The Banking System During and After the War: Challenges and Policy Recommendations

The Economic Impact of the War in Sudan No. 1

SUDAN TRANSPARENCY AND POLICY TRACKER

The Banking System during and after the War

July 2023

Cover credit: Fire at the Central Bank of Sudan in Khartoum, anonymous eyewitness

SUDAN TRANSPARENCY AND POLICY TRACKER

TABLE OF CONTENTS

1 INTRODUCTION....3
2 SELECTED MACROECONOMIC INDICATORS: INSIGHTS INTO WHAT IS AHEAD .4
2.1 Rise in the inflation rate (surprise inflation) 4
2.2 Rise in the budget deficit and reliance on the CBoS 5
2.3 Lack of external financing and grant inflows 5
2.4 Chronic trade deficit 5
2.5 Massive shortages of the country's foreign exchange reserves 6
3. KEY CHALLENGES TO THE ECONOMY AS A RESULT OF THE WAR 6
3.1 Damage to factories, mills and industrial infrastructure 6
3.2 Challenges for agriculture and access to finance....7
3.3 Looted bank branches....7
4. CHALLENGES OF BANKING OPERATIONS 8
4.1 Theft of Sudanese banknotes 8
4.2 The impact of the war on brain drain....9
4.3 Operational challenges 10
4.4 The impact of war on banks' lending capacity & asset quality.... 11
4.5 The deterioration of correspondent banking relationships (CBR)....12
4.6 Infrastructure damage to banks 12
4.7 Payment systems and electronic payments 12
5. RECOMMENDATIONS FOR POST-WAR COMMERCIAL BANK RECOVERY AND REFORM....14

1. Introduction

The war in Sudan is resulting in tragic loss of life and human suffering and causing massive damage to Sudan's physical infrastructure. It has displaced more than 2.5 million, more than half a million refugees to neighboring countries, mainly Egypt, South Sudan, Chad, and Ethiopia, and about two million internally displaced.[1] The situation is catastrophic, the outlook is extraordinarily uncertain, and the economic consequences are already very serious. Prices of basic commodities have surged as a result of scarcity, putting pressure on the vast majority of Sudanese. Price shocks will have an impact on everyone, but especially on poor households for whom food and fuel are a higher proportion of

[1] OCHA, "Sudan: Situation Report," June 22, 2023, https://reports.unocha.org/en/country/sudan?_gl=1%2a1qx7a9g%2a_ga%2aMTI0Mjg1Mzc4LjE2ODExMzE1MzM.%2a_ga_E60ZNX2F68%2aMTY4ODE5MzkwOC43MC4wLjE2ODgxOTM5MDguNjAuMC4w

expenses. Should the conflict escalate further, the economic damage could be even more devastating. Infrastructure has also been hit. Airports are closed and damaged, and many key public institutions, including the Central Bank of Sudan (CBoS) - Khartoum branch, have been damaged or destroyed. While it is very difficult to assess financing needs precisely at this stage, it is already clear that the country will face significant recovery and reconstruction costs.

To mitigate the economic damage caused by the war, an expansionary fiscal policy – an increase in government spending - is essential from a macroeconomic standpoint. Such policies play a crucial role in post-war recovery efforts by offering vital support to the most affected sectors of the economy and facilitating the rehabilitation of key public and private institutions. Expansionary fiscal policy can also support government stimulus packages, allowing resources and funds to be targeted at sectors in need of support. This can include providing financial assistance to businesses, investing in infrastructure development, offering incentives for economic growth, encountering the cost-of-living crisis, and job creation. Such measures are aimed at revitalizing the economy and promoting the recovery of affected sectors. More importantly, expansionary fiscal policy can contribute to the rehabilitation of public institutions that may have suffered damage during the war, rebuilding and strengthening these institutions, ensuring their proper functioning and capacity to deliver essential services to the public. Similarly, private institutions can benefit from fiscal support to recover and resume their operations. This assistance can include measures such as tax incentives, access to credit, and support for innovation and entrepreneurship.

In the same vein, Sudan’s war has caused extraordinary pressure on the stability of the Sudanese banking system. All bank headquarters have been closed since the outbreak of the war on April 15, 2023. The sector’s profitability is expected to be hit hard as a result of financial losses driven by expected losses on credit extended. Against this backdrop, the paper examines the performance of selected macroeconomic indicators during the war and their impact on the banking system. It also highlights the repercussions of an ongoing war on the resilience and soundness of the banking sector. The paper concludes with a set of recommendations aimed at assisting banks in resuming their operations and moving forward.

2. Selected macroeconomic indicators: Insights into what is ahead

As a result of the ongoing war and its political ramifications, several macroeconomic factors are expected to create significant challenges for the Sudanese banking system. These include:

2.1 Rise in the inflation rate (surprise inflation)

The ongoing conflict and instability may lead to an increase in the inflation rate, which had not been predicted prior to the conflict. This can erode the value of banks’ assets and thus negatively impact them. The transitional government’s comprehensive and sustained economic reform program, designed in collaboration with the International Monetary Fund’s Staff Monitored Programme (SMP) and then the Extended Credit Facility (ECF), the World Bank Group (WBG) and other international partners, began to reduce inflation which, dropped to 83 percent in December 2022 from 422 percent in June 2021.[2] Following the war, a surge of inflation is likely as a result of weak economic and financial performance, which leads to monetary and fiscal expansion; severe import compression; and

[2] Monthly Inflation Report, Central Bureau of Statistics (CBS).

constraints on the private sector. The war is expected to increase the public budget deficit and depreciate local currency, causing inflation to rise above 100 percent levels once again.

2.2 Rise in the budget deficit and reliance on the CBoS

The prolonged war may lead to an increase in the budget deficit. To contain this, the government may borrow from the CBoS to cover its urgent liabilities. This may strain the bank's resources and lead to further economic imbalances. The reliance on monetary resources may lead to monetary expansion, which may increase inflationary pressures, with further negative impacts on banks as described above. The government is heavily dependent on tax and fee revenue. It is unlikely that the state will reach its goal of collecting 50 percent of its income through taxes in light of the difficult security and military situation and its impact on individuals and businesses.

Government spending generally rises as a result of war. Governments also frequently increase the proportion of resources diverted to military operations, taking money away from infrastructure development, healthcare, and education. As a result of this and other policies, we would expect quasi-fiscal activities (QFAs), including temporary advances from CBoS to MoFEP to cover its short-term liabilities, issuance of Letters of Guarantees, direct finance to the agriculture (through the Sudanese agricultural banks and state-owned banks), etc. to rise, and public finances to be strained, during and after the war leading to inflation.

2.3 Lack of external financing and grant inflows

The conflict and political instability may result in the continuation of the suspension of foreign loans and grants to the country that was initiated after the October 2021 coup. This may further limit the availability of external financing and borrowing lines for the banks, hindering their ability to extend financing to priority sectors of the economy.

2.4 Chronic trade deficit

Sudan had a massive trade deficit prior to the war, reaching $7 billion at the end of 2022. This deficit can be attributed to a 29 percent decline in the proceeds of gold exports, which play a critical role in the economy, compared to the previous year. The war exacerbated the trade deficit, which is the difference between a country's exports and imports. This deficit puts pressure on the country's foreign exchange reserves, which in turn affects the stability of the banking system. The war has resulted in significant barriers to import and export activity, leading to shortages of essential goods. In 2022, food imports accounted for 22.3 percent of the country's total commodity imports.[3] Sudan relied heavily on these imports to meet domestic consumption needs. The ongoing conflict has led to a decrease in the availability of essential food items in local markets. This scarcity has created inflationary pressures and an increase in food prices.

In addition, the trade deficit is likely to be impacted by the disruption of necessary security for extracting, transporting, and exporting gold. Moreover, the income generated from gold exports may be subject to dispute, which exacerbates their vulnerability to the war. Gold is a critical sector of the economy,

[3] Foreign Trade Statistical Digest, Quarter IV, Central Bank of Sudan.

representing a value of $2.06 billion, which accounts for 49 percent of the country's total commodity exports.[4] Because this sector is such a large part of the economy, disruption of gold exports will significantly exacerbate the trade imbalance.

Additionally, it is expected that artisanal gold miners will face difficulties in making payments to banks on open loans, used for vehicles and heavy equipment, under current conditions. This situation will exert further pressure on both the miners and the banks. Moreover, defaulting on outstanding loans will prevent them from accessing future bank financing, and also affect the banks' profitability.

2.5 Massive shortages of the country's foreign exchange reserves

Extended conflict and economic challenges further bleed the country's foreign exchange reserves. Insufficient reserves make it difficult for banks to meet demands for foreign currency, affecting their operations and ability to facilitate foreign trade transactions.

3. Key challenges to the economy as a result of the war

3.1 Damage to factories, mills and industrial infrastructure

Many factories and mills have been damaged by war, looted, and set on fire, resulting in significant losses for investors. The destruction of infrastructure and equipment reduces production capacity, leading to a decrease in output and revenue. In such circumstances, it is not uncommon for companies to resort to cost-cutting measures, including laying off, furloughing or reducing hours of employees. These employees lose income and face financial hardships. As a result, their buying power diminishes, which can have adverse effects on the overall economy. In addition, when a significant portion of the workforce experiences financial strain, others tend to worry about their own positions, further decreasing consumer spending, affecting still more businesses.

This can create a general cycle of economic downturn, as reduced demand and income levels lead to further layoffs and reduced production capacity in other sectors. In such situations, it is crucial for the government to address the underlying issues, such as security concerns, to prevent further damage and loss. Government support programs and initiatives can also play a role in helping affected businesses recover, providing assistance to employees facing unemployment or financial difficulties, and fostering an environment conducive to rebuilding and restoring production capacity.

---

[4] Simon Marks, "Conflict Brings Sudan's Official Gold Trade to a Halt," Bloomberg, May 17, 2023, https://www.bloomberg.com/news/articles/2023-05-17/conflict-brings-sudan-s-lucrative-official-gold-trade-to-a-halt

3.2 Challenges for agriculture and access to finance

The lack of access to imported components, financing, fuel, fertilizers, and manpower for Sudan’s summer agricultural season will likely have a significant impact on crop production. Lack of access to financing options can hinder farmers' ability to invest in necessary resources and equipment for cultivation. Limited availability or high costs of fuel can impede transportation and cultivation processes, affecting overall productivity. Insufficient access to fertilizer can lead to lower crop yields. Furthermore, the shortage of skilled labor or manpower can hamper the efficiency and effectiveness of farm operations.

The lack of market, internal or external, for agricultural products adds another layer of challenges. The inability to export agricultural products and weak market locally further exacerbates the difficulties faced by farmers and the agricultural sector as a whole. Exports are essential for generating revenue and creating market opportunities for farmers. If the export market is limited or disrupted as it is now, it can result in oversupply domestically, leading to reduced prices and potential financial losses for farmers. It also limits the capacity of farmers to expand their operations and invest in future seasons.

Addressing these challenges requires a multi-faceted approach involving various stakeholders but can begin even in a context of conflict. The government can play a vital role in providing financial support or access to credit for farmers, and ensure the availability and affordability of fuel, fertilizer, and other essential inputs. Collaborating with international partners or organizations can assist in developing sustainable solutions and improving export opportunities. Investing in agricultural infrastructure, promoting research and development, and supporting farmers with training and technical assistance can enhance productivity and resilience in the sector. It is crucial to recognize the importance of the agricultural sector in Sudan's economy and prioritize efforts to overcome these challenges. By addressing the issues related to imported components, financing, export markets, and local sales, the summer agriculture season can regain its productivity and contribute to the overall growth and development of the country.

3.3 Looted bank branches

The attacks on bank branches in Khartoum and western cities, looting of banknotes, and destruction of infrastructure, looting of tens of thousands of homes and small businesses, and shops in Sudan have undoubtedly caused severe damage to individuals and the economy as a whole. The consequences are far-reaching and can have long-lasting effects on investors and the ability to rebuild and recover after the war.

The looting of banknotes and personal belongings in bank vaults not only results in immediate financial losses for individuals, but also creates a sense of insecurity and distrust in the banking system. The loss of precious items, like gold, that could otherwise have been used as collateral can make it even more challenging for individuals to access finance from banks, especially considering the already high interest rates prior to the war. The loss of investments and belongings further compounds the difficulties


Looted safety deposit boxes
Credit: anonymous eyewitness

faced by individuals and businesses, leaving them vulnerable and making it harder to rebuild and start over. Access to finance is crucial for individuals to reinvest in their businesses, repair or rebuild their homes, and restart their lives. However, in the aftermath of war, the loss of collateral and instability can make challenges of obtaining finance even more pronounced. In such situations, it is essential for the government and international organizations to prioritize post-war recovery efforts by providing financial support and resources to individuals and businesses affected by the conflict, establishing favorable loan schemes and grants. These can help stimulate economic activity and enable individuals to rebuild their lives.

Moreover, the restoration of security, infrastructure, and basic services is crucial to create a conducive environment for investment and economic recovery. Collaboration with international partners can play a vital role in providing financial aid and expertise to support reconstruction efforts. It is crucial to develop comprehensive strategies that address the immediate needs of affected individuals while also focusing on long-term economic development and stability. Recovering from the devastating impact of war requires concerted effort, strong leadership, and a focus on rebuilding both physical infrastructure and the financial well-being of individuals and businesses. By providing support, access to finance, and a supportive environment, it is possible to help those affected by the conflict to regain their livelihoods and contribute to the recovery of the country as a whole.

4. Challenges of banking operations

4.1 Theft of Sudanese banknotes

The theft of a significant number of Sudanese banknotes, whether from banks or individuals, poses a challenge to the stability and management of the currency. Addressing this issue requires any postwar government to take decisive action to manage the currency effectively and restore public trust in the financial system. Here are some potential steps that could be taken:

1. **Enhancing security measures:** Strengthening security measures within banks, including surveillance systems, access controls, and alarm systems, can help prevent theft of banknotes. Law enforcement agencies and banks can collaborate to investigate and apprehend thieves and establish accountability.

2. **Currency tracking and identification:** Implementing systems to track and identify stolen banknotes can help mitigate the impact of the thefts. This could involve working with the Central Bank and other financial institutions to detect the circulation of stolen currency, making it more difficult for thieves to benefit from their ill-gotten gains.

3. **Currency replacement and redesign:** The government may consider a currency replacement or redesign/redenomination. This may involve issuing new banknotes with enhanced security features to deter counterfeiting and making the stolen banknotes invalid or obsolete. Implementing a controlled process for exchanging old banknotes for new ones can help prevent further illicit circulation.

4. **Public awareness and education:** Public awareness campaigns can educate the public about stolen banknotes and help mitigate their consequences. Providing guidance on how to identify stolen currency and report any suspicious activities can aid in recovering stolen banknotes and apprehending criminals.

5. **Strengthening financial institutions:** Implementing reforms and regulations to enhance the overall integrity and resilience of financial institutions is crucial. This includes improving internal controls, risk management systems, and compliance procedures to prevent future thefts and protect the interests of depositors and customers.

6. **Collaboration with international partners:** Seeking assistance from, and collaboration with, international organizations and financial institutions facilitate access to expertise, technical support, and financial resources. This can involve exploring best practices and lessons learned from other countries that have faced similar situations.

Managing the currency effectively in the aftermath of widespread theft requires a multi-faceted approach, combining security measures, public awareness campaigns, regulatory reforms, and collaboration with various stakeholders. By taking proactive steps, the new government can work towards restoring public trust, ensuring the stability of the currency, and preventing future incidents of theft and illegal circulation of banknotes.

4.2 The impact of the war on brain drain

The flight of banking and financial employees as a result of the war, especially if they find opportunities abroad, can create a significant gap in expertise and experience within the industry. Some considerations for addressing this challenge include:

1. **Retention and incentives:** To retain employees during challenging times, banks can consider implementing retention strategies such as competitive compensation packages, career development opportunities, and employee welfare programs (including support to relocate and find housing, within Sudan). Bonuses, performance-based rewards, and employee recognition can also help encourage talent to stay.

2. **Training and development:** Investing in the training and development of existing employees can be crucial in bridging the talent gap. Offering specialized training programs, workshops, and mentorship opportunities can enhance the skills and knowledge of existing staff, can enable them to take on additional responsibilities and fill the void left by departing employees.

3. **Attracting new talent:** Banks can focus on attracting new talent by promoting the industry's potential for growth and career advancement. Partnering with educational institutions to develop banking-specific curricula and internship programs can help cultivate a pipeline of fresh talent. Engaging with professional associations and participating in industry events can also raise the industry's profile and attract skilled professionals.

4. **Embracing technology:** Leveraging technology can help alleviate the talent shortage by automating routine tasks and improving operational efficiency. This allows existing employees to focus on more complex and value-add activities. Adopting innovative technologies, such as

artificial intelligence, robotic process automation, and data analytics can attract tech-savvy individuals to the banking industry.

5. **Collaboration and partnerships:** Establishing partnerships with educational institutions, industry associations, and other organizations can facilitate knowledge sharing, skills development, and talent acquisition. Collaborative efforts can create internship programs, scholarship opportunities, and industry-specific training initiatives that attract and nurture talent.

6. **Government support:** Engaging with the government and relevant regulatory bodies to address talent challenges can be beneficial. Advocating for policies that promote the development of a skilled workforce and provide incentives for talent retention and attraction can help create a favorable environment for the banking industry.

Addressing the talent problem caused by the flight of employees due to war requires a comprehensive and multi-pronged approach. By focusing on employee retention, training and development, talent attraction, technological innovation, collaboration, and government support, the banking industry can navigate this challenging period and build a sustainable talent pool for the future.

4.3 Operational challenges

The centralization of banking operations in Khartoum and heavy dependence on headquarters, most of which are now in a war zone, can severely impact the functioning of branches located in other states. Here are some considerations for managing this situation:

1. **Disaster recovery locations (DR):** Building disaster recovery locations (DR) which allow banks to function properly even if the main site is not functioning.

2. **Decentralization or loosely coupling operations:** Decentralizing banking operations can help ensure the continued provision of services in other states. This could involve establishing regional or local hubs that have the necessary infrastructure and resources to operate independently, even if headquarters face disruptions. Distributing essential functions and decision-making capabilities across locations could both allow banks to resume functions quickly in the short term and be further developed to enhance the resilience of the banking system in the future.

3. **Strengthening branch capacities:** Providing support and resources to bank branches operating in regions less affected by the war can help mitigate the impact of centralized operations in Khartoum. Ensuring these branches have sufficient staffing, access to technology, and necessary training can enable them to maintain essential banking services locally, minimizing disruptions for customers.

4. **Mobile and digital banking:** Promoting the use of mobile and digital banking services can help bridge the gap caused by the centralized operations. Encouraging customers to adopt digital banking platforms and expanding their availability can provide alternative channels for banking transactions, reducing the reliance on physical branches and the headquarters in Khartoum.

5. **Collaborations and partnerships:** Exploring collaborations with other financial institutions, including local banks or international counterparts, can provide temporary solutions for customers in regions affected by the war. Partnering with institutions that have operational capacity outside the war zone can facilitate the continuation of banking services and ensure uninterrupted access to financial services.

6. **Government support:** Engaging with the current government to address the challenges faced by the banking industry in the war zone is crucial. This could include advocating for measures such as enhanced security for bank branches, prioritized access to resources, and support for the decentralization of operations.

7. **Crisis management and business continuity planning:** The CBoS should develop guidelines for the development by banks of robust crisis management and business continuity plans specific to the war zone. Implementing measures to ensure the safety of employees and the protection of assets, as well as establish alternative communication channels and backup systems, can help banks navigate the challenges and maintain essential operations.

   The centralization of banking operations in a war zone presents significant challenges, but with strategic planning, collaboration, and government support, banks can work towards ensuring the continuity of services and support for their customers in other regions.

8. **Impact on banking digital infrastructure:** The war's impact extends beyond the financial aspects. The infrastructure of the banking sector, including core banking systems, software, and hardware, suffered damage or disruption. This impedes delivery of financial services and decreases the sector's attractiveness for deposits and investments.

Overall, the ongoing war and its political ramifications pose significant challenges to the banking system. These challenges include erosion of capital, deterioration of asset quality, impact on infrastructure, decreased attractiveness for deposits and investments, and increased operational expenses due to physical damage.

4.4 The impact of war on banks' lending capacity & asset quality

Lending capacity & financial intermediation: Even before the war, financial intermediation in Sudan remained below the Sub-Saharan Africa (SSA) average. Financing to enterprises and households stood at 9.5 percent of GDP as of the end of 2021 (8.7 percent of GDP in June 2020, 11.6 percent in 2019, 9.7 percent in 2018) against the SSA average of 18.8 percent.[5] Household financing was a paltry 2 percent of total credit extended with the bulk of financing going to enterprises: state-owned, small and middle-sized enterprises and microenterprises. Industry was 20.1 percent, local trade 8.2 percent; agriculture 19.0 percent and construction 8.8 percent of all credit extended as of December 2021.[6]
Lending activity is expected to shrink further as banks are less able to engage in financial intermediation activities and provide necessary credit and financing to targeted economic sectors compared to before the war. Banks face limitations in mobilizing deposits as well as receiving support from the CBoS and regional banks are not expected to make credit available. Banks will adopt more credit rationing with respect to credit extension in order to avoid the risk of default.

The deterioration of asset quality: The financial sector was vulnerable prior to the war due to the weak economy, and it is expected that vulnerabilities and risks will increase as a result of the war. In particular, the anticipated devaluation in the national currency, external sector imbalances, monetary financing and temporary advances from CBoS to MoFEP will increase risk. These factors will have a

[5] Sudan: Financial Sector Assessment Program, World Bank report on the Banking System, Economic & Financial Review, Quarter IV, CBoS, Annual Report 2021.

[6] Central Bank of Sudan (CBoS), Annual Reports 2021, Economic & Financial Review, CBoS, Quarter IV, 2021.

direct negative impact on banks' capital positions and – through higher inflation and low growth – are expected to worsen the borrower's repayment capacity, leading to a likely deterioration in asset quality.

4.5 The deterioration of correspondent banking relationships (CBR)

The banking system has been constrained by the lack of correspondent bank relations, which have not been restored despite Sudan's de-listing from the State Sponsors of Terrorism List in December 2020. The lack of international CBR is a severe restriction on the Sudanese economy and has prevented Sudan from benefiting from economic reintegration. The lack of CBR limits the services banks can offer, especially for valuable commercial customers. To the extent that these restrictions limit opportunities for growth and raise transaction costs, the problem creates political risk for the government and lowers the quality of life of Sudanese citizens.

Establishing correspondent banking relationships requires building credibility and trust that the Sudanese government and financial institutions understand the importance of anti-money laundering and combating the financing of terrorism (AML/CFT) compliance and putting in place the necessary policies, systems and practices. However, the ongoing war, the Central Bank of Sudan (CBoS) has halted the plan for a mutual evaluation led by the Financial Action Task Force (FATF) to assess Sudan's progress in AML/CFT compliance.

Furthermore, it is anticipated that international banks will adopt additional de-risking measures against Sudanese banks in light of the recent developments. This will exacerbate the challenges faced by Sudanese banks in establishing or maintaining correspondent banking relationships.

4.6 Infrastructure damage to banks

Due to the limited availability of precise information, it is currently difficult to determine the exact extent and magnitude of the infrastructure loss for banks, in both headquarters and branch locations. However, according to news reports, critical infrastructure such as buildings, furniture, computers, electronic systems, banknotes, and gold in the bank vaults have been looted or suffered significant damage. While precise forecasts are not possible at this stage, it is believed that the economic loss is substantial.

4.7 Payment systems and electronic payments

The lack of effective business continuity plans in the banking sector, coupled with the closure of banks in Khartoum and the failure of digital financial services, has resulted in significant challenges for customers and service providers. The centralized nature of the banking system and the dependence on key systems operated by the Central Bank of Sudan (CBoS) and Electronic Banking Services (EBS) further exacerbate the situation. Here are some considerations for addressing these challenges:

1. **Urgent restoration of systems:** Prioritizing the restoration of critical systems operated by CBoS and EBS is crucial to resume digital financial services. Efforts should be made to gain access to data centers, ensure stable connectivity, and secure power supply to enable these systems to operate effectively. Collaborating with relevant authorities, internet service providers, and power supply agencies can help address these infrastructure challenges.

2. **Collaboration with private switches:** Banks with private switches make more effort to provide services since they can do that independently of EBS, similar to the Bank of Khartoum, which has managed to bring its systems intermittently online, to provide digital services to their

customers. Sharing resources, knowledge, and expertise can help other banks gradually restore their digital services and provide access to customer accounts.

3. **Support for fintech and digital service providers:** Recognizing the importance of fintech and digital service providers, it is crucial that the government extend support to them during this challenging period. Collaborating with these providers to explore alternative solutions, temporary infrastructure setups, or even utilizing their platforms and capabilities can help restore digital financial services for customers.

4. **Government intervention:** The government should actively intervene to address the challenges faced by the banking sector and digital service providers. This could involve providing support for infrastructure restoration, ensuring stable power supply and fuel availability, and creating an enabling regulatory environment to expedite the recovery of digital financial services.

5. **Learning from experience:** The current situation highlights the need for robust business continuity plans in the banking sector and digital financial service providers. It is crucial to learn from this experience and invest in building resilient systems, redundant infrastructure, and alternative connectivity options to minimize future disruptions.

The challenges faced by the banking sector, CBoS, EBS, and digital financial service providers require a collaborative effort involving government, banks, service providers, and other relevant stakeholders. By prioritizing the restoration of critical systems, fostering collaboration, and implementing long-term measures for resilience, the industry can work towards restoring digital financial services and ensuring access to customer accounts during this difficult period and into the future.

The conflict near CBoS-Khartoum Branch has particularly impacted the CBoS (Sirag[7] and the core banking system) and EBS, which serves as the technical arm of CBoS. As a result of the suspension of the national switch, electronic payment services have become inaccessible. However, some banks have private switches, which will enable them to provide some services to their customers if intermittently, if other factors, especially internet connectivity, remain stable.

The war in Sudan has also had a significant impact on the payments industry, particularly banking applications. Many banks have been unable to maintain their core banking systems and consumer applications, and there is a lack of business continuity. Consequently, customers face even greater difficulties in conducting their transactions or accessing their funds even in the same bank branch in other cities.

It is important to highlight that Sudan is primarily a cash-based society, and the penetration of financial inclusion is low. Only 15.3% of Sudanese adults have a bank account. Women and individuals from low-income backgrounds are particularly underserved in this regard. However, during times of war, it becomes crucial to utilize electronic channels to mitigate the risks associated with cash transactions (cash hazard deals).

Furthermore, the deployment of numerous checkpoints has hindered the mobility of bank IT and business staff, making it challenging for them to address application-related incidents and reopen their banks for service.

[7] Sirag stands for Sudan Real Time Gross Settlement System (RTGs).

5. Recommendations for post-war commercial bank recovery and reform

Overall, therefore, it is clear that the war will do a lot of damage to the banking sector. Once the situation is stabilized, a number of actions will need to be taken to improve the condition of the banking sector and build its capacity in the longer term. These include:

1. **Inflation management:** The war is creating a shock to both households and business activity, amid already elevated prices. CBoS will need to carefully monitor rising commodity and service prices and calibrate appropriate responses once the security situation stabilizes. Fiscal policy will need to support the most vulnerable households, help offset rising costs of living, create more tax incentives, relax regulations and create incentive and stimulus packages for the private sector to resume its operations.

2. **Expansionary fiscal policy**: Expansionary fiscal policy plays a vital role in post-war recovery efforts by providing the support to the most affected sectors and facilitating the rehabilitation of key public and private institutions. Post-war recovery requires the implementation of an expansionary fiscal policy to support government stimulus packages. This policy is crucial in assisting the most affected economic sectors to recover swiftly and facilitating the rehabilitation of key public and private institutions.

3. **Improving access to finance:** Reforms to improve access to finance are urgently needed, as getting credit remains one of the lowest-rated “doing business” indicators in Sudan. We propose the implementation of a number of measures, including expanding microfinance, increasing banking coverage in the countryside, developing agent banking, and strengthening the credit registry to lower the costs of credit. Banking sector reforms will improve financial intermediation and access to commercial bank lending by the private sector.

4. **Asset quality review:** There will be a need for an extensive, banking system-wide asset quality review similar to the ones performed after the introduction of reform packages after 2021 to reveal the true performance of the banking system before and after the war.

5. **Enhancing financial stability:** Stronger banking supervision and privatization are needed to improve the competitiveness and resilience of banks. Implementation and strengthening of the AML/CFT framework would contribute to improving financial stability and integration into the global financial system.

6. **Enhancing corporate governance:** The capacity of banks to undertake their role in the system must be enhanced, starting with prioritizing AML risk management as a board-level function and corporate priority, and followed by putting in place the right systems: effective customer due diligence, the identification and monitoring of high-risk customers, the development of suspicious transaction reports, and follow up on those transactions.

7. **Reestablishing correspondent banking relationships:** Sudan needs to build the confidence of international regulators and commercial decision-makers that it is not only putting in place the right policies and systems, but also creating a culture of compliance and risk management.

8. **Payment system infrastructure:** Sudan’s payment systems have witnessed a number of developments during the past years, but still lack key elements and a structure to ensure effective participation of all stakeholders. Above, we highlighted several important challenges regarding the legal and regulatory framework, fintech support, financial inclusion, decentralization of bank

operations, business continuity plans, and cash subsidies to families. Here are some key considerations in response to these points:

a. **Legal and regulatory reforms:** Reviewing and updating the existing legal and regulatory framework is essential to accommodate technological advancements and support the growth of fintech. This can involve creating a conducive environment for innovation, establishing clear guidelines for digital financial services, and ensuring consumer protection and data privacy. Collaborating with industry stakeholders and international best practices can help inform the reform process.

b. **Fintech and financial inclusion:** Encouraging the participation of fintech companies in providing financial services can promote financial inclusion in Sudan. This requires enabling regulatory measures to facilitate fintech operations, including licensing and registration processes tailored to their specific needs. Collaborating with fintech companies, traditional financial institutions, and relevant stakeholders can drive innovation, expand access to financial services, and promote financial literacy among underserved populations.

c. **Decentralization and interoperability:** Implementing decentralization and interoperability measures can enhance the resilience and efficiency of the financial system. This can involve establishing disaster recovery (DR) centers and ensuring interoperability between banks, fintech providers, and digital financial service platforms. Such efforts can enable seamless transactions, promote competition, and expand financial access across different regions of Sudan.

d. **Mandating business continuity plans (BCP):** Requiring financial institutions and digital financial service providers, including the CBoS, to have effective business continuity plans and disaster recovery services is crucial. This ensures their ability to continue operations during disruptive events, such as wars or natural disasters. The CBoS can play a pivotal role in setting guidelines and monitoring compliance to ensure the resilience of the financial system.

e. **Digital cash subsidies:** Establishing an effective mechanism for delivering cash subsidies digitally to needy families is vital for post-war recovery and addressing the needs of the population. This requires the deployment of a countrywide agent network and collaboration among government entities, financial institutions, and fintech providers. Implementing secure and inclusive digital payment platforms can ensure efficient and transparent delivery of subsidies to those who need them most.

f. **CBoS Leadership:** The CBoS has a critical role in driving the digital transformation of financial services and leading the implementation of necessary reforms. Prioritizing digital services, fostering collaboration among stakeholders, and providing guidance on technological advancements can help the CBoS effectively steer the economy towards a greater inclusivity and resilience.

Implementing these reforms will require close collaboration among the government, regulatory bodies, financial institutions, fintech providers, and other stakeholders. By embracing technology, promoting financial inclusion, and ensuring a robust legal and regulatory framework, Sudan can harness the potential of the digital economy for the benefit of its citizens and the overall development of the financial sector.

9. **Improve bank regulation and supervision capacity:** Most importantly, banking regulation and supervision capacity need to be improved. According to the World Bank's assessment, CBoS supervision is constrained by limited resources and capacity, and its approach is fragmented and

lacks understanding of banks' risk profiles. Corrective action is not effective and prudential requirements are incomplete and outdated.

10. **Currency reform:** The government should develop a well-defined strategy for currency reform, drawing insights from the experiences of other countries such as India, Thailand, and Saudi Arabia. Key considerations in this strategy should include determining the optimal currency denomination, facilitating banknote exchange, enhancing security features, and reducing the cost associated with printing banknotes. Additionally, such a plan should explore new forms of currency, such as central bank digital currency (CBDC), including evaluating existing and developing new pilot projects for CBDC implementation that can contribute to better management of the informal economy, as well as improve the effectiveness of monetary policy and its transmission.

By carefully assessing the experiences and best practices of other nations, Sudan can design a comprehensive currency reform strategy. This strategy should encompass currency denomination, banknote exchange procedures, enhanced security features, cost-efficient printing methods, and the exploration of innovative solutions like CBDC. Implementing such reforms will not only enhance the efficiency of monetary policy but also enable better management of the informal economy and support economic development.

Last but not least, once the war concludes, numerous challenges will arise for both the banking sector and regulators, especially the CBoS. These challenges will be related to devising exit strategies from wartime policies such as direct lending to the budget. Banks will need to develop strategies to address the potential emergence of non-performing loans (NPLs) and the impact on their asset quality and prepare for new rounds of capitalization in order to extend financing to key priority sectors during and to support rehabilitation efforts.