

# **Analysis of Productive & Service Sectors from viewpoint of their contributions on Real GDP and National Development Expenditure**

## **Introduction**

On 11 April 2019, Sudan's President Omar al-Bashir was overthrown by a popular revolution ending almost three decades in power. After hundreds of thousands of protesters encircled the military headquarters in the capital Khartoum, ten generals stepped in to remove their former boss, establishing a Transitional Military Council, ostensibly to pave the way for civilian rule. This was a moment that came only after more than four months of continued demonstrations, organized by the Sudanese Professionals Association. On 17 August 2019, Sudan's military and civilian leaders signed a landmark power-sharing deal in the capital, Khartoum, signaling a new chapter in the life of the sprawling African country, which has been rocked by eight months of popular protests, a coup and a bloody military crackdown.

## **Overview of Sudan Macro-economy**

The new government of Sudan will have to deal with a failing economy, and, at the same time, it has to sustain democratic reforms. It will not be easy to reform Sudan's economy after South Sudan seceded on top of three decades of government corruption and domination. When South Sudan seceded following a referendum in 2011, Sudan lost almost half of its budget resources. Consequently, Sudan's oil revenue declined by 75%, resulting in a 60% loss of fiscal revenues and foreign exchange earnings. Although the United States removed most of the Darfur sanctions against Sudan in 2017, the Sudanese government failed to stabilize the economy due to corruption and the government's mismanagement. In addition, Sudan's toxic politics – including Bashir's indictments from the International Criminal Court for crimes against humanity – made it impossible to get relief on Sudan's debt (well over \$50 billion), or obtain new loans from the International Monetary Fund and the World Bank. Today, a hamstrung economy and a deteriorating public service sector continue to haunt the country.

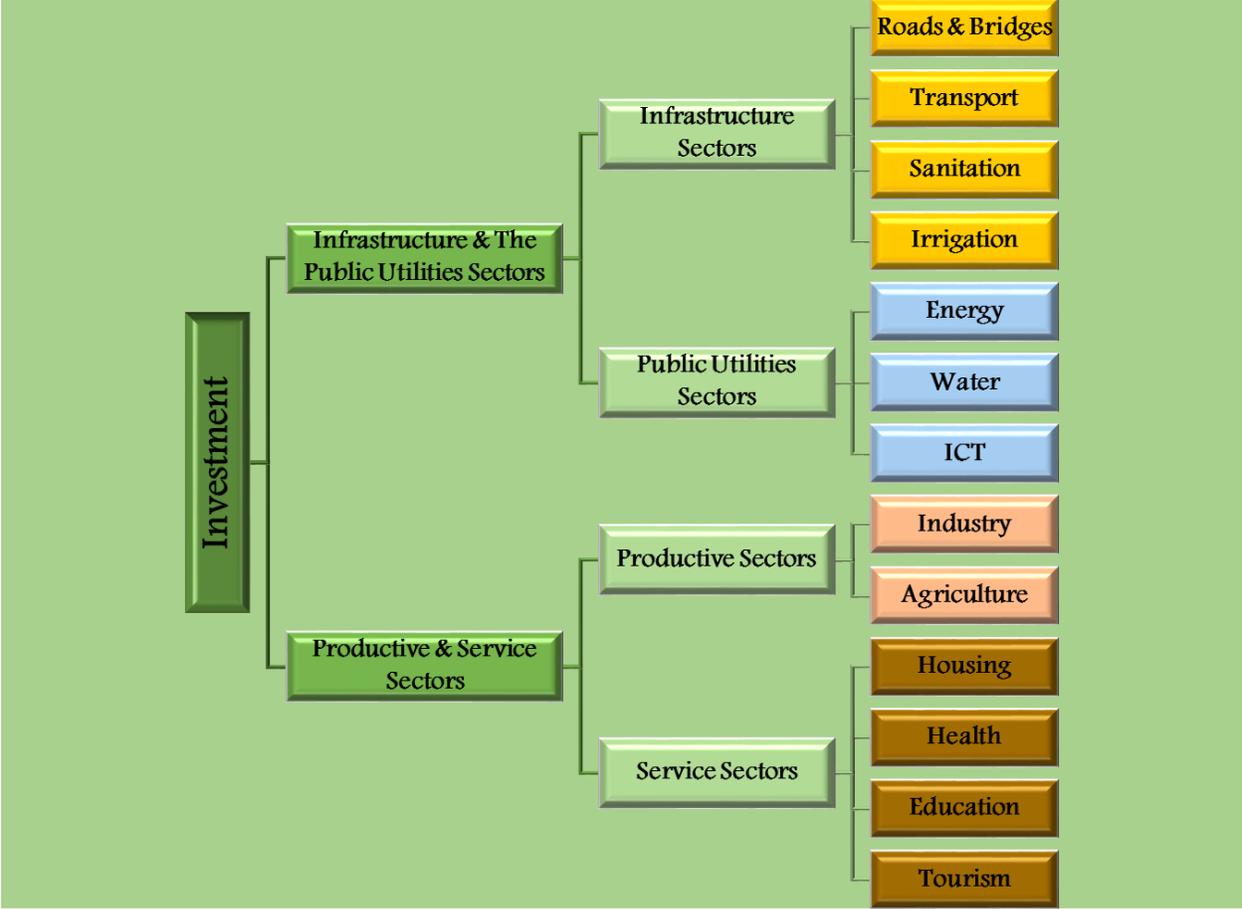
## Investment Role in Achieving UN Sustainable Development Goals

Investment in general is defined as the capital expenditure on new projects related to the infrastructure and the public utilities sectors as well as the economic activity of producing goods and services in the productive and service sectors with the expectation of generating an income or profit. Investments in infrastructure and the public utilities are usually directed to sectors such as roads & bridges, transport, sanitation, irrigation, energy, water and information & communication technology, while investments in productive and service sectors include capital expenditure on sectors such as industry, agriculture, housing, health, education and tourism. Currently, the basic infrastructure like roads, information and communication technologies, sanitation, electrical power and water remains scarce in many developing countries. According to the United Nations statistics, an estimated 3.8 billion people still do not have access to the internet, representing 80% of the population in the least developed countries. Moreover, 3 billion people worldwide lack access to basic sanitation and 3 in 10 people lack access to safely managed drinking water. As a result, for many African countries, particularly the lower-income countries, the existent constraints regarding infrastructure affect companies' productivity by around 40%. However, it has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure and public utilities. Thus, investments in infrastructure and public utilities sectors are crucial to achieving sustainable development and empowering communities in many countries including Sudan.

Globally, it has been proven that manufacturing is an important driver of economic development and the creation of employment opportunities. According to the United Nations statistics, the global share of manufacturing value added in GDP increased from 15.2% in 2005 to 16.3% in 2017, driven by the fast growth of manufacturing in Asia. Small and medium-sized enterprises that engage in industrial processing and manufacturing are the most critical for the early stages of industrialization and are typically the largest job creators. They make up over 90% of business worldwide and account for between 50-60% of employment opportunities. Furthermore, in 2015, medium-high- and high-technology sectors accounted for 44.7% of total manufacturing value added globally. The value added reached 34.6% in developing economies, up from 21.5% in 2005. At the current time, however, manufacturing value added per capita is only US\$100 in the least developed countries compared to over US\$4,500 in Europe and Northern America. However, industrialization's job multiplication effect has a positive impact on society. Every job in manufacturing sector creates 2.2 jobs in other sectors.

On the other hand, the carbon dioxide emissions, which in turn associated with the global warming represent the major issue facing the manufacturing sector. The carbon intensity decreased during the period 2000 to 2015 by 19% from 0.38 to 0.31 kilograms of carbon dioxide per dollar of value added. Despite that emissions have decreased over the past decade in many countries, the carbon dioxide emission during the manufacturing processes is still considered as a global issue. In order to achieve

environmental objectives, such as increased resource-efficiency and energy-efficiency, efforts need to be paid to attain technological progress. Without technology and innovation, industrialization will not happen, and without industrialization, development will not happen. More investments in high-tech products that dominate the manufacturing productions to increase efficiency and reduce emissions are highly needed throughout the globe. Finally, economic growth, social development and climate action are heavily dependent on investments in infrastructure and public utilities, sustainable industrial development and technological progress. Therefore, inclusive and sustainable industrial development has been incorporated, together with resilient infrastructure and innovation, as UN Sustainable Development Goal 9 in the 2030 Agenda for Sustainable Development.



In order to achieve country's economic recovery as well as UN Sustainable Development Goals, however, the government should encourage the private sector to increase investments in hard currency and enhance the country's infrastructure such as ports, national railways, and interstate highways. This could be done as part of new Prime Minister Dr. Abdalla Hamdok's two-year strategy in which he asked for US\$8 billion in foreign aid during the next two years to rebuild the devastated economy. The major issues of Dr. Hamdok's strategy include "Making Peace", "Reforming the Economy", "Rehabilitation of Civil Service" and "Adoption of an Unbiased Foreign Policy".

## Performance of Infrastructure, Utilities, Productive and Service Sector in Sudan

According to 55th - 58th annual reports of the central bank of Sudan, the y-o-y GDP growth rate at constant prices increased from 2.68% in 2014 to 5.57% in 2018. Although the overall look of the contribution of the productive sectors, i.e. Agriculture, Manufacturing and Petroleum, on the GDP at constant prices for the past five years shows slight decrease, their corresponding compound annual growth rates (CAGR) demonstrate two digits growth rate registered for Agriculture (29.3%) and Manufacturing (11.06%), while Petroleum sector grew by only 3.98%. Moreover, the contribution of (Electricity & Water), (Trade, Hotels & Restaurants) and (Transport & Communications) sectors on GDP at constant prices increased from 2.65%, 8.87% and 10.66% in 2014 to 2.9%, 8.97% and 11.08% in 2018, respectively. Furthermore, the contribution of Building & Construction sector on GDP at constant prices decreased from 3.46% in 2014 to 1.85% in 2018 accounting for negative CAGR of 30.3% for the same period.

Table (1) demonstrates the contribution of different sectors on GDP at current prices and their corresponding compound annual growth rates (CAGR) for the period 2014 - 2018.

**Table (1): The contribution of infrastructure, utilities, productive and service sectors on real GDP**

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Sector	Contribution on GDP 2014. (%)	Contribution on GDP 2018. (%)	CAGR, 2014 – 2018. (%)
Agriculture, Forests, Animal Resources and Fisheries	28.49	28.23	29.30
Manufacturing	17.36	14.78	11.06
Petroleum, Mining & Quarrying	2.32	1.85	3.98
Electricity & Water	2.65	2.90	42.69
Building & Construction	3.46	1.85	-30.30
Trade, Hotels & Restaurants	8.87	8.97	32.03
Transport & Communications	10.66	11.08	35.63

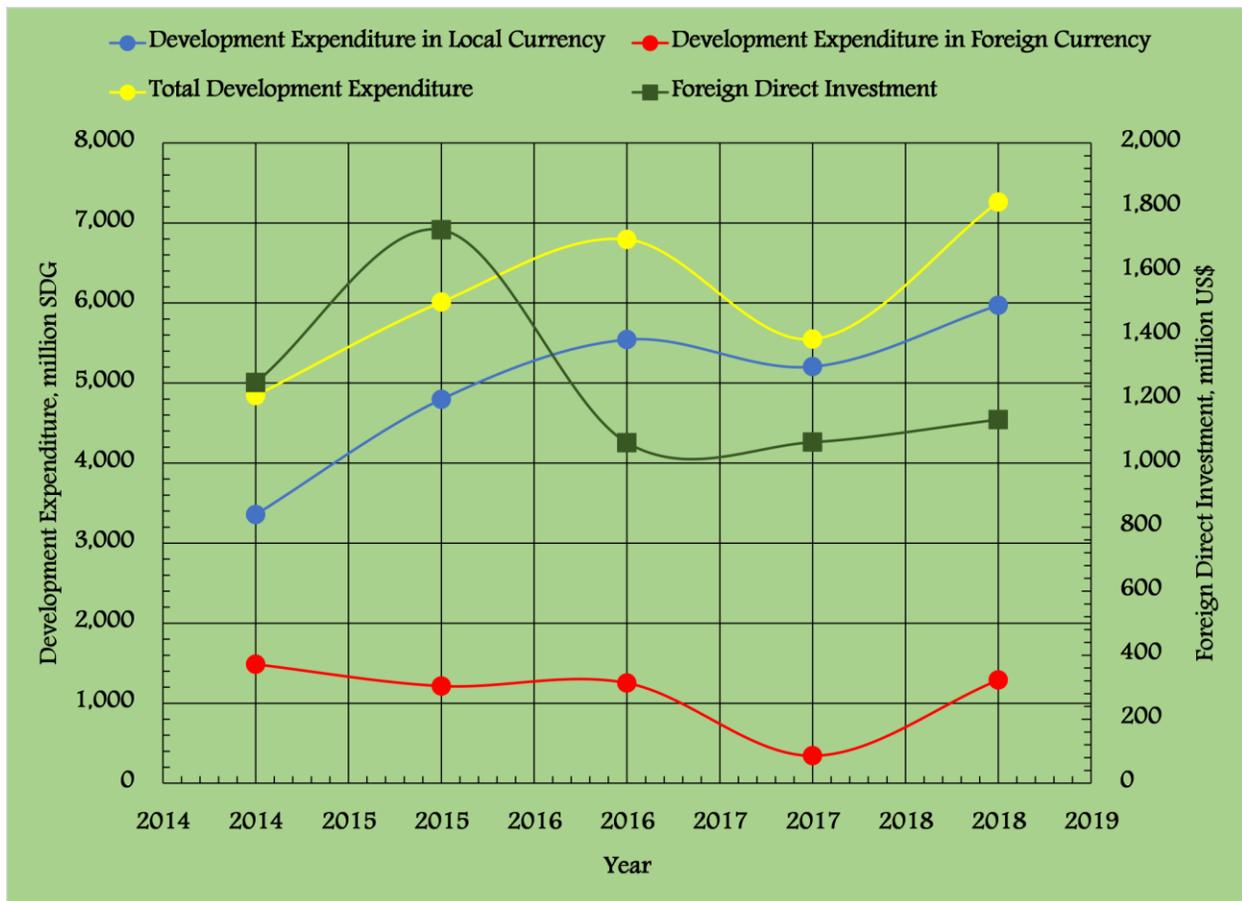
Source: Central Bank of Sudan annual reports. □

Despite the growth rates observed during the period 2014 – 2018 for all sectors except Building & Construction sector, the higher inflation rates prevailed during the same period prevented the development in these sectors as the average inflation rate increased from 36.9% in 2014 to 63.3% in 2018.

## National Development Expenditure

The development of national development expenditure in local and foreign currencies between 2014 and 2018 is demonstrated in Figure (2). Although the national development expenditure increased from SDG 4,843.26 million in 2014 to SDG 7,262 million in 2018, its portion in public expenditure decreased from 8.7% in 2014 to about 4.5% in 2018. The component of foreign currency in national development expenditure decreased from 30.7% in 2014 to 17.8% in 2018 accounting for negative CAGR of 13.22% for the same period.

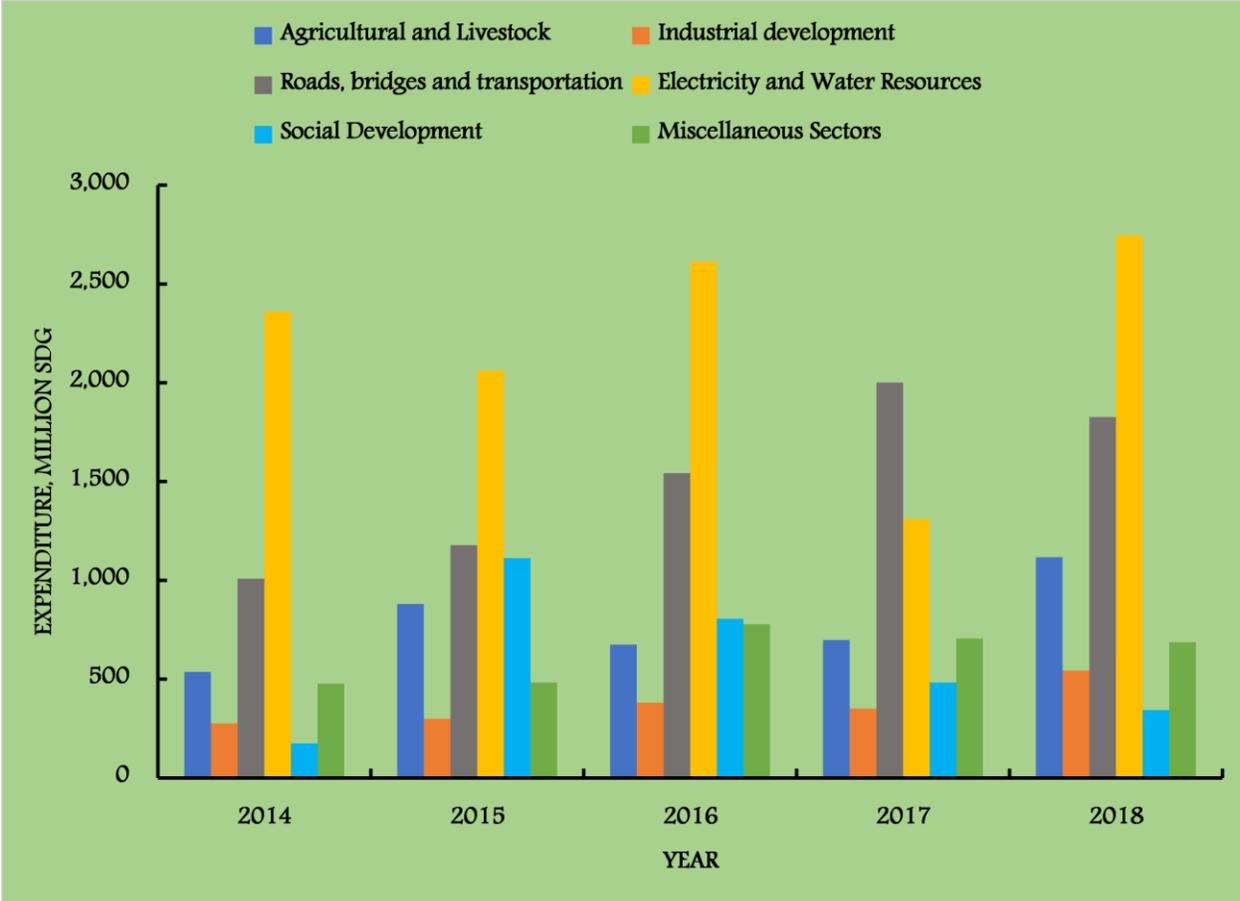
Figure (2): The local and foreign currency component in National Development Expenditure.



It is well known that national development expenditure is tightly linked to the available national resources as well as foreign direct investment. As Sudan has lost almost half of its budget resources since 2011 due to secession of South Sudan, the country relied only since then on external funds such as foreign direct investment and foreign grants to finance national development expenditure as a part of public expenditure. Tracking the foreign direct investment during the past five years shows that it decreased from US\$1,251.3 million in 2014 to about US\$1,135.8 million in 2018 accounting for negative

CAGR of 9.2% for the same period. However, the break-down of national development expenditure is shown in Figure (3).

Figure (3): Development Expenditure by Sectors



It is evident that Agricultural and manufacturing sectors recorded CAGR of 108% and 96.7% during the period 2014 - 2018, respectively. Nevertheless, their contribution together in national development expenditure in 2018 did not exceed 23% in comparison to 25% for Road, Bridges & Transportation and 38% for Electricity & Water sectors. Recalling the contribution of Agriculture & Manufacturing sectors on real GDP in 2018, it becomes clear that the mismanagement for the available country resources as well as corruption made the country reaching the current economic collapse.

## Potential Opportunities for Economic Recovery in Sudan

In the Information Age, the global economy has moved toward the knowledge economy. The knowledge economy is defined as a system of consumption and production that is based on intellectual capital. Knowledge economy relies greatly on intellectual capabilities instead of natural resources or physical contributions. In the knowledge economy, products and services that are based on intellectual expertise advance technical and scientific fields, encouraging innovation in the economy as a whole. However, most economies are composed of three major categories of economic activity in varying degrees: agriculture, manufacturing, and services. Less developed countries tend to have agriculture and manufacturing-based economies. A developing country has manufacturing and service-based economy, and developed countries tend to have service-based economies. Most countries' economies are composed of each of these three major categories of economic activity but in differing proportions relative to the wealth of that country. However, the World Bank defines knowledge economies according to four pillars:

1. Institutional structures that provide incentives for entrepreneurship and the use of knowledge.
2. Availability of skilled labor and a good education system.
3. Access to information and communication technology (ICT) infrastructures.
4. A vibrant innovation landscape that includes academia, the private sector, and civil society.

On the other hand, knowledge-based firms are considered the backbone of the “knowledge economy.” They have been considered to be consistently outperforming the total economy in terms of growth and job creation since the 1970s. Because of their smaller size and the nature of their activities, they imply different challenges for traditional suppliers of finance. Moreover, investment and growth in developed economies is increasingly driven by investment in intangible assets, also known as knowledge-based capital (KBC). In many developed countries, firms now invest as much or more in KBC as they do in physical capital such as machinery, equipment and buildings. This shift reflects a variety of long-term economic and institutional transformations in developed economies.

Yet, Business Entrepreneurship is the fastest growing sector in Sudan. Young entrepreneurs have managed to resist the regime's monopoly in the private sector by creating innovative software-based enterprises that have changed many aspects of Sudanese daily life such as Tirhal and Yalla Natlob, which are smartphone applications for ordering taxis and food. In order to encourage these entrepreneurs, it is highly recommended to review the extent of corporate finance activities in these industries to develop appropriate financing formats. This industry can flourish with international support.

However, the rise of KBC creates new challenges for policymakers, for business and for the ways in which economic activity is measured. Many policy frameworks and institutions are still best suited to a world in which physical capital drove growth. New government in Sudan, in particular Ministry of Industry & Commerce, Ministry of Finance & Economy and Central Bank of Sudan need to have new thinking to improve understanding of current and emerging challenges for policy, in such areas as taxation, competition, intellectual property rights, personal data, and corporate reporting.