The State of the Political Instability and Its Impact on Trade in South Sudan: A Critical Assessment

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Ву

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Contents

List of tables List of figures List of abbreviations and acronyms Abstract

1.	Introduction	1
2.	Literature review	5
3.	The wrath of South Sudan's conflicts	g
4.	The impact of the conflict on South Sudan's trade and regional integration	19
5.	and policy implications	24
Note:	S	26
Refer	rences	28
Appe	endix	31

List of tables

1.	South Sudan's national accounts components (in millions of nominal domestic currency)	11
2.	South Sudanese firms growth constraints (%)	16
App	pendixes	
1.	South Sudan's exports of petroleum oils and oils obtained from	31
	bituminous minerals, crude (in '000 US\$)	
2.	South Sudan's imports by commodities (in '000 US\$) in 2016	31
3.	The Symmetric Revealed Comparative Advantage (SRCA) for	32
	South Sudan, 2012-2016	
1	Number of conflicts and Number of commodities SS has DCA	22

List of figures

1.	Military expenditure (% of GDP)	9
2.	South Sudan's gross domestic product, volume (2010=100)	10
3.	South Sudan's exports and imports (% of GDP)	12
4.	South Sudan's exports by commodity in 2016 (%)	13
5.	South Sudanese trade (2011-2017)	13
6.	South Sudan's trading partners in 2016	14
7.	Distance to frontier (DTF) on doing business indicators in 2017	15
8.	South Sudan's total reserves excluding gold against its	17
	exports (in US\$ million)	
9.	CPI, nominal exchange rates against USD and exports (in US\$ million)	18
10.	SS exports vs number of conflict related fatalities	19
11	SS imports vs number of conflict casualties	20

List of abbreviations and acronyms

AfDB African Development Bank

BPD Barrel Per Day

CIF Cost, Insurance, and Freight
CPA Comprehensive Peace Agreement

CPI Consumer Price Index
DOTS Direction of Trade Statistics

DTF Distance to Frontier
EAC East African Community

FAO Food and Agriculture Organization

FDI Foreign Direct Investment

FOB Fund for Peace FOB Freight on Board

GDP Gross Domestic Product GoSS Government of South Sudan

HESPI Horn Economic and Social Policy Institute

IFS International Financial Statistics

IGAD Intergovernmental Authority on Development

IMF International Monetary Fund ITC International Trade Centre

RCA Revealed Comparative Advantage RECs Regional Economic Communities

SAF Sudan Armed Forces

SPLA Sudan People's Liberation Army

SRCA Symmetric Revealed Comparative Advantage

SS South Sudan

SSP South Sudanese Pound

UCDP Uppsala Conflict Data Programme

UNCHR United Nations High Commissioner for Refugees
UNECA United Nations Economic Commission for Africa

UNOCHA United Nations Office for the Coordination of Humanitarian Affairs

Abstract

In December 2013, South Sudan descended into a civil war following the long feud between the president and his vice president that has caused huge humanitarian crisis, not only in the country, but in the region. Close to two million South Sudanese are currently residing in neighbouring Uganda, Kenya, Ethiopia, and Sudan as refugees and asylum seekers. Hence, the study tries to assess the impact of the ongoing conflict on the country's economy and trade in particular. The civil war has taken a huge toll on South Sudanese economy. Domestic oil production has plummeted considerably, which has led to deterioration of economic performance. The country's GDP contracted by around 14% in 2006 and 6% in 2017. Foreign trade, especially exports (which is dominated by oil), has significantly been hindered by the conflict. Exports and episodes of conflict (measured by number of conflict induced fatalities) seem highly correlated, suggesting a possible rapacity (state prize) effect—a rise in contestable income may increase violence by raising gains from appropriation—as observed in other resource rich and conflict prone countries such as DRC. Furthermore, the civil war wreaked havoc to the physical infrastructure and also weakened the non-existent government institutions, which have made the Government of South Sudan to implement the necessary macroeconomic policies and advance its regional integration process.

1. Introduction

Background and context

The Republic of South Sudan gained its independence from Sudan on July 9, 2011 after more than three decades of conflict and insecurity and a six-year transitional period (2005-2011) following the signing of the 2005 Comprehensive Peace Agreement (CPA). It was hoped then that the country could fully utilize its untapped natural resources (water, land and mineral resources). Notwithstanding its huge untapped potential, the country was mired with lack of effective management and development of its natural resources, paucity of well-functioning public and private institutions, as well as poor economic and social infrastructure. On top of that, there were a number of unresolved issues with Sudan, like the use of oil infrastructure, the demarcation of the common border, and the division of state debts. These unresolved issues had led to deterioration of the two countries' relation, which later escalated into interstate conflict. In 2012, the Sudan People's Liberation Army (SPLA) and the Sudan Armed Forces (SAF) carried out cross-border attacks on each other's territories. The military confrontation between the countries forced South Sudan to shut down its oil production, which severely affected the foreign exchange receipts and the state finances of both countries.

Amid the border stalemate and rampant political instability, South Sudan descended into civil war and political unrest in December 2013, following the feud between President Salva Kiir and Vice President Riek Machar that escalated into interethnic conflict. Despite the many peace agreements signed between SPLM/A in government and SPLM/A in opposition and mediated by regional organizations, especially Intergovernmental Authority on Development (IGAD), both parties undertook military operations even targeting civilians in violation of the agreements. Consequently, many people were internally displaced and killed; by the end of 2013, it was estimated that more than one thousand people had been killed and an estimated 194,000 people were displaced (Spittaels & Weyns, 2014). As of July 2017, close to two million South Sudanese were living in the neighbouring countries, mainly in Uganda, Kenya, and Ethiopia as refugees and asylum seekers (United Nations High Commissioner for Refugees [UNCHR], 2017), and many more have been internally displaced.

Besides the internal displacement and refugee crisis, the South Sudanese civil war has also highly weakened the economy. The conflict and the subsequent fall in domestic oil production, coupled with drop in international oil price, has resulted in the deterioration of the economic performance of the country, particularly after the conflict broke out in 2013. In 2016 alone, South Sudan's economy contracted by around 14% (International Monetary Fund [IMF], 2017a); estimates also show that, in 2017 the country's GDP continued to contract by more than 6% (HESPI, 2017).1 The country's fiscal as well as current account has already soared; in 2016, its fiscal deficit was more than 20% of GDP, while the current account deficit was more than 86% in 2016 (World Bank, 2017). The deterioration of the current account balance forced the government to float its exchange rate which has led to a sharp fall in the value of South Sudanese Pound (SSP) against the dollar. The continuous depreciation of the SSP has, in turn, fuelled the country's inflation. Currently, the country is in a state of hyperinflation, with annual consumer price changes recorded at 380.1% in 2016 (World Bank, 2017). The conflict has also exasperated the country's fiscal budget and current account deficit, resulting in huge drop in foreign reserves and rise in domestic and external debt (African Development Bank [AfDB], 2017). The political instability led to credit rationing by external lenders in 2016, except for a few short-term oil advances; as a result, total external debt therefore remained at about US\$1 billion through 2016 (IMF, 2017).

As much focus has been given to emergency, conflict management, and peace building, the country's focus on moving to sustainable pursuit of economic development, including the country's trade to neighbouring countries and to other regions has been lessened. In order to enable the policy makers to appreciate the impact of the recurring conflict on the country's global as well as regional trade and also to help them navigate the future ways of maximizing export markets, this research looks into the impact that the ongoing political instability has on the country's overall economy and its trade sector in particular. The assessment also helps to navigate the way to the country's future trade and how to align with the neighbouring countries in the pursuit of regional integration.

Objectives of the study

Apart from the small amount of reports coming out of the country by international organizations, there has not been an extensive study assessing the impact of the ongoing conflict on the country's economy and the trade sector. Hence, this study tries to show the impact of the conflict on overall trade performance of the country. The study, specifically, tries to:

 Assess the impact of the current political instability on South Sudan's external sector, mainly on its export and imports, and the country's regional trade particularly with neighbouring IGAD member countries such as Sudan, Uganda, Ethiopia, and Kenya.

- Identify the main bottlenecks to the export sector, and also evaluate the country's trade competitiveness both in terms of its potential and actual performance visa-vis the country's current political environment.
- Examine South Sudan's current level of export diversification and comparative advantage, and how the conflict affected the export diversification process and the country's comparative advantage.

The research also recommends measures to reduce the impact of conflict on exports and imports.

Data sources and methodology

The hypothesis of this study is that the conflict and fragility situation in South Sudan has significantly affected its international trade, including oil production and export. The research mainly depends on desk reviews of recent literature including secondary data. Indicators of fragility are taken from Uppsala Conflict Data Programme (UCDP). In addition, we have used state fragility index of the Fund for Peace (FFP). The index is based on a conflict assessment framework—known as CAST—developed by the FFP to assess states vulnerability to collapse. The UCDP database has two indicators of violence, i.e., the number of violence and the number of violence induced casualties in a particular country.

Regarding analytical methods, quantitative techniques (mainly the different trade indicators such as Revealed Comparative Advantage, Trade Intensity, and Export Diversification indices) will be employed. IMF's Direction of Trade Statistics (DOTS) and International Trade Centre's (ITC) Trade Map databases will be extensively used to analyse South Sudan's international trade (both imports and exports) patterns and response to episodes of conflict. In addition to this, the country's bilateral trade with its neighbours will be analysed using IMF's DOTS.

To assess SS's comparative advantage and export potential at a commodity level, we employ Symmetric Revealed Comparative Advantage index (SRCA). Revealed Comparative Advantage (RCA) index has been used to assess a country's comparative advantage in the export of a specific product. RCA is computed as follows:

$$RCA_{ij} = \left[\frac{\binom{X_{ij}}{X_{it}}}{\binom{X_{wj}}{X_{wt}}} \right]$$

Where, X_{ij} and X_{it} are country i's export of product j and country i's total export, respectively. X_{wj} and X_{wt} are world exports of product j and total world export, respectively.

RCA can take a value between zero and infinity. If RCA has a value exceeding unity, the country is said to have a revealed comparative advantage in product j.

RCA has its own limitations:

- It can be affected by trade barriers that distort the trade pattern.
- The index is unbounded for products in which a country has comparative advantage, while it's bounded for products in which a country has comparative disadvantage.

For this reason, the study will employ symmetric revealed comparative advantage (SRCA), whose value ranges between -1 and 1, and is defined using the following formula.

$$SRCA_{ij} = \frac{RCA_{ij}-1}{RCA_{ii}+1}$$

Using product-specific export data from the ITC, we will compute SS's comparative advantage in selected products, and how the conflict affected competitiveness in selected products.

2. Literature review

Over the last century alone, the world has seen many devastating wars, including civil conflicts wreaking havoc to humanity and causing lasting adverse impact on the economy. The impact of such wars, especially civil conflicts, could continue even after the war ended. Studies have shown that there are different ways in which civil conflict (wars) impact the economy. Collier (1999) listed out five ways through which conflict damages the economy of a country during the war. Destruction of human and physical infrastructures, disruption of social order, diversion of public expenditure from output-enhancing activities, dissaving following income losses, and capital flights out of the country, are the channels through which the whole economy is impacted by civil wars. Following the outbreak of civil wars, on top of destruction of infrastructures and loss of human lives, scarce resources will also be diverted from output-enhancing activities such as investment on physical and human capitals to the military.

During the tumultuous insecurity and conflict periods, governments usually lack resources to ensure the rule of law. Consequently, the cost of contract enforcements rise and private property rights will not be secured. Improvements in security, which allow governments to reduce military spending, contribute to very large long-run gains in output (Knight et al., 1996). Likewise, conflict paves the way for capital flights out of the country; as the economic environment deteriorates, there will be significant capital flight out of the country. This will have lasting economic impact on the economy even after the civil war ends. The small capital these economies have will leave the countries through multiple illicit channels, including under-invoiced exports and over-invoiced imports (Collier, 1999).

Trade and conflict: Theory

The theoretical perspective on the nexus between trade and conflict (be it civil wars or between nations) are somewhat diverse. But the two dominant views in the political science literature are liberalism and realism perspectives. The liberal view (propagated by Anderton & Carter, 2001; Oneal & Russet, 1997; Doyle, 1997; Polacheck, 1980) argues that trade promotes peace. This view mainly rests on three premises: (1) societies achieve salient economic gains from their trading relationships; (2) continuous conflicts disrupt trade; and (3) premises 1 and 2 enter the calculus of the political decision-making (Anderton & Carter, 2001). If war breaks out between nations or

within, the liberal view assumes that the bilateral trade or the trade volume in general will be hugely reduced. Hence, the reduced trade will have additional opportunity costs on the warring factions besides the direct costs of war. Consequently, salient trade between nations and within nations prior to the outbreak makes war more costly and less likely to happen (Anderton & Carter, 2001). The underlying theory, which assumes that states will be better off if they trade than they would be if they refrain from trade, is the neoclassical trade theory (Barbieri, 2002).

In line with the liberal view, Martin et al. (2008) extended the argument for civil wars and international trade. They argue that, international trade may act as deterrent to escalation towards civil wars if trade gains are put at risk; but it could also be an insurance if international trade provides a substitute to internal trade during the civil wars and reduce the opportunity cost of civil wars for the warring factions (Martin et al., 2008). This theory rests on the fact that an actor country does not initiate conflict against a target country if it expects that this would reduce its profit from trading with that country (Li & Reuveny, 2011). On the other hand, the realists and others dispute the notion that trade promotes peace; rather, trade has a negligible or positive impact on conflict (Barbieri & Levy, 2001; Barbieri & Levy, 1999; Barbieri, 1996; Ripsman & Blanchard, 1996). This school of thought suggests that the impact of trade on conflict is subordinate to other considerations such as military concerns (Barbieri, 2002). Realists imply that trade, especially in strategic commodities, will terminate between the warring factions fearing the other group will gain from continuation of trade and exploit those gains to enhance their military power vis-a-vis the other group(s) (Barbieri & Levy, 1999). Hence, according to the realists view, trade may contribute to conflict and to peace. This implies that we could arrive at a null finding, suggesting that there is no relationship, on average, between trade and conflict (Barbieri, 2002). Reuveny (2001) found that the bilateral trade between two countries and conflict are simultaneously determined. The effects of trade on conflict could be positive or negative; whereas the impact of conflict on trade is negative (Reuveny, 2001).

Despite the two opposing views on the impact of trade on war, both views concur that international trade is usually hampered by conflicts. Both the liberals and the realists imply that trade and other forms of economic exchange between states will cease or be drastically reduced once states are involved in series conflicts with each other (Barbieri & Levy, 1999).

Empirical literature

Recent empirical evidence shows that state fragility² has a lasting economic and social impact on a country. Ncube et al. (2014) found that fragile states lose an opportunity to double their initial GDP per capita after a period of 20 years of conflicts. Another study by Rother et al. (2016) showed that the conflicts in the Middle East and Northern Africa mainly in Iraq, Libya, Syria, and Yemen have caused deep recessions, driven up inflation, worsened fiscal and financial positions, and damaged institutions in addition to tragic loss of life and physical destruction. Such fragile states like South Sudan,

Burundi, Guinea-Bissau, and Liberia, which are heavily dependent on remittance inflows, primary commodity exports, overseas development aid, and concessional financing from multilateral organizations such as the IMF, are inherently vulnerable to global shocks (IMF, 2009; World Bank, 2009).

Fragile and conflict affected states have grown more slowly than other low income countries and have made less progress towards tackling chronic poverty, and persistent inequality remains a key challenge (Jones, 2013). Likewise Collier et al. (2004) found out that a unit increase in the number of months of civil war is associated with a 0.1-1 percentage point increase in the ratio of financial wealth stock held abroad to the total wealth of the country. Bruck (1996) cited in Collier (1999) corroborate the view that some scarce resources, including transport equipment and livestock, could leave the country; in Mozambique during the 1980s civil war, close to 80% of the cattle stock of the country declined. Globally, value added could have been 17% more if there were no wars (de Groot et al., 2015). Collier (1999) also came up with a figure showing that a 15-year civil war would lead to a reduction in GDP by an average of roughly 33%.

The long and protracted Ethiopian civil war (1974-90) had been the major and fundamental factor for the country's high level of poverty and backwardness by suppressing economic activity (Alemayehu, 2004). During periods of the civil conflict, Ethiopia had either very low and even negative GDP growth rates; but following the end of the conflicts, the country's economic revival intensified, registering an average 6% annual growth between 1992 and 1997 (Alemayehu & Befekadu, 2005; Alemayehu, 2004).

On the link between conflicts and specifically trade, rather conflicting evidence has emerged. Some have found evidence confirming the liberal view that trade promotes peace (Hegre et al., 2010; Magee & Massoud, 2011; Martin et al., 2008); while others dispute the pacifying effects of trade and could not find significant impacts of trade on conflicts (e.g., Keshk et al., 2004; Kim & Rousseau, 2005). Furthermore, others argue that exports (especially primary commodity dependence) lead to civil conflicts (Collier, and Hoeffler 2002; Collier & Hoeffler, 2004; Dube & Vargas, 2013; Berman et al., 2014; Maystadt et al., 2014; Calì, 2015). Even though the pacifying impact of trade is not empirically conclusive, much of the studies confirm the adverse impacts of conflicts on trade. Blomberg and Hess (2006) found a sizeable impact of conflict on trade that is equivalent to as much as 30% tariff on trade.

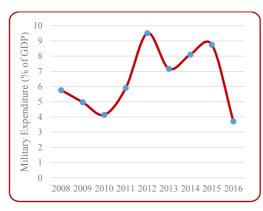
Using a comprehensive data set of civil wars between 1960 and 1990, Collier and Hoeffler (2004) found that primary commodity exports, including oil, raise the risk of conflict, suggesting that primary commodity dependence worsens governance and generates strong grievances. Likewise, Dube and Vargas (2013) found a similar effect using data from Colombia. Berman et al. (2014) also found a strongly significant and quantitatively large impact of mining activities on the likelihood of conflict incidence using data from all African countries. A steep rise in mineral prices between 1997 and 2010 accounted for 13% to 21% of the average violence observed in African countries over this time period.

Contrary to these studies (Collier & Hoeffler, 2004; Dube & Vargas, 2013; Berman et al., 2014), Fearon (2005) found no strong or robust association between primary commodity exports and civil war outbreaks, even using Collier and Hoeffler's (2004) data and model specifications. Fearon (2005) argue that, oil exports (or any other commodity exports) is unlikely to predict the risk of civil war; rather, it could be because high oil exports indicates weaker states, given the level of per capita income possibly raising the prize for the state or secessionist groups. As cited in Fearon (2005), TerryKarl (1997: 61) argue that, given their access to easy revenues from petroleum, few oil exporters sought to supplement state income through substantial increases in domestic taxation; and high stateness in this arena (running the oil industry) occurred at the long term expense of their capacity to build extensive, penetrating, and coherent bureaucracies that could successfully formulate and implement policies. And such commodity exporting economies have less reliable and competent states, which make it more likely for civil war (Fearon, 2005).

3. The wrath of South Sudan's conflicts

Even before the civil war broke out in late 2013, the country had many sporadic conflicts (which are interethnic) in many parts of the country causing significant carnage. According to Uppsala Conflict Data Programme (UCDP), there were around 18 interethnic clashes involving major ethnic groups mainly between Lou Nuer & Murle, Bor Dinka & Murle, and Dinka & Nuer in 2011 alone. The death toll from these skirmishes is estimated to be between 974 and 978. The figure could be much higher if those conflicts involving the Government of South Sudan are included; it was estimated to be around 1200 fatalities. The years 2013 and 2014 were recorded to be the deadliest in terms of fatalities with 1,529 and 1,511, respectively. Geographically, much of the conflicts took place in Unity State followed by Jonglei State and Upper Nile State. Inbetween 2011 and 2016, Unity State saw around 115 conflicts including government involved ones, Jonglei State 106 conflicts and Upper Nile State 39 conflicts. As a result of the country's political situation, South Sudan has consistently been ranked top of the list in terms of state fragility. For example, Fund for Peace has ranked South Sudan as the most fragile state in the world since the civil war broke out in 2013 in different indicators of state fragility, particularly in security situation, economic performance, public service provisions, and refugees and internal displacement situations.

Figure 1: Military expenditure (% of GDP)



Source: SIPRI Military Expenditure Database.

The civil war has contributed to the rise in military expenditure. In 2011, the military expenditure constituted around 6% of its GDP, but by 2015 it rose steeply to nearly 9%, which is considerably higher even by sub-Saharan African countries average of less than 1.5% over the last five years or so. In terms of total expenditures, South Sudanese defense expenditure eats up much of the country's total expenditure. In 2014/15, the country's defense made up more than 30% of its total expenditure.

The civil war has severely impacted the country's oil production (which had been the strategic source of government revenue). Following the country's independence in 2011, oil production reached as high as 350,000 barrel per day (bpd) but fell after a row with Sudan over fees for pumping crude through an export pipeline that prompted Juba to temporarily halt production in 2012. Then in 2013, just before the civil war broke out, oil production was around 245,000 bpd and dropped to 130,000 bpd in January 2017. The war and the subsequent decline in the production of oil together with the collapse of global oil prices have caused deterioration in economic performance in whole parts of the country. The country's GDP, measured in terms of volume (taking 2010 as base year), plummeted by a significant margin following its independence and has remained way below what it was in 2011. The volume of the country's GDP in 2015 was below 80% of what it was in 2010/11. Looking at the components of the country's GDP, it is the export sector which has seen huge drop. Household consumption expenditure (measured in nominal domestic currency) had more than doubled between 2011 and 2015; likewise, government consumption expenditure had jumped from SSP 6 billion in 2011 to nearly SSP 11 billion.

120 100 80 60 40 20 2009 2010 2011 2012 2013 2014 2015 2016

Figure 2: South Sudan's gross domestic product, volume (2010=100)

Source: International Monetary Fund, International Financial Statistics.

In spite of the country's huge investment demand, gross fixed capital formation had remained stagnant over the years owing to the state of the country's political situation. In 2011, gross capital formation was more than SSP 5 billion; but following the halt in oil production due to the border dispute with Sudan, capital formation nosedived to SSP 3.1 billion in 2012; since then, the growth in capital formation has stayed sluggish and way below the country's huge investment needs. Yet, measured as percentage of GDP, capital formation hovers between 9% and 11%. In 2011, it was 9.5% of GDP and showed increment in 2012 to 11.3% despite the fall in absolute terms. On the other hand, the country's export sector has been impacted by the border saga with Sudan and the ongoing civil war. The country's exports of goods and services was north of SSP 35 billion in 2011, which plunged to SSP 3.1 billion in 2012. Since then,

the country's export revenue has remained so volatile and far below what it was in 2011 when the country seceded from Sudan. On the other hand, the country's imports valued at the domestic currency has been increasing, but by a very small margin. It increased from SSP 14.5 billion in 2011 to SSP 21.5 billion in 2015.

Table 1: South Sudan's national accounts components (in millions of nominal domestic currency)

	Household Consumption Expenditure	Government Consumption Expenditure	Gross Fixed Capital Formation	Exports of Goods and Services	Exports (% of GDP)	Imports of Goods and Services	Imports (% of GDP)
2011	20,754	6,725	5,056	35,208	66.1	14,467	27.2
2012	30,906	7,013	3,463	3,096	10.1	13,835	45.1
2013	31,372	8,261	4,488	11,458	28.4	15,200	37.6
2014	32,751	9,444	4,553	16,502	34.8	15,945	33.7
2015	49,469	10,797	5,123	9,837	18.3	21,487	39.9

Source: International Monetary Fund, International Financial Statistics.

The deterioration of the country's economic performance has resulted in worsening of living standard and food insecurity among the population. According to FAO, in 2014-2016 more than 10 million people in South Sudan were severely food insecure, which makes the country one of the highest prevalence rate of food insecurity in the world. Similarly, large numbers of people have either been internally displaced or fled the country to neighbouring countries. According to UNOCHA, as of December 2017 more than 1.9 million people have been internally displaced. UNHCR also reports that 2.4 million South Sudanese are living as refugees and asylum seekers, of which 42.5% are hosted by Uganda, 31.6% by Sudan, and 17.6% by Ethiopia.

South Sudanese exports and imports

Like any typical fragile state, South Sudanese economy is highly dependent on few primary commodities, mainly on oil. Hence, its exports are chiefly dominated by crude petroleum oils and oils obtained from bituminous minerals. In 2016, for example, crude petroleum made 99% of South Sudan's exports and much of these exports go mainly to China. This makes South Sudan vulnerable to global oil prices shocks and economic slowdown and rebalancing in China.

The border dispute between Sudan and South Sudan severely affected oil production and exports (particularly of South Sudan). In the early days of the country's independence, South Sudan had relatively one of the most open economies in the region owing to the small size of the country's economy as measured by imports and exports as percentage of GDP. In 2011, the country's exports constituted more than 71% of GDP and its imports made close to 30%. But in 2012, exports as percentage of GDP plunged to less than 10% while that of imports increased to 34%. Amid all the conflicts, imports (as percentage of GDP) have continued to grow over the years

reaching around 62% in 2016 partly due to the fall in violence rate. On the other hand, exports (% of GDP) fluctuated highly; in 2013 exports were 28% of GDP, which increased to 34% in 2014 and then declined to 21% in 2015; then in 2016 it jumped to 55%.

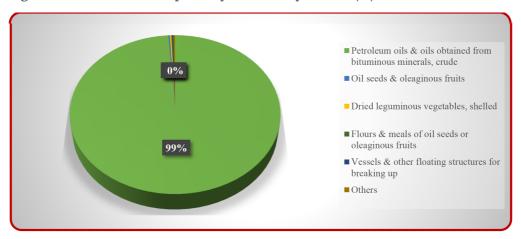
In 2011: South 80 Sudan gained independence 2016 April: Riek Machar 70 returned to Juba and sworn-in as first vice-president in 60 **2012 April:** South Sudan troops occupied a new unity gov't - bu sacked in <mark>July after fu</mark>rther 50 il field and border town of Heglig before being repulsed. Sudanese warplanes conflict a<mark>nd went bac</mark>k 40 aid the <u>Benti</u>u area in South Sudan 30 20 10 2011 2012 2013 2014 2015 2016 ■ Imports of goods and services (% of GDP) ■ Exports of goods and services (% of GDP)

Figure 3: South Sudan's exports and imports (% of GDP)

Source: World Bank, World Development Indicators.

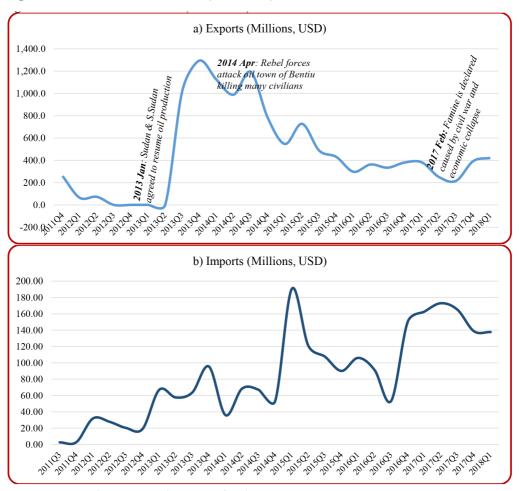
In absolute terms, both the exports and imports have shown an erratic pattern (particularly exports). The quarterly merchandise exports of South Sudan was close to US\$260 million (in the last quarter of 2011); but the military standoff with Sudan over the border had harmed its exports revenues because of the drop in oil production. The country's exports plummeted significantly from its peak in Q4 of 2011 to less than US\$65 million in the first quarter of 2012. But in the second half of 2013, just before the civil war broke out, South Sudan's exports leapfrogged by huge margin; in the first half of that year, the country's total exports were less than US\$3 million which jumped to US\$2.4 billion. This is due to the fact that in the first quarter of 2013, the governments of Sudan and South Sudan agreed to resume pumping oil after a bitter dispute over fees that saw production shut down more than a year earlier; and also agreed to withdraw troops from their border area to create a demilitarized zone. But since the last quarter of 2013 (which coincided with the breakout of the civil war), the country's exports (quarterly) has nosedived to the pre-conflict period and has continued to drop.

Figure 4: South Sudan's exports by commodity in 2016 (%)



Source: International Trade Centre's Trade Map.

Figure 5: South Sudanese trade (2011-2017)

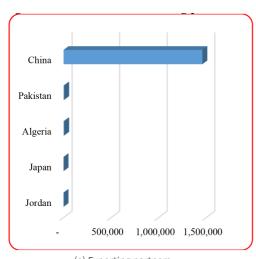


Source: International Monetary Fund, Direction of Trade Statistics.

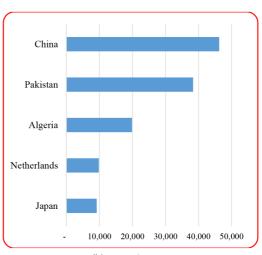
Imports, on the other hand, had been growing steadily on quarterly basis until the last quarter of 2013. However, the civil war had evidently impacted the country's imports. Following the outbreak of the civil war, South Sudan's imports in 2014 declined by more than 20% compared to 2013. But in 2015, it recovered and exceeded the pre-crisis level. In Q1, 2015 alone, the total imports reached around US\$152 million. In-between Q1, 2015 and Q3, 2016, the country's imports had downward trend. Then since Q4 of 2016, the country has registered growing imports. In the first half of 2017, merchandise imports valued around US\$295 million.

Food items (such as rice, wheat, and cereal floor) constitute the major imported items for the country following cane or beet sugar. Before the civil war broke out, vehicles, machinery, mechanical appliances, and electrical machinery and equipment were key import items besides sugar. In 2016, around US\$53 million of the country's imports were cane or beet sugar, whereas food items made more than US\$31 million of its imports. The ongoing political instability could really make it difficult for the government to diversify its economy away from oil dependency. Unlike its exports markets, South Sudan's importing partners are relatively diversified, yet China remains the top importing partner followed by Pakistan, Algeria, the Netherlands, and Japan. Despite the low level of official trade between South Sudan and its neighbours, reports show that there is huge cross-border trade going on mainly in agricultural commodities such as maize, sorghum, rice, and sheep, as well particularly between South Sudan and Uganda (East Africa Cross-border Trade Bulletin, 2017). For example, in-between April and June of 2017, Uganda exported more than 26,000 MT of maize and 6,174 MT of sorghum to South Sudan.

Figure 6: South Sudan's trading partners in 2016







(b) Importing partners

Private sectors

The ongoing civil war in South Sudan has hindered the country's effort in building the necessary institutions which could facilitate formal markets and ensure enforcement of property rights under which the private sectors flourish and contribute to the country's development. The country has consistently been ranked bottom in most of the indicators of doing business by World Bank; and the country's scores for these indicators are far from the best performing economies across the globe as measured by distance to frontier. Starting a new business has remained to be the greatest challenge and the country has been ranked 181st among 190 countries; and distance to frontier score in starting a business in 2017 was 54, suggesting that South Sudan was 46 percentage points away from the frontier (or best performing economies) in terms of ease of starting a new business.

Worse than that, South Sudan businesses have difficulty in getting electricity and resolving insolvency, and DTF score for these two indicators were zero, implying that the country was 100 percentage points away from the frontier economies in terms of access to electricity and resolving insolvency. Consistent with this, World Bank studies shows that in 2014, South Sudanese firms reported that 94% of their power supply comes from generator. Similarly, trading across borders and accessing finances are the other great challenges facing the private sectors in South Sudan.

Genting with construction permits

Registreting property Construction for the Construction of the Construc

Figure 7: Distance to frontier (DTF) on doing business indicators in 2017

Source: World Bank Doing Business.

Despite the fact that the country has vast infrastructure needs, the conflict has exacerbated the country's infrastructure deficiency which significantly impede private sector investment. Accordingly, close to half of business enterprises in the country report transportation as a major constraint. The conflict has hindered the government's effort in expanding the much needed physical infrastructure and social services throughout the country.⁷

On top of that, firms (around 48%) pay for security mainly because the political instability has eroded public trust in the government. The political unrest has also been mentioned (by more than 30% of firms) as the biggest challenges for day to day operations and growth of business enterprise in the country.

Table 2: South Sudanese firms growth constraints (%)

S. No:	Constraints	Per cent
1	Political instability as the biggest challenge	30.4
2	Competing against unregistered or informal firms	69.8
3	Give gifts in meeting with tax officials	30.6
4	Corruption as a major constraint	40.1
5	Transportation as a major constraint 46.2	
6	Give gifts to get a construction permit	46.1
7	Firms paying for security	47.9
8	Capacity utilization (%)	67.7

Source: World Bank Enterprise Survey (2014).

The ongoing conflict has depleted our foreign exchange reserves, as domestic oil production and global oil prices has gone down, and given the fact that we do not have any other major exports to bring in foreign currency.

Because of the conflict and collapse of the economy, it has become difficult for the Government of the Republic of South Sudan to meet its financial obligations, including paying financial contributions required by different regional blocs such as the East African Community (EAC). For example, South Sudan is now in arrears of over US\$15 million not paid to the EAC Secretariat. It has also been difficult for the country to implement the various protocols required for regional integration. Again, this is the case with the EAC, where South Sudan is able to implement the roadmap to fully integrate into the EAC.

After the onset of the conflict, many businesses, including those that came from the region, could not find foreign currency to import raw materials to do their business and eventually closed down. For example, The SSBL Ltd., a South African soft drinks and beer producing company in South Sudan, closed its subsidiary. Similarly, many businesses, including regional banks, either relocated or completely closed their businesses.

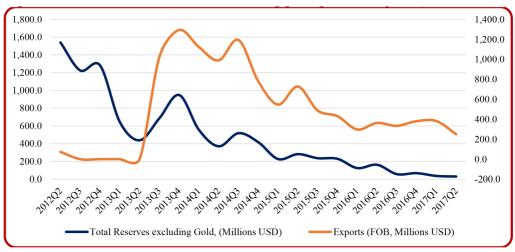
The destruction of physical infrastructure (roads, power and even telecommunications) and lack of formal banking services have hugely constrained the non-existent private sector. Even though it has severely affected our export sector, the conflict has created an enabling environment for informal trade, especially that of cross-border.

Source: Key informants interview.

International reserves, exchange rates and prices

Following the drop in the country's exports, South Sudan has significantly depleted its foreign reserves over the course of the civil war. In May 2012, the country's total reserves excluding gold were around US\$1.8 billion. But by July 2017, the country's total reserves dwindled to only US\$27 million, which is far below the reserves required to finance the country's three months of imports. In June 2016, the Deputy Central Bank Governor of South Sudan publically confessed that the country's foreign reserves could only cover five weeks of the country's imports.⁸

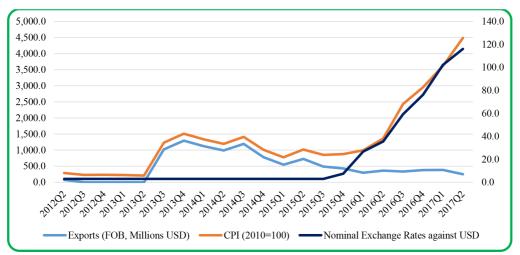
Figure 8: South Sudan's total reserves excluding gold against its exports (in US\$ million)



Source: International Financial Statistics (IFS).

Up until the last quarter of 2015, the South Sudanese Pound was pegged against the US dollar at 2.95 per USD. But the depletion of the reserves had forced the government to float the exchange rate in December 2015 that led to a substantial depreciation of SS Pound. In the first month of 2016, the official exchange rate (end of period) per the US dollar was 19.79; but since the second quarter of 2017, the official exchange rate has hovered around 118 per dollar. The continuous depreciation of South Sudanese Pound in the last 2-3 years has, in turn, led the country into a state of hyperinflation. As of February 2017, consumer price index (measured at 2010=100) reached a staggering level of 3,657.7. As a result of skyrocketing prices (especially that of food), both rural and urban households faced huge challenges in affording the minimum food baskets (World Bank, 2016).

Figure 9: CPI, nominal exchange rates against USD and exports (in US\$ millions)



Source: International Financial Statistics (IFS).

4. The impact of the conflict on South Sudan's trade and regional integration

Conflict vs South Sudan trade

The graphs in figures 10 and 11 show the relationship between South Sudan's trades (exports and imports) and the number of causalities due to the ongoing civil war gripping the country. The graph in Figure 10 reveals the fact that the country's trade (exports), like in any fragile country, are volatile owing to the country's dependence on oil. In addition, it shows that both the value of exports and number of conflict-induced causalities move in the same direction implying a possible rapacity (sometimes called state prize) effect—a rise in income from commodity exports increases the likelihood of conflict by raising the return to predation and promoting rapacity over these resources (Dube & Vargas, 2013; Abidoye & Calì, 2015). The correlation coefficient between exports and number of violent-induced deaths is close to 0.6. implying that the two variables are related. Hence, theoretically, this robust and positive association between the country's exports (which is mainly dominated by oil) and conflict (measured by the number of conflict-induced fatalities and number of conflicts in the country) seems strongly in line with the resource scarcity perspectives which predicts that trade, especially that of commodity exports, promotes civil war contrary to the liberalists and realists views.

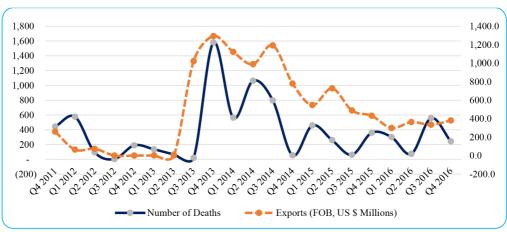


Figure 10: SS exports vs number of conflict related fatalities

Source: Author's computation based on IMF's Direction of Trade Statistics and Uppsala Conflict Data Programme (UCDP).

Empirically, there are many studies showing that high commodity export dependence increases the risk of civil war, especially in those nations with weak institutions (Collier and Hoeffler, 2002; Collier & Hoeffler, 2004; Dube & Vargas, 2013; Calì, 2015). Commodity export dependence raises the risk of conflict through different channels: financing rebels, worsening corruption, increasing the incentive for secession, and increasing exposure to shocks (Collier & Hoeffler, 2004). Therefore, this is consistent with Calì (2015) who found that, a 10% increase in the value of exports raises the risk of conflict by 2.2%, on average, across countries. Similarly, Dube and Vargas (2013) found that, a rise in oil prices increased both municipal revenue and violence differentially in the oil region of Columbia. In Democratic Republic of Congo, Maystadt et al. (2014) showed that granting of mineral concessions by the government at the district level exacerbate the level of violence.

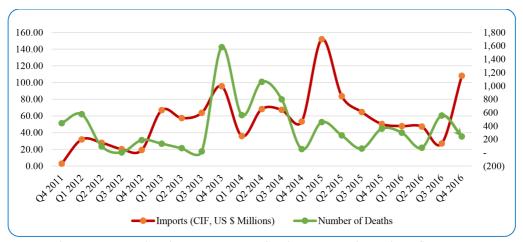


Figure 11: SS imports vs number of conflict casualities

Source: Author's computation based on IMF's Direction of Trade Statistics and Uppsala Conflict Data Programme (UCDP).

Similarly, the relationship between conflicts and South Sudanese imports seems positive looking at the medium-term trends (Figure 11). But looking closely at both imports and the number of casualties, it seems that imports considerably dropped when the number of fatalities increased and vice versa, suggesting that the violence and the subsequent fall in foreign reserves have made it difficult to import. It also shows that the country's imports have been much unpredictable and so volatile over the course of the country's civil war. Over the time period between Q4, 2011 and Q4, 2017, we have tried to compute the correlation coefficient between imports and the number of deaths and found that it is very low (i.e., 0.0137), suggesting that the impact of the conflict on the import side is more observed in terms of making the imports so volatile.

In general, it can be inferred from the graphs in figures 10 and 11 that the political unrest has severely impacted both the exports and imports sectors. The conflict has

disrupted the country's oil production (which the country heavily depends on for government revenue and exports earning); the fall in domestic oil production has left its export sector and the economy in tatters. The export revenue has dramatically plunged, which contributed to the depletion of the country's foreign reserves. The depletion of the foreign reserves and the depreciation of the country's currency have fuelled inflation resulting in hyperinflation. So all these factors combined have paralyzed the economy of South Sudan to the brink of collapse; this, in turn, leads to macroeconomic instability, high exposure to global shocks and exasperates the poverty level in the country (as price hikes and continuous depreciation of South Sudan's Pound disproportionately affects the poor). Therefore, the country could be in a vicious cycle of conflict and macroeconomic instability.

Does the conflict impact South Sudan's comparative advantages?

The ongoing civil war in South Sudan has considerably impacted the country's exports, which have been dominated mainly by crude petroleum and very few primary agricultural commodities such as natural gums, resins, gum-resins, balsams and other natural oleoresins as well as wood charcoal. It may also affect the competitive advantage through its impact on the trade pattern of the country (Ahsan & Iqbal, 2017). Hence, we employ the Revealed Comparative Advantage (RCA) index to quantify the commodity-specific degree of comparative advantage and to reveal the change in competitive advantage and trade pattern. RCA indicates the importance of a specific industry in the exports of a particular country relative to the weight that this industry has in the area and is therefore a measure of relative specification (Ginzburg & Simonazzi, 2005). Using 4-digit Harmonized System (HS) commodity classification, we have computed the comparative advantage of South Sudan for the years between 2012 and 2016.

The result (see Appendix 3) shows that the country's comparative advantage has been impacted by the conflict. Over the years (between 2012 and 2016), the number of commodities South Sudan has comparative advantage has changed; in 2012, the country had comparative advantage on six commodities constituting chiefly primary commodities such as crude petroleum oil, natural gums, dried leguminous vegetables, hides and skins of goats, sheep or lambs (tanned or crust). But in 2013, its comparative advantage narrowed down to only three commodities (crude petroleum, skins of sheep or lambs, and natural gums).

As the country's exports relatively increased in 2014 in variety as well volume, the number of commodities South Sudan had comparative advantage increased in terms of varieties of commodities. In addition to skins of sheep or lambs and crude petroleum, oil seeds and flour meals of oil seeds, as well as grain sorghum emerged as important commodities for South Sudan. In 2016, the country had comparative advantage on more commodities (eight commodities) and new commodities have

gained importance for South Sudan in comparative advantage such as groundnuts and inorganic or organic compounds of mercury. Hence, the result from the RCA reveals that when the conflict intensifies throughout the country, the number of commodities South Sudan has RCA fall and vice versa, implying that the violence has impacted the country's comparative advantages. Some commodities such as crude petroleum, natural gums and flour meals of oil seeds to some extent remain key export items with high revealed comparative advantages amid all these conflicts in the country. Yet there are some commodities which South Sudan exports consistently over the years without any comparative advantages; these commodities include vegetable products, rice, and natural honey.

What does the violence entail for the country's regional integration process?

Currently, South Sudan is a member of the Intergovernmental Authority on Development (IGAD) and the East African Community (EAC). The country was admitted to the Intergovernmental Authority on Development (IGAD) in November 2011, just four months after it proclaimed its independence. But it took more than five years to fully join the East African Community owing to the Community's requirements that new member states shall meet. Article 3(3) of the EAC Treaty states the conditions for membership. These are: (a) acceptance of the Community as set out in this Treaty; (b) adherence to universally acceptable principles of good governance, democracy, the rule of law, observance of human rights and social justice; (c) potential contribution to the strengthening of integration within the East African region; (d) geographical proximity to and inter-dependence between it and the Partner States; (e) establishment and maintenance of a market driven economy; and (f) social and economic policies being compatible with those of the Community. In April 2016, South Sudan signed the East African Community Treaty on Accession and became full member of the EAC in September 2016 after depositing the instruments of ratification of the East African Community Treaty of Accession. Even though the Community has granted South Sudan a grace period of three years to implement the Treaty in order to become a full member of the economic bloc, South Sudan is expected to ratify the various protocols including the custom union and the common market and align its constitutions with the EAC Treaty.

Given South Sudan's natural resource endowment including oil, minerals, water, forest, and rich arable land, coupled with its geographic location as landlocked country, South Sudan's integration into these regional economic communities (RECs) will benefit, not only South Sudan, but also the region as a whole. South Sudan, which maintains high level of dependence on food imports and face shortage of skilled labour, could also gain from its membership of these RECs through reduction in food import bills and attraction of required expertize from the region. Yet these perceived benefits of South Sudan's integration hinge on the country's ability to

enhance it supply capacity and expand physical infrastructure, harmonize its fiscal, monetary and welfare policies, as well as meet the macroeconomic convergence criterion. But the ongoing violence has been a huge challenge for the Government of South Sudan (GoSS) to fully implement the necessary macroeconomic policies to support economic growth and poverty reduction efforts. By joining the EAC, South Sudan agrees to maintain low inflation, fiscal balance, and register high economic growth. But the macroeconomic situation resulting from the conflict—negative GDP growth (-14% and -6% in 2015 and 2016, respectively), high government budget deficit of more than 20% in 2016, and spiralling inflation—make it difficult for South Sudan to really meet the criterion in East African Community. In addition, the country's full integration with other countries depends highly on the existence of appropriate physical infrastructure and institutions. South Sudan has one of the poorest roads and communication infrastructure, and lacks fully functioning governmental institutions even before the civil war broke out. Alemayehu and Kayizzi-Mugerwa (2012) also argue the macroeconomic policy collaboration and integration as a critical strategy for South Sudan to function as a viable state especially with Sudan for the two countries have had a long history of economic ties and share long common border. Furthermore, such macroeconomic collaborative and peaceful development, particularly between the two Sudans, will thus have a positive effect for the whole region.

The already poor physical infrastructure as well as lack of soft infrastructure has been destructed by the civil wars posing greater challenge for South Sudan to fully integrate with the EAC as well as IGAD countries. Hence, South Sudan fails to attract foreign direct investment (FDI) even from regional member countries, as well as promote its regional trade and diversify its oil-dependent economy; and now it is struggling to settle its membership fees to the RECs. By September 2017, South Sudan was expected to pay US\$6,715,064 for the 2016/2017 financial year in arrears, and US\$8.37 million towards the 2017/2018 East African Community budget like other partner states (The East African, 2017).

Consequently, the country lags far behind other countries in the region in terms of integrating with the RECs. According to UNECA (2016) report on regional integration, South Sudan lags far behind the region in different dimensions of regional integration, particularly in trade, productive, financial and macroeconomic integration, as well as free movement of people.

5. Conclusion and policy implications

Even before the civil war broke out in December of 2013, South Sudan had seen sporadic conflicts throughout the country involving ethnic groups as well as the government. But the eruption of the civil war in 2013 worsened the country's situation and the economic woes of this young nation. Beyond the economic situation, the conflict has led to a regional humanitarian crisis affecting many of the neighbouring countries particularly Uganda, Sudan, and Ethiopia. According to recent UNOCHA reports, an estimated 1.9 million people are internally displaced, and close to 2.4 million South Sudanese are living as refugees and asylum seekers mainly in Uganda, Sudan, and Ethiopia.

Over these years, the country's Gross Domestic Product (GDP) has contracted significantly; in 2016 and 2017, GDP growth rates were recorded to be -14% and -6%, respectively. Oil production, which is the sole source of government revenue and foreign exchange earnings, plummeted from 245,000 bpd in 2013 to around 130,000 bpd in 2017. Consequently, the country's exports earning (dominated by oil exports constituting around 99%) dwindled by a huge margin, which contributed to the deterioration of the country's foreign reserves that reached a point where it only covers five weeks of imports in 2016. Then the government was forced to float its currency against the dollar which resulted in continuous depreciation of the South Sudanese Pound (SSP), which in turn fuelled inflation.

Owing to the country's reliance on oil, the conflict has aggravated the volatility and unpredictability of exports. Interestingly, exports (merchandise) and different measures of conflict (the number of conflicts and number of conflict-induced fatalities) seem highly correlated, suggesting a possible rapacity (or state prize) effects as observed in many African countries and other conflict-prone countries including Colombia. It implies that the country's heavy dependence on oil revenue raises the risk of violence. But on the import side, the conflict has resulted in the volatility as well as fall in the country's imports owing to shortage of foreign reserves.

South Sudan does not trade at all with regional countries (looking at the official data) despite its membership with the EAC and IGAD. Rather, it heavily relies on China for its exports as well as imports. More than 95% of the country's export (dominated by crude petroleum) goes to China, making the country vulnerable to the global commodity price shock as well as economic slowdown and rebalancing in China. Due to its undiversified exports, it has a comparative advantage on very few commodities

mainly on crude petroleum, natural gums, and flour meals of oil seeds. It shows that the country's comparative advantage has been impacted by the conflict; as the conflict intensifies in the country, the country's RCA narrows down to small number of commodities and vice versa.

The civil war has wreaked havoc to the country's physical infrastructure and further weakened the non-existent government institutions. All these have made it more difficult for the Government of South Sudan (GoSS) to fully implement the necessary macroeconomic policies, particularly the macroeconomic convergence criterion. Despite its membership in the EAC and IGAD, the existing situations hinder the country's integration into the regional economies. And the country fails to realize the perceived benefits of its membership in the RECs such as attracting FDI, promote its regional trade, and diversify its oil-dependent economy.

Policy implications

The Government of South Sudan faces multifaceted problems that include the unresolved political fragility, worsening humanitarian situation, and disruption of economic activities including oil production. All these factors have made the economic prospects of this young nation bleak in the years to come. Hence, in order to fully utilize its untapped natural resources beyond oil, South Sudan needs to:

- Promote peaceful coexistence between the various ethnic groups; and the warring factions in the country should respect the cessation of hostilities agreement facilitated by IGAD;
- Diversify its economy away from oil dependence through enhancing water supply capacity which could make the agriculture sector more competitive;
- Implement sound macroeconomic policies (maintaining stable prices, and ensuring that debt ratios and the current account on balance of payment are sustainable, and pursuing sound fiscal policies);
- Harmonize its fiscal and monetary policies to facilitate its integration into the regional economies, especially with the East African Community (EAC); and
- Strengthen its institutions which are critical to foster the private sector participation in the economy; and ensure rule of law, guarantee property rights, and contract enforcement.

Notes

- 1. HESPI. 2017. Macroeconomic Performance and Status of Industrialization in IGAD. The Horn Economic and Social Policy Institute, Addis Ababa, Ethiopia.
- Fragility is defined as the combination of exposure to risk and insufficient coping capacity of the state, system and/or communities to manage, absorb or mitigate those risks. Fragility can lead to negative outcomes including violence, the breakdown of institutions, displacement, humanitarian crises or other emergencies (OECD, 2016).
- 3. BBC's South Sudan Profile Timeline https://www.bbc.com/news/world-africa-14019202
- 4. https://reliefweb.int/sites/reliefweb.int/files/resources/Quarterly%20GHA%20 Cross%20Border%20Trade%20Bulletin%20July%202017.pdf
- 5. An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represent the frontier. For example, a score of 75 in 2017 means an economy was 25 percentage points away from the frontier constructed from the best performances across all economies and across time. A score of 80 in 2018 would indicate the economy is improving.
- 6. World Bank Enterprise Survey.
- 7. http://www.undp.org/content/dam/undp/library/crisis%20prevention/UNDP_FamineStudy_SouthSudan_2017.pdf
- 8. Sudan Tribune. Available at http://www.sudantribune.com/spip.php?article59388
- 9. World Bank. 2016. South Sudan Economic Overview. Available at http://www.worldbank.org/en/country/southsudan/overview
- 10. Revealed comparative advantage (RCA) index is used to assess a country's comparative advantage in the export of a specific product. RCA is computed as follows:

$$RCA_{ij} = \left[\frac{\binom{X_{ij}}{X_{it}}}{\binom{X_{wj}}{X_{wt}}} \right]$$

• Where, Xij and Xit are country i's export of product j and country i' total export, respectively. Xwj and Xwt are world exports of product j and total world export, respectively.

RCA can take a value between zero and infinity. If RCA has a value exceeding unity, the country is said to have a revealed comparative advantage in product *j*.

RCA has its own limitations:

- It can be affected by trade barriers that distort the trade pattern.
- The index is unbounded for products in which a country has comparative advantage, while it's bounded for products in which a country has comparative disadvantage.

For this reason, the study will employ symmetric revealed comparative advantage (SRCA), whose value ranges between -1 and 1, and is defined using the following formula.

$$SRCA_{ij} = \frac{RCA_{ij} - 1}{RCA_{ij} + 1}$$

• Where, *Xij* and *Xit* are country *i*'s export of product *j* and country *i*' total export, respectively. *Xwj* and *Xwt* are world exports of product *j* and total world export, respectively.

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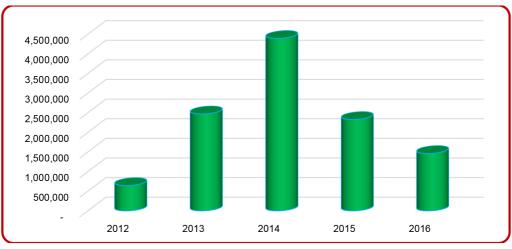
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Appendixes

Appendix 1: South Sudan's exports of petroleum oils and oils obtained from bituminous minerals, crude (in '000 US\$)



Source: International Trade Centre's Trade Map.

Appendix 2: South Sudan's imports by commodities (in '000 US\$) in 2016

Cane or beet sugar and chemically pure sucrose, in solid form	53,400
Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic	
uses	
Motor cars and other motor vehicles	11,214
Rice	10,720
Palm oil and its fractions, whether or not refined (excluding chemically modified)	10,688
Wheat flour	10,499
Cereal flours	9,768
Cement, incl. cement clinkers	8,132

Source: International Trade Centre's Trade Map.

Appendix 3: The Symmetric Revealed Comparative Advantage (SRCA) for South Sudan, 2012– 2016^{10}

Year	Product Code	Product Label	SRCA
2016	'2852	Compounds, inorganic or organic, of mercury, whether or not chemically defined (excluding amalgams)	0.265
	'4402	Wood charcoal, incl. shell or nut charcoal, whether or not agglomerated (excluding wood charcoal)	0.387
	'0713	Dried leguminous vegetables, shelled, whether or not skinned or split	0.499
	'1202	Groundnuts, whether or not shelled or broken (excluding roasted or otherwise cooked)	0.524
	'1301	Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins	0.754
	'1207	Other oil seeds and oleaginous fruits, whether or not broken (excluding edible nuts, olives)	0.817
	'2709	Petroleum oils and oils obtained from bituminous minerals, crude	0.919
	'1208	Flours and meals of oil seeds or oleaginous fruits (excluding mustard)	0.931
2015	'4402	Wood charcoal, incl. shell or nut charcoal, whether or not agglomerated (excluding wood charcoal)	0.164
	'1301	Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins	0.577
	'4105	Tanned or crust skins of sheep or lambs, without wool on, whether or not split (excluding further)	0.652
	'1207	Other oil seeds and oleaginous fruits, whether or not broken (excluding edible nuts, olives)	0.660
	'2709	Petroleum oils and oils obtained from bituminous minerals, crude	0.911
	'1208	Flours and meals of oil seeds or oleaginous fruits (excluding mustard)	0.921
2014	'1207	Other oil seeds and oleaginous fruits, whether or not broken (excluding edible nuts, olives)	0.134
	'1208	Flours and meals of oil seeds or oleaginous fruits (excluding mustard)	0.589
	'4105	Tanned or crust skins of sheep or lambs, without wool on, whether or not split (excluding further)	0.743
	'2709	Petroleum oils and oils obtained from bituminous minerals, crude	0.861
	'1007	Grain sorghum	0.926

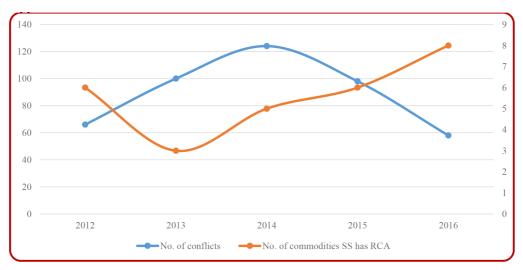
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Appendix 3 Continued

Year	Product Code	Product Label	SRCA
2013	'1301	Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins	0.029
	'4105	Tanned or crust skins of sheep or lambs, without wool on, whether or not split (excluding further)	0.833
	'2709	Petroleum oils and oils obtained from bituminous minerals, crude	0.847
2012	'1301	Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins	0.110
	'0713	Dried leguminous vegetables, shelled, whether or not skinned or split	0.313
	'4106	Tanned or crust hides and skins of goats or pigs, reptiles and other animals.	0.328
	'4103	Other raw hides and skins, fresh, or salted, dried, limed, pickled or otherwise preserved	0.471
	'2709	Petroleum oils and oils obtained from bituminous minerals, crude	0.832
	'4105	Tanned or crust skins of sheep or lambs, without wool on, whether or not split (excluding further)	0.973

Source: Authors Computation Based on International Trade Centre's Trade Map.

Appendix 4: Number of conflicts and Number of commodities SS has RCA



Source: Authors computation based on International Trade Centre's Trade Map.



Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

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