

# African J. of Economic and Sustainable Development

ISSN online: 2046-4789 - ISSN print: 2046-4770

https://www.inderscience.com/ajesd

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James Alic Garang

**DOI:** 10.1504/AJESD.2024.10061578

**Article History:** 

Received: 28 December 2021
Last revised: 11 February 2023
Accepted: 10 May 2023
Published online: 15 January 2024

# Effects of the civil war on financial inclusion in South Sudan: theory and evidence

# James Alic Garang

Upper Nile University,
Munuki Campus,
Juba, Republic of South Sudan
and
Africa Center for Financial Inclusion,
Block 1 Bilpam Road, Opposite Pension Building,
Juba, Republic of South Sudan
and
Bank of South Sudan,
Plot No. 1, Block D6, P.O. Box 136,
Juba, Republic of South Sudan
Email: aliabugalu@gmail.com

Abstract: The paper surveys the existing literature and sheds light on ways through which the South Sudanese Civil War that stretched from 2013 through 2018 has stunted the growth of the infant financial sector, with implications on the business climate and financial inclusion. While the majority of South Sudanese people were financially excluded owing to the country's past legacies, the paper finds that the internal conflict has worsened many indicators of financial inclusion, including by necessitating closure of bank branches, placing a dent on the ATM geographic penetration, and constraining household access to credit. It concludes by outlining policy measures to advance financial inclusion. The suggested options include efforts to strengthen key economic institutions and improve regulatory and supervisory frameworks while promoting banking policies that support the usually excluded segments of the society, including small and medium-sized enterprises, women, youth, farmers, and poor households.

**Keywords:** wars; financial development; financial inclusion; financial services; South Sudan.

**Reference** to this paper should be made as follows: Garang, J.A. (2024) 'Effects of the civil war on financial inclusion in South Sudan: theory and evidence', *African J. Economic and Sustainable Development*, Vol. 9, No. 3, pp.255–271.

**Biographical notes:** James Alic Garang holds a PhD in Economics from the University of Massachusetts at Amherst, USA. His research interests are in macroeconomics, development economics, and monetary policy with a focus on financial sector development and financial inclusion, especially the role of financial sector in expanding access frontier to SMEs. Serving presently as the Governor for the Bank of South Sudan, he was formerly a Senior Advisor to the Executive Director at the Board IMF in Washington DC, a senior economist at Ebony for Strategic Studies, a scholar at The Sudd Institute, and an Assistant Professor of Economics at the Upper Nile University, South Sudan. He previously served in the same school as the Chair of the Economics Department and the Deputy Dean in the College of Economics and Social Studies.

#### 1 Introduction

A war can be a huge disruptor of progress in the society or the global economy (Kang and Meernik, 2005; Slaviuk and Bui, 2022). It displaces labour, destroys capital assets, disrupts means of communications and payments and constrains the growth of the financial system in general. Closer to home, the debilitating effects of the civil war on development and regional neglect in the old Sudan abound, as a case in point (see D'Agoôt, 2013; Nyaba, 2015). The same conclusion can be drawn from the South Sudanese conflict which lasted from 2013–2018, with implications on financial inclusion, which remains key for growth and development (Collier, 1999; Garang, 2014, 2015; Humphreys, 2003; Weinstein, 2000; World Bank, 2020).

Financial inclusion, defined as the proportion of households and firms using financial services, fosters economic growth and development (GDI, 2014). Inclusive financial systems allow economic actors to engage in productive endeavours, including investing in education and health, saving for retirement, accumulating for social obligations such as weddings, exploiting opportunities, and mitigating against risks (Demirgüç-Kunt and Klapper, 2012; Hayem et al., 2013; World Bank, 2014a, 2014b; Beck, 2016; Demirgüç-Kunt and Singer, 2017; Demirgüç-Kunt et al., 2019). Many in the development circles today regard inclusive financial systems as critical contributors to economic and social development (Adefabi, 2018; Badmus and Ogundele, 2019). It is broadly understood "that access to formal financial tools reduces poverty, stimulates investment and creates growth, particularly in rural areas" [Van Hove and Dubus (2019), p.1]. In this regard, access to financial services fosters savings, boosts investment, and helps mitigate against risks. Quality of institutions also plays a positive role in fostering financial inclusion, which, in turn, positively affects long-run growth and poverty reduction (Yiadom et al., 2021). Further, latest advancements in technology present clients with better opportunities to promote access to financial services. This underscores the notion that digital innovations, including mobile money, payment cards, and technological revolution can enhance financial inclusion across the board (Stephen, 2011; De Sousa, 2015; Mohamed et al., 2017).

The above conjecture notwithstanding, economic agents around the world continue to face differential access to financial services owing to several factors, including unaffordability, long geographical distance from financial centres, stricter documentation requirements, the non-existence of credit histories, collateral requirements, financial illiteracy, and self-selection out of the credit market for fear of rejection (Garang, 2015; Beck, 2016). Where financial exclusion dominates, individuals find themselves involuntarily locked out of financial systems, a condition that can contribute to slower aggregate growth and persistent inequality, usually dubbed as a *poverty trap* (Aghion and Bolton, 1997).

Account ownership at a formal financial institution is one indicator of inclusion, and access to mobile financial services is another. To see why, formal accounts allow the owner to receive or send remittances, make transfers, enhance direct deposits, or transact with the government and others. Access to formal financial services encourages savings and facilitates access to credit. Despite the benefits of financial inclusion, evidence shows that many countries do not have inclusive financial systems. Besides oft-cited factors affecting financial inclusion, such as financial illiteracy, low-income status, and self-selection out of credit markets, there is another subtle inhibitor: civil war. The latter makes it difficult for financial service providers to serve diverse markets. A civil war

disrupts supply chains, intensifies uncertainty, which erodes market confidence, and undercuts firms' investments (Deng et al., 2018; Mawejje and McSharry, 2021) while exerting pressures on prices and diminishing purchasing power. It destroys assets, endangers economic actors, displaces labour, and impedes production. By disrupting the provision of financial services through impeding transport, forcing banks to close, raising transaction fees, or exacting economic pains, which force clients to draw down on their accounts, civil war, directly and indirectly, affects financial inclusion.

Broadly, lack of economic development in South Sudan today could be attributed to previous wars with the Sudan or to the pre-independence era (see 1955–1972; 1983-2005; Adiebo, 2021; Mawejje and McSharry, 2021) and later to internal conflict (2013–2018). While Southern Sudan (then a region) and now an independent country has been in conflict for over half a century dating from Sudan's independence in 1956 through 2018, this study focuses on the impact of the post-independence conflict. Though data deficiencies hamper efforts to quantify the impact of the civil war, the qualitative evidence is quite revealing. This paper submits that the latest South Sudanese conflict has dented financial inclusion in some measured ways. Some banks were looted in the Upper Nile region during the conflict in 2014. For instance, the Bank of South Sudan (BoSS) and Equity Bank buildings in Malakal, the capital of Upper Nile, were severely damaged during the fighting, forcing them to evacuate staff and close. Meanwhile other financial institutions such as Nile Commercial Bank, Kenya Commercial Bank, Equity Bank, and Ivory Bank decided to reduce their operations in some parts of Greater Bahr el Ghazel and Greater Equatoria regions at Torit, Yei, Yambio, and Wau, respectively, for two reasons. First, it was unsustainable to maintain operations in some areas, and second, as a precautionary measure against the 2016 conflict, which engulfed a large section of the country, leading to a significant reduction in the branches.

There is no denying that financial exclusion predates the conflict. While Atil (2009), for example, reports that about 10% of the population owned bank accounts before independence, Garang (2014) finds that only about 3% owned bank accounts by 2014. As of end-2021, account ownership has risen modestly to 5.7% for current and about 6.1% for savings accounts (see Table 2). Despite these previously low access indicators, qualitative evidence from branch closures, as cited above, points to worsening of access to finance after the 2013 conflict. To better contextualise, the paper examines two related questions:

- 1 Has the conflict affected broader financial inclusion during the study period?
- If so, then what policy options can the authorities take to enhance financial inclusion in the country? The methodology section provides an approach to addressing these two questions.

The paper examines the conflict effects on four indicators of financial inclusion:

- 1 individual account ownership
- 2 ATM penetration
- 3 bank branch network
- 4 financial penetration.

These are measured, respectively, by individual accounts at formal banks, bank branch and ATM networks, and credit to small and medium-sized enterprises (SMEs) or private sector as percent of GDP. The above approach is appropriate and in line with researchers' usual practice that measures financial inclusion in three dimensions, namely:

- 1 access to financial services
- 2 usage of financial services
- 3 the quality of the products and the service delivery.

Therefore, the number of adults formally banked, and number of branches per 100,000 adults or number of ATMs per 100,000 adults, for example, corresponds to usage and access of financial services.

In reviewing the extant literature and talking to select industry experts, the paper finds that major indicators of financial inclusion have worsened during this study period, leading us to conclude that the conflict has affected financial inclusion. This confirms a longstanding view stating that wars affect financial inclusion, and hamper growth, and social outcomes. To the best of our knowledge, this is the first study of its kind, which attempts to establish a qualitative link between the civil war and financial inclusion in South Sudan.

The paper proceeds as follows. Section 2 focuses on the literature, examining the nexus between the civil war and financial inclusion; Section 3 outlines the methodology and data; Section 4 provides a narrative on the financial landscape; Section 5 focuses on the results from the analysis of the civil war and highlights examples. Section 6 concludes the paper.

# 2 Survey of the literature

To measure financial inclusion, researchers usually consider access indicators, which look at and examine the depth of outreach of financial services; usage indicators, reflecting usage of financial services such as volume of transactions or number of times that a client visits a bank; and quality, indicating whether financial services meet the client needs, the range of options available, and customers' understanding of services (Demirgüç-Kunt and Klapper, 2012).

Theory postulates that inclusive financial systems are a boon for economic development (Wongpiyabovorn, 2016; Laha and Sen, 2021). They enable an individual or a household to save, invest, and mitigate risks. Yet, when financial systems are not inclusive, due to a host of rationalisations, some economic actors, especially the poor, and small firms (Garang, 2015; Lemmon, 2012; Mohamed et al., 2017), tend to remain unbanked, which condemns them to the poverty trap. When a large segment of society does not participate in the financial markets, the consequences weigh down on growth, and depress employment. In this context, theory favours financial inclusion to ensure inclusive economic development and poverty reduction. Further, factors such as distance from financial centres, unaffordability of financial services, stricter documentation requirements, and being discouraged inhibit financial inclusion. Those excluded from financial services tend to have no accounts, lack access to financial services, and rely on the cash economy, which can be cumbersome and risky.

There exist other factors that constrain financial inclusion. These include the fact that banks can choose to offer no loans, and when maintenance fees and interest rates are high, discouraging financial intermediation. Further, when the banking sector is improperly regulated, it can foster unintended customer exploitation. Finally, natural disasters such as floods, volcanic eruptions, and earthquakes (Keerthiratne and Tol, 2017; Zhang and Managi, 2020) can also affect financial sector development or financial inclusion in untold ways. Above all, war can compound these factors, imposing additional constraints on access to finance.

So, in addition to traditional factors, war is another element that can exacerbate the access dilemma, thereby constraining financial inclusion. In conflict-affected situations, individuals confront weak institutions which constrain access to financial services, thereby rendering it harder to price risks and improve their lives. As Nobel Laureate Amartya Sen has always said many times, war affects individual 'functioning', which is a critical aspect of their well-being. For those living in war zones, individual capabilities are constrained by the aftermaths of the conflict, making it harder to make choices that can lead to a happy or a healthy life.

The survey of the empirical literature on the impact of the conflict on financial sector development or access to finance is instructive. Using narrative-based country case studies, Sab (2014) finds that war episodes in the Middle East have negatively impacted economic outcomes. The author concludes that these episodes of conflicts have induced contraction in growth, high prices, fiscal and current account deficits, loss of reserves, and weakening of the financial system. Relatedly, Collier (1999) argues that wars tend to negatively impact output, including per capita GDP, first through a reduction in output, and second, through a gradual loss of capital stock and propagation of dissaving. They note that although civil wars affect sectors such as construction, transportation, distribution, and finance differently, their impacts lead to a reduction in GDP (Humphreys, 2003). Further, wars affect private investment via the portfolio substitution effect (Easterly and Levine, 1997; Imai and Weinstein, 2000).

Similarly, Gupta et al. (2002) argue that armed conflicts and terrorism in low-income countries impose fiscal challenges in those they examined, again concluding that in 22 conflict episodes, armed conflicts weakened financial regulation, impacting financial sector development, and further feeding into intensive conflicts. In the same vein, Ades and Chua (1997) find that political instability in one country has adverse effects on the neighbouring countries, arguing that conflict lowers growth through disrupting trade and increasing military spending. They maintain that conflicts generally disrupt the financial sectors in the affected countries. These authors provide an example of Lebanon, where the banking system was greatly weakened during the conflict, diminishing its role as a regional intermediary. The same was true for Kuwait, where the civil war exacerbated non-performing loans. As Baddeley (2011) underscores, civil wars affect the financial sector through disrupting confidence, increasing military spending, and generating low revenues, again intensifying distributional conflicts around competition over scarce foreign exchange, and natural resources, including oil. As documented elsewhere, including in the ECOWAS by Abdoulage (2021), causality between corruption and military spending runs both ways. Corruption has a positive effect on military spending, while military spending leads to an increase in the level of corruption. The impact is then fed through into the financial sector.

In examining the impact of the war on economic development in Ukraine, Slaviuk and Bui (2022) outline channels through which the effects of the conflict can be felt. It has, as of summer 2022, led to the deaths of thousands, while impairing the lives of millions. The authors submitted that the conflict has affected the world economy, severely affecting Ukraine through wrecking its industries, causing massive migration, necessitating a decrease in household income, and a balloon in the budget deficit and government debt. Other scholars, including, Khudaykulova et al. (2022), have also noted the opportunity cost of investing in military wares, the humanitarian loss of the financial system as well as the burden of repairing post-war damage, which can be colossal.

Ajide (2017) examines factors that affected financial inclusion in a panel of 18 SSA countries from 2004–2010 and concludes that the quality of institutions alongside GDP and inflation are key determinants of financial inclusion. In examining a case study in Mozambique, Osano and Languitone (2016) argue, on the other hand, that streamlining collateral requirements, offering small business support, and reducing information asymmetry can enhance access to finance.

Using the synthetic control method, Mawejje and McSharry (2021) show that the conflict has had a significant economic cost on South Sudan, estimated at \$81.1 billion from 2012–2018. This surpassed the economic costs provided by Frontier Economics in 2015 with estimates ranging from \$22–28 billion for the five-year period. Mawejje and McSharry identified the channels through which the impact of the conflict can be translated into the economy, namely exports and investment, highlighting that the South Sudanese war disrupted oil production, thereby reducing exports, and delaying firm investment decisions. To extrapolate further, the consequences have been depletion of foreign exchange reserves, dwindling oil receipts, and dipping of government hands into commercial bank deposits. This is besides paying the transitional financial arrangement (TFA) to Sudan, which was cleared by March 2022, and taking oil advances, which has meant very little going to the budget (IMF, 2019), while more went to peace and security spending. In another paper by Deng et al. (2018), the authors concluded that a violent conflict is among the binding constraints to growth in South Sudan as well as an obstacle to transition from fragility to stability.

As the foregoing discussion shows, civil wars have a high propensity to instigate sharp reductions in output, trigger inflation, lead to large fiscal deficits, deplete foreign reserves, and put pressures on the exchange rate, in addition to loss of human lives. The human cost can be immense. World Health Organisation (WHO), for example, estimates that over 1.3 million people die every year owing to causes related to wars and crimes.

Globally, access to finance is a problem even when there is no civil war. There exists a gender dimension to differential access to finance. Gender gaps exist in financial inclusion worldwide, with about 72 men and 65% of women having accounts globally by 2017. Account ownership also tends to be lower in rural areas. By 2013, for example, banks provided financial access to 3% of the South Sudanese population, compared to 42% and 20% in Kenya and Uganda, respectively (Atem, 2018). Several reasons point to lack of account ownership. Sometimes, people do not have accounts because they do not have enough money, feel that it is too expensive to operate an account, are far away from banks, lack trust in the banks, hold religious reasons, or see no need since some family members have an account already or they simply decide to avoid the paper trail of money.

While financial inclusion has been considered globally as key to enhancing access to finance for households and firms (Aduda and Kalunda, 2012; Johnson and Williams,

2016; Ajide, 2017), firms generally rank lack of access to finance as a big obstacle to their operations. This is even more acute for SMEs, which normally cite geographical distance from financial centres, collateral requirements, lack of support for financial services to firms and businesses, and information asymmetry as key impediments. To this end, countries have tried to ease access to finance through interventionist policies. Kenya is among such countries that have done so through leveraging technology, particularly through its pioneering mobile money services, the M-Pesa, with implications to enhance growth and address poverty.

The spread of 3G and 4G technologies in the last two decades presents an opportunity to harness enormous economic empowerment and value through advanced access to smart mobile phones. Mobile technology creates consumer surplus, with overall operational costs decreasing when running online businesses, a powerful tool for business growth and competitiveness. It also supports women empowerment and other capabilities, with discernable economic benefits (Goel and Gupta, 2019). Despite the obvious benefits of access to mobile phones, many people globally still do not have access to smartphones, barring citizens, and businesses from benefiting from the digital economy. Further, while the digital technology is transforming the payments landscape globally, it, however, requires policy support. This support includes good infrastructure, appropriate regulations, consumer protection, financial literacy, and reliable power. The latter are areas where South Sudan lags regional peers.

While some researchers hold the illusion that World War II (the last good war) saved the world from the Great Depression, the same view is not held today by many. Those who believe that any war helps the economy approach it through the prism of the 'broken glass window', which simply goes thus: if a glass is broken, the owner will hire a window-maker to fix it, who gets paid, and, in turn, uses this money to pay for other goods and services, thereby stimulating the economy. However, those who hold a contrary view believe that if this glass was not broken, the owner could have spent that money anyway on basic needs and wants such as clothing or entertainment, which could even have stimulated the economy further without the added distress. Thus, those holding the contrary position believe that war drains wealth, disrupts markets, depresses economic growth, encumbers innovations, and taxes consumers. These economic consequences affect financial markets and bear negatively on financial inclusion, as the foregoing survey of the literature demonstrates (Washington Post, 2014).

There appear to be gaps in the earlier research concerning the ways in which researchers have examined the impact of the conflict. Drawing from the literature above, we see that different researchers have examined the impact of the conflict, either at the regional or international level (see Bilmes and Stiglitz, 2010) for the case of Iraq or on the macroeconomy in other countries but without a specific focus on South Sudan. Second, very little research has been conducted on how conflict affects financial inclusion. By addressing these methodological and contextual gaps, this paper hopes to offer a new perspective into the conflict-financial inclusion nexus. Therefore, the paper examines the evidence against specific indicators of financial inclusion in South Sudan, as the methodology section discusses below.

### 3 Methodology and data sources

The data for this analysis come from two sources, covering ten years (2011–2021). Indicators for financial inclusion come from the IMF's Financial Access survey (2021) and Bank of South Sudan (2021). Other macroeconomic indicators come from different sources. Four indicators are used to proxy financial inclusion, namely:

- 1 commercial bank branches per 100,000 adults
- 2 ATMs per 100,000 adults,
- 3 credit to SMEs
- 4 adult account ownership.

Broadly, the number of deposit accounts with commercial banks per 1,000 adults is used to measure financial usage. It is expected that indicators of financial inclusion, including loans to SMEs or private sector, and ATM geographic penetration, are negatively affected by armed conflict.

The paper adopts the literature-based technique, a mixed method relying on situational analysis and presenting data in a tabular format to discern patterns. This helps to facilitate analysis, distil findings, and arrive at policy implications. While this methodology is heavily informed by the lack of data, and inconveniencies that stand in the way of conducting quantitative research in challenging contexts like South Sudan, it can inform useful conclusions.

# 4 The financial landscape in South Sudan

At independence in 2011, there were eight commercial banks and eight microfinance institutions (MFIs) operating in South Sudan. By 2013, the number of commercial banks rose to 20 and climbed again to 26 by the year-end (Garang, 2014; Atem, 2018). Following independence, the banking sector was thriving in South Sudan, and many investors came in from Kenya, Uganda, Ethiopia, and beyond. The number of foreign exchange (forex) bureaus also grew to 96 by 2015 but declined to 76 and 44 by 2017 and end-November 2019, respectively, before rising again to 56 by 2021 (see Table 2). The banks' main business model was money transfer and other services, including the letter of credit program, which was lucrative for some authorised dealers. Yet, as of end-2020, there were about 30 commercial banks, 36 insurance companies, 64 active forex bureaus, and 3 mobile money providers. There were also international money transfer operators such as Amal Express, and Dahabshil, and several local money transfer companies across the states during the same period.

Some banks and non-bank financial institutions (NBFIs) were affected by the conflict as the preceding sections noted. That said, forex bureaus increased following the signing of Revitalised Peace Agreement and receipt of external emergency financing from international financial institutions (IFIs), particularly from the IMF, starting in November 2020, and later in March 2021 and March 2023. The paper hastens to add that South Sudan qualified for the three disbursements under the Rapid Credit Facility (RCF), as a response to the COVID-19 pandemic (Oxford Analytica, 2021), and the lingering global shocks.

On the backdrop of the legacy of wars, the financial sector in South Sudan remains shallow and thin, comprising mainly commercial banks, and NBFIs, including a few insurance companies, MFIs, and forex bureaus. Further, the financial sector landscape also remains bank-based, with no known securities market nor credit referencing bureaus, though the BoSS had a credit reference unit in the supervision department since 2017. The conflict erased some gains made since independence in 2011, while complicating oil management in South Sudan, especially through the practice of taking short-term exorbitant oil advances and loans. It resulted in fiscal dominance, high inflation, depreciating currency, and sustaining multiple currency practices, with external position weaker than implied fundamentals (IMF, 2020).

#### 5 Results and discussion

This section focuses on three-part arguments – the conflict outcomes on the macroeconomy, the potential conflict pathways, and specific effects on indicators of financial inclusion.

# 5.1 Effects of the civil war on macroeconomic indicators in South Sudan

The effects of the civil war in South Sudan have been felt on key macroeconomic indicators, including GDP, inflation, the current account, oil production, government spending, and revenue. As Figure 1 shows, for example, the civil war coincided with deterioration in GDP, inflation, and current account. For illustration, GDP declined to -5.5% in 2017 from 29.3% in 2013 while inflation ascended momentously, climbing up to 188% in 2018 from about 0% in 2013.

60 400 GDP and CAB in Percentages 350 30 300 250 0 200 2014 201 2016 2018 nflation in 150 -30 100 50 -60 Current Account Balance -Average Inflation

Figure 1 South Sudan key economic indicators, 2011–2020 (see online version for colours)

Source: IMF (2021)

In addition, the quality of governance, as measured by the corruption perception index (CPI), also worsened during this period. While South Sudan starts with low figures compared to the region in 2013, its average CPI scores declined further by 2018 (see Table 1). This deterioration of the quality of economic governance has compelled other authors to advocate efforts to strengthen the governance framework, with emphasis on

key areas such as revenue institutions, procurement, transparency, public financial management, regulatory framework, the rule of law, and the AML/CFT architecture. This corrosion in key macroeconomic aggregates has a bearing on debt sustainability and external stability, as well as worsening indicators of governance and quality of life.

<b>Table 1</b> CPI for South S	Sudan and	East Africa.	2012–2018
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		CPI scores	Overall C	PI ranking
Year	South Sudan	East Africa community (EAC) average	South Sudan	EAC average
2012	-	33	-	117
2013	14	29	173	128
2014	15	28	171	132
2015	15	28	163	125
2016	11	28	175	133
2017	12	30	179	130
2018	13	29	178	131

Note: CPI ranks countries on a scale from 100 (very clean) to 0 (highly corrupt).

Source: Transparency International (2019); Author's construction (2021)

# 5.2 Hypotheses of the conflict pathways on financial inclusion

This subsection discusses the effects of the conflict pathways as hypotheses, which could be tested. First, the war has led to the loss of innocent lives. Different sources, including the UN and academic papers, provide whopping estimates. The 2018 paper by the London School of Hygiene and Tropical Medicine reveals that about 180,000 to 400,000 people might have died during the conflict. While human life is priceless, and it is unconscionable to put a price on it, the paper surmises that the economic magnitude of the conflict in foregone wages is staggering.

Second, poverty rates worsened during this period. Castro (2010) reports that about 51% of South Sudan was below poverty based on a 2009 National Baseline Household Survey. As the IMF notes in its 2019 Article IV report, the resumption of war in mid-2016 quickly spread insecurity across the country, severely affecting real economic activities. This situation exacerbated the humanitarian crisis and caused food insecurity, prompting real disposal income to decline by 70% since independence. The decline in disposable income translated into a marked rise in poverty, with the headcount ratio reaching 82% in 2016 from 50% in 2012 (IMF, 2019).

Third, the conflict displaced civilians to refugee camps and caused hunger. By 2019, different UN sources estimated that about 7.1 million people in South Sudan required humanitarian assistance, while over 2 million fled to neighbouring countries, and close to 1.9 million were internally displaced. Based on estimates by the UN Office for the Coordination of Humanitarian Affairs, the humanitarian agencies have spent about \$10 billion in the country by 2019 since independence in 2011 (IMF, 2019).

Fourth, the war has led to a credibility gap with development partners. In defending its sovereignty, the government failed to stick to the basics of public financial management, thereby dispensing with the budget at times and spending resources outside the appropriation acts. Rent-seeking behaviour that perfected an agency creation or

agency shopping as an instrument to extract rents from the state (Garang, 2021), fiscal indiscipline, monetisation of fiscal deficits, and opaque oil management reinforced the credibility issue with the donors.<sup>1</sup>

Finally, the paper hypothesises that the late arrival of mobile money services in South Sudan is partly attributed to the conflict. Without the conflict, some argue that the country could have advanced in tandem with its regional peers. A handful of mobile operators started operating in the aftermath of the conflict in 2019, which suggests that the conflict prevented their initial entry. The South Sudanese authorities licensed four mobile money providers after the conflict. The m-Gurush, simply meaning mobile money in Juba Arabic; and Nile Pay were licensed in 2019. In 2020-2021, two additional mobile money providers, Capital Pay Ltd. & MTN South Sudan Ltd. were licensed, bringing the total to four. Though limited, these mobile money providers endeavour now to serve clients without bank accounts through accessing financial services on their phones. Just like M-PESA in Kenya, where digital value gets transferred through text messages, with the help of a network of agents, users can deposit and withdraw money from the mobile accounts at the point of sales (Van Hove and Dubus, 2019). Users of the m-Gurush, for example, have access to many features on their phones. With a touch of their phones in Juba, a son or daughter can send funds to families in the state capitals; say in Bentiu or Aweil or Yambio.

# 5.3 Specific effects of the conflict on financial inclusion

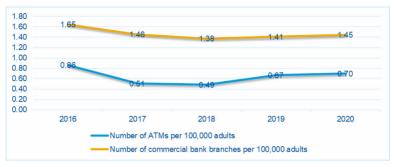
This subsection focuses on how the war affected financial inclusion. Table 2 highlights five instances in which the war has affected financial services in South Sudan.

First, the South Sudanese civil war compelled banks to close branches, especially in conflict-affected areas. From the available data in 2019, foreign banks, joint ventures, and the national banks closed about 18, 1, and 20 branches, respectively, indicating no clear differences between local and foreign bank branch closures. Some banks considered this downsizing critical for their survival from economic woes, largely due to high inflation and shortage of dollars. Branch closure translated into a loss of jobs for employees. It also imposed costs, especially by compelling clients to travel a long distance to access financial services in towns or nearby financial centres. A decline in ATMs and bank branches is displayed in the data obtained from the IMF's Financial Access Data (see Figure 2). Further, from Table 2, total bank branches declined by 31% from 88 in 2014 to 61 in 2018 while the total number of ATMs declined by 54% from 67 in 2014 to 31 in 2018.

Second, both the total number of borrowers and total loans declined by about 60% and 63%, respectively, to 3,657 and 4,115 in 2018 from 9,015 and 11,014 in 2013. For the SMEs, the decline of total numbers in the same period is even higher. Credit to SMEs declined from 2013 to 2018 by about 66%.

Third, some financial services, like Western Union services, for example, became unavailable in 2016 because several correspondent banking relationships (CBRs) were reassessed considering the raging conflict at the time. Seeing no viable business model, the CBRs were withdrawn, bringing provision of those services to a halt, and affecting receiving families, say in East Africa. Moreover, the number of forex bureaus also dropped by 54% from 96 in 2014 to 44 in 2019.

Figure 2 ATM and bank branch penetration in South Sudan, 2016–2020 (see online version for colours)



Source: IMF Financial Access Survey, November (2021)

Fourth, the civil war led to deficit monetisation, which exacerbated inflation, and constrained credit to the private sector. Another manifestation is the rise in the M2/GDP ratio (see Table 2), indicating a marked growth in money supply relative to production. Parallel market rates also doubled in 2017–2018, reflecting worsening economic conditions, and flight to the US dollar. Notably, gross reserves declined from about \$1.7 billion, which is about 1 month of import cover in June 2012, to \$33 million, which is about 0.1 month of import cover by June 2018 (see Atem, 2018; IMF, 2014 Article IV Report).

Finally, the credibility of the financial system is not always given and can be quickly eroded. When the government used public savings in the form of commercial bank deposits, in hard currency, it accelerated the crisis in the banking sector, eroding public trust around 2015–2017. Some plans were, however, made in 2021 to allow commercial banks to have access to their blocked accounts in FX. Therefore, the amount owed to commercial banks has reduced drastically, but it remains a positive non-zero. If the public loses trust in the macroeconomic management, which often is the case during the wartime, incentives to save decline, and access to finance becomes a significant problem. Financial service providers also become guarded about lending to the households on the account that individuals with no collateral and proper documents can move from one town to another without stricter enforcement in place. This can lead to limited bank lending to households.

Considering the foregoing discussion, we can conclude that several indicators of financial inclusion in South Sudan have worsened during this period, indicating a negative association between key indicators and the conflict. We see that the total number of borrowers, credit to SMEs, number of ATMs, bank branches, and forex bureaus declined. Further, M2/GDP rose, indicating the pronounced growth in money supply relative to production. This observed weakening in key indicators supports the central argument that the conflict has affected financial inclusion in South Sudan. The only exception observed in Table 2 relates to the number of account holders, which rose during the study period. This anomaly could be partly due to population growth and limited data in capturing the dynamics throughout the banking sector during this period.

 Table 2
 Indicators of financial sector development and inclusion in South Sudan, 2013–2021

L. 1: -1					Year				
Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021
M2/GDP (as %)	26	35	74	187	325	474	454	825	1,282
Banks	26	27	28	28	27	27	26	30	31
Banking branches	61	88	72	75	65	61	65	94	98
Number of ATMs	44	29	65	54	32	31	43	50	49
Account holders	211,428	332,779	451,999	492,262	516,622	522,516	678,265	535,074	580,472
of which SMEs	63,428	63,472	35,721	89,660	133,442	49,895	64,085	83,884	140,476
Households	148,000	269,307	416,278	402,602	383,180	472,621	614,180	450,495	439,996
Deposit accounts	212,962	362,369	508,570	631,774	618,235	575,262	735,809	607,945	710,439
of SMEs	63,889	75,689	40,199	132,106	160,095	58,278	78,704	85,507	176,836
Households	149,073	286,680	468,371	499,668	458,140	516,984	657,105	522,438	533,603
Total borrowers	9,015	14,101	10,161	7,730	4,501	3,657	3,658	5,952	4,829
of SMEs	3,003	491	2,918	401	477	1,252	984	1,656	1,137
Households	6,012	13,610	7,243	7,329	4,024	2,405	2,674	4,296	3,692
Total loans	11,014	14,123	10,937	8,193	4,581	4,115	3,687	7,817	4,255
of SMEs	4,008	491	3,353	456	480	1,367	1,002	2,159	731
Households	7,006	13,632	7,584	7,737	4,101	2,748	2,685	5,658	3,524
M2	6,714.39	7,858.30	16,111.30	41,591.95	69,547.66	105,00.23	13,906.42	208,667.63	323,742.46
Real GDP	19,419.03	22,549.77	23,007.38	22,145.66	21,333.20	22,148.36	24,259.31	24,999.9	25,249.2
MFIs	∞	7	7	7	7	7	7	7	7
Forex bureaus	ı	96	96	ı	92	ı	44	64	64
Insurance firms	1	1		1	1	ı	1	36	36
Mobile money	1	-	-	i	i		2	3	4

Source: Bank of South Sudan; Author's compilation (2021)

### 6 Conclusions and policy implications

While financial inclusion fosters economic development, many households around the world find themselves excluded from financial services due to cost, documentation requirements, or lack of proper bookkeeping. However, these problems are exacerbated when a country goes through a conflict, which tends to drain wealth, discourage investments, and curtail growth. The conflict in South Sudan has worsened macroeconomic indicators, causing high inflation, depressing GDP, decreasing revenues, and worsening external stability. The conflict worsened most indicators of financial inclusion in myriad ways. It led to closure of some bank branches, decline in ATM penetration, and constrained credit to the private sector. Therefore, the authorities would be well-served if they understand and undertake measures to improve post-conflict growth and foster financial sector development. Embracing the financial inclusion agenda, and investing in mobile technology, which has proven useful during the pandemic, can bear fruits. The paper highlights four policy options.

First, deepening engagement with the international community and embarking on key reforms, including by strengthening governance and transparency, while augmenting state-owned enterprise sector is key. This can boost market confidence and build credibility with donors.

Second, taking commensurate measures to address financial illiteracy, ensure interoperability, simplify documentations, and deploy user-friendly interfaces remains key. Financial service providers should expand access through differentiating their products and advancing branchless tools. Other countries, which are expanding access through targeted programs, and branchless instruments, from ATMs to agent networks, to reach many, can offer lessons here.

Third, specific support to foster mobile money deployment remains complementary to promote financial inclusion. In recent years, investment in mobile technology has furthered those objectives. Digital platforms allow users to store, transfer funds, and reduce poverty. Access to mobile phones and the internet increases the chance for financial inclusion. The uptake in mobile money rose during the pandemic and might move to greater heights in the future.

Finally, enhancing financial infrastructure, regulatory, and supervisor frameworks is essential. This can lead to a well-developed financial payments system, which should be multi-purposely robust. It needs to be underpinned by appropriate regulations that entail national payment system, apposite financial safeguards to address cyber security risks; good physical infrastructure that encompasses reliable electricity and internet; and consumer protection mechanisms. In addition, investing in vital infrastructure, including roads and power generation, remains vital to enable mobile money in rural areas.

To conclude, the paper has demonstrated that the civil war has affected key macroeconomic aggregates in South Sudan and, by extension, worsened indicators of financial inclusion. To recover from this adverse impact, the authorities should accelerate structural reforms, focusing on governance and transparency, and embracing financial inclusion, to expand the access frontier. Key policy responses should be multifaceted and include efforts to restore political stability, investments in growth-promoting sectors, and instituting robust public financial management instruments, as well as addressing entrenched historical barriers to the country's financial sector development. It would also entail a better understanding of the drivers of and fundamental causes of economic growth as well as access to finance. Given the lack of extensive research on this topic,

insufficient data, and inherent methodological limitations, further research will be needed to better understand specific channels through which the conflict affected financial inclusion in South Sudan. Additional research on this could generate enough literature to form a broad consensus.

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#### Notes

Some of these issues have been resolved with the authorities focus on the foreign exchange and PFM reforms under the staff-monitored program (SMP) in starting in March 2021, which led to a deeper engagement between South Sudan and the IFIs, particularly the IMF. The latest engagement was through the third disbursement of about \$115 million under the RCF Food shock Window in March 2023 and the first review of the Program Monitoring with Board Involvement (PMB) in May 2023.