furceri, D., Ostry, J.D., & Tawk, N. (2020). How the Great Lockdown Saved Lives. IMF Blog, June 2, 2020.
- Falk, M. T., & Hagsten, E. (2020). The unwanted free rider: Covid-19, Current Issues in Tourism, DOI: [10.1080/13683500.2020.1769575](https://doi.org/10.1080/13683500.2020.1769575).
- Fatás, A., & Summers, L. H. (2018). The permanent effects of fiscal consolidations. *Journal of International Economics*, 238–250.
- Fatima, F., Finn, A., Goltz, J. V. D., & Ramasubbaiah, R. G. N. (2020). Monitoring COVID-19 Impacts on Households in South Sudan, Report No. 1. Results from a High-Frequency Phone Survey of Households. World Bank, November 24, 2020.
- Garang, J. A. (2020). Limitations of COVID-19 Pandemic Containment Measures in Fragile Context: The Case of South Sudan. Washington DC, November 3, 2020.
- Hobdari, N. A., & Lahreche, A. (2020). Four Things to Know About How Fragile States Like South Sudan Are Coping With COVID-19. IMF Country Focus, November 20, 2020.

- International Labor Organization [ILO]. (2021). *ILO Monitor: COVID-19 and the world of work*. Seventh edition Updated estimates and analysis, January 25, 2021.
- International Monetary Fund. (2020). *World Economic Outlook: Statistical Appendix*, October 2020. Washington DC.
- International Monetary Fund. (2021). *World Economic Outlook: Statistical Appendix*, April 2021. Washington DC.
- Kozłowski, J., Veldkamp, L., & Venkateswaran, V. (2020). Scarring body and mind: The long-term belief-scarring effects of Covid-19. *Covid Economics*, 8 (22), April 2020, CEPR Press.
- Mayai, T. A. (2020a). The Economic Impacts of COVID-19 Pandemic in South Sudan: An Update. The Sudd Institute Policy Brief, January 26, 2020.
- Mayai, T.A. (2020b). The COVID-19 Outbreak in South Sudan. The Sudd Institute Policy Brief and National Secretariat for HLFT, May 20, 2020.
- Mayai, A. T., Awolich, A. A., & Tiitmamer, N. (2020). Economic Effects of the COVID-19 Pandemic in South Sudan. The Sudd Institute.
- O'Shaughnessy, T. (2011). Hysteresis in Unemployment. *Oxford Review of Economic Policy*, 27(2), 312–337.
- Ozili, P.K., & Arun, T. (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>.
- Waakhe, S. (2020, May 8). South Sudan Lifts COVID-19 Restrictions Despite Rise in Cases. The VOA News. Retrieved from: <https://www.voanews.com/covid-19-pandemic/south-sudan-lifts-covid-19-restrictions-despite-rise-cases>.
- World Bank (2020). Lasting Scars of the COVID-19 Pandemic, Chapter 3, Global Economic Prospects, June 2020.
- 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, April 20.

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Author's Biography

James Alic Garang is a co-founder and scholar at The Sudd Institute. His areas of interest include macroeconomics, development economics, financial sector, and financial inclusion. He has in the past participated in host of academic and professional undertakings, 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 a board member serving on a number of charitable organizations and academic affiliations. A former McNair Scholar, and a member of Omicron Delta Epsilon, James holds a PhD in Economics from the University of Massachusetts, Amherst. A former Deputy Dean of Faculty of Economic & Social Studies at Upper Nile University and a Senior Economist with the Ebony Center for Strategic Studies, he is currently a Senior Advisor to the Executive Director at the IMF Executive Board in Washington, DC.