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ASSESSING THE CHALLENGES OF MANUFACTURING EXPORT OF ETHIOPIA

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Abstract: *Ethiopia has demonstrated strong economic growth and become one of the best performing economies in the past decade. It had an average GDP growth rate of more than 10 percent. This study examines the trends of Ethiopia's external trade performance, particularly the Manufacturing export sector and its main challenges. The country has made relentless and massive efforts to diversify its economy and increase export earnings. However, the trade balance sustains a huge deficit with larger gaps between imports and exports, and remains persistently negative. The growth pattern of imports and exports indicates a steady increase over time with higher growth in imports than the exports. The country heavily relied on the export of primary agricultural products while the contribution of the manufacturing sector remains meager. Both external and internal factors contributed to the low level of manufacturing exports. Unfavourable business environment, Low productivity and lack of product diversification, poor border administration and regulatory environment, and lack of quality physical infrastructures are the main challenges that urged to be addressed.*

Keywords: *Export, Import, Trade Balance, Manufactruing Sector, Physical Infrastructure*

1. INTRODUCTION

Ethiopia is one of the landlocked in Sub-Saharan African countries. It has registered remarkable economic growth for the last decade with the average of 10.2 percent (Gebreeyesus, 2016). According to Ministry of Trade and Industry (2007), the country has launched a package of reform programs aimed at reorienting the economy from command to market economy, rationalizing the role of the state and enhancing the private sector development (MOTI, 2007). In line with this, the introduction of the Agricultural Development Led Industrialization (ADLI) Strategy provided a long-term development framework for economic transformation. The reform programs focused on liberalization of markets, removal of subsidies, tax reform measures, reduction of import tariffs, and current account convertibility. These measures were supported by fiscal and monetary policy

discipline. The favorable policy environment created by the economic reform, coupled with macro-economic stability, invigorated the domestic private sector, which was suppressed during the military government before 1991 (MOFED, 2014).

In addition, in 2010, the country introduced five year growth and transformation plan with the main objective of transforming the agricultural dominated economy into the manufacturing and export oriented economy. The plan prioritized the manufacturing sector and focused on industries which are labor intensive and having a wider market access; broader linkages with the rest of the economy; use agricultural products as input; export-oriented and import substituting; and industries that can contribute to faster technology transfer (MOI, 2013). The priority sectors in the manufacturing sector are Agro-processing (food and beverage), textile, leather and leather products, metal and engineering, and chemical sectors. Because of these measures, the manufacturing sector is performing well compared to the past times.

However, its external trade still far behind and less integrated into the global market. It is heavily reliant on the primary and the agricultural sector, which accommodates more than 80 percent of the country's population. The manufacturing sector remains stagnant and contributing less to the overall trade and especially in the export sector. Various factors, both domestic and external play significant roles for lack of structural change and poor performance in the manufacturing sector. And hence, the following section gives a brief analysis of factors which curtail the manufacturing sector at both domestic and external levels and the way forward to increase Ethiopia's export in this sector.

1.1 Objective of the Study

The main objective of the study is to analyze the Indutrial exports of Ethiopia and its main challenges. Specifically, the study focuses on:

- To examine the trend of Ethiopia's export performance, particularly the Indudustrial export sector.
- To assess the main challenges of the Industrial export performance of Ethiopia.

1.2 Methodology

Secondary source of data has been used. Reviewing relevant literatures; and consulting strategic documents and policy reform measures served as the main sources of information.

Descriptive analysis has been deployed as the main tool to analyse the aforementioned specific objectives.

World bank database (World Integrated Trade Solutions), International Trade Statstics (Trade Map), United Nations Conference for Trade and Development Hand Book of Statistics, National Bank of Ethiopia and Central Statistical Authority, Annual Reports of Ministry of Trade; and Ministry of Finance and Economic Developments have been used as the main source of secondary data.

1.3 Brief Account of Industrial Policy of the Country

Before 1991, import substitution and a protectionist trade regime have been considered as a key strategy for any developing country such as Ethiopia. Both academics and policy makers believed that industrialization and full employment could not be achieved without providing a reasonable level of protection to those firms that serve the domestic market. At that time, Ethiopia implemented an import substitution strategy, and imposed very restrictive tariff and non tariff barriers on foreign products. However, after 1991, Ethiopia took reform measures by implementing the structural adjustment program; foreign trade liberalization began to take place as one of the key components of economic policy. And currently the country adopted export oriented industrial policy (Assefa et al. 2013). Hence, Ethiopia is one of the few African countries that has formulated a full-fledged industrial policy and implementing over the last decade (Gebreeyesus, 2016).

The Industry Development Strategy of the country has put in place the principles that primarily focus on the promotion of agricultural-led industrialization, exported oriented development, and expansion of labor intensive industries. These principles are interdependent and interlinked one with another. The strategy has also set the other principles that clearly stated the pivotal contribution of the private sector, the leadership role of the government, and the integrated and coordinated participation of the public at large in nurturing the strategy. This refers to those industries which are primarily involved in the production of manufactured goods. It also tried to include other industrial classified sectors in the document other than the manufacturing industries (MOT, 2014).

The industrial policy of the country is focused on some selected and specific sector, which is directly related to the agricultural sector as the country is highly dependent on this sector. The policy document clearly stated the priority sectors which are textile and garment;

meat, leather and leather products; agro-processing; construction; micro and small scale enterprises and horticulture, however, Ethiopia may modify this list in response to the outcome of past promotion, rising policy capability or changing domestic and international situations. The following export-oriented industries can continue to be supported in the coming years: Leather and leather products, Agro-processing, Textile and garment, and Floriculture (Altenberg, 2011).

2. PERFORMANCE OF EXTERNAL SECTOR

2.1 Export

Ethiopia made relentless and massive effort to diversify its economy and increase export earnings over the last decade. However, its external orientation indicates a huge deficit with larger gaps between imports and exports.

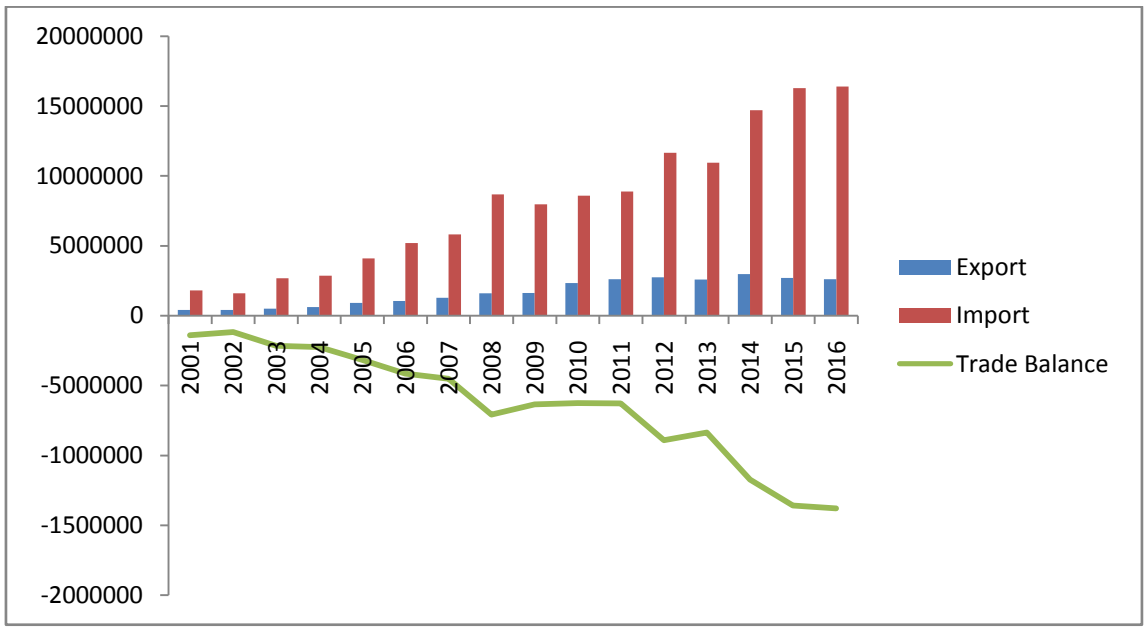


Figure 1: Total Import, Export and Trade Balance from 2001-2016 ('000 US$)

Source: WITS UNCOMTRADE

The above figure gives an overview of export and import trends over the period 2001 to 2016. It indicates that the exports and imports of Ethiopia are increasing over time. However, from 2001 to 2004 the growth rate is marginal and slower in pace. Since 2005 towards 2016, it shows a drastic increment and a rapid growth. This might be attributed to a dramatic economic reform by Ethiopian government after the 2005 political election and the consequent political upheaval.

The government initiated and launched a massive economic reform. Since then, the country has maintained the status of one of the best performing economy in Sub Sahara Africa and non oil economy in the world. However, the country is experiencing a huge deficit and the trade balance is persistently negative. According to African Development Bank report (2015), export earnings doubled between 2003/04 and 2010/11, rising from USD 0.6 billion to USD 3.25 billion. Over the same period, imports increased fourfold, largely driven by capital goods, resulting in the widening of the current account deficit (ADB, 2015).

The deficit in merchandise trade during 2014/15 stood at USD 13.4 billion, widened by 29.1 percent relative to the preceding fiscal year mainly due to the significant growth in total import bills coupled with low performance in the growth of total export proceeds. In the same period, export to GDP ratio went down and import to GDP ratios went up by 4.6 and 26.5 percentage points, respectively from 6 and 25 percent of the preceding year (NBE, 2015). Thus, the effect on the overall balance of payments deficit, would be worsened and pronounced, had it not been surpluses in services and capital account mitigating effect. Private transfers, including remittances, also offset the rise in imports (ADB, 2015). Nevertheless, Ethiopia's export earnings of the goods trade can only finance about one-fourth of the total import bill (UNDP, 2017).

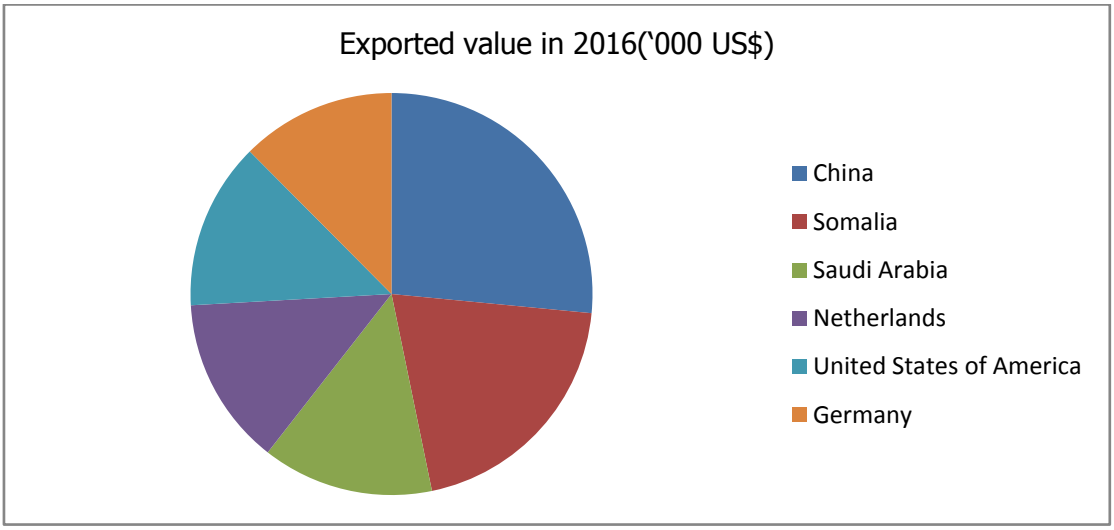


Figure 2: Export Destinations of Ethipia in 2016

Source: International Trade Center, Trade Map

Country wise, in 2016, China is the largest export destination, followed by Somalia and Saudi Arabia. While the Netherlands and Unites States of America stood third and fourth respectively.

2.2 Export structure of Ethiopia

The composition of exports revealed that coffee takes the largest share with, 19 percent and it remains the main export earner in 2014-2015, though its share declined over time (Table 2). Vegetables, oil seeds, live animals and leather are the other major contributors of the export sector. This shows the export of the country is more of agricultural and concentrated on a few primary commodities. The manufacturing export remains stagnant and shows marginal movement compared to other sectors. Nonetheless,

Table 2: Export structure by product of Ethiopia 2014-2015('000 US$)

Leading products exported based on average 2014-2015 values SITC Revision 3 (3-digit level)	Value (f.o.b., thousands of dollars)	As Percentage of Country Total	As Percentage of Developing Country	As Percentage of World
Coffee and Coffee Substitutes	1021247	19.1	4.36	2.61
Vegetables, Vegetable Products	903 748	16.9	3.26	1.37
Heavy Petroleum, Bituminous Oil	885 784	16.6	0.26	0.11
Crude Vegetable Materials, ness	724 357	13.5	5.06	1.76
Oil Seeds, Oleaginous for Soft Oil	617 231	11.5	1.73	0.83
Live Animals Excluding Fish and Crustacean	332 214	6.2	6.47	1.47
Gold, Non-monetary Excluding Ores	157 112	2.9	0.12	0.05
Leather	97 778	1.8	0.69	0.38
Meat, nes, Fresh, Chilled, Frozen	97 081	1.8	0.60	0.13
Footwear	35 787	0.7	0.04	0.03
Reminder	474 879	9.0		
All Commodities	5347218	100.0	0.07	0.03

Source: UNCTAD HANDBOOK OF STATSTICS (2016)

2.3 Imports

The trend of import indicates a steady increase over time with higher growth rate than the export. The country is heavily dependent on imported manufactured products. Machinery, fuel, and petroleum products represent the leading import items. Since 1995, manufactured goods are the highest imported products. It accounted 82 percent in 2014 out of which Chemical Products, Machinery and Transport equipments, and Other Manufactured Goods accounted 14, 37.2 and 30.8 percent respectively (Table 3). However, the import of food items shows a declining trend. This might be related to the increase in the agricultural production and productivity. Fuel import has been increased due to the expansion of the economy as the demand for energy increased. In general, the trend of imports shows the

low capacity of the manufacturing sector to supply important manufactured goods for the domestic market.

Table 3: Ethiopia's Import Structure ('000 US$)

Year	1995	2005	2014
All Food Items	13.8	10.6	9.5
Agricultural raw materials	1.9	0.9	0.8
Fuel	11.1	15.1	19.9
Ores, Metals, Precious Stones	0.8	1.2	1.6
Manufactured Goods	72.4	72.1	82.0
Chemical Products	14.1	12.3	14.0
Machinery and Transport Equipments	35.5	34.7	37.2
Other Manufactured Goods	22.7	25.1	30.8
Total Vaue	1 141	4 095	18 987

Source: UNCTAD HANDBOOK OF STATSTICS (2016)

It also appears that the spatial distribution and trade landscape of the country has been changing over time. The traditional trade partners, European member countries like Germany and Italy were the largest trading partners in terms of receiving Ethiopia's export, however, its external orientation has been shifting towards the Asian emerging economies. China and India are coming at the forefront.

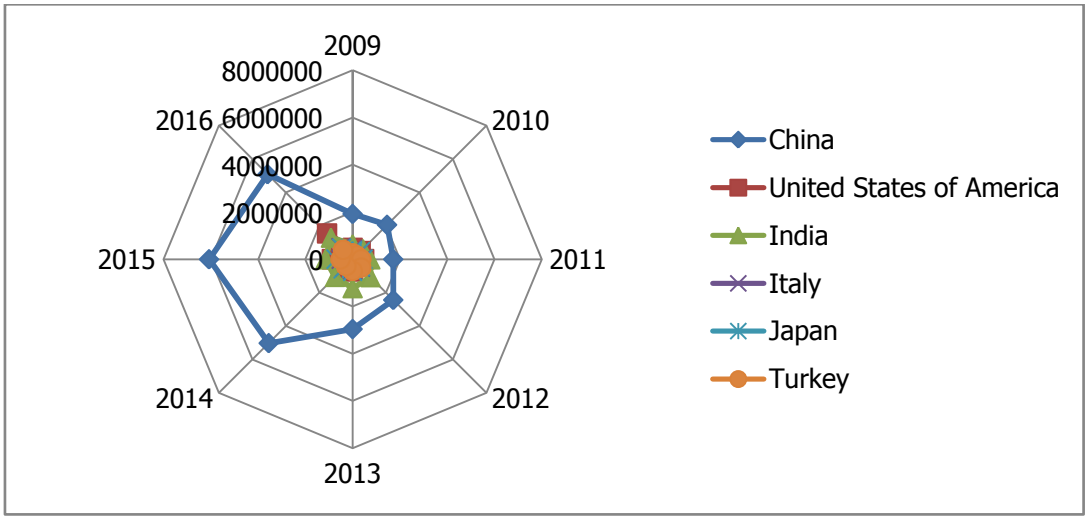


Figure 3: Import Source of Ethiopia (2009-2016) ('000 US$)

Source: International Trade Center, Trade Map

2.4 Sectoral Composition and contribution to the Economy

Unbundling the sectoral share of the GDP revealed that agriculture had the highest share with 48.8 percent, followed by the service sector with 41 percent; the remaining 10.1 percent goes for the industrial sector in 2007/08.

Table 4: Sectoral Contributions and share to GDP

Industry/Year	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Agriculture	170.3	181.2	195.0	212.5	222.9	238.8	251.8	267.9
Industry	35.4	38.8	43.0	49.8	59.6	73.9	86.5	105.2
Service	143.1	163.2	184.7	216.6	237.4	258.8	292.5	322.2
Total	348.3	383.2	422.7	478.9	519.9	571.5	630.8	695.3
	Sectoral Contribution and Share of GDP in Percentage							
Agriculture	48.8	47.3	46.1	44.4	43.1	42.0	40.1	38.8
Industry	10.1	10.1	10.2	10.4	11.0	13.0	13.8	15.2
Service	41.1	42.6	43.7	45.2	45.9	45.0	46.1	46.0

Source: Ministry of Finance and Economic Development

Notwithstanding, in 2014/15 fiscal year, the share of the service sector climbed to 46.6 percent and surpassing the agriculture, which maintains the share of 38.8 percent while the industrial sector increased to 15.5 percent.

This reflects that despite, agricultural production has been expanding in absolute terms, it has been losing its status as the leading sector and declining its share while the service sector has overtaken it. The industrial sector has been increasing, but the rate of growth is less than the Service and agricultural sector performances.

2.5 Share of Manufacturing Sector in the Economy

The absolute growth of the industrial sector has been remarkable, though its share in the overall economy has still remained small (Table 5). From 2007/08 fiscal year to 2014/15, it showed more than double growth.

Table 5: GDP by sector, share & growth in %

Indicators	2009/10	2010/11	2011/12	2012/13	2013/14	Average
Real growth rate, in %						
GDP	10.5	11.4	8.7	9.8	10.4	10.1
Industry	10.8	15.0	19.7	24.0	21.2	20.0
Manufacturing	11.6	17.9	11.8	16.9	11.3	14.5
Large and Medium Scale	13.6	14.1	15.9	24.2	14.5	17.2
Small Scale and Cottage	7	7.2	4.2	1.9	3.1	4.1
Share, in %						
Industry/GDP	10.2	10.4	11.5	13.0	13.8	12.3
Manufacturing /Industry	37	38.1	35.6	33.6	30.8	34.5
Manufacturing /GDP	3.6	4.0	4.1	4.4	4.4	4.2
Large and Medium Scale/GDP	2.4	2.6	2.8	3.1	3.2	2.9
Small Scale and Cottage/GDP	1.3	1.4	1.3	1.2	1.2	1.3

Source: Ministry of Finance and Economic Development

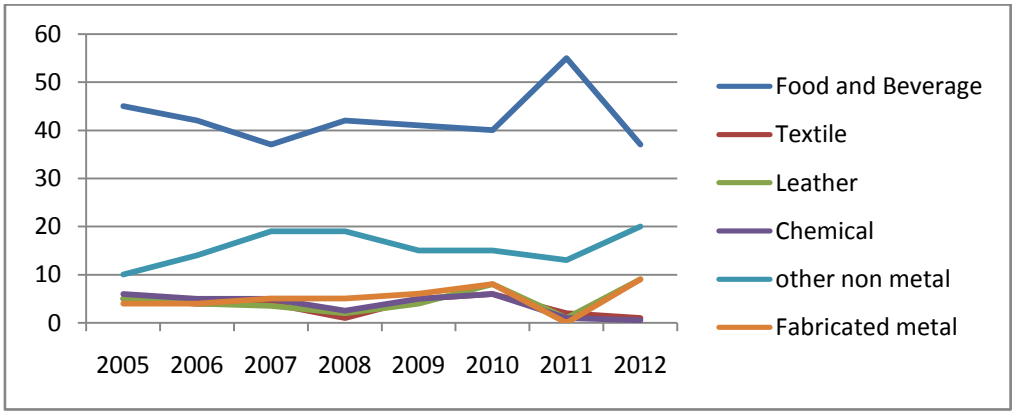
The contribution to the GDP growth is also relatively significant 3 percent out of 10.2 percent in 2014/15 compared to 1 percent out of 11 percent growth of GDP in 2007/08 fiscal year. The service sector is overtaking the agricultural sector where it contributed 4.5 percent, while the later did 2.5 percent.The average share of the manufacturing over the industrial sector was 34.5 percent, while the industry over the GDP was 12.3 percent (Table 5). numerous factors contributed for the lower performance of the industrial sector.

Thus, the industrial sector continues to contribute a marginal share of GDP, while the full potential of the private sector remains restricted by various business climate constraints (**See Section 3.2.6**). The high public investments have tended to crowd out the private sector, and led to the widening of the investment-saving gap (17.5% of GDP in 2014/15) and the external sector gap. This implies that the high economic growth has not been accompanied by structural transformation (ADB, 2015).

2.6 Manufacturing Export of Ethiopia

The Government of Ethiopia identified six priority areas in the manufacturing sector, namely, leather and leather products, textiles and garment, Agro-processing, chemical, fabricated metals and other non metal subsectors as focus areas.

Figure 4: The Composition of Manufacturing Sector ('000 US$)



Source: Central Statistics Authority

The large and medium scale manufacturing sectors tended to produce consumer goods production. The food and beverage Subsector has accounted, on average, for about 2/5th of the industry total for over the past decades. The share of the Subsector declined to 37 percent in 2012. The share of the none-metallic minerals (cement constitute the major component) and fabricated metals subsectors increased during the same year mainly due to the construction sector boom. The share of export subsectors declined in 2011indicating

lower performance compared with subsectors focusing on mainly import substituting goods (EEA, 2015).

2.7 Structural Transformation and the Manufacturing Sector

The manufacturing sector is one of the prospects and promising potential of Economic development in Ethiopia. However, the country has not yet exploiting this opportunity and realizing its potential. The government is fully committed and engaged to strengthen the sector by giving due priority among all other sectors (UNDP, 2017). Ethiopia has not made significant progress in pulling labor out of agriculture into more productive and industrial jobs with three-quarters of all workers still employed in agriculture. For a country passing through the early stages of economic development, growth in the industrial sector is essential for sustained long-term growth and poverty reduction. The structural economic transformation that involves the reallocation of workers from the poorly productive agriculture to more productive economic activities in manufacturing is an important step towards the creation of better-paying jobs.

3. FACTORS AFFECTING MANUFACTURING SECTOR EXPORT

Though, the multifaceted nature of the challenges at the domestic and external level of the manufacturing sector's export, it varies across each sub-sector. Thus, we can look at the most concerning elements at both domestic and external levels

3.1 External Factors

The external factors are linked to external orientation of the country and it comprises the following issues:

3.1.1 Multilateral and Regional integration

It is hardly easy to identify any African country without regional trade arrangements and free trade areas, however, Ethiopia is one of the least integrated into African regional arrangements framework compared with its counterparts. It remains without any free trade area agreements and only a member of COMESA (preferential trade arrangement) and acceding at the WTO with the observer status. Its unwillingness of integration at regional and global markets shows its manufacturing sector is less developed and stutters to compete even in the face of developing countries' market. The low performance of the manufacturing sector caused the country, not to involve sufficiently in the global value chains and unable to integrate with other partners and reach to other destinations. Thus,

integrating at multilateral and bilateral levels merely cannot be a guaranteed without efficient and competent industrial sector on the world market rather it depends on enhancing its competitive and comparative advantage while building vibrant institutions.

3.1.2 Tariff and Non-tariff barriers: As an LDC, Ethiopia is benefiting from multiple opportunities with special and preferential treatments like the Generalized System of Preferences (GSP) scheme, Agricultural Growth Opportunity Act (AGOA from USA) and Everything but Arms (EBA); however, there are challenges faced by the exporters in these and other foreign markets. For instance, **tariff barriers** remain challenges for least developed countries to penetrate the market of developed countries. **Tariff escalation** on the value added exports remain high in the developed countries' market. That is, while tariffs are zero or lower for raw commodities, it is higher as the value addition in the commodity increases (from raw material to finish or semi finished products).

Non-tariff Barriers (NTB) are another form of challenges for manufacturing sector in Ethiopia. As tariffs are coming to zero or decline in recent years due to the multilateral negotiations under WTO, the use of NTB and sanitary and phytosanitary measures are being increased. Besides, due to health reasons foreign customers tend to utilize home made products compared to foreign products. Additionally, these measures, particularly in developed countries posed another challenge since these requirements are difficult to fulfill and comply with. Even setting its own standers is being difficult due to weak institutional set up and to have an own certifying organization in the domestic market. For instance, the country has the largest stock of livestock production and instead of exporting processed meat, it has resorted to export live animals. Therefore, Ethiopia is not benefiting from its potential export of meat and meat products from its livestock resources.

3.2 Domestic Factors

One of the important factors for the low export and the incompetent manufacturing sector is the shortcomings in the supply side of the economy.

3.2.1 Physical infrastructure: By physical infrastructure we mean, quality of road, rail and air transportation systems; and quality of ports as well and electric power, are the principal and important factors to improve the competitiveness of the sector. Specifically, Power outage is the chronic problem and curtails productivity and competitiveness. Albeit, rapid developments and increase in the generating capacity of hydropower, the country fails to

meet the growing power demand as it outweighs the supply. It has also a plan to develop industrial parks of 100,000 hectares of land between 2016 and 2025 -i.e. 10,000 Ha annually- for a total factory floor area of 10 million m2 (1 million m2 annually). This can strengthen the countries competitiveness and attracts more of FDI[1].

On the other hand, financial services are one of the driving force for economic progress, where an expansion in credit to the private sector enables business firms to invest in productive capacity, thereby laying the foundation for a sustainable growth path. Notwithstanding, Ethiopia is by far falling behind its peers in financial services; the ratio of private sector credit to GDP declined from 15.4 percent in 2003/04 to 10.9 percent in 2013/14, and remained below the SSA averages for the period reviewed (World Bank, 2015). According to the Doing Business Report 2015, Ethiopia ranks 165 out of 189 in the ease of getting credit compared to the SSA average ranking of 122 and well-performing peers such as Rwanda which ranks 4 out of 189 economies (World Bank, 2015b).

The Banking and telecom service sectors are dominated by the government and this makes Ethiopia an exception within Sub-Saharan Africa and across the developing world, where banking systems have much higher shares of private and foreign participation. The Public banks, which mainly focus on financing large enterprises, are dominating the credit market share of lending in the banking sector (World Bank, 2014).

The dominance of the government in the banking system has enabled the country to finance big public projects and being closed to foreign competition, however, are lagging behind in their service quality.

The telecom and banking sectors are dominated by the government, and closed for external competitions, are lagging behind in their service quality. Opening up the banking services could have contributed to resolve the shortage of foreign currency. Particularly, it adversely affects the sector because of unable to get timely foreign exchange to purchase and import raw materials from foreign sources as well as machinery and equipments. Thus, manufacturing industries have to wait for an average of 6-8 months after opening LCs to get approval for their foreign exchange application. (World Bank, 2014d).

3.2.2 Regulatory environment: By regulatory environment, we refer to the level of change in regulation and transparency. It includes favoritism in decision making, government

[1] See https://www.scribd.com/document/316755609/Ethiopian-Industrial-Park-Development

transparency and reducing corruption (Portugal-Perez and Wilson, 2012; Ferrantino, 2013). Hence, the regulatory environment is another pivotal factor that can influence the country's attractiveness to foreign direct investment (FDI) which serves as a catalyst to flourish the manufacturing sector. Efficient institutions, transparent government policy making; and responsive administrative procedures are detrimental factors while reducing corruption and bribes; abolishing favoritism in decision making by government officials boosts inflow of capital that ultimately increases the manufactured products. However, Ethiopia lacks and desperately needs to improve on this aspect. Despite the current massive crack down on corruption, it remains rampant and the corruption perception index suggests pervasively widespread which curtails and creates hindrance to the manufacturing sector.

3.2.3 Technological readiness: Sustainable industrial catch-up and acceleration of structural transformation require a high rate of investment in productive capacity and technological capabilities.(UNCTAD, 2016). It is the availability and absorption of latest technology, usage of internet among business to business and business to customers, which facilitates the expansion of the sector and lays the foundation for innovation. It is also vital for technological transfer and improves productivity.

3.2.4 Port efficiency: The improvement of port efficiency by reducing time to import and export; and documents required to import and export by reducing the number of procedures, Landlocked Least Developed Countries (LLDCs), can improve their external trade. As they rely on their neighboring countries to transit most of their imports and exports, coordinating effort with neighboring countries to improve the infrastructure (hard and soft) may serve as a useful way to improve the development prospects of LLDCs. Ferrantino, (2013) argued that the challenges resulting from the inadequacy of the hard infrastructure are still quite large, however, the potential gains from improving border administration measures may be cheaper and easier to achieve and are still significant (Ferrantino, 2013).

As Ethiopia is a landlocked country**,** it is dependent on neighboring Djibouti port, 750 kilometers away from the capital Addis Ababa where virtually the manufacturing factories agglomerated. The long distance away from the port combined with poor quality of road infrastructure, resulted in high cost of transportation and added up to the inefficiency of the sector and unable to compete in the international market. According to the World Bank

ease of doing report 2015, it costs more than 2500 US$ to transport a standard container of manufacturing products from Ethiopia to its market destinations while it costs 350 US$ to do the same in Singapore. However, large rail projects were under construction and last year, the first phase connecting Djibouti port and the capital Addis Ababa has been inaugurated. When the new railway becomes fully operational, transport time from Djibouti to the Ethiopian capital will be reduced from 7 days to ten hours. This can be considered as a great leap towards the transformation of the transport system and significantly impacting the country's export[2].

With the aim of reducing delays and reducing congestion at Djibouti port, more than 5 dry ports are constructed within different parts of the country; due to lack of competent institutions and the prevalence of bureaucratic bottlenecks, the expected outcome is yet to be achieved.

3.2.5 Low productivity and lack of product diversification

Human capital is one of the principal factors for the development of the manufacturing sector. In addition, a key determining factor of productivity is the ability of an economy to supply the skills needed for companies to grow and to thrive; and favourable investment climate. It helps in long term economic growth and improving living standards. However, Ethiopia lacks the required skills and professionals which leads to more efficient and competent production system (Worldbank, 2015). Hence, firms are struggling to absorb qualified and competent professionals. This can be attributed to lack of education and industry linkage in one hand and poor educational institution on the other. Well trained and literate workforce would not only increase productivity, but it will also make the country more attractive to international firms who seek to invest in the country. On the other hand export diversification is a key factor to increase the manufacturing export. Over the past decade, export revenue increased by 13.3 percent on average. This resulted from both changes in volume and prices of exported items. However, export growth remains volatile, and due to concentration on few agricultural commodities, it has been exposed to price and weather shocks (IMF, 2016).

[2] See https://www.theguardian.com/world/2016/oct/06/next-stop-the-red-sea-ethiopia-opens-chinese-built-railway-to-djibouti. Next stop the Red Sea: Ethiopia opens Chinese-built railway to Djibouti

Furthermore, the manufacturing sector is at its early stage; concentrated on few Agro-processing subsectors and not diversified. This led to inability to add value in its export products. Due to this fact, Ethiopia exports mostly raw materials; and agricultural commodities and imports capital goods in return. This situation has made its terms of trade to deteriorate and balance of trade to deficient. However, by diversifying the export portfolio, the country can maintain stable export revenue than concentrating on fewer products and markets. Demand and price shocks are not usually symmetrical across sectors and countries, so diversified economies have the margin to offset revenue losses in one area with potential gains, or at least stability, in another. Economies, less diversified and concentrated on a few products can not sustain export earnings and maintain stable revenue (Shepherd, 2009).

Table 6: Export Diversification and Concentration Indices of Ethiopia and Selected Countries

Exports						
Country	2005			2015		
	Number of Products Exported	Diversi-fication Index	Concen-tration Index	Number of Products Exported	Diversi-fication Index	Concen-tration Index
Developing Economies	260	0.246	0.138	260	0.193	0.090
Transition Economies	256	0.593	0.300	256	0.572	0.274
Developed Economies	260	0.159	0.066	260	0.175	0.067
Djibouti	55	0.658	0.165	92	0.633	0.206
Ethiopia	52	0.644	0.379	127	0.785	0.313
Kenya	226	0.714	0.210	238	0.638	0.199
Uganda	145	0.752	0.264	186	0.715	0.177
Tanzania	179	0.758	0.231	208	0.769	0.199

Source: UNCTAD HANDBOOK OF STATISTICS[3]

The UNCTAD compilation of diversification and concentration indices reflect even though the country could double the number of products exported from 52 to 127 in the last decade, the concentration index is still higher than its peers, i.e. Kenya has more diversified and less concentrated economy than Ethiopia as its concentration index is 0.199 compared to 0.313 of Ethiopia in 2015.

3.2.6 Business Environment constraint

[3] An index value closer to 1 indicates a country's exports or imports are highly concentrated on a few products. On the contrary, values closer to 0 reflect exports or imports are more homogeneously distributed among a series of products (UNCTAD, 2016)

At the domestic level, favorable business environment is the crucial elements to further develop the existing manufacturing sector as well as the newly flourishing manufacturing establishments. The World Bank enterprise survey takes a close look at various indicators, through collecting data from 848 firms in Ethiopia. A list of 15 business environment obstacles has been presented to business owners and top managers across those 848 firms and was asked to choose the biggest obstacle to their business (World Bank, 2015).

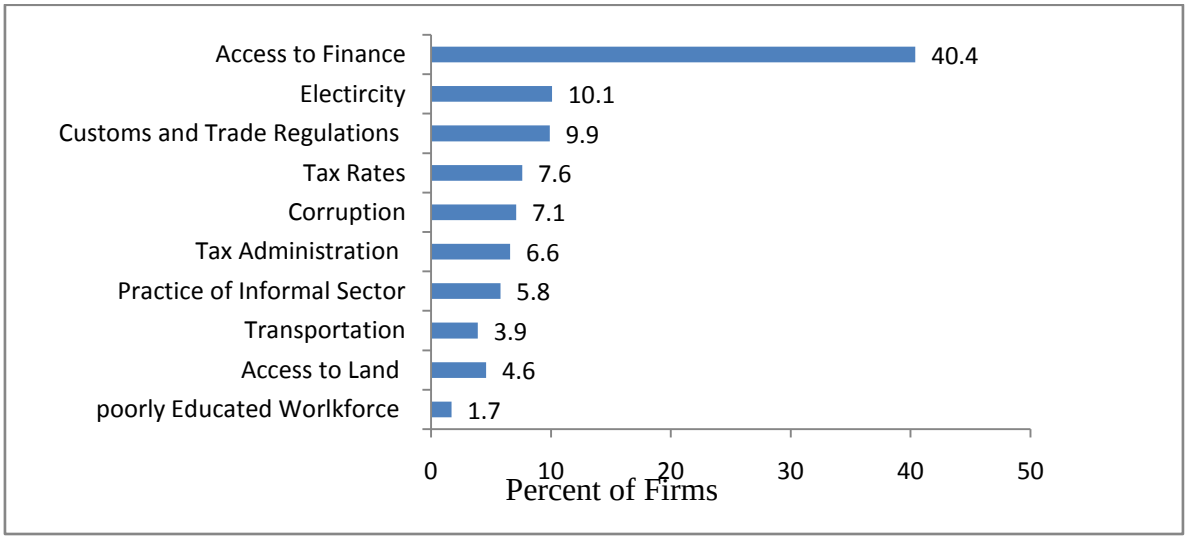


Figure 5: Ranking of the Top Business Environment Obstacle for Firms in Ethiopia

Source: World Bank Business Enterprise Survey 2015[4]

From the figure above we can see that access to finance is reported to be the most constraining factors with 40 percent of the surveyed firms. While 10.1 percent reported power outage as the most pressing problem while 9.9 percent complained customs and trade regulations pose the highest constraint. The same survey conducted in 2011 showed that access to finance remained the first hindrance to hamper the development and expansion of the manufacturing sector.

In addition, the Global Competitiveness Report (GCR) also revealed that, Ethiopia ranked as low as 109th out of 144 nations in the 2015/16. This was attributed to the low ranking in infrastructure services and efficiency enhancers (i.e., technological readiness, higher education, and financial market). It identified the following as the main constraints on doing business in Ethiopia: access to finance (10.6 percent), inefficient government bureaucracy (9.3 percent), foreign currency regulation (8.8 percent), corruption (8.2 percent), policy

[4] See World Bank Business Enterprise Survey Avilable online at the Following website. http://www.enterprisesurveys.org/data/exploreeconomies/2015/Ethiopia#innovation-and-technology

instability (8 percent), and tax policy (8 percent). Due attention and policy measures are needed to reduce hindrances and providing supportive policies to doing business, including access to finance.

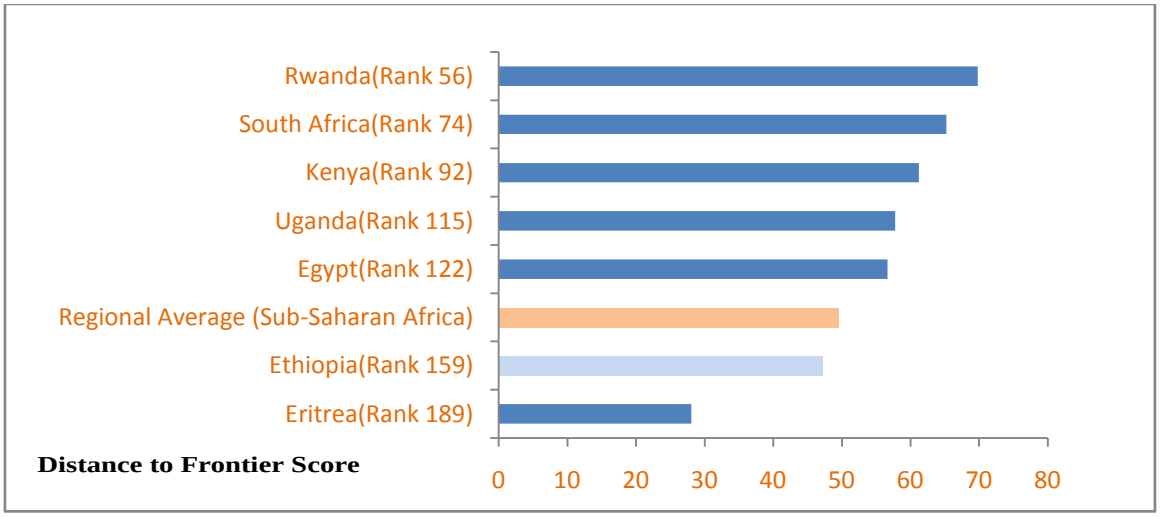


Figure 6: Distance to Frontier Score of Ethiopia and Other Selected Countries[5]

Source: World Bank Business Enterprise Survey 2015

The Distance to Frontier Score of Ethiopia shows the country lags behind with its comparator countries. Its score accounts 47. 22 which is below the regional average score of 49.51 for Sub-Sahara Africa. While the regional best performer, Rwanda scored 69.81 out of the scale of one hundred.

4. CONCLUSIONS AND RECOMMENDATIONS

As we have in the above discussion, the manufacturing is weak and vulnerable sector. Having this in mind the following issues at both domestic and international level needs to be addressed.

- Ethiopia cannot hide itself from the globalized world and needs focus on building its competitiveness. The country can continue its economic integration efforts while bolstering its competitive advantage and integrate in the global market so as to get access to market for its manufacturing sector. This also gives the opportunity to defend its interest in the global value chains.
- Improving infrastructures boost the competitiveness of the manufacturing sector. It helps to reduce the average cost of production and export. The country heavily relies

[5] Distance to Frontier Score ranks economies with respect to regulatory practice, showing the absolute distance to the best performance in each *Doing Business* indicator. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 as the highest. *Source: Doing Business* database(World Bank, 2017).

on Djibouti port (90%) of external trade which is putting much pressure on the existing infrastructure and it is vital to diversify and use other alternative ports (Kenya and Sudan) and strengthening regional development corridors rather than concentrating around the capital Addis Ababa. Huge investment is needed not only in the power generation and also improving the efficiency of distribution to meet the demand for the sector.

- Continued reform in customs administration and regulatory environment and reducing bureaucratic bottlenecks is vital to attract foreign direct investment that can help diversify and increase the manufacturing sector. Moreover, increased FDI helps to diffuse and transfer technology.
- Quality education: reorientation of the educational institutions is important to produce competent and productive professionals required for the expansion of the manufacturing sector. Improve industry-education linkage.
- Enhancing efficiency of the domestic financial institutions and progressively opening up its financial sector and telecom industry can help facilitate the smooth flow of goods and services and improve its external trade.
- Providing investors to get special support from the other service sectors like banking to access loan and duty free import (input) particularly for industries which are export oriented.
- To transform the economy, the country needs to promote greater private investment, particularly in the strategic priority area of agrobased light manufacturing.

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