Bilateral Trade Analyses Between China and East African Community Countries

Paula Jeanne Ihirwe*
Department of Management and Economics, Tianjin University
300072, Tianjin, China

Godwin Norense Osarumwense Asemota
African Centre of Excellence in Energy for Sustainable Development, University of Rwanda
PoBox 3900 Kigali Rwanda

Samuel Bimenyimana
Department of Electrical Engineering, Hebei University of Technology
300130, Tianjin, China

Abstract
China had held trade and economic relationships with foreign nations including African countries and members of East African Community (EAC) for a long time. This paper analyses the bilateral trade relationships between China and countries, currently members of EAC (Rwanda, Kenya, Burundi, Tanzania, Uganda, South Sudan) from 1980 to 2016. Data from International monetary Fund database (Data set: Goods, value of exports, freight on Board, US Dollars) were gathered and analysed using Excel Data analyses tool. In the context of this paper, Imports stand for trade from China to EAC countries and Exports stand for trade from EAC countries to China. Analyses and results show high exports trade during: 1980-1993 and 1999-2003 for Kenya; 1994-1998 and 2004-2012 for Tanzania; 2013-2016 for South Sudan. Analyses also show astronomically very high imports in recent years for Tanzania, Rwanda, and Kenya, running into Billions of US Dollars. Only South Sudan has recorded positive trade surplus against China, because of its strong oil exporting advantage, while the other EAC countries have very high negative trade imbalances with China. It is strongly recommended that value addition to export products of each EAC member country, would improve the bilateral trade relationships between China and the EAC.

Keywords: China; East African Community, Exports; Imports; Trade

1. Introduction
The East African Community (EAC) is the regional intergovernmental organisation, which initially consisted of Kenya, Uganda and Tanzania, and later to include Rwanda, Burundi and South Sudan. It was established in 2000 with the aim to increase intra-regional trade and raise the prominence of the East African region, internationally. It is headquartered in Arusha, Tanzania. The EAC development was planned to operate in four different phases, which are: Customs Union, Common Market, Monetary Union and Political Federation [1, 2]. China, the world’s second largest economy by gross domestic product (GDP), has trade as key driving factor of its economy. It has held international trade for a long time with many foreign countries [4, 5, 6] and this paper is analysing its bilateral trade with countries currently members of EAC [7-11]. Trade Data (1980-2016) from International Monetary Fund (IMF) database for the current EAC members were gathered and analysed using EXCEL software. These analyses are expected to provide ways and means of reducing the great trade imbalances in the longer term for the EAC. The paper is organized into: Introduction; Items of Trade between China and EAC countries; Analyses/Results; Discussion and Conclusion.
2. Items of Trade between China and EAC Countries

2.1 Rwanda and China
Rwanda imports from China include: (a) Electronic products, (b) Machinery and (c) Light industry products, while Rwanda exports to China comprise: (a) Minerals like Gold, Tin, Tantalum, Vanadium, Zirconium Ore, Coltan, Cassiterite, Wolfram, Niobium, Tungsten, (c) Hides and Skin, (d) Coffee, (e) Tea, and (f) Pyrethrum, a flower used to make insecticide [12-18].

2.2 Uganda and China
Uganda exports to China include: (a) Cotton, (b) Cobalt, (c) Oil seeds, (d) Animal products and leather, (e) Chemical products, (f) Coffee, (g) Copper ores and concentrates, (h) Cotton yarn, (i) Timber, (j) Cocoa, (k) Niobium, (l) Vanadium, (m) Zirconium, (n) Lead ore and concentrates, (o) Ivory, (p) Tortoise shell and horns, (q) Fish (Fresh and dried). The imports from China to Uganda, comprise (but not limited to): (a) Footwear, (b) Telecommunications equipment, (c) Textiles, (d) Medical equipment, (e) Electronic equipment, (f) Batteries, (g) Bags and cases, (h) Motorcycles and parts, (i) Fabrics and textiles, (j) Pharmaceuticals, (k) Bicycles, (l) Furniture, (m) Blankets, (n) Padlocks and keys [19].

2.3 Burundi and China
The imports of Burundi from China are not limited to: (a) Food products, (b) Minerals, (c) Fuels, (d) Chemicals, (e) Plastics or rubber, (f) Hides and Skin, (g) Wood, (h) Textiles and Clothing, (i) Footwear, (j) Machines and Electrical products, and (k) Transportation. The export products of Burundi to China comprise: (a) Minerals like Niobium, Tantalum, Vanadium, Zirconium ore, and (b) Vegetables like Coffee and Tea [20, 21].

2.4 Kenya and China
Kenyan imports from China include: (a) Household electric appliances, (b) Industrial and Agricultural tools, (c) Textile goods, (d) Commodities for daily use, (e) Building materials, (f) Pharmaceutical products, etc. The Kenyan exports to China comprise: (a) Black Tea, (b) Coffee, (c) Leather goods, etc [22, 23].

2.5 Tanzania and China
China exports to Tanzania comprise: (a) Foodstuff, (b) Vehicles, (c) Textiles, (d) Light industrial products, (e) Chemical products, (f) Mechanical equipment, (g) Electric appliances, (h) Steel. Chinese imports from Tanzania, include: (a) Dry Seafood, (b) Raw leather, (c) Log, (d) Coarse Copper, (e) Wooden handcrafts [24].

2.6 South Sudan and China
China’s cooperation with South Sudan focuses on: (a) Oil, (b) Public Health, (c) Education and Capacity Building, (d) Infrastructure, (e) Agriculture Modernisation, (f) Public facilities, (g) Environment Protection, so as to directly benefit livelihoods of the people and favour the socio-economic development of the nation [25-26]. There are also more than 120 Chinese businesses that are registered in South Sudan, which operate in the: (a) Oil Sector, (b) Real Estate, (c) Construction and Services, (d) Clinics, and (e) Merchandising. Also, imports from China comprise: (a) Raw Sugar, (b) Packaged Medicines, (c) Cereal Flours, (d) Air Transportation vehicles, and (d) Cars [25, 26]. It is also worthy to note that South Sudan-China trade has gone beyond US$ 12 Billion per year. It is the only EAC country that trades at a surplus with China, as 92% of the US$ 12 Billion (US$11.04
Billion) trade volume, is export of South Sudan to China [25-26].

3. Analyses and Results

![Graph of Rwanda trade with China (1980-2016)](image1)

Rwanda started exporting to China in 1992, while its imports from China started in 1981. Since all these years, Rwanda’s highest value of imports from China was 13406939 USD in 2013 while its value of exports in the same year was only 348695 USD. Also, Rwanda’s highest value of exports to China was 17574243 USD in 2010 while its value of imports in the same year was 50383126 USD. Rwanda has always traded at a huge deficit with China.

![Graph of Uganda trade with China (1980-2016)](image2)

Uganda started exports trade with China in 1982 while it started to import goods from china in 1981. From that time and, if we look at the above Figure 3, we can see that Uganda’s highest value of imports from China was 829145000 USD in 2016 while its value of exports in the same year was 27526488 USD. And Uganda’s highest value of exports was 65995222.21 USD in 2014, while its total imports in the same year was 486391074 USD. The same trends of huge trade deficits are witnessed between Uganda and China, during period under investigation.
Figure 4 China and Burundi Trade 1980-2016

Burundi’s exports to China began in 1980 while it started to import goods from China in 1981. Also, if we look at the above Figure 4, we can automatically see that Burundi imports much more than it exports. The highest value of imports was 51602365 USD in 2014, and its exports amount in the same year was 1183490 USD. Also, the highest value of exports from China was 6582366 USD in 2012, while her imports amount in the same year was 46467852 USD. There is persistently high and negative trade imbalance between Burundi and China.

Figure 5 China and Kenya Trade 1980-2016

If we look at the above Figure 5, we can see that Kenya’s imports from China are much higher than its exports to China. A renewed Kenyan export to China began in 1980 while its imports started in 1981. Its highest imports were 5917792853 USD in 2015, while her exports amounted to 98853218 USD in same year (This is the highest negative trade imbalance between Kenya and China).
From the above Figure 6, presents the values of exports from Tanzania to China and values of imports from China to Tanzania, both since 1980. The highest value of imports of Tanzania was 4287328896 USD in 2015 while its value of exports was 562322432 USD in the same year. Tanzania’s highest value of exports to China was in 2011 where it exported goods worth 677366638 USD, and imports from China was 1661105219 USD. Its negative trade imbalance is close to US$ 1.0 Billion.

South Sudan started exporting to China since 2012 while its imports from China began in 2011. If we look at the above Figure 7, we can automatically see that, South Sudan’s exports to China are much higher than its imports from China. South Sudan’s highest exports were 4083739274 USD in 2014 while its imports in 2013 were 66332828 USD. And South Sudan’s highest imports were 155332577 USD in 2015 while its export figure was 2190485877 USD in 2015. South Sudan has always traded at a surplus, with China, because of its oil exports.
Figure 8 All Imports of EAC countries from China 1980-2016

Figure 8 above reflects all the imports of each EAC member country from China between 1980 and 2016. The highest importer was Kenya at close to US$6.0 Billion, closely followed by Tanzania at about US$4.3 Billion, Uganda at about US$1.0 Billion, Burundi at about US$0.60 Billion, South Sudan at about US$155 Million and Rwanda with about US$124 Million. The indebtedness to China of each EAC country equally follows in that order.

Figure 9 All exports from EAC countries to China 1980-2016

Figure 9 above shows all export quantities of each EAC member country to China between 1980 and 2016. More than US$4 Billion worth of goods were exported to China by South Sudan in 2014, closely followed by Tanzania to the tune of US$0.68 Billion in 2014, Kenya exported about US$99 Million in 2015, while Uganda exported around US$66 Million in 2014, Rwanda also exported about US$17.6 Million worth of goods and US$6.6 Million goods were exported by Burundi, in 2014.
4. Discussion

The 2014 trade figures from the Rwanda Revenue Authority (RRA) shows China as one of Rwanda’s highest trade partners, where total trade increased from US$ 245 million in 2013 to US$ 367 million in 2014 (50% increase year on year), which is characterised by huge trade imbalances between the two countries [18]. This was so because Rwanda exported only US$ 62 million worth of goods from January to September 2014. It was explained that this low export figure derive from a fall in mineral prices in the world market. Consequently, an agreement was signed in November 2014 to award duty-free treatment between 95% and 97% to Rwanda products [17-18] to promote bilateral trade relations. In order to address trade imbalances between the two countries, the Rwanda Ministry of Commerce is finalising a new national export strategy that supports rapid growth in exports from Rwanda to regional and international markets. This includes building stronger linkages between exporters from Rwanda and key export markets like in China [17-18]. Furthermore, important challenges vitiating trade between China and Rwanda, as well as with other EAC countries include high transportation costs and high costs of production due to unreliable electricity [18]. Also, China wants to establish Tea factories in Rwanda and produce Rwandan Tea according to Chinese tastes and preferences thereby boosting Tea exports to China (because the Chinese have a large appetite for tea). In addition, encourage Chinese manufacturers to start businesses in Rwanda and export products to other countries or the region. It must be emphasised that each of these strategies proposed for Rwanda, can be seamlessly implemented in each of the other EAC member countries to facilitate export development growth potentials which tend to break barriers to export market entry and cost of doing business in the region [13, 17-18]. Also, the items of trade as export products in virtually all the EAC member countries are essentially the same. So, what works for country A can also work for country B, with slight modifications and adjustments to location specific variabilities, which might occur. As a result of strong leadership from the EAC, the Rail transportation initiatives under the Central and Northern Corridor initiatives, if properly implemented would substantially reduce the cost of conducting business and transporting goods across borders in the EAC [13]. The continuously low export trade between EAC member countries and China has led to huge and astronomically high deficits, on the part of EAC countries, because of the inability of EAC member countries to carry out value addition to their raw materials export and attract higher prices. Chege [23], lamented that Kenya had exported raw materials like: (a) Sisal fibre, (b) Raw cotton, (c) Wattle bark extract and (d) Pyrethrum to China in the 1950s and early 1960s, while still under the British colonial rule to be processed. In return, Kenya bought semi-processed and finished products from China like: (a) Base metals, (b) Tea, (c) Fabrics, (d) Fruit preparations, and (e) Sundry manufactured goods, at much higher prices. Now: (a) Paper, (b) Stationery, (c) Cotton yarn, (d) Textiles, (e) Sheet glass, (f) Household items like clocks, chinaware and porcelain, toys, hand tools and bicycles are imported to Kenya from China [23]. Therefore, EAC member countries should seek for ways and means of improving export products through pre-

![Figure 10 All exports and imports between China and EAC [1980-2016]](image-url)
processing and value addition, before exports.

**Conclusion**

Analyses show that South Sudan is the latest country among EAC countries to trade with China and it is the only country that currently trades at a surplus with China because of its Oil edge. Furthermore, South Sudan started exporting to China since 2012 while its imports from China started in 2011. The study period was divided into groups (each group with six years) to carefully analyse the trading status as shown in Figure 10. The analyses show good progress in trade over the years, but driven and dominated by much higher imports trade from China to EAC countries. The overall picture painted by these analyses is that the bilateral trade agreements between China and the EAC, is very much in favour of China, with every EAC trading partner in trade deficit except, South Sudan. Therefore, more pragmatic and more symbiotic solutions like value addition to export products from the EAC should be worked out between China and EAC countries, so that the bilateral trade of China with the EAC bloc can progress much further than it is, presently.

**References**

2. EAC (2017). Overview of EAC. Available at: https://www.eac.int/overview-of-eac. (Accessed 01 February 2018)


---

**Paula Jeanne Ihirwe** received her Bachelor of Science in Applied statistics from University of Rwanda, in 2014. She is currently with Tianjin University in the Department of Economics and Management, MBA program and her interest is in data analysis.

**Godwin Norense Osarumwense Asemota** (M’04–SM’13), became a Member (M) of IEEE in 2004, and a Senior Member (SM) in 2013. He received the B.S, M.S, MBA and PhD degrees in physics, electronic and electrical engineering, finance and banking and electrical engineering, respectively. He teaches electrical power systems engineering and high voltage engineering courses in the Electrical and Electronics Engineering Department, College of Science and Technology, University of Rwanda, Kigali, Rwanda. He is the author of two books and more than 40 journal articles and conference papers. He researches in power systems engineering, high voltage engineering, plantains biology, convex mathematics, number theory, electricity load management, energy efficiency, multivariate analyses, optimisation, statistical inference, finance, banking, investment, stock brokering, bifurcations, critical phenomena, electromagnetics, fibre optics, jump phenomena, cryptography, series solution of differential equations and their applications.

**Samuel Bimenyimana**, IEEE student Member since 2017. He received his Bachelor of Science in Electrical Engineering from University of Rwanda, School of Engineering, Department of Electrical and Electronics Engineering in 2014. He is currently with Hebei University of Technology, Tianjin, China, State Key Laboratory of Reliability and Intelligence of Electrical Equipment, Department of Electrical Engineering, Continuous Masters-Doctoral program (2015-2020) and his research interest is all about analysis (Power system analysis and energy systems analysis).