ECO-PIDE Study on Trading Patterns in the ECO Region

ECO-PIDE STUDY ON TRADING PATTERNS IN THE ECO REGION

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EXECUTIVE SUMMARY

At a time when the world trading system is rapidly moving towards regionalism, the region comprising 10 members of the 'Economic Cooperation Organization' (ECO)-Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan-remains one of the least integrated in the world, with weak intra-regional trade and investment linkages. Though the volume of bilateral trade remains small, and in some instances trade complementarity is low, there exists potential for strengthening intra-regional trade across a wide range of commodities. This study shows that trade in the ECO region can increase by a factor of eight as a result of a potential free trade agreement among the ECO member countries.

Based on an in-depth analysis of the regional trading patterns, this study argues that there is a strong case for promoting regional economic integration in the ECO region. First, regional economic integration through liberal trade policies can result in trade creation among the member countries entailing several benefits including lower prices, more product variety and quality, and improved incentives for innovation. The benefits of regional economic integration can go far beyond trade creation. For example, a greater level of economic integration can be instrumental in locking-in and institutionalizing trade policy reforms allowing the countries to enhance their policy credibility. Also, increased economic ties in the region may create stake-holding in the domestic economies, reduce the risk of conflict, and thus enhance regional security.

The study shows that not only is there potential for trade in goods, there exists a significant potential for trade in services as well. The services trade in the ECO member countries is of intra-industry variety signifying that intra-regional trade can be strengthened in all segments of the services sector. On the demand side, a majority of the ECO countries are in transition and have a great demand for construction, telecommunications, and financial services. On the supply side, both Turkey and Pakistan can be important suppliers of a wide variety of services including information and communications technology, construction, and business and financial services. Turkey has a very well developed capacity in construction and its world class construction companies have won contracts around the globe. The developing countries of the ECO region such as Afghanistan, Tajikistan, Turkmenistan, and Kyrgyzstan can benefit from Turkey's expertise in construction services. Turkey can also be an important supplier of business and financial services in the ECO region.

The study argues that a greater level of economic integration in the ECO region will be instrumental in promoting FDI in the ECO region. The ECO region is a combined market of 417 million inhabitants with average per capita GDP of US$3578. The region also offers diversity in terms of their production structures, and demand patterns. Whereas these are important attributes for foreign investors, the individual member countries must also take steps to put in place an environment that can enhance the profitability of foreign investors. In particular, to attract FDI the host countries need to provide a business-friendly environment, promote industrial diversification, upgrade physical infrastructure, promote special economic zones, and take effective steps for human resource development.

Energy has emerged as one of the most critical issues all over the world. It is particularly important for the ECO region where some countries are endowed with abundant energy resources whereas others are energy deficient which signifies the potential for cross-border energy cooperation. Regional cooperation in energy will open up new avenues for economic development of the ECO member countries. It will lead to a more effective utilization of natural resources in the region while at the same time helping the energy deficient

countries to improve their energy supplies. Regional energy cooperation will also help achieve large scale transformation in the energy sectors thus contributing to economic growth.

Regional cooperation in ECO can contribute significantly to the development of financial sectors in the ECO member countries. The less-developed countries can learn from the experiences of Turkey and Pakistan in financial sector development. Similarly, the individual countries can benefit from the financial institutions of the ECO members. There are some instances of cross-border presence of the financial institutions in the ECO region. For example, major commercial banks in Kazakhstan expanded their operations to neighboring countries in recent years. Also, Turkish banks have a presence in other ECO member states. There is a great scope for enhancing intra-regional provision of financial services. Such cooperation will not only improve access to financial services and instruments but will also facilitate intra-regional trade in the ECO region. The ECO Trade and Development Bank can play an important role in the development of the financial sector. The Bank needs to expand its operations in terms of medium and long-term financing facilitates for both public and private sectors. The bank can also play an important role in promoting intra-regional trade through provision of trade finance facilities to the ECO member states.

The study spells out several policy recommendations to boost trade and investment ties in the region. To begin with, the potential for greater intra-regional trade cannot be realized unless supportive measures are adopted to put in place trade regimes that are open and responsive to the needs of intra-regional trade. First and foremost, there is a need to further liberalize trade through reduction in tariff and non-tariff barriers. Whereas many countries have already carried out trade policy reforms to liberalize their trade regimes, some ECO members continue to impose high tariffs and non-tariff barriers. Besides a liberal tariff regime, there is a need to improve trade facilitation mechanisms in many ECO member countries especially Uzbekistan, Tajikistan, Turkmenistan, and Kyrgyzstan. It is generally believed that doing business in these countries is difficult because of the cumbersome and complex bureaucratic requirements imposed on international trade transactions as well as inefficient trade and transport infrastructure. Trade facilitation is universally accepted as a means of improving the efficiency of international trade and economic development. Trade facilitation is an issue that is linked to a number of critical areas with far reaching implications for competitiveness and economic efficiency. Despite efforts to streamline the customs procedures, the clearance of consignments remains a problem due to weaknesses in customs administration and cumbersome regulatory procedures.

Another initiative that can help boost intra-regional trade is monetary cooperation. Many ECO members often face foreign exchange constraints especially in the wake of external economic shocks. Lack of adequate foreign exchange reserves can hinder all international transactions including intra-regional trade and investment. In this context, monetary cooperation among the ECO members can be instrumental in enhancing intra-regional trade. For example, membership in the Asian Clearing Union (ACU) can help strengthen intra-regional trade by circumventing the need for hard currency. Pakistan and Iran are already members of the ACU and trade ties can be strengthened if other ECO countries also acquire the ACU membership.

There is a need to facilitate business to business contacts in the ECO region. The importance of advisory services, market intelligence, and export promotion in helping private businesses to sell their products in international markets cannot be overemphasized. The governments can help in international trade fairs, and overseas market visits to provide exposure to regional markets.

The ECO member countries need to put in place effective mechanisms to promote a broader level of economic and technological cooperation in the ECO region. First, the member countries need to open up cross-border movement of technical personnel in the region. Policies in this area may include temporary work permits to technical persons, exchange visas, and business visas. Second, the member countries need to facilitate their enterprises who wish to engage in cross-border service provision under Mode-3 of GATS. This will ensure that the regional companies are able to secure construction and infrastructure projects in the ECO member countries. Third, the member countries need to devise mechanisms to facilitate mutual sharing of their experiences especially in technological fields. For example, Pakistan has the knowledge and capacity in agricultural research and extension services. The experience and knowledge of Pakistan can be instrumental in helping other ECO member countries to replicate best practice models in agricultural research and extension. Fourth, there is a need for individual member countries to develop a network of their universities that can help collaborative research and development activities to the mutual benefit of the member countries.

At the regional level, the ECO Secretariat can play an important role in strengthening economic and technological cooperation in the ECO region. The Secretariat can play host to a joint commission on economic and technological cooperation in the ECO region. The commission may serve as an umbrella to oversee all initiatives of technological cooperation in the ECO region. These measures will help realize the full potential of economic and technological cooperation in the ECO region.

Chapter 1

INTRODUCTION

Recent decades have witnessed a growing interest in regional economic integration not least because the process of multilateral trade liberalization has not moved forward and negotiations under the Doha Round have stalled for quite some time. According to WTO, some 474 Regional Trade Agreements (RTA's) have been notified to the WTO and about 283 were in force as of July 2010. At a time when the world trading system is rapidly moving towards regionalism, the ECO region comprising 10 countries-Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan-remains one of the least integrated regions in the world with low volumes of intra-regional trade and investment. The ECO is a diverse region that is endowed with enormous natural resources with a variety of production structures. There is thus significant potential for the region to become more integrated through greater intra-regional trade and investment flows.

There is a strong case for promoting regional economic integration in the ECO region. First, regional economic integration through liberal trade policies can result in trade creation among the member countries spurring competition in the domestic economies. Enhanced competition results in lower prices for consumers, more product variety and quality, and increased incentives for innovation. By promoting a more efficient allocation of resources, import competition increases productivity, living standards, and long-run growth of the economy. Empirical research has shown that the welfare consequences of trade liberalization through regional trading arrangements generally tend to be positive. Second, regional integration schemes are viewed as a way for nations to lock in and institutionalize trade policy reforms.[1] The improved policy credibility may also encourage both domestic and foreign investment by reassuring investors that policy will not be reversed in the future.[2] Third, regional economic integration may act as a stepping stone to multilateral trade liberalization by providing an opportunity to experiment trade liberalization on a limited scale. Fourth, increased economic ties in the region may create stake-holding in the domestic economies, reduce the risk of conflict, and thus enhance regional security.[3] Finally, it needs to be emphasized that ECO countries can provide easier access to each others' markets because of geographical proximity, and shared economic, social and cultural characteristics; and this makes it all the more imperative for them to foster regional economic cooperation.

This study explores the prospects of enhanced regional economic cooperation in the ECO region through greater trade and investment linkages. The study is organized as follows. Chapter 2 provides a macroeconomic overview of the ECO countries. Chapter 3 contains an analysis of bilateral trade flows in the ECO in terms of revealed comparative advantage indices, trade complementarity indices and the gravity model. Chapter 4 deals with trade in services whereas Chapter 5 covers mutual investment. Chapter 6 looks at financial regulatory issues. Chapter 7 spells out avenues for economic and technological cooperation in the ECO region and Chapter 8 offers summary and conclusions.

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[1] Fukase and Winters (1999) argue that regional trade agreements can help in strengthening the members' commitment to reform and thus enhance their external credibility.

[2] Foreign investment may also be encouraged due to increased market size within an RTA.

[3] Schiff and Winters (1998) maintain that increased trade among members of an RTA can build mutual trust and thereby strengthen friendly ties among trading nations.

Chapter 2

MACROECONOMIC OVERVIEW OF ECO COUNTRIES

The ECO region with average per capita GDP of $3578 and a combined population of 417 million is well endowed with natural resources like oil and gas, gold, uranium, and iron. The member countries have diverse production structures with Turkey, Iran and Pakistan having strong manufacturing and services sectors and the Central Asia Republics transforming from centrally planned economies to market based systems. Turkey is the most advanced country in the region while Tajikistan is the poorest country.

Table 2.1: Population and Gross Domestic Product

	POPULATION (Percent of Region)			GDP (Percent of Region)			PER CAPITA INCOME (US $)		
Country Name	1991	2000	2009	1991	2000	2009	1991	2000	2009
Afghanistan	6.2*	6.7	7.1			1.9**	..	..	486**
Azerbaijan	2.4	2.3	2.1	2.4	1.1	2.7	1223	655	2303
Iran	18.4	18.0	17.5	21.2	20.9	21.5	1432	1584	2168
Kazakhstan	5.5	4.2	3.8	6.3	3.8	5.1	1425	1229	2376
Kyrgyzstan	1.5	1.4	1.3	0.5	0.3	0.3	422	279	385
Pakistan	36.9	38.9	40.7	14.1	15.3	15.1	477	536	657
Tajikistan	1.8	1.7	1.7	0.6	0.2	0.2	387	139	249
Turkey	19.0	18.7	17.9	50.3	55.0	48.5	3293	4011	4778
Turkmenistan	1.3	1.3	1.2	1.0	0.6	1.3	965	645	1827
Uzbekistan	7.0	6.9	6.7	3.7	2.8	3.4	667	558	893

Source: World Development Indicators (http://databank.worldbank.org)
* Figure for 1990, **http://www.economywatch.com/economic-statistics/country/Afghanistan/
Note: GDP and Per Capita Income are based on Constant US $ 2000.

The ECO region is dominated by three countries namely Turkey, Pakistan and Iran both in terms of population as well as economic size. Pakistan is the largest country accounting for more than 40 percent of the region's population, followed by Turkey (17.9 percent), and Iran (17.5 percent) (Table 2.1). In terms of the level of income, Turkey is the regional leader accounting for 48.5 percent of the regional GDP, followed by Iran (21.5 percent), and Pakistan (15.1 percent). Turkey has the highest per capita GDP in the region, followed by Kazakhstan, Iran, Azerbaijan, Turkmenistan, Uzbekistan, Pakistan, Kyrgyzstan, Afghanistan, and Tajikistan.

The regional countries have diverse production structures. In Azerbaijan and Turkmenistan, Iran, and Kazakhstan, the share of industrial sector in GDP is respectively 60 percent, 53.5 percent, 44.5 percent, and 40.3 percent reflecting the dominance of energy related industries. The industrial sector in other countries also has a significance presence: the share of industrial sector in national income ranges from 19.3 percent in Kyrgyzstan to 33.2 percent in Uzbekistan.

Despite significant structural changes with falling share of agriculture over time, the agriculture sector continues to play in important role in some ECO countries, especially Afghanistan, Kyrgyzstan, Tajikistan, Pakistan, and Uzbekistan where the share of agriculture in GDP is 32.5 percent, 29.2 percent, 22.4 percent, 21.6 percent and 19.5 percent. The role of agriculture in other economies including Azerbaijan, Iran, Kazakhstan, Turkey and Turkmenistan is rather limited with agriculture's share in GDP at less than 10 percent.

Though the commodity-producing sectors account for a sizable share in national economies, it is the services sector that plays a dominant role in these economies with Turkey having the highest share of services in its economy (64.9 percent), and Azerbaijan the lowest (31.8 percent).

Table 2.2: Sectoral Composition of National Income

(% of GDP)

Country Name	AGRICULTURE			INDUSTRY			SERVICES		
	1991	2000	2009	1991	2000	2009	1991	2000	2009
Afghanistan	..	..	32.5	..	..	22.1	..	..	45.4
Azerbaijan	32.3	17.1	8.2	31.4	45.3	60	36.3	37.5	31.8
Iran	18.5	13.7	10.2**	28.7	36.7	44.5**	52.7	49.5	45.3**
Kazakhstan	26.7*	8.7	6.4	44.6*	40.5	40.3	28.7*	50.8	53.3
Kyrgyzstan	37.0	36.7	29.2^	35.5	31.4	19.3^	27.6	31.9	51.5^
Pakistan	25.8	25.9	21.6	25.4	23.3	24.3	48.8	50.7	54.2
Tajikistan	36.6	27.4	22.4	36.9	38.9	23.7	26.4	33.7	53.9
Turkey	15.8	11.3	9.3	32.7	31.5	25.8	51.5	57.2	64.9
Turkmenistan	32.3	24.4	12.3	31	44.4	53.5	36.7	31.2	34.2
Uzbekistan	37.0	34.4	19.5	36.6	23.1	33.2	26.5	42.5	47.3

Source: World Development Indicators (http://databank.worldbank.org); * value for 1992; ** value for 2007; ^ value for 2008.

Before the onset of the financial crisis, the industrial sectors in most of the ECO countries exhibited robust growth. In 2007, the industrial sector showed a stellar performance in Azerbaijan and Turkmenistan with industrial output growing respectively at 32.8 percent and 25.9 percent. The industrial sector in other economies also posted strong growth with industrial growth ranging from 12.5 percent in Kyrgyzstan to 5.8 percent in Turkey. Industrial growth in most ECO countries slowed sharply after the financial crisis, and most of the economies are still in recovery phase.

Table 2.3: Growth Performance of Industrial Sector

(% per annum)

Country	1981-1990	1991-2000	2002	2003	2004	2005	2007	2008	2009
Afghanistan	..	..	..	6.1	32.1	23.9	-2.7	5.7	19.1
Azerbaijan	..	-4.2	14.8	12.5	11.6	43.4	32.8	10.0	2.5
Iran	6.9	4.0	9.5	9.6	6.5	4.7	7.9	..	..
Kazakhstan	..	-6.2	12.0	9.2	11.3	10.7	8.5	1.9	0.4
Kyrgyzstan	6.5	-7.9	-9.0	12.7	3.0	-9.8	12.5	7.6	..
Pakistan	7.8	4.2	2.7	4.2	16.3	12.1	8.8	1.4	-1.9
Tajikistan	4.9	-8.7	8.4	9.9	15.1	10.4	6.0	6.0	8.7
Turkey	7.2	4.4	4.6	7.8	11.8	8.7	5.8	-1.3	-8.4
Turkmenistan	..	-0.1	13.2	16.2	25.8	21.8	25.9	134.2	25.0
Uzbekistan	6.7	-2.7	3.4	3.2	5.0	5.0	6.6	6.8	4.1

Source: World Development Indicators (http://databank.worldbank.org) .

While the manufacturing sector has expanded in almost all the ECO countries, the sector is not too much diversified in most of the economies. Except for Turkey, and to some extent Pakistan and Iran the manufacturing sector in other economies is dominated by energy and food industries. Turkey is classified as a developed country of the region having comparative advantage in the industries of mine-metal and chemical, automotive, electrical and electronics, textile and clothing and in agriculture. On the other hand, Pakistan has significant textiles and light engineering sectors that play an important role in country's exports. The diverse production structures in these economies essentially reflect different levels of technological advancement, which in turn can be an important basis for enhancing trade links among the ECO countries.

In terms of the overall growth performance, the ECO economies show a mixed trend. The Afghan economy has obviously suffered because of political instability with growth slowing down from 14.3 percent in 2003 to 2.3 percent in 2008. Though

economic growth in Azerbaijan slowed down in 2008, the economy performed quite strongly with economic growth as high as 34.5 percent in 2006. Economic growth in Iran reached 7.8 percent in 2007 before slowing sharply to 2.3 percent in 2008 and 1.8 percent in 2009 not least because of international sanctions. Economic growth in Kazakhstan remained robust until 2007 when the economy grew on average at 10 percent. However, the economy lost the growth momentum in 2008 and 2009 on the back of a slowing world economy. Pakistan's economy also grew strongly at about 6 percent per annum until 2007 but thereafter economic growth fell sharply due to the global financial crisis as well as hike in global fuel and food prices. A similar picture is observed in Turkey where economic growth slowed sharply in 2008 to only 0.7 percent from 4.7 percent in 2007. In 2009, the economy experienced a sharp contraction in output with growth at negative 4.7 percent. Turkmenistan and Uzbekistan showed resilience as growth remained strong in these economies because of their limited exposure to the global financial turmoil.

Table 2.4: GDP Growth Rate in ECO Region

Country/Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan	--	--	--	14.3	9.4	14.5	11.2	16.2	2.3	
Azerbaijan	11.1	9.9	10.6	11.2	10.2	26.4	34.5	25.0	10.8	9.3
Iran	5.1	3.7	7.5	7.1	5.1	4.6	5.9	7.8	2.3	1.8
Kazakhstan	9.8	13.5	9.8	9.3	9.6	9.7	10.7	8.9	3.3	1.2
Kyrgyzstan	5.4	5.3	0.0	7.0	7.0	-0.2	3.1	8.5	8.4	2.3
Pakistan	4.3	2.0	3.2	4.8	7.4	7.7	6.2	5.7	2.0	3.7
Tajikistan	8.3	10.2	9.1	10.2	10.6	6.7	7.0	7.8	7.9	3.4
Turkey	6.8	-5.7	6.2	5.3	9.4	8.4	6.9	4.7	0.7	-4.7
Turkmenistan	18.6	20.4	15.8	17.1	17.2	13.0	11.4	11.8	10.5	8.0
Uzbekistan	3.8	4.2	4.0	4.2	7.7	7.0	7.3	9.5	9.0	8.1

Source: World Development Indicators, http://databank.worldbank.org

In terms of international trade, the region is dominated by Turkey, Iran and Pakistan. In 2009, Turkey accounted for 45.9 percent of total regional imports and 39.9 percent of total regional exports, whereas the share of Iran in total regional imports and exports stood respectively at 18.8 percent and 25.7 percent. The share of Pakistan in total regional imports and exports respectively was 10.1 percent and 5.8 percent in 2009.

Table 2.5: Country Share in Regional Aggregates: 1991, 2000 and 2009

	IMPORTS			EXPORTS			GDP		
Country Name	1991	2000	2009	1991	2000	2009	1991	2000	2009
Afghanistan	--	2.4^	1.7^^	--	1.2^	0.5^^	--	0.5^	0.9^^
Azerbaijan	4.8	1.8	3.3	5.3	1.9	6.3	2.8	1.1	3.2
Iran	15.7*	16.0	18.8#	21.8*	21.3	25.7#	19.2*	20.8	24.7#
Kazakhstan	24.7**	8.1	11.9	24.4**	9.6	13.5	8.0**	3.8	8.6
Kyrgyzstan	1.2	0.6	1.1	1.2	0.5	0.6	0.8	0.3	0.3
Pakistan	11.1	9.8	10.1	10.2	9.2	5.8	14.6	15.2	12.1
Tajikistan	1.1	0.8	0.9	1.1	0.8	0.2	0.8	0.2	0.4
Turkey	33.1	55.7	45.9	27.7	49.7	39.9	48.4	54.8	45.9
Turkmenistan	1.1	2.1	2.8	1.6	2.6	4.2	1.0	0.6	1.5
Uzbekistan	7.1	2.7	3.6	6.5	3.1	3.3	4.4	2.8	2.4

SOURCE: World Development Indicators (http://databank.worldbank.org)
* value for 1992; ** value for 1993; ^ value for 2002; ^^ value for 2008; and # value for 2007.

Macroeconomic stability is essential for sustained economic growth. Whereas some countries have generally maintained macroeconomic stability in recent years as indicated by a

low rate of inflation, others have struggled with persistently high rates of inflation due to lax macroeconomic management. For example, in 2009, the rate of inflation in Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, and Turkey remained in single digits whereas other countries have witnessed high rates of inflation ranging from 13.5 percent in Iran to 20.8 percent in Uzbekistan.

Table 2.6: Inflation (CPI)

Country/Year	2004	2005	2006	2007	2008	2009
Afghanistan		12.1	3.5	17.0	22.7	-13.2
Azerbaijan	6.8	11.6	8.3	16.7	20.8	1.4
Iran	14.8	13.4	11.9	17.2	25.5	13.5
Kazakhstan	6.9	7.6	8.6	10.8	17.2	7.3
Kyrgyz Republic	4.1	4.4	5.6	10.2	24.5	6.9
Pakistan	7.4	9.1	7.9	7.6	20.3	13.6
Tajikistan	7.1	7.1	10.0	13.1	20.5	6.4
Turkey	10.6	10.1	10.5	8.8	10.4	6.3
Turkmenistan*	6.0	7.1	11.8	8.5	46.4	20.5
Uzbekistan*	15.6	21.4	21.5	24.0	19.9	20.8

Source: World Development Indicators, http://databank.worldbank.org
Note: * GDP deflator values.

All the ECO countries are open to foreign direct investment (FDI). In 2009, Kazakhstan was the largest recipient of FDI relative to GDP with such inflows amounting to 11.54 percent of GDP, followed by Turkmenistan (6.79 percent), Kyrgyzstan (4.14 percent), Uzbekistan (2.29 percent), and Pakistan (1.43 percent). The major sectors where FDI has been concentrated include oil and gas sectors, textiles, and construction.

Table 2.7: FDI as percent of GDP

Country Name	2004	2005	2006	2007	2008	2009
Afghanistan	3.28	3.98	2.91	2.39	2.82	
Azerbaijan	40.97	12.68	-2.78	-14.37	0.03	1.10
Iran, Islamic Rep.	1.75	1.63	0.74	0.58	0.48	0.91
Kazakhstan	9.63	3.45	7.75	10.60	11.83	11.54
Kyrgyz Republic	7.93	1.73	6.42	5.47	7.33	4.14
Pakistan	1.14	2.01	3.35	3.90	3.29	1.43
Tajikistan	13.10	2.36	12.05	9.70	7.32	0.32
Turkmenistan	5.17	5.16	7.11	6.35	4.82	6.79
Uzbekistan	1.47	1.34	1.02	3.16	2.55	2.29

Source: World Development Indicators, http://databank.worldbank.org

The significance of international trade in domestic economies varies greatly across the ECO member countries. For example, merchandize trade accounts for 98 percent of GDP in Kyrgyzstan, followed by Tajikistan (72 percent), Kazakhstan (66 percent), Azerbaijan (65 percent), Uzbekistan (53 percent), Turkey (39 percent), Iran (39 percent), and Pakistan (30 percent). It is clear that the importance of trade in domestic economies is roughly inversely proportional to the size of the country except for Kazakhstan.

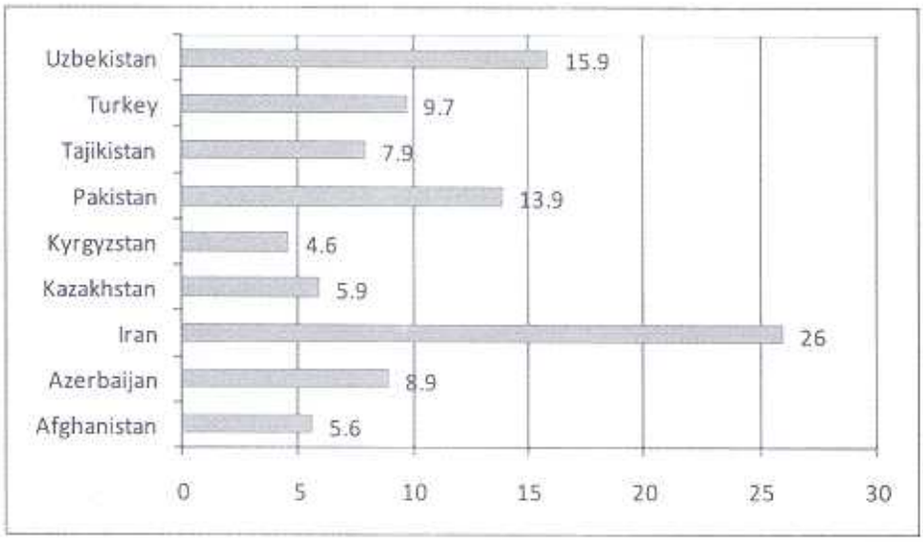
Table 2.8: Merchandise Trade as Percent of GDP

Country/Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan	...	72	59	47	44	42	37	33	35	...
Azerbaijan	55	56	61	72	82	91	87	83	82	65
Iran	42	37	39	43	45	50	53	47	51	39
Kazakhstan	76	68	66	69	76	79	76	77	82	66
Kyrgyzstan	77	62	67	68	75	72	89	93	111	98
Pakistan	27	27	29	30	32	38	37	35	38	30
Tajikistan	170	124	119	108	101	97	111	106	91	72
Turkey	31	37	38	38	41	39	42	43	46	39
Turkmenistan	148	140	111	103	105	97	95	92	105	67
Uzbekistan	40	48	51	58	64	59	59	58	62	53

Source: World Development Indicators, http://databank.worldbank.org

Almost all the countries in the region have introduced trade policy reforms in recent years to enhance their growth prospects. Three countries of the region - namely Turkey, Pakistan, and Kyrgyzstan - are members of the WTO, whereas the other countries have observer status in WTO. The WTO member countries have reformed their trade policy regimes in line with the WTO requirements with low tariff and non-tariff barriers.

Figure 2.1: Simple Mean MFN Applied Tariff (All Products): 2009



For some ECO countries, especially the non-members of the WTO, the low tariff rates mask the actual restrictiveness of their trade regimes due mainly to imposition of non-tariff barriers. For example, goods imported into these countries must comply with a host of standards and certification requirements. Technical standards are mostly outdated, and the system of testing is weak and fragmented. Poor institutional capacity of the agencies responsible for testing and issuing certificates of conformity often contributes to delays in the completion of certification requirements. Presently, all the countries are striving to bring their technical standards and certification requirements in line with internationally accepted norms under the WTO.

Also, for some non-member countries of the WTO, customs and inspection procedures at the borders are complicated and vague, leaving room for arbitrary interpretation and

enforcement. Transporters often have insufficient knowledge of the customs rules and procedures, not least because of frequent changes in the procedural requirements at the borders. Furthermore, differences in the permissible technical characteristics of vehicles (total weight, axle load, and vehicle dimension) often lead to cumbersome physical inspections of the vehicles, contributing to delays in the clearance of the goods. Due to unpredictable transit times, producers have to keep their stocks in excess of the optimal size required for the production process. Another major concern is the delay in repayment of guarantees and deposits for goods in transit.

Chapter 3

BILATERAL TRADE ANALYSIS

The success of regional integration schemes hinges on a number of factors, prominent among them being the pattern of comparative advantage and the extent of trade complementarity within a regional trading bloc. More specifically, regional integration schemes are likely to promote intra-regional trade in situations where members have comparative advantage in diverse products and exhibit strong trade complementarities. On the other hand, prospects of regional trade expansion are likely to be limited for countries whose production and trade structures are characterized by identical pattern of comparative advantage and low trade complementarities.[4]

This chapter undertakes a detailed analysis of the pattern of comparative advantage and the extent of trade complementarity in the ECO region, with a view to identifying the potential of intra-regional trade in the short to medium term. We compute three types of indices namely the revealed comparative advantage (RCA) index, trade complementarity index, and trade specialization index to measure the product complementarities, export efficiencies and diversification in the trade profile of the regional members.

3.1. Revealed Comparative Advantage Analysis

This section aims to examine the ECO region's relative competitiveness and compare the pattern of specialization in trade. The analysis has been undertaken at both the industry and product level. For the industry level, the revealed comparative advantage index has been computed for all ECO countries in all the 97 sectors of the Harmonized System 1996 classification for the year 2003 to 2008. The profile of industry-wise revealed comparative advantage provides a broader picture of the trade structure. However there is possibility that the pattern of comparative advantage may differ across the different levels of aggregation at the product level. Therefore this study has analyzed the export performance of the industries at product level i.e. at 4-digit and 6-digit level of HS classification.

The RCA index is defined as the ratio of two shares. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports. [5]

$$RCA = \frac{\sum_d x_{isd} / \sum_d X_{sd}}{\sum_{wd} x_{iwd} / \sum_d X_{wd}}$$

Where s is the country of interest, d and w are the set of all countries in the world, i is the sector of interest, x is the commodity export flow and X is the total export flow. The

[4] Obviously if trade is opened up, there are possibilities of changes in comparative advantage and a large number of products not traded now would become a part of trade.

[5] *"Trade statistics in policymaking"* A handbook published by UNESCAP.

numerator is the share of good i in the exports of the country s, while the denominator is the share of good i in the exports of the world.

RCA takes a value between zero and positive infinity. A country is said to have a revealed comparative advantage if the value exceeds unity. A country therefore has a revealed comparative advantage only in those products for which its market share of world exports is above its average share of world exports. Data for measuring RCA are collected from World Bank and UN COMTRADE.

The revealed comparative advantage indices can be computed at various levels of commodity aggregation according to the harmonized system (HS) classification. To begin with, 2-digit HS classification has been used to provide a broad picture of the pattern of comparative advantage. However, the finer the disaggregation, the better the identification of the products in which potential for exports exists. Accordingly, the 4 and 6 digit HS commodity classifications have also been used for identification of products of export interest to each country.

3.2. Sector Level Analysis

In this section Revealed Comparative Advantage (RCA) analysis has been conducted at the sector levels for Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyz Republic, Pakistan and Turkey in all the 97 sectors of the Harmonized System (HS 1996) 2-digit classification for the period 2003 to 2008.[6]

3.2.1. Pakistan

In the case of Pakistan the RCA indices are greater than one for more than 30 sectors, indicating that Pakistan has comparative advantage in a broad range of commodities. The analysis shows that Pakistan has maximum comparative advantages in textiles and this has not changed since 2003. In 2008, the RCA index for this sector stood at 58.1 and its share in total exports at 15.5 percent, up from 57 and 20 percent respectively in 2003. The second top ranked sector in terms of the RCA is cotton (HS-52) which has the largest share in total exports of Pakistan.

The top ten sectors with highest RCA include textile articles, cotton, leather, cereals, carpets and textile floor, raw hides and skin, staple fibers, apparel and clothing, gums, vegetable, starches, salt, sulphur, ships, boats, toys, sports material, fish and fresh/dried fruits (Table 3.1).

[6] Due to non-availability of data, RCA indices could not be computed for Tajikistan, Uzbekistan, and Turkmenistan.

Table 3.1: Top Ten Sector Based on RCA Index: Pakistan

Sectors	HS-codes	Share	RCA	HS-codes	RCA	HS-codes	RCA
	2008			2007		2003	
Made-up textiles	63	15.5	58.1	63	60.9	63	57.2
Cotton	52	17.7	54.8	52	58.9	52	41.5
Cereals	10	12.4	17.5	42	13.9	57	14.3
Carpets and other textile floor coverings	57	0.9	11.3	10	13	54	11.9
Articles of leather, animal gut, harness, travel goods	42	3.8	11.2	57	12.8	42	11.7
Raw hides and skins (other than furskins) and leather	41	1.9	11	41	10.5	10	10.4
Articles of apparel, accessories, knit or crochet	61	9.3	8.9	55	9.6	61	8.4
Salt, sculpture, earth, stone, plaster, lime and cement	25	3	7.6	61	9.1	36	7.1
Manmade staple fibers	55	1.4	6.7	13	7.1	41	6.6
Lac, gums, resins, vegetable saps and extracts	13	0.2	6.3	11	7	13	6.1

Overall, Pakistan has relatively weak advantage in 64 out of 97 sectors. Silk, ceramic products, glass and glassware, tobacco and manufactured tobacco, dairy product, mineral fuels, oil products, wood and articles of wood, organic chemical and many others are the industries where Pakistan has comparatively a disadvantageous position. A complete list of these sectors is given in a (Appendix 1, Table 4).

3.2.2. Azerbaijan

Azerbaijan enjoyed comparative advantage in 11 sectors in 2007. Mineral fuel and sugar and sugar confectionary are the top ranked sector followed by fruit and nuts, peel of citrus, animal and vegetable oils, vegetables products, cotton, ships, boats coffee, tea, spices, inorganic chemicals, and iron and steel. The pattern of comparative advantaged changed considerably in 2008 when Azerbaijan maintained its comparative advantage in only Mineral fuels, oils, and distillation products.

Table 3.2: Top Tsector Based on the RCA Index: Azerbaijan

Sectors	HS-codes	RCA	HS-codes	RCA	HS-Codes	RCA
	2008		2007		2003	
Mineral fuels, oils, distillation products	27	5.5	17	11.4	27	8.9
Sugars and sugar confectionery	17	0.8	27	6.4	15	3.7
Edible fruit, nuts, peel of citrus fruit, melons	8	0.7	8	4.7	8	3.3
Ships, boats and other floating structures	89	0.5	15	2.9	52	2.6
Animal and vegetable fats and oils	15	0.5	7	2	28	2
Edible vegetables and certain roots and tubers	7	0.4	52	1.9	24	1.2
Milling products, malt, starches, inulin,	11	0.3	89	1.9	76	0.9
Aluminium and articles	76	0.3	9	1.6	20	0.9
Coffee, tea, mate and spices	9	0.2	28	1.6	9	0.8
Articles of iron or steel	73	0.2	20	1.4	12	0.6

A look at past comparative advantage reveals that Azerbaijan's comparative advantage lied in only 6 sectors in 2003. The sector mineral fuel was not in the top ten products in 2003 and remained as a disadvantaged sector in 2005. The performance of this sector improved remarkably during the last two years. Other sectors including coffee, tea, spices, vegetable products, fruit, nuts, and ships and boats also improved their performance overtime. Other than efficient 11 sectors, Azerbaijan has weak comparative advantage in 88 sectors [7].

3.2.3. Iran

At the sectoral level (HS-2 digit), carpets and other textile floorings (HS-57), and mineral fuels and oils are the top ranked sectors with respective RCA at 8.7 and 6.

Table 3.3: Top Ten Sector Based on the RCA Index: Iran

Sectors	HS-codes	RCA	HS-codes	RCA	HS-Codes	RCA
	2008		2007		2003	
Mineral fuels, oils, distillation products	27	4.9	57	8.7	57	14.9
Carpets and other textile floor coverings	57	3	27	6	27	8.9
Edible fruit, nuts, peel of citrus fruit, melons	8	1.9	8	5.3	8	5.2
Salt, sulphur, earth, stone, plaster, lime and cement	25	1.9	5	2.5	5	2.4
Organic chemicals	29	1.3	79	1.8	14	1.8
Ores, slag and ash	26	1.2	14	1.4	9	1.6
Products of animal origin	5	1.1	7	1.3	25	1.3
Zinc and articles thereof	79	1.1	78	1.2	58	1
Lac, gums, resins, vegetable saps and extracts	13	0.9	9	1.2	13	1
Lead and articles thereof	78	0.8	13	1.1	41	0.9

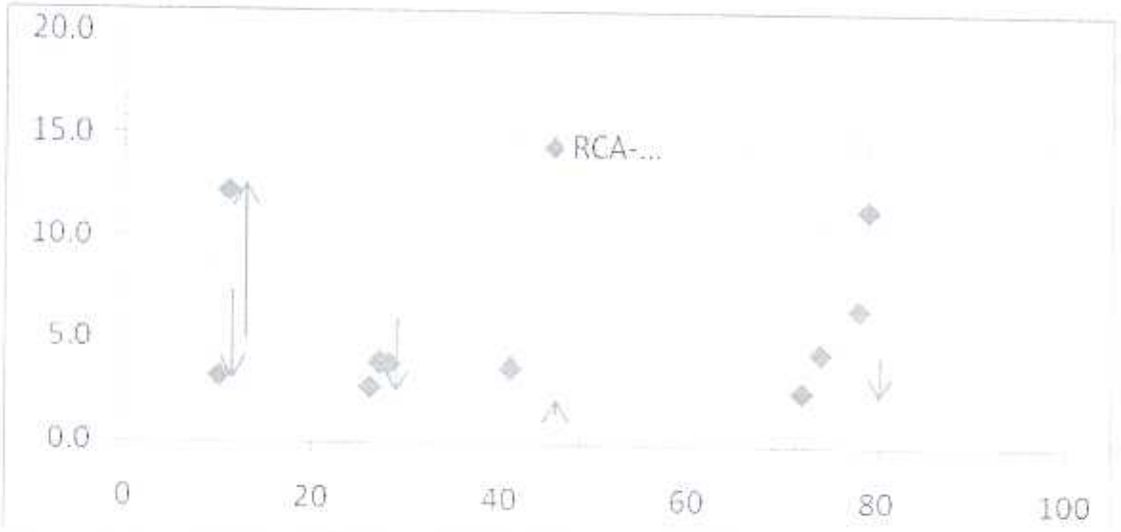
The shares of these sectors in total exports of Iran are 1 percent and 83 percent respectively. The top ten sectors with highest RCA indices include edible fruits and nuts, zinc, vegetable plaiting materials, vegetables product, salt, sulphur, organic chemicals, coffee, tea, spices and cereals. Out of 97 sectors, Iran holds comparative advantage in 11 sectors whereas in 88 sectors it has relatively weak comparative advantage.

3.2.4. Kazakhstan

Out of 97 sectors Kazakhstan holds comparative advantage in 15 sectors. Zinc and related items is the highest ranked sector with a RCA of 14.2 and 2.1 percent share in total exports. This sector's share in total exports was only 0.4 percent in 2003 but it remained an efficient sector with RCA of 15. Lead and articles thereof, starches, copper mineral fuels and oils product inorganic chemicals and cereals.

[7] Detailed list of sectors where Azerbaijan holds comparative advantage is provided in the Appendix.

Figure 3.1: Top Ten Sector Based on RCA Index: Kazakhstan



The top ten sectors of Kazakhstan include raw hides and skins, wool, iron, steel and base metal. There are 82 sectors where Kazakhstan is comparatively weak in terms of the RCA index. These sectors include sugar and sugar confectionary, footwear, cotton, carpet and textile products, beverages, spirit, vinegar, silk, arms and ammunition and many others (complete list is providing in Appendix Table 7).

3.2.5. Turkey

Turkey has a diversified production structure which is reflected in its international trade profile. A look at Turkey's top ten exports in 2010 shows that Turkey's exports consist of a diverse range of commodities including vehicles, iron and steel, textiles and clothing, pearls and stones, and mineral products (Table 3.4).

Table 3.4: Top 10 Exports of Turkey 2010

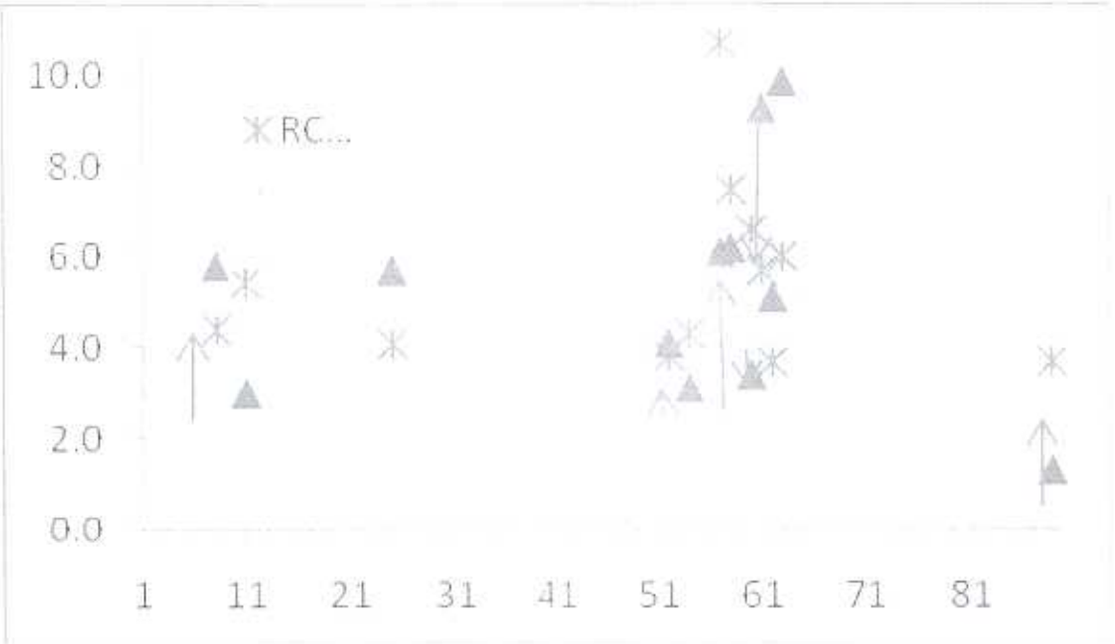
(US$ Million)

Commodity Code	Product	Total	Share in total Exports
87	Vehicles	13815	12.1
72	Iron and Steel	8768	7.7
61	Articles of Apparel	7741	6.8
73	Articles of Iron and Steel	4857	4.3
62	Apparel (not knitted)	4639	4.1
27	Mineral Fuels	4511	4
71	Pearls and Stones	3748	3.3
39	Plastics	3717	3.3
8	Fruits and Nuts	3494	3.1
25	Salt and Sulphur	2509	2.2
	Total share of top exports.		50.7

Source: Turkish Statistical Institute.

In terms of the revealed comparative advantage, out of 97 sectors at HS-2 digit classification, Turkey has comparative advantage in 42 sectors. Carpets and textiles floorings is the top ranked sector but it has only 1 percent share in Turkey's total exports. Incidentally, export shares of products in which Turkey has comparative advantage do not exceed 6 percent of the country's total exports. Other products in which Turkey has comparative advantage include apparel and clothing accessories, woven and knitted fabrics, fruit and nuts, salt, sulphur and stones, cotton, and fertilizers, footwear, dairy products, silk, live animals, copper, mineral fuel oil and products, paper and paperboard, cork and articles of cork, tins, organic chemicals, live tree and other plants are the sectors where Turkey has weak comparative advantage. [8]

Figure 3.2: Top Ten Sector Based on RCA Index: Turkey



3.2.6. Kyrgyz Republic

The Kyrgyz Republic holds comparative advantage in 24 out of 97 sectors at the HS-2 digit classification. The top ten RCA profile in Table 3.4 reveals that the top ranked sectors of Kyrgyzstan are fruits and nuts, raw hide skins, vegetable products, precious stones, cement, cotton, wool, animal horns, salts, sulphur, ceramic products, paper and paper board, mineral fuels, glass and glassware, furniture, bedding, mattress, nuclear reactors, boilers, apparel and clothing, and sugar and sugar confectionary. Over time, a more diversified production structure appears to have emerged in the country: the exports share of the top ranked sector i.e. natural and cultured pearls, stone was 45 percent of the total exports in 2003 but the share declined to 20 percent in 2007 with an increasing share of other sectors in total exports.

There are also some sectors where Kyrgyzstan exhibits a relatively weak comparative advantage at HS-2-digit level. These sectors are iron and steel, footwear, soap organic, organic chemicals, pharmaceutical products, musical instruments, live animals, leather products, clock and watches and parts, toy games and sports material, printed book, newspapers and pictures and rubber products.

[8] Detailed list is provided in Appendix Table.

Table 3.5: Top Ten Sector Based on the RCA in 2007 and 2003: Kyrgyz Republic

Sectors	HS-codes	RCA	HS-codes	RCA	HS-Codes	RCA
	2008		2007		2003	
Edible fruit, nuts, peel of citrus fruit, melons	8	48.1	71	44.7	71	25.1
Raw hides and skins (other than furskins) and leather	41	38.4	68	42.2	52	14.7
Edible vegetables and certain roots and tubers	7	34.4	52	25.5	78	12.2
Salt, sulphur, earth, stone, plaster, lime and cement	25	13.1	51	21.8	24	7.6
Cotton	52	11	25	15.8	41	6.4
Articles of apparel, accessories, not knit or crochet	62	10.7	87	13.8	70	5.6
Glass and glassware	70	8.8	7	12.8	17	5.3
Dairy products, eggs, honey, edible animal product s	4	7.3	70	12.2	68	5
Wool, animal hair, horsehair yarn and fabric thereof	51	6.9	94	9.4	25	4.5
Products of animal origin	5	6.1	84	8.7	7	3.5

3.3. Product Level Analysis

3.3.1. Pakistan

At a disaggregated level of product classification (HS 4 digits), Pakistan's comparative advantage is indicated in some 180 products with prominent being cotton textiles, organic chemicals, salt, sulphur, fish, cutlery, ceramics, electro medical apparatus and cement. The RCA analysis at the product level shows the importance of other potential sectors and products that could be the competitive sectors in future, such as footwear, mattresses, copper wire, toys, and machines of preparing textiles can be value added products in export earnings.

Pakistan's revealed comparative advantage analysis at the 6-digit level shows that in the year 2008, all the top 10 exports came from top export items at 2 and 4-digit levels (Appendix Table). Pakistan exhibited the highest comparative advantages in bed linen of textile materials. In year 2008, although the share of bed linen of textile materials remained the highest, it has substantially declined as has Pakistan's competitiveness in this product. At the same time, Pakistan has been able to enhance its competitiveness in some products like Plain weave cotton fabrics since the year 2003. This product has become the second most important export item from Pakistan. The share of other products such as cotton yarn, leather prepared, footwear, and woven fabrics has continuously increased it is clear that Pakistan has been able to maintain its competitiveness in these products. With an increase in the RCA value of the product category 'other vehicles with spark ignition', its share has risen in Pakistan's exports. Other products including jackets, twill, woven cotton fabrics, electric generating sets, and cement have also become important in the Pakistan's export basket with a high RCA value.

Table 3.6: Sector Wise Distribution of Products

Rank	HS code	Sectors	No. of products
1	52	Cotton	44
2	63	Other textile	11
3	61	Apparel and clothing accessories	15
4	42	Raw hides and skins	5

At the six-digit level of HS classification, the sector in which Pakistan has weak comparative advantages are the jams, fruit jellies, marble granules, and office and desk

equipment, base metal, plaster boards, wheeled tractors, transmission apparatus for radio-broadcasting refrigerators, household and cooking appliances. The analysis shows that these are the potential commodities in which Pakistan can gain competitiveness through enhanced investments in product development.

3.3.2. Turkey

Among all the ECO countries, Turkey has the most diversified export structure with comparative advantage in diverse product categories. At the 2-digit classification, Turkey enjoys comparative advantage in 42 out of 97 sectors whereas at a more disaggregated level (HS 4-digits), its comparative advantage is indicated in 346 out of 1286 products.

The sectors with the maximum number of commodities where Turkey has comparative advantage in the world market are Carpets and other textile floor (HS 57), iron and steel, salt, sulphur. The top products at the four-digit level in which Turkey holds comparative advantage are as follows: yarn, dried fruit, copper stranded wire, jams, fruit jellies and marmalades, refrigerator, freezer, machine-tools for working metal. These sectors represent the comparatively advantageous position of Turkey; however according to share in total exports, the product level and sector wise ranking are different. The following shows that the top contributing sectors and products in total exports at two digit level of classification are vehicles, iron and steel, petroleum and oil.

Table 3.7: Major Exports at 4-digit Product Level

HS Codes	Products
7214	Bars and rods of iron
8703	Cars (incl. station wagon)
2710	Petroleum oils, not crude
8704	Trucks, motor vehicles for the transport of goods
7108	Gold unwrought or in semi-manufactured forms
6109	T-shirt and other vests, knitted or crocheted
8708	Parts and access. of motor vehicles
6204	Women's suits, jackets, dresses, and skirts
8901	Cruise ships, cargo ships, barges
8544	Insulated wire/cable
8528	Television receivers (including video monitors and video projectors)

At the four-digit level of classification, cars, truck and motor vehicle for the transport goods, parts and accessories of motor vehicles, and Television receiver, are the products with a significant share in the total exports of Turkey. The competitiveness of the Turkey has increased rapidly over time. These sectors and products changed their comparative position from disadvantages to advantageous since 2000.

At the individual level product i.e. six-digit level of HS classification, Turkey holds comparative advantage in some 1286 products. The top exported products according to their performance are the filament yarn, tuna fish, marble yarn of synthetic filaments, and diesel powered trucks. However, the sanitary ware and parts, parts of turbo-jets door closures, olive oil, and pharmaceuticals are the potential products where value addition can be enhanced in total production and exports earnings for Turkey.

3.3.3. Kazakhstan

At four digit level of HS classification, Kazakhstan holds comparative advantage in only 77 products. The top ranked products in terms of RCA include natural asphalt, natural & petroleum bitumen, wheat and flour, chromium oxides and hydroxides, copper products, radioactive chemical and isotopes. In terms of the share in total exports, crude petroleum, refined copper, petroleum oils, radioactive chemical and isotope, coal; fuels, zinc, and flat-rolled product of iron are the top contributing sectors in the total exports of Kazakhstan. Copper plates, sheets and strip, wallpaper and similar wall coverings, calcium and aluminum calcium phosphate are the products in which Kazakhstan has weak comparative advantage but these sectors and products have the potential to become important export earners in the future.

Table 3.8: Sector-wise Distribution of Products According to Share in Total Exports and RCA Index

Top product according to share in total exports		Top product according to RCA Index	
20321	Swine carcasses and half carcasses, frozen	250621	Quartzite, crude or roughly trimmed
20621	Bovine tongues, edible offal, frozen	811212	Unwrought beryllium; beryllium powders
20725	Turkey, whole, frozen	250629	Quartzite
20810	Rabbit or hare meat and edible meat offal, fresh, chilled or frozen	720250	Ferro-silico-chromium
20900	Pig fat lean meat & poultry fat	284410	Natural uranium &its compounds
30110	Ornamental fish, live	271500	Bituminous mixtures based on natural asphalt
30231	Tunas, albacore or long-finned excl. heading No. 03.04,livers & roes	811259	Articles of thallium

Table 3.7 depicts the top ranked commodities in terms of share in total exports and RCA indices at the 6-digit commodity classification. The crude oil is the top ranked product according to the RCA index, however Swine carcasses and half carcasses, frozen is the top ranked top product according to its share in total exports. Beryllium power, quartzite, Natural uranium are top products according their exports performance and frozen meat and ornamental fish are the top ranked products according to their share in total exports of Kazakhstan.

3.3.4. Iran

At the product level, the revealed comparative advantage index is calculated for all 1241 commodities exported by Iran to the world at four-digit level and 4995 at six-digit level of HS classification in 2008. The index values suggest that Iran enjoys comparative advantage in 50 products at four-digit level and 138 products at six-digit level of HS classification. Iran's comparative advantage lies in sectors like petroleum oils, copper mattes, marble, raw skins of sheep and carpets and other textile. However the top contributing products in total exports are the crude petroleum oils petroleum oils, petroleum gases, iron and copper. The product with the maximum comparative advantage is identified as copper with RCA value of 24.3 and followed by the carpets and textile floor. At the six digit level, the top commodities include carpets of man-made textile and saffron products.

3.3.5. Kyrgyzstan

Kyrgyzstan has comparative advantage in 140 products with significant export potential in varieties of fruits and vegetables, and raw hides and skin. There are some sectors in which Kyrgyzstan has weak comparative advantage at present but these sectors have the potential to play a larger role in the country's exports in future provided investments are made in expansion of scale as well as quality improvements. These products include live animals, paper, household and sanitary items, carpets and textile floor, medicinal plants and shavers and hair clippers. At the 6-digit level, coarse animal hair, apricots, cadmium and scrap, mercury, and cherries are the top ranked commodities in terms of revealed comparative advantage.

3.3.6. Azerbaijan

As compared with other smaller countries of the ECO region, the profile of Azerbaijan's comparative advantage is more diversified with top ranked products of crude petroleum oils, aluminum oxide, and vegetable oil. Other products of significant export potential include vegetable products and petroleum products. At a more disaggregated level (6-digit), the most important export products include fruits, sheep or lamb skin, petroleum minerals, sugar beet and cotton-seed oil crude. Overall, Azerbaijan has revealed comparative advantage in 11 sectors at two- digits level of classification and 19 and 55 products at four-digit and six-digit level of classification respectively.

3.3.7. Afghanistan

Afghanistan's export potential at present is quite limited as it is exporting only 7 products at both four-digit level and six-digit level of HS classification. The most important export product is carpets and textiles floor coverings. Other significant export products at four digit level of classification are seeds of anise, and Oil seeds. The pattern of export performance is not different at six digit level of classification: wool carpets seeds, sesame seeds are the top-ranked commodities in terms of the revealed comparative advantage.

3.4. Trade Complementarity Index

The success of regional integration schemes depends largely on the extent of trade complementarity in a regional trading bloc. For example, regional trading arrangements are likely to succeed in strengthening intra-regional trade if the trade structures of member countries exhibit strong complementarities. This section explores the extent of trade complementarity in the ECO region in terms of trade complementarity index, which measures the compatibility of imports of country i with exports of country j, as defined below.

$$TCI_{ij} = \sum_{k} \frac{X_{iw}^{k}}{X_{iw}} * \frac{M_{ww} - M_{iw}}{M_{ww}^{k} - M_{iw}^{k}} * \frac{M_{jw}^{k}}{M_{jw}}$$

Where *Xi* and *Xik* represent country *i*'s total exports and exports of commodity *k* respectively; *Mi* and *Mik* represent country *i*'s total imports and imports of commodity *k* respectively; *Mw* and *Mwk* represent the world's total imports and imports of commodity *k* respectively; and *Mj* and *Mj k* represent country *j*'s total imports and imports of commodity *k* respectively. The value of the index ranges between zero and 100 with values greater than unity indicating complementarity between country *i*'s exports and country *j*'s imports.

According to Michealy (1994) and Yeats (1998) the higher the trade complementarities the more likely a regional trade arrangement is to succeed.

Table 3.9: Trade Complementarity Index of ECO Region

Countries	2005	2006	2007	2008
Azerbaijan	0.5	1.8	0.3	1.9
Iran	1.1	1.0	0.9	0.7
Kazakhstan	1.3	1.0	1.0	0.8
Kyrgyzstan	1.2	0.9	0.8	0.6
Pakistan	1.2	0.9	1.1	1.0
Tajikistan	1.4	1.0	1.0	0.8
Turkey	1.0	0.8	0.9	0.8
Turkmenistan	1.2	1.0	1.0	0.7
Uzbekistan	1.7	1.6	1.2	0.9

Table 3.8 reports the trade complementarity indices of the member countries with reference to the rest of the ECO region. In 2008, the indices for Azerbaijan and Pakistan show some trade complementarity with the ECO region. The indices for other countries are not very much significantly different from unity, indicating some measure of trade complementarity. It is also obvious that there is considerable variation in the level of trade complementarity over time signifying that intra-regional trade has been quite volatile in the ECO region. Trade complementarity indices for individual member countries vis-à-vis their bilateral trade have also been computed and these are reported in the appendix.

3.5. Trade Competition in the ECO Region

The foregoing analysis shows that though there is potential for expanding intra-regional trade in many product categories, there are many product segments in which the ECO members have identical comparative advantage and hence are competitors in the world market. It is important to note that trade can take place even in products in which the countries have comparative advantage in similar products. This type of trade is of intra-industry variety and is largely driven by product differentiation and increasing returns to scale. Table 3.9 provides details of the products in which ECO members compete with Pakistan. It is clear that there are a number of products in which intra-industry trade can take place provided the regional countries are able to develop the technological capacity to achieve product differentiation at declining average cost.

Another avenue through which the ECO members can strengthen trade complementarities in similar product categories is vertical specialization through product sharing arrangements. A good example is the case of garments. There would be little or no regional trade if each country is a garments producer. On the other hand, trade can take place if one country specializes in yarn and fabrics while another in finished products. Vertical specialization would not only allow the regional trading partners to strengthen their trade ties, but also enable them to reap economies of scale by concentrating on a specific production process in the value-addition chain. Therefore, as in the case of various regional trading groups around the world, the ECO countries can achieve an enhanced level of economic cooperation by developing vertically integrated production structures, thereby attaining vertical specialization.

The ECO countries can also build an alliance for the marketing of their competing export products. This would not only promote mutual economic cooperation in the region but also allow regional exporters to collectively reap the benefits of improved export opportunities.

Table: 3.10: Trade Competition between Pakistan and ECO Countries

	Products	2008			Competitor Countries				
		Code	Export shares	RCA	Azerbaijan	Iran	Kazakhstan	Kyrgyz	Turkey
1.	Other made up textile articles	63	17.82	60.9	1	-	-	-	6
2.	Cotton.	52	19.28	58.9	2	-	1	26	4
3.	Articles of leather	42	3.88	13.9	-	-	-	-	1
4.	Cereals	10	6.97	13	-	-	5	-	-
5.	Carpets and other textile floor coverings	57	1.25	12.8	-	9	-	-	9
6.	Raw hides and skins (other than fur	41	2.2	10.5	1	1	3	6	1
7.	Man-made staple fibers.	55	2.16	9.6	-	-	-	-	3
8.	Art of apparel & clothing access,	61	10.38	9.1	-	-	-	3	6
9.	Lac; gums, resins & other vegetable	13	0.19	7.1	-	1	-	1	-
10.	Prod.mill.indust; malt; starches;	11	0.62	7	1	-	8	-	5
11.	Art of apparel & clothing access, n	62	7.69	6.7	-	-	-	6	4
12.	Explosives; pyrotechnic prod; match	36	0.14	6.7	-	-	-	-	-
13.	Salt; sulphur; earth & stone; plaster	25	1.41	5.9	-	1	1	16	5
14.	Vegetable plaiting materials	14	0.02	4.5	1	1	1	1	4
15.	Ships, boats and floating structure	89	2.41	3.1	-	-	-	-	2
16.	Lead and articles thereof.	78	0.14	2.7	-	2	14	-	-
17.	Man-made filaments.	54	0.76	2.6	-	-	-	-	4
18.	Knitted or crocheted fabrics.	60	0.37	2.4	-	-	-	-	6
19.	Toys, games & sports requisites; pa	95	1.18	2.4	-	-	-	-	-
20.	Products of animal origin	5	0.1	2.2	-	3	-	1	1
21.	Special woven fab; tufted tex fab;	58	0.2	2.1	-	-	-	-	6
22.	Other vegetable textile fibres; pap	53	0.05	1.9	-	-	-	-	1
23.	Fish & crustacean, mollusc & other	3	0.9	1.9	-	-	-	-	1
24.	Edible fruit and nuts; peel of citr	8	0.7	1.7	5	5	-	6	6
25.	Sugars and sugar confectionery.	17	0.34	1.6	11	-	-	3	1
26.	Beverages, spirits and vinegar.	22	0.87	1.5	1	-	-	-	-
27.	Animal/veg fats & oils & their clea	15	0.61	1.4	3	-	-	2	1

3.6. Trade Specialization Index

The previous analysis has focused on export performance of ECO member countries in terms of the RCA indices. It remains to be seen which sectors of each member country have significant potential for expansion of trade with the ECO region.

This section examines this issue in terms of the trade specialization index (TSI) which is defined as:

$$TSI = (x_i - m_i)/(x_i + m_i)$$

Where x_i is the country' exports on this particular product and m_i is the imports. It measures ratio of the trade balance for the product to the total value of trade of that product. The index varies between +1 and -1; a value closer to +1 signifies exporter's comparative advantage and a value closer to -1 implies comparative advantage of the trading partner which is taken to be the ECO region. This index in computed at HS-2 digit commodity classification for Azerbaijan, Pakistan, Turkey, Kyrgyzstan and Afghanistan.[9]

Table 3.11: Trade Specialization Index 2007-2008 –Azerbaijan versus ECO

Product Code	Product	TSI 2007	TSI 2008
97	Works of art, collectors pieces and antiques	0.9	1.0
14	Vegetable plaiting materials, vegetable products	1.0	1.0
41	Raw hides and skins (other than furskins) and leather	1.0	1.0
89	Ships, boats and other floating structures	1.0	1.0
78	Lead and articles thereof	1.0	1.0
43	Furskins and artificial fur, manufactures thereof	-1.0	-1.0
42	Articles of leather, animal gut, harness, travel goods	-0.9	-1.0
36	Explosives, pyrotechnics, matches, pyrophorics, etc	-1.0	-1.0
31	Fertilizers	-1.0	-1.0
26	Ores, slag and ash	-0.9	-1.0
21	Miscellaneous edible preparations	-1.0	-1.0
13	Lac, gums, resins, vegetable saps and extracts	-1.0	-1.0
11	Milling products, malt, starches, inulin, wheat gluten	-1.0	-1.0
6	Live trees, plants, bulbs, roots, cut flowers	-1.0	-1.0
3	Fish, crustaceans, molluscs, aquatic invertebrates	0.1	-1.0
2	Meat and edible meat offal	-1.0	-1.0
1	Live animals	-0.5	-1.0

Table 3.10 reports the trade specialization indices for Azerbaijan. It is evident that Azerbaijan has comparative advantage in only a narrow range of products (5 products at HS2) including raw materials such as cotton, collectors pieces and antiques, vegetable plaiting materials, vegetable products, raw hides, skins and leather, ships, boats and other floating structures. These products are the potential products that can be traded with the rest of ECO countries. Whereas it has comparative disadvantage in the sectors of furskins, live animals, live trees, plants, cut flowers, fish, crustaceans, molluscs, aquatic invertebrates fertilizers, and leather goods. These are the potential sectors in which Azerbaijan can expand its imports from other countries of the ECO region.

Pakistan has comparative advantage in 20 sectors including headgear and parts, wool, animal hair, horsehair yarn and fabric, tobacco products, pharmaceutical products, apparel, accessories, and food item sectors (Table 3.11). These are the potential sectors for expansion of Pakistan's exports to the ECO region. On the other hand, Pakistan can expand its imports from the ECO region in a range of products including tramway locomotives, rolling stock equipment, organic chemical, copper, works of art, collectors' pieces and antiques, zinc and umbrellas, walking-sticks, seat-sticks.

[9] The index could not be computed for other countries due to non-availability of data.

Table 3.12: Trade Specialization Index 2007-2008 –Pakistan versus ECO

Product Codes	All products	TSI 2007	TSI 2008
65	Headgear and parts thereof	1.0	1.0
57	Carpets and other textile floor coverings	1.0	1.0
51	Wool, animal hair, horsehair yarn and fabric thereof	1.0	1.0
24	Tobacco and manufactured tobacco substitutes	1.0	1.0
16	Meat, fish and seafood food preparations nes	1.0	1.0
3	Fish, crustaceans, molluscs, aquatic invertebrates nes	1.0	1.0
2	Meat and edible meat offal	1.0	1.0
44	Wood and articles of wood, wood charcoal	1.0	1.0
11	Milling products, malt, starches, inulin, wheat gluten	1.0	1.0
75	Nickel and articles thereof	1.0	1.0
26	Ores, slag and ash	-1.0	-1.0
58	Special woven or tufted fabric, lace, tapestry etc.	-1.0	-1.0
86	Railway, tramway locomotives, rolling stock, equipment	-1.0	-1.0
29	Organic chemicals	-1.0	-1.0
74	Copper and articles thereof	-1.0	-1.0
97	Works of art, collectors pieces and antiques	-1.0	-1.0
79	Zinc and articles thereof	-1.0	-1.0
78	Lead and articles thereof	-1.0	-1.0
66	Umbrellas, walking-sticks, seat-sticks, whips, etc.	-1.0	-1.0
13	Lac, gums, resins, vegetable saps and extracts nes	-1.0	-1.0

Turkey has comparative advantage in wide range of commodities (41 products at HS2) than any other ECO member country. Its comparative advantageous products are railway, tramway locomotives, rolling stock, equipment, ships, boats and other floating structures, tin, pharmaceutical products, electrical, electronic equipment, Tin, cork and articles of cork, nickel and cocoa and cocoa preparations, pearls, precious stones, metals, coins, essential oils, perfumes, cosmetics, toiletries, wood products, sugars and sugar confectionery, beverages, vehicles other than railway, live trees, plants, cut flowers and many other including the food items [See Appendix for a detailed listing]. It is thus clear that Turkey can enhance its exports to the ECO region in these product categories. On the other hand, a number of products can be imported by Turkey from the ECO region including mineral fuels, oils, distillation products, animal products, cereals, and zinc product, and articles thereof, ores, slag.

The trade similarity index for Kyrgyzstan indicates 12 potential sectors for the expansion of exports to the ECO region including ships, boats and other floating structures, cork and articles of cork, manufactures of plaiting material, basketwork, animal products, vegetables products and few food commodities [see detail in appendix]. On the other hand, Kyrgyzstan can import a wide range of products from the ECO region including tobacco and manufactured items base metals, cement, explosives, pyrotechnics, matches, pyrophorics, fertilizers, carpets and textile floor coverings, cereals, Copper, zinc, nickel, umbrellas, walking-sticks, knitted fabrics and furskins.

There are only a few items in which Afghanistan can enhance its exports to the ECO region. These are wool, animal hair, horsehair yarn and fabrics, vegetable, fruit, and nuts, raw hides and skins (other than furskins) and leather. It can, however, import a large number of products from the ECO region including products of pearls, precious stones, metals, coins, clocks and watches and parts thereof, optical, photo, technical, medical, etc apparatus, vehicles other than railway, tramway, electrical, electronic equipment, machinery, nuclear reactors, boilers, tools, implements, cutlery, base metal, aluminum iron or steel, iron and steel, footwear, and textile and clothing, wood products, charcoal, rubber and food commodities.

Overall, it is important to emphasize that whereas the differences in the patterns of comparative advantage indicate the existence of trade potential among the ECO member countries, the economies of Azerbaijan, Kyrgyzstan and Afghanistan presently lack diversification with a high concentration of exports in a few product categories. This situation may, however, change in a longer term perspective when increasing trade ties may encourage a shift in production structures that can support a different pattern of intra-regional trade than the one predicted on the basis of the existing production structures and trade patterns.

3.7. Gravity Model

The gravity model has been widely used to measure the impact of trade policy issues such as preferential trade agreements, currency unions, and border trade measures. The model was first introduced by Tinbergen (1962) who used the gravity equation to measure bilateral trade flows in terms of the size of the economy and the geographical distance between the trading partners. Subsequent work has attempted to provide theoretical foundations to the basic gravity model. In particular, Anderson (1979), Bergstrand (1985, 1989), Helpman and Krugman (1985), Frankel and Romer (1999), Anderson and Wincoop (2003), and Helpman (2006) have shown that the gravity model can be derived from a variety of theoretical settings including partial and general equilibrium frameworks.

The standard gravity model proposed that the bilateral trade is proportional to their national income and inversely related to the distance between partner countries which is proximity of transportation cost and information cost. Other explanatory variables that are typically included in the model are country size represented by population or GDP per capita and dummy variables reflecting contiguity; geographical and cultural proximity such as common border and common language. In empirical literature, studies have added dummy variables for participation in various preferential arrangements. A positive coefficient of preferential arrangement dummy variable suggests that both participants of the preferential arrangement would trade more with each other. This is called trade creation effect of regional arrangement. On the other hand, a negative coefficient shows that the members have loss in their trade because they are moving from low cost sources to the high cost sources. This is called the trade diversion effect. Some member countries are found to have trade creation within the preferential arrangement region but divert their trade with the non-member countries. The log form gravity model of trade equation is given below:

$$Log(Trade_{ijt}) = \alpha_0 + \alpha_1 Log(GDP_{it} * GDP_{jt}) + \alpha_2 Log(PCI_{it} * PCI_{jt}) + \alpha_3 Log(Distance_{ij}) + \alpha_4(Tariff_{ij}) + \alpha_5(Border_{ij}) + \alpha_6(ECO) \quad \text{.....(1)}$$

Equation (1) is the estimated equation. It shows that Trade*ijt* is bilateral trade between countries *i* and *j* at the time *t* (measured in million U.S. dollars), GDP is real gross domestic product of country *i* and *j*), PCI is per capita income, Distance is the land distance in Kilometers between two countries, Tariff is trade cost borne by the partner *i* and *j* and Border is dummy variable that takes a value of 1 if two countries have common border and 0 otherwise. Equation (1) shows that trade is expected to increase with the size of the economy measured by GDP. It is also expected that trade will increase if the partner countries share common border and if they experience an increase in their per capita incomes. Trade is expected to decrease with the distance between countries as the transportation cost and information cost will increase.

The study has estimated gravity model for the time period 1996 to 2008 with a focus on bilateral trade in the ECO region. Panel data estimation is generally preferred over cross section analysis because the former incorporates the year effect. Regional trading blocs (ECO and Pakistan) are included to examine the behavior of regional trade over time. The study has included 29 countries in the data set that are regular and significant trade partners of Pakistan and rest of the ECO members. Annual data on bilateral trade flows have been collected from UNCOMTRADE Trade Statistics. The data on GDP and per capita incomes have been collected from World Bank indicators and the data on Distance and Border are collected from the website of CEPII.

Table 3.13 : Random Effect Gravity Model

Variables	Model 1		Model 2	
	Coefficient	S.E	Coefficient	S.E
C	6.83	10.17	4.77	9.68
LOG(GDP)	0.14	0.12	0.16	0.18
LOG(PCI)	0.95	0.41	1.27	0.44
LOG(DISTANCE)	-1.67	0.94	-0.71	0.62
LOG(TARIFF)	-0.05	0.04	-1.92	0.73
ECO	2.13	0.95	2.08	2.52
ASEAN	-3.22	1.19		
EE	-4.4	2.12		
R^2	0.52			
Adjusted			0.57	
Hausman Test	χ^2	Fixed verses Random Effect =331.35 prob(0.00)		

As expected, GDP is positive and significant, implying a direct (positive) relationship between economic size and bilateral trade. Similarly, Per Capita Income (PCI) is also positive and highly significant, indicating that as the countries grow richer, they tend to have stronger ties in terms of bilateral trade. As predicted by gravity model, distance, which is used as a proxy for transaction costs, has a fairly significant negative effect on bilateral trade flows. As expected, tariffs have a negative impact on trade flows, though the magnitude is not so significant.

Of particular interest is the assessment of the impact of free trade agreement among the ECO countries. The model predicts that bilateral trade should expand by a factor of 8.4 as a result of the free trade agreement and the member countries are likely to gain significantly in future from increased volume of trade. The enhanced volume of trade is expected to encourage competition in the domestic economies resulting in lower prices for consumers, more product variety and quality and increased incentives for innovation. By promoting a more efficient allocation of resources, bilateral trade will increase productivity, living standards and improve long-term growth prospects of the economies. Estimating the impact of ECO in the presence of two other regional trading agreements, the European Union and ASEAN, yields similar interesting results (see Model 1 in Table). One is that the impact of the key economic indicators (GDP and PCI), as well as the geographical Indicator DISTANCE are somewhat diluted in the presence of these agreements. However, the impact of the ECO FTA is increased, and would result in bilateral trade expanding by a factor of roughly 8.

3.8. Policy Recommendations

This chapter has carried out an analysis trade patterns in the ECO region with a special focus on revealed comparative advantage, and trade complementarities. An addition, a gravity model has been developed and estimated to explore the potential of intra-regional trade in the ECO region as a result of possible free trade agreement among members. The results show that though the volume of bilateral trade remains small, and in some instances trade complementarity is low, there exists potential for strengthening intra-regional trade across a wide range of commodities. The results of the gravity model show that trade in the ECO region can increase by a factor of eight as a result of the potential free trade agreement.

It is important to note that potential for expanding intra-regional trade cannot be realized unless supportive measures are adopted to put in place trade regimes that are open and responsive to the needs of intra-regional trade. First and foremost, there is a need to further liberalize trade through reduction in tariff and non-tariff barriers. Whereas many countries have already carried out trade policy reforms to liberalize their trade regimes, some ECO members continue to impose high tariffs and non-tariff barriers. Besides a liberal tariff regime, there is a need to improve trade facilitation mechanisms in many ECO member countries especially Uzbekistan, Tajikistan, Turkmenistan, and Kyrgyzstan. It is generally believed that doing business in these countries is difficult because of the cumbersome and complex bureaucratic requirements imposed on international trade transactions as well as inefficient trade and transport infrastructure. Trade facilitation is universally accepted as a means of improving the efficiency of international trade and economic development. Trade facilitation is an issue that is linked to a number of critical areas with far reaching implications for competitiveness and economic efficiency. Despite efforts to streamline the customs procedures, the clearance of consignments remains a problem due to weaknesses in customs administration and cumbersome regulatory procedures. Excessive procedural requirements are also to be blamed for providing an opportunity for customs officials to engage in corrupt practices.

There is a need to build the trade capacity of producers especially in countries that are in transformation. The trade capacity of producers depends on a number of factors including the ability to produce according to world market requirements, the availability of skilled labor, product designing capabilities that are driven by world market demand, reliable supply of quality inputs and raw materials, and ability to meet technical standards and certifications. In a highly competitive global trading regime, it is essential for exporters to enhance their trade capacity with a view to maximizing the gains from improved market access. These efforts must be supported by a comprehensive program of trade capacity building by the public sector. A major challenge faced by these economies is the lack of national capability to produce according to required standards and technical regulations applied in the international markets. In addition to product related standards and technical regulations, system standards are rapidly gaining currency. More and more international buyers ask for the proof that internationally recognized (certified) operational systems and procedures are in place for the control of food contamination (HACCP), quality management (ISO 9000), environmental management (ISO 14000), traceability, social accountability (SA 8000), occupational health and safety and others.

The importance of advisory services, market intelligence, and export promotion in helping private businesses to sell their products in international markets cannot be

overemphasized. The governments can help in international trade fairs, and overseas market visits to facilitate business to business contacts in the ECO region.

Another initiative that can help boost intra-regional trade is monetary cooperation. Many ECO members often face foreign exchange constraints especially in the wake of external economic shocks. Lack of adequate foreign exchange reserves can hinder all international transactions including intra-regional trade and investment. In this context, monetary cooperation among the ECO members can be instrumental in enhancing intra-regional trade. For example, membership in the Asian Clearing Union (ACU) can help strengthen intra-regional trade by circumventing the need for hard currency. Pakistan and Iran are already members of the ACU and trade ties can be strengthened if other ECO countries also acquire the ACU membership.

Chapter 4

TRADE IN SERVICES

The services sector plays a dominant role in the ECO member countries. It is generally recognized that the services sector has a significant impact on economic growth, job creation, and development in the emerging economies. The services sector is a key source of overall efficiency in the economy as it facilitates the commodity producing sectors including manufacturing and agriculture through backward and forward linkages. The services sector covers a wide range of economic activities such as transport, telecommunication, computer services, construction, financial services, and wholesale and retail distribution. In recent years, trade in services sector has surged across the globe owing to advances in information and communications technology that have enabled service providers to expand into global markets. With falling communications costs this trend is likely to further strengthen in the future.

4.1. Importance of Services Sector in ECO Economies

The services sector, which constitutes over 50 percent of GDP in most ECO countries, plays an important role in the development process of ECO region. Four countries namely Kazakhstan, Pakistan, Tajikistan and Turkey have high shares of services sector in their respective GDPs. Over the last three decades, the ECO region has shown tremendous progress in services sector and almost all countries of the region show a consistently rising trend in the share of the services sector in GDP (Table 4.1).

Table 4.1: Service Sector in the ECO Region

(% of GDP)

Country	1981-1990	1991-2000	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan	..	..	35.1	35.3	35.1	35.2	39.2	39.7	45.2	45.4
Azerbaijan	38.1	37.7	34.7	34.0	33.4	26.5	23.8	24.5	23.8	31.8
Iran	52.4	50.0	46.6	47.1	46.0	45.1	46.0	45.3	..	..
Kazakhstan	..	51.0	52.8	53.9	54.8	53.1	52.0	53.3	51.0	53.3
Kyrgyz Republic	31.4	31.9	39.0	40.6	42.6	45.7	47.2	49.6	51.5	..
Pakistan	48.5	49.7	52.8	52.7	50.8	51.4	52.8	52.6	52.9	54.2
Tajikistan	28.0	32.8	35.9	35.5	46.6	44.7	47.8	50.4	48.4	53.9
Turkey	49.8	52.5	59.6	60.0	60.6	60.7	61.8	63.1	63.7	64.9
Turkmenistan	35.9	30.9	35.6	38.4	40.5	43.6	46.3	42.8	34.0	34.2
Uzbekistan	34.9	37.9	43.7	43.4	43.3	48.9	46.5	44.0	47.9	47.3

Source: World Development Indicators (http://databank.worldbank.org); simple averages for period 1981-1990 and 1991-2000.

Owing to its advanced stage of development, Turkey has the highest share of services sector in GDP at 65% in 2009, up from about 50 percent during the 1980s (Table 4.2). The services sector plays a dominant role in Pakistan's economy as well with its share rising gradually from 48.5 percent of GDP in the 1980s to 54.2 percent in 2009. In Tajikistan, the contribution of services sector in GDP has increased from 28 percent in 1981-1990 to 54 percent in 2009, whereas in Kazakhstan the services sector accounted for 53.3 percent of GDP in 2009. In other countries of the region, the services sector has gradually gained prominence: in 2009 the share of services sector stood at 47.3 percent of GDP in Uzbekistan, followed by Afghanistan (45.4 percent), Turkmenistan (34.2 percent), and Azerbaijan (31.8 percent).

Progress in services sector is clearly linked with economic development in the region. The most developed countries of the region have highest share of services sector in their GDP. Turkey, Pakistan, Kazakhstan and Iran are the more developed countries than the rest of the

ECO members, and with rising income levels in these countries, a more developed services sector is emerging. Growth performance of services sector depicts that average growth rate of services sector remained impressive in the region and it has witnessed a consistent increase over the years (Table 4.2). However, after global financial crisis, growth in services has slowed in recent years especially in Turkey, Pakistan, Kazakhstan and Azerbaijan.

Table 4.2: Service Sector Growth

(Percent)

Country	1981-1990	1991-2000	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan	..	..	..	13.7	16.2	14.6	16.9	-5.0	13.8	45.2
Azerbaijan	..	-3.4	6.0	8.0	8.9	9.6	18.2	12.5	13.7	4.5
Iran	-0.1	4.1	5.3	4.9	4.4	5.4	6.1	6.4	..	..
Kazakhstan	..	0.3	9.2	10.6	9.7	8.8	8.7	9.1	5.8	1.2
Kyrgyz Republic	17.4	-4.5	4.4	7.3	11.9	8.4	5.5	10.1	10.7	..
Pakistan	6.6	4.5	4.8	5.2	5.8	8.5	6.5	7.0	6.0	1.6
Tajikistan	3.3	-8.8	8.2	10.3	9.0	6.7	8.0	6.0	..	..
Turkey	5.1	3.9	6.4	5.3	9.2	8.0	6.0	6.1	1.6	-3.2
Turkmenistan	..	-0.4	40.2	24.9	18.6	13.6	7.9	20.4	-5.0	5.0
Uzbekistan	-1.9	0.2	3.2	3.2	7.5	8.0	10.1	14.8	13.1	11.7

Source: World Development Indicators (http://databank.worldbank.org); simple averages for period 1981-1990 and 1991-2000.

4.2. Trade in Services

The level of trade in services varies across the ECO region. Kyrgyzstan has the highest level of trade in services expressed in terms of GDP, with the share of services trade in GDP rising from 15.4 percent in 2000 to 37.7 percent in 2009 (Table 4.3). Both Azerbaijan and Kazakhstan exhibit a declining trend in trade in services in recent years: in Azerbaijan services trade as a percent of GDP declined from 37.1 percent in 2004 to 11.9 percent in 2009 whereas in Kazakhstan the same fell from 16.5 percent to 12.4 percent during the same period. A similar picture is observed in the case of Tajikistan. The share of services trade in GDP in Pakistan and Turkey, the two large economies in the region, stood respectively at 6.4 percent and 8.2 percent in 2009. The low shares of these two countries are in line with the fact that larger countries tend to have a smaller share of trade in their economies.

Table 4.3: Trade In Services Sector Growth

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(% of GDP)					
Azerbaijan	14.1	16.7	26.6	34.1	37.1	25.2	18.1	14.0	11.8	11.9
Kazakhstan	15.9	17.6	20.6	17.7	16.5	17.0	14.3	14.6	11.7	12.4
Kyrgyz Republic	15.4	13.6	18.0	16.6	19.6	22.4	29.6	33.9	36.8	37.7
Pakistan	4.9	5.2	6.5	7.5	8.3	10.2	9.4	8.8	8.5	6.4
Tajikistan	..	..	14.2	13.5	16.2	17.2	18.8	20.0	12.4	9.5
Turkey	10.4	10.9	8.7	8.4	8.5	7.9	7.1	6.9	7.2	8.2
					(% of Total Trade)					
Azerbaijan	18.2	21.4	28.7	31.7	30.6	21.8	17.2	14.5	12.5	15.4
Kazakhstan	15.0	18.9	21.9	19.4	17.1	17.3	15.6	15.8	12.4	16.4
Kyrgyz Republic	17.2	18.5	21.7	19.7	20.8	23.2	24.5	25.6	24.9	28.9
Pakistan	17.5	17.2	21.2	22.9	27.2	28.9	24.3	24.7	31.6	19.3
Tajikistan	..	..	10.1	9.9	12.6	21.8	23.3	22.3	13.9	13.6
Turkey	24.0	21.4	17.8	17.9	17.0	16.8	14.1	13.9	13.9	17.1

Source: World Development Indicators (http://databank.worldbank.org).

A somewhat different picture is observed for trade in services in terms of its share in each country's total trade. In 2009, the share of services in total trade in Kyrgyzstan was the highest at 28.9 percent, followed by Pakistan (19.3 percent), Turkey (17.1 percent), Kazakhstan (16.4 percent), Azerbaijan (15.4 percent), and Tajikistan (13.6 percent).

Exports of services exhibit an increasing trend in a majority of the ECO member countries. In Azerbaijan, export of services increased manifold from US$260 million in 2000 to US$1750 million in 2009. Kazakhstan witnessed a four-fold increase in services exports from US$1053 million in 2000 to US$4266 million in 2009. Though the value of export of services in Kyrgyzstan and Tajikistan remains small, it increased from US$62 million in 2000 to US$ 860 million in 2009 in Kyrgyzstan and from US$69 million in 2002 to US$180 in 2009 in Tajikistan. Pakistan's total exports of services increased from US$ 1.38 billion in 2000 to US $ 4.2 billion in 2008. Transport services, communication services and government services sectors are the main contributing sectors in Pakistan's total exports of services. Turkey is a major exporter of services with services exports rising from US$19.5 billion in 2000 to US$33.2 billion in 2009. Travelling and transport services are the major sources of export earnings in Turkey.

Except for Kyrgyzstan and Tajikistan, the ECO member countries are also major importers of services. In 2009, imports of services in Turkey stood at US$16.9 billion, followed by Kazakhstan (US$10.06 billion), Pakistan (US$6.4 billion), Azerbaijan (US3.3 billion), Kyrgyzstan (US$867 million), and Tajikistan (US291 million). Major imports include business services, transport services, and financial services.

Table 4.4: Trade in Service: Exports and Imports

(US $ Million)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					Exports					
Azerbaijan	260	290	362	432	492	683	940	1248	1547	1750
Kazakhstan	1053	1260	1540	1712	2009	2228	2819	3564	4428	4266
Kyrgyz Republic	62	83	142	158	210	259	379	685	896	860
Pakistan	1380	1459	2429	2968	2749	3678	3506	3767	4263	3891
Tajikistan	..	..	69	89	123	146	134	149	181	180
Turkey	19528	15234	14046	18013	22960	26770	25600	29027	34996	33218
					Imports					
Azerbaijan	485	665	1298	2047	2730	2653	2863	3379	3889	3358
Kazakhstan	1850	2635	3538	3753	5108	7496	8760	11730	11119	10066
Kyrgyz Republic	148	125	147	160	223	290	460	604	993	867
Pakistan	2252	2330	2241	3294	5333	7508	8418	8811	9717	6482
Tajikistan	..	..	105	122	213	252	394	592	456	291
Turkey	8153	6098	6161	7502	10163	11505	11990	15683	17875	16913

Source: UNCOMTRADE.

4.3. Trade in Commercial Services

Pakistan's exports of commercial services in 2005-06 stood at US$3.75 billion with computer and information technology, professional services, and travel services being the major contributing sectors. The imports of commercial services amounted to US$8.15 billion with transport and travel services and other business services dominating the services imports profile. The major trading partners were United States, European Union, and Middle East. Trade in commercial services also showed strong growth during in Turkey, Azerbaijan, Kazakhstan, and Kyrgyzstan during the period 2003-08 (Fig. 4.1).

Figure 4.1: ECO's Commercial Services, 2003-2008

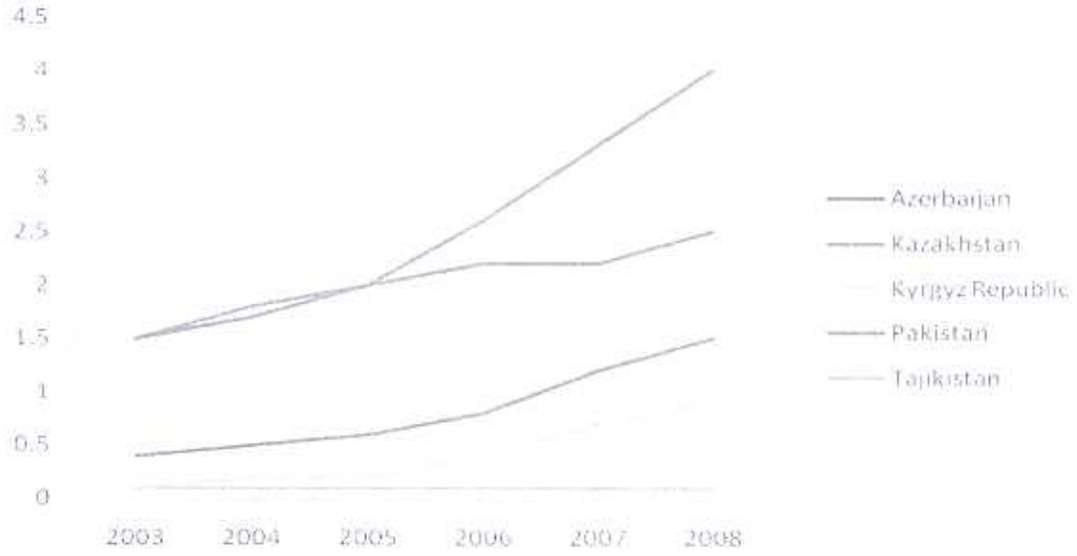
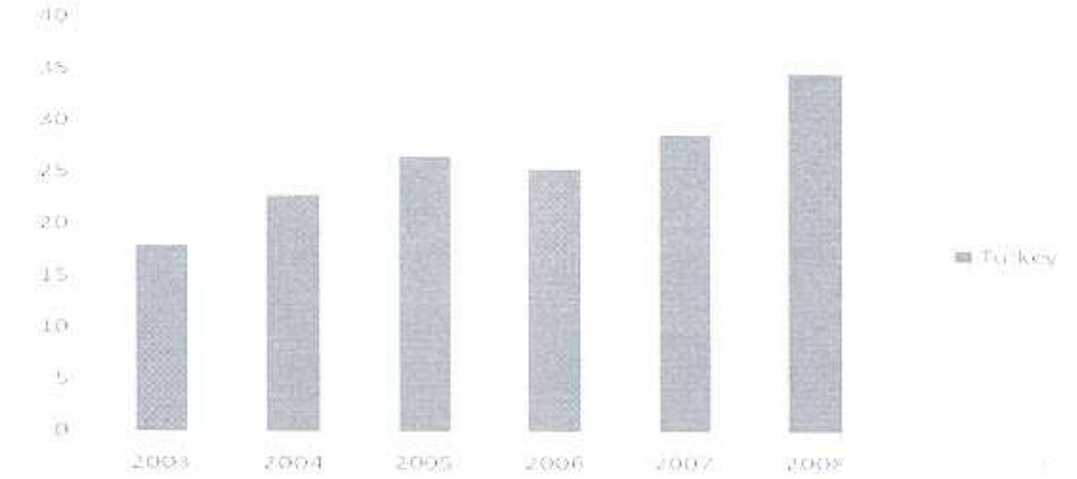


Figure 4.2: Turkey's Commercial Services, 2003-2008



4.4. Trade in Financial Services

Turkey is the only major player in ECO region with substantial exports of financial services: its exports of services were as high as US$841 million in 2008, before falling to US$464 million in 2009 due mainly to the global financial crisis. Pakistan's exports of financial services stood at US$55 million in 2008, up from US$47 million in 2005. Kazakhstan's exports of financial services, though small, have risen substantially risen years from US$18 million 2005 to US$ 112 million in 2008. With the global economic slowdown, Kazakhstan's exports of financial services fell to US$48 million in 2009. Exports of financial services remain quite low in other ECO members including Azerbaijan, Kyrgyzstan, and Tajikistan.

Turkey, Kazakhstan, Pakistan, and Azerbaijan are significant importers of financial services in the ECO region. Imports of financial services in Turkey increased from US$386

million in 2005 to US$826 million in 2009, showing strong growth over the years. In Kazakhstan, imports of financial services stood at US$287 million in 2009, up from US$47 million in 2005. Pakistan also witnessed an increase in the import of financial services from UD$124 million in 2005 to US$217 million in 2008. In terms of the trade balance, all the ECO countries under review recorded a deficit, reflecting their excess demand for a variety of financial services.

Table 4.5: Trade Financial Service

Country	2005	2006	2007	2008	2009
	Exports (US $ Million)				
Azerbaijan	0.1	0.2	0.1	0.12	0.3
Kazakhstan	18	22	75	112	48
Kyrgyz Republic	4	2	3.6	1.4	1.1
Pakistan	47	64	67	55	..
Tajikistan	8	8.8	12.5	17.3	6
Turkey	345	277	395	841	464
	Imports (US $ Million)				
Azerbaijan	10	48	121.7	125	153
Kazakhstan	47	182	193	323	287
Kyrgyz Republic	4.4	3.5	9	9	4
Pakistan	124	132	125	217	
Tajikistan	4.2	12	11	25	12.3
Turkey	386	524	623	978	826

Source: UNCOMTRADE.

4.5 Trade in Communication Services

Turkey and Pakistan are the leading countries in the ECO region in terms of exports of communication services. In Turkey, exports of communication services amounted to US$725 million in 2008, up from US$412.4 million in 2005. In Pakistan, however, exports of communication services fell from US$ 284 million in 2005 to US$91 million in 2008. Azerbaijan is the next important player in terms of exports of communication services showing an increasing trend from US$73 million in 2005 to US$98.4 million in 2008. Both Turkey and Pakistan are also major importers of communication services in the ECO region with respective imports amounting to US$298 million and US$128 million in 2008.

Table 4.6: Trade in Communication Services

(US $ Million)

Countries	2005			2008		
	Exports	Imports	Trade Balance	Exports	Imports	Trade Balance
Turkey	412.4	228280	184.2	725	298	427
Azerbaijan	73	72.4	23.2	98.4	121	19
Tajikistan	36	12.5	5.6	47	28	5.6
Kyrgyzstan	13.5	7.8	5.4	39	33	3.8
Kazakhstan	6.4	6	0.7	16.4	13	-22.5
Pakistan	284	84	200	91	128	-37

Source: UNCOMTRADE.

4.6. Potential in Trade in Services

There is a significant potential for trade in services in the ECO region. The services trade in the ECO member countries is of intra-industry variety signifying that intra-regional trade can be strengthened in all segments of the services sector. On the demand side, a majority of the ECO countries are in transition and have a great demand for construction, telecommunications, and financial services. On the supply side, both Turkey and Pakistan can be important suppliers of a wide variety of services including information and communications technology, construction, and business and financial services. Turkey has a very well developed capacity in construction and its world class construction companies have won contracts around the globe. The developing countries of the ECO region such as Afghanistan, Tajikistan, Turkmenistan, and Kyrgyzstan can benefit from Turkey's expertise in construction services. Turkey can also be an important supplier of business and financial services in the ECO region.

Pakistan can be an important source of information and communications technology and financial services. Over the years, Pakistan has developed substantial capacity in information and communications technology and its firms are supplying such services to the US and the European Union. As many ECO member countries are rapidly transforming into market economies based on private enterprise, their demand for information and communications services is likely to grow strongly in the future thus opening up possibilities for intra-regional trade in information technology.

The ECO member countries are likely to benefit particularly from trade in services under Mode 3 of the GATS (sales by foreign affiliates). This mode of trade involves FDI by foreign enterprises that can bring additional benefits in terms of transfer of managerial and technical expertise. For example, Turkish construction companies operating in ECO member countries can be beneficial for the domestic construction enterprises through spillovers of technology. Similarly, opening up of foreign banks can be instrumental in improving the overall efficiency of the financial sector in the host economies. There is significant scope for intra-regional trade in services under Mode 3 with Turkey and Pakistan.

4.7. Barriers to Trade in Services Sector

Despite the potential for trade in services, intra-regional trade in services remains minimal due to several barriers that usually take the form of establishment and foreign equity participation requirements under Mode 3 service delivery while in mode 4 there are limitations on movement of intra-corporate transferees and contractual service suppliers. Similarly, services trade under Mode 1 is generally restrained by residency requirements. Foreign suppliers are discriminated by nationality and residency requirements. In other instances, these are replaced by requirements such as collaboration with locals through joint ventures. Furthermore, there are barriers that relate to requirements in ownership and control of establishment, regulation of international transactions, and cross-border movement of personnel.

Trade barriers also come in the form of regulations such as citizenship or nationality requirements for professionals practice in such fields as medicine and law, economic needs test, educational and other qualification requirements, licensing requirements for temporary or occasional practice, fee setting regulations, compulsory membership in professional associations, and compulsory partnership with local professionals. Other barriers that restrict

trade in services include local presence requirements through permanent residency, cumbersome registration procedures, restricted mobility of natural persons, and the requirement of hiring minimum number of local professionals. Discrimination in government procurement also often acts against foreign service providers. Trade in transportation services is hindered by lack of trade and transit facilitation. For example, there are restrictions on the movement of Afghan vehicles for transportation of goods to Pakistan, Iran, Tajikistan, and Turkmenistan. Also, lack of adequate financial intermediation for the cross-border transfer of payments and profits has impeded trade in services.