



Wazema Institute

Prospect of FDI-Led Industrialization in Ethiopia (Critical analysis)



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Wazema Institute:

Wazema institute is Wazema Radio affiliated research group comprising experts working on pertaining issues in Ethiopia and across the East Africa region.

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Contact- Derese K. Getachew (PhD) – derese@gmail.com

About the Author:

Sileshi Tenna is an Economist by training. He received his Bachelors in Economic degree from Addis Ababa University and Masters Degree in Public Administration and International Development from Harvard University. He is currently working for Bank of America. Sileshi is also regular contributor to Wazema Radio.

I. Introduction

Historically, industrial development – particularly the one through the expansion of the manufacturing subsector- was the first milestone that contemporary developed countries attained in their journey of economic development. This is because the manufacturing subsector- with relatively little effort to improve labor skills - is capable of absorbing large amount of labor force that is released from the traditional sector like agriculture. In the second half of the 20th century, most of the countries that caught up the developed economies managed to do so by increasing the productivity of their labor force through shifting it from the traditional economy into the manufacturing subsector. In this regard, it could be reasonable to developing countries like Ethiopia to focus on the manufacturing subsector in their endeavor to transform their traditional economy into a modern one.

However, there is no single model for industrialization that all developed economies employed. Tracing back the history of industrialization reveals individual as well as different groups of countries managed to industrialize their economies at different points in time following different approaches that fit their specific contexts. The pioneers of industrialization- namely West Europe and North America- followed *private sector-led industrialization* that involved *invention* and *expansion* of new technologies while Japan - taking advantage of being a follower - industrialized its economy by following *export-oriented* and *state-led industrialization* by *imitating* and *innovating* the already invented technologies by the pioneers. The so called East Asian Tiger economies including Hong Kong, Singapore, South Korea and Taiwan more or less followed a path that is similar to that of Japan. However, in addition to benefiting from the politics of the Cold War era, the Tigers were able to take advantage of Japan's industrial success due to their geographical proximity to and cultural similarity with the later. There are also dozens of successful newly emerging economies including China, India, Turkey, Thailand and Malaysia that pursued their own paths of industrialization that blend several policy options depending on their context.

During the last decade, the Government of Ethiopia claimed that the country's economy has been growing at an average rate around 10 percent. However, leaving aside the validity of this staggering figure, the share of the industry sector is still very low and unchanged. Unlike what has been observed in most fast growing economies, manufacturing in Ethiopia has been lagging and there is no sign of structural change that shifts labor from low to high productivity sectors. In 2014, the average share of industry in GDP of the country was only 15 percent while that of the manufacturing subsector is 5 percent. This share of the manufacturing sector in GDP is

significantly less than the developing countries average as well as the sub-Saharan Africa average which was about 10 percent in the same year.

In my pervious short article¹, I argued, by stating several external and internal factors, that the present day Ethiopia can emulate neither the industrialization model of Japan nor that of the other successful Asian economies. However, I indicated that the door to industrialization is not totally closed to Ethiopia. Ethiopia can compete for light manufacturing industries that are currently leaving countries like China, Turkey, Thailand and Malaysia and going to countries like Vietnam, Bangladesh, Cambodia and Philippines in search of cheaper skilled labor and product markets. Given its comparative advantages – lower wage, young population, and big domestic market – Ethiopia has the potential to pursue the Foreign Direct Investment led industrialization policy following the footsteps of the later economies. However, the competition to attract efficiency- or market-seeking FDI firms is tough. In fact, taking advantage of this reality, many other economies – which are still at the lower stage of development in the global structural transformation chain – are also currently pursuing FDI-led industrialization that intends to attract such efficiency- or market-seeking FDI firms.

It should be noted that such efficiency- or market-seeking FDI firms are different from the traditional type of resource-seeking FDI firms. Efficiency- or market-seeking FDI firms -in addition to cheap labor and product market - require an excellent investment climate. In contrast, resource-seeking FDI firms are generally more tolerant of a poor investment climate as the costs of resource-based investments are less dependent on the broader economic and political conditions.

Moreover, as a recent assessments of FDI inflows indicated, attracting FDI does not guarantee economic development. And, many are arguing that the benefits of FDI and its productivity spillovers depend on the macroeconomic and structural conditions of the host economy.²

In this article, I try to explore the existing opportunities and challenges in pursuing successful FDI-led industrialization in Ethiopia.

II. Rationale, Caveats and Fundamentals of FDI-Led Industrialization

World leading growth economists, such as Daron Acemoglu and Philippe Aghion, argue that in countries that are at earlier stages of development investment-based strategies that encourage adoption and imitation, rather than invention and innovation, are not only better but the only

¹ Made in Ethiopia -Arkebe's Vision or Illusion. www.wazemaradio.com

² UNCTAD. (2015). Foreign direct investment inflows to Africa remained stable in 2014, UN report says [Press release]. Retrieved from: unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=250.

feasible policy strategies.³ Moreover, with globalization, there is also a change in the mode of industrial production from whole production chain to segmented value chains. As a result producers have shifted the focus from achieving comparative advantage along the whole production chain in favor of advantages in specific niches.⁴ Such segmented value chains create opportunities for developing countries to specialize, with FDI productivity spillovers helping them move progressively into higher value-added tasks, over time.

In connection to this, several empirical studies found FDI could play a significant role in economic development in multiple dimensions⁵: by increasing investment and trade; by expanding access to world markets for capital, technology, and goods; by contributing to technology adoption by and industrial upgrading among domestic firms; by helping the structural transformation of host economies; and, ultimately, by spurring growth of output, employment, and productivity.

In their study that is published in the world-leading platform for high quality peer-reviewed Development Economics Journals, “Handbook of Development Economics”, Harrison and Rodríguez-Clare (2010) present that trade volumes are highly and positively correlated with foreign investment inflows.⁶

Another group of prominent economists provide some empirical evidence that FDI - by combining long term investment with control - can facilitate the transfer of capability (technology and management knowhow), and provide access to regional and global value chains.⁷

A World Bank study by Chandra and Kolavalli (2006) provide evidence that attracting FDI has been an important strategy in technological adaptation.⁸ Similarly, in another World Bank study, Farole and Winkler (2014) present evidence how productivity increase can be attained through the transfer of technology and knowhow of the foreign company to domestic firms in

³ Acemoglu, D., Aghion, P., & Zilibotti, F. (2006). Distance to frontier, selection, and economic growth. *Journal of the European Economic association*, 4(1), 37–74.

⁴ UNECA. (2013). *Harmonizing Policies to Transform the Trading Environment* United Nations Commission for Africa. Retrieved from: www.uneca.org/sites/default/files/PublicationFiles/aria_vi_english_full.pdf.

⁵ Dinh, H., Plamade, V., Chandra, V., and Cossar, F. (2012). *Light Manufacturing in Africa: Targeted Policies to Enhance Private Investment and Create Jobs*. International Bank for Reconstruction and Development / International Development Association or The World Bank. Washington DC 20433

⁶ Harrison, A., & Rodríguez-Clare, A. (2010). “Trade, Foreign Investment, and Industrial Policy” *Handbook of Development Economics*. Volume 5, edited by D. Rodrik and M. Rosenzweig, 2010.

⁷ Prasad, E., Rogoff, K., Wei, S. J., & Kose, M. A. (2005). Effects of financial globalization on developing countries: some empirical evidence (pp. 201–228). Palgrave Macmillan UK.

⁸ Chandra, V., and Shashi Kolavalli, S. (2006). “Technology, Adaptation, and Exports: How Some Countries Got It Right.” In *Technology, Adaptation and Exports*, ed., Vandana Chandra. Washington, DC: World Bank

the same sector (horizontal spillover) or along the supply chain (vertical spillovers) through the movement of people and goods.⁹

Based on a survey conducted on the biggest export firms and industrial companies across Sub-Saharan Africa, Sutton and Zhang (2016) present three key facts that illustrate the potentially transformative role of FDI in Africa. These are: (i) Around half the biggest export companies operating in African countries that have successfully gone from low to high industrialization began as FDI ventures; (ii) In the African countries that currently show the greatest prospects for industrialization, around one-fourth of their leading industrial companies are companies of foreign origin; and (iii) In sub-Saharan African economies as in East Asia, FDI has broadened the scale of activity across existing industries and the range of industrial activities.¹⁰

All these suggest that attracting FDI is vital for countries that are at the lower stage of development in the global structural transformation chain but striving to industrialize their economy. However, attracting efficiency- or market-seeking FDI firms is not an easy task as it requires an excellent investment climate that comprises the whole arrays of economic, social and political factors. Some of requirements such as basic infrastructure (access to electricity and energy, transport, telecommunication and logistics), vital institutions (property rights, rule of law, corruption, macroeconomic stability, economic management, and business regulations), and political stability (peace and security) are deemed to be knock-out factor while there are still other important factors like the size of the domestic market, the quality of human capital, the degree of monetization of the economy, and investment and trade policy incentives (wage, tariff, tax on export and profit tax).

Sutton et al. (2016) argue that efficiency- or market-seeking FDI firms are different from resource-seeking FDI firms that are generally more tolerant of a poor investment climate because the costs of enclave investments are less dependent on the broader economic and political conditions and custom-made arrangements can be agreed with local elites. In contrast, as Sutton et al. (2016) further elaborates, political or economic instability may be an insurmountable obstacle for efficiency- or market-seeking FDI firms to invest. The presence of widespread corruption in government is incapacitating and can effectively stifle FDI inflows, even when other aspects of the investment climate are favorable. These conditions are usually deep-rooted institutional failures, politically sensitive and difficult to address, but they are fundamental in attracting FDI.¹¹

Moreover, attracting FDI does not guarantee economic development. The benefits of FDI and its productivity spillovers depend on the macroeconomic and structural conditions of the host

⁹ Farole, T., & Winkler, D. (Eds.). (2014). Making foreign direct investment work for Sub-Saharan Africa: local spillovers and competitiveness in global value chains. World Bank, Washington, DC.

¹⁰ Sutton, J., and Zhang, Q. (In progress). Industrial development in historical perspective: the prospects for Sub-Saharan Africa.

¹¹ Sutton, J. Jinhage, A., Leape, J., Newfarmer, R. & Page, J. (2016). Harnessing FDI for job creation and industrialisation in Africa. Growth Brief | FIRMS | May 2016.

economy.¹² A World Bank study by Lederman et al. (2010) indicates that FDI can be directly harmful when poorly managed, for example, as a result of a deterioration in the balance of payments as profits are repatriated.¹³ Similarly, Farole and Winkler (2014)¹⁴ and Chen et al. (2015)¹⁵ argue that harnessing the value of FDI requires active pro-competition policies that not only attract FDI, but also encourage economic contributions to technology, labor markets and vertical supply chains.

Brookings Institution researchers who have been studying the prospect of industrialization in Africa for long argue that for increased FDI to translate into increased productivity, and ultimately economic growth, will depend upon existing linkages between domestic and foreign firms. The researchers argue that the movement of workers and adoption of technologies and work practices are crucial in generating productivity spillovers. In Africa, in contrast to East Asia, the researchers indicate, linkages between foreign and domestic manufacturing firms are limited, as multinational enterprises (MNEs) often rely solely on imports for intermediate inputs. Many African MNEs produce wholly for export markets, this reduces the scope for forward linkages.¹⁶

III. Prospect of FDI-Led Industrialization in Ethiopia: A comparative analysis of Ethiopia's relative position in terms of its potential to attract efficiency- or market-seeking FDI firms

Background

In this part, what I try to achieve is to show where Ethiopia is found vis-a-vis other countries in terms of its potential to attract efficiency- or market-seeking FDI firms?

To undertake a sensible comparative analysis, this paper - by going through existing literature and available latest statistics - identified 15 African and Asian economies to be part of the analysis. These countries are selected since they are still at the lower stage of development in the global structural transformation chain but striving to attract efficiency- or market-seeking FDI firms - that are currently leaving developed and emerging economies in search of market and cheap labor- by pursuing FDI-led industrialization policy. These include: relatively 'big'

¹² UNCTAD. (2015). Foreign direct investment inflows to Africa remained stable in 2014, UN report says [Press release]. Retrieved from: unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=250.

¹³ Lederman, D., Mengistae, T. and Xu, L. (2010). Microeconomic Consequences and Macroeconomic Causes of Foreign Direct Investment in Southern African Economies. World Bank, Washington, DC.

¹⁴ Farole, T., & Winkler, D. (Eds.). (2014). Making foreign direct investment work for Sub-Saharan Africa: local spillovers and competitiveness in global value chains. World Bank, Washington, DC.

¹⁵ Chen, G., Geiger, M., & Fu, M. (2015). Manufacturing FDI in Sub-Saharan Africa.

¹⁶ Newman, C., Page, J., Rand, J., Shimeles, A., Söderbom, M., and Tarp, F. (2016). Made in Africa: learning to compete in industry. Brookings Institution Press, Washington, DC.

economies like Indonesia, Nigeria, Egypt and Philippines; ‘mid-size’ economies like Bangladesh and Vietnam; small economies like Myanmar, Kenya, Ethiopia, Tanzania, Ghana and Uganda; and even very small economies like Rwanda, Lao PRD and Cambodia are included due to their strong effort to attract efficiency-seeking and market-seeking FDI firms.

Although all of the selected economies are still at the lower stage of development in the global structural transformation chain, it should be noted that there are significant difference among them. Some of these economies – such as Indonesia, Vietnam, Egypt and Philippines – can be said they are in the process of transforming their economy and somewhat managed to attract reasonable amount of efficiency- or market-seeking FDI firms in the past decade, there are some that managed to attract noticeable amount of FDI though they have not yet able to show strong sign of economic transformation, and there are others that can be simply considered as strong aspirants of FDI-led industrialization.¹⁷

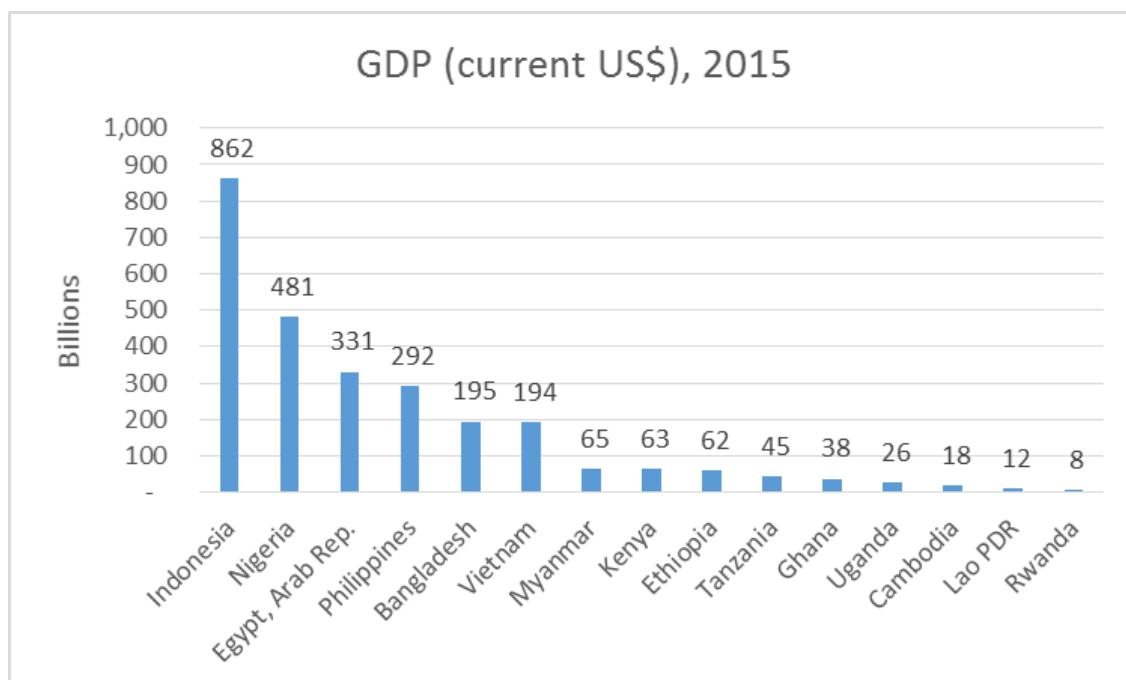
Before we dive into exploring Ethiopia’s relative position in terms of the key factors that are believed to determine the inflows of efficiency- or market-seeking FDI firms, it is good to see the following two things that pertain with the objective of attracting FDI.

- (i) The relative size and structure of the Ethiopian Economy vis-à-vis other countries – countries that are currently pursuing FDI-led industrialization policy and striving to attract efficiency- or market-seeking FDI firms; and
- (ii) Where Ethiopia stands currently vis-à-vis other countries – countries that are currently pursuing FDI-led industrialization policy and striving to attract efficiency- or market-seeking FDI firms – in terms of inflows of FDI

Relative Size of Ethiopian Economy

As can be seen in Figure ____, the size of Ethiopia’s economy is significantly less than some leading FDI-seeking economies like Indonesia, Vietnam, Bangladesh and Philippines in Asia, and Egypt and Nigeria in Africa. However, thanks to its big population, Ethiopia’s economy is somewhat bigger than many other FDI-seeking small economies like Rwanda, Uganda, Ghana and Tanzania in Africa and like Cambodia and Lao PRD in Asia.

¹⁷ In order to more information about the economic structure of the selected countries look at <https://www.cia.gov/library/publications/the-world-factbook/>



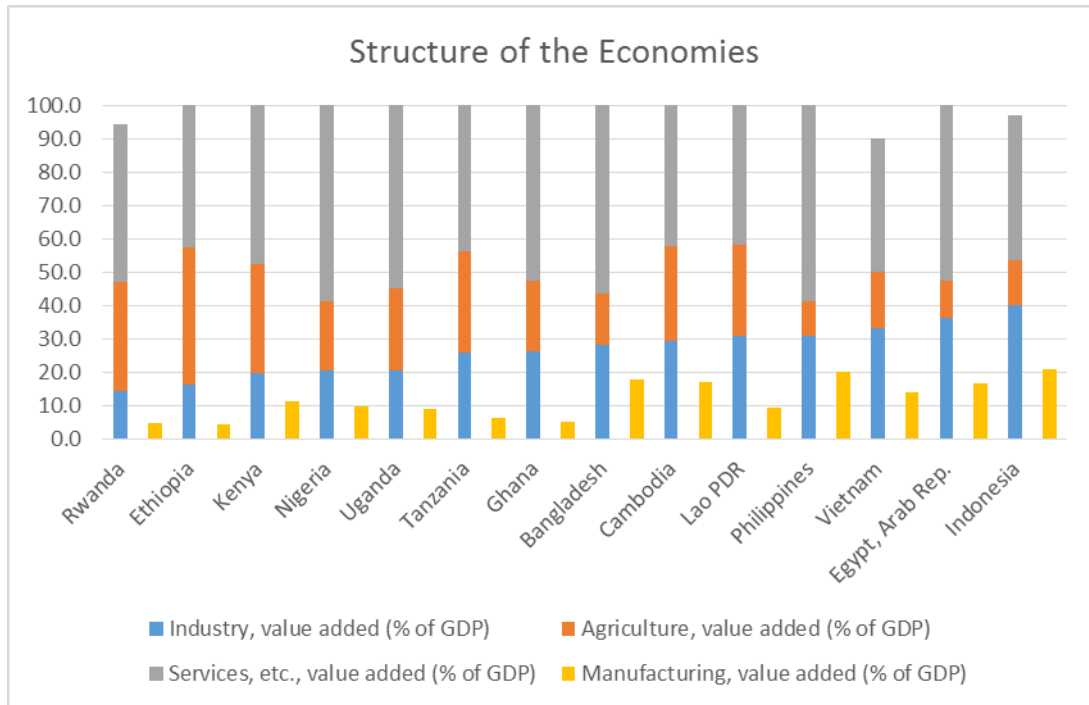
Source: WDI 2016

Structure of Ethiopian Economy

When we look at the structure of Ethiopian economy, the economy is dominated by agriculture with 42 percent of its GDP comes from the sector- this share is more than the share observed in any other Asian and African economy included in comparison group.

The share of the industry sector in the Ethiopian economy is only 16 percent while that of the manufacturing sub-sector – which is one of the indicators of the suitability of the FDI-seeking economies for FDI-led industrialization – accounts for only 4 percent of the GDP. In many of FDI-seeking economies in Asia, the share of the industry sector in the economy is already more than 30 percent while the comparable figure for FDI-seeking economies in Africa is more than 20 percent. Similarly, the share of the manufacturing sub-sector in GDP is much greater in many of FDI-seeking economies of Asia and Africa than it is in Ethiopia.

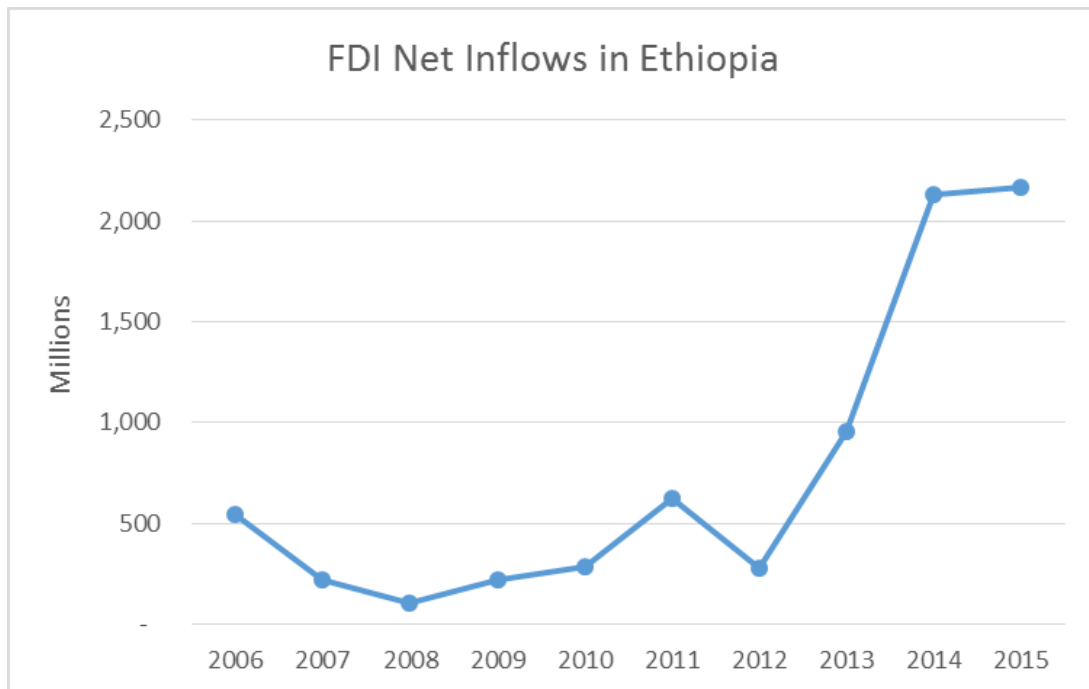
The current structure of the Ethiopian economy indicates that, as a country that has not yet started its journey to industrialize its economy, Ethiopia awaits a fierce competition with the other FDI-seeking economies that have already started their journey to industrialization and aggressively working to achieve more via FDI-led industrialization policy.



Source: WDI 2016

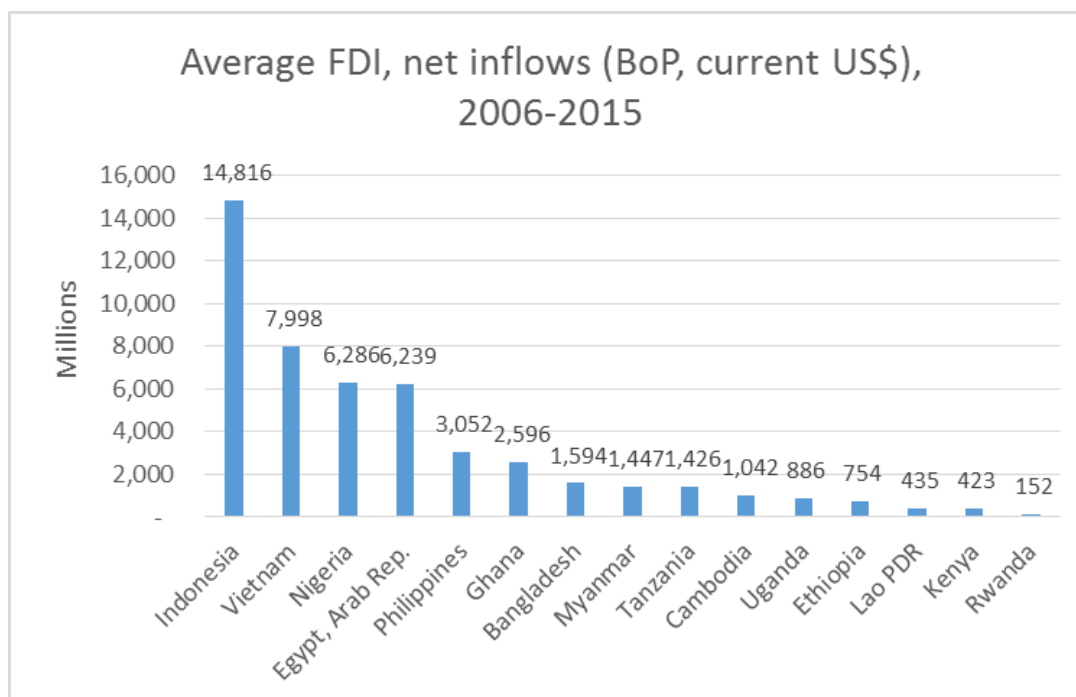
FDI Inflows to Ethiopia

Although it has shown a significant surge since 2013, FDI inflows to Ethiopia was significantly low and showed no steady trend historically.



Source: WDI 2016

In the past ten years covering from 2006 to 2015, Ethiopia witnessed an average FDI net inflows of USD 754 million annually. To put things in perspective, FDI inflows to Ethiopia was less than what was observed in Uganda whose economy and population are less than half of that of Ethiopia. Compared to Bangladesh and Tanzania the figure is around half while it is one-tenth and a quarter of the FDI inflows to the highest performing countries Vietnam and the Philippines, respectively.



Source: WDI 2016

Pillars of FDI-Led Industrialization

Attracting efficiency- or market-seeking FDI firms is not an easy task as it requires an excellent investment climate that comprises the whole arrays of economic, social and political conditions. Some of requirements such as the presence of basic infrastructure (access to electricity and use of energy, transport, telecommunication and logistics), vital institutions (property rights, rule of law, corruption, macroeconomic stability, economic management and business regulations), and political stability (peace and security) are deemed to be knockout factors in attracting efficiency- or market-seeking FDI firms in the sense that without them it is unthinkable to see such firms investing. In this sub-section, we explore Ethiopia's position vis-a-vis other countries in terms of these factors.

a. Infrastructure

Basic infrastructure such as electricity, transportation, telephone, mobile and internet services, and water are necessary to attract efficiency- or market-seeking FDI firms. The presence of such basic infrastructure is among the three most important factors that FDI firms consider before they invest in the host country. Specially, for efficiency- or market-seeking FDI firms, the presence of such basic infrastructure is a knockout factor. This is because without efficient infrastructure FDI firms can't attain the competitiveness and productivity that are required for their survival.

Access to Electricity and Use of Energy

Low access, poor reliability and high cost of electricity is repeatedly identified as a major challenge for countries that strive to attract FDI. A recent World Bank Enterprise Survey conducted in 2011/2013 indicates that more than two-third of FDI firms identified electricity as a major constraint for doing business in Africa (Chen et al., 2015).¹⁸

Of the total population of Ethiopia, only 27 percent got access to electricity by 2012. Access to electricity in Ethiopia is significantly less than the access in many of the FDI seeking Asian and African economies. This figure is even less than the average figure for Sub-Saharan Africa (excluding high income).

When we further look at the electric power consumption (KWH per capita), we found this statistic horrifyingly low. As of 2013, electric power consumption in Ethiopia is only 65 KWH per capita which is less than 5 percent of what is consumed in countries like Vietnam and Egypt, less than one-tenth of what is consumed in countries like Indonesia and Philippines, less than one-fifth of what is consumed in countries like Bangladesh and Ghana, and less than one-third of what is consumed in countries like Myanmar and Kenya.

Country Name	Access to electricity (% of population), 2012	Electric power consumption (kWh per capita), 2013	Energy use (kg of oil equivalent per capita) , 2013	Energy use (kg of oil equivalent) per \$1,000 GDP (constant 2011 PPP)
Egypt, Arab Rep.	100	1697	885	88
Vietnam	99	1306	668	130
Indonesia	96	788	850	88
Philippines	88	692	457	72
Lao PDR	70	na	na	na
Ghana	64	382	344	90
Bangladesh	60	293	216	76
Nigeria	56	142	773	142
Myanmar	52	164	313	NA
Cambodia	31	221	396	134
Ethiopia	27	65	507	381
Kenya	23	168	492	179
Uganda	18	NA	NA	NA
Rwanda	18	NA	NA	NA
Tanzania	15	89	470	207

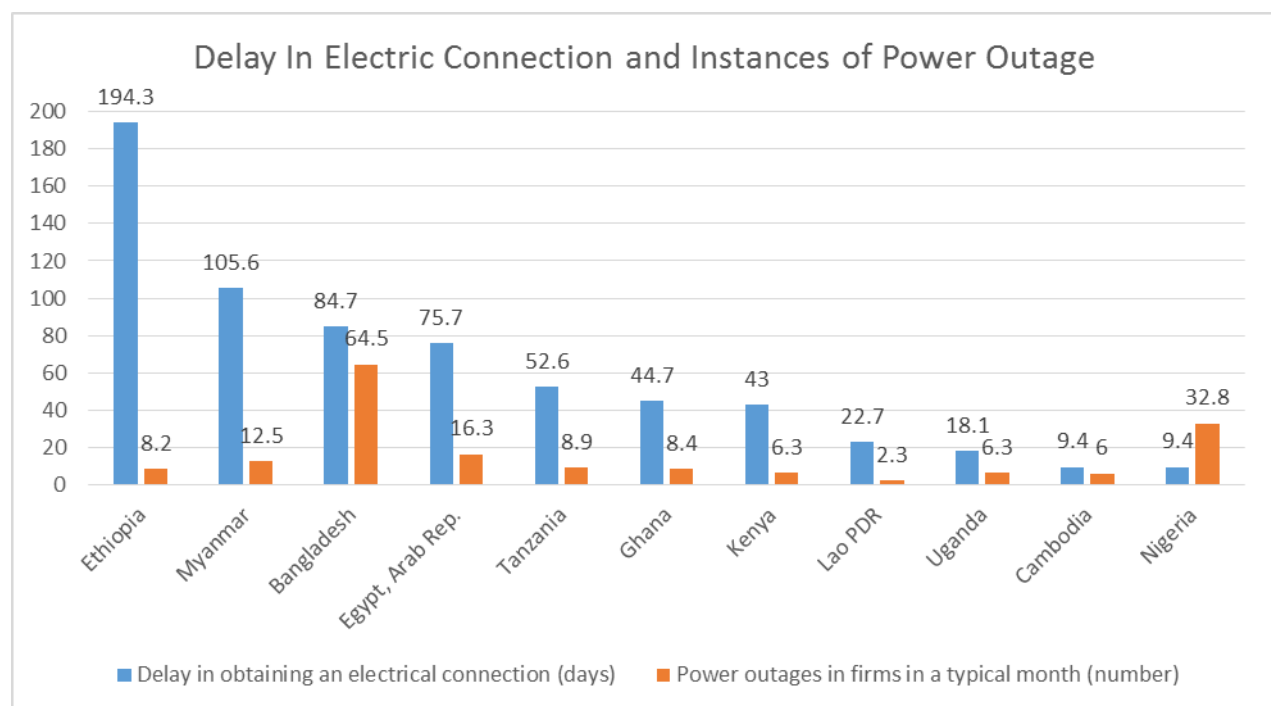
Source: WDI 2016

Generally, like most small economies, energy use in Ethiopia is low. In Ethiopia, per capita energy use - being measured by kilo gram of oil equivalent - is more or less similar to what is observed in Kenya and Tanzania while it is significantly greater than what is used in Bangladesh,

¹⁸ Chen, G., Geiger, M., & Fu, M. (2015). Manufacturing FDI in Sub-Saharan Africa.

Myanmar and Ghana. In terms of efficiency of energy use, however, Ethiopia is the least efficient. On average, 381 kg of oil equivalent is used to produce \$1,000 worth of output (GDP) in Ethiopia while the comparable figure in most Asian economies is less than 100 kg of oil equivalent. Even the bad performer African economies like Kenya and Tanzania used 179 kg and 207 kg of oil equivalent per \$1,000 GDP, respectively.

Aside from access and use of electricity, delays in obtaining electric connection and power outages are also the other crucial factors that FDI firms consider seriously. In terms of delays in obtaining electric power connection, Ethiopia is the worst of all. In Ethiopia, a firm, after making a request for an electric connection, needs to wait 194 days or a little less than seven months on average. In this regard, there is no any other country on the planet that stands in comparison to Ethiopia. For instance, in Cambodia and Nigeria, a request for electric power connection is answered in less than 10 days while it takes around three weeks in Uganda and Lao PDR. With regard to the extent of power outage in firms, however, unlike what is witnessed by the consumers and service providers, Ethiopia is not the worst if not the best. The total number of instances of power outages in firms in a typical month is around 8 which is significantly less than what is observed in Bangladesh (65 days), Nigeria (33 days), Egypt (16 days) and Myanmar (13 days).



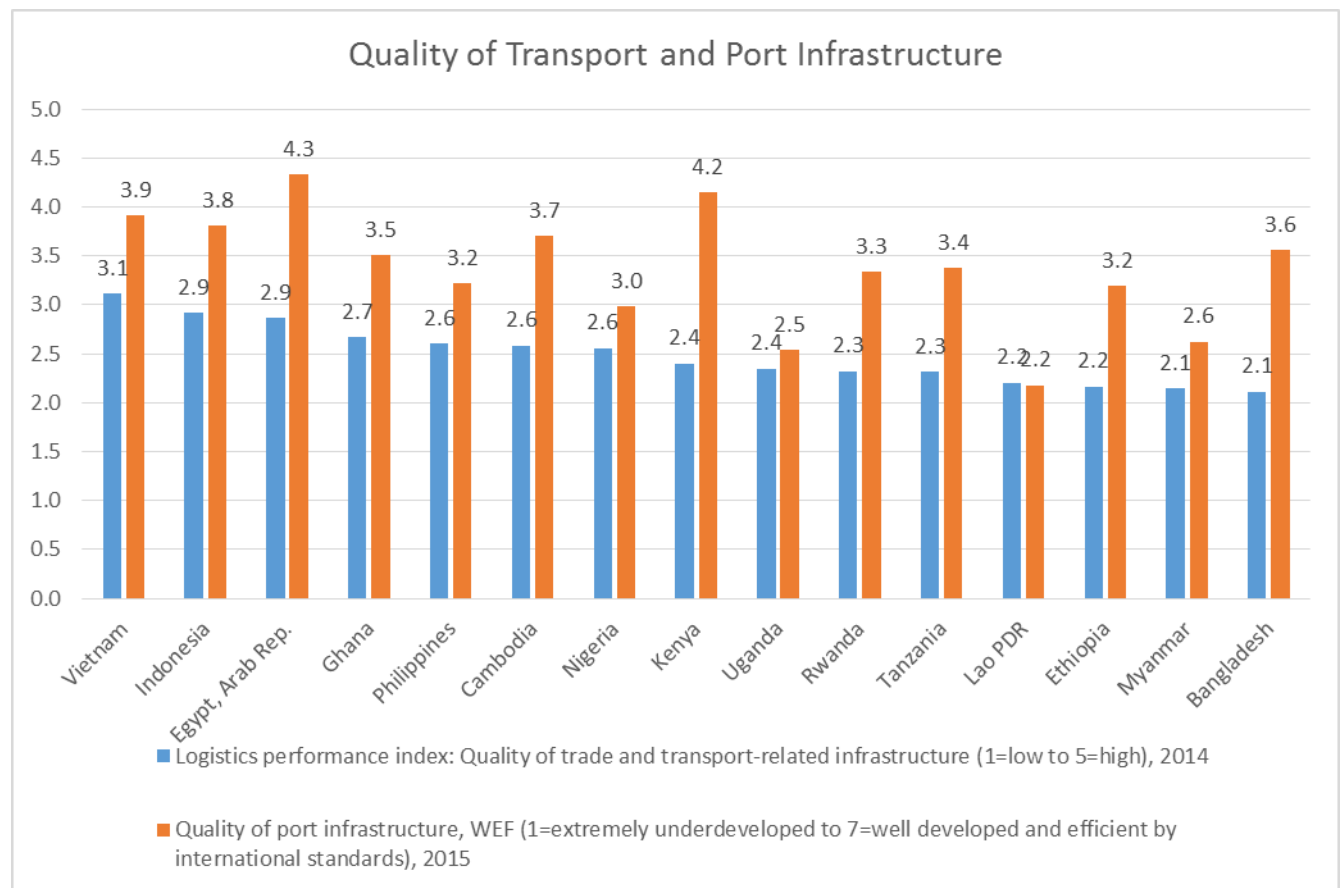
Source: WDI 2016

Transport

Ease of transportation of goods and people is the other the key requirements of FDI firms. Poor transport infrastructure raises the cost of inputs to manufacturing and other activities. The

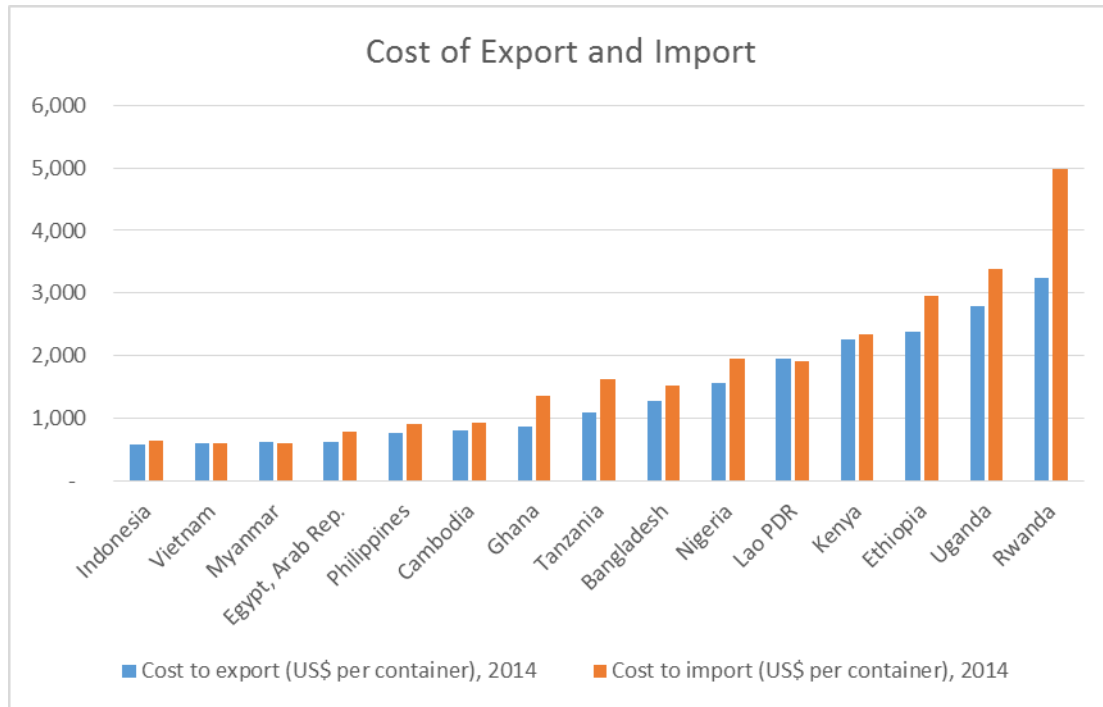
World Bank Enterprise Survey conducted in 2011/2013 indicates that poor transport infrastructure stands second in terms of constraints to FDI, especially for the one third of African countries that are landlocked.¹⁹

In this regard, land-locked Ethiopia with its less than 1000 KM rail has a formidable challenge though there is a significant improvement in the past decade. After spending billions of dollars in improving and expanding its road network, as of 2014, Ethiopia scored only 2.2 out of 5 for the quality of trade and transport-related infrastructure it had while in 2015 it scored 3.3 out of 7 for the quality of port infrastructure it used.



The Ethiopia's poor performance with transport and port related infrastructure is not without cost. Consistent to this poor performance, cost of export and import is very high in Ethiopia. As of 2014, on average, a firm needed to pay USD 2,380 per container to export and USD 2,960 to import. These amounts are significantly higher than what a firm needed to pay in most other countries, and this negatively affects Ethiopia's attractiveness to efficiency-seeking FDI firms. For instance, a firm in Indonesia, Vietnam and Myanmar needed to pay around USD 600 per container either to export or import goods.

¹⁹ ibid



Source: WDI 2016

Logistic

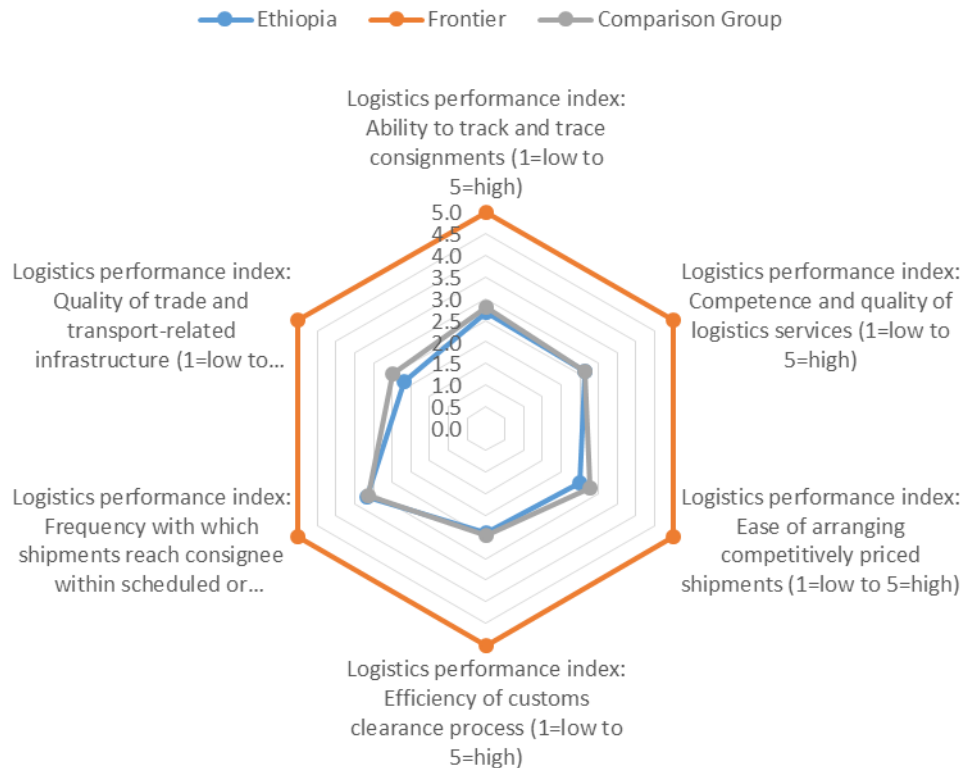
In order to attract FDI firms, country need to have a good performance in their logistics. Without efficient logistics, delays at the land ports, sea ports and airports as well as at border and in transit would be inevitable. Delays can have a dramatic effect on increasing costs –and therefore decreasing competitiveness (Arvis, et al., 2014)²⁰. Moreover, in addition to increasing cost and decreasing competitiveness, delays also reduce the volume of trade (Freund and Rocha, 2010)²¹.

Ethiopia scored 2.6 out of 5 for its overall logistic performance which reflects perceptions of a country's logistics based on efficiency of customs clearance process, quality of trade- and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. Ethiopia's logistics performance ratings are less than the average rate of the comparison group for the 4 logistics performance indicators of the 6 logistics performance indicators this paper considered.

²⁰ Arvis, J. F., Saslavsky, D., Ojala, L., Shepherd, B., Busch, C., & Raj, A. (2014). Connecting to Compete 2014: Trade Logistics in the Global Economy – The Logistics Performance Index and Its Indicators.

²¹ Freund, C. L., & Rocha, N. (2010). What constrains Africa's exports? World Bank Policy Research Working Paper Series, 5184. World Bank, Washington, DC.

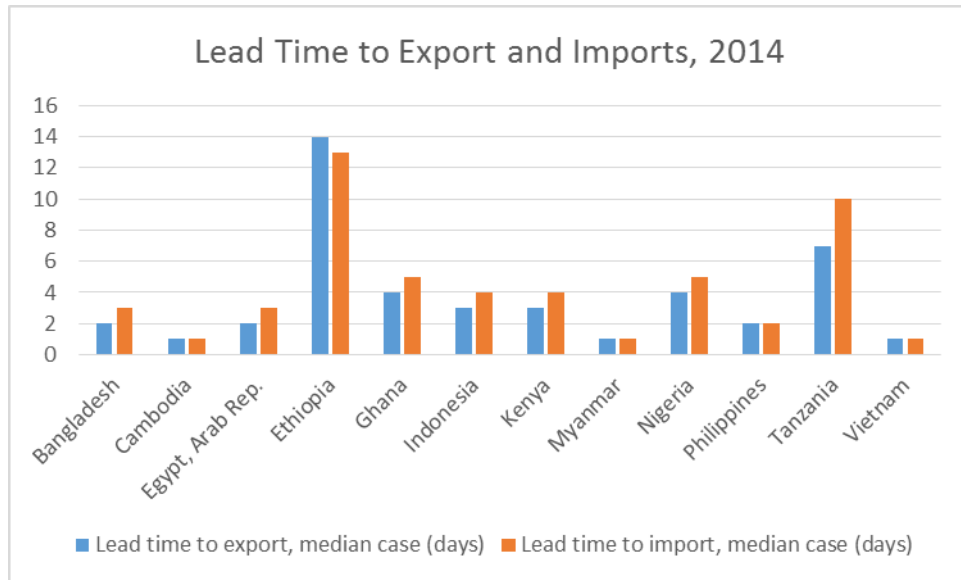
Ethiopia's Logistics Performance Indices, 2014



Source: WDI 2016

When we look at the specifics, Ethiopia's performance in terms of the quality of trade and transport-related infrastructure and ease of arranging competitively priced shipments very low.

The other key indicators that this paper used to measure the relative logistics performance of Ethiopia are the median lead time to export (which is the median time -the value for 50 percent of shipments- from shipment point to port of loading) and the median lead time to import (which is the median time -the value for 50 percent of shipments- from port of discharge to arrival at the consignee). In both parameters, Ethiopia's performance is the worst of all countries in the comparison group. In 2014, the median lead time to export from Ethiopia was 14 days while the average median lead time to export considering all other countries in the comparison group was only 2.7 days. Similarly, the median lead time to import to Ethiopia was 13 days while the average median lead time to import considering all other countries in the comparison group was only 3.5 days.

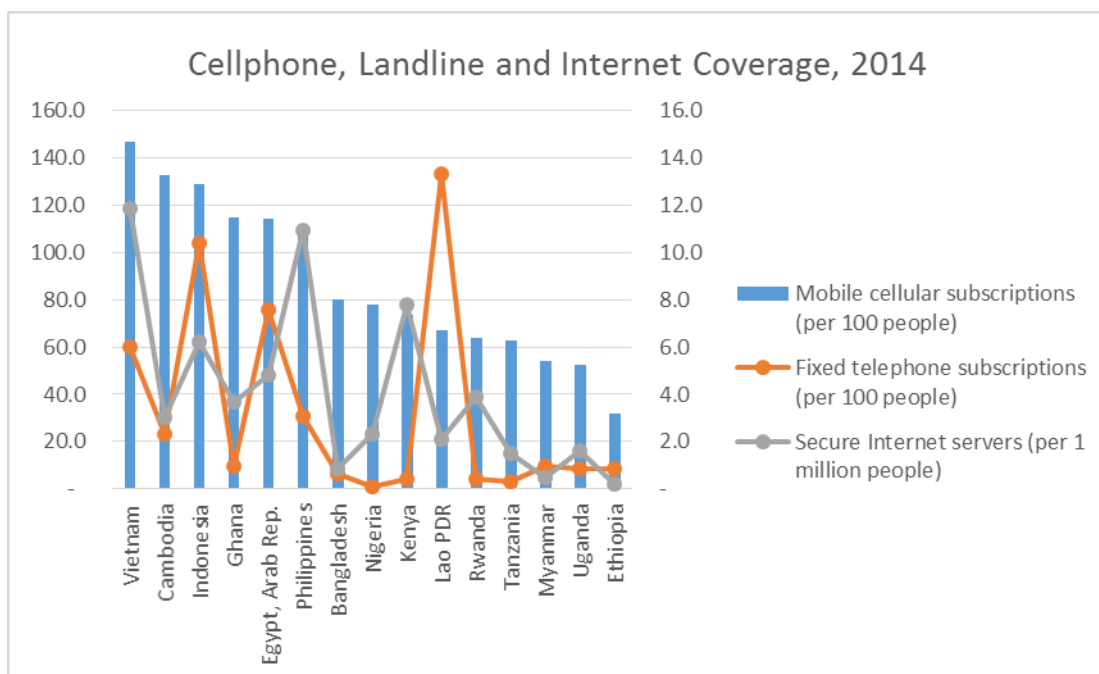


Source: WDI 2016

Information Communication Technology (ICT)

The rise in global value chains has increased not only the opportunity cost of maintaining inefficient logistic procedures and other non-tariff barriers, but it has increased the opportunity cost of restrictions on the flow of information – which has got to do with Information Communication Technology.

Like electricity and transport, Ethiopia's ICT infrastructure as well as the ICT management are inferior as it is reflected in the coverage and quality of different ICT services. Mobile cellular subscription per 100 people is 32 which is the least of all the countries considered for comparison purpose. Similarly, the number of secure internet servers per a million population is less than 1 which is also the least in the group.



Source: WDI 2016

b. Institutions

Rule of Law, Property Rights and Business Regulations

The presence of vital institutions (property rights, rule of law, low level of corruption, macroeconomic stability, good economic management, and business friendly regulations) is among the three most important factors that FDI firms consider before they invest in the host country. Specially, for efficiency- or market-seeking FDI firms, the presence of such institutions, like basic infrastructure, is a knockout factor.

Generally, the regulation environment in Ethiopia is among the bad if not the worst. Ethiopia scored 146 for ease of doing business index where 1 is a score that is given to most business-friendly regulations. Of course, some of the countries – including Bangladesh, Nigeria, and Myanmar – we picked for the purpose of comparison are worse than Ethiopia while several of them are not that much better than Ethiopia. However, given Ethiopian eagerness to attract FDI and the legions of chronic weakness we listed above, putting business-friendly regulations should have been something Ethiopia could take advantage from.

Similarly, Rule of Law in Ethiopia is weak. Ethiopia's score in The Global Economy Rule of Law index (-2.5 weak; 2.5 strong) is -0.42 which is less than the scores given to most countries (Rwanda, Ghana, Uganda, Tanzania, Indonesia, Philippines and Vietnam) included in the comparison group. Ethiopia scored 3.5 out of 6 in CPIA's business regulatory environment rating which assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive. Similarly,

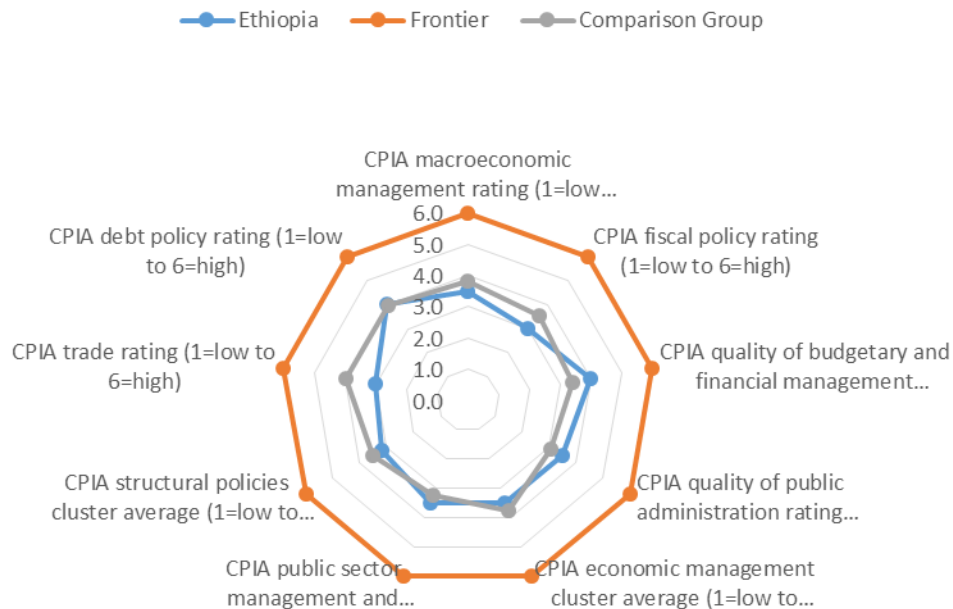
Ethiopia scored 3 out of 6 in CPIA's property rights and rule-based governance rating which assess the extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property and contract rights are reliably respected and enforced. Moreover, Ethiopia scored 3 out of 12 in its strength of legal right index that measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. All of these specific measurements of the health of institutional environment categorize Ethiopia with poor performers.

Such indexes are created by consolidating several facts on the ground. For instance, the number of procedures needed to register a start-up business and to register a property in Ethiopia are 11 and 7, respectively. And these figures are higher than the number of procedures required to do the same in most countries in the comparison group if not in all. In addition to delaying the process of starting businesses, these procedures have serious implication on cost of start-up a business. The cost of business start-up procedures being measured as percentage of gross national income per capita is 76 percent in Ethiopia which is significantly higher than what is observed in all countries considered except one.

Macroeconomic Stability and Economic Management

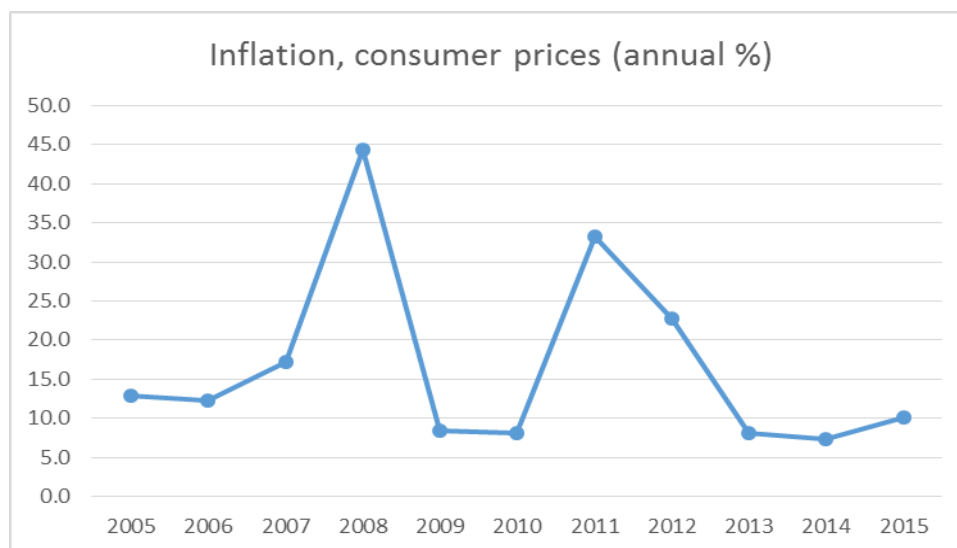
As per the World Bank Country Policy and Institutional Assessment rating, Ethiopia scored between 3 and 4 out of 6 in the whole range of issues pertaining to Macroeconomic Stability and Economic Management. Ethiopia's CPIA ratings are less than the average rate of the comparison group for the 5 CPIA indicators of the 9 CPIA indicators this paper considered. The areas Ethiopia performed poorly vis-à-vis other countries include macroeconomic management (refers to the monetary, exchange rate, and aggregate demand policy framework), fiscal policy (refers to the sustainability of the public debt), trade, economic management cluster average, and structural policies cluster average. These have either a direct or an indirect relevance in terms of attracting FDI firms. Particularly, CPIA's trade rating – for which Ethiopia scored 3 out of 6 by scoring 1 unit less than the comparison group's average rating (4 out of 6) – is a very good indicator of the health of the trade environment and tells that how the policy framework fosters trade in goods -which is crucial for FDI firms.

World Bank Country Policy and Institutional Assessment Rating, 2015



Source: WDI 2016

The other crucial indicator for the health of an economy is inflation. High and unpredictable inflation is regarded as harmful for the economy by making it difficult for companies to budget or plan long term. Uncertainty about the future purchasing power of the money discourages firms not to invest. Here again Ethiopia's record is very bad. Looking back for the past decade, we found inflation in Ethiopia staggeringly high ranging from 7.4 percent and going up to 44 percent while two-digit inflation rates were recorded in 7 years out of the 11 years under consideration.

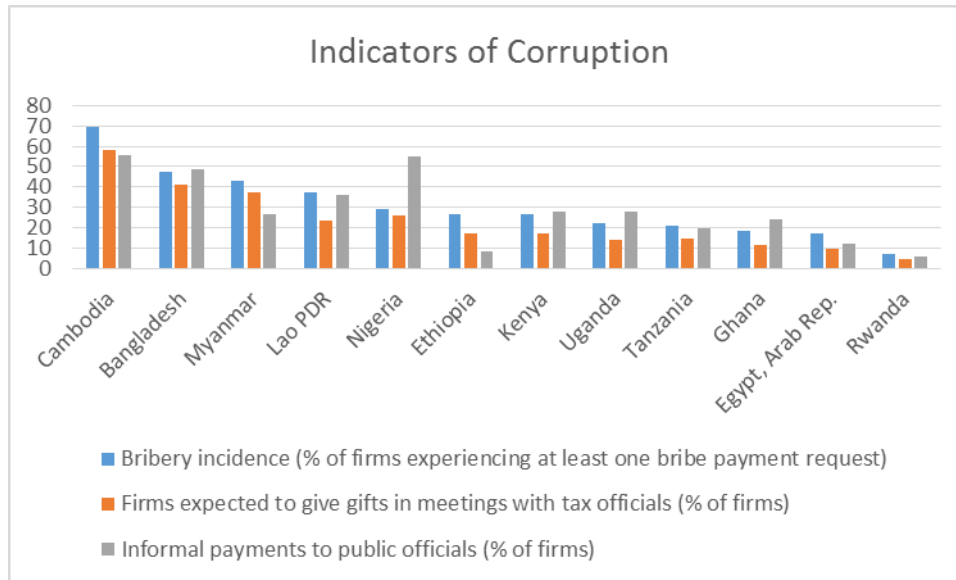


Source: WDI 2016

Corruption

The other factor that can server as indicator of the heath of institution in a country is the level of corruption. In this regard, compared to other countries in the comparison group, Ethiopia's performance is not bad. Ethiopia's score in The Global Economy Control of Corruption index (-2.5 weak; 2.5 strong) is -0.43 which is still not good but better than the scores given to most countries (Nigeria, Uganda, Kenya, Tanzania, Cambodia, Bangladesh, Lao PDR, Indonesia, Vietnam and Philippines) included in the comparison group.

The percentage of firms that experienced at least one bribe request in the past was 27 percent. Firms which expected to give gifts in meetings with tax officials are 17 percent while firms which made informal payments to public officials were 8 percent. These figures are significantly less than what were observed in countries like Cambodia, Bangladesh and Myanmar. However, in countries like Rwanda, Egypt and Ghana firms had significantly less experience of corruption than in Ethiopia.



Source: WDI 2016

c. Political Stability

Political stability is among the three most important factors that FDI firms consider before they invest in the host country. Specially, for efficiency- or market-seeking FDI firms, political stability, like the presence of basic infrastructure and vital institutions, is a knockout factor. A study by Lemi and Asefa (2003)²² looks at how uncertainty affects FDI and find that US manufacturing companies looking to invest in Africa consider not only governments' policy commitments but political stability as particularly important.

Probably, political stability is the major challenge of all the challenges Ethiopia faces in terms of attracting efficiency- or market-seeking FDI firms. For the of The Global Economy composite Political Stability index which reflects the likelihood of a disorderly transfer of government power, armed conflict, violent demonstrations, social unrest, international tension, terrorism, as well as ethnic, religious or regional conflict, the latest data we have is for 2014. Since we don't have latest data that takes into account the latest waves of nation-wide strong political protests that continued for the past two years and forced the government to declare a six month long state of emergency in November 2016, the score given to Ethiopia in The Global Economy Political Stability index doesn't reflect the actual current political situation.²³ As a result of these protests, several of the few FDI firms that the country managed to attract in the last decade have been attacked and suffered a lot.²⁴

²² Lemi, A. and Asefa, S. (2003). Foreign direct investment and uncertainty: empirical evidence from Africa. *Africa Finance Journal* 5, 36–67.

²³ <https://www.hrw.org/world-report/2016/country-chapters/ethiopia>

<https://www.hrw.org/africa/ethiopia>

²⁴ <https://www.bloomberg.com/news/articles/2016-10-10/ethiopia-losing-appeal-for-foreign-investors-as-attacks-spread>

Even with the data of 2014, however, Ethiopia's score of The Global Economy Political Stability Index is -1.24 which is far less than the score given to most countries (Rwanda, Ghana, Tanzania, Uganda, Vietnam, Cambodia, Lao PRD, Indonesia, Philippines, Bangladesh, and Myanmar) included in the comparison group.²⁵

We also have other narrowly defined measurements of political risk- short-term political and long-term political risk – which are related to export transactions and for which we have the latest statistics. For a short-term political risk that is related to short-term export transactions and covers risks of foreign exchange shortages, wars, revolution, natural disasters and arbitrary government actions, Ethiopia scored 5 out of 7 (where 1 reflects low and 7 reflects high risk) being ranked 165 out of 200 countries considered. For a long-term political risk that is related to export transactions with a credit period of more than two years and covers risks of foreign exchange shortages, wars, revolution, natural disasters and arbitrary government actions, Ethiopia scored 7 out of 7 (where 1 reflects low and 7 reflects high risk) being ranked 185 out of 200 countries considered.²⁶

Other Important Factors

Domestic Market

In the preceding section, we said that one of the reason that light manufacturing industries are currently leaving countries like China, Turkey, Thailand and Malaysia is to look for new markets. In this regard, other factors being the same, Ethiopia with more than 90 million population looks attractive destination for such industries.

<http://globalriskinsights.com/2016/10/radar-foreign-investors-attack-ethiopia/>

²⁵ <http://theglobaleconomy.com/>

²⁶ *ibid*

Country Name	Total Population, 2015	GDP per capita (current US\$), 2015
Indonesia	257,563,815	3,346
Nigeria	182,201,962	2,640
Bangladesh	160,995,642	1,212
Philippines	100,699,395	2,899
Ethiopia	99,390,750	619
Vietnam	91,703,800	2,111
Egypt, Arab Rep.	91,508,084	3,615
Myanmar	53,897,154	1,204
Tanzania	53,470,420	865
Kenya	46,050,302	1,377
Uganda	39,032,383	676
Ghana	27,409,893	1,381
Cambodia	15,577,899	1,159
Rwanda	11,609,666	697
Lao PDR	6,802,023	1,812

Source: WDI 2016

However, it should be noted that there are also other big FDI-seeking countries like Indonesia, Bangladesh, Philippines and Vietnam in Asia and Nigeria and Egypt in Africa that Ethiopia needs to compete with.

Moreover, being a member of regional communities play an important role in determining the actual market size of countries. Regional trade agreements that drive down trade costs while expanding markets can have a powerful effect in attracting FDI. Experience in China and elsewhere in Asia shows that special economic zones (SEZs) can be highly effective in attracting FDI, by ensuring that the infrastructure, institutions and incentives all work to support manufacturing and facilitate trade.²⁷

When we look at countries we selected for this comparative analysis, Nigeria and Ghana are members of the Economic Community of West African States (ECOWAS) which is 15-member states strong regional group with a total population of 335 million. ECOWAS has a Customs Union program that works to expand the markets of member states' industries by improving the circulation of goods and services among member states. This implies- given other factors are the same- market-seeking FDI firms would prefer to invest in countries that are member of stronger regional communities than investing in countries that are member of weaker regional communities. For instance, relatively smaller countries like Tanzania, Kenya and Uganda could be more preferable in terms of access to market than Ethiopia due to their advantages that are drawn from the Custom Union and Common Market agreements of the East African Community

²⁷ Sutton, J. Jinhage, A., Leape, J., Newfarmer, R. & Page, J. (2016). Harnessing FDI for job creation and industrialisation in Africa. Growth Brief| FIRMS | May 2016.

(EAC) that comprises five neighboring countries including Tanzania, Kenya, Uganda Rwanda and Burundi with a market size of more than 150 million people.

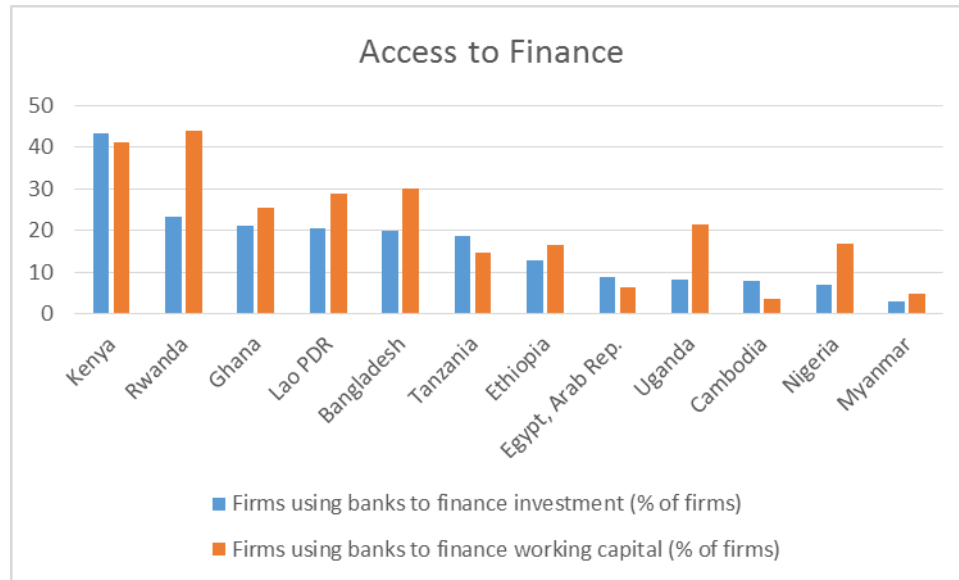
Moreover, looking at the size of the population alone does not tell us the actual size of the domestic market. In order to measure the actual market size, we need to look at the standard of living of the population which can crudely be measured by GDP per capita of a country. In this regard, given other things the same and even leaving aside the validity of Ethiopian staggering growth statistics, Ethiopia –with GDP per capita of USD 600 – is still among the poorest countries in the world and would be among the least preferred for market-seeking FDI firms due to the lowest standard of living of its population. Ethiopia's GDP per capita is far less than the GDP per capita of most Asian and African economies that Ethiopia need to compete with in order to attract FDI. To put things in perspective, Ethiopia's GDP per capita is roughly one-sixth of that of Egypt and Indonesia, one-fifth of that of Philippines and Nigeria, one-third of that of Vietnam and Lao PDR, and half of that of Ghana, Kenya, Bangladesh, Myanmar and Cambodia.

Monetization of the Economy

Generally speaking, financial penetration in Ethiopia is low. As per the World Bank Country Policy and Institutional Assessment rating, Ethiopia scored 3 out of 6 in financial sector rating and this figure is less than what is scored by several of the countries in the comparison group.

Looking at some specific indicators of financial penetration would make clear what this rating means. For instance, less than 22 percent of the eligible population has an account at a financial institution in Ethiopia which is significantly less than the average figure (30 percent) obtained by considering all the countries in the comparison group. Similarly, there are less than 3 commercial bank branches per 100 thousand adults while the average figure obtained by considering all the countries in the comparison group is 5 commercial bank branches per 100 thousand adults.

In Ethiopia, only 12.9 percent of the firms used banks to finance investment while 16.4 percent of firms used banks to finance working capital. The comparable figures from countries like Kenya, Rwanda, Ghana and Lao PDR and Bangladesh are significantly higher than that of Ethiopia.



Source: WDI 2016

Human Capital

In the preceding section, we said that one of the reason that light manufacturing industries are currently leaving countries like China, Turkey, Thailand and Malaysia is to look for cheap, skilled labor. This implies countries that strive to attract efficiency- or market seeking FDI firms need to have enough workers who have skills that match to the desire of the FDI firms.

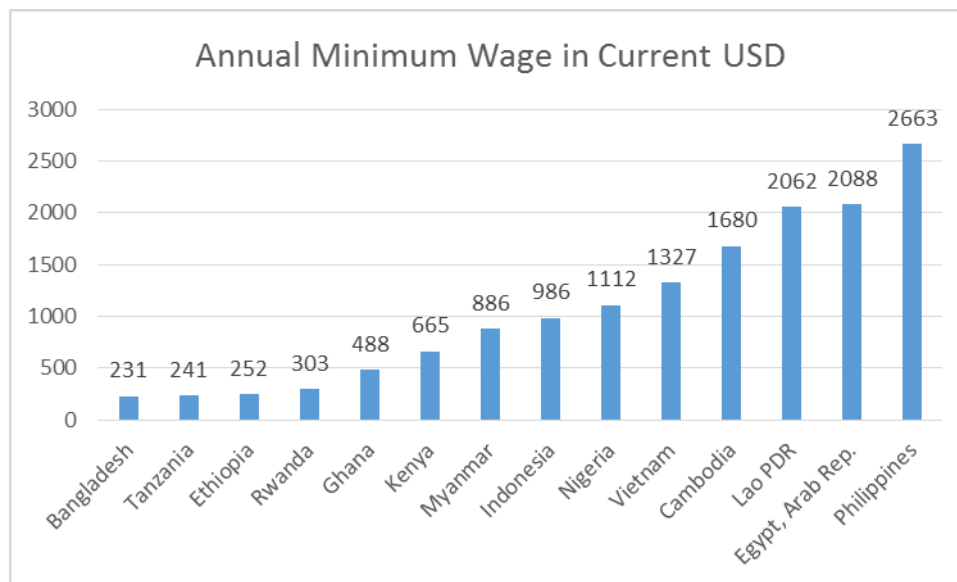
As a corollary to its big population, Ethiopia has a huge labor force that was estimated to reach around 47 million by the mid-year 2014. Of course, to have a huge labor force is an advantage to attract efficiency-seeking FDI firms. However, the quality of the labor force also matters. As per the World Bank Country Policy and Institutional Assessment rating, Ethiopia scored 4.5 out of 6 in building human resources rating which assesses the national policies and public and private sector service delivery that affect the access to and quality of health and education services, including prevention and treatment of HIV/AIDS, tuberculosis, and malaria. In this regard, Ethiopia's performance is better than the performance of other countries in the comparison group.

With respect to attracting FDI firms however we need to go beyond this general indicator of quality of labor force. More importantly, we need to look at the educational attainment of the labor force as most efficiency-seeking FDI firms requires secondary and tertiary education level of attainment. In Ethiopia, the majority of the labor force is literate. However, 59 percent of the total labor force attained or completed only primary education as the highest level of education while only 21 percent of the total labor force attained or completed secondary or tertiary education as the highest level of education. In contrast, in countries like Egypt and the Philippines the majority of the labor force attained or completed secondary or tertiary education as the highest level of education.

Wage and Labor Market

Wage or compensation of employees in Ethiopia is very low. As of 2015, annual minimum wage paid in Ethiopia was around USD 252 which is less than what was paid in most countries in the world including in the FDI-seeking economies selected for comparison purposes. Given other factors are the same, this fact could make Ethiopia more preferable FDI destination than most countries in the world.

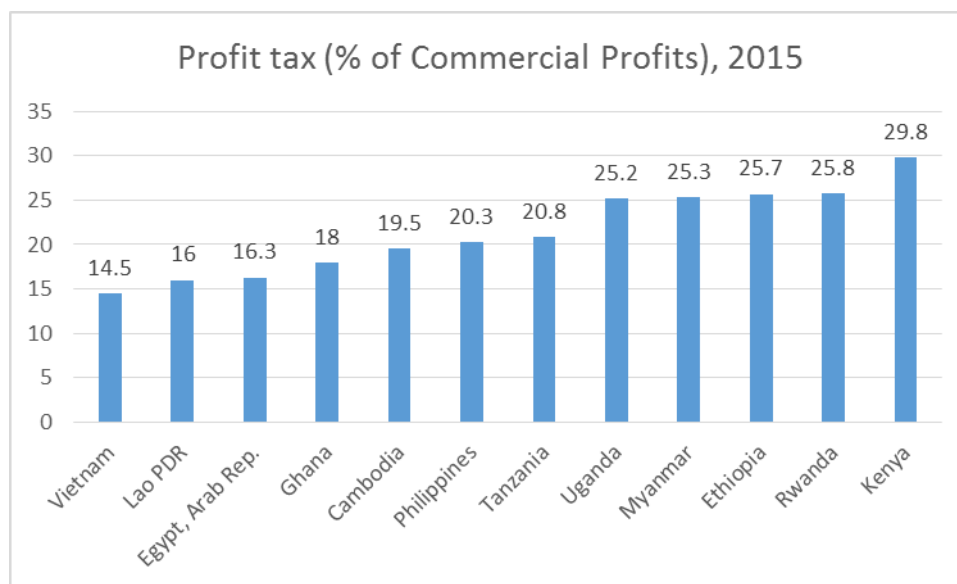
However, not only lack of skilled and matching labor force but also rigid labor markets that are characterized by restrictive labor laws and regulations can deter FDI. To attain the desired efficiency in production FDI firms need more flexible employment rules. In this regard, we don't have an indicator to measure Ethiopia's relative position.



Source: WDI 2016

Incentive

It is argued that high import tariffs, huge tax on exports and trade restrictions are disincentives to FDI and foreign trade by reducing the competitiveness of manufacturing sector (Looi Kee et al., 2009).²⁸ In this regard, we don't have an indicator to measure Ethiopia's relative position.



Source: WDI 2016

IV. Conclusion and Policy Implication

This comparative analysis suggests Ethiopia is currently far less competent than other countries in terms of its relative position to attract efficiency- or market-seeking FDI firms - that are currently leaving the developed and emerging economies in search of cheap labor and market.

Although the Government of Ethiopia recently claims to pursue FDI-led industrialization policy, the country's performance in all of the three knockout factors (i.e. basic infrastructure, vital Institutions and political stability) for attracting efficiency- or market-seeking FDI firms is inferior. Similarly, the country's relative position in some of the other important factors (including monetization of the economy and investment incentives) is lower.

With this poor performance, Ethiopia faces a formidable challenge to compete with these countries and be part of the global structural transformation chain.

For successful attraction of FDI, political stability, improvement in vital institutions and further expansion of basic physical infrastructure are necessary conditions. Similarly, attraction of FDI requires formulation and implementation of policies and strategies that capitalize on country's comparative advantages - lower wage, young population, and big domestic market.

²⁸ Looi Kee, H., Nicita, A., & Olarreaga, M. (2009). Estimating trade restrictiveness indices, *The Economic Journal*, 2009, vol. 119, p172-199.

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