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India-Korea CEPA: Harnessing the Potential in Services

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Abstract

Under India-Korea Comprehensive Economic Partnership Agreement, both India and Korea have offered trade liberalisation commitments in services. This paper examines the CEPA with the objective of identifying potential areas for harnessing services trade between the two countries. Using the Revealed Comparative Advantage (RCA) index, the paper shortlists four sectors of interest and identifies possibilities of bilateral trade flows in these sectors in the purview of existing domestic regulatory regime. Through a qualitative examination, it highlights the market access barriers and suggests areas of co-operation for enhanced trade in services. The paper also draws a comparison between the schedules of commitments offered by India and Korea under WTO revised offer and CEPA to analyse the extent of liberalisation undertaken in the bilateral agreement. The paper concludes that there are strong complementarities for services trade in sectors such as IT, transportation, construction and audiovisual services. By collaborating in these areas, India and Korea can not only strengthen their trade ties but can also gain a competitive advantage in the global market.

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1. Introduction

The services sector is a major contributor to GDP, international trade and employment in not just developed economies but also in emerging economies. With rapid expansion of the services sector in most countries, any trade liberalisation is considered incomplete without liberalisation of the services sector. Realising this, the World Trade Organisation (WTO) broadened the scope of negotiation during the Uruguay Round in 1995 to include trade in services by establishing the General Agreement on Trade in Services (GATS).² However, limited success of Uruguay Round and sluggish progress of Doha Development Agenda (launched in November 2001) in multilateral trade negotiations accelerated the process of bilateral and regional trade agreements (RTAs). Many WTO members embraced RTAs as “trade policy instruments and as complimentary to MFN” (Crawford and Fiorentino, 2005).

A distinct feature of these agreements, also called the “New Age FTAs” is that they extend beyond merchandise trade to include services, investments, government procurement and a range of other co-operation issues apart from trade in goods. The purpose of these comprehensive trade agreements is not only to enhance bilateral trade flows but also strengthen strategic ties or overcome historic animosities (Fink and Molinuevo, 2007).³ Fink et al. (2007) note that though services were previously considered non-tradable, technological progress and trend towards private and competitive provision of infrastructure services have enabled trade in a wide range of service activities. The services sector has come to account for the fastest growing segment of international commerce (World Bank, 2002).⁴

In line with this pattern of bilateralism/regionalism, India and Korea have been signing a number of Comprehensive Economic Partnership Agreements (CEPA) with several countries and regions. Some of these agreements are with neighbours while others are in the inter-regional framework of economic cooperation ranging from bilateralism to sub-regionalism to regionalism. Apart from Korea, India has a CEPA with Japan, and CECA with Singapore and Malaysia. Korea has a CEPA only with India and is negotiating RCEP.⁵

¹ We would like to acknowledge Ms. Divya Satija for her valuable comments and Mr. Nitesh Kumar for his research assistance in the paper.

² GATS established the rules and discipline governing trade in services in a multilateral framework. It has the objective of creating a credible and reliable system of international trade rules; ensuring fair and equitable treatment of all participants (principle of non-discrimination); stimulating economic activity through guaranteed policy bindings; and promoting trade and development through progressive liberalization.

³ “Liberalisation of Trade in Services”, C.Fink and M.Molinuevo, World Bank (2007)

⁴ World Bank (2002). “Global Economic Prospects 2002: Making Trade Work for the World’s Poor.” (Washington, DC: The World Bank)

⁵ RCEP is the Regional Comprehensive Economic Partnership between the ten member states of ASEAN and six states with which ASEAN has FTAs (Australia, China, India, Japan, Korea and New Zealand)

The feasibility of signing a CEPA between India and Korea were examined by a Joint Study Group in 2005. The Indo-Korea CEPA was concluded in 2009 and implemented in 2010. The agreement covers goods, services, investments, bilateral cooperation, intellectual property rights and competition. Since its operation, the CEPA has unleashed economic growth impulses as a result of which two-way trade has increased from US\$12 billion in 2009-10 to US\$17 billion in 2012-13, an increase of 42 percent. The trade volume is expected to cross US\$40 billion by 2015. This surge can be attributed to strong economic growth in India that offers growing opportunities for trade and investment to Korean firms, particularly in automotives, steel and electronic industries.

Recently in January 2014, the finance ministers of the two governments met to discuss bilateral trade, investments and possibilities of upgrading the CEPA. Korea is pressing on getting a zero-tariff access into India's market for auto and steel, among other goods. In addition, Korea wants to evaluate the process to obtain permission for establishing branches of Korean commercial banks in India. However, India is undertaking a study examining its existing FTA/CEPA. The findings of the study will determine which way the India-Korea CEPA revision will go.

With the objective of identifying the potential areas for harnessing services trade between India and Korea, this paper attempts to describe the performance and composition of the service sector in both countries, assess liberalisation commitments under CEPA and examine the extent to which these are more liberal than the unilateral commitments, assess trade possibilities in sectors for detailed analysis. The qualitative examination of the sectors highlights the market access barriers and suggests areas for co-operation for enhanced trade in services in identified sectors under the CEPA.

2. Understanding Trade in Services

The comparison of commitments that India and Korea have undertaken under WTO and India-Korea CEPA are examined using the GATS framework which provides member countries with a structure for negotiating removal of external and domestic barriers. GATS categorises services trade into four modes of supply depending on the location of supplier and consumer. **Mode 1** (cross-border supply) is the delivery of services across countries without the physical movement of supplier or buyer of the service. **Mode 2** (consumption abroad) refers to the physical movement of service consumer to the territory of service provider for consumption. **Mode 3** (commercial presence) pertains to establishment of foreign affiliates and subsidiaries of foreign service companies, joint ventures, partnerships, representative offices and branches and **Mode 4** (presence of natural persons) refers to natural persons who themselves are service suppliers, as well as natural persons who are employees of service suppliers temporarily present in other Member's market to provide the service.

Unlike goods, barriers to trade in services are not in the form of import tariffs. Instead, service trade barriers take the form of restrictions, prohibitions, government regulations, etc. Service trade liberalisation is henceforth, dependent on removal and relaxation of these non-tariff barriers. GATS identifies two broad categories of barriers – market access (MA) and

national treatment (NT). Market access barriers exist when a country does not allow (or partially allows with some restriction) foreign service providers to enter and operate in its markets. Restrictions in market access include barriers such as limitations on number of foreign service providers, total quantity of service output, valuation of transactions and assets, number of persons to be employed, etc. A country is said to have imposed a national treatment barrier if it accords a treatment less favourable to other country service providers than to its own domestic service providers. These barriers include discriminatory taxes, residency requirements, registration and licensing, etc.⁶

Based on this framework, member countries can offer commitments for each of the four modes of supply of services across all sectors (horizontal commitments) or in specific sectors/sub-sectors (sectoral commitments). For each sector under each mode, member country can impose market access and/or national treatment barriers. If the country imposes no barriers in a particular mode, it is said to have “full” commitment. If the country imposes some restrictions in a mode, then it is said to have offered “partial” commitments. If a country does not make any commitment to liberalise the sector in a mode and reserves the rights to impose restrictions in the future, the country is said to have kept the sector “unbound”. On the basis of this categorization, countries offer liberalisation commitments on service trade sectors using the services sectoral classification list by GATS (MTN.GNS/W/120 – July 1991). This list, with 12 broad sectors, has been in turn drawn from the United Nations Central Product Classification (UNCPC) which provides a comprehensive coverage of all services sectors.

Estimates and data for trade in commercial services in mode 1, 2 and 4 are derived from a country’s balance of payment account and for Mode 3 using the Foreign Affiliates Trade in Services (FATS) statistics.⁷ However, export and import of commercial services is classified and recorded using the concepts, definition and classifications under the fifth edition of the International Monetary Fund (IMF) Balance of Payment Manual (1993). Under this classification, the current account of balance of payment (BoP) is sub-divided into goods, services, (including government services, not included elsewhere), income (investment income and compensation of employees), and current transfers.

Commercial services are defined as all services minus government services not included elsewhere. It is further sub-divided into three categories – transportation, travel and other commercial services. Transportation service covers air, maritime, rail, road, and pipeline transport services that involves freight, passenger and other auxiliary services such as warehousing, cargo handling, etc. Travel consists of hotels and restaurants, travel agencies, tour operators and tourist guides. Unlike other services, travel is not a specific type of service but is an assortment of goods and services consumed by travellers. Other commercial services comprises of nine sub-sectors - insurance, financial services, computer and information,

⁶ Taneja, Mukherjee, Jayanetti and Jayawardane (2004) “Indo Sri Lanka Trade in Services: FTAA and Beyond”, ICRIER Working Paper No. 145

⁷ Metadata, WTO International Trade Statistics

construction, communications, royalty and license fees, other business services, and personal, cultural and recreational services.

The data on trade in services is available only at the country level and not at the bilateral level. For the period under study (2000-2011), the data is available for almost all categories and sub-categories with a few exceptions. The data for secondary analysis is extracted from WTO, UNCTAD and World Bank at the aggregate level.

3. WTO vs. CEPA: A Comparative Analysis

The process of services trade liberalisation began with the formulation of GATS, which was a landmark achievement under the Uruguay Round (1995).⁸ In this round, member countries submitted schedule of commitments for selected service sectors. This was followed by the Doha Round (commenced in 2001) which marked the beginning of first round of negotiations under the Council for Trade in Services. Its objective was to lower trade barriers around the world in order to facilitate trade in services. As a part of this round, member countries submitted a revised offer for negotiations that is still under discussion.

Table 3.1: Commitments in Doha Round and CEPA

Offer	India		Korea	
	Sector	Sub-Sector	Sector	Sub-Sector
Revised Offer in Doha Round	12	27	12	25
CEPA	12	28	12	31

Source: Author's own computation from WTO Revised Offer of India and Korea

In both rounds of trade negotiations, India and Korea have actively participated in the liberalisation process. Compared to the Uruguay Round, both countries have submitted a schedule of commitments under the Doha Round that is much wider in its coverage and includes commitments in market access as well as national treatment under all modes (refer to table 3.1). In Doha Round, India offered commitments in 12 sectors and 27 sub-sectors⁹. It extended full commitment under market access and national treatments in many sub-sectors such as architectural, engineering, management consulting, general construction services, etc.) and undertook MFN exemptions¹⁰ for communications (audio-visual and telecommunications), construction, recreational, and transport services.¹¹ Korea, on the other hand, being a proponent of open market, submitted an offer including all 12 sectors and 25 sub-sectors. Compared to the UR offer, it made considerable improvements in sectors such as

⁸ Uruguay Round was the 8th round of multilateral trade negotiations conducted within the framework of the General Agreement on Trade and Tariff (GATT) spanning from 1986 to 1994 and embracing 123 countries as "contracting parties". It transformed the GATT into the World Trade Organization. It came into effect in 1995 and has been implemented over the period to 2000 (2004 in the case of developing country contracting parties). (Source: Wikipedia and WTO)

⁹ WTO Service Sectoral Classification List – MTN/GNS/W/120

¹⁰ An MFN exemption was a once-only opportunity for WTO member countries to take an exemption from the MFN principle of non-discrimination between a members' trading partners. The measure for which the exemption was taken is described in a member's MFN exemption list, indicating to which member the more favourable treatment applies, and specifying its duration. (Source: WTO)

¹¹ India's Revised Offer submitted to WTO - TN/S/O/IND/Rev.1 submitted on August 24, 2005

business services, construction, distribution, education, financial and transportation services. It also allowed complete market access and national treatment in several sectors such as legal, wholesale trade, retailing services, etc under mode 2, 3 and 4. Moreover, it participated in the extended GATS negotiations on financial services and telecommunications and became a member and observer, respectively, of the plurilateral Agreements in Government Procurement¹² and Trade in Civil Aircraft.¹³

Under the CEPA, both countries have offered liberal commitments in services trade. They have offered commitments in all sectors classified under the GATS according to the MTN.GNS/W/120¹⁴ document. A comparison of the offers made by India and Korea in WTO and the CEPA is presented in Appendix 1A. The schedule of commitments under the CEPA has the same framework as GATS. The commitments on 12 sectors cover national treatment, market access, domestic obligations, exceptions, definitions and scope but it does not venture into safeguards, subsidies and procurement. In terms of sub-sectors, the Indian schedule includes 28 sub-sectors and Korean schedule includes 31 sub-sectors. In addition, it also has separate chapters on telecommunications, financial services, audio-visual services and movement of natural persons (mode 4) enlisting additional commitments and terms for trade.

3.1 Comparative Analysis:

This section draws a comparison between commitments offered under the Doha Round and under CEPA for each sub-sector. The focus is on assessing the possible additional gains that the two countries can have in each other's markets under the CEPA and the extent of liberalisation in the bilateral agreement vis-à-vis multilateral agreement. Refer to appendix 1A for a detailed comparison of the commitments by the two countries.

Mode 1: As compared to the revised offer, India has not made many changes to its commitments under CEPA for cross-border services. It has offered to give full commitments in research and development (R&D) in natural sciences and biotechnology, hotels and other lodging services, and travel agency and tour operator services and partial commitment in advertising services. Korea, on the other hand, offered more liberal commitments for cross-border services under its revised offer (submitted in 2003) than under CEPA. In the former, it fully liberalised sub-sectors like engineering, urban planning, advertising, environmental testing, audio-visual services, etc. It also gave partial commitments in courier, adult education, life insurance, non-life insurance, and reinsurance services. However, under the CEPA, Korea has added the requirement of 'local presence' in all these services as a condition for foreign individuals or juridical persons wishing to provide services within the

¹² The Agreement on Government procurement (GPA) is based the only legally binding agreement in the WTO focusing on the subject of government procurement. It is a plurilateral treaty administered by a Committee on Government Procurement, which includes the WTO Members that are Parties to the GPA, and thus have rights and obligations under the Agreement. (Source: WTO)

¹³ Plurilateral Agreement on Trade in Civil Aircraft was entered into force on January 1, 1980 and has 31 signatories. It eliminates import duties on all aircraft, other than military aircraft, as well as on all other products covered by the agreement — civil aircraft engines and their parts and components, all components and sub-assemblies of civil aircraft, and flight simulators and their parts and components. (Source: WTO)

¹⁴ www.wto.org/english/tratop_e/serv_e/mtn_gns_w_120_e.doc

territory. This requirement is often made in case of services that require close supervision to guarantee consumer protection¹⁵. However, it may hinder international trade because it is likely to impose financial cost on foreign service providers. This requirement has made Korea's commitments under CEPA more restrictive than the multilateral agreement as in the latter, there is no such requirement of local presence for foreign entities.

Mode 2: Trade through consumption abroad primarily takes place in education, travel and tourism, and healthcare services. In both revised offer as well as CEPA, India has offered liberal commitments for trade in these services. Korea on the other hand, has offered liberal commitments in only two out of these three services – education and travel & tourism. It has not included healthcare services in both the schedules, implying that market access is restricted in this sector.

Mode 3: India offered liberal commitments in commercial presence under the revised offer including sectors such as engineering, computer and related services, rental and leasing, construction services, etc. It further liberalised trade in this mode under the CEPA by offering commitments in all the above sectors as in the revised offers and in addition including some others such as R&D on natural sciences, advertising, internet, factoring, and services incidental to mining. Korea has offered liberal commitments in the revised offer as well as under CEPA. In the revised offer, it allowed conditional access to foreign investors in 18 sub-sectors and full access in the remaining sub-sectors. However, it limited investment in stocks to companies listed under the Korea Stock Exchange with an upper ceiling of 6 percent of the company's total stock by individual foreign investors and an aggregate 23 percent of foreign investment per company. Under the CEPA, it offered more liberal commitments in comparison to the revised offer by including sub-sectors such as building, cleaning, technical and analysis services of physical properties, and sporting and other recreational services (only for national treatment). Moreover, both countries have agreed to give preference to application of partner country's banks for establishment of branches if they meet the industry requirement.

Mode 4: Under the revised offer, both India and Korea have specified their commitments in the movement of natural persons in horizontal commitments section. In the revised offer, India has included four categories of persons – business visitors (BV), intra-corporate transferees (ICT), contractual service suppliers (CSS) and independent professionals (IP). In the latter two categories, it specifies a list of sub-sectors in which the persons can obtain a service contract. The Korean revised offer allowed ICT, BV and services salespersons (SS) who can temporarily stay in Korea with a visa but restricted CSS. Under the CEPA, however, movement of natural persons is covered in a separate chapter. It covers four categories of natural persons – ICT, BV, CSS and IP, as defined under WTO/GATS (see appendix 2A for definition). For the latter two categories, the countries have prepared a positive list of 163 professions that professionals from two countries can engage in, provided the person complies with applicable immigration measures. In the case of ICT, India has agreed to grant

¹⁵ "Development, Trade and the WTO – A Handbook", Edited by Bernard Hoekman, Aaditya Mattoo and Philip English, World Bank (2002)

a visa for a temporary stay for an initial period of up to one year as against Korea which has agreed for a visa of up to two years. For BVs, India has agreed to grant a temporary stay for a period of not more than 180 days while Korea has agreed for a period of only 90 days. The commitments also cover employment of spouse and dependents, regulatory transparency, resolution of problems, dispute settlement and reservations.

Overall, both India and Korea have offered more liberal commitments under the bilateral agreement than the revised offer by covering a larger number of sectors and sub-sectors in respective schedules. However, Korea's requirement of local presence in Mode 1 is restrictive. It has similar requirements in other FTAs as well such as the Korea-EU FTA but not under the Korea-US and Korea-Singapore FTA.

4. Performance and Composition

In recent years, both Indian and Korean economy have undergone major economic and structural changes which has resulted in the emergence of services as a leading sector contributing significantly to GDP and international trade. Previously, the service sector in both economies was subject to substantial barriers in trade and investments. The policy of liberalisation was adopted with the objective of lowering prices, improving quality, increasing competitiveness and ultimately reducing the loss to consumer surplus. Services accounted for 56 percent of GDP in India and 58 percent of GDP in Korea in 2012. The size of the sector increased almost five times from US\$241 billion in 2000 to US\$970 billion in 2012 in India, and more than doubled from US\$306 billion to almost US\$600 billion during the same period in Korea.

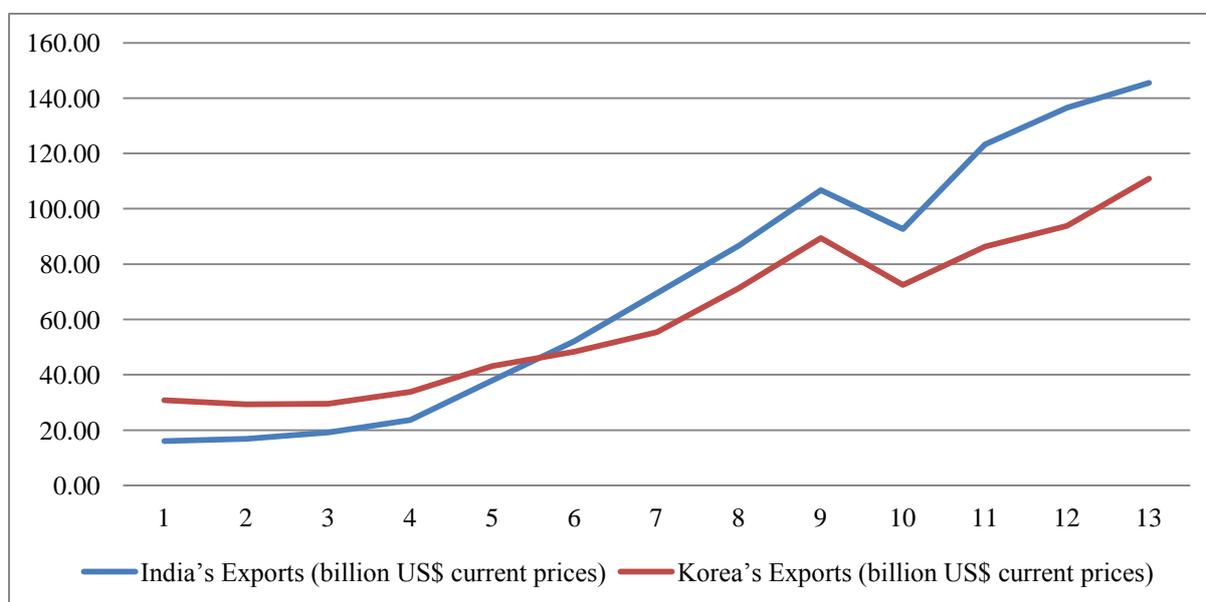
The share of the sector in total trade of goods and services has also accelerated in both countries. During 2000-12, it contributed around 28-30 percent in India's and 16-18 percent in Korea's total trade of goods and services. In 2012, service trade for India was US\$274 billion accounting for 15 percent of GDP while that of Korea was US\$216 billion accounting for 19 percent of GDP. Exports of service also increased more than six times in India from US\$16 billion to US\$145 billion and tripled in Korea from US\$30 billion in 2000 to US\$110 billion in 2012. While India is a net exporter of services since 2004, Korea's trade balance worsened from US\$2.4 billion in 2000 to US\$6 billion in 2011 but actually turned favourable US\$2 billion in 2012.

Table 4.1: Service Sector Overview

	India						Korea					
	2002	2004	2006	2008	2011	2012	2002	2004	2006	2008	2011	2012
GDP (USUS\$ billion at current prices)	523	722	949	1224	1873	1858	576	722	952	931	1116	1130
Services as percent of GDP	53.0	53.0	52.9	53.9	55.7	56.2	59.8	58.1	59.7	60.8	58.1	58.2
Annual Growth of Services (in percentage)	7.0	8.1	10.1	10.0	8.2	7.0	7.7	2.5	4.4	2.7	2.7	2.5
Trade in Services as percent of GDP	7.7	10.2	13.5	16.0	14.0	15.0	11.7	13.1	13.3	20.1	17.4	19.4
Trade in Services as percent of Trade in Goods & Services	27.7	29.9	30.7	28.5	25.8	26.9	17.7	16.5	16.5	17.8	15.3	17.4

Source: Compiled from World Development Indicators (2012), World Bank

Figure 4.1: Export of Services (USUS\$ billions)



Source: Compiled from WTO

The lag in the growth of service trade in Korea as compared to India is explained by its economic policy and structure. After putting an end to its inward-looking policy in 1990's, India adopted a service-export led development policy primarily driven by IT-ITeS services.

Korea, on the other hand, has concentrated comparatively more on manufacturing sector led export policy over the last 40 years. However, the Korean services sector has now gained a strong foothold in merchandise exports by providing cost efficient solutions through inventory control, sales, marketing, etc. This has created a “manufacturing-services continuum”, a phenomenon particularly evident in South Korea.¹⁶

Unlike schedule of commitments which use service sector classification list by GATS (MTN.GNS/W/120-July 1991), export and import of services trade is based on classification under the fifth edition of International Monetary Fund (IMF) Balance of Payment (BoP) Manual (1993). Under this classification, commercial service is sub-divided into three categories - transportation, travel and other commercial services. Looking at composition of service trade, India’s trade basket has remained rather concentrated in the last decade with other commercial services (OCS) accounting for a majority share followed by travel and transportation (Table 4.2). During 2000-11, the share of OCS in total commercial services export increased substantially from 66 percent in 2000 to 74 percent in 2011. On the other hand, the share of travel declined from 21 percent in 2000 to 13 percent in 2011. The share of transportation has remained unchanged at around 12 percent during the period. Within the nine sub-sectors of OCS, computer and information and other business services together accounted for about 70 percent in total services export. This is indicative of India’s concentrated trade basket.

Table 4.2: Structure of Export (US\$ billions)

Service Category	India			Korea		
	2000	2006	2011	2000	2006	2011
A. Transportation	2.5 (12.9)	7.6 (10.9)	17.5 (12.8)	13.2 (44.8)	25.8 (46.6)	37.0 (39.5)
B. Travel	3.1 (16.2)	8.6 (12.4)	17.5 (12.8)	5.9 (20.1)	5.8 (10.5)	12.3 (13.1)
C. Other Commercial Services	13.5 (70.8)	53.3 (76.7)	101.5 (74.4)	10.4 (35.1)	23.7 (42.9)	44.4 (47.4)
Total	16.0 (100)	69.5 (100)	136.5 (100)	29.7 (100)	55.3 (100)	93.9 (100)

Source: World Development Indicator, World Bank. *Figures in parenthesis indicate share of category export in total commercial service export.

Unlike India, Korean trade basket has changed in the last decade. In 2000, transportation accounted for a majority share followed by OCS and travel. The share of transport services has declined to 39.5% in 2011 while that of OCS has risen to 47.4%. It is led by an increase in exports of construction and other business services. While OCS accounts for the largest share in total commercial services export in India as well as Korea, the sub-sectors within OCS leading exports are different for both countries. Computer and Information services accounts for a majority share in India’s and construction services accounts for a majority share in Korea’s export of OCS.

¹⁶ “South Korea braves the knowledge economy”, Scott B Macdonald, Korea Investment Forum (<http://ncta.osu.edu/lessons/korea/econ/Koreanpercent20Economicpercent20Developmentpercent20Flaig.pdf>)

5. Trade Possibilities

A majority of studies conducted to assess the bilateral trade possibilities between two countries use two conventional tools – Revealed Comparative Advantage (RCA) index¹⁷ and Trade Complementarity Index (TCI)¹⁸. The prospects of trade expansion are likely to be strong for countries that have either comparative advantage for dissimilar products, or trade structures that exhibit high complementarity. Such indices, although widely used in the goods context, have not been used often in the context of trade in services primarily due to shortcomings in the available data.¹⁹

The RCA index is a ratio of the share of a product in a country's export to the share of the product in world exports. A value of more (less) than unity indicates that a country has a revealed comparative advantage (disadvantage) in that product. The TCI measures trade complementarity at the bilateral level in terms of the overall export-import structure of the trading partners. While the RCA index is a measure of comparative advantage that a particular country has *vis-à-vis* the rest of the world, the TCI is a bilateral measure in the context of bilateral trade. Hence, the TCI may be more appropriate to analyse trade possibilities between the two countries. However, lack of data on bilateral trade flows in services explains why this index is not used very often. In the context of the present study also, data is available on trade carried out by India and Korea with the rest of the world but not bilaterally, making it possible to compute RCA index but not TCI.

But use of RCA index in case of identifying trade possibilities in services has a limitation. Being a market share index, RCA can be an indicator of true competitiveness only under condition of free trade. Since trade in services is governed by a plethora of non-tariff barriers, this indicator becomes weak. Hence, in the context of the present study, the RCA index will be applied only to identify potential service sectors with trade possibilities. This will sectors where one of the two countries has competitiveness and supplemented with a qualitative survey which would help in identifying trade possibilities and barriers.

There are various ways of constructing the RCA indices but the one most commonly used is the Balassa index (Balassa 1965, 1977, 1979, 1986). Balassa's definition of RCA pertains to the relative trade performance of individual countries in particular commodities (Batra and Khan, 2005)²⁰. It is based on the assumption that trade pattern reflects differences in relative costs and non-price factors at country level, thereby, revealing the comparative advantage of the trading partners. The factors that contribute to changes in RCA are economic - structural change, improved world demand and trade specialization.

¹⁷ Balassa (1965)

¹⁸ Michaely (1994)

¹⁹ Taneja, Mukherjee, Jayanetti and Jayawardane (2004) "Indo Sri Lanka Trade in Services: FTAII and Beyond", ICRIER Working Paper No. 145

²⁰ "Revealed Comparative Advantage – An Analysis for India and China, Batra A. and Khan Z., ICRIER Working Paper 168, August 2005

Hoekman (1995) uses CA for trade in services and conclude that developed economies are more specialised in commercial services that are capital intensive while developing countries are specialised in labour intensive commercial activities. Wickramasinghe (2000) examines the RCA co-efficient for South Asian countries both at an aggregate and dis-aggregated level of trade in services. A study by Batra and Khan (2005) highlights that the advantage of using the revealed comparative advantage index is that it takes into account the inherent advantage of exporting a particular commodity/service and is consistent with changes in relative factor endowment and productivity of an economy. The limitation of the index is that it is unable to differentiate between improvements in factor endowments and implementation of appropriate trade policies by a country.

Balassa's (1965) RCA index is calculated as follows:

$$RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$$

Where, x_{ij} – Country i's export of service j, x_{wj} – World exports of service j, X_{it} – Total services exports of country i, X_{wt} – Total services exports of world.

Table 5.1 shows the RCAs of India and Korea for services for four years. The year 2002 has been chosen to examine the competitiveness of the two countries at the beginning of structural reforms; year 2006 has been chosen keeping in mind its proximity with the year for setting up of the Joint Study Group to examine the feasibility of the India-Korea CEPA; year 2008 has been chosen to examine the impact of the recent global financial crisis on the competitiveness of the two economies; the year 2013 has been chosen to study the competitiveness post-recovery from the crisis and prior to revision of the CEPA.

Table 5.1: RCA Comparison for Service Sectors

Service Category	India				Korea			
	2002	2006	2008	2013	2002	2006	2008	2013
A. Transportation	0.5	0.5	0.5	0.6	2.0	2.1	2.2	1.6
<i>B. Travel</i>	0.7	0.5	0.4	0.5	0.6	0.4	0.4	0.5
<i>C. Other Commercial Services</i>	1.5	1.5	1.5	1.4	0.7	0.8	0.7	1.0
C.1 Insurance	0.6	0.7	0.7	0.6	0.0	0.2	0.2	0.2
C.2 Financial	0.5	0.4	0.5	0.5	0.3	0.6	0.5	0.5
C.3 Computer & Information	12.5	9.1	8.8	5.4	0.0	0.10	0.0	0.1
C.4 Communication	1.8	1.3	0.9	0.5	0.6	0.5	0.3	0.3
C.5 Construction	0.5	0.4	0.3	0.3	3.4	5.3	5.4	7.6
C.6 Royalty and License Fee	0.0	0.0	0.0	0.0	0.5	0.7	0.4	0.6
C.7 Other Business	0.6	1.0	0.8	1.2	0.9	0.8	0.6	1.0
C.8 Personal, Cultural and Recreational		0.3	0.6	0.8	0.4	0.5	0.5	1.4
Total Commercial Services	1.4	1.9	1.9	1.6	0.8	0.8	0.9	0.6

Source: Authors' calculations based on data from WTO Database. *figure for 2010. Data for 2011 is not available.

An examination of the computed RCA indices indicates that India has a comparative advantage ($RCA > 1$) while Korea does not have a comparative advantage ($RCA < 1$) in commercial services (see Table 5.1). *At a disaggregated level, India specialises in computer and information while Korea specialises in transportation and construction services.* This is in conformity with the export structure of the two countries analysed in the previous section.

Three sectors have been taken up for an in-depth analysis - computer and information, construction, and transportation. While computer and information will be examined from India's export and Korea's import point of view, construction and transportation will be examined from Korea's export and India's import point of view. In addition, the audio-visual sector is also covered, partly because Korea shows a competitive advantage in this sector during 2011-2013 and partly because it has received a special mention under the CEPA as a separate chapter under which both countries agree to enter into a co-production agreement for national treatment and better market access for joint products.

6. Sectoral Trade Possibilities and Regulatory Barriers

This section provides a qualitative examination of the shortlisted four sectors. The analysis discusses the potential areas of collaboration and engagement between the two countries. Both the governments should pursue the task of deepening mutual cooperation in areas of mutual interest and take measures to provide more effective market access by removing substantial barriers to the bilateral trade in services.

6.1 Computer and Information Services (C&I)

In the last decade, India has emerged as a significant player in the world C&I market on account of software, information technology (IT) and information technology enabled services (ITeS).²¹ This phenomenal growth has come about with the rise of India as a major outsourcing hub on account of its proficient, english-speaking technically skilled and cost effective human capital base (Ghibutiu and Dumitriu, 2008). Export of computer and information services increased from USD 5 billion in 2000 to USD 51 billion in 2013. In Korea as well, this sector has gained momentum. During the same period, its exports increased from USD 10 million to close to US\$1 billion.

In India, the sector has attracted considerable foreign direct investment (FDI) inflows. Cumulative FDI inflows in computer services (including hardware and software) from April 2000 to February 2012 were US\$12.6 billion, which accounted for 7 percent of the total FDI

²¹ IT services are those services that are directly related to computer software/hardware. For example, providing custom software will be classified as an IT service. An ITeS service is one that uses computers/telecommunications systems to provide the service for a non-IT field such as banking, finance, etc. Some of the examples of ITeS are medical transcription, back-office accounting, insurance claim, credit card processing. Business process outsourcing (BPO) involves the contracting of the operations and responsibilities of specific business functions (or processes) to a third-party service provider. It can be back office outsourcing (such as accounting) or front office outsourcing (customer-related services). BPO services are often termed as ITeS-BPO services because it indicates the provision of BPO services using IT services.

inflows²². India allowed 100 percent through the automatic route²³ in various segments of the industry in 2008 with the implementation of the Information Technology Act (Amendments) 2008. The FDI statistics²⁴ show that Samsung India Software Operations is one of the Korean companies, which has invested worth US\$8 million in data processing and software development services. Samsung has set up its R&D centre in India and has employed about 3,000 engineers and experts.²⁵ LG has also gained a presence in electronic services and has set up an R&D centre in India.

Given the importance of IT/ITeS industry and its growth trends in both India and Korea, there are numerous possibilities for mutual cooperation. The expansion of the ICT sector in Korea has led to an increase in demand for English-speaking highly-skilled IT professionals. India, with a huge English speaking labour force can offer these services.

Over a period, India has moved up the value chain from being mere application development and maintenance units to becoming strategic partners providing testing, infrastructure, and consulting and system integration services (Satija and Mukherjee, 2013). At the same time, Korean software firms are also engaged in providing innovative IT products and solutions such as gaming and smart-phone applications, defence robotics control platforms and 'green' energy software applications. This difference in product segments can be another area of partnership where companies can set up operations in the partner country for service delivery. India can provide a platform to Korean firms for catering to third world countries and Korea can provide a platform to Indian firms to cater to the innovative solution requirements of Asian, European and American technology companies. In a geographical context, while India can serve as a regional hub for Korean companies targeting the South Asian market, Korea can serve as a hub for Indian companies targeting the North and North-Eastern Asian market.

Korean firms can invest in India and set up operations in services like government, banking, retail, travel, transportation, etc. Satija and Mukherjee (2013) note that with the evolution of Indian domestic market from captive dominated market structure to third party transformational outsourcing relationships, there is an increase in domestic demand for software services. With the India-EU BTIA (Broad based Trade and Investments Agreement) and India-Taiwan ECA (Economic Cooperation Agreement) negotiations in process, Korea needs to act fast in its engagements with the Indian IT industry to avoid competitive pressure and gain a major share of the market.

The government of Korea is also investing into digitizing its services and adopting cloud computing. For instance, Ministry of Public Administration and Security is investing in cloud technologies for national computing resources and the Ministry of Knowledge Economy has

²² DIPP Factsheet on Foreign Direct Investment for April 2000 to March 2012

²³ FDI is allowed through two routes in India - automatic route under which foreign investors are not required to take any approvals from the government authority, and the FIPB route, under which the foreign investor is required to take an approval.

²⁴ 'FDI Synopsis on South Korea', Department for Industrial Policy and Promotion, Ministry of Commerce, Government of India

²⁵ 'South Korea looks at Punjab as preferred investment destination', August 19, 2011, Confederation of Indian Industry

launched a study on how to combine green IT with cloud platforms. Korea has put in place a successful e-governance project that has enabled it to gain the top position on the E-Government Development Index²⁶ conducted under the UN Global E-Government Survey (2010). Its exports of e-government solutions surpassed US\$200 million on the basis of its leading position in the evaluation of e-governments by the UN. On the other hand, though there is an increase in the use of IT in delivery of Indian government services, the process is still at a nascent stage of digitization. Indian government departments and agencies have not yet resorted to usage of advanced technologies like cloud computing, an area where it can collaborate with Korean companies. As new cloud computing offerings increase the demand from companies to utilize this technology, the need for fuelling investments in datacenters will also rise. This can be another opportunity for Indian investors.

There are also complementarities between the Indian software industry and the Korean hardware and manufacturing industry.²⁷ Korea has a comparative advantage in microelectronics and semiconductor production. This expertise can be leveraged with Indian software development with a specific focus on applications like telecom software, broadband networking solutions, banking and insurance, multimedia and system integration, etc. Furthermore, Korea can also take advantage of India's advanced and developed business process outsourcing (BPO) services. Korean software market is engaged in providing specialized vertical-specific application packages for industries such as autos, pharmaceuticals, healthcare, and financial services. Part of this process can be outsourced to India.

This complementarity can be synergised by allowing easy cross-border movement of IT/ITeS professionals. CEPA allows for movement of business visitors as well as intra-corporate transferees. The positive list of professionals under CEPA for movement of independent professionals and contractual service suppliers also includes IT consultants, computer system designers and analysts, database consultants, and many more IT related professions under which people from both countries can move across borders to render their services.

In the backdrop of these multiple possibilities of trade, the requirement of local presence by Korea for trade in mode 1 can be a possible barrier. It can hinder business as the financial cost of enterprises providing only cross-border services will increase if they are mandatorily required to establish office and hire staff in Korea. Another significant barrier for Indian software and BPO entities interested in doing business in Korea will be language. Indians providing these services in Korea will have to learn Korean to converse with the locals.

²⁶ E-Government Development Index, compiled by the United Nations, is a measure of the capacity and willingness of a country to use e-government for ICT-led development. Along with an assessment of the website development patterns in a country, the E-Government Development index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people. E-Government Development Index is a composite index comprising the Web measure index, the Telecommunication Infrastructure index and the Human Capital index. (<http://www.un.org/en/development/desa/publications/connecting-governments-to-citizens.html>)

²⁷ http://www.kdcstaffs.com/it/main_view.php?mode=view&nNum=5126&parts=Country

6.2 Transportation

In this section, transportation and logistics are used interchangeably based on the definition of ‘transportation’ services in the IMF BoP Manual (1993). Transportation forms a part of the larger logistics sector. The demand for transportation and logistics sector²⁸ services is derived from its synergy with other economic activities that expand as a country moves up the growth trajectory. Korea has well developed transportation and logistics infrastructure comparable to that of many other OECD (Organisation for Economic Co-operation and Development) countries²⁹. Korea was ranked 4th and 8th in the WTO list of top fifteen leading exporters and importers respectively of transportation services in 2012.³⁰ Korea had a high index value of 101.7 in 2012 on the UNCTAD Liner Connectivity Index indicating its excellent connectivity with the global shipping network and was ranked 23rd in the World Bank Logistics Performance Index.

On the other hand, in India, despite inflow of huge investments from both domestic as well as international sources, demand is still unmatched by an equivalent supply of logistics services. It ranked 10th and 4th in the WTO list of top fifteen leading exporters and importers of transportation services respectively in 2012.³¹ It had a low index value of 41.3 in 2012 on the UNCTAD Liner Connectivity Index³², and was ranked 47th by the World Bank Logistic Performance Index³³ (2010), indicating a huge demand-supply gap in logistic services. Indian logistics costs are among the highest in the world at about 10-20 percent of GDP and 14 percent of the total value of goods. Since India is not a single market, there are several impediments to intra-state movement of goods. These high costs are attributable to infrastructure bottlenecks, a multi-layered tax regime, delays in processing documents and other inefficiencies that are a part of doing business in the economy.³⁴

²⁸ Logistics services include integration of information, transportation, inventory, warehousing, material handling and packaging. However, the IMF BOP manual (fifth edition) and WTO service sector classifications list logistics services such as warehousing and cargo handling as auxiliary services under transportation services. For the purpose of the paper, we have used the larger definition of logistics, which encompasses transportation and thus, the two terms have been used interchangeably.

²⁹ India is not a member of the OECD countries

³⁰ Table III.4, International Trade Statistics (2013), WTO

³¹ Table III.4, International Trade Statistics (2013), WTO

³² UNCTAD Liner Shipping Connectivity Index captures how well countries are connected to global shipping networks. Its computation is based on five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. For each component a country's value is divided by the maximum value of each component in 2004, the five components are averaged for each country, and the average is divided by the maximum average for 2004 and multiplied by 100. The index generates a value of 100 for the country with the highest average index in 2004.

³³ World Bank Logistic Performance Index (LPI) is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. It is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers), providing feedback on the logistics “friendliness” of the countries in which they operate and those with which they trade. They combine in-depth knowledge of the countries in which they operate with informed qualitative assessments of other countries with which they trade, and experience of global logistics environment.

³⁴ “Logistics and Infrastructure – Exploring Opportunities”, Report by Deloitte

Given India's increasing demand for integrated logistics infrastructure and Korea's expertise in supplying it, there is a strong possibility of expansion in trade and investment between the two countries.

India allows 100 percent FDI under the automatic route in services such as ports and harbour services, storage and warehousing services, and transport and transport services. Currently, over 70 percent of the world's top 50 logistics firms have a presence in India and are providing freight forwarding services, having entered the market through a variety of modes including acquisitions, JVs, and the establishment of local subsidiaries.³⁵ However, Indian FDI statistics show that the transportation and logistics sector is not amongst the top five sectors attracting investments from Korea.³⁶ There are very few Korean logistics and cargo firms with presence across India providing services such as freight forwarding, customs clearance, warehousing, domestic airfreight, cargo marking, door-to-door delivery, etc.³⁷ According to a recent survey on the management of domestic logistics businesses in foreign markets conducted by the Korean Chamber of Commerce and Investment³⁸, a majority of firms select and base their businesses in foreign logistics markets based on its growth potential. Given that India is likely to invest a cumulative amount of US\$1 trillion under the ongoing Twelfth Five Year Plan (2012-17) to develop an organised logistics market and meet the demand for integrated logistic infrastructure solutions, India can prove to be a strong potential market for Korean logistics and freight firms.

The significant presence of various other Korean businesses such as Hyundai, Samsung, etc in Indian destinations, especially Chennai, has also led to an increase in demand for direct flights between the two countries. Currently, India's international carriers – Air India and Jet Airways – have direct flights to Seoul. Air India also signed a Code Sharing Agreement³⁹ with Asiana Airways⁴⁰ in 2012 which allows both airlines to share flight codes by each other on the India-South Korea (Seoul) and vice-versa sectors, on a free flow basis⁴¹. This development is indicative of facilitation of trade relations between India and Korea as it ensures direct connectivity of different Indian destinations with Seoul.

With CEPA in place, Indian businesses can also take advantage of Korea's well connected logistics network. Korea operates as an international logistics hub for north-eastern Asia and offers frequent sea and air transport services to and from some of the key regions of the world such as north-eastern China, the western coastal areas of Japan and the far eastern region of Russia. The world's major marine transportation channels i.e. the European, American, Southeast Asian, Korea-China, and Korea-Japan routes are directly connected to Korea's

³⁵ "Logistics in India" Part 3, KPMG (2011)

³⁶ The DIPP note FDI Synopsis on South Korea dated February 28, 2011 shows that the top five sectors attracting FDI from South Korea are metallurgy, automobile, industrial machinery, electronics and electrical equipment.

³⁷ The Korea Desk webpage on DIPP

³⁸ http://english.korcham.net/sub02/report_view.asp?nKey=1424&searchfield=&searchtext=

³⁹ Code-share is a business arrangement where two or more airlines share the same flight. A seat can be purchased on one airline but the flight is actually operated by a cooperating airline under a different flight number or code.

⁴⁰ Asiana Airways is a major South Korean airline

⁴¹ http://www.airindia.com/SBCMS/Webpages/air_india_and_asiana_airways_April_29_2012.aspx

seaports. Its Incheon International Airport⁴² (handling the world's 2nd largest international air cargo volume) and Busan Port⁴³ (world's 5th busiest container port) are amongst the world's leading international trade gateways. Indian businesses can use Korea's airports and seaports to participate in efficient supply chains that connect a large number of cities within Northeast Asia.

Korea has an efficient custom clearance system. According to the World Bank's evaluation of customs-related administrative services for 2009, South Korea was ranked 8th among 183 countries. India, on the other hand, has a complicated custom clearance system, which raises the cost of doing business considerably. India can counter this problem by collaborating with Korea to put in place a custom clearance system similar to Korea's UNI-PASS which is a one-stop logistics information and custom clearance system enabling export clearance within 2 minutes, import clearance within 2.5 minutes, custom drawbacks within 5.2 hours and tax payment within 10 hours.⁴⁴ Through the pre-declaration system in UNI-PASS, importers can obtain complete clearance before entry into the port. If India implements a similar system, it will ease customs procedures, increase the capacity of ports and airports to handle cargo, and stop evasion of duty considerably, thereby decreasing the loss to the exchequer.

With the implementation of new reform measures such as FDI in multi-brand retail and implementation of GST, the demand for Third Party Logistics (3PL) is likely to surge. On the other hand, Korean logistics industry has a fast-growing 3PL logistics sector, which is engaged in providing 3PL services solutions to businesses all over the world. India can be another potential market for business gains for such Korean companies. Further, Indian manufacturers can also outsource their entire reverse logistics flow to Korean firms.

Korea can also gain from India in this sector. By 2020, the Korean government aims to strengthen the domestic software-oriented logistics system to promote the efficiency of the national logistics system. This could be another area of collaboration, where Korea can engage with Indian IT-services firms. Thus, Korean logistics and transportation companies can outsource their IT-related operations to India while India can allow Korean logistics companies to set up operations in India to support the growing need for infrastructure, given greater merchandise and overall economic growth.

Though the Indian logistic industry is in its infancy and there is potential for growth, it has some regulatory barriers that make it unattractive for investments. Given the high-cost low-margin nature of the business, the problem for organised players in the industry is compounded by the existence of unfair competition from unorganised players, who are often able to provide services at competitive prices by evading paying taxes and flouting the norms under the Motor Vehicles Act. High cost of operation and delays caused by cumbersome

⁴² Incheon airport provides an extensive network connecting 172 cities in 53 countries via 67 airlines.

⁴³ Busan Port is the largest trans-shipment port in northeast Asia. Located on the world's main marine transportation route, the port handles more than 13 million TEU (Twenty Feet Equivalent Unit which represents a unit for containers) annually through an active exchange with 500 ports in 100 countries. It handles a massive volume of trans-shipment to China and Japan.

⁴⁴ Korea Trade and Investment Promotion Agency

documentation requirements of different states makes the business unattractive.⁴⁵ Poor physical and inadequate communications infrastructure in the sector also restricts seamless flow of information.

Rising investments, rapidly evolving regulatory policies, mega infrastructure projects and many other developments in recent times have driven the Indian logistics market. The industry is simultaneously overcoming infrastructural constraints and logistic-centric inefficiency. To attract higher FDI, India will have to combat these barriers through uniform progress across segments.⁴⁶ It must work a policy roadmap per mode of transportation that aims to increase investment and capacity. The processes across various levels of government, both horizontally and vertically, must be streamlined to reduce compliance burden of operators. This will reduce stoppages and touch points of cargo movements as well as increase the speed at which goods are transported within and outside the country. Another policy initiative can be to set benchmarks and standards for the industry that drives uniformity of warehouses, storage and transport equipment. Currently, all cargo clearance activities are undertaken at ports and airports. This imposes a high cost that can be reduced by decongesting these activities at inland locations. Further, an improved IT platform can help reduce documentation burden.

6.3 Construction Services

The second largest contributor to GDP after agriculture in India, construction services accounted for export of USD1.1 billion and import of USD1.3 billion in 2013. The DIPP⁴⁷ data shows that Indian construction industry is the second largest sector in terms of FDI inflows with a cumulative inflow of 12 percent during 2000-12⁴⁸. A report by EC Harris Research (2011) estimates that growth rates for the construction industry is likely to exceed overall GDP growth over the next 2 years, underlying a continued strong demand.

In the global construction market, India is ranked 12th and accounts for 17.5 percent of the \$3.4 trillion global market. According to a global economic survey, India is ranked the sixth – fastest growing country in terms of construction (Ministry of commerce, Government of India).⁴⁹ Construction overseas particularly occupied an important position in India's export portfolio after the early seventies with the spurt in construction activity in oil-exporting region of Middle East. The thrust of India's project export bids has exhibited a significant shift towards cash-terms projects, and Multilaterally Funded Project Overseas (MFPO).⁵⁰ There is a growing emphasis amongst Indian construction companies on competitive pricing and aggressive strategic marketing for securing contracts. Contracts secured in the recent

⁴⁵ Subrata Mishra “Logistics Industry: Global and Indian Perspectives”, European Business and Technology Centre

⁴⁶ KPMG Report “Logistics Game-Changers – Transforming India's logistics industry”

⁴⁷ DIPP uses NIC definition which means that construction sector includes goods and services pertaining to the real estate sector.

⁴⁸ Department of Industrial Policy and Promotion (DIPP) FDI Factsheet from April 2000 to December 2012 available at http://dipp.nic.in/English/Publications/FDI_Statistics/2012/india_FDI_December2012.pdf. The data uses DIPP FDI data base and considers equity capital components only.

⁴⁹ <http://commerce.nic.in/annual2004-05/englishhtml/lesson-11.htm> accessed on October 13, 2013.

⁵⁰ Ministry of Commerce

years have been quite diverse in nature, indicating the growing versatility and technological capabilities of Indian project exporters. Regions that continue to be potential markets for Indian construction sector include Asia (South, West and East), Africa, Middle East, Russia, CIS (Commonwealth of Independent States), and Latin American countries.

For Korea as well, this sector holds a vital position. Korean overseas construction industry has grown rapidly in the last four decades and particularly in the last five years. With the second largest exporter of construction services, Korea's exports amounted to around USD2 billion with a share of 17 percent in commercial service export in 2013. This surge in exports can be attributed to increase in overseas construction. By region, Middle East accounts for the largest share of 60 percent followed by the Asia with a share of 30 percent in Korean construction exports. By construction type, plant construction orders account for the largest share of 54 percent of cumulative overseas orders.

However, growth in this sector has been volatile and has seen a slump in the recent years in both countries due to a rise in material costs, higher interests outgo and declining profit margins.⁵¹ But given the infrastructure and real estate needs, trade in this sector has soared as government and private sector companies collaborate through the Public-Private Partnership (PPP) models to bridge the gap.

Though a bulk of trade in this sector continues to take place under mode 3 and mode 4 given the capital intensiveness and specialised skill requirement of the industry, advancement in technology and communication has also made trade under mode 1 possible.

A look at India's inward FDI data shows that construction is not amongst the leading sectors attracting FDI from Korea. Investments by Korean firms in construction activities in India are limited when compared to investment in other industries (such as automobile, metallurgical industry, electronics, etc). As India prepares to bridge the demand and supply gap in infrastructure by investing a cumulative amount of USD1 trillion under the ongoing twelfth five year plan (2012-17), it puts forth opportunities for Korean firms to make investments and collaborate with Indian construction firms.

After the Indian construction industry received 'industry' status in 2000, a number of initiatives in infrastructure related projects on PPP basis were undertaken. This resulted in expansion of private ownership of build-operate-transfer (BOT), build-operate-own-transfer (BOOT), and build-operate-lease-transfer (BOLT) projects. Indian private construction majors engage with foreign construction and real estate companies for project financing, technical assistance and management support. Korea, with its experience in overseas construction projects, can play an active role by participating in these projects. The potential of this collaboration is particularly large in urban infrastructure, mass rapid transport system (MRTS) and water management. Moreover, FDI up to 100 percent is allowed under the automatic route for townships, housing, built-up infrastructure and construction of

⁵¹ Economic Survey of India, 2011-12

development projects. Many Indian states such as Haryana and Gujarat are also taking significant steps towards industrial development.

Not only the large Korean firms but even small and medium Korean construction firms are engaged in overseas construction activity. The Korean government has provided initiatives to ease financing of projects and entry of SMEs into foreign construction markets. With the government aiming to make Korea one of the five powerhouses in overseas construction industry by 2014, the Ministry of Land, Transport and Maritime Affairs (MLTM) is likely to reinforce its support and policies.⁵² It is planning to expand the number of professional workers it fosters and allocate 150 billion Won for the water industry to support companies advancing into developing countries, continued from the formation of a global infrastructure fund of 400 billion Won in 2010. MLTM has also listed India on its priority list of core partners for the upcoming financial year where it will focus on providing financial and diplomatic assistance to companies bidding for overseas projects in these countries (Jessica Seoyoung Choi for Korea.net, 2012). This effort will strategically push forward Korea's plans to boost overseas construction projects in India.

International trade in construction is subject to a plethora of regulatory barriers and institutional constraints which are applied not only at the national but also at regional and local levels (Mukherjee, 2001). World Bank's Doing Business Report 2012 shows that while India is among the top countries in terms of housing and work space needs, it is ranked 181st in construction permission processes. There are 34 procedures and average time taken is 227 days. Therefore, in order to make most of its prospective collaboration with Korea in construction sector, India will have to ease some of its regulatory and infrastructure barriers. For instance, one major barrier pertains to land acquisition that require approvals from multiple agencies (such as central and state government ministries), high stamp duty and cumbersome paper procedures. While India has eased some of the barriers related to land acquisition through Land Acquisition Bill (2013), the cumbersome procedures that construction companies will have to undergo to acquire land from farmers can pose a problem and make investments unattractive in the sector. Another example can be sited of India's lagging environmental clearances, which have put many critical investments (such as by Korea's steel giant Posco) on the backburner.

In order to be a favourite investment destination, India will have to make amends to its policy and regulatory mechanisms. Infrastructure and contraction projects are highly costly with a long gestation period. The companies investing are highly leveraged. A delay of a week in these clearances can substantially burden their book-of-accounts. A possible solution can be of using a single-shop model for all governmental clearances. This model is already in practice in Gujarat and is highly successful. A similar model at the central level can prove to be highly beneficial for businesses as well the government.

⁵² "Korea's overseas construction orders exceed US\$ 500 billion", Jessica Seoyoung Choi, published on July 10, 2012 in Korea.net (<http://www.korea.net/NewsFocus/Business/view?articleId=101184>)

Despite existence of these challenges, India can still be a huge investment opportunity to Korean construction firms to set up projects and engage in collaborations for infrastructure development. Both countries signed a Civil Cooperation Agreement on July 26, 2011 after which Korea has already asked India to allot land for its nuclear industry to build power plants in which it specializes.⁵³ Korean firms have also shown interest in building the Dighi port and in the Delhi-Mumbai Industrial Corridor (DMIC).

6.4 Audio-Visual Services

Audio-visual services include services and fees related to the production of motion pictures, radio and television programmes, and musical recordings. The IMF BoP Manual (1993) categorises audio-visual services under personal, cultural and recreational services but the WTO Services Sectoral Classification List (MTN.GNS/W/120) is based on UNCP (United Nations Provisional Central Product Classifications). This WTO classification, which is used for making commitments, lists audio-visual services as a sub-sector of communication services. Since this paper uses IMF BoP classification to compute the RCA index, we assume that audio-visual service is a sub-category of personal, cultural and recreational services.

Neither India nor Korea has a comparative advantage in personal, cultural and recreational services. In spite of this why this paper picks this sector for an analysis is that both countries agree to sign a co-production agreement under the CEPA. According to the agreement, India and Korea will collaborate to produce films and audio, animation, TV programmes, etc to strengthen cultural ties. The co-production agreement accords national treatment with concomitant of national benefits (including government support) to products of the partner country. The agreement enables not just easy access to finance but also ensures transfer of technology, investment in infrastructure and increased market access.

The industry is expanding and engaging in providing a variety of services to international production studios. Even during the times of financial crisis, the Indian media and entertainment (M&E) industry managed to grow at a rate of 11 percent from US\$12.9 billion in 2009 to US\$14.4 billion in 2010.⁵⁴ Factors such as high demand for India-specific products, both domestically and from non-resident Indians (NRIs), and other South Asian markets, increase in export of television content and films and availability of high-skilled labour at competitive prices have contributed to the growth of the sector. For Korea, the sector gained significance with the beginning of its flagship “Korean Wave”, an initiative to promote Korean culture across Asia by way of export. The country was the 5th largest exporter and 10th largest importer of audio-visual services in 2012.⁵⁵ Its export of audio-visual and related services increased from US\$13 million in 2000 to US\$359 million in 2012. Imports during the same period increased from US\$79 million to US\$357 million. The country has the fifth largest film industry and is a pioneer of TV via mobile devices and the internet.

⁵³ “India seeks S Korean funding for clean energy, infrastructure”, Elizabeth Roche published in Live Mint on March 26, 2012

⁵⁴ <http://www.indiainbusiness.nic.in/industry-infrastructure/service-sectors/media-entertainment.htm>

⁵⁵ Table III.40, WTO (2013)

In India, the entertainment sector has been free from any significant regulations for a very long time. This has helped the sector grow mainly through investments by private entrepreneurs with minimum efforts from the government. On the contrary, dictatorship-era regulations have dominated the Korean media industry with the government practicing strict protectionist policies. Recently in 2011 President Lee Myung-bak took significant steps in spite of resistance from regulators, unions and other political parties to loosen the grip and allow five privately owned television stations to go on air. The new stations are free of some government restrictions to which the older ones adhere.⁵⁶

Mukherjee, et. al. (2007) point out that other than providing access to subsidised finance, a co-production treaty signed with one country permits both parties to avail advantage of the co-production treaties with other countries that the respective country may have. India presently has a co-production agreement with France, Brazil, Germany, New Zealand, Italy, UK, Poland and Spain. Korea has a co-production agreement with New Zealand, EU and France, under which it grants benefits such as screen quota and selective financial support for production and distribution to co-produced products. While Korea can avail of the benefits of other co-production agreements signed by India, India already has a co-production treaty with all of Korea's co-production treaty partners. Moreover, India was one of the few countries to undertake MFN exemption under GATS that allows it to offer preferential treatment to motion pictures and television programmes from countries with which it has a co-production agreement.⁵⁷ This move was driven by the objective to promote cultural exchange and was applicable for an unspecified period of time.

Sub-sectors such as animation, films and television are likely to benefit the most from this collaboration. Korea has a vast (valued at US\$0.9 billion in 2008 with more than US\$80 million worth of exports) and technological advanced animation industry producing original cartoons and animations. The Indian animation industry, though close to Korean industry in terms of market size (valued at US\$0.5 billion in 2009), is primarily engaged in catering to the demands of domestic end user segments (such as feature films, television programmes, advertisements and commercials, and computer games), and processing outsourced work of various international studios(especially from US) and gaming companies. A co-production agreement between the two countries will enable Indian and Korean companies to collaborate and engage in all activities from pre-production to post-production. While Korean animators can work on innovation and content, Indian animators can provide production and post-production services. This collaboration will not only lead to production of more culture-oriented and varied animations but also provide Indian companies with human and financial capital to venture into high-quality animations such as 3D, 4D and other new animation types for the new age.

The film industry in India (2nd largest in the world) and Korea (5th largest in the world) is well developed across the value chain, from development to exhibition. While domestic films

⁵⁶ "South Korea Loosens Grip on Media Industry", published in the Wall Street Journal dated December 1, 2011 available at <http://online.wsj.com/news/articles/SB10001424052970204397704577071810413535758>

⁵⁷ Mukherjee, Gupta, Ahuja (2007) 'India-US FTA: Prospects for Audiovisual Services'

have been a prime source of entertainment in both countries, the emergence of multiplexes has increased the demand for foreign cinema including films, documentaries and short movies. The India-Korea co-production agreement entitles co-produced products to avail the benefits provided to local firms such as financing and screen space in movie theatres in accordance with the screen quota. Korea has given similar benefits under its co-production agreements with New Zealand and France. The Korean government has recently launched a supporting programme and incentives for filming in Korea or foreign films which plan to shoot in Korea. This will benefit the Indian company participating in co-production agreement⁵⁸ who can partner with Korean companies to select, get permissions and shoot in Korean locations.

There has been a rapid development of television industry sector in both countries with the change in regulatory regime and adoption of liberal policies. With the co-production agreement in place, broadcasters from India and Korea can showcase programmes in each other's language to promote cultural ties. As India is becoming a content exporter, many Indian broadcasters are now catering to the requirements of local audiences around the world. By producing programmes for the local Korean audience, Indian enterprises can utilise the development fund and improve advanced production facilities. The Indian advertising industry can also enter Korea as regulations in advertising have been eased. Korea can continue to provide India with technical consulting services to encourage import of Korean technologies and services. Further, Indian agencies and authorities can learn from Korean broadcasting and communications policies that have made Korea a broadcasting and communications powerhouse. Korea has bigger industries than any other nation in the communications technology segment like digital multimedia broadcasting, digital TV, etc.

To enhance co-operation in this sector, the Federation of Indian Chambers of Commerce and Industry (FICCI) and Korea Creative Content Agency (KCCA)⁵⁹ jointly signed a Memorandum of Understanding (MoU) in 2011. The agreement specified that the two countries would co-operate on overseas marketing of Indian and Korean content in each country and exchange information, statistical data and expertise about the Indian and Korean content market. Further, the two would collaborate in educating and training professionals of content industry and organise events such as seminars, conferences, stakeholder consultations, etc. This MoU is valid for five years and at the end of the period, the organisations will discuss and extend it further if required.

⁵⁸ Recently, Indian film distribution house Eros International Plc. signed a multi-film agreement with Korea's second largest mobile carrier KT Corp. to showcase 50 of its film titles on multiple digital platforms. Under the arrangement, KT Corp through its Olleh TV will showcase 50 films from Eros's library on a revenue sharing basis. With a strong slate of film titles under its banner, Eros recently listed its unit **Eros International Media Ltd** on the BSE.

⁵⁹ KOCCA under the Ministry of Culture, Sports and Tourism, Government of Korea is an agency dedicated to promoting all areas of media and entertainment including broadcasting, film, gaming and animation. It is responsible for providing a comprehensive support system to nurture the industry along with conducting various support businesses to help M&E corporations and aims to make Korea one of the top 5 content powerhouses in the world.

But for constructive trade to take place in this sector Korea will have to contemplate mitigating entry barriers and regulations. In spite of efforts by the incumbent government to loosen the grip, there still remain certain elements that are restrictive to trade in the sector. For instance, to promote the Korean animation industry, the Korean government has put in place a broadcasting quota (under the Korean Broadcasting Act) for domestic animation to provide the industry with opportunities to promote domestic animation through the TV network. Foreign animation is restricted to only 55 percent and 65 percent of all animation content for terrestrial and cable and satellite broadcasts respectively. This is an area of contention that has not been discussed in the MoU signed between FICCI and KCCA in 2011. The quota can prove to be a hindrance for an Indian company that wishes to broadcast its product in Korea.

Further, India and Korea must make sincere efforts towards promoting the country's heritage in partner's land as a tourist destination. A plethora of Indian movies are shot in foreign locations. To keep up with the Indian viewer's global awareness, the industry is shifting from clichéd European destinations to explore newer lands. Korea can be an attractive option here. It can draw lessons from Australia Tourism's strategy that has drawn many Indians to the land and gained popularity.

7. Way Forward and Conclusion

With opening of the global economy and advancement in information technology, the significance of service sector has increased in almost all economies, including India and Korea. This has resulted in the inclusion of this sector in many recent trade liberalisation agreements including India-Korea CEPA. In services, both India and Korea have undertaken liberalising commitments in 11 service sectors along with additional commitments in audio-visual, financial and telecommunication services as well as in movement of natural persons. An analysis of the services sector in the above sections shows that there are strong complementarities in services sectors such as IT, transportation, construction and audiovisual services which can be accentuated by further liberalising trade and movement of natural persons.

Often, the commitments made under these comprehensive trade agreements (CEPA, CECA, FTA and PTA) are more liberal than those made under GATS or the Doha Round. Under the India-Korea CEPA, bilateral commitments have gone beyond the revised offers in the Doha Round with both countries offering more liberal commitments. However, both countries have also imposed some restrictions which hinder trade. Korea has imposed a restriction of local presence in Mode 1 in a number of sub-sectors. India, while being more liberal in its bilateral commitments under CEPA than multilateral commitments under revised offer, has put some restrictions on foreign participation (mode 3). These areas of contention must be addressed in the near future to allow free trade.

Nevertheless, India-Korea CEPA provides numerous trade possibilities through which both countries are largely benefiting and can do so more by addressing market barriers. The paper discusses existing trade, future trade complementarities and market access barriers in four

sectors of mutual interest – information technology, transportation, construction and audio-visual services. India has a competitive advantage in information technology and can provide sophisticated testing, consulting and system solutions to Korean clients. Korea is one of the leading exporters of transportation services with a highly advanced logistics network. India, with a huge demand-supply gap, can synergize with Korean logistic service providers to meet its shortfall. India can also prove to be a huge investment opportunity for Korean construction firms who have garnered rich experience in overseas construction services. With the CEPA in place, the two countries can develop inter-industry linkages to collaborate rather than compete in the future. For instance, Korean logistics and transportation companies can outsource their IT-related operations to India while India can allow these companies to set up operations in its territory to meet the growing need for infrastructure. Both countries can also promote their culture and heritage through audio-visual services.

Governments, agencies and consulates are taking a number of steps to take advantage of the CEPA and boost trade. To ease movement of people, both countries signed an agreement on visa simplification in March 2012 in the presence of Indian PM and Korean President. Korea has also established business centres of Korea Trade and Investment Agency (KOTRA) in New Delhi, Mumbai and Chennai to render support existing and prospective Korean businesses with operations in India. A number of MoUs and agreements have been signed since 2009 to improve relations in different aspects including strategic partnership. An MoU was signed between Defence Research and Development Organisation (DRDO) of India and Defence Acquisition Programme Administration (DAPA) of Korea to for cooperation in R&D. To create Indian culture awareness amongst Koreans, an Indian Cultural Centre (ICC) was also established in 2011. ICC holds special programmes, yoga classes, cookery lessons and traditional dance training in Korea, catering to popular demand among people.

To realise all trade possibilities, both countries will have to address some urgent issues restricting trade. They must work together on expanding the positive list of professionals to include more professions that allows greater movement of people. Presently, Indian community in Korea is estimated at only 7500 which include businessmen, IT professionals, scientists, research fellows, students and workers (Ministry of External Affairs, Government of India)⁶⁰. This is much smaller when compared to other countries such as USA, UK, Australia and Canada where Indians are present in large numbers.

Another possible barrier in services trade, especially mode 1, is language. Indians are well versed in English but will have to learn Korean to render services to and in Korea. Similarly, Koreans will have to learn English to do business in India. This barrier will hold for all services requiring communication directly between parties of two countries.

The two countries are contemplating upgrading the CEPA as well as India-Korea Double Taxation Avoidance agreement to meet each other's needs for increasing trade and investments. By pursuing the task of deepening mutual cooperation in areas of mutual interest

⁶⁰ http://www.mea.gov.in/Portal/ForeignRelation/India-Korea_ROK_Relations.pdf accessed on October 21, 2013

and taking measures to provide more effective market access by removing substantial barriers to bilateral trade in services, both countries can benefit by gaining a competitive advantage in the global supply chain. The India-Korea CEPA can go a long way in increasing bilateral flow of services between the two countries.

References

- Balassa, B. (1965)** ‘Trade Liberalisation and Revealed Comparative Advantage’, The Manchester School of Economic and Social Studies, Vol. 33, 99-123
- Bank of Korea, March 2012**, ‘Current Economic and Financial Movements’, Quarterly Bulletin, Chapter 1
- Batra, A. and Khan, Z. (2005)** ‘Revealed Comparative Advantage – An analysis for India and China’, ICRIER Working Paper 168
- Chanda, R. (2002)** ‘Globalisation of Services – India’s Opportunities & Constraints’, Oxford University Press
- Chandra, P. and Jain, N. (2007)** ‘The Logistics Sector in India: Overview and Challenges’, Indian Institute of Management, Working Paper No. 2007-03-07
- Choi J.**, ‘Korea’s overseas construction orders exceed US\$500 billion’, published on July 10, 2012 in Korea.net
- CMM-I Report**, ‘Trade in Audio Visuals Market: China, Mongolia and South Korea’, UNESCO
- Confederation of Indian Industry (2011)** ‘South Korea looks at Punjab as preferred investment destination’
- Crawford, J. and Fiorentino, R. (2005)** ‘The Changing Landscape of Regional Trade Agreements’. World Trade Organisation, Discussion Paper No. 8
- Deloitte** ‘Logistics and Infrastructure – Exploring Opportunities’ last accessed on January 13, 2012 available at
<http://www.deloitte.com/assets/DcomIndia/Local%20Assets/Documents/aLogistics%20and%20infrastructure%206%20Aug.pdf>
- Department of Industrial Policy and Promotion (DIPP)**, ‘FDI Synopsis of South Korea’, Ministry of Commerce, Government of India available at
http://dipp.gov.in/English/Investor/Korea_Desk/FDI_Synopsis_KoreaSouth_31August2012.pdf
- Department of Industrial Policy and Promotion (DIPP) Factsheet on Foreign Direct Investment (FDI) (April 2000 to March 2012)**, Department of Industrial Policy and Promotion, Ministry of Commerce, Government of India, 2012, last accessed on December 1, 2012 available at
http://dipp.nic.in/English/Publications/FDI_Statistics/2012/india_FDI_March2012.pdf
- Department of Information Technology (2011)** ‘Annual Report 2010-11’, Ministry of Communication and Information Technology, Government of India

- Dewan P.N. Chopra Consultants Private Limited** ‘The Indian Logistics Industry: An Overview’ available at <http://www.dpncindia.com/news/Logistics.pdf>
- FICCI-KPMG Report (2011)** ‘India Media & Entertainment Industry to touch US\$ 28 billion by 2015’ available at http://www.kpmg.com/IN/en/Press%20Release/FICCI_KPMG_M_E.pdf
- Findlay, C. and Warren, T. (2000)** ‘Impediments to Trade in Services: Measurement and Policy Implications’, Routledge, London and New York
- Fink, C. and Molinuevo, M. (2007)** ‘East Asian Free Trade Agreements in Services: Roaring Tigers or Timid Pandas?’, East Asia and Pacific Region Poverty Reduction and Economic Management, World Bank
- Fitch Ratings (2012)** ‘2012 Outlook: Indian Logistics Industry’
- Ghibutiu A. and Dumitriu I. (2008)** ‘The Effects of Offshoring on Trade in Services - Evidence from Romania’, Working Paper, European Trade Study Group available at <http://www.etsg.org/ETSG2007/papers/dumitriu.pdf>.
- Hoekman, B. (1995)**, “An Assessment of the General Agreement on Trade in Services”, in Will Martin and L. Alan Winters (eds), The Uruguay Round and the Developing Economies, The World Bank, Cambridge University Press, Cambridge, UK
- Hoekman B., Mattoo A. and English P. (2002)** ‘Development, Trade and the WTO – A Handbook’, World Bank
- Hufbauer, G. and Warren, T. (1999)** ‘The Globalisation of Services: What has happened? What are the implications?’, Peterson Institute for International Economics, Working Paper available at <http://www.piie.com/publications/wp/99-12.pdf>
- Hulme-Jones, L. (2011)** ‘South Korea-Telecoms, Mobile, Broadband and Forecasts’, Paul Budde Communication Pty Ltd., 17th Edition
- Investment Technology Promotion Division (2007)** ‘Dynamic Business Partner: Investor Friendly Destination - Media and Entertainment Industry’, Ministry of External Affairs, Government of India available at <http://www.indiainbusiness.nic.in/Book.pdf>
- International Monetary Fund (1993)** ‘Balance of Payment Manual’ last accessed on October 15, 2012 available at <http://www.imf.org/external/pubs/ft/bopman/bopman.pdf>
- Interview of Ambassador. Nagesh R. Parthasarathi (2008)** ‘Ambassador Explains India’s IT Policy’, Country Report, Korea IT Times
- Invest Korea (2009)** ‘Promising Investment Opportunities – Logistics’

- Kathuria, R. (2008)** ‘Prospects for the Telecommunication Sector under the India-EU Trade and Investment Agreement’, Final Report, Indian Council for Research in International Economic Relations (ICRIER)
- Kathuria, R. and Kedia, M. (2012)** ‘India: Evolution of Telecommunications and Information Technology since Independence’, Yojna, Publication of Ministry of Information and Broadcasting, Vol. 56
- Kim, H. (2001)** ‘The audiovisual sector in another part of the world’, Audiovisual Industry Seminar, WTO
- Kim, J. and Kim, J. (2003)** ‘Liberalisation of Trade in Services and Productivity Growth in Korea’, Conference Volume-NBER, University of Chicago Press, Chapter 6, 179-207
- Korea Chamber of Commerce and Industry (2012)** ‘Survey on Management of Domestic Logistics Businesses in Foreign markets’
- Korea Communication Commission**, Annual Report, 2008 and 2010
- Korea Communication Commission**, “KCC Plan for 2011”
- KPMG (2011)** ‘Logistics in India’, Part 1, 2 and 3 available at <http://storemmove.com/links/news/Logistics-in-India-Part-1.pdf>
<http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/Logistics-in-India-Part-2.pdf>
<http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/Logistics-in-India-Part-3.pdf>
- Kwak, K. (2009)** ‘Broadcasting Deregulation in Korea’, Academia Paper Series available <http://keia.org/publication/broadcasting-deregulation-south-korea>
- Lee, N. and Lie, H. (2003)** ‘Korea’s Telecom Services Reform through Trade Negotiations’, Conference Volume – NBER, University of Chicago Press, 243-281 available at <http://www.nber.org/chapters/c10161.pdf>
- Macdonald, S. (2006)** ‘South Korea Braves the Knowledge Economy’, Korea Investment Forum available at <http://www.atimes.com/atimes/Korea/HF28Dg03.html>
- Michaely, M. (1994)** ‘Trade Preferential Agreements in Latin America: Ex-ante Assessment’ Washington, D.C.: The World Bank Latin America and Caribbean Region available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1996/03/01/000009265_3961019193227/Rendered/PDF/multi0page.pdf
- Ministry of Commerce, Industry and Energy (MOCIE)**, Korea Trade Investment Promotion Agency (KOTRA) and Deloitte & Touche Corporate Finance, ‘A Guide to Investment in Korea’

Ministry of Foreign Affairs and Trade, Republic of Korea

Mukherjee, A. (2001) ‘Trade in Construction and Consultancy Services: India and the GATS’, ICRIER Working Paper No. 75

Mukherjee, A. (2003) ‘Audio-visual policies and international trade: the case of India’, HWWA-Report, Hamburg Institute of International Economics available at http://ec.europa.eu/culture/media/media-content/media-mundus/india_2003_en.pdf

Mukherjee, A., Gupta, A. and Ahuja P. (2007) ‘India-U.S. FTA: Prospects for Audiovisual Services’, Working Paper No. 192, ICRIER

Mukherjee, A., Ray S. and Rai, D. (2010) ‘Trade in Services’, India-Turkey FTA Report, ICRIER

Mukherjee, A., and Miglani, S. (2010) ‘Non-tariff barriers in the transport and logistics sectors: India’, Research Report – European Business and Technology Centre

Mukhopadhyay S. (2002) ‘Globalisation and Indian Services Sector’, Economic and Political Weekly, 4097-4098

Mishra S. “Logistics Industry: Global and Indian Perspective”, European Business and Technology Centre

NASSCOM (2012a), ‘The IT-BPO Sector in India’, Strategic Review 2012, India

NASSCOM Strategic Review 2010

NASSCOM ‘Indian Animation Market’, Fact Sheet

National Information Society Agency, ‘Global IT Initiatives of Korea’, Republic of Korea

National Information Society Agency – Korea 2010, ‘Yearbook of Information Society Statistics’, Republic of Korea

National Information Technology Promotions Agency ‘IT Industry Annual Report - 2010’ <http://www.nipa.kr/eng/boardView.it?boardNo=110&contentNo=1&page=2> last accessed on November 4, 2012

Organisation for Economic Cooperation and Development (2000) ‘Regulatory Reform in Korea’ available at <http://www.oecd.org/gov/regulatory-policy/oecdreviewofregulatoryreformkorea.htm>

Park, K. and Kim, Y. (2011) ‘Korea’s International Comparative Legal Guide to: Telecommunication Laws and Regulations 2011’, Global Legal Group, Chapter 16, 109-115

Price Waterhouse Coopers (2010) ‘India Entertainment and Media Outlook 2010’ available at http://www.pwc.com/gx/en/entertainment-media/pdf/PwC_India_EM_Outlook_2010.pdf

- Raipuria, K. (2001)** ‘Service Exports: ‘Knowledge Bowl’ yet to yield major gains’, Economic and Political Weekly, 3351-3352
- Rausas, M., Manyika, J., Hazan, E., Bughin, J., Chui, M. and Sai, R. (2011)** ‘Internet Matters: The Net’s sweeping impact on growth, jobs, and prosperity’, McKinsey Global Institute
- Rim, K. (2011)** ‘30 Korean Software Worthy of Global Recognition in 2012’, Korea IT Times available at <http://www.koreaittimes.com/story/15607/30-korean-software-worthy-global-recognition-2012>
- Roche, E.** ‘India seeks S Korean funding for clean energy, infrastructure’, Live Mint published on March 26, 2012
- Satija D. and Mukherjee A. (2013)** ‘Movement of IT Professionals between India and the EU: Issues and the Way Forward’, Working Paper No. 391, Indian Institute of Management Bangalore
- Sinha, A. (2011)** ‘Banking on Technology’, Reserve Bank of India Bulletin, Volume LXV, Number 6
- Sungeun, S. (2008)** ‘Behind the Korean Broadcasting Boom’, NHK Broadcasting Studies, Number 6
- Taneja, N., Mukherjee, A., Jayanetti, S. and Jayawardane, T. (2004)** ‘India-Sri Lanka Trade in Services: FTA II and Beyond’, ICRIER Working Paper No. 145
- Telecom Regulatory Authority of India (TRAI) 2009-10, Annual Report**
- Thomas, P. (2003)** ‘GATS and Trade in Audio-Visuals: Culture, Politics and Empire’, Economic and Political Weekly, 3485-3493
- Trade Policy Report (August 10, 2011)**, submitted to WTO by Secretariat of India
- Trade Policy Review (August 10, 2011)** submitted to WTO by Secretariat of India (WT/TPR/S/249)
- UNESCAP** ‘National Policies and Strategies for Infrastructure Development’, Chapter III, Country Infrastructure Reports
- United States Trade Representative Report, South Korea**
- Vaidyanathan, G (February 2007)** ‘Current Status of Logistics in India’, PIANC Magazine
- Veluree, M** ‘Key success factors of Korean TV industry structure that leads to the popularity of Korean TV dramas in a global market’, Journal of East Asian studies available at http://www.asia.tu.ac.th/journal/EA_Journal2_50/B5.pdf
- Wickramasinghe, U. (2000)**, “Services Trade as a New Frontier in South Asia: Is Optimism Warranted”? South Asia Economic Journal, Sage Publications, New Delhi

World Bank (2002). ‘Global Economic Prospects 2002: Making Trade Work for the World’s Poor’, Washington, DC: The World Bank available at http://econ.worldbank.org/external/default/main?pagePK=64165259&piPK=64165421&theSitePK=469382&menuPK=64216926&entityID=000094946_0202020411334

World Trade Organisation (2010) ‘Measuring Trade in Services’, Training Manual produced by WTO/OMC

World Trade Organisation (2011) World Trade Report 2011

Website Links

- Korea Software Industry Association (<http://www.sw.or.kr/>) last accessed on February 2, 2013
- Electronics and Telecommunications Research Institute, Korea <http://www.etri.re.kr/eng/> last accessed on November 14, 2012
- http://dipp.gov.in/English/Investor/Korea_Desk/Resource.aspx last accessed on June 5, 2013
- <http://www.kotra.in/index.jsp>
- <http://www.indembassy.or.kr/BilateralTrade.aspx?Cul=en-US> last accessed on October 20, 2012
- <http://www.mofat.go.kr/english/regions/intorganization/wto/index.jsp> last accessed on September 2, 2012
- <http://www.ficci.com/PressRelease/755/press-21mar-entertainment.pdf> last accessed on December 17, 2012
- <http://www.bok.or.kr/contents/total/eng/boardView.action?boardBean.brdid=10782&boardBean.rnum=1&menuNaviId=744&boardBean.menuid=744&boardBean.cPage=1&boardBean.categorycd=0&boardBean.sdt=&boardBean.edt=&boardBean.searchColumn=&boardBean.searchValue=>

APPENDIX

Appendix 1A: Comparison of Doha Round Revised Offer and CEPA: India and Korea

Categories of services	India		Korea	
	MA	NT	MA	NT
1. BUSINESS SERVICES				
A. Professional Services				
a. Legal Services	X	X	=	=
b. Accounting, auditing and book-keeping services	=	=	=	=
c. Taxation Services	X	X	=	=
d. Architectural services	=	=	-	=
e. Engineering services	+	=	-	=
f. Integrated engineering services	+	=	-	=
g. Urban planning and landscape architectural services	+	=	-	=
h. Medical and dental services	+	=	-	=
i. Veterinary services	+	=	-	=
j. Services provided by midwives, nurses, physiotherapists and para-medical personnel	+	=	X	X
B. Computer and Related Services				
a. Consultancy services related to the installation of computer hardware	+	=	=	=
b. Software implementation services	+	=	=	=
c. Data processing services	+	=	=	=
d. Database services	+	=	=	=
e. Other	+	=	=	=
C. Research and Development Services				
a. R&D services on natural sciences	+	+	=	=
b. R&D services on social sciences and humanities	=	=	=	=
c. Interdisciplinary R&D services	X	X	=	=
D. Real Estate Services				
a. Brokerage Services	X	X	X	X
b. Appraisal Services	+	=	-	=
E. Rental/Leasing Services without Operators				
a. Relating to ships	+	=	=	=
b. Relating to aircraft	+	=	=	=
c. Relating to other transport equipment	+	=	-	=
d. Relating to other machinery and equipment	=	=	-	=
e. Other	+	=	=	=
F. Other Business Services				
a. Advertising services	*	*	-	=
b. Market research and public opinion polling services	X	X	=	=
c. Management consulting service	+	=	=	=
d. Project management services	+	=	=	=
e. Composition and purity testing and analysis	+	=	=	=
e. Technical inspection	+	=	=	=
e. Testing and analysis services of physical properties	+	=	+	+
e. Testing and analysis services of integrated mechanical and electrical systems	+	=	+	+
f. Consulting related to agriculture and animal husbandry	X	X	=	=
f. Services incidental to forestry excluding aerial fire	X	X	=	=

Categories of services	India		Korea	
	MA	NT	MA	NT
fighting and disinfection				
g. Services incidental to fishing	+	=	+	=
h. Services incidental to mining	*	*	=	=
i. Services incidental to manufacturing	X	X	=	=
j. Services incidental to energy distribution	+	=		
k. Placement services of personnel	+	=	-	=
m. Related scientific and technical consulting services	X	X	+	=
n. Maintenance and repair of equipment	+	=	-	=
o. Building-cleaning services	+	=	+	+
p. Photographic services	+	=	+	=
q. Packaging services	+	=	=	=
r. Printing, publishing	X	X	=	=
s. Convention services	+	=	=	=
t. Translation, interpretation and speciality design services	+	=	=	=
2. COMMUNICATION SERVICES				
B. Courier services	X	X	=	=
C. Telecommunication services				
a. Voice telephone services	=	=	=	=
b. Packet-switched data transmission services	=	=	=	=
c. Circuit-switched data transmission services	=	=	=	=
d. Telex services	X	X	=	=
e. Telegraph services	X	X	=	=
f. Facsimile services	=	=	=	=
g. Private leased circuit services	=	=	=	=
h. Electronic mail	=	=	=	=
i. Voice mail	=	=	=	=
j. On-line information and database retrieval	=	=	=	=
k. Electronic data interchange	X	X	=	=
l. Enhanced/value-added facsimile services	=	=	=	=
m. Code and protocol conversion	X	X	=	=
n. On-line information and/or data processing	=	=	=	=
o. Other	=	=	=	=
D. Audiovisual services				
a. Motion picture and video-tape production and distribution services	=	=	-	=
e. Sound recording	X	X	=	=
3. CONSTRUCTION AND RELATED ENGINEERING SERVICES			-	=
A. General construction work for buildings	+	=	X	X
B. General construction work for civil engineering	+	=	X	X
C. Installation and assembly work	+	=	X	X
D. Building completion and finishing work	+	=	X	X
E. Other	+	=	X	X
4. DISTRIBUTION SERVICES				
A. Commission agents' services	+	=	=	=
B. Wholesale trade services	+	=	-	=
C. Retailing services	X	X	-	=
D. Franchising	X	X	=	=
5. EDUCATIONAL SERVICES				

Categories of services	India		Korea	
	MA	NT	MA	NT
C. Higher education services	+	=	+	=
D. Adult education	x	x	+	=
6. ENVIRONMENTAL SERVICES				
A. Sewage services	x	x	-	=
B. Refuse disposal services	+	=	-	=
D. Other	+	=	-	=
7. FINANCIAL SERVICES				
A. Insurance and Insurance-related Services	+	=	+	=
B. Banking and other financial services				
a. Deposit	+	=	+	=
b. Lending	+	=	+	=
c. Financial leasing	+	=	+	=
d. Payment and money transmission	+	=	+	=
e. Guarantees and commitments	+	=	+	=
f. Trading for own account or for account of customers in OTC market or otherwise	x	x	=	=
f1. Money market instruments	+	=	x	x
f2. Foreign exchange services	+	=	+	=
f3. Derivative products	x	x	x	x
f4. Exchange rate and interest rate instruments	x	x	x	x
f5. Transferable securities	+	=	x	x
f6. Other negotiable instruments	x	x	x	x
g. Participation in issues of all kinds of securities	+	=	=	=
h. Money broking	=	=	x	x
i. Asset management	+	=	=	=
j. Settlement and clearing	=	=	+	=
k. Provision and transfer of financial information	+	=	=	=
l. Advisory, intermediation and other auxiliary financial services	+	=	=	=
8. HEALTH RELATED AND SOCIAL SERVICES				
a. Hospital services	+	=	x	x
9. TOURISM AND TRAVEL-RELATED SERVICES				
A. Hotels and restaurants (incl. catering)	+	=	+	=
B. Travel agencies and tour operators services	+	=	=	=
C. Tourist guides services	=	=	=	=
10. RECREATIONAL, CULTURAL AND SPORTING SERVICES				
A. Entertainment services (including theatre, live bands and circus services)	+	=	=	=
D. Sporting and other recreational services	+	=	*	=
10. TRANSPORT SERVICES				
A. <u>Maritime Transport Services</u>				
a. International transport	=	=	=	=
b. Maritime auxiliary services	+	=	=	=
b1. Storage and warehouse in ports	+	=	=	=
b2. Custom clearance	=	=	-	=
b3. Maritime agency services	+	=	=	=
b4. Container station services	+	=	=	=
b5. Maritime Agency Services	+	=	x	x
b6. Maritime freight forwarding services	+	=	=	=

Categories of services	India		Korea	
	MA	NT	MA	NT
b7. Shipping brokerage	+	=	=	=
c. Rental of vessels with crew	=	=	=	=
d. Maintenance and repair of sea going vessels	+	=	+	+
l. Pushing and towing	x	x	=	=
m. Tally, measuring and survey	x	x	=	=
<u>C. Air Transport Services</u>				
a. Computer reservation	x	x	=	=
b. Selling and marketing of air transport services	x	x	=	=
d. Maintenance and repair of aircraft	+	=	=	=
<u>E. Rail Transport Services</u>				
a. Passenger transportation	x	x	=	=
b. Freight transportation	x	x	=	=
<u>F. Road Transport Services</u>	x	x	=	=
<u>G. Pipeline Transport</u>	x	x	=	=
<u>H. Services auxiliary to all modes of transport</u>				
b. Storage and warehouse services	x	x	=	=
<u>I. Other Transport Services</u>	x	x	=	=

***Description of Symbols:**

No commitment	×
Improvement in CEPA	+
No improvement in CEPA	=
No commitment in revised offer but in CEPA	*
Reduction from revised offer commitment	-

Appendix 2A: Definition of categories under Mode 4

Under the GATS Mode 4 negotiations there are four broad categories of temporary movement of professionals. These include:

- a) **Business visitor** is a person who visits another country for a short duration specifically for business negotiations and/or for preparatory work towards establishing a business;
- b) **Intra corporate transferee** is an employee of a company who is transferred from an office in the country of origin to an office of the same company in another country;
- c) **Contractual service supplier (CSS)** is an employee of a foreign company who enters another country temporarily in order to perform a service pursuant to a contract;
- d) **Independent professional (IP)** is a self-employed person based in the territory of another country who supplies a service on the basis of a services contract with a consumer in the host country.

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