

Challenges Facing Intra-Regional Trade among North African Countries

Abd Elrhman Elzahi Saaid Ali
Islamic Research and Training Institute (IRTI/IDB)
E-mail: aelzahi@isdb.org

Abstract

The high rate of unemployment and the slow progress of economic growth in most North African countries have spotlighted the importance of inter-regional trade among them as an alternative solution to achieve inclusive growth in the long run. This paper investigates challenges facing intra-regional trade for the North African Arab countries, namely: Mauritania, Sudan, Egypt, Morocco, Libya, and Algeria. Beside that, the study attempt to identify the possible trade linkages and the elements of succession to boom inter-regional business among these countries. This study lays out the options that policymakers can adopt to overcome these challenges. The results reveal that in spite of the existent of the linkages between these countries that might lead to the successful inter-regional trade among them, there are more challenges which have hindered its contribution based on the highly requested inclusive economic growth. The results of this study show a strong policy implication for the policy makers in these countries that might support the facilitation and the promotion of inter-regional trade among them.

Keywords: Economic Integration, Inter- regional Trade, Trade-integration, OIC
JEL Classification: F02; F13; F15

1. Introduction

North Arab countries are part of OIC members that commands enormous ownership of the world's crucial resources such as oil and natural gas reserves. They own potential economic resources in different fields and sectors, such as agriculture and arable land, energy and mining, and human resources which are necessary for conducting successful interregional trading. Hence, OIC encourage the regional integration in any form. However, this is very clear from the different initiative such as the Framework Agreement on Trade Preferential System among the Member States of the OIC (TPS-OIC), Protocol on the Preferential Tariff Scheme for TPS-OIC (PRETAS), and a Ten-Year Program of Action 2. In addition to the TPS-OIC Rules of Origin, the testimony of OIC desire has successfully deepened intra-regional integration.

Interregional trade is very essential to North Africa OIC member countries. However, they have easy access boarders and share more common customs and religion. In addition to these common factors, they own diverse resources and huge population particularly in Egypt and Algeria. Therefore, interregional trade integration might help reap economies of scale, expand markets, collectively exploit their resources, reduce countries' dependence on traditional trading partners, and raise their resilience against external shock. Interregional trade might also help the North African countries to improve competitiveness and ease of doing business environment. The recent OIC indicate that there is some improvement in intra-OIC trade among some members, namely: Saudi Arabia, United Arab Emirates,

Turkey, Malaysia, Indonesia, Iran, Syria, Kuwait, Egypt, and Pakistan. Furthermore, North African Intra-regional trade appears to be completely in existence as it supposed to be.

North African countries are at different levels of economic development. They are not a homogeneous economy. However, they are classified into three main groups. The first group is the Least Developed Countries which includes **Mauritania and Sudan**. The second group comprises of fuel-exporting member countries which includes **Algeria and Libya**. The last group is the middle-developed countries which comprises of Egypt and Morocco. Consequently, this study will tackle the issues of interregional trade among these neighboring countries. It is not done through comparative analysis, but simply through the trend of their international trade based on export-import analysis.

Figure 1: North Africa Countries GDP, Unemployment and National Poverty Line

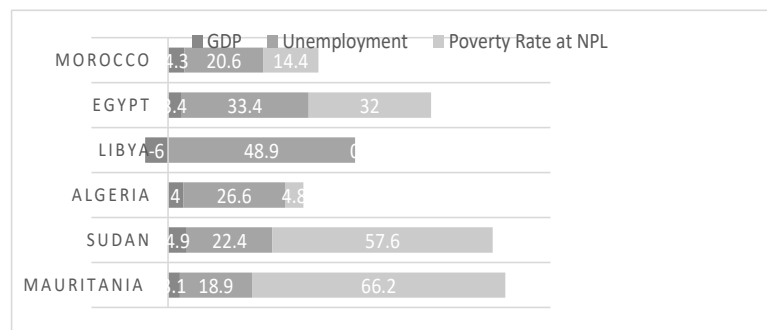


Figure 1¹ shows that North African countries are facing more challenges such as slowing down of economic, high unemployment, extremely poverty, high political instability, and internal conflict such as that of Libya. The recent data revealed that youth-unemployment in these countries is among the highest rate when compared to the world's standard. Due to the Arabic spring which is still on going, the economic situation of their majority is in transition. Due to low economic growth, it is difficult to create more jobs to bridge the increasing unemployment gap to assist in mitigating the high rate of poverty. Therefore, this research investigated the trend of the top of the North African OIC-countries major export-import product and partners in trade. In addition, this study aims to determine the opportunities and challenges that might help or hinder the intra-regional trade and integration between these countries.

2. OIC Efforts to Promote Intra-Regional Trade among Member Countries

Since the last century, the Organization of the Islamic Conference (OIC) has exerted remarkable efforts towards the development of economics and intra trade linkages among the member states for the purpose of economic prosperity. Intra-OIC trade has been given the lion share from these efforts. Subsequently, these efforts have been materialized by the adoption of the Framework Agreement on Trade Preferential System among the Member States of the OIC (TPS-OIC) in 1990. As a result of this, members agreed on general principles towards establishing a preferential trade system. This would help to promote trade among them through the exchange of trade preferences on the basis of equal and non-discriminatory treatment. Unfortunately, these agreement became effective only after 12 years from the initiative when it was ractified by 10 member states in 2002. After then, it was followed by another two agreement with focus on tariff and the originality of the product in 2005 and 2007, respectively.

Additional efforts showed that enhanced intra-OIC trade was also among the priorities of the Ten-Year Programme. This programme helps in setting a target of 20% level for intra-OIC trade to be

¹ <http://data.worldbank.org/indicator/SL.UEM.1524.ZS>

achieved in 2015. Though all the efforts reflected are not real and tangible, the OIC outgoing efforts addressed all the challenges that is expected to affect intra-OIC trade among the respective states. First, the OIC initiatives addresses the stream that is lining the diverse trade policies among the members. Also, it generates substantial funds to improve trade infrastrucutre. This is considered the most binding constraints for most of the members. OIC has also declared that support must be given to the energy sector to shrink the huge energy deficit, particulary for African and central asian members. Since most of the OIC memebers governments' revenue depends on the tax and custom, the removal of traditional trade facilities are among the OIC efforts. Since the improvement of ICT is expected to boost the regional collaboration among the members, it is also expected to play a vital role in removing barriers to business and customs regulations through the use of a streamlined, harmonized, and an automated ICT-based processing of documentation. In financing international trade, access to finance and foreign direct investment represents more challenges to most of the members. However, this has also been given considerable attention by OIC agreements and strategic program. Generally, the intra-OIC trade is associated with high risk which is operational as well as geopolitical. It is not forgotten by OIC strategy to promote trade cooperation. Lastly, OIC consider the private sector to be a key component of trade facilitation. Hence, more efforts were directed in enhancing the roles of the private sector development. The above evidence showed that OIC exerted more efforts to formulated rules and policies in promoting trade and economic integration among the states. Unfortunately, more members were reluctant to ratify the agreements to materialize the great initiatives. This fact limited the intra-OIC trade to be seen among only five countries out of the more than fifty-five member countries. Therefore, this might be the reason North African OIC countries is still facing more business barriers despite the existence of the OIC formulated rules and trade policies. The OIC structural measures outlined above can be used to ensure that the North African Countries operate within free trade obstacles to achieve export competitiveness and diversification based on their comparative advantages.

3. Mauritania: Top Five Exports and Imports

Figures (2a-2d) show Mauritania top five exported and imported products in addition to the top five trading destinations. The Iron Ore represents the top exported products, while Wheat and Refined Petroleum are the top imported products for Mauritania. In term of trading destinations, China represents the top Mauritania exporting country while UAE represents the top imported destination. Mauritania was ranked 130 with an Economic Complexity Index (ECI) of -1.22196. This indicates that the country might face more difficulties in order to sustain considerable economics growth. Hence, the intra trade among the boarders' countries might be of great help. In addition, the current data shows that the country has weak trade linkages with its Arab and Muslims neighbour's countries. Mauritania has only one Arab country among its top imported destinations.

Figure 2a: Mauritania's Top Five Exported Products

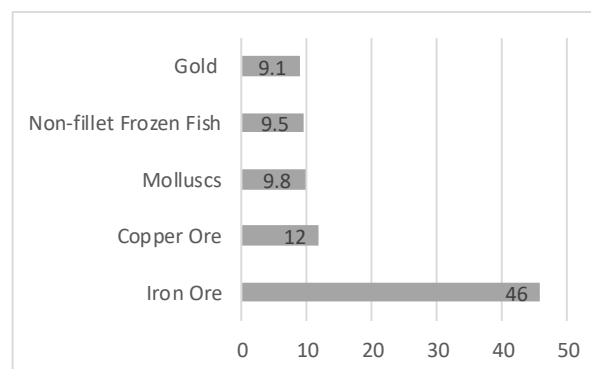


Figure 2b: Mauritania’s Top Five Imported Products

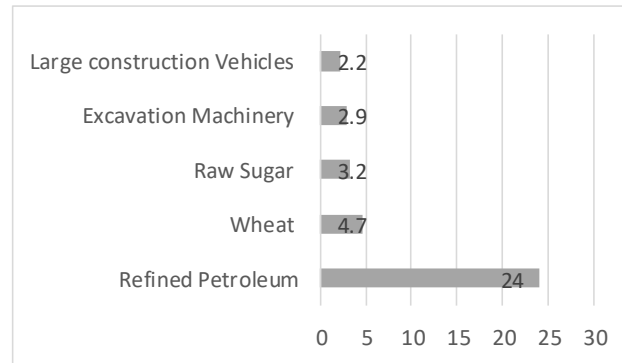


Figure 2c: Mauritania's Top Five Export Destinations

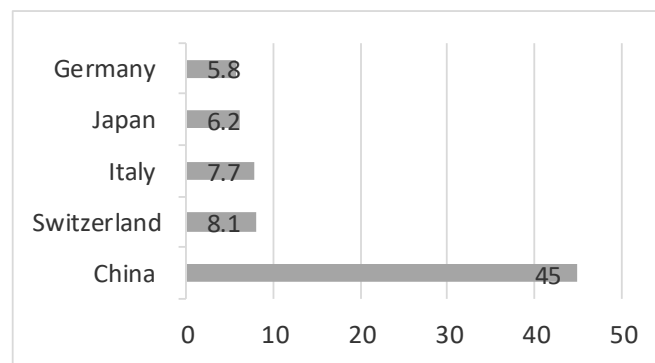
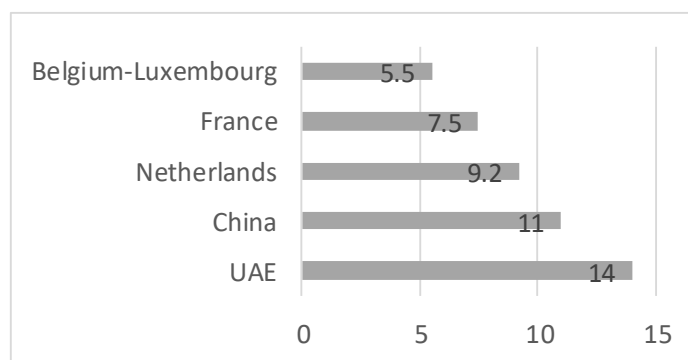


Figure 2d: Mauritania's Top Five Imported Destinations



4. Sudan Major Imports, Exports and Trading Partners

Likewise, Figures (3a-3d) show Sudan top five exported and imported products in addition to the top five trading destinations. After the separation of the South, Gold became the top exported products for Sudan, while Wheat is the top imported products irrespective of the country’s vast agricultural land. Sudan shared with Mauritania such that UAE and China became the top trading destinations. Contrary to Mauritania, UAE represents Sudan top exporting country, while China is the top imported destination. Sudan is ranked 133 with an Economic Complexity Index (ECI) of -1.29334. Sudan faces more difficulties due to the separation of the rich South Region and the severe USA economic sanction. Though the sanction has duly left, the country might take a long time to recover. Hence, the intra trade

among the OIC and Arab boarders' countries might be of great assistance to mitigation of the impact of the country's slowest economics. Basically, the current data shows the country has weak trade linkages with OIC and its Arab and neighboring countries. It is good to know that Sudan is an Arab country.

Figure 3a: Sudan Top Five Exported Products

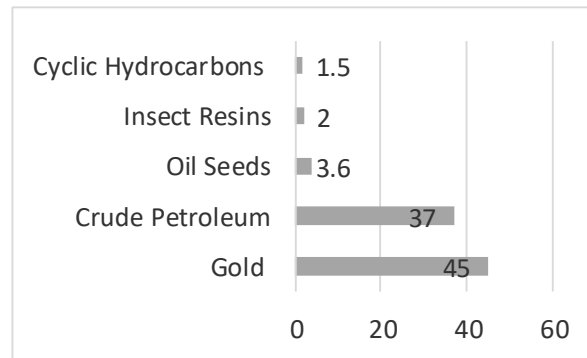


Figure 3b: Sudan Top Five Imported Products

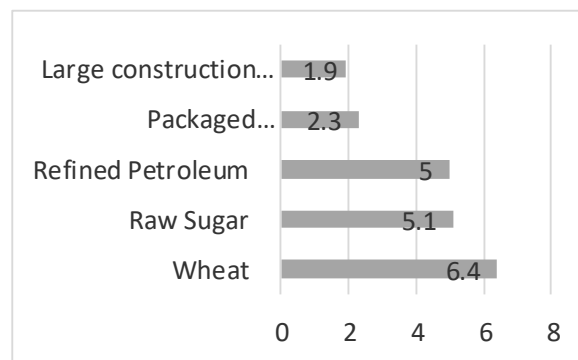


Figure 3c: Sudan Top Five Export Destinations

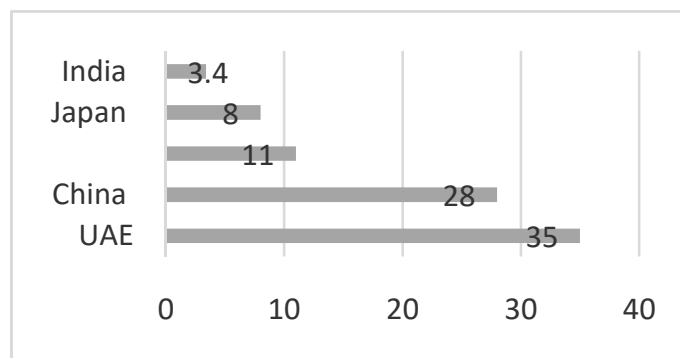
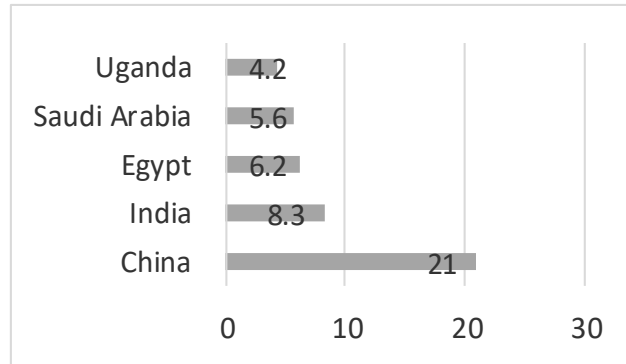


Figure 3d: Sudan Top Five Import Destination



5. Algeria Major Imports, Exports and Trading Partners

Figures (4a-4d) show Algeria top five exported and imported products in addition to the top five trading destinations. These figures indicate that petroleum and natural gas represent the top exported products. If we add to them the electronics and petroleum products, it comprises of around 97% of the Algeria total export. The figures also show that Cars and refined petroleum represents the top Algeria imported products. Algeria is a large country and boarded almost four countries. Despite that, none of OIC or neighbouring countries was among the Algeria’s top five trading destinations. Italy and United States represent the top exported destinations, while France and China are the top imported countries.

Hence, as found in the previous countries, Mauritania and Sudan, Algeria data shows that the country has very weak trade linkages with OIC and its Arab and neighboring countries. The above evidence shows that none of the Islamic or Arab countries were among the Algeria top trading partners.

Figure 4a: Algeria Top Five Exported Products

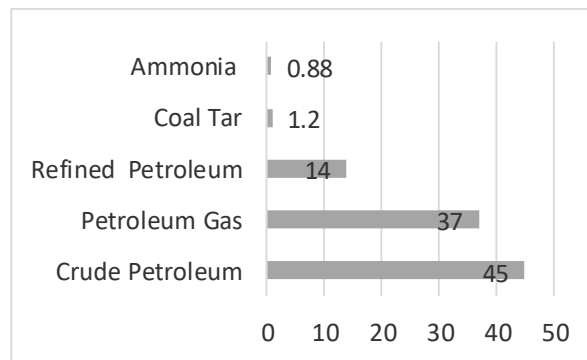


Figure 4b: Algeria Top Five Imported Products

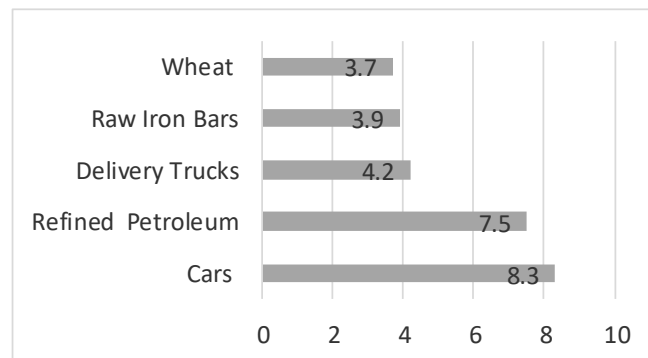
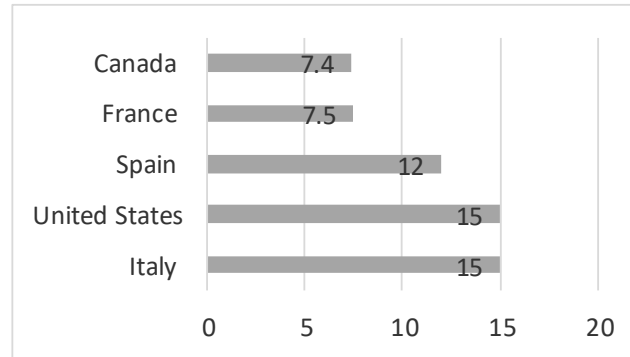
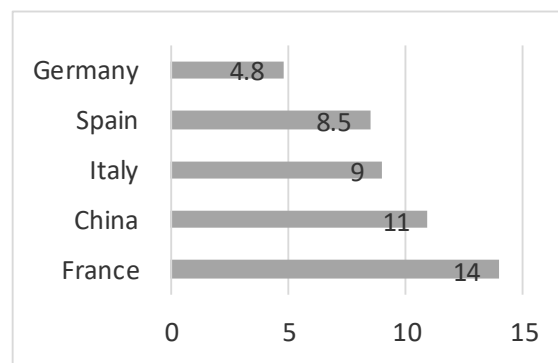


Figure 4c: Algeria Top Five Export Destinationss**Figure 4d:** Algeria Top Five Import Destinationss

6. Libya Major Imports, Exports and Trading Partners

As shown in the previous argument, Figures (5a-5d) show Libyan top five exported and imported products and top five trading destinations. These figures indicate that crude petroleum represent the top exported products, while refined petroleum represents the top imported products. Currently, Libyan has severe civil conflict after the Arabic spring and the removal of Muammar Gaddafi, long ruling regime. As in Algeria, Libya has non Arab or OIC among its top five trading destinations. Italy represent the top exported and imported trading destinations, while Germany and China are sharing equally the second top trading destination countries. Hence, as found in the previous countries, the above evidence shows that Libya has very weak trade linkages with OIC and its Arab neighboring countries. The results also indicate that none of the Islamic or Arab countries was among Libya top trading destination countries.

Figure 5a: Libya Top Five Exported Products

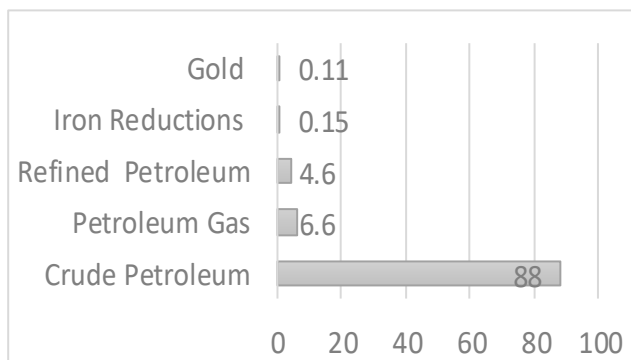


Figure 5b: Libya Top Five Imported Products

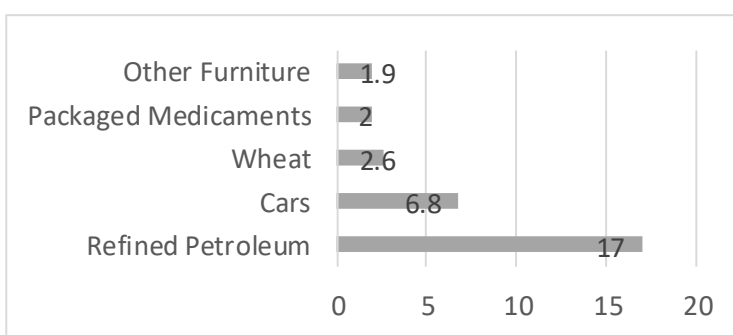


Figure 5c: Libya Top Five Export Destinations

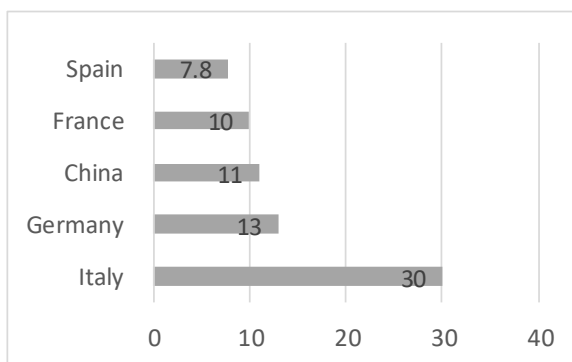
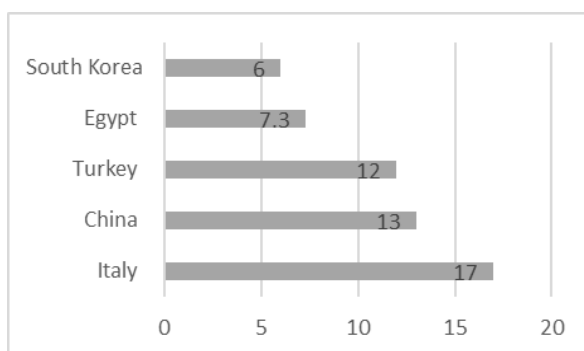


Figure 5d: Libya Top Five Import Destinations



7. Egypt Imports, Exports and Trading Partners

Egypt is a North Africa country that borders to Sudan, Libya, and Palestine. It is not far from Tunisia, Algeria, other Arab countries particularly those which are sited in the Mediterranean Sea. The country was categorized under lower middle income and currently holds the rank of 122 ease doing Business indicator.

Figures (6a-6d) show that Crude Petroleum and Petroleum Gas are top five Egypt's exported products, while the Refined Petroleum and Wheat are the five top imported products. These figures also show that Italy and United States are the top exported destinations, while China and United States are the top imported destinations countries. The results also show that none of the North Arab countries are among the top five Egypt trade destinations. Although Egypt has reasonable trading with Saudi Arabia and Turkey as part of OIC countries, the current political unrest might weakend the bilateral trade with them. Hence, the above evidence might imply that the intra-trade between Egypt and the OIC countries or North Arab countries is not as good as in China or United States.

Figure 6a: Egypt Top Five Exported Products

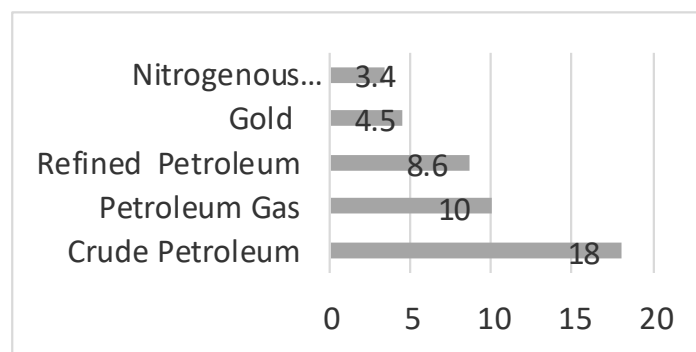


Figure 6b: Egypt Top Five Import Products

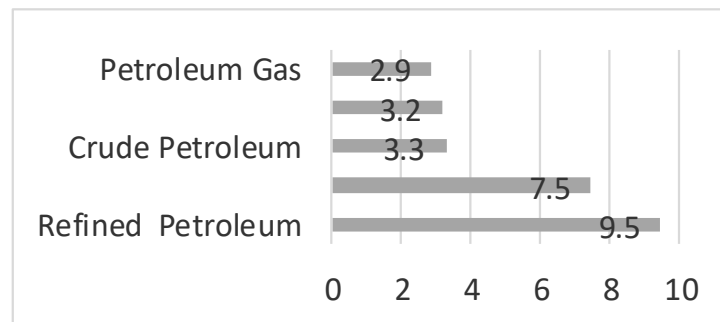


Figure 6c: Egypt Top Five Export Destinations

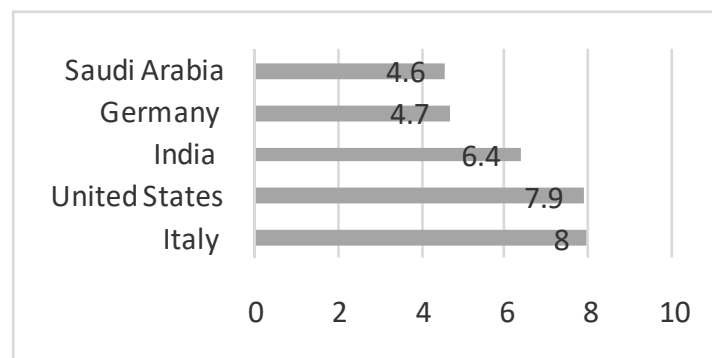
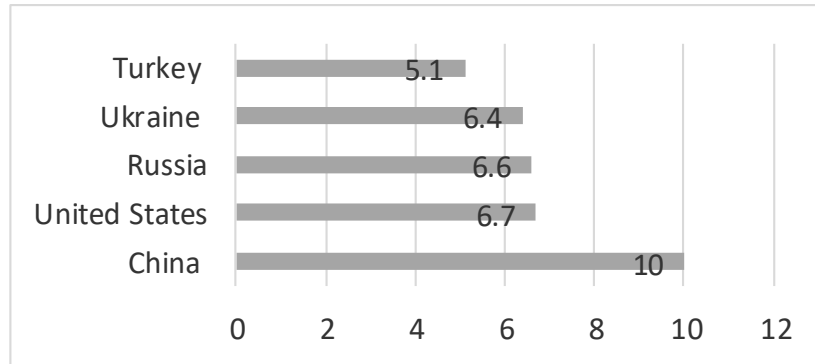


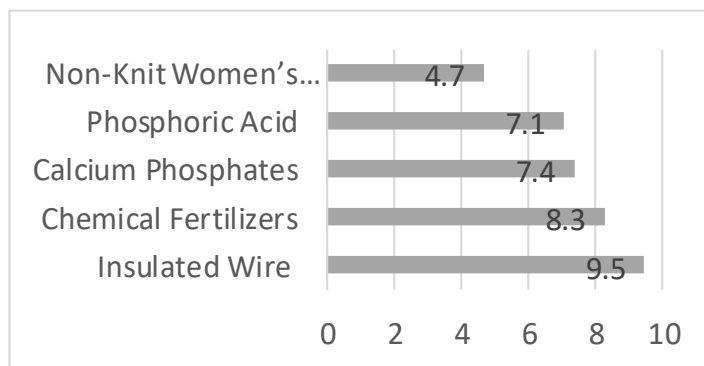
Figure 6d: Egypt Top Five Import Destinations



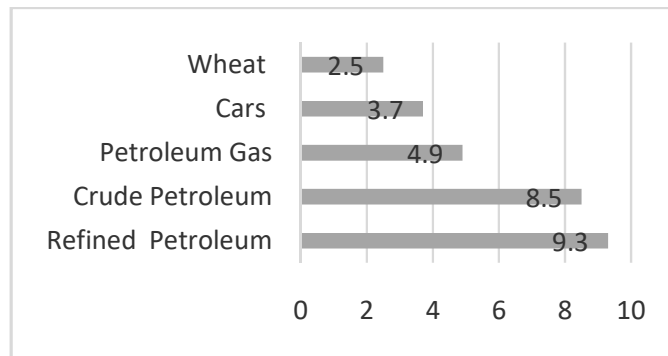
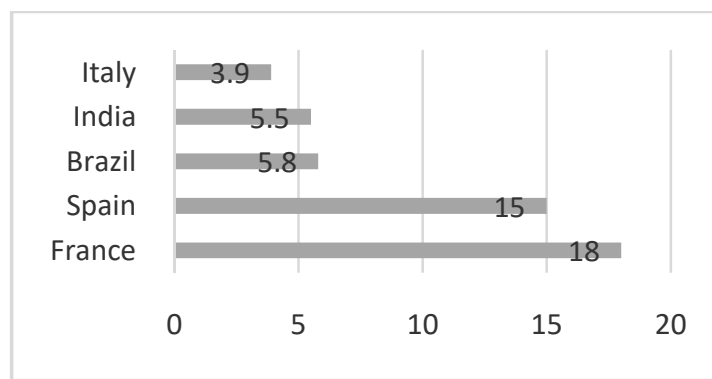
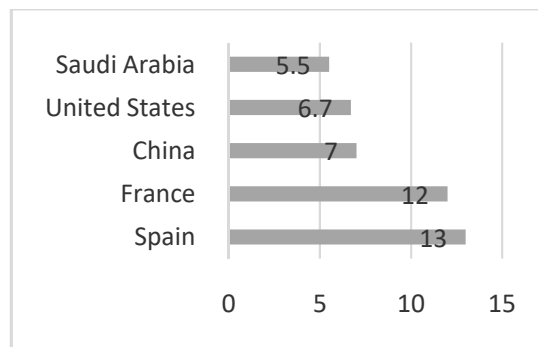
8. Morocco Major Imports, Exports and Trading Partners

Morocco is the 64th largest export economy worldwide and the 109th most complex economy as per Complexity Index². Figures (7a-7d) show Morocco top five exported and imported products in addition to the top five trading destinations. These figures indicate that Insulated Wire and Chemical Fertilizers represent the top exported products. The figures also show that refined petroleum and Crude Petroleum represent Morocco top imported products. Morocco is located in the northwestern corner of Africa. It is bound by Mauritania (through Western Sahara), Algeria, the Mediterranean sea, and the Atlantic Ocean. The Figures (7a-7b) showed that France and Spain are the top Morocco trading destinations. Despite the country is bordered to Algeria and Mauritania and joined other Arab countries linked with other OIC members through the Mediterranean Sea, none of them among the top five trading destinations were European countries. Hence, with an exception of Saudi Arabia, Morocco might be considered as one of the Muslim countries that have very weak trade linkages with OIC and its Arab and neighboring countries. The above evidence has shown that none of the Islamic or Arab countries is among the Algeria top trading partners.

Figure 7a: Morocco Top Five Exported Products



² <http://atlas.media.mit.edu/en/profile/country/mar/>

Figure 7b: Morocco Top Five Imported Products**Figure 7c:** Morocco Top Five Export Destinations**Figure 7d:** Morocco Top Five Import Destinations

9. Direction of Overseas Trade of North African Countries

Tables (2a-7d) shows the intra trade between six North African OIC member countries (Data sources: Observatory of Country Complexities³ and UNCTAD⁴). Sudan and Mauritania is among the least developed OIC members (OIC-LDC). Their respective top export products are Iron Ore and Gold, and their top import products are Refined Petroleum and Wheat. The statistics indicate that both countries trade more extensively with China by which the balance of payments is in favor. The only OIC country from the top export and import destinations for these two countries is the United Arab Emirates (UAE).

³ <https://atlas.media.mit.edu/en/profile/country/mar/>

⁴ United Nations Conference on Trade and Development

Although Sudan holds vast agriculture land, the wheat is top of the five imported products as well as for Mauritania. Based on the theory of comparative advantages, the two countries may run an effective intra-trade business.

Similarly, there is no significantly intra trade relationship between the OIC-FEC of Algeria and Libya. Their respective top export products are crude petroleum and their top imports product are cars and refined petroleum. The top export destination for Algeria is Italy with the balance of payments favoring Algeria. Subsequently, Algeria balance of payment favors its main import partner which is France. The top import and export destination for Libya is Italy with the balance of payments remaining in favor of Italy. The data shows that there is no bilateral trade between Algeria and OIC member countries among the top five import and export partners. Contrary to Algeria, Libya has intra trade between Egypt and Turkey who are OIC members in the list of the top five imported partners.

The last category of North African OIC member countries is Egypt and Morocco. They were declared to be among the Medium Developed OIC member countries. There is no intra trade between the OIC-MDC of North African countries among their top five exporters or importers. Thus, their respective top export products are crude petroleum and insulated wire, while both their top imported product is refined petroleum. The top export partner for Egypt is Italy, while the majority of its imports are mainly from China. However, Egypt also has trading partners of OIC members of Saudi Arabia and Turkey. The top export partner for Morocco is France, while its top import partner is Spain. Morocco also lists Saudi Arabia, the OIC, as a trading partner. The above results show that there was only one intra trade relationship between Libya and Egypt among the six North African countries among the top five trading partners. This bilateral relationship between Libya and Egypt is now facing more challenges due to the internal conflicts and the political instability for the two countries. Therefore, the foregoing argument has revealed either a weak bilateral trade among North African countries or non-trading between them at all as the case of Mauritania . The UNCTAD 2013 Intra Trade report showed that there are bilateral trade relationships between the countries that in turn is so called neighbourly effects. For instance, there is an export-import relationship between Morocco and Algeria and between Egypt, Algeria, and Sudan. Egypt also share economic and population sizes with Algeria. The two countries represent a very big market. This analysis of intra-African imports indicated that Algeria, Egypt, Tunisia, and South Africa were absorbed during most of the imports. The high density of population and shorter destinations between Algeria, Egypt, Tunisia, and the rest of North African OIC countries might play a vital role in strengthening intra-regional trade among them. Despite that, the inter-trade activities is considered weak and very limited based on the common factors between these countries including the shared borders. Based on the top five export –import products and destination analysis, the main destinations of the North African OIC countries is the western countries or China.

10. Opportunities for Inter Trade among North Africa Countries

The previous statistical evidence of North African countries showed that most of the top major exports and imports investigated countries are mainly within outside OIC countries, let alone to be between them as neighboring countries. The evidence also reflect that more of the international trade of the North Africa countries are primary commodities in the form of crude oil, import refineries petroleum, and other heavy equipment. These results might indicate that most of the North African countries lack the refineries and the capacity that constraints them to refine their crude oil locally. This was despite the fact that they are considered to be major crude oil producers worldwide. Many of the Northern African countries are producing crude oil and import refinery oil. The data also unexpectedly reflects that some countries were supposed to be the main contributor for agricultural products. Also, wheat among their five top imported products is even outside OIC member countries.

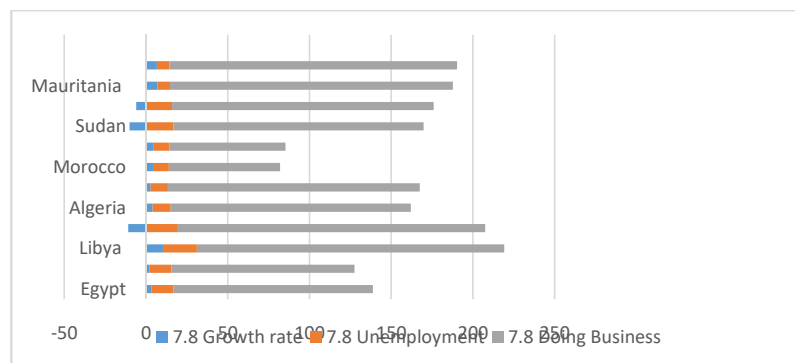
There are more intra-trade opportunities in North Africa which remains unexploited in many product categories. This is particularly in the area of agriculture and food production such as in Sudan and Morocco, respectively. All the countries will satisfy and exchange with the rest of OIC members if

these countries are up in scaling the domestic agricultural production. The opportunity of the intra trade between North African can be more useful if the countries encourage investment on oil refineries industries. These countries hold very smooth access boarders among them. Despite these opportunities, there are more challenges which discouraged the intra-trade among the North African OIC members. Hence, the following section attempt to pin point the most important challenges that hinder the development of inter-trade between North Africa OIC countries. The thorough analysis of these challenges might deepened the understanding of the constraints to intra-trade business in North Africa OIC member. In addition, it could provide a potential boost to it.

11. The Challenges Facing Intra-OIC trade among North African Countries

The above major top export-import analysis of North African countries showed that there is weak intra-trade among these Arab and OIC members. This was despite the expected existence of enabling intra-trade environment between them. The weakness of intra-trade among these countries has spotlighted the essentiality of identification of the most important challenges that might hinder the development of inter-trade between North Africa OIC countries. Figure 8 reflects the index that was calculated by the World Bank which explains how easy the country is doing the business.

Figure 8: Indicators for Inclusive Growth for the North Africa Countries



This index showed that North African countries has not passed the ease doing business index that ranks the country from 1 that has the most business-friendly regulations to the most cumbersome when climbing up the ladder up to 189. The index averages the country's percentile rankings on 10 topics covered in the World Bank's Doing Business. The majority of ease doing index of North Africa countries is above 110. However, this indicates that intra-trade business among them might be more difficult.

The basic trade infrastructures might represent another major obstacle to promote intra-trade among the North Africa countries. The competitiveness and access to basic infrastructure such as energy, telecom, and transport, including roads, airports, railways, and ports are critical elements of intra-regional trade and economic growth for North African countries. Firms in most North African countries face high production costs due to poor access to production factors such as electricity, credit, skilled labor, and other inputs. As a result, they find it difficult to produce competitively. North Africa lags behind other developing-country regions in terms of physical and social infrastructure. According to the World Development Indicators,⁵ road density in North Africa was 9.5 kilometers per 100 square kilometers of arable land, compared to 127 for non-African developing countries. Hence, like other

⁵ <http://knoema.com/WBWDIGDF2012Apr/world-development-indicators-wdi-global-development-finance-gdf-april-2012?tsId=1094940>

African countries, poor transport infrastructure is one of the major causes of high trading costs in North Africa. Subsequently, it is the most binding constraint to intra-African trade as whole.

Since North African countries are yet to ratify the intra-OIC trade agreements, the fundamental level of trade still remains low. This is because trade tariffs remain high on products of export interest to regional partners. The elimination of these trade barriers is certainly important to boost the intraregional trade among the members (Appendix 1). As it exists in most of OIC countries, there is limited role of the private sector intraregional trade. Thus, this has contributed to the weak trade performance in North African countries. These countries must exert more efforts to enhance the private sector through understanding the constraints facing enterprises and as such, building their capacities to take advantage of the opportunities created by OIC regional trade initiatives. Apart from Algeria and Egypt, North African member states also comprise of countries with low population densities compared to other developing regions. For example, Mauritania and Western Sahara Morocco have fewer than 5 million people. As a result, such member states have small domestic markets with low purchasing power. In addition to that, bad policies and a poor regulatory environment compound this weak physical infrastructure. These might include but not limited to the poorly developed financial markets; the absence of cross-border financial instruments; complex and lengthy procedures regulating private business activity; high trade tariffs; complex customs arrangements; and limited regional harmonization of policies, regulations, and procedures. Poor transit systems and numerous informal roadblocks along trade corridors create additional obstacles. Hence, there is a pressing need to harmonize these regulations through implementing reasonable trade facilitation measures designed particularly to reduce the 'hassle' costs of doing intraregional trade and business in North African countries. Furthermore, the recent civil strife and geopolitical instability have a significant impact on the intra-trade and the whole economics of the neighboring countries. For example, Libya's turmoil has negatively affected Libyan-Tunisian bilateral economic initiatives to finalize the establishment of a free economic zone between Ben Guerdane in Tunisia and Libya's Ras-Jedir border development area. Finally, access to Islamic trade finance is also a key constraint to intra-trade due the weakness of Islamic financial infrastructures in North Africa countries. Majority of the population of these regions are Muslims. Also, if we consider the resilient of the Islamic financial institutions during the recent financial crisis, the improvement of Islamic financial infrastructure is very vital.

12. Conclusion

The recent event evidence shows the high rate of unemployment, and the slow economic growth lead to Arabic spring and instability in most of the North African countries. Intra-regional trade might be one of the solutions to economic prosperity. Hence, it mitigates the impact of poverty and unemployment. North African countries share easy access borders and more than common factors such as the language and religion to form effective markets and successful intra-regional trade to overcome most of their economic problems. Therefore, this article investigates challenges facing intra-regional trade for the North African countries, namely: Mauritania, Sudan, Egypt, Morocco, Libya, and Algeria. In addition to that, the study attempts to identify the possible trade linkages and the elements of succession to boom their inter-regional business among them. Also, it lays out the options that policymakers may adopt to overcome these challenges. The results reveal that there is weak intra-regional trade among the investigated North Africa Countries despite the favorable trade environment. Also, there is great intra-trade opportunities that remain unexploited among these countries. They could develop effective intra-trade in terms of agricultural products, oil refineries, human resources, etc. Despite these opportunities, the study shows that there are more challenges that might contribute to the weakness of the intra-regional trade among these countries. Most of the North Africa countries do not have easy business access and political instability which might make the intra-trade more difficult among them. Another intra-trade obstacles is the poor basic infrastructures among these countries in addition to the existence of more trade barriers such as tariff and complex customs arrangements.

Moreover, the political instability and the ideological wars between the partners and the global wars against the terrorist lead to unfavorable investment environment that shrinks the involvement of the private sectors. However, based on the poor financial infrastructures, these countries need to have a will as well to work hard in order to adopt mutual trade for their benefit. These results have good policy implication for the matter to be address among these countries.

References

- [1] Annual report on trade between the OIC member states 2013 http://www.icdt-oic.org/RS_67/Doc/annualreportexecutivesummary_2013_en.pdf
- [2] El Hassane Hzaine. Global Outlook of the OIC Member-States' Foreign Trade, (*ICDT*), http://www.iemed.org/dossiers/dossiers-iemed/desenvolupament-socioeconomic/economic-agendas-of-islamic-actors/ICDT_Paper_PC.pdf
- [3] <Http://www.oic-oci.org/oicv2/home/>
- [4] Waleed al wohaib, CEO, ITFC, (2009). Speech at the Second Global Review Of Aid Trade Geneva, https://www.wto.org/english/tratop_e/devel_e/a4t_e/alwohaib_jul09_e.pdf
- [5] Myrna S. Austria and John Lawrence V. Avila (2001). Looking Beyond AFTA: Prospects and Challenges for Inter-Regional Trade Discussion Paper Series No. 2001-10 <http://dirp3.pids.gov.ph/ris/dps/pidsdps0110.pdf>
- [6] Trade among OIC Countries (2011). http://file.insightturkey.com/Files/Pdf/insight-turkey_vol_13_no_2_-2011_alpay_atlamaz_bakimli.pdf
- [7] AJG Simoes and CA Hidalgo (2011). The Economic Complexity Observatory: An Analytical Tool for Understanding the Dynamics of Economic Development. Workshops at the Twenty-Fifth AAAI Conference on Artificial Intelligence.
- [8] R Hausmann, CA Hidalgo, S Bustos, M Coscia, S Chung, J Jimenez, A Simoes and M Yildirim (2011). The Atlas of Economic Complexity. Puritan Press. Cambridge MA.
- [9] <https://atlas.media.mit.edu/en/profile/country/mar/> accessed 26.04.2015
- [10] http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEB%20VOL%202%20Issue%2011_AEB%20VOL%202%20Issue%2011.pdf
- [11] http://unctad.org/en/PublicationsLibrary/aldcafrica2013_en.pdf
- [12] <http://www.sesrtcic.org/files/article/391.pdf>
- [13] <http://knoema.com/WBWDIGDF2012Apr/world-development-indicators-wdi-global-development-finance-gdf-april-2012?tsId=1094940>
- [14] <http://www.renewableenergyworld.com/rea/news/article/2014/03/renewables-in-north-africa-a-nation-by-nation-report-card>
- [15] <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/The%20Impact%20of%20Libyan%20Conflict%20on%20Tunisia%20ENG.pdf>