

Addis Ababa University
School of Graduate Studies

**Potential Market Structure, Competition, Liberalization and
Trade in Services after Economic Partnership Agreements
(EPAs): The Case of Ethiopia**

By
Yemesrach Fisseha

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Abstract

The conception of market led international trade as a means to mutual benefits for all engaged bodies is a truth rooted in the *invisible hand* notion of Adam Smith (1776). Carrying on this 18th century factual understanding of free trade and aiming at realizing the full benefits of international trade, regional and international agreements and negotiations are underway to reduce and eventually eliminate restrictions on free functioning of markets. Among these, Economic Partnership Agreements (EPAs) being negotiated between EU and ACP countries are comprehensive accords attempting to promote free workings of markets. Beyond the common tariff and quota-free understanding of free trade, EPAs include provisions on investment and trade in services with an ultimate aim of creating market-led service industries. As an economy negotiating EPA with EU, potential outcomes of the agreement on the Ethiopian service industries call for assessment. In this regard, this study examines the potential post-EPA competition, trade and investment in three fundamental but restricted service industries of the Ethiopian economy. Based on reviews of CARIFORUM (states that have completed EPA negotiations) experiences, EPA service provisions, the service industry structures and regulatory framework of the industries in Ethiopia; findings of the study reveal that, aligned with the objective of EPAs, the telecommunications, finance and maritime transport industries of Ethiopia would move towards a competitive industry structure, trade and liberalization for investments in the post-EPA future.

Introduction

The notion of international trade as a means towards economic development is no longer doubted. However, the guaranteed benefits of international trade can only be realized if factors distorting the workings of markets (the invisible hand) in an economy are removed. Recognizing this, currently the insight of eliminating factors that hamper operation of markets has gained significant momentum through the advocacy of competition and lessening of intervention in markets.

In this regard, nations of the world have been engaging in international trade agreements to realize the full benefits emanating from free trading. Among these international trade accords, Economic partnership agreements (EPAs), between African Caribbean and Pacific (ACP) states and the European Union (EU), have emerged comprehensive; extending beyond the ordinary narrow view of tariff and quota free trade in attempting to secure complete benefits of free international trade¹.

Since the establishment of the European Community (EC) in 1957 and the decolonization process, Europe and group of ACP countries have formed a privileged trade relationship among each other. For decades the European states granted preferential market access to ACP imports on a non-reciprocal basis.²

However, in 2000 with the signing of Cotonou agreement by 77 ACP countries with the EC on behalf of the European Union (EU), a new form of trade negotiations was embarked on. The negotiations were instigated by the WTO's challenge to Europe's preferential schemes for ACP countries which were considered prohibited as they discriminated against other developing countries in Latin America and Asia. WTO gave Europe and the ACP countries until 2007 to agree on a WTO-regulation compatible trade arrangement.³

^{1, 2} Gorfu, Lisanework (2009), "*Potential Impacts of EPA on the Ethiopian Economy*", Ministry of Trade and Industry

Since 2002, ACP states in six regional groups started negotiating on EPA with EU. Although the deadline for these negotiations was in 2007, only 25 ACP countries signed the EPA by the set time limit. As a result the negotiations were forced to extend beyond 2007. 40 African states refused to sign up then, including Ethiopia. Currently, Ethiopia is negotiating EPA within the Eastern and Southern Africa (ESA) regional group.⁴

Regarding the EPA negotiations, over the past few decades researching the potential impacts of EPA on the ACP and EU economies has been of vital importance in forwarding sound negotiation strategies. Anticipating the possible impacts of the EPA, several empirical studies have been conducted at the general EPA-ACP, at the narrowed EPA-COMESA and at the specific EPA-Ethiopia levels.

A study by Fontagne, etal (2008)⁵, with the use of partial equilibrium analysis, reflected that imports of ACP from EU would outweigh the ACP exports to EU after EPAs (*by 2022 exports of ACP to EU would increase by 10.7%, while their imports rise by 17%*). Decrease in customs revenue of ACP states and trade diversion from the rest of the world to the nations engaged in EPAs are also results forwarded by the study.

Similarly, another study by Karingi, etal (2006)⁶, assessing EPAs impact on COMESA states through general equilibrium analysis, shows that customs revenue of COMESA states would decline and negative trade balance would result. In addition, the study points out that intra-African trade would be created leading to improvement in welfare and terms of trade, though the trade balance regresses.

³ GTZ trade programme (2009), *“How to ensure development friendly Economic Partnership Agreements Lessons Across Counties”*, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Postfach 5180, 65726 Eschborn, Germany

⁴ Gorfu, Lisanework (2009), *“Potential Impacts of EPA on the Ethiopian Economy”*, Ministry of Trade and Industry

⁵ Fontagne, Lionel, Mitaritonna, Cristina and Laborde, David, (2008) *“An impact study of the EU-ACP economic partnership agreements (EPAs) in the six ACP regions”*, N° Trade SPECIFIC CONTRACT N° SI2.453.883 Implementing Framework Contract No TRADE/05/H3/01/1c Commission of the European Union - Directorate General for Trade, CEPII-CIREM – 9 rue Georges Pitard – 75740 PARIS Cedex 15 – France

As an EPA negotiating nation, studies that specifically analyze impacts of EPA on the Ethiopian economy have also been conducted. Hammouda et al (2005)⁷ through simulation analysis points out that Ethiopia would generate limited consumer welfare after signing EPA. The study also shows that trade would expand, customs revenue would fall and imports of Ethiopia would increase. As a way of recommendation, the study forwards that Ethiopia should join the COMESA free trade area to realize increased welfare.

However, nearly all studies conducted to date have mostly focused on a single element from the EPA negotiations i.e. on trade in commodities. But EPAs actually include components other than commodities trade. EPAs include development cooperation issues, trade in services and legal issues among few others.⁸

Hence, the study of potential impacts of EPA requires assessment of all elements integrated in the EPA. Among the components of EPA negotiations, investment and trade in services are among issues with significant economic implications to many of the ACP states, including Ethiopia. This is evidenced from the fact that most CARIFORUM (Caribbean Forum of African, Caribbean and Pacific) States that signed the EPA liberalized certain service markets including Telecommunications, Transport, and Financial services; after signing EPAs⁹. These liberalized service markets under EPAs are heavily regulated in many of the ACP states, including Ethiopia¹⁰, that have not signed but are currently negotiating the EPA. Recognizing this, the potential EPA impact on liberalization, competition, investment and trade in services of Ethiopia is the selected subject of research in this study.

⁶ Karingi, Stephen, Perez, Romain, Oulmane, Nassim, Lang, Remi and Sadni Jallab, Mustapha, (2006), *“Assessment of the Impact of the Economic Partnership Agreement between the COMESA countries and the European Union”*, UN Economic Commission for Africa, African Trade Policy Centre, No. 37

⁷ Hakim Ben Hammouda, Stephen Karingi, Ben Idrissa Ouedraogo, Nassim Oulmane and Mustapha Sadni-Jallab, (2005), *“Assessing the consequences of the Economic Partnership Agreement on the Ethiopian economy”*, Trade and Regional Integration Division, United Nations Economic Commission for Africa, Addis Ababa, Ethiopia, noulmane@uneca.org.

The investigation of potential impacts of EPA on service industries begins with the review of what has been done so far. In this regard, few researches undertaken examining the impacts of EPAs on services are reviewed.

A study by the German Federal Ministry for Economic Cooperation and Development (2007)¹¹, forwards five basic elements the EPA service provisions must integrate. First, capacity of ACP states in service trading must be built; secondly liberalization of essential (water, education, energy and health) service sectors is not currently justifiable; third, areas to be liberalized should be those where an opening contributes to development; fourthly, ACP states should not be pressurized to liberalize and fifth, there is no one single way of making service sectors work for development in all the ACP states.

Similarly, an OXFAM working paper (2008)¹² points out that opening up services without adequate regulation may risk the poor to remain without key services and also utilities should not be privatized.

Similar to the above studies, general elements of concern in EPA services negotiations have been discussed by preceding studies. However, country-specific researches on the most EPA-relevant service sectors are inadequate and impacts of EPAs on liberalization, competition, market structure and trade of EPA-relevant service industries are missing.

Recognizing this, this study conducts a comprehensive and an in-depth examination of the present and the possible post-EPA degree of liberalization, competition, investment and trade in services of Ethiopia, there by reducing the gap in the overall analysis of potential EPA impacts on the Ethiopian economy.

⁸ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crnmm.org)

^{9, 10} Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

The general aim of the study is to assess whether signing the EPA would lead to liberalization, improvement of competition, market structure and trade in services of Ethiopia. Specifically, the study aims at answering the following two questions;

Would signing the EPA bring about a shift in market structure leading to more competitive service industries in Ethiopia?

Would the conclusion of EPA result in liberalization of closed service industries or would it lead to flexibility of service industry regulatory restrictions in Ethiopia?

Addressing the above two basic questions, this study is of reasonable importance; as it aims to capture the so far overlooked potential impact of EPA on the Ethiopian economy. The study aspires to complete the missing picture by capturing the non-tariff impacts of EPA through the investigation of potential EPA impacts on liberalization, competition, investment and trade in services.

To realize the above stated objectives and thus actually be of the above stated importance, the study is organized as follows; succeeding this introductory part the second section exhaustively discusses the existing theoretical and empirical literatures on EPAs in terms of resulting in free trade, liberalization, market structure shift and competition in services. Then, the third part constituting review of EPA and domestic proclamations on services, experiences of states that signed EPAs, trend extrapolation projections and regulatory restrictiveness indices follows and lastly, the fourth section winds up the study with conclusions.

¹¹ German Federal Ministry for Economic Cooperation and Development, (2007), “*The Development Dimension of the Economic Partnership Agreements (EPAs) between the ACP Countries and the EU*”, Discourse 010, Federal Ministry for Economic Cooperation and Development Bonn Office Postfach 12 03 22 53045 Bonn, Germany

¹² Oxfam Briefing Paper, (2008),” *Partnership or Power Play? How Europe should bring development into its trade deals with African, Caribbean, and Pacific countries 110*”, Oxfam America 226 Causeway Street, 5th Floor Boston, MA 02114-2206, USA

Review of Related Literature

The Economics of International Trade and Competition

The theoretical evolution of trade theory began with the economic philosophy of 17th and 18th century known as the Mercantilists view¹³, however the actual economic concept behind international trade was forwarded at a later stage with the emerging of the Classical, Neo-classical and Complementary (New) trade theories.

Classical trade theories;

Classical trade theories take the center stage in international trade principles. Classical theorists argued that trade is a mutually beneficial economic activity. Adam Smith (1776)¹⁴, father of classical economics, postulates trade as a positive sum game. He noted that a nation should sell items of its absolute advantage and buy those of its absolute disadvantage. The policy implication of this trade theory is policy of Laissez-faire i.e. no need for government intervention and free operation of markets.

Through the absolute advantage theory, Smith uncovered the corner stone to the benefits accruing from international trade i.e. competition. Behind the absolute advantage theory of Smith lays the notion of competition. A nation with an absolute advantage in a given item supplies that item i.e. markets determine who should sell what through competition.

¹³ Dominick Salvatore, (2003), *International Economics*, Wiley; 8 edition, ISBN-10: 0471230707, ISBN-13: 978-0471230700

¹⁴ Smith, Adam (Author), (1776), Sutherland, Kathryn (Editor), (2008), *An Inquiry into the Nature and Causes of the Wealth of Nations*, Oxford Paperbacks, Oxford, UK; [ISBN 978-0-199535-92-7](https://www.oxfordpaperbacks.com/9780199535927)

Agreeing to Smith's conception of international trade, Ricardo (1817)¹⁵ carried forward the classical trade theory by presenting a more realistic basis of trade; comparative advantage. Further, Haberler (1993)¹⁶ discussed difference in opportunity cost of production; while K.Dixt and D. Norman (1980)¹⁷ presented differences in relative prices as basis for trade.

Again behind all these three classical basis of trade lays the principle of competition. More competitive economies (those with comparative advantage/ lower opportunity cost of production/lower relative prices) become suppliers in the international market.

Neo-classical trade theories;

Neo-classical trade theories were built on Classical theories adding certain level of realism. Neo-classicals forwarded arguments for free trade on the basis of efficiency. Further, these theories brought forward the notion of trade in services. Previously, the classical theories emphasized and mostly referred to trade in commodities.

Taking the international trade understanding forward, Neo-classicals made factual economic cases for free international trade. Heckscher-Ohlin (H-O) theory discussed by Flam and Flanders (1991)¹⁸ and Heckscher-Ohlin-Samuelson theorem (H-O-S theorem) presented by Diamond (2004)¹⁹ were significant contributions of economists from this school.

Complementary (New) trade theories;

New trade theories, as discussed in Choi and Harrington (2003)²⁰, are developed to explain portion of international trade that is not addressed by Neo-classical trade principles. The new trade theories forward additional elements as basis for international trade; economies of scale, technological gaps and product cycles.

¹⁵ Ricardo, David, (1817), *On the Principles of Political Economy and Taxation*, John Murray, Albemarle-Street, London, England

Overall every trade theory in Classical, Neo-classical and New era agrees on Ricardo's comparative advantage as the foundation for international trade, implying that competition is the underlining factor for a mutually beneficial trade. Competition determines who buys and who sells through a market system, thereby allocating resources efficiently and in turn ensuring the channeling of mutual benefits to engaged parties.

Based on the above classical trade arguments; if each nation specializes in items of its comparative advantage, each nation involved in trade would share the gains from trade. Now considering present day distribution of factor endowments and technology between developed and developing countries, this comparative advantage theory prescribes the developing economies to specialize in export of primary products to the developed nations in exchange for import of manufactured products.

Recognizing this, M. Todaro (1981)²¹ opposes the classical trade theories by presenting another line of argument. Todaro states that trade has always been and will always continue to be one of the determinants for the unequal growth in different nations.

Todaro notes that classical trade theories promote trade between unskilled labor abundant and capital abundant nations. In this case, trade intensifies the already unequal trading relationships and distributes benefits largely to the "have" nations and under serves the "have-not" economies. Implication of this would be that free trade among "unequals" does not result in economic benefits. As a result, Todaro points out; to capture real benefits developing nations should trade among themselves with out being exposed to the contemporary trading system dominated by rich nations and powerful multi-national corporations.

¹⁶ Haberler, Gottfried (1993), *The theory of international trade*, Brookfield, Vt.: Edward Elgar

¹⁷ K.Dixt, Avinash and D. Norman, Victor (1980), "*Theory of international trade: a dual general equilibrium approach*", Cambridge University Press, ISBN-10: 0521299691, ISBN-13: 978-0521299695

¹⁸ Flam, Harry and Flanders, M., (1991), *Introduction to Heckscher-Ohlin trade theory*, Cambridge, MA: The MIT Press. ISBN 978-0262082013

Behind M.Todaro's line of argument against free trade lays the notion of unfair competition. Competition forces replacement of inefficient producers by efficient ones and by this, under free international trade, the developed economies and their multinational corporations would wipe out the developing countries producers.

Several economies of the world today are seen trying to settle at some point between the two extreme conceptions of free trade. Both developed and developing economies have formed regional trade integration units among themselves. A multinational entity, World Trade Organization (WTO) has also been in place to foster trade and commerce among nations. Aspiring to realize successful operation of the WTO developed and developing economies have also been carrying out bilateral and regional trade agreements with one another.

Among the trade and commerce agreements between developed and developing economies, Economic Partnership Agreements (EPAs) emerge being comprehensive; combining both the classical aspects and developmental dimensions of free international trade. EPAs are trade and development assistance agreements between European Union member states and African, Pacific and Caribbean (ACP) states.

Evolution of Economic Partnership Agreements (EPAs);

Starting from the establishment of European Commission (EC) with the signing of the treaty of Rome in 1957, Europe created an avenue for cooperation with overseas countries and territories (OCTs) in Africa.²²

¹⁹ Diamond, Robert (2004), "*Origins of international Economics*", Vol.9, Taylor & Francis, Inc ISBN-13: 9780415315647,

In 1963 and 1969, 18 African states and their ex-colonizers signed the first and second Yaoundé agreements consecutively. In 1973, the accession of United Kingdom (UK) to EC paved a way for extension of the Europe – Africa cooperation to the common wealth countries in African, Caribbean and Pacific regions. Then the first Lomé convention was signed in 1975, the second in 1980, third in 1985 and the fourth in 1990. The Lomé convention granted preferential market access on non-reciprocal basis to ACP imports along with provision of substantial development aid.²³

However, these preferential trade agreements were seen to stand against article XXIV²⁴ of GATT under the WTO framework and EU was said to have violated multilateral trade rules by discriminating among developing countries. As a result the EU was ordered to launch a WTO compatible trade agreement at the 4th WTO ministerial conference in Doha in 2001 with the time deadline at year 2007.²⁵

The WTO waiver given to EU to devise a WTO – compatible trade agreement led to the signing of Cotonou agreement in 2000. The Cotonou agreement envisages removal of non-reciprocal trade preferences granted to ACP countries, but only after a long transition period. The agreement was concluded for 20 years period (2000-2020) and entered into force in 2003. With the signing of Cotonou, EPAs were designed to be WTO-compatible agreements negotiated between the EU and ACP states within 2002 – 2007, after which they were expected to come in to force.²⁶

²⁰ Choi, Kwan Eun and Harrington, James (2003), *“Handbook of international trade”*, Malden, MA: Blackwell Pub., ISBN 0-631-21161-6.

²¹ Todaro, Micheal P. and Smith, Stephen C. (2008), *Economic development 10th edition*, Prentice Hall, ISBN-10: 0321485734, ISBN-13: 9780321485731

^{22, 23} Gorfu, Lisanework (2009), *“Potential Impacts of EPA on the Ethiopian Economy”*, Ministry of Trade and Industry

EPAs are supposed to be special trade agreements which mainly aim at ensuring development of ACP countries and their gradual integration into the global economy. EPAs are also expected to fulfill asymmetry i.e. take in to account the difference in levels of social and economic development between EU and ACP countries, while also remaining WTO-compatible. At the same time EU is also expected to assist ACP countries in coping up with challenges of competition and globalization.²⁷

EPAs serve three major objectives; attaining sustainable development, ways of paving a path for smooth and gradual integration into world market and means to eradication of poverty from ACP countries.²⁸ Further, EPAs are designed to serve as instruments of development, as cooperation agreements supporting regional integration initiatives, as means of maintaining and improving current level of preferential access to ACP exports to EU market and elements making EU-ACP relations WTO compatible.²⁹

Joint report on EC-ACP negotiations (2002),³⁰ forwards that EPA negotiations were launched in Brussels in 2002. At the opening an agreement was reached to sequence negotiations in two phases. As per the initial design, the first phase took place at the ACP-EC level where general issues of interest are discussed. Specific commitments were then left for negotiations at regional and country-specific levels. Accordingly, ACP countries were segmented in to regional groups; Central Africa³¹, Eastern and Southern Africa (ESA)³², Southern Africa (SADC)³³, West Africa³⁴, Caribbean³⁵ and Pacific³⁶.

²⁴ General Agreements on Trade in Services (GATS),
http://www.wto.org/english/tratop_e/serv_e/gatsintr_e.h

^{25, 26} Fontagne, Lionel, Mitaritonna, Cristina and Laborde, David, (2008) “*An impact study of the EU-ACP economic partnership agreements (EPAs) in the six ACP regions*”, N° Trade SPECIFIC CONTRACT N° SI2.453.883 Implementing Framework Contract No TRADE/05/H3/01/1c Commission of the European Union - Directorate General for Trade, CEPII-CIREM – 9 rue Georges Pitard – 75740 PARIS Cedex 15 – France

²⁷ Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum – EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

Among the developing African countries negotiating the EPA, Ethiopia has engaged from the beginning of the first phase negotiation through its Embassy in Brussels in 2002 and 2003. However, the country was a distant player then as the Ethiopian Embassy does not have technicians in the negotiation areas.

At the second phase of negotiations, Ethiopia joined the East African Community (EAC) regional group. The second phase EPA regional negotiations got underway in 2004. The Ethiopian embassy discontinued its involvement after this reorganization and the negotiation is mainly handled since then by Ministry of Trade and Industry (MoTI). In this second phase negotiation, Ethiopia assumed an active role as a lead negotiator of institutional provisions of EPA.³⁷

However, without concluding the second phase negotiations, the 2007 WTO deadline approached. Recognizing this, the EC started pressuring the ACP negotiating groups to sign EPAs. Nonetheless, many of the ACP economies refused to sign up, including Ethiopia.³⁸

^{28, 29} Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crn.org)

³⁰ ACP-EC EPA Negotiations, (2003), *Joint Report on the all-ACP – EC phase of EPA negotiations*, ACP-EC/NG/NP/43, ACP/00/118/03 Rev.1 Brussels

³¹ Cameroon, Central African Republic, Chad, Congo Republic, Equatorial Guinea, Gabon, São Tomé and Príncipe

³² Burundi, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Uganda, Zambia, Zimbabwe

³³ Angola, Botswana, Lesotho, Mozambique, Namibia, Swaziland, Tanzania

³⁴ Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo

³⁵ Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Surinam, Trinidad and Tobago

³⁶ Cook Islands, Fed. Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

^{37, 38} Gorfu, Lisanework (2009), *“Potential Impacts of EPA on the Ethiopian Economy”*, Ministry of Trade and Industry

EPAs, according to the joint report on EC-ACP negotiations (2002)³⁹, have six main dimensions of negotiation;

1. Market access
2. Development support
3. Trade in Services
4. Agriculture and Fisheries
5. Trade related areas
6. Other issues

Due to persistent disagreement on the elements of negotiation at the face of pressuring time deadline, EU was forced to open the door to the possibility of signing interim agreements covering only trade in goods to meet the WTO demands by 2007; leaving the other issues to be resolved later. Accordingly, interim agreements were signed by Botswana, Namibia, Swaziland, Lesotho, Mozambique Ivory Coast, Ghana, Mauritius, Seychelles, Zimbabwe, Comoros, Madagascar, Kenya, Burundi, Rwanda, Tanzania and Uganda with the EU. Regarding full EPAs, only one region, CARIFORUM⁴⁰ (except Haiti), completed the EPA agreement with EU, while for the other regions negotiations are expected to continue.⁴¹

In this regard, among the six elements of EPA negotiations, complete attention and emphasis has been placed on agreements on trade of commodities; mainly tied to the market access and trade related sections of EPAs.

³⁹ ACP-EC EPA Negotiations, (2003), *Joint Report on the all-ACP – EC phase of EPA negotiations*, ACP-EC/NG/NP/43, ACP/00/118/03 Rev.1 Brussels

⁴⁰ CARIFORUM - Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Surinam, Trinidad and Tobago

⁴¹ Colombo, Anna, (2009), “*Economic Partnership Agreements Putting Development Centre Stage*”, Secretary General, Socialist Group in the European Parliament, rue Weirtz, 1047, Brussels

However, at present the issue of trade in services is gaining significant momentum both at multinational (WTO) and regional trade integration levels. According to GTZ trade programme (2009)⁴², average share of services in GDP is 50 percent for ACP states but the figure varies widely across countries; the share of services in total exports ranges from over 75 percent for a number of Caribbean countries to under five percent for several African nations. This indicates that services account for considerable portion of the ACP economies and undertaking economic agreements concerning services necessitates an in-depth investigation of the possible implications of the agreements.

According to the Caribbean Regional Negotiating Machinery (2008)⁴³, EPA contains four modes of service supplies. Mode 1 entails cross border supply; implying that foreigners supply services to a given state. Mode 2 refers to consumption abroad; indicating that residents purchase services from a foreign state. Mode 3 is about commercial presence; implying that foreigners establish operation in another state and Mode 4 refers to movement of natural person i.e. temporary entry and stay of residents of one state into another state.

Among the four modes of trade in services under EPAs, mode 3 entails presence of foreign firms in an economy. According to CRNM (2008)⁴⁴, mode 3 is important in key service sectors of an economy; financial services and Telecommunications among similar others. Therefore, assessing possible impacts of EPA on these mode 3 trades of services is mandatory before proceeding to the signing of comprehensive EPAs not only at regional but also at country and economy - specific basis.

⁴² GTZ trade programme (2009), “*How to ensure development friendly Economic Partnership Agreements Lessons Across Counties*”, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Postfach 5180, 65726 Eschborn, Germany

⁴³ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crn.org)

The CRNM (2008)⁴⁵ also points out the experience of CARIFORUM states which have completed EPAs. Under the EU - CARIFORUM EPA, EU has opened 29 service sector industries, while those liberalized by the CARIFORUM are limited to business services (accounting, architecture, engineering, etc.), computer and IT related, research and development, environmental services, management consultancy, maritime transport, entertainment and tourism.

Under WTO rules on Regional Free Trade Areas (RFTAs) between developed and developing countries reciprocity is required. But level of reciprocity does not have to be the same or symmetrical. Realizing this, CARIFORUM has not matched commitments of EC in opening up of service sectors.⁴⁶

Having known the EPA service trade agreements, proper ways of proceeding with the accords have been studied. The German Federal Ministry for Economic Cooperation and Development (2007)⁴⁷ discusses that EPAs should provide for flexibility and asymmetry in favor of the ACP countries and ensure priority for development objectives. Further, it forwards that ACPs should not be pressured to liberalize their service industries. However, it calls for improved market access to EU service providers in ACP economies. The study also points out that liberalization of basic utilities (water, energy, health, basic education) under EPAs is not justified at present. The overall conclusion of the study is that negotiations on services should be conducted in a spirit of partnership. It stresses the need for sensible balance between liberalization, regulation and adequate freedom of policy making.

^{44, 45, 46} Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crn.org

In addition to studies on execution mechanisms of the EPAs, studies on potential impacts of EPAs have been undertaken. An impact study by the Overseas Development Institute (2006)⁴⁸, using General equilibrium (CGE) and partial equilibrium (PE) models, revealed that for African countries EPAs would lead to more trade creation (i.e. reduction in import prices benefiting consumers). However, the study is limited to assessing the impact of interim EPAs (studying impacts of EPAs on international trade in commodities) and relies on a bold assumption that tariff cuts automatically translate into reduction of import prices.

Carrying on the impact investigation of EPAs; an Oxfam briefing paper (2008)⁴⁹ investigates EPAs impacts on services by taking account of the CARIFORUM (economies that have completed EPA negotiations) experiences. Under the CARIFORUM EPA, up to 75% of service sectors have been liberalized. In addition, CARIFORUM governments are largely prohibited from treating foreign and local investments differently. Considering these CARIFORUM experiences, the study forwards liberalization of service markets and opening up of service industries for foreigners as impacts of EPAs on service industries in the remaining ACP states. However, the method of impact assessment, in the study is limited a mere review of CARIFORUM experiences and drawing of general implications for the remaining ACP states.

⁴⁷ German Federal Ministry for Economic Cooperation and Development, (2007), "*The Development Dimension of the Economic Partnership Agreements (EPAs) between the ACP Countries and the EU*", Discourse 010, Federal Ministry for Economic Cooperation and Development Bonn Office Postfach 12 03 22 53045 Bonn, Germany

⁴⁸ Koyama, Takeshi and Gloub, Stephen, (2006), *OECD's FDI Regulatory Restrictiveness Index: Revision and Extension to More Economies, Working Papers on International Investment Number 2006/4*, Investment Division, Directorate for Financial and Enterprise Affairs Organization for Economic Co-operation and Development 2 rue André-Pascal, Paris 75116, France

Focusing the EPAs impact assessment to a given regional group, a study by Karingi et al (2005)⁵⁰ investigates potential impacts of EPAs between the COMESA countries and EU members. Adopting general and partial equilibrium approaches, it shows; terms of trade in COMESA states would improve but their trade balances would regress. But, this study is based on static analysis and it assumes EPAs to be full reciprocity agreements; which is not realistic at least in the short run. Further, the study is limited to studying impacts of interim EPAs.

Another study on impacts of EPAs by Sauve and Avdent (2008)⁵¹, adopting partial equilibrium analysis and assuming 90% liberalization of bilateral trade forwards; by 2022 exports to EU and imports from EU would rise while tariff gains from the trade decline. As for EPAs impacts on services, the study forwards that African economies need more time to build their regulatory & productive capacities before opening up service industries. Nonetheless, the study adopted a static model and exhaustively analyzed the tariff implications while presenting slight implications for service sector impacts of EPAs.

Narrowing down the EPA impact assessments at specific country levels, a study by Hammouda et al (2005)⁵² points out that Ethiopia can expect limited gains in consumer welfare from EPAs. Though the gains are predicted to be minimal, the involved cost of implementing the agreements is estimated to be heavy for public resources of the Ethiopian government. Another finding of the study states that EU gains significantly from an expanded trade with Ethiopia. The study, however, adopted static analysis techniques and it is limited to study of EPAs impacts on trade in commodities not accounting for the possible impacts on services.

⁴⁹ Oxfam Briefing Paper, (2008),” *Partnership or Power Play? How Europe should bring development into its trade deals with African, Caribbean, and Pacific countries 110*”, Oxfam America 226 Causeway Street, 5th Floor Boston, MA 02114-2206, USA

⁵⁰ Karingi, Stephen, Perez, Romain, Oulmane, Nassim, Lang, Remi and Sadni Jallab, Mustapha, (2006), “*Assessment of the Impact of the Economic Partnership Agreement between the COMESA countries and the European Union*”, UN Economic Commission for Africa, African Trade Policy Centre, No. 37

Another empirical study with a focus on EPAs impact on services is forwarded by the Ministry of Trade and Industry; Gorfu (2009)⁵³. The study addresses the mode 3 trades of services under EPAs and it forwards that making commitments on trade in services by itself does not attract more foreign investments and hence, commitments on services are of trivial importance to secure mode 3 service trades.

The study also notes that Ethiopia should concentrate on building up capacities, competitiveness and proper regulatory frameworks before liberalizing service industries. Extended and comprehensive assessment of EPA consequences is made under this study. However, specific investigations on certain service areas are lacking. Further, empirical evaluations and analysis for Ethiopian service industries are short-comings of the study.

Having noted what has and has not been done; this study aims to fill in the missing component of EPAs impact assessment on services. Considering mode 3 trades in services, potential EPAs impacts on selected Ethiopian service industries are analyzed. This study aims at capturing the possible market structure, liberalization and trade shifts in few chosen Ethiopian service industries towards competitive state. Hence, by addressing one of the non-tariff implications of EPAs, this study would narrow the gap on the study of potential EPA impacts on the Ethiopian economy.

⁵¹ Sauv , Pierre and Audet, Denis, (2008), *“The services trade component of an Economic Partnership Agreement (EPA): Implications for the Common Market of Eastern and Southern Africa (COMESA)”*, International Trade Center

⁵² Hakim Ben Hammouda, Stephen Karingi, Ben Idrissa Ouedraogo, Nassim Oulmane and Mustapha Sadni-Jallab, (2005), *“Assessing the consequences of the Economic Partnership Agreement on the Ethiopian economy”*, Trade and Regional Integration Division, United Nations Economic Commission for Africa, Addis Ababa, Ethiopia, noulmane@uneca.org.

⁵³ Gorfu, Lisanework (2009), *“Potential Impacts of EPA on the Ethiopian Economy”*, Ministry of Trade and Industry

Methodology

The determination of potential market structure, competition, liberalization and trade in services after EPAs begins with the presentation of experiences of economies that have already signed the comprehensive EPAs, including service and investment provisions. From their experiences, implications for the Ethiopian economy are forwarded. Secondly, based on the implications derived; specific Ethiopian service markets pertinent to EPA are identified. Then, a brief discussion of data and data sources is presented. Having established the reliability and credibility of the data, presentation and justification of analysis techniques takes place. After the description and rationalization of analysis techniques, limitations of the study are acknowledged.

Experiences of ACP countries that signed the EPA;

Although the EPAs were designed to be concluded with all the six regions of the ACP and EU before the WTO set deadline of 2007, the reality turned out to be contrary. Only one final EPA was initialed with all member CARIFORUM states, except Haiti.⁵⁴

The completed EU-CAROFORUM EPA text, in addition to agreements on trade in goods, includes provisions on investment and services. CARIFORUM and EU agreed on investment liberalization to establish rules that facilitate easier flow of investment across their regions and reduction in discriminatory treatment of foreign investors. Such an agreement aimed at benefiting the CARIFORUM in terms of technology transfer, creation of jobs and quality of products and services.⁵⁵

⁵⁴ Colombo, Anna, (2009), “*Economic Partnership Agreements Putting Development Centre Stage*”, Secretary General, Socialist Group in the European Parliament, rue Weirtz, 1047, Brussels

The EU-CARIFORUM EPA also includes specific provisions on regulatory framework and cooperation on several key service sectors including;⁵⁶

1. Tourism
2. E-commerce
3. Courier
4. Telecommunications
5. Financial service
6. Maritime transport
7. Cultural and entertainment services
8. Professional services

EU opened more than 90% of service sectors listed in the World Trade Organization (WTO) W/120⁵⁷ services sectoral classification list.⁵⁸

^{55, 56, 58} Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnw.org

⁵⁷ World Trade Organization (WTO), (1991), *services sectoral classification list*, MTN.GNS/W/120, <http://wto.org>

Sectors liberalized by EU include;⁵⁹

1. Business services
2. Communications
3. Distribution
4. Environmental
5. Financial services
6. Transport services
7. Tourism
8. Recreation

On the CARIFORUM side sectors liberalized include those that have positive development impacts and in which member states are seeking investment or new technologies. Main sectors that most CARIFORUM states liberalized in the EPA are;⁶⁰

1. Business services
2. Computer and related
3. Research and Development
4. Environmental services
5. Management Consultancy
6. Maritime transport
7. Entertainment
8. Tourism

^{59, 60} Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crnmm.org)

Under the World Trade Organization (WTO) rules⁶¹ regional free trade areas (RFTAs) between developed and developing countries requires reciprocity. The WTO rules require the liberalization commitments to cover all service sectors. However, the level of reciprocity in exchange of concessions does not have to be the same. Therefore, as a developing region, CARIFORUM has not matched commitments of EC in all service sectors. CARIFORUM opened limited areas of its service sector to attract increased investment, to boost performance of existing markets and promote growth of new service industries.⁶²

Implications for Ethiopia;

Determining exact the impact of EPAs on the CARIFORUM economies would not be possible as the agreement was just signed a year ago. However, key implications can be drawn for the potential EPA agreement between EU and Ethiopia.

The service provisions of EPAs solely focus on liberalization and reduction of differential treatments between foreign and domestic investors. Given this fact, possible move towards liberalization in certain Ethiopian service markets is anticipated.

⁶¹ General Agreement on Trade in Services (GATS),
[http://www.wto.org/english/tratop_e/serv_e/gatsintr_e.h](http://www.wto.org/english/tratop_e/serv_e/gatsintr_e.htm)

⁶² Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

Regarding commitments Ethiopia would enter, individually or with the ESA regional bloc, as the WTO rules do not require symmetrical reciprocity, Ethiopia's commitments of liberalization would not match that of EU's.

In addition, with regards to which sectors to liberalize the same service sectors opened up by the CARIFORUM may not apply to Ethiopia. The up coming negotiations of the country on EPA would determine the actual service industries to be liberalized.

Nonetheless, an overall inference drawn from the EU-CARIFORUM agreement to the potential Ethiopian case is that a number of service markets would be opened up with a prearranged adjustment period leading to shifts in market structure, competition, liberalization and competitive trade of those specific service markets.

Identification of Service Markets Pertinent to the Potential EU-Ethiopia Comprehensive EPA;

On the basis of implications derived from the EU-CARIFORUM EPA, certain service markets in Ethiopia are likely to be headed towards opening up after the signing of EU-Ethiopia EPA. But the service sectors liberalized by the CARIFORUM may not exactly apply to Ethiopia.

Recognizing this and taking in to consideration that Ethiopia would prefer to liberalize service markets that have positive development impact, areas where technology transfer and quality improvement are promising and also taking in to account data availability and reliability, this study, considers three service sector industries that would have significant multiplier impact on the rest of the economy if steps towards liberalization are taken.

Selected Service Markets;

1. Telecommunications
2. Maritime Transport
3. Financial Services
 - Insurance
 - Banking
 - Microfinance

Data and Data Sources;

For assessment of the selected service markets, the study envisages to use both primary and secondary data. Relevant data for this study are the number of engaged businesses in the service industries and facts on economic variables indicating their market structure and competition.

The data on number of market players and on market structure indicating variables are obtained from National bank of Ethiopia (NBE), Ethiopian Telecommunications Corporation (ETC), Ethiopian Shipping Lines (ESL) and Association of Ethiopian Microfinance Institutions (AEMI).

Stages of Analysis

Determination of the potential market structure, competition, liberalization and trade in Ethiopian services after EPA takes two stages;

Analysis of Pre and Potential Post – EPA Market Structure and Competition

On the basis of experiences of CARIFORUM states (which have signed the comprehensive EPAs) and principles of EPA service provisions; three service sector industries have been selected for investigation in this study.

First stage of analysis would answer the first research question i.e. if Ethiopia concludes the EPA deals with EU; what would happen to the market structure and degree of competition in the selected service industries?

The study of service markets structure and competition, in this text, begins with definition of markets. Markets, in economics, refer to commercial activities where goods and services are bought and sold and one of the pillar elements for functioning of markets is competition.

Commercial activities (markets) driven by competition are known to deliver efficient outcomes. This is because competition aligns the seller's interests with that of the buyer's and reveals the true value of the good or service being exchanged (the actual cost of production is matched to the actual demand). This notion of competition-led-markets-led-efficiency is rooted in the laissez-faire principle of Smith (1776)⁶³ back in the 18th century.

Building on Smith's theory of free (competitive) markets, classical economists have enhanced and developed perfectly competitive market models to serve as bench marks for gauging performances (efficiencies) of real world industries.

⁶³ Smith, Adam (Author), (1776), Sutherland, Kathryn (Editor), (2008), *An Inquiry into the Nature and Causes of the Wealth of Nations*, Oxford Paperbacks, Oxford, UK; [ISBN 978-0-199535-92-7](https://www.amazon.com/dp/9780199535927)

Given the perfectly competitive models as standards for efficiency, the notion of market structure comes into play. In economics, market structure⁶⁴ (also known as market form) refers to the state of a given market with respect to competition. The elements of market structure include the number and size distribution of firms, entry and exit conditions and extent of product/service differentiation.

Based on these elements of market structure, there are different forms of markets⁶⁵; Perfectly competitive, Monopoly, Monopolistic competition, Oligopoly, Oligopsony and Monopsony. These different forms of markets have different degrees of competition and thus exhibit varying levels of efficiency.

The analysis of Pre and Potential Post – EPA market structure and competition thus begins by determining to which market form the selected Ethiopian services industries belong. Then based on reasonable assumptions of what would occur according to the EPA service provisions, potential post - EPA market structures and degrees of competition are determined. Whether agreeing to EPA service provisions leads to a market structure shift towards competitive nature and hence efficiency is to be exposed.

In determining the market structure to which the service industries belong, we are estimating the extent to which the market deviates from the bench mark case of perfect competition. According to Motta (2008)⁶⁶, this approach first requires defining ‘relevant market’; that is the set of products and geographical areas to which the specific services belong. In this perspective, definition of markets (both from its product and geographical points of view) is listed as the initial step towards assessment of market power (deviation from competition).

^{64, 65} McConnell, Campbell, (2008), *Microeconomics*, McGraw-hill publishing company, ISBN-10: 007725735, ISBN-13: 978-0077257354

Market Definition⁶⁷

Product Market Definition;

The relevant product market is expected to constitute products that exercise competitive constraints on one another.

As discussed by Motta (2008), there are five key measures of product market definition;

1. The Small but significant non-transitory increase in price (SSNIP) or Hypothetical Monopolist Test

These tests are implemented using own-price and cross-price elasticities of demand. Products that have low own-price elasticity (products commanding inelastic demand) and products with low cross-price elasticity (products which cannot be easily substituted) have their own separate product market.

Products with close substitutes and with price elastic demand, on the other hand, have other similar products as competitors and the product market definition would include the competitor products as well.

1. Demand Substitutability

Demand substitutability is a measure that simply checks whether given set of products are substitutable to consumers (Is it easy for consumers to switch from one product to another?).

^{66, 67} Motta, Massimo, (2008), *Competition Policy: Theory and Practice*, Cambridge University Press, ISBN 0-521-81663-7-ISBN 0-521-01691-6

9. Supply Substitutability

Supply substitutability examines if producers currently supplying a different product possess the skills and assets to switch to production of other products in a short period of time. According to Motta (2008), six months is considered to represent the short period.

10. Price Correlation Tests

Price correlation tests look at how price series of different products evolve over time. The idea is that if two products belong to the same market their prices will tend to move in the same way over time.

11. Price Differences

The underlying principle behind the price differences indicator is; large differences in price levels of different products indicate that the products are not in the same market.

Geographic Market Definition

Geographic market definition refers to geographic extent of a market for a given product or service. In determining the geographic market; Motta (2008) lists imports, transportation costs and consumer tastes as the main indicators.

If products produced locally are also imported, then they face competition from the imports and the geographical market for these products would include the source regions of those imports. In terms of transportation costs, if transporting one product from one region to another involves high costs and thus results in high price forcing demand for the product to decline then the geographic market for the product stays confined to a single region; if not it would expand as long as demand for the product remains unaffected. As for consumer tastes, if customers strictly prefer products from a specific region then the geographic market of the product would be the region of customers taste.

In accordance with theories of market power assessment or measurement of deviation from competition, this study firstly determines relevant product and geographic markets for the selected service sector industries with the use of three of the following three indicators.

1. Demand Substitutability
2. Production Substitutability, and
3. Price Correlation

Price difference measure is not used because of it's shortcoming in failing to address differences in prices among identical products, while the SSNIP test, on the other hand, is dropped because of data limitation in prices and quantities marketed for the chosen service industries.

Having determined the specific markets in the transport, telecom and financial service industries of Ethiopia; current level of competition of each market is determined through the use of degree of competition measures which also indicate the structure of the markets.

The ground for carrying out market power (level of deviation from competition) assessment is that firms lack market power only in the abstract and unrealistic world of perfect competition. In real world industries, where products are unlikely to be perceived as perfect substitutes by all consumers, firms are expected to have market power.

As Motta (2008) discusses it, a theoretical measure of market power is given by Lerner Index; defined as a firm's mark-up (i.e. difference between price and marginal cost over price ratio); $L_i = (P_i - C_i)/P_i$. But applying this measure in reality is a problem as marginal cost estimation is a difficult task.

Given the difficulties involved with the use of Lerner Index, according to Motta (2008), an alternative approach can be used based on the fact that Lerner Index corresponds to the inverse of elasticity of demand; $L_i = 1/\xi_i$. This estimate of elasticity of demand is at the core of modern econometric techniques for assessment of market power (deviation from competition). However, using econometric techniques to estimate market power from demand elasticities is not always possible mainly due to lack of data.

Recognizing this, as Motta (2008) discusses, a common way of measuring market power is through indirect indicators. In these indirect measures market shares play a central role. But market shares must be complemented with additional measures that capture the position of competitor firms in an industry to qualify as adequate measures of market power.

Given these facts, measures of competition and indicators of market structure in the selected service markets, in this study, are;

1. **Market shares**⁶⁸;

Market shares simply reflect percentage of the total market serviced by each firm. However, market shares alone are not adequate measures of competitiveness. The relative position of competitors must be taken into account to capture the degree of competition and to determine the industry structure of a given market.

2. **Herfindahl Hirschman Index (HHI or H)**⁶⁹;

$$H = \sum_{i=1}^N s_i^2$$

Where s_i is the market share of firm i in the market and N is the number of firms. The Herfindahl Index (H) ranges from $1/N$ to 1, where N is the number of firms in the market.

The HHI index accounts for market share of each entity in the market and it yields a given value which can shed light on the industry structure of a given market. Nonetheless, the measure fails to capture a firm's market share in comparison with other firms in the market.

3. **Kwoka's dominance index (D)**⁷⁰;

$$D = \sum_{i=1}^{n-1} (s_i - s_{i+1})^2$$

Where, $s_1 \geq \dots \geq s_i \geq s_{i+1} \geq \dots \geq s_n$ for all $i = 1 \dots n - 1$.

s_i is the market share of firm i in the market and N is the number of firms.

Kwoka's dominance index (D) is defined as the sum of squared differences between each firm's market share and the next largest share in a market. It captures market share of a firm in comparison with its immediate competitor. But it fails to show relative position of all competitors of a firm in the identified relevant market.

^{68, 69} Brown, Donald M.; Warren-Boulton, Frederick R., (1988), *Testing the Structure-Competition Relationship on Cross-Sectional Firm Data*, Discussion paper 88-6, Economic Analysis Group, U.S. Department of Justice.

⁷⁰ Kwoka, J. E., (1977), "*Large firm dominance and price-cost margins in manufacturing industries.*" Southern Econ J vol. 44

1. **Asymmetry Index (AI)**⁷¹:

$$AI = \sum_{i=1}^n \left(s_i - \frac{1}{n} \right)^2 / n.$$

Where s_i is the market share of firm i in the market and N is the number of firms.

Asymmetry Index (AI) is defined as statistical variance of market shares.

While Kwoka's dominance index presents a firm's share of the market in relation to its closest competitor, Asymmetry Index comprehensively grasps a firm's market share in relation to all competing players in the given market.

With the use of the above four measures, the current degree of competition and the market structure of the selected service industries would be determined.

Having established the current status of the industries in terms of market structure and competition, the potential post –EPA changes would be investigated through reasonable assumptions of outcomes based on experiences of CARIFORUM states, EPA service provisions and industry-specific regulations of Ethiopia.

Complementing the qualitative reasoning of potential post –EPA market structures and competition levels, projections of 'with EPA' and 'without EPA' are forwarded based on Herfindahl Hirschman Index (HHI). The 'without EPA' projections would depend on the Herfindahl Hirschman Index (HHI) computed annually for the considered service markets. The 'with EPA' projections, on the other hand, would depend on predicted values of HHI indicating the level of competition each service industry in the post-EPA case. Assigning a reasonable figure (HHI value) to indicate the shift in market shares, based on scientific judgment of relevant facts, a possible post-EPA market structure and competition of services in Ethiopia can be determined.

⁷¹ Warren-Boulton, Frederick R., (1990), "*Implications of U.S. Experience with Horizontal Mergers and Takeovers for Canadian Competition Policy*"; Mathewson, G. Franklin et al. (Eds.), *The Law and Economics of Competition Policy*, Vancouver, B.C.: The Fraser Institute. [ISBN 0889751218](#)

Analysis of Pre and Potential Post-EPA Service Market Liberalization and Trade

The second stage of analysis, in this study, addresses the second research question i.e. would agreeing to EPA lead to liberalization of service markets in Ethiopia thereby leading to competitive trade in services?

To investigate the issue of potential liberalization and thus competitiveness of trade, the study has selected three service sector industries in Ethiopia that are (relevant to EPA provisions) currently heavily regulated but would have momentous impact on the overall economy if the regulatory restrictions are lifted.

In this perspective, a regulatory restrictiveness index is computed for the two cases of pre and potential post – EPA to capture possible outcomes of liberalization and competitiveness of trade in the chosen Ethiopian service industries.

Regulatory Restrictiveness Indices⁷²

OECD'S FDI regulatory restrictiveness index (2006) is used measure deviations from national treatment i.e. measuring discrimination against foreign investment along the way capturing openness of service industries for private sector investment.

According to the Caribbean Regional Negotiating Machinery (2008)⁷³, EPA contains four modes of trade in services, out of which the focus of this study is on Mode 3. The Mode 3 trade in services refers to commercial presence of foreigners in another state. In this regard, the regulatory restrictiveness index, in this study, measures restrictiveness of the selected Ethiopian service industries to foreign investments.

Restrictions on national treatment, according to the OECD regulatory restrictiveness index, are classified into entry and post-entry operational restrictions. The indicator takes into consideration discriminatory barriers to entry in the form of limitations on foreign ownership, special screening procedures which only apply to foreign investors, as well as post entry management and other operational restrictions. Regulations that equally apply to foreign and domestic investors are not considered here.

Restrictiveness in the index is measured on a 0-to-1 scale with 0 representing full openness and 1 indicating prohibition of foreign direct investment (FDI). Restrictiveness is calculated for each of the three Ethiopian service industries selected in this study.

The regulatory restrictiveness index is calculated for the two cases of pre and post – EPA. With comparison of the two, extent of liberalization and competitiveness of trade in the selected service sectors of Ethiopia is observed. The potential post-EPA restrictiveness index for the three service industries will be based on the EPA provisions of services and investment.

⁷² Koyama, Takeshi and Gloub, Stephen, (2006), *OECD's FDI regulatory restrictiveness index: Revision and extension to more economies*, OECD, OCDE, working papers on international investment, no. 2006/4, Economic department working paper no. 525 [Eco/WKP (2006) 53]

⁷³ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crn.org)

Limitations of the Study

In the investigation of potential market structure, competition, liberalization and trade in services after EPAs, the study would not exhaust all possible impacts of EPAs on investment and trade in all service industries. The study only considers three service sector industries in Ethiopia (Telecommunication, Maritime Transport and Financial services).

Further, the used market structure and competition indices are indirect and second best due to limitations in data availability impeding application of first-rate direct market power measures.

Another dimension of the study's shortcoming is related to the drawing of forecasts from industry-specific regulations, investment proclamations and EPA service agreements. Limited sources are consulted for the prediction and thus cannot be considered all-inclusive. Further, mostly implications derived are indirect and in forecasting, uncontrollable elements other than the reviewed policies and agreements exist.

With regards to the restrictiveness index measure; it is only limited to capturing regulatory restrictions on FDI and private sector participation, ignoring non-policy institutional or informal restrictions such as nature of corporate governance as well as policies that indirectly impact FDI notably economic and social regulations. Also, the extent of actual enforcement of the legal restrictions is difficult to determine and thus it is not factored in to the calculations.

Nonetheless, despite the limitations, the indirect measures of market power and the used restrictiveness index contribute to the assessment of policies towards FDI and private sector investments in the selected Ethiopian service industries. With the use of accessibly adequate and credible data complemented with analysis techniques, the study forwards precise and robust potential EPA impacts on market structure, competition, liberalization and trade in the three industries (Telecom, Maritime Transport and Financial services) of Ethiopian service sector.

Empirical Results

THE ETHIOPIAN TELECOMMUNICATION INDUSTRY⁷⁴

The introduction of telecommunication services in Ethiopia dates back to 1894, seventeen years after the invention of telephone technology in the world. It was Menilik II, the King of Ethiopia, who introduced telephone technology to the country. The telecom technology introduced then contributed to the integration of the Ethiopian society linking Addis Ababa, the Ethiopian capital city, with all the important administrative towns of the country.

The company was placed under government control during the imperial regime, at the beginning of the twentieth century. It came to be known as Imperial Board of Telecommunications.

With the coming of the Derg, the Telecommunication Company was restructured. It became Ethiopian Telecommunication Service in 1975 and later on changed to Ethiopian Telecommunications Authority by 1981.

Once again the Ethiopian Telecommunications was reorganized and came to be known as Ethiopian Telecommunications Corporation starting from 1996.

⁷⁴ <http://www.ethionet.et>

The Telecommunications services provided currently by the ETC are classified as follows based on the existing schemes of rendering the telecom services⁷⁵;

1. WCDMA (Wideband Code Division Multiple Access) - radio access scheme used for third generation cellular systems - Voice, Video calling, Mobile Internet/web Browsing services
2. Wireless CDMA WLL - used to access dial-up Internet connectivity
3. Landline Services - deliver voice, fax and internet services
4. Global System for Mobile (GSM) Cellular Phone Services - digital cellular mobile telephone system and satellite telephone (for those who travel and work out side coverage of mobile telecommunication services in Ethiopia)
5. Broadband - Internet, Multimedia, VSAT
6. Call Center – Information and Customer Relation, Operator Services
7. Digital Data Network (DDN) Services – enable sharing of data within a company and /or with external organizations
8. Roaming services - enable mobile subscribers make use of mobile or wireless services (Voice, SMS, MMS, Instant Messaging, Data Services and Video Calls) beyond the network coverage of ETC.

⁷⁵<http://www.ethionet.et/services>

I. Pre and Potential Post – EPA Market Structure and Competition

Market Definition

The economic theory⁷⁶ of measuring market power /deviation from competition requires determination of actual geographic and service market for a given service industry.

Service Market Definition

As discussed earlier in the methodology section, the study adopts three market definition indicators.

1. Demand Substitutability

With demand substitutability we try to capture customer's ease of substitution of services to delineate specific service markets in the Telecom industry of Ethiopia.

There are six basic service forms rendered by ETC;

1. Internet services (Dial up, Leased line, ADSL, Wireless)
2. Telephone services (Cellular phone, Fixed line telephone)
3. Call center services
4. Digital Data Network
5. Roaming services
6. Fax and Telegram services

⁷⁶ Motta, Massimo, (2008), *Competition Policy: Theory and Practice*, Cambridge University Press, ISBN 0-521-81663-7-ISBN 0-521-01691-6

To mark out specific service markets and to measure the degree of competition, the above six categories need to be further delineated. However, as the objective of this study is to capture the overall deviation of the industry from competition; detail classification of the six market categories is not conducted. Instead, each service group is considered as a separate market i.e. A single market for all forms of internet services, a single market for all types of telephone services and a single market for each of the remaining four categories.

The delineation and identification of the above six categories as separate markets is justified with the demand substitutability indicator as follows;

1. If a change in price or any other market variable occurs, an internet user would not switch to using telephones (telephones and internet serve different purposes) i.e. telephones are not substitutes to internet services to customers. The markets of internet and telephone are thus separate.
2. If variation in price or any other market variable occurs, a telephone user would not switch to the use of call centers. Again the two have separate markets.
3. If price or any other market variable changes, call center service user would also not switch to use of digital data network use.

Carrying on the above demand substitutability arguments, we observe that the six forms of telecom services in Ethiopia have separate markets i.e. demand for one form of Telecom service cannot be substituted by another.

Therefore, based on the use of demand substitutability; we observe that there are six distinct service markets in the Telecom industry of Ethiopia.

2. Production Substitutability

We use production substitutability to measure the ease of substitution of rendering different services. Based on the six classifications of the Telecom services, the possibility of substituting one service provision with another is reviewed.

In the telecommunication industry, the possibility of substituting one service provision to another is relatively straightforward⁷⁷. This implies; the six different forms of services share a common market based on the ease of switching from rendering one type of service to another.

3. Price Correlation

Once again based on the six service classifications, correlation between their prices is examined to delineate specific service markets.

Prices of the different services provided by ETC appear to have moved together over time⁷⁸. Increments and decreases in prices of the different Telecom services have followed similar pattern over time. This again implies that the Telecom services in Ethiopia would fall into the same market.

^{77, 78} <http://www.ethionet.et>

However, the price correlations over time in Ethiopia may be due to the fact that all Telecom services have been rendered by a single body.

Provided that the two measures of market identification (production substitution and price correlation) indicate common market for the Telecom services in Ethiopia and also given the fact that all Telecom services are provided by a single business unit, the study takes the six Telecom services to fall in to a single market. This consideration of a single service market may come as a limitation; however, as the industry is purely monopolized (as will be discussed later), the market delineation contributions to measuring market structure and competition is minimal.

Geographic Market Definition

Geographic market definition provides the geographic extent of a market for a given service.

As presented in the Telecommunication Services regulation No.47/1999 of the country, the Ethiopian Telecommunication Corporation solely caters the national market for Telecom services. There are no imports and exports of telecommunication services to and from Ethiopia. The ETC serves all regions within the country and all telecom service users in Ethiopia obtain the services only from ETC. Therefore, the relevant geographic market, for Telecom services, in this study includes all regions within the national boundary of Ethiopia.

Overall, a single Telecom services market is defined and the geographic market is the territory of Ethiopia. Having defined the market, its structure and level of competition is investigated for the pre and potential post –EPA cases.

Pre – EPA Competition and Market Structure of Telecommunications;

Table 1 – Measuring Pre – EPA Competition and Determination of Market Structure

| Measures of Competition and Indicators of Market structure | Telecom Services in Ethiopia – Ethiopian Telecommunications Corporation (ETC) |
|--|---|
| Market Share | 100% |
| Herfindahl Hirschman Index (HHI) | 10,000 |
| Kwoka Dominance Index (D) | 1 |
| Asymmetry Index (AI) | 0 |

As Ethiopian Telecommunications Corporation is the sole supplier of Telecom services in Ethiopia, it has 100% market share and 10,000 HHI figure. In Kwoka's dominance index ETC registers 1; implying that ETC controls the entire industry and there is no other firm with any share of the market implying zero competition. Further, the Asymmetry Index is zero; indicating that there are no other firms in the market and a single firm (ETC) serves the entire telecom market.

Overall, on the basis of standard microeconomic theory,⁷⁹ the Ethiopian Telecommunication industry currently, in the pre-EPA case, is a monopoly; implying that the degree of competition in the industry is zero.

Potential Post–EPA Competition and Market Structure of Telecommunications;

Highlights of EPA Rules on Investment and Trade in Services;

According to the Caribbean Regional Negotiating Machinery (2008)⁸⁰, there are comprehensive rules in EPA covering services. In line with the study's area of investigation, telecommunications, financial services and maritime transport industries are covered by the EPA. Provisions on liberalization of these sectors for Mode 3 service trade (i.e. allowing private sector and foreign investment in the industries), are parts of EPA rules on investment and trade in services.

Regulation of Telecommunications in Ethiopia;

According to section one of Proclamation No. 49/1996 (a proclamation to provide for the regulation of telecommunications in Ethiopia), Ethiopian telecommunications agency is to be established as an autonomous federal agency having its own legal personality.

Regarding the entities that can engage in the telecommunication industry of Ethiopia, the Ethiopian Investment Proclamation No.37/1996 Part Two Article five lists telecommunication as one of the industries exclusively reserved for government; banning private sector's participation. Amended version of the investment proclamation in 1998 (Investment Proclamation NO. 116/1998) under Article Two Sub-article Two lists telecommunications as an industry where private investors can take part in partnership with the government.

⁷⁹ Mankiw, Gregory, (2008), **Principles of Microeconomics**, ISBN-10:0324319169 ISBN 13:9780324319163

Concerning the participation of foreign investors, further amended investment proclamation (Proclamation No. 168/1999) Article Two Sub-article Two states that investment areas of joint ventures with government are not open for foreign investors; implying that the telecommunication industry of the country is not open for foreign investment.

Proclamation No. 47/1999, the amended telecommunications regulation in Ethiopia, lists the licensing procedure for domestic investors to participate in joint venture with the government in the telecommunications industry. However, there has not been private sector partaking in the industry to date.

CARIFORUM after EPA;

According to Office of Trade Negotiations Caribbean Community (2008)⁸¹, most of the CARIFORUM states have liberalized their Telecommunication services.

Implication for the Potential Post –EPA Ethiopian Telecommunication Industry;

If EU– ESA/Ethiopia comprehensive EPA is concluded; based on the EPA service provisions, the current telecommunication regulation of the country and experiences of CARIFORUM states, reasonable inferences can be forwarded for the potential market structure and competition in the post –EPA telecommunication industry of Ethiopia.

⁸⁰ Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

Assumptions and Predictions of Potential Post –EPA Telecommunication in Ethiopia;

1. Five years to complete EPA comprehensive negotiations with EU [2010 -2015]
2. Five years of adjustment period towards liberalizing the telecommunication industry [2015 – 2020]
3. With in the adjustment period, we assume the government at a first stage gives 25% of the market to the private sector through joint venture and at a second stage another 25% is assumed to be opened up for domestic -foreign partnership.
4. After the end of the adjustment period [Post – 2020] 50% of the telecommunication industry is assumed to remain under the government, while the remaining 50% is predicted to fall under the private sector (domestic and foreign investment).

The CARIFORUM liberalized the service industries after completing the EPA but for the Ethiopian telecommunication industry, we consider five years of adjustment period after the EPA comes into effect.

Based on the above assumptions and predictions; Measures of Competition and Determinants of Market Structure are presented in table 2 below.

⁸¹ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crn.org)

Table 2 - Measuring Potential Post – EPA Competition and Determining Market Structure

| Measures of Competition and Indicators of Market structure | Stage 1 of adjustment period (2015 – 2018) | | | Stage 2 of adjustment period (2018 – 2020) | | |
|--|--|---------------------------|------------------|--|---------------------------|------------------|
| | Government ETC | Domestic Private Investor | Foreign Investor | Government ETC | Domestic Private Investor | Foreign Investor |
| Market Share | >75%* | <25%* | 0 | <50%* | >30%* | >10%* |
| Herfindahl Hirschman Index | >7,500 | <2,500 | 0 | <5,000 | >3,000 | >1,000 |
| Kwoka Dominance Index | 0.25 | 0.0625 | 0 | 0.04 | 0.01 | 0.01 |

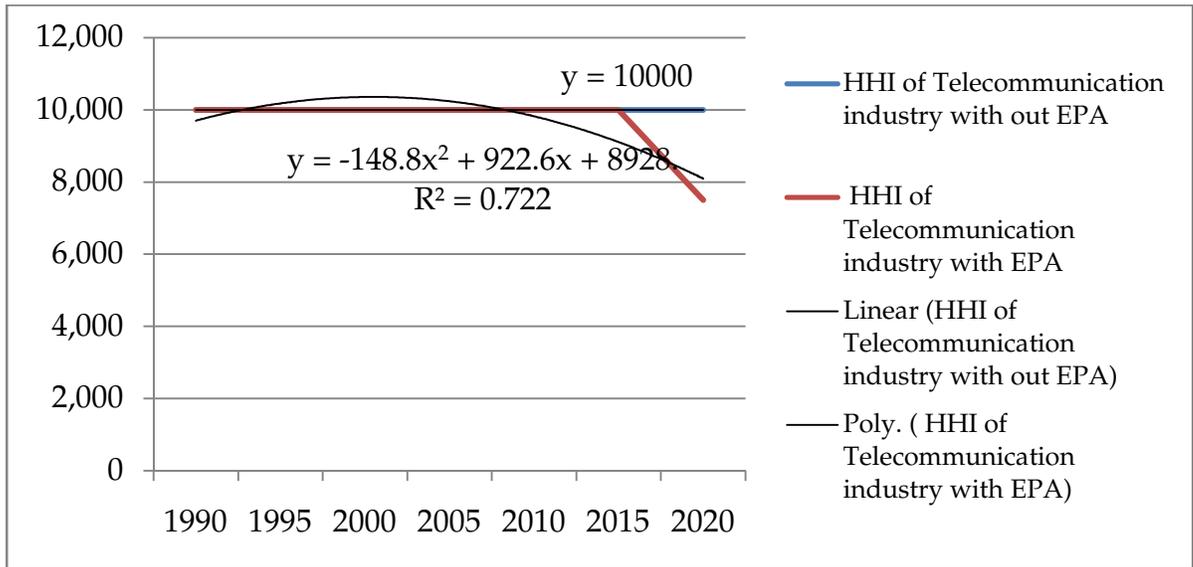
* - The market share of the telecommunication operators in the Potential Post-EPA case is assumed to be based on the number of subscribers for the different services to each firm in the industry.

As demonstrated above, the structure of the Ethiopian Telecommunications industry shifts towards a less monopolized state and competition would be introduced in the Potential Post – EPA case. The government would remain dominant in the market after the immediate adjustment period but private sector and foreign investment participation would craft the industry to be less monopolized compared to the pre-EPA case.

“With and Without EPA” Market Structure and Competition Projections;

The projected market structure for telecommunications industry is based on the HHI of the market over the past two decades (1990 – 2010) and on the assumed HHI figure, for the Post –EPA case, of the coming decade (2010 -2020). This enables us to capture the possible market structure and competition of the post-adjustment future.

Figure 1 – With and Without EPA Market Structure Projections



For the “with out EPA” case, as the telecommunication industry has been monopolized since it was introduced in Ethiopia, the resulting projection equation is linear i.e. constant, with an HHI value of 10,000.

For “with EPA” a polynomial equation is used as it fits the trend most.

$$Y = at^2 - bt + c, \text{ where,}$$

Y = is the HHI value being forecasted.

t = is the time period, and

a, b and c are constants to be determined.

Using historical data, the three constants are determined and the following trend equation is developed. Projection would be based on the polynomial equation below;

$$Y = -148.8x^2 + 922.6x + 8928$$

$$R^2=0.722$$

The R^2 of the above projection equation, 0.72, shows that 72% of the variation in the degree of competition can be explained by historical trend extrapolation.

The projected market structure and degree of competition in the “with EPA” Ethiopian telecommunication industry, based on the above equation, is given in Table 3 below.

Table3 - Projected market structure and degree of competition based on trend extrapolation method

| Year | HHI of Telecommunication industry with out EPA | HHI of Telecommunication industry with EPA |
|------|--|--|
| 1990 | 10,000 | 10,000 |
| 1995 | 10,000 | 10,000 |
| 2000 | 10,000 | 10,000 |
| 2005 | 10,000 | 10,000 |
| 2010 | 10,000 | 10,000 |
| 2015 | 10,000 | 10,000 |
| 2020 | 10,000 | 7,500 |
| 2025 | 10,000 | 6190.4 |
| 2030 | 10,000 | 5178.6 |
| 2035 | 10,000 | 3274 |

Based on the study's assumption of 10 years (2010 - 2020) working period for concluding comprehensive EPA negotiations and commencing adjustments towards opening the telecom market, projection is made for the period 2020-2035.

The projections, as shown above, demonstrate that “*with EPA*” the telecommunication industry of Ethiopia would move away from monopoly opening a way for competition.

II. Analysis of Pre and Potential Post-EPA Service Market Liberalization and Trade

Having determined the potential market structure shift, a second element central to EPAs is openness for foreign direct investment (FDI) and private sector participation. Addressing this, regulatory restrictiveness indices are computed for the pre and potential post-EPA case.

Regulatory Restrictiveness Index

Based on OECD'S FDI regulatory restrictiveness index (2006)⁸², we measure deviation from national treatment i.e. discrimination against foreign investment along the way capturing openness of the telecommunications industry for private sector.

⁸² Koyama, Takeshi and Gloub, Stephen, (2006), *OECD's FDI regulatory restrictiveness index: Revision and extension to more economies*, OECD, OCDE, working papers on international investment, no. 2006/4, Economic department working paper no. 525 [Eco/WKP (2006) 53]

Table 4 - Pre –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ⁸³ | Scores |
|--|--------|
| Level of openness for private sector investment (State monopoly) | 1.0 |
| FDI equity limits (No foreign equity allowed) | 1.0 |

The restrictiveness index is measured on a 0-to-1 scale with 0 representing full openness and 1 indicating prohibition of private sector participation and foreign direct investment (FDI).

If private sector participation and foreign equity is banned or non-existent, the other restrictiveness criteria become irrelevant and the index becomes 1; which is the case for the Ethiopian telecommunications industry.

As shown in table 4, both FDI and private sector investments are not partaking in the Ethiopian telecommunications industry, currently in pre –EPA stage.

Table 5 –Potential Post –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ⁸⁴ | Scores |
|---|--------|
| Level of openness for private sector investment (Privatization underway) | 0.6 |
| FDI equity limits (1 - 19% foreign equity allowed) | 0.6 |
| Screening and Approval (Investor must show economic benefits) | 0.2 |
| Management restrictions (Majority given foreigners) | 0.1 |
| Movement of people (Allowed for foreigners) | 0.025 |
| Input and operational restrictions (Less priority for using domestic content) | 0.05 |
| Overall FDI Restrictiveness Index | 0.975 |

On the basis of the completed EU-CARIFORUM EPA, the Ethiopian telecommunication regulation and investment proclamation, anticipations of the potential Post-EPA market structure and competition, in table 5, indicate that private sector participation would commence but foreign investment would only come about in the gradual Post –EPA future.

Overall, the industry would become less monopolized and certain level of competition would be introduced. Further, regulatory restrictions would also become flexible as a way of complying with the potential Ethiopia/ESA –EU EPA.

^{83, 84} The scores for the calculation of the restrictiveness indices are listed in the section III of the Annex.

THE ETHIOPIAN MARITIME TRANSPORT INDUSTRY⁸⁵

Maritime transport in Ethiopia was introduced with the establishment of Ethiopian Shipping Lines Share Company (ESLSC) in 1964. The ESLSC started operation in 1966 G.C. with three newly built ships (two general cargos and one tanker). It was established as a share company with a capital of birr 50,000 subsequently to be raised to birr 3,750,000. Taurus Investment Inc. of Washington DC Agreed to subscribe to 51% of the capital requirement, while the Ethiopian government under wrote the remaining 49%. Eventually, the American share was sold to the government of Ethiopia and the company became fully owned by the government of Ethiopia since 1969/70 G.C.

ESLSC now has a capital of birr 289 million and operates under the supervision of Public Enterprises Supervising Authority. ESLSC is the only entity involved in sea freight activity in the country.

ESLSC launched its first service forty years ago along the UK/North and West Europe route, which was then major direction of the country's import and export trade. In the course of its development the Company further expanded its service to include the Mediterranean, Adriatic, the Far East areas, Gulf regions and the Red Sea.

At present ESLSC has an agency network in all its trading areas for assisting shippers from Ethiopia or abroad in arranging and consolidating their shipments. The company provides maritime transport of cargo loads facilitating the country's export and import trade of goods. The ESLSC currently uses the port of Djibouti as its base and provides liner services to specified ports on regular sailing schedules.

⁸⁵ www.ethiopianshippinglines.com.et/

I. Pre and Potential Post – EPA Market Structure and Competition

Market Definition

Prior to the measurement of market power /deviation from competition, determination of the actual geographic and service market for a given service industry is imperative.

Service Market Definition

Using the three indicators adopted by the study, specific service markets within the Ethiopian maritime transport industry are identified.

1. Demand Substitutability

Demand substitutability captures the ease of substitution of services by customers. Application of this indicator necessitates the list of alternative services provided by the ESLSC in Ethiopia.

Shipping service in general may be for commerce, recreation or military. However, the ESLSC, the sole maritime transport service provider in Ethiopia, renders only transportation of cargo shipments assisting the export and import trade of goods.⁸⁶

⁸⁶www.ethiopiashippinglines.com.et/

Cargo (or freight) refers to goods or produces transported, generally for commercial gain, by ship, aircraft, train, van or truck. As per the focus area of this study, list of cargo types transported with ships is presented below.

Marine cargo types⁸⁷

The primary types of marine cargoes are:

1. Automobiles - carried on specialist roll-on/roll-off ships.
2. Break bulk cargo - materials stacked on wooden pallets and lifted into and out of the ship by cranes.
3. Bulk Cargoes (salt, oil, tallow, and scrap metal) - commodities that are neither on pallets nor in containers, and which are not handled as individual pieces.
4. Containers - the largest and fastest growing cargo category worldwide. Containerized cargo includes everything from auto parts and machinery components to shoes, toys, frozen meat and seafood.
5. Project cargo and heavy lift cargo - include items such as manufacturing equipment, factory components, power equipment such as generators and wind turbines, military equipment or almost any other over sized or overweight cargo too big or too heavy to fit into a container.

⁸⁷Moshe Ben-Akiva; Meersman, Hilde; Eddy Van De Voorde, (2008), *Recent Developments in Transport Modeling: Lessons for the Freight Sector*, Business & Economics - Emerald Group Publishing Limited

The Ethiopian Shipping Lines S.C. has nine cargo ships (Abay wonz, Abyot, Admas, Andinet, Netsanet, Omo wonz, Tekeze, Shebelle and Ghibe) transporting the above primary forms of marine cargoes to and from Ethiopia. Since the ESLSC renders only cargo transport services, we consider only a marine cargo transport market.

Using the demand substitutability measure, we question whether or not it is straightforward for the customer to switch from one form of marine cargo transport service to another. For a price or other market variable change, a customer shipping automobiles would not resort to ships that transport containers. The configuration and capacity of the ships determine the cargo being transported.

Therefore, based on the demand substitutability indicator; we observe that there are five distinct primary cargo transport service markets in the Ethiopian maritime transport industry.

2. Production Substitutability

We use production substitutability to measure the ease of substitution of rendering varying services.

For a given change in market variables, a container transporting ship cannot be switched to transport bulk cargoes or the ESLSC can not merely resort to purchase of bulk cargo carrying ships due to the huge capital necessitated. This entails separate markets for the above mentioned five forms of primary marine cargo types.

3. Price Correlation

Over the years, movement of prices for the different marine cargos has followed a similar path. Transportation cost for cargo being transported greatly varies with the type of the cargos but the path of price development for the different cargos shows a parallel trend⁸⁸. This indicates that all forms of marine cargo transportation fall in to a single market. However, the price correlations observed may be due to the fact that all maritime cargo transport services have been provided by a single body.

Overall despite the fact that the two measures (demand and production substitutability) indicate five separate markets; the study takes a single market for all maritime transport services by emphasizing that all marine transport services are provided by a single business unit in Ethiopia. This consideration of a single service market comes as a limitation, but the contribution of defining five separate markets to market structure and competition measures in this study is minor as there is only one service provider in the market.

Geographic Market Definition

Geographic market definition provides the geographic extent of a market for a given service.

For the marine transport industry, there are no other marine transport service providers in Ethiopia. The Ethiopian Shipping Lines SC is the sole entity carrying marine transport services from and to Ethiopia. In this regard, the geographic market for the marine transport industry is the entire Ethiopian national territory.

⁸⁸ www.ethiopiashippinglines.com.et/

On the whole, a single marine transport market is identified and the geographic market is the territory of Ethiopia. Having the market defined, its structure and competition level are then examined for the pre and potential post – EPA case.

Pre –EPA Competition and Market Structure of Maritime Transport Industry;

Table 6 – Measuring Pre – EPA Competition and Determination of Market Structure

| Measures of Competition and Indicators of Market structure | Maritime Transport Services in Ethiopia – Ethiopian Shipping Lines S.C (ESLSC) |
|--|--|
| Market Share | 100% |
| Herfindahl Hirschman Index (HHI) | 10,000 |
| Kwoka Dominance Index (D) | 1 |
| Asymmetry Index (AI) | 0 |

As Ethiopian Shipping Lines is the sole supplier of marine cargo transport services in Ethiopia, it has 100% market share and 10,000 HHI figure. In Kwoka's dominance index ESLSC registers 1; implying that the company controls the whole industry and there is no other firm with a share of the market. Further, the Asymmetry Index is zero; indicating that a single firm (ESLSC) serves the whole market i.e. since there is only one firm in the market there is no variation to capture across market players.

In general, on the basis of standard microeconomic theory,⁸⁹ the Ethiopian marine transport industry currently, in the pre-EPA case, is a monopoly; implying that the degree of competition in the industry is zero.

⁸⁹ Mankiw, Gregory, (2008), *Principles of Microeconomics*, ISBN-10:0324319169 ISBN 13:9780324319163

Potential Post –EPA Competition and Market Structure of Marine Transport Services;

According to the Caribbean Regional Negotiating Machinery (2008)⁹⁰, the EPA service provision covers the maritime transport sector in terms of liberalization for Mode 3 trade in services (i.e. permission for private sector and foreign nationals’ engagement).

With regards to the experiences of CARIFORUM states, after completing the comprehensive EPAs, most of the states liberalized their Maritime transport services (CRNM, 2008)⁹¹.

Regulation of Maritime Transport Industry in Ethiopia;

In line with the intent of the study i.e. to determine the potential post –EPA market structure and competition, investment proclamation of the country for maritime transport is reviewed.

The amended investment proclamation No. 116/1998 under article 2, sub-article 3(1) “d” states maritime transport as an area reserved for domestic investors but up on the decision of the government it may be opened up for foreign investors.

However, private sector in Ethiopia has never taken part in providing maritime transport services yet. This may be due to the enormous investment cost involved. Allowing foreigners’ participation, at least in partnership with domestic investors, may reverse the situation making the investment cost barrier penetrable.

⁹⁰ Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

⁹¹ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnm.org](http://www.crnmm.org)

Implications for the Potential Post –EPA Ethiopian Maritime Transport Industry;

If EU– ESA/Ethiopia comprehensive EPA is completed; based on the EPA service provisions, the current Marine Transport regulation of the country and experiences of CARIFORUM states, sound deductions can be forwarded for the potential market structure and competition in the post –EPA Ethiopian marine transport industry.

Assumptions and Predictions of the Potential Post –EPA Ethiopian Marine Transport Industry;

1. Five years to complete comprehensive EPA negotiations with EU [2010 -2015]
2. Five years of adjustment period towards opening up the marine transport industry.
3. With in the adjustment period, we assume the government gives 15% of the market to the private sector through joint venture with foreign investors.
4. After the end of the adjustment period, 70% of the marine transport industry is assumed to remain under the government, while the remaining 30% is predicted to fall under the private sector (domestic and foreign investment).

Given the fact that CARIFORUM liberalized its marine transport industry after completing the EPA and also considering the relative flexibility of the Ethiopian marine industry proclamation (in terms of allowing private sector and foreign investment participations), the study assumes a reasonable figure of 15% market share under the private sector within the five years of adjustment period after possibly completing the ESA/Ethiopia-EU EPA.

Based on the above assumptions and predictions; Measures of Competition and Determinants of Market Structure for the post-EPA case are presented in table 2 below.

Table 7 - Measuring Potential Post – EPA Competition and Determination of Market Structure

| Measures of Competition and Indicators of Market structure | Adjustment period (2015 – 2020) | |
|--|---------------------------------|---|
| | Government ESLSC | Domestic and Foreign Investors' Participation |
| Market Share | >85%* | <15%* |
| Herfindahl Hirschman Index | >8,500 | <1,500 |
| Kwoka Dominance Index | 0.49 | 0.0225 |

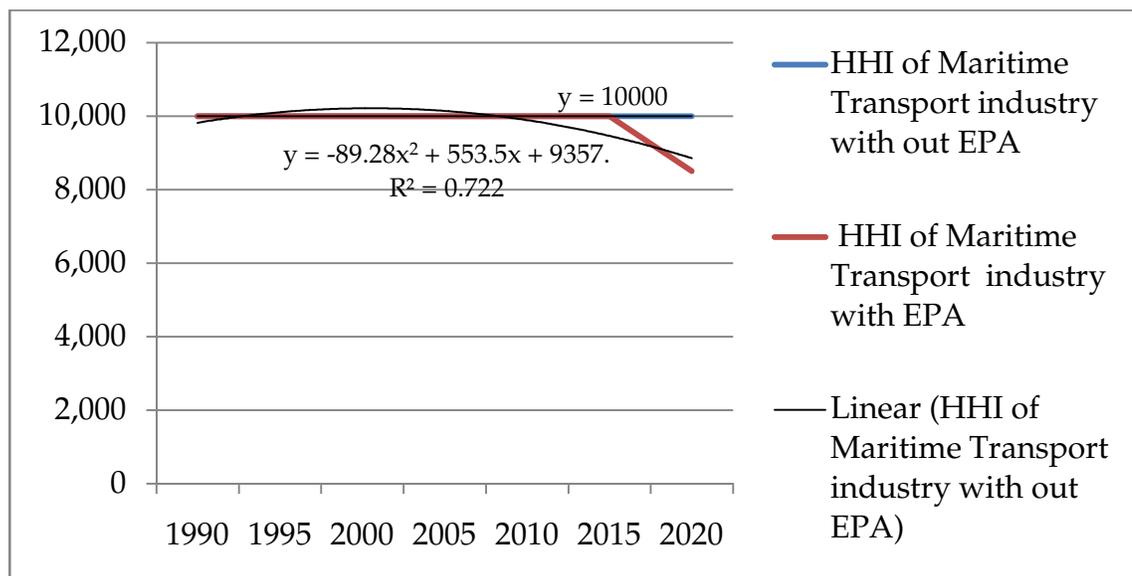
* - The market share calculations are assumed to be based on operating revenue of the engaged maritime transport service providers.

As demonstrated above, the structure of the Ethiopian maritime transport industry shifts towards a less monopolized state and competition would be introduced in the Potential Post – EPA case. The government would remain dominant within and after adjustment period of Post-EPA, but private sector and foreign investment participation would surface making the industry less monopolized compared to the pre-EPA case.

“With and Without EPA” Market Structure and Competition Projections;

The projected market structure for maritime transport industry is based on the HHI of the market over the past two decades (1990 – 2010) and on the assumed HHI figure, for the Post –EPA case, of 2010-2020. This enables us to capture the possible market structure and competition of the post-adjustment future for the Ethiopian maritime transport industry.

Figure 2 – With and Without EPA Market Structure Projections



For the “with out EPA” case, as the marine transport industry has been monopolized since it was established in Ethiopia, the resulting projection equation is linear i.e. constant, with an HHI value of 10,000.

For the “with EPA” case a polynomial equation is used as it fits the trend appropriately.

$$Y = at^2 - bt + c, \text{ where,}$$

Y = is the HHI value being forecasted.

t = is the time period, and

a, b and c are constants to be determined.

Using historical data; HHI value of the marine transport industry, the three constants are determined and the following trend equation is developed. Projection would be based on the polynomial equation below;

$$Y = -89.28x^2 + 553.5x + 9357$$

$$R^2=0.722$$

The R^2 of the above projection equation, 0.72, shows that 72% of the variation in the degree of competition of the “with EPA” marine transport industry can be explained by historical trend extrapolation.

The projected market structure and degree of competition in the marine transport industry, based on the above equation, is given in Table 8 below.

Table 8 - Projected market structure and degree of competition based on trend extrapolation method

| Year | HHI of Maritime Transport industry with out EPA | HHI of Maritime Transport industry with EPA |
|------|---|---|
| 1990 | 10,000 | 10,000 |
| 1995 | 10,000 | 10,000 |
| 2000 | 10,000 | 10,000 |
| 2005 | 10,000 | 10,000 |
| 2010 | 10,000 | 10,000 |
| 2015 | 10,000 | 10,000 |
| 2020 | 10,000 | 8,500 |
| 2025 | 10,000 | 8071.08 |
| 2030 | 10,000 | 7106.82 |
| 2035 | 10,000 | 5964 |

Based on the study’s assumption of 10 years (2010 - 2020) working period for concluding comprehensive EPA negotiations and commencing adjustments towards opening the service market, projection is made for the period 2020-2035.

The projections, as shown above, demonstrate that “with –EPA” the marine transport industry of Ethiopia would move away from monopoly opening a way for competition to surface.

I. Analysis of Pre and Potential Post-EPA Service Market Liberalization and Trade

Having determined the potential market structure shift, a second component fundamental to EPAs is openness for foreign direct investment (FDI) and private sector involvement. Addressing this, regulatory restrictiveness indices are computed for the pre and potential post-EPA case.

Regulatory Restrictiveness Index

Based on OECD'S FDI regulatory restrictiveness index (2006)⁹³, we measure deviation from national treatment i.e. discrimination against foreign investment along the way capturing openness of the marine transport industry for private sector.

Table 9 - Pre –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ⁹⁴ | Scores |
|---|--------|
| Level of openness for private sector investment (Privatization Underway) | 0.6 |
| FDI equity limits (No foreign equity allowed) | 1.0 |

⁹³ Koyama, Takeshi and Gloub, Stephen, (2006), *OECD's FDI regulatory restrictiveness index: Revision and extension to more economies*, OECD, OCDE, working papers on international investment, no. 2006/4, Economic department working paper no. 525 [Eco/WKP (2006) 53]

The restrictiveness index is measured on a 0-to-1 scale with 0 representing full openness and 1 indicating prohibition of private sector participation and foreign direct investment (FDI).

If foreign equity is banned, the index becomes 1; which is the case for the Ethiopian marine transport industry. For private sector participation, as the investment proclamation of the country allows domestic investors' participation, marine transport industry of the country cannot be referred as closed.

As shown in table 9, FDI is forbidden but private sector participation is permissible in the Ethiopian maritime transport industry, currently in pre –EPA stage.

Table 10 –Potential Post –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ⁹⁵ | Scores |
|---|--------|
| Level of openness for private sector investment (Privatization underway) | 0.6 |
| FDI equity limits (1 - 19% foreign equity allowed) | 0.6 |
| Screening and Approval (Investor must show economic benefits) | 0.2 |
| Management restrictions (Must be locally licensed) | 0.025 |
| Movement of people (Allowed for foreigners) | 0.025 |
| Input and operational restrictions (Less priority for using domestic content) | 0.05 |
| Overall FDI Restrictiveness Index | 0.90 |

^{94, 95}The details of basis (scores) for the calculation of the restrictiveness indices are listed under section VI of the Annex.

On the basis of the completed EU-CARIFORUM EPA, the Ethiopian maritime transport regulation and investment proclamation, predictions about the Post-EPA marine transport market structure and competition are forwarded. Table 10 shows that private sector participation in the industry would commence but the presence of foreign investment would only come about in the gradual post-EPA future. As a result private sector partaking in the industry comes after a steady process (domestic investors are likely to engage in the industry in partnership with foreigners to surpass the enormous investment cost barrier).

Overall, the industry would become less monopolized and certain level of competition would be introduced in the post-EPA case. Further, regulatory restrictions would also become flexible as a way of conforming to the potential Ethiopia/ESA –EU EPA.

THE ETHIOPIAN FINANCIAL SERVICES INDUSTRY⁹⁶

The financial services industry is an industry encompassing a broad range of financial institutions that deal with management of financial capital. Financial institutions making up the financial industry may be private (shareholder-owned) or public (government-owned) organizations that act as a channel between savers and borrowers of funds (suppliers and consumers of capital). Two main types of financial institutions are:

- 1) Depository banks and credit unions - which pay interest on deposits from interest earned on loans, and
- 2) Non-depository insurance companies and mutual funds (unit trusts) - which collect funds by selling their policies or shares to the public and provide returns in the form periodic benefits and profit payouts.

For the case of Ethiopia, according to the National Bank of the country, the formal financial institutions in operation are; banks, insurance companies and microfinance institutions. Currently there are fifteen banks (3 state-owned and 12 private) in service and in the Ethiopian insurance industry, there are 12 (1 state-owned and 11 private) insurance companies. As for microfinances, 29 microfinance institutions (MFIs) are operating in Ethiopia currently.

Banks in Ethiopia serve as financial intermediaries providing a broad range of financial services such as deposits, loans, payment services, letter of credit, safe keeping of items, currency exchange and money transfers. Similarly the microfinances also deliver similar financial services as the banks, but the services are rendered to low-income households and their microenterprises. Insurances, in Ethiopia, on the other hand provide services of compensation for potential future losses.

⁹⁶

<http://www.businessdictionary.com/definition/financial-institution.html>,
<http://www.nbe.gov.et/financial>

II. Pre and Potential Post – EPA Market Structure and Competition

Market Definition

Preceding the measurement of market power/deviation from competition, identification of the actual geographic and service market for a given service industry is necessary.

Service Market Definition

Using the three indicators adopted in the study, specific service markets within the Ethiopian financial services industry are identified.

1. Demand Substitutability

Demand substitutability measures the ease of substitution of services by customers. Use of this measure necessitates identification of services rendered by engaged business units in the industry.

Banks and microfinances render similar financial services, but the identical services provided by the two forms of institutions do not fall in the same market. To demonstrate this we apply demand substitutability measure and question whether customers can switch from one financial service to another at ease.

For a change in interest rate or other market variables, clients seeking loan can not switch from banks to microfinances. This is because, although the service is the same, the two institutions cater for completely different client groups. As a result, financial services from microfinances and banks fall into distinctly separate markets.

Insurances on the other hand deliver financial services completely different from banks and microfinances. Insurances provide financial compensation for potential future losses in exchange for periodic payments.⁹⁷ Thus, services of insurances fall in to a separate category.

In Ethiopia, insurance companies provide several business classes of insurance services each having numerous market classifications underneath.

Insurance service classes of business in Ethiopia are;

1. Motor insurance
2. Fire and lightening insurance
3. Accident and health insurance
4. Marine insurance
5. Aviation insurance
6. Engineering insurance
7. Liability insurance
8. Pecuniary insurance
9. Workman insurance
10. Others forms of insurance

⁹⁷ <http://www.businessdictionary.com/definition/financial-institution.html>

The above classes of business in the Ethiopian insurance industry serve different purposes i.e. for changes in the amount of monthly payment; clients would not replace their motor insurance with marine insurance. Each class of business serves a specific form of demand; as a result, there are numerous business classes of insurance service markets.

Therefore, based on the demand substitutability indicator; we observe that there are several distinct financial service markets in the banking, microfinance and insurance industries.

2. Production Substitutability

Production substitutability measures the ease of substitution of service provision from one form to another.

For a given change in market variables, a bank may function as microfinance at a relative ease but the vice versa may not be straight forward; due to the large capital necessitated by microfinances to grow into banks. As for insurances, switching from one class of business to another comes at a relative ease, but insurances cannot divert operations into banks/microfinances at ease and nor can banks/microfinances switch to insurance services following a given change in market situation. This entails a separate market for banks, microfinances and insurances each. The indicator also shows numerous market classifications in the banking, microfinance and insurance industries.

3. Price Correlation

Over the years, movement of prices for the different financial services in the banking business has followed a similar path. The amount charged for the different services varies but the path of price development shows a parallel trend⁹⁸. Similarly the movement of prices of services from microfinances has followed a parallel trend. The same also applies to insurance services. But the path of prices of services from the three financial institutions (banks, microfinances and insurances) is not analogous. This thus implies separate markets for the three and also for the different service markets within each industry.

Overall the three measures (demand and production substitutability and price correlations) indicate separate and various markets for and within banks, microfinances and insurances. But the study takes a reduced form of the numerous market classifications. We regard the banking, microfinance and insurance industries as having a single market each. Based on this classification, market power measures are applied using total capital of each bank and insurances and total asset of each Microfinance institution. This comes as a limitation in analyzing market power within the financial industry. Nonetheless, a lucid direction explaining the market structure and competition can be achieved.

⁹⁸ <http://www.nbe.gov.et/financial>

Geographic Market Definition

Geographic market definition provides the geographic extent of a market for a given service.

For the financial services industry, the service giving financial institutions have branch entities across the country attempting to reach the different regions of Ethiopia. But neither the financial institutions nor the financial services of Ethiopia are present in foreign nations. Financial service provisions by Ethiopians are limited to the domestic economy to date. In like manner foreigners are also prohibited from providing financial services to Ethiopia. In this regard, the geographic market for the financial services industry, in this study, is the Ethiopian national territory.

On the whole; separate individual service markets are considered for banking microfinance and insurance industries each and the territory of Ethiopia is the considered geographic market. Having these markets defined, their structure and competition level are then assessed for the pre and potential post – EPA cases.

Pre –EPA Competition and Market Structure of Banking Services Market;

Table 11 – Pre –EPA Market Shares of Ethiopian Banks

| Banks | Capital of Banks in millions of birr(2007/08) | Market Shares | Market Shares in Percentage (%) |
|--------------------------------|---|---------------|---------------------------------|
| CBE | 4561 | 0.457701957 | 45.7% |
| Construction and Business Bank | 175 | 0.017561465 | 1.75% |
| Development Bank of Ethiopia | 1865 | 0.187155043 | 18.71% |
| Awash Int. Bank | 480 | 0.04816859 | 4.81% |
| Dashen Bank | 731 | 0.073356749 | 7.33% |
| Abyssinia Bank | 416 | 0.041746111 | 4.17% |
| Wegagen Bank | 467 | 0.046864024 | 4.68% |
| United Bank | 467 | 0.046864024 | 4.68% |
| Nib Int. Bank | 489 | 0.049071751 | 4.90% |
| Oromia Cooperative Bank | 137 | 0.013748118 | 1.37% |
| Lion Bank | 177 | 0.017762168 | 1.77% |
| Industry Total | 9965 | | |

Source; National bank of Ethiopia⁹⁹

As shown in table 11 above, for the current (pre-EPA) case, the state owned Commercial Bank of Ethiopia (CBE) is a dominant market player having 45.7% market share. Another state owned Development Bank of Ethiopia (DBE) comes second with a market share of 18.7%. The private entities in the industry appear to have market shares of similar levels. The market shares of banks are calculated based on their total capital. Overall, from the market shares we observe that the Ethiopian banking industry is concentrated with one dominant entity (CBE) in the current pre-EPA case.

^{99, 100} National Bank of Ethiopia (NBE), Annual Report 2007/08, www.nbe.gov.et

Table 12 – Pre –EPA Market Shares of Ethiopian Insurance Companies

| Insurance Companies | Capital of Insurance Companies in millions of birr (2008/09) | Market Shares | Market Shares in percentage (%) |
|--|--|---------------|---------------------------------|
| Ethiopian Insurance Corporation | 249.4 | 0.382163653 | 38.21% |
| Awash Insurance Company | 52.9 | 0.081060374 | 8.10% |
| Africa Insurance Company | 59 | 0.0904076 | 9.04% |
| National Insurance Corporation of Ethiopia | 14.8 | 0.022678517 | 2.26% |
| United Insurance Company | 39.3 | 0.060220656 | 6.022% |
| Global Insurance Company | 22.9 | 0.035090408 | 3.50% |
| Nile Insurance Company | 56.4 | 0.086423537 | 8.64% |
| Nyala Insurance Company | 61.6 | 0.094391664 | 9.43% |
| Nib Insurance Company | 60.3 | 0.092399632 | 9.23% |
| Lion Insurance Company | 7.1 | 0.010879559 | 1.08% |
| Ethio-Life Insurance Company | 3.3 | 0.005056696 | 0.50% |
| Oromia Insurance Company | 25.6 | 0.039227705 | 3.92% |
| Total industry capital | 652.6 | | |

Source; National Bank of Ethiopia¹⁰⁰

As for insurance companies, again using total capital of engaged market players, market shares are calculated and the results in table 12 show that the state owned Ethiopian Insurance Corporation (EIC) is the dominant actor with a 38.21% market share. The privately owned insurance companies have market shares ranging from 0.50% -9.43%. Similar to the banking industry, the insurance market of Ethiopia is also concentrated with one major market player.

Table 13 – Pre –EPA Market Shares of Ethiopian Microfinance Institutions (MFIs)

| Microfinances | Total asset (2007) | Market shares | Market Shares in Percentage (%) |
|--|--------------------|---------------|---------------------------------|
| ACSI (Amhara Credit and Saving Institution) | 1227164308 | 0.212640586 | 21.26% |
| ADCSI (Addis Credit and Saving Institution) | 234,815,528 | 0.040688367 | 4.06% |
| Agar | 6,288,753 | 0.001089703 | 0.01% |
| AVSFS (Africa Village Financial Services) | 14,606,582 | 0.002530999 | 0.253% |
| Beneshangul | 39,636,058 | 0.006868057 | 0.686% |
| Bussa Gonofaa | 28,721,690 | 0.004976837 | 0.497% |
| DECSI (Dedebit credit and saving institution) | 1,540,322,287 | 0.266903976 | 26.69% |
| Dire | 27,697,454 | 0.00479936 | 0.479% |
| Digafe | 878,150 | 0.000152164 | 0.015% |
| Eshet | 38,892,553 | 0.006739224 | 0.673% |
| Gasha | 16105868 | 0.002790793 | 0.279% |
| Ghion | 492,236 | 8.52937E-05 | .00853% |
| Harbu | 8,055,095 | 0.001395771 | 0.13% |
| Letta | 738,003 | 0.00012788 | 0.012% |
| Meket | 3,084,860 | 0.000534538 | 0.053% |
| Meklit | 16,088,391 | 0.002787764 | 0.278% |
| Metemamen | 9,316,000 | 0.001614258 | 0.161% |
| OCSSCO(Oromia credit and saving institution share company) | 509,269,220 | 0.088245155 | 8.82% |
| OMO (Omo microfinance institution) | 248,169,445 | 0.043002307 | 4.3% |
| PEACE(poverty eradication and community empowerment) | 36,950,080 | 0.006402636 | 0.64% |
| SFPI(specialized financial and promotional institution) | 33,602,386 | 0.005822554 | 0.582% |
| Shashimene | 4,028,149 | 0.00069799 | .069% |
| Sidama | 30,071,189 | 0.005210676 | .521% |
| Wasasa | 38,235,702 | 0.006625406 | .662% |
| Wisdom | 72,356,805 | 0.012537843 | 1.253% |
| Harrar | 7,362,023 | 0.001275677 | .127% |
| Dedebit | 1578124026 | 0.273454186 | .273% |
| Industry Total | 5771072841 | | |

Source; Association of Ethiopian Microfinance Institutions (AEMFI) ¹⁰¹

Market shares based on the total asset of microfinances in table 13 above reveal that two institutions together have more than 40% of the market. DECSI has the largest share of the microfinances market; 26.69%, while ACSI has the second largest share; 21.26%. The microfinance institutions market, as demonstrated above, appears to have smooth distribution of market share of institutions compared to the banking and insurance markets.

Overall, the market shares computed for the three industries provide an important insight but market shares are not adequate measures of market structure and competition. Thus, more encompassing indicators are applied to capture the actual structure and competition level of the industries.

Table 14 – Measures of Market Structure and Competition

| Measures of Market Structure and Competition | Ethiopian Banking Industry | Ethiopian Insurance Industry | Ethiopian Microfinance Institutions Industry |
|--|----------------------------|------------------------------|--|
| Herfindahl Hirschman Index (HHI) | 0.261575675 | 0.1927648 | 0.202996577 |
| Kwoka Dominance Index(D) | 0.087353967 | 0.0840846 | 0.021344754 |
| Asymmetry Index (AI) | 0.015515144 | 0.0091193 | 0.006146716 |

¹⁰¹ Pech, David, W/Yohannes, Ephrem, 2009, *Ethiopian Microfinance Institutions Performance Analysis Report*, Bulletin 5, Association of Ethiopian Microfinance Institutions (AEMFI), Addis Ababa, Ethiopia

The HHI values for the three industries show that all the three industries are concentrated. We use the US system of market power thresholds.¹⁰² An industry with HHI value of less than 1000 is said to be unconcentrated, an industry with HHI value between 1000 and 1800 is said to be moderately concentrated while an industry with HHI exceeding 1800 is said to be highly concentrated. As shown in table 14, the three industries register HHI values exceeding 1800 and are thus said to be concentrated.

As an indicator, HHI uses level of concentration of the entire industry as a measure of market power; but the Kwoka index reveals relative market power by capturing the difference in market shares between a firm and its immediate competitor. The Kwoka index calculated for the three financial service industries of Ethiopia show that, the relative market power of entities in the banking and insurance industries is higher than that of the microfinance industry. This implies that the variation between market shares of immediate competitors in the banking industry is higher than that of the insurance industry which in turn is higher than the case for microfinances.

The asymmetry index (AI) on the other hand measures the variation of market shares of all entities engaged in a given market. The reported AI values in table 14 show that variation among market share of banks exceeds that of microfinances which in turn surpasses that of insurances. The AI results show that market shares of insurances are concentrated around similar points, while that of banking industry is the most spread out from the three financial industries under investigation.

¹⁰² Brown, Donald M., Fredrick R. Warren-Boulton, 1988, "*Testing Structure-Competition Relationship on Cross-sectional Firm Data*", Discussion Paper 88-6, Economic Analysis Group, US Department of Justice

Overall, the three industries are concentrated; the banking and insurance industries are dominated by a single entity; while the distribution of market shares of all market players is more spread out in the banking industry followed by microfinances and lastly insurances.

Potential Post –EPA Competition and Market Structure of Financial Services Industry;

According to the Caribbean Regional Negotiating Machinery (2008)¹⁰³, the EPA service provision covers the financial services sector in terms of liberalization for Mode 3 service trade (i.e. permission for private sector and foreign nationals’ engagement).

With regards to the experiences of CARIFORUM states, after completing the comprehensive EPAs, most of the states have agreements with the EU concerning the development of competitive trade and investment in their financial services industry (CRNM, 2008)¹⁰⁴.

Regulation of Financial Services Industry in Ethiopia;

In line with the intent of the study, i.e. determining potential post –EPA market structure and competition, investment proclamation of the country for financial services industry is assessed.

¹⁰³ Caribbean Regional Negotiating Machinery (CRNM), 2008, *The Cariforum –EC Economic Partnership Agreement (EPA); Highlights of the rules on Services and investment in the EPA*, brief no. 3200.3/EPA-02[08], www.crnmm.org

¹⁰⁴ Office of Trade Negotiations Caribbean Community (CARICOM) Secretariat, (2008), *Details for Getting to know the EPA: Provisions on Services and Investment*, [http:// www. crnmm.org](http://www.crnmm.org)

The Ethiopian investment proclamation No. 37/1996 Part Two under article 1, sub-article 1 “a” lists the banking and insurance industries as areas reserved for domestic investors.

Reinforcing the 1996 Proclamation, the amended version of investment proclamation No. 116/1998 under article 3, sub-article (1) “a”, banking and insurance industries are stated as areas reserved for domestic investors only.

In this regard, private sector participation has greatly surfaced in providing financial services in the country. The number of private market players by far outweighs the number of the public entities. However, whether or not the situation is the same in terms of market power asymmetry needs to be seen.

Implications for the Potential Post –EPA Ethiopian Financial Services Industry;

If EU– ESA/Ethiopia comprehensive EPA is completed; based on the EPA service provisions, the current financial services regulation of the country and experiences of CARIFORUM states, sound inferences can be forwarded for the potential market structure and competition of the post –EPA Ethiopian financial services industry.

Assumptions and Predictions of Potential Post –EPA Ethiopian Financial Services;

1. Five years to complete comprehensive EPA negotiations with EU [2010 -2015]
2. Five years of adjustment period towards opening up the financial services industry [2015 – 2020]
3. With in the adjustment period, we infer 0% of the market to be given for foreign investors [2015 – 2020].

4. After the end of the adjustment period [Post – 2020], in the immediate post-adjustment period, 100% of the financial services industry is expected to remain under domestic investors and the public entities, while only in the gradual post-EPA future foreign investors participations would come about along with restrictive directives controlling their business behavior in the market.

Unlike the already discussed cases of maritime transport and telecommunications industry, the financial services industry of Ethiopia has been and still is open for private sector participation. With the coming of the potential comprehensive EU-ESA/Ethiopia EPA, the financial services industry of the country would continue to manifest competition among the private actors. Thus, a driving force for a possible shift in market structure and a new form of competition in post-EPA case would have to emanate from entry of foreign investments into the industry.

Regarding entry of foreign investors; as the financial sector of the country already enjoys certain level of competition, and also given the experiences of CARIFORUM states; opening up the sector to foreigners is not likely to take place in the adjustment period; not even with in the immediate post-adjustment period.

In relative terms (compared to the marine transport and telecommunications), the financial services industry does not require sophisticated service giving technology and it also does not involve large investment costs as barrier. Hence, domestic agents can adequately cater for the economy.

Further, the financial sector is a very sensitive component of an economy. This is because international shocks can easily have their way into the Ethiopian real economic sector if the financial services industry is open. Thus, the industry requires intense contemplation than the telecommunications and marine transport cases.

The opening of the sector is inevitable but it would come at a much extended future and when the industry is finally opened, the study predicts it to be accompanied by heavy regulatory frameworks (setting maximum capital level for foreign banks, limiting total assets, requirements in management and operation staff....).

Overall, unlike the telecommunications and marine transport industries, the financial sector is not expected to enjoy improvement in levels and forms of competition starting from the adjustment period in post-EPA case. Foreign investment participation in the Ethiopian financial sector is predicted to surface at a much stretched post –EPA phase.

II. Analysis of Pre and Potential Post-EPA Service Market Liberalization and Trade

Subsequent to the determination of the potential market structure shift, an essential question especially for the financial industry is the issue of openness for foreign direct investment (FDI). Addressing this, regulatory restrictiveness indices are computed for the pre and potential post-EPA cases.

Regulatory Restrictiveness Index

Based on OECD'S FDI regulatory restrictiveness index (2006)¹⁰⁵, we measure deviation from national treatment i.e. discrimination against foreign investment along the way capturing openness of the financial services industry for private sector.

Table 15 - Pre –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ¹⁰⁶ | Scores |
|---|--------|
| Level of openness for private sector investment (Majority Private Enterprises) | 0.1 |
| FDI equity limits (No foreign equity allowed) | 1.0 |

¹⁰⁵ Koyama, Takeshi and Gloub, Stephen, (2006), *OECD's FDI regulatory restrictiveness index: Revision and extension to more economies*, OECD, OCDE, working papers on international investment, no. 2006/4, Economic department working paper no. 525 [Eco/WKP (2006) 53]

^{106, 107} Details of scores for computed the indices are presented under section IX of the annex.

The restrictiveness index is measured on a 0-to-1 scale with 0 representing full openness and 1 indicating prohibition of private sector participation and foreign direct investment (FDI).

If foreign equity is banned, the index becomes 1; which is the case for the Ethiopian financial services industry. For private sector participation, as the investment proclamation of the country allows domestic investors' participation, the industry is not closed; in fact the number of private market players outweighs that of the public entities.

As shown in table 15, FDI is forbidden but private sector participation is sufficient in the Ethiopian financial services industry, currently in pre –EPA stage.

Table 16 –Potential Post –EPA Regulatory Restrictiveness Index

| Measures of Restrictiveness ¹⁰⁷ | Scores |
|---|--------|
| Level of openness for private sector investment (Privatization underway) | 0.1 |
| FDI equity limits (1 - 19% foreign equity allowed) | 0.6 |
| Screening and Approval (Investor must show economic benefits) | 0.2 |
| Management restrictions (Must be locally licensed) | 0.1 |
| Movement of people (Allowed for foreigners) | 0.025 |
| Input and operational restrictions (Less priority for using domestic content) | 0.05 |
| Overall FDI Restrictiveness Index | 1 |

On the basis of the completed EU-CARIFORUM EPA, the Ethiopian financial services regulation and investment proclamation, predictions about the Post-EPA financial market structure and competition are forwarded. Table 16 shows that private sector participation in the industry is already healthy but the presence of foreign investment would only come about in the extended post-EPA future.

Aside from the actual engagement of foreign investments, in terms of regulatory frameworks, as a matter of complying with EPAs, in the post-EPA case a slight relaxation regarding entry of foreign investments would surface.

Conclusions

The study has empirically examined the potential changes in market structure, liberalization, competition and trade in services after Economic Partnership Agreements (EPAs); for the Ethiopian case.

The study began investigation by defining and presenting the basis, purpose and content of EPAs. Among the EPA provisions, sections on service industries were chosen to be issues of investigation in this study; given the fact that studies capturing the EPA impacts on service industries are lacking for the Ethiopian economy.

The analysis of the study commenced with the selection three service industries on which EPAs focus and at the same time which are under regulatory restrictions in Ethiopia. Telecommunications, marine transport and financial services were chosen to be service areas of examination in this study.

The intent of the study was to demonstrate the current (pre-EPA) and future (potential Post-EPA) market structure, liberalization, competition and trade in the telecommunications, marine transport and financial industries of Ethiopia. To this end, the current level of market structure and competition were measured using indirect market power measures (Market shares, Herfindhal-Hirshman index, Kwoka's dominance index and Asymmetry index) due to data limitations impeding the use of direct market power measures. Further, investment proclamation of the country was reviewed to capture openness of the industries for private sector participation and foreign direct investments (FDIs). In line with this, regulatory restrictiveness indices were also calculated to show possible regulatory frame work shifts.

For the purpose of forwarding implications for the potential post-EPA case, experiences of CARIFORUM (states that have already concluded comprehensive EPAs with EU), the EPA service provisions and the investment proclamations of the country have been reviewed. In addition to these, indirect market power measures have been used along with few bold assumptions concerning the post-EPA future. In this regard, as only few sources are consulted, the resulting predictions may not be considered comprehensive.

Nonetheless, through the use of practically sufficient data along with appropriate methods, reasonably sound implications for the post-EPA case of telecommunications, marine transport and financial services are forwarded.

Results obtained show that the current state monopolies; telecommunication and marine transport service industries would enjoy introduction of competition through private sector participations. But the financial sector, as it already exhibits certain level of competition, further flexibility (engagement of foreign investments) in the industry is predicted to come about within a stretched future period in the post-EPA stage. However, in terms of regulatory restrictiveness, relaxations are expected in the post-EPA case for all the three industries as it would be a requirement for complying with the EPA services provisions.

Overall, based on the analysis results of the study, we conclude that EPAs would indeed shift markets towards a competitive structure and trade; along the way leading to gradual liberalization of currently closed sectors in Ethiopia.

Annex

The regulatory restrictiveness indexes calculations are computed based on *OECD's FDI regulatory restrictiveness index* (2006). The scores for the calculations of the index are as follows;

| State of the Industry | Scores |
|-----------------------------------|---------------|
| State monopoly | 1.0 |
| Privatization underway | 0.6 |
| 90% or more private sector | 0.4 |
| 75 – 90% under private sector | 0.2 |
| Majority private sector operators | 0.1 |

| FDI Equity Limits | Scores |
|---------------------------------|---------------|
| No foreign equity allowed | 1 |
| 1 – 19% foreign equity allowed | 0.6 |
| 20 - 34% foreign equity allowed | 0.4 |
| 35 – 49% foreign equity allowed | 0.3 |
| 50 – 74% foreign equity allowed | 0.2 |
| 75 – 99% foreign equity allowed | 0.1 |

| Screening and Approval | Scores |
|---|---------------|
| Investor must show economic benefits | 0.2 |
| Approval unless contrary to national interest | 0.1 |
| Notification only | 0.05 |

| Other Restrictions | Scores |
|---|---------------|
| Board of Directors/Managers | |
| Majority must be nationals or residents | 0.1 |
| Atleast one must be national or resident | 0.05 |
| Must be locally licensed | 0.025 |
| Movement of people | |
| No entry | 0.1 |
| Less than one year | 0.075 |
| One to two years | 0.05 |
| Three to four years | 0.025 |
| Input and operational restrictions | |
| Domestic content must be > 50% | 0.1 |
| Other | 0.05 |

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