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Regional integration and services exports: A comparative analysis of growth, performance, and competitive advantage for ECO region

#### **ABSTRACT**

This study intends to perform the comparative analysis of growth, performance, and competitive advantage of services exports of Pakistan regarding ECO (Economic Cooperation Organization) countries. There hardly exists any such study. To examine the growth and performance of services exports in ECO countries this study relies on descriptive statistics while the competitive advantage of Pakistan regarding other ECO countries is analyzed using well recognized Balassa index. Results of the study show that although the share of ECO in world services exports is comparatively small than other regional trading blocs however, it is consistently on the rise. And Balassa's index shows that Pakistan has managed to maintain and develop exports of royalties and license fees services and computer and information services over the years. To exploit its RCA (Revealed Comparative Advantage) in computer and information services, this study suggests Pakistan should spend on the education and training of its youth to enhance its human capital.

#### Keywords

Trade, Services Export, ECO, Revealed Comparative Advantage (RCA), Exports Performance

**JEL Classification** F10, F14, F15, F19

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**Author's contribution in the article:** 1- Conceived and designed the analysis, 2- Reviewed and compiled the literature, 3-Collected the data, 4- Contributed data or analysis tools, 5- Performed the analysis, 6- Wrote the paper, 7- Financial support for the conduct of the study, 8-Other

# 1. INTRODUCTION

The service sector has become the most important of three sectors for most of the economies of the world and that is why it is now often touted as the engine of economic growth, especially for developing countries (Park and Shin, 2012). The importance of services in international trade and investment is rising rapidly (WTO, 2014). Services that were previously considered non-tradeable are now traded frequently (McGuire, 2002). Although, trade in services is only 25% of total global trade its growth is higher (6%) than the trade in goods (2%) (WTO, 2014). Further, services export is higher in developing countries than in developed countries (UNCTAD, 2014). The chief cause of growth in services trade is the revolution of technological advancement and improvements in telecommunication infrastructure (Banga and Kumar, 2010). The service sector not only directly affects economic growth positively but also crucially helps the industrial sector to grow by providing them essential services like financial services, transport, communication, wholesaling, and other business services (Ahmed *et al.* 2017).

Erstwhile, services trade was thought to be invisible and so it was not included in the first round of negotiations of the General Agreement on Trade and Tariffs (GATT) in 1947. In the mid-1980s, however, services gained enough attention that they got included in WTO's Uruguay Round of negotiations. According to General Agreement on Trade in Services (GATS) services sector is comprised of twelve core services: transportation services, communication services, financial services, business services, construction, and related engineering services, distribution services, educational services, environmental services, health-related services, tourism and travel services, recreational, cultural and sporting services and other miscellaneous services. This shows that along with traditional services some non-traditional services have also been included in this classification.

Services trade is different from goods trade primarily because services carry the proximity burden. It means that being 'flow', services can't be stored therefore they require proximity of buyer and seller. According to GATS, there are four modes of service supply. The first is, cross border supply. In this mode, services are provided across the border without the movement of either seller or buyer. The second mode is the movement of the buyer to the country of the supplier. The third mode is, establishing a legal person (offshore affiliate) in the country of the buyer. And the fourth mode is the movement of the seller to the buyer's country. Due to the development in communication technologies, this proximity burden has been a weekend (Saez and Goswami, 2010).

Pakistan is one of the emerging players in the services trade in the world. It has an important presence in trading blocs like SAARC (South Asian Association for Regional Cooperation) and ECO (Economic Cooperation Organization). ECO was originally established as Regional Cooperation for Development (RCD) in 1964 by Iran, Pakistan, and Turkey. It was an intergovernmental organization for the sake of socio-economic development. It was renamed as Economic Cooperation Organization (ECO) in 1985. ECO also included prospects like technical and cultural co-operation besides economic co-operation among its member states. In 1992 ECO included seven new states: the Islamic Republic of Afghanistan, Republic of Azerbaijan, Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Republic of Uzbekistan, and Turkmenistan. Although over time ECO developed its international stature yet it faces challenges mainly due to lacking appropriate infrastructure and institutions. ECO priorities are the energy sector, drugs control, trade, transportation, and agricultural sector.

Many similarities of ECO countries like culture, traditions, and customs are helpful for them to manage and expand trade in the services sector along with the manufacturing sector. The introduction of WTO and GATS is further helpful in this regard. ECO countries are rich in natural resources and human capital is in abundance in these countries. These countries are different in the quality of human resources as well as their comparative approach towards economic wellbeing and growth. This difference in the resource quality

leads them over one another to get higher growth and ultimately comparative advantage in their trade relations. There is a need to focus on this area to analyze their comparative regional position. In this purview, this study focused on growth, performance and revealed the comparative advantage of services exports of Pakistan regarding ECO countries. This is an important contributing aspect of the study in current literature. It is hard to find any comparative study which is focusing services trade in ECO countries. So this study was meant to fill the void. Although, the present study has focused on ECO countries the findings of the study may be helpful for the developing countries as a whole because most of them are now transforming their economies into service-based economies.

## 2. REVIEW OF LITERATURE

There is a plethora of literature available on the trade of goods or on trade in the aggregate which implicitly incorporates services in it. But studying services in isolation is relatively a recent phenomenon. The available literature on services trades mainly concerned with three dimensions. Firstly, studies tried to find out the determinants of services trade. Secondly, studies tried to find out the nexus between services trade and economic growth. And finally, studies focused impact of trade policies on services trade and economic growth. These are briefly being reviewed as under.

As in the case of trade in goods, studies focusing on determinants of trade in services also broadly seem to suggest that, it is a comparative cost that primarily determines the potential of a country's export. These studies include Ok *et al.* (2014), Copeland and Mattoo (2008), and Deardorff (1985). And these comparative costs depend on factors endowment and availability of relevant technology (Vernon, 1966; Krugman, 1986). Kaur (2016) used revealed comparative advantage methodology to study services trade in South Asian Association for Regional Cooperation (SAARC) countries. She found that India produced and exported modern services and gained a comparative advantage because of the availability of required technology, skilled labor, and English speaking capability of workers. Marel (2011) worked in twenty-three OECD countries. This study also showed that trade in services is sensitive to factor endowment like availability of high skilled and mid-skilled labor and information technology-related capital stock. Other important determinants of services trade were found to be domestic regulations, market size, trade agreements, and exchange rate (Shingal, 2010; Lennon *et al.*, 2008; Kimura and Lee, 2006).

The second strand of literature which focused on services trade and economic growth nexus seems to agree with the positive relationship between them. Bosworth and Collins (2008), found that service exports played important role in the economic growth of many countries. Studies that specifically focused on developing countries also concluded that services trade has played a vital part in the growth of these economies. Examples of these studies are Langhammer (2002) and Teltscher (2002). Another such study was conducted by Mitra (2013). It was found that the Philippine's exports of services are the principal engine for growth for the period 1998-2012. The study suggested expanding the scale and scope of exports and to expand tourism across the country especially in remote rural areas to enhance economic growth in the country. Mattoo et al. (2006) in a cross-country analysis found that controlling for other growth determinants, countries with open telecom and financial sectors grow faster than their counterparts. Similarly, Jens et al. (2007), also found a positive relationship between Foreign Direct Investment (FDI) and domestic manufacturing. Another study by Bayraktar and Wang (2006) found that foreign bank's assets share and economic growth have a positive relationship. Similarly, Eschenbach and François (2006), have also found that FDI in domestic financial services has a positive impact on economic growth. Liu et al. (2020) concluded that manufacturing exports in developing countries can be enhanced by decreasing the trade barriers.

And finally, the third strand of literature is devoted to studying the impact of various trade policies on services trade and economic growth. Nordas (2011), found that services trade liberalization policies are

important for the industrial purgation of developing countries. Borchert *et al.* (2015), found that conservative service trade policies are adversely affecting the overall trade balances of African countries. Eschenbach and Hoekman (2006) have also found that liberal services trade policies positively affect transition economies' trade and growth performances. Similarly, Mcguire (2002), in a comprehensive study, analyzed comparative advantage for services and export markets for developing economies. It was found that exports of services are limited due to restrictions. And study predicted that trade liberalization of services can be expected to better off these economies by US\$ 130 billion. Another comprehensive study by Fontagne *et al.* (2011) estimated tariff equivalents in services for nine services sectors of 65 countries. They found that developed economies are least protected. Transport with 26 percent of average protection is the most liberalized sector while with 75 percent of the average tariff, construction is the most protected sector. Then, there are several studies which show the positive impact of liberal trade policies on total factor productivity (TFP) of downstream firms for almost all type of economies. These studies include Bas (2014) for the Indian economy, Bourlès *et al.* (2013) for OECD countries, Arnold *et al.* (2008) for Sub-Saharan African countries, and Duggan *et al.* (2013) for the Indonesian economy. These results from a very diverse set of economies clearly show the vital importance of trade policies and their effects on economies.

To sum up, a brief overview of the literature suggests that; i) like trade in goods trade in services also depends on comparative costs, ii) trade in services are of vital importance for a modern economy to grow and iii) for enhancing trade in services, countries need to adopt liberal trade policies.

# 3. MATERIAL AND METHODS

In 1817 David Ricardo proclaimed that the trade bases on comparative advantage. According to the law of comparative advantage, "Even if one nation is less efficient than (has absolute disadvantage concerning) the other nation in the production of both commodities. There is still basis for mutually beneficial trade". The first nation should specialize in the production and export of commodity in which its absolute disadvantage is smaller (This is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage).

For empirical studies measuring this comparative advantage becomes very difficult as pre-trade prices of the countries are difficult to obtain. Liesner (1958) proposed that comparative advantage can be "revealed' through observable trade patterns. Thus this process of studying comparative advantage by this method since then named as revealed comparative advantage (RCA). He gave the following measure of RCA:

$$RCA_A = \frac{X_{ij}}{X_{nj}} \tag{1}$$

In equation (1) 'X' represents exports, 'i' is a country, 'j' represents commodity, and 'n' is a set of countries like ECO. This concept of RCA was more refined and formalized by Balassa (1965). According to the Balassa index, exports share of a sector, say sector 'j', is compared with its share in exports of reference country. For example, Balassa index of country A's 'j' sector,  $BI_i^A$ , is defined as:

$$BI_j^A = \frac{Share\ of\ sector\ j\ in\ country\ A's\ exports}{Share\ of\ sector\ j\ in\ reference\ country\ exports} \tag{2}$$

Revealed comparative advantage value ranges from zero to positive infinity. If  $BI_j^A > 1$ , there is RCA in sector 'j' of country A. This implies sector 'j' is more important for the exports of country 'A' compared to its importance in exports of reference country. Country A should consider specializing in the production of 'j'. If  $BI_j^A = 1$ , it means sector 'j' has equal importance in the exports of both countries. If the value of RCA is close to zero, it shows the reference country has RCA in 'j', and the country 'A' should not focus

on this sector. Higher RCA index values show greater importance of the sector in exports of the country of interest relative to the other sectors' exports.

The use of this Balassa index has been very popular in empirical studies (Kim, 2019; Altay and Sümerli, 2015; Akhtar *et al.* 2009; Akhtar *et al.*, 2008; Hanif and Jafri 2006; Mahmood, 2004). RCA reflects the intrinsic advantage of commodity export and is reliable with changes in the relative endowment of factor and productivity. However, the Balassa index is not without criticism. It has been criticized on the grounds of its poor distribution characteristics: firstly, its distribution is not stable over time and secondly, it has poor ordinal ranking property (De Benedictis and Tamberi, 2004; Yeats, 1985).

According to Deardorff (1985), the usual concepts of comparative advantage and specialization of goods trade can be applied to study the pattern of services trade. Using comparative advantage theory to study services trade has been validated by Sapir and Winter (1994). This study asserted that under perfect competition, the theory of comparative advantage can be applied to trade in services. However, some argue that results of comparative advantage should be interpreted differently when used for services or entirely new theory should be introduced (Melvin,1989). Notwithstanding this on-going debate, the application of the theory of comparative advantage is very popular in empirical studies (Karaalp and Yilmaz, 2013; Siriwardana and Yang, 2007; Bhuyan and Ray, 2006).

This paper uses the Balassa index to analyze trends in exports of services of ECO countries with specific reference to Pakistan. There are many existing studies conducted on different sectors of Pakistan's economy that have utilized this index to measure comparative advantage. Hanif and Jafri (2006) used it in the study of the textile sector, Mahmood (2004) utilized it to study the non-agricultural exports of Pakistan, and Shahab and Mahmood (2013) have used the Balassa index to the comparative advantage of the leather industry of Pakistan compared to China, Iran, and India.

The analysis has been conducted using data for the period 1994-2015. Collection of data has been carried out mainly from World Bank, United Nations Conference on Trade and Development (UNCTAD), World Trade Organization, and ECO National Statistical Offices.

## 4. RESULTS AND DISCUSSION

This section consists of two subsections. In the first subsection share and growth of services, export is analyzed while the second subsection is developed to construct and analyze Balassa's index.

## 4.1 Growth and Performance of Services Sector in ECO

This subsection does these tasks; i) compares export of services of ECO with other regional trading blocs, ii) studies balance of foreign trade of ECO countries, iii) analyses the import of services of ECO countries iv) examines the exports of services of ECO countries and in v) explores ranks of ECO countries in world trade of commercial services.

**Table 1:** Share of Services Exports of Major Regional Trading Blocs in Services Exports of World (%)

YEAR	ECO	SAARC	ASEAN	NAFTA	APTA	EU	MERCOSUR
2002-2004	1.23	1.71	4.51	18.83	6.01	47.40	0.93
2005-2007	1.34	2.59	4.83	16.96	7.66	47.03	1.09
2008-2010	2.14	3.13	5.05	16.36	8.98	45.56	1.27
2011-2013	2.65	3.63	5.77	16.55	9.97	43.06	1.36
2014-2015	2.95	3.88	6.45	17.25	10.75	44.81	1.48

Source: UNCTADSTAT, United Nations Conference on Trade and Development Statistics

Table 1 compares services exports of ECO countries with other major trading blocks of the world. These trading blocks are Economic Cooperation Organization (ECO), South Asian Association for Regional Cooperation (SAARC), Association of Southeast Asian Nations (ASEAN), North American Free Trade Agreement (NAFTA), Asia-Pacific Trade Agreement (APTA), and European Union (EU), and Group of Latin American Countries Comprising Argentina, Brazil, Paraguay, Uruguay, and Venezuela are known as MERCOSUR. The European Union has the highest share of services exports in total exports of services of the world. Although, it declined from 47.40 percent in 2002-2004 to 44.81 percent in 2014-2105. But still, it remained the highest. It is NAFTA, which stood at second place with a share of 18.83 percent in 2002-2004 and 17.25 percent in 2015-16. APTA with third place showed a consistent increase in exports of services throughout the study period. Its share increased from 6.01 percent in 2002-2004 to 10.75 in 2014-2015. SAARC also recorded an increase in services exports share from 1.17 percent in 2002-2004 to 3.88 percent in the period 2014-2015. And at last, position stands MERCOSUR. It recorded a small increase in services exports shares from 0.93 percent in 2002-2004 to 1.36 percent in period 2011-2013. ECO recorded an increase in its share of services exports from 1.23 percent in the period 2002-2004 to 1.48 percent in the period 2014-2015. This consistent increase in the share of exports of ECO countries over the whole study period is an encouraging sign.

Table 2 presents a balance of trade of services for ECO countries. Most of the ECO countries have experienced a negative balance of trade of services for most of the period. The highest negative was experienced by Iran and Kazakhstan that is equal to -20 billion US\$ and the lowest negative was experienced by Kyrgyzstan and Tajikistan that is less than -0.3 billion US\$. And then there are countries with positive figures. These include Turkey, Pakistan, Afghanistan, and Uzbekistan. Among these, Turkey has the highest positive balance equal to USD 10 billion, Afghanistan figures equal to USD 5.2, and Pakistan figures equal to USD 4.3 billion. Whereas, the highest balance recorded for Uzbekistan is USD 0.8 billion.

Table 2: Balance of Foreign Trade of Services of ECO Countries within the Period 1994-2015 (Mln US\$)

Years	Afghanistan	Azerbaijan	Iran	Kazakhstan	Kyrgyz	Pakistan	Tajikistan	Turkey	Turkmenistan	Uzbekistan
1994			-454			-646		10315		
1995			-417			-740		11467		
1996			-380			-895		12876		
1997			-302			-974		13632		
1998		-174	-251			-1025		14818		
1999		-467	-321			-1227		8914	-485	
2000		-731	-311		-173	-906		16215	-694	
2001		-629	-123		-157	-765		20858		
2002		-445	-161		-126	-766		10473		
2003		-412	-243	-2025	-189	-1077		20389		
2004		-830	-175	-3169	-105	-979		12467		
2005		-2223	-594	-4886	-29	1788	-36	7957		
2006		-3743	-374	-5404	-28	2012	-7	9703		
2007		-5082	-710	-8264	-25	-3483	-51	12928		
2008		-3992	-729	-13515	-10	-6283	-49	14061		
2009		-4164	-767	-14554	-171	-8343	-347	10884		
2010		-4934	-102	-19303	156	-8140	-939	9346		
2011		-5641	-11957	-16588	-53	-7861	-425	14024		
2012	3000	-3930	-15611	-15731	128	-2762	-146	12582		621
2013	5232	-4491	-19667	-19921	-223	4279	-265	10426		842
2014		-7422	-10687	-16673	129	-2452	-341	12417		1216
2015		-8028		-19317	-348	1077	-381	16654		1493

Source: World Trade Organization

**Table 3:** Imports of Services of ECO Countries within the Period 1994-2015 (Mln US\$)

Years	Afghanistan	Azerbaijan	Iran	Kazakhstan	Kyrgyz	Pakistan	Tajikistan	Turkey	Turkmenistan	Uzbekistan
1994			5313		113	3159		5745		
1995			5287		176	3345		5924		
1996		180	4897		236	3583		6812		
1997		296	4139		287	3790		7468		
1998		372	3495		331	3800		7725		
1999		666	4474		389	4372		9846	580	
2000		1156	5028		247	3228		13426	1071	
2001		1038	3911		255	2771		15597		
2002		763	3221		222	2692		14326		
2003		805	5405	3515	301	3207		18682		
2004		1270	6286	4897	251	3361		13136		
2005		2753	12634	6986	296	3410	141	10760		
2006		4501	18061	7907	310	4809	161	12574		
2007		5970	11848	11116	386	9273	299	16553		
2008		5362	12702	16681	497	14558	352	18813		
2009		5858	13881	18337	832	16026	599	20926		
2010		7034	17782	24407	900	16685	1232	26317		
2011		8161	20700	23244	1384	17616	828	30346		
2012	1603	6943	24012	22060	1237	11738	505	28808		415
2013	2435	8009	30772	26015	1385	11974	1066	32142		486
2014		11325	19504	23204	1555	13594	1531	35338		557
2015		14190		26238	2074	15112	1839	35801		659

Source: World Trade Organization

Table 3 shows figures for imports of services by ECO countries. Turkey, Iran, Pakistan, and Kazakhstan are the major importer of the bloc while Uzbekistan and Turkmenistan are having the lowest imports in the bloc. There is a huge difference between the highest importer of services, Turkey, and the lowest importer Uzbekistan. This shows the diversity of the economies in ECO.

 Table 4: Exports of Services of ECO Countries within Period 1994-2015 (Mln US\$)

Years	Afghanistan	Azerbaijan	Iran	Kazakhstan	Kyrgyz	Pakistan	Tajikistan	Turkey	Turkmenistan	Uzbekistan
1994			774			2513		16060		141
1995			798			2589		18763		167
1996		124	812			2642		20752		214
1997		164	894			2736		21874		259
1998		198	981			2775		22543		288
1999		199	1267			3145		18760	95	379
2000		425	1919		74	2322		29641	377	361
2001		409	1677		98	2006		36455		310
2002		318	1609		96	1926		24799		308
2003		393	2974	1490	112	2130		39071		447
2004		440	4533	1728	146	2382		25603		463
2005		530	6699	2100	267	5198	105	18717		475
2006		758	9356	2503	282	6821	154	22277		536
2007		888	4752	2852	361	5790	248	29481		573
2008		1370	5413	3166	487	8275	303	32874		660
2009		1694	6213	3783	661	7683	252	31810		773
2010		2100	7558	5104	1056	8545	293	35663		962
2011		2520	8743	6656	1331	9755	403	44370		1196
2012	4603	3013	8401	6329	1365	8976	359	41390		1036
2013	7667	3518	11105	6094	1162	16253	801	42568		1328
2014		3903	8817	6531	1684	11142	1190	47755		1773
2015		6162		6921	1726	16189	1458	52455		2152

Source: World Trade Organization

Table 4 presents data of export of services by ECO countries. The clear leader of export of services in the ECO bloc is Turkey with having total export of services worth USD 673.68 billion from 1994-2015. Pakistan being distant second exported services worth USD 131.79 billion during this period. Turkmenistan exported services worth only USD 0.47 billion and lies at the bottom. While Tajikistan being the second last exported services worth USD 5.57 billion.

**Table 5:** Rank of ECO Countries in World Trade of Commercial Services

Country	Exports	Imports
Afghanistan	158	130
Azerbaijan	79	67
Iran	57	47
Kazakhstan	71	55
Kyrgyz	131	138
Pakistan	83	66
Tajikistan	162	166
Turkey	29	39
Turkmenistan	86	90
Uzbekistan	102	147

Source: World Trade Organization

Table 5 shows the global ranks of ECO countries in exports and imports. It shows ECO countries are not major contributors to the global services trade. Only Turkey finds a place in the top fifty world's exporters and importers while Iran finds its place in the top fifty world importers of services only. Four out of ten ECO countries don't fall in even top hundred countries with Tajikistan being at 162 and 166 ranks in exports and imports! These results show that most of the ECO countries are not global players when it comes to trade-in services.

## 4.2 Services Exports of ECO Countries: Revealed Comparative Advantage

This subsection presents results on the RCA of Pakistan concerning ECO countries as suggested by Balassa's index. Table 6 presents these results.

**Table 6:** Revealed Comparative Advantage Index of Pakistan for Different Services (1994-2015)

Service Code	Afghanistan	Azerbaijan	Iran	Kazakhstan	Kyrgyz	Tajikistan	Turkey	Turkmenistan	Uzbekistan
01	3.86	1.02	1.59	0.58	1.82	0.85	1.56	0.58	-
02	3.11	0.16	0.57	0.19	0.12	5.67	0.10	0.52	-
06	0.01	0.10	0.07	1.09	0.14	0.12	0.17	-	-
07	1.13	1.80	19.84	2.03	2.74	0.43	5.27	-	-
10	6.49	11.48	12.24	15.50	12.83	44.32	119.09	-	-
13	0.10	15.18	4.59	0.97	1.61	0.09	0.87	-	-
14	31.92	33.67	12.35	419.36	0.33	1.31	0.00	-	-
15	0.25	0.58	10.59	1.17	0.68	0.44	4.00	-	-
16	0.58	1.99	3.78	0.64	2.25	42.08	0.61	-	-
18	0.13	0.10	0.12	2.32	0.01	-	0.01	-	-
21	14.69	8.15	8.85	4.49	12.06	3.19	33.06	-	-

Notes: 01- Transport, 02- Travel, 06- Construction, 07- Communication, 10- Computer and Information, 13- Financial Services, 14- Royalties and License Fees, 15- Other Business Services, 16- Insurance, 18- Personal, Cultural and Recreational Services, 21- Government Services.

## 4.2.1 Pakistan Vs Afghanistan

Compared to Afghanistan, Pakistan has the highest RCA in royalties and license fees, and government services. Balassa's index value for these services is as high as 31.92 and 14.69 respectively. A value greater than 1 of Balassa's index shows an RCA for the country. Such a high value of index shows that royalties and license fees are almost 32 times more important to the exports of Pakistan than to the exports of

Afghanistan and government services are about 15 times more important to the exports of Pakistan than of Afghanistan's. For computer and information, transport and travel also, Pakistan has RCA with index values 6.49, 3.86, and 3.11 respectively. As for as communication is concerned Balassa's index value being close to one suggests that this service is of equal importance to both Pakistan's and Afghanistan's export sectors and no one has a clear RCA. For the other five types of services namely construction, insurance, financial services, other business services, and personal, cultural, and recreational services; Afghanistan has RCA. With the highest RCA being in construction services where Balassa's index value is as low as 0.01. It means the export of construction services is 100 times more important to Afghanistan's exports than to Pakistan's. Financial services are 10 times more important to Afghanistan's exports than to Pakistan's.

# 4.2.2 Pakistan Vs Azerbaijan

Compared to Azerbaijan, Pakistan has the highest RCA in royalties and license fees, financial services, and computer and information. Balassa's index values for these services are 33.67, 15.18, and 11.48. For government services too, Pakistan has RCA and specialization. For insurance and communication, Pakistan has a slight comparative advantage. And transport services are almost of equal importance to the exports of both countries as Balassa's index value is close to 1. For the other four types of services namely other business services, travel, personal cultural and recreational services, and construction services, Azerbaijan has RCA. With having highest RCA in personal cultural and recreational services and construction services. These two services are ten times more important to Azerbaijan's exports sector than to Pakistan's.

#### 4.2.3 Pakistan Vs Iran

Compared to Iran, Pakistan has RCA in eight out of eleven services studied namely transport, communication, government services, insurance, financial services, computer and information, royalties and license fees, and other business services. Pakistan has the highest RCA in communication services having with having Balassa's index value of 19.84. Pakistan has also very high RCA in royalties and license fees and computer and information. Both being almost 12 times more important to the exports sector of Pakistan than to Iran's. Iran has RCA in travel, construction, and personal, cultural, and recreational services. With having the highest RCA in construction.

## 4.2.4 Pakistan Vs Kazakhstan

Compared to Kazakhstan, Pakistan has RCA in six out of eleven services namely royalties and license fee, computer and information, government services, personal, cultural, and recreational services, communication, and other business services. Pakistan has the highest RCA in royalties and license fees with Balassa's index value 419.36. This shows phenomenal RCA for Pakistan in royalties and license fees. Construction and financial services are of almost equal importance to both Pakistan and Kazakhstan's exports as Balassa's index value is close to 1. Kazakhstan has RCA in transport, travel, and insurance services. And Kazakhstan has the highest RCA in travel with Balassa's index value 0.19. It shows travel services are almost five times more important to Kazakhstan's exports than to Pakistan's.

## 4.2.5 Pakistan Vs Kyrgyzstan

Compared to Kyrgyzstan, Pakistan has RCA in the export of six services namely: transport, communication, insurance, financial services, computer and information, cultural and recreational services, and government services. Pakistan has the highest RCA in computer and information. This service is almost thirteen times (Balassa's index value equals 12.83) more important to the export of Pakistan than Kyrgyzstan. Export of government services is also very important to Pakistan compared to Kyrgyzstan. In five services; travel, construction, royalties and license fees, other business services, and personal cultural and recreational services, Kyrgyzstan has RCA as suggested by Balassa's index. Kyrgyzstan has the highest RCA in personal, cultural, and recreational services. These services are a hundred times more important to Kyrgyzstan's exports than to Pakistan's.

# 4.2.6 Pakistan Vs Tajikistan

Both Pakistan and Tajikistan have RCA in five services each while Balassa's index for personal, cultural, and recreational services could not be calculated due to the non-availability of data. Pakistan has RCA in travel, insurance, computer and information, royalties and license fees, and government services. Pakistan has the highest RCA in computer and information. She has also a high RCA in insurance. On the other hand, Tajikistan has RCA in transport, communication, construction, financial services, other business services, and personal, cultural, and recreational services. From which Tajikistan has the highest RCA in financial services with Balassa's index value 0.09.

## 4.2.7 Pakistan Vs Turkey

Compared to Turkey, Pakistan has RCA in five services while Turkey has RCA in the export of six services. Pakistan has RCA in transport, communication, computer and information, other business services, and government services. She has the highest RCA in computer and information services with Balassa's index value 119.09. In government services to Pakistan has a very high RCA compared to Turkey. Turkey has RCA in travel, construction, insurance, financial services, royalties and license fees, personal, cultural, and recreational services. She has the highest RCA in royalties and license fees. She also has very high RCA in personal, cultural, and recreational services.

## 4.2.8 Pakistan Vs Turkmenistan

Compared to Turkmenistan, the availability of data permitted to calculate Balassa's index for only two services; transport and travel. In both of these two services, Turkmenistan has RCA and she can do specialization in it.

## 5. CONCLUSION AND RECOMMENDATIONS

This study was intended to explore the growth, performance and revealed the comparative advantage (RCA) of services exports of Pakistan concerning ECO countries. The growth and performance of services exports of ECO countries are studied with the use of descriptive statistics while the RCA of Pakistan regarding other ECO countries is analyzed by constructing a well-known Balassa index. Results of the study show that with the passage of time composition of exports of services in ECO countries has shifted from traditional services to non-traditional services particularly due to advancement in technology. And Pakistan has emerged as one of the largest exporters of the services among the ECO countries. Its volume of services trade and exports has risen consistently over the study period.

The study found that ECO countries vary significantly in their ranks in commercial services in world trade. It shows the diverse nature of economies as the difference in the ranks ranges between 29 to 162 for Turkey and Tajikistan respectively. RCA index of Pakistan concerning ECO countries provides a clear view that Pakistan has managed to maintain and develop exports of royalties and license fees services and computer and information services over the years. Pakistan has particularly huge potential to exploit its RCA in computer and information services as it has one of the highest percentages of young population.

Thus, the present study recommends Pakistan should spend on the education and training of its youth to enhance its human capital. Due to the limited time and scope of the study, we have focused on the services sector but this analysis can be expanded to the other sectors of the economy to have a complete insight into the comparative advantages for the Pakistan economy.

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