Regional Economic Integration in Central Asia and South Asia

Lord, Montague

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Acronyms

ACD	Afghan Customs Department
AD	Anno Domini
ADB	Asian Development Bank
API	Active Pharmaceutical Ingredient
ARD	Afghan Revenue Department
ATF	Agreement on Trade Facilitation
BC	Before Christ
BEZ	Border Economic Zone
BTA	Bilateral Trade Agreement
CADGAT	Central Asia Data-Gathering and Analysis Team
CAREC	Central Asia Regional Economic Cooperation
CARs	Central Asian Republics
CASA	Central Asia South Asia
CBTA	Cross-Border Trade Agreement
CC	Cubic Centimeter
CGE	Computable General Equilibrium
CIF	Cost Insurance Freight
CISFTA	Commonwealth of Independent States Free Trade Agreement
COMTRADE	Commodity Trade Statistics Database
CPI	Consumer Price Indices
CU	Customs Union
DOF	Degrees of Freedom
DOT	Direction of Trade
DRC	Domestic Resource Cost
DW	Durbin-Watson
EAEC	Eurasian Economic Community
ECM	Equilibrium-correcting mechanism
ECOTA	Economic Cooperation Organization Trade Agreement
FAO	Food and Agriculture Organization
FOB	Free on Board
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GIROA	Government of the Islamic Republic of Afghanistan
GMP	Good Manufacturing Practice
GNI	Gross National Income
GNP	Gross National Product
GVC	Global Value Chain
HDI	Human Development Index

HS	Harmonized System
HT	High Tech
IIT	Intra-Industry Trade
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
kVA	Kilo Volt Ampere
kW	Kilo Watt
LDC	Least Developed Countries
LSCI	Linear Shipping Connectivity Index
MT	Medium Tech
MW	Megawatt
NGO	Non-Government Organization
NTB	Non-Tariff Barrier
NTMs	Non-Tariff Measures
NUPI	Norwegian Institute of International Affairs
OECD	Organisation for Economic Cooperation and Development
PP	Primary Products
PPI	Producer Price Indices
PPP	Purchasing Power Parity
QR	Quick Response
RB	Resource-Based
RCA	Revealed Comparative Advantage
REER	Real Effective Exchange Rate
RER	Real Exchange Rate
RTA	Regional Trade Arrangement
RVC	Regional Value Chain
SAFTA	South Asia Free Trade Area
SAPTA	South Asian Preferential Trade Agreement
SI	Similarity Index
SME	Small and Medium-Sized Enterprise
SPS	Sanitary and Phytosanitary
TAFA	Trade and Accession Facilitation for Afghanistan
TAP (TAPI)	Turkmenistan–Afghanistan–Pakistan–India Pipeline
TIVA	Trade in Value Added
TLP	Trade Liberalization Program
TTA	Transit Trade Agreement
TTF	Transport and Trade Facilitation
UAE	United Arab Emirates
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USAID	United States Agency for International Development

VA	Value Added
VAT	Value Added Tax (VAT)
WIOD	World Input Output Database
WPI	Wholesale Price Indices
WTO	World Trade Organization

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Map of Central and South Asia

Source: Perry-Castañeda Library Map Collection, University of Texas at Austin

Regional Trade Opportunities in Central and South Asia

Executive Summary

The Central and South Asia regions have a long history of trade relations. There have nearly always been movements of goods and people between the regions, which in turn have linked their cultural and religious ties and impacted political relations. Yet today's trade between the two regions remains low and significantly below regional trade in Africa, the Middle East, Latin America and Southeast Asia. Using different measures of trade, we estimate that inter-regional trade is only between 0.2 and 4 percent of total trade to all destinations. Even within the regions, trade among countries remains low. Intra-regional trade in Central Asia is less than 5 percent and that of South Asia is 1.5 percent of trade with all countries.

The present study explores opportunities and challenges for intra- and inter-regional trade in the Central and South Asia areas by analyzing a wide range of channels impacting trade. Trade enhancing channels are divided into two broad categories. The first set refers to disaggregated or product-level characterizations of trade affecting competitiveness and complementarities between trading partners within and between the regions. The second refers to price, non-price and structural determinants that tend to affect all products traded between countries. The analysis also includes a gravity model to gauge the effect of economic growth, distance and price, non-price and structural determinants of regional trade.

The empirical results indicate that, under existing trade patterns, the potential value of trade in the two regions is nearly twice as large as the actual level. The finding is not surprising. Opportunities for regional trade abound and there are numerous policy initiatives that could be taken to help spur trade and investment in and between the two regions. Among the possibilities are regional value chains that could create large gains in terms of higher value additions to exports, technologies transfers and employment generation. The analysis of different types of value chains in this study categorizes industries according to their value added contribution to trade, and it prioritizes industries according to interests ranging from the diversification of industries across resource-intensive, labor-intensive, and technology-intensive industries, as well as the potential participation of Afghanistan due to its comparative advantages in products exported by the industries or its geographic location for transit trade.

Based on quantitative analyzes of actual and potential channels of trade, the study ranks the pattern of trade in terms of its adaptability to intra- and cross-regional commerce in the Central and South Asia regions and its predilection for regional value chains. The ranking uses an innovative methodology that takes account of difference preference orderings of stakeholders, such as governments and development partners that have interests in pro-poor trade, or large companies that favor cross-border fragmentation of production for regional and global value chains.

Ratings are classified into the following categories: trade complementarities, export diversification, comparative advantages, structural factors, intra-industry trade, price competitiveness, trade costs, economic growth; and regional value chains. The baseline ratings suggest the following: First, the larger economies have higher ratings than the smaller, less developed ones, suggesting that size and level of development matter in the development of regional trade. Second, among the different channels of regional trade development, the most effective ones are (i) measures that promote price competitiveness; (ii) intra-industry trade; (iii) trade complementarities; and (iv) economic growth. Third, the effectiveness of country-specific measures differ, as for example in Afghanistan, where the trade enhancing channels that matter the most are structural factors, price competitiveness and trade complementarities with other countries in South Asia and with Central Asia in general.

These findings have important implications for the ability of different trade-related policies, programs and institutional mechanisms to successfully promote greater commerce within and across the two regions. Each of these mechanisms has costs associated with them and different types of mechanisms can be programmed on the basis of their ease of implementation and impact potential.

The material in this study is designed in such a way as to provide practical knowledge and methods for businesses to take advantage of Central and South Asia regional opportunities; analytical tools for policymakers and researchers; and policy and program recommendations for governments and development partners. It should be of interest to businesses, governments, international development partners, policymakers and researchers, and others concerned with Central and South Asia's trade and the potential for developing value chains or so-called 'trade in tasks' across the two regions.

PART I. INTRODUCTION

I. BACKGROUND AND COVERAGE

A. Introduction

Trade, investment and economic cooperation between the Central and South Asia regions is critical to present-day economic growth and development of countries in those areas. The two regions contain the landlocked countries of the Central Asian Republics and Afghanistan, which rely on land and air connectivity with each other and neighboring countries to access regional and global markets. Yet, while there is tremendous potential for increasing trade and investment between Central Asia and South Asia, these two regions are among the least economically integrated ones in the world: their inter-regional trade accounts for less than 1 percent of the total trade between the five Central Asian Republics and the three South Asian countries of Afghanistan, India and Pakistan.[1]

In an effort to reverse that situation, a variety of initiatives are being put forward. They range from a cross-border transport agreement among Kyrgyzstan, Tajikistan and Afghanistan, and the Afghanistan-Pakistan Transit-Trade Agreement, to multilateral efforts to secure better market access through accession to the World Trade Organization (WTO) by Afghanistan, Kazakhstan, Turkmenistan and Uzbekistan.[2] The United States Government's concept of a New Silk Road forms the basis for much of its supports to enhancing connectivity across South and Central Asia, and reestablishing Afghanistan's historic role as the crossroads of Eurasia. New trade routes are envisioned. They connect Europe and the markets of Central and East Asia through a web of north-south and east-west trade corridors, as well as energy grids and communication networks. The establishment of the new routes has been shaped by the Asian Development Bank's (ADB) Central Asia Regional Economic Cooperation (CAREC) program, which has implemented over 100 projects in regional transport, trade facilitation, trade policy and energy, as well as facilitated over $20 billion worth in infrastructure and investment in that region.[3]

In this context, the objective of the present study is to explore opportunities and challenges for intra- and inter-regional trade in the Central and South Asia areas by analyzing trade competitiveness and complementarities along with the potential for regional value chains. In particular, the study quantitatively analyzes actual and potential channels for trade at the detailed product level. Based on those findings, it ranks the pattern of trade in terms of its adaptability to intra- and cross-regional commerce in the Central and South Asia regions and its predilection for regional value chains. It then assesses the ability of different trade-related policies, programs and institutional mechanisms to successfully promote greater commerce

[1] Trade-weighted average, based on data for 2013 from International Monetary Fund, Direction of Trade statistics.

[2] W.J. Burns (2014), "Remarks by Deputy Secretary of State on 'Expanding Economic Connectivity in Greater Central Asia'. Delivered to the Asia Society, New York City. 23 September 2014. Available: http://www.state.gov/s/d/2014/232035.htm.

[3] P. Pyatt (2013), "Remarks by Principal Deputy Assistant Secretary, Bureau of South and Central Asian Affairs on Afghanistan Security Days, Organization for Security and Cooperation in Europe". Vienna, Austria. March 12, 2013. Available: http://www.state.gov/p/sca/rls/rmks/2013/205973.htm.

within and across the two regions. Those assessments are based on rating of alternative preferences by stakeholder groups, such as governments and development partners that wish to promote pro-poor trade, or large companies that are interested in greater cross-border fragmentation of production for regional and global value chains.

The material in this study is designed in such a way as to provide (a) practical knowledge and methods for businesses to take advantage of Central and South Asia regional opportunities; (b) analytical tools for policymakers and researchers; and (c) policy and program recommendations for governments and development partners. It should be of interest to businesses, governments, international development partners, policymakers and researchers, and others concerned with Central and South Asia's trade and the potential for developing value chains or so-called 'trade in tasks' across the two regions.

The study has been carried out under USAID's Afghanistan Trade and Revenue Project, which provides technical support and assistance to strengthen the business climate of Afghanistan in order to enable private investment, enhance trade, create jobs, and provide fiscal sustainability during the country's transition period in this decade and continuing into the next decade's transformational period. The study supports the project's Component 2 that seeks to enhance regional economic integration in Central and South Asia through the adoption of trade facilitation measures such as cross-border transit agreements, corridor governance, customs reforms, private sector linkages, and regional policies and programs.

B. Historical Context

The Central and South Asia regions have a long history of trade relations. There has nearly always been movement of goods and people, which has, in turn, linked their cultural and religious ties and impacted their political relations.

- In ancient times, travelers from Central Asia seeking to enter South Asia had a choice of routes. Although the Himalayan Mountains in the north and extensive mountains in the northeast prevented large-scale overland trade, regular cultural contacts and the movement of valuable goods always continued. Land routes through the Hindu Kush in the northwest, including the Khyber Pass, allowed contact between Central Asia and South Asia through what is today Afghanistan.[4] Lapis lazuli was one of the principal materials procured through these trade networks. As a highly prized raw material in the ancient world and used in combination with gold and silver to create works of art, it was traded along a route linking the people of the Indo-Iranian borderlands (now Afghanistan and parts of Pakistan) and Turkmenistan since at least the seventh millennium BC.[5]
- During the period of the Indus Valley Civilization (3300-1300 BC), the people from what is today northeast Afghanistan, Pakistan and northwest India traded with Central Asia

[4] V. Hansen and K. Curtis (2013), *Voyages in World History, Volume 1 to 1600, Volume 1*. Edition 2. Boston, Mass.: Cengage Learning. Available: http://books.google.co.th/books/about/Voyages_in_World_History.html?id=-MLXDr0GRHQC&redir_esc=y.

[5] Ibid.

through the Khyber Pass.[6] This was a period during which there was a renewal of trade networks between the Indian subcontinent and southern Central Asia.[7] The ancient cities in the plains between the Kopet Dagh and the Karakum Desert of Turkmenistan were where the trade routes from China in the east, Europe in the west, Russia in the north and India in the south met and cultures, trade and religions converged. An extensive network of land routes had emerged as early as the III-II millennium BC that included access to India through Afghanistan.

- Under ancient India's Maurya Empire (322–185 BC), the importance of relations with Central Asia increased through the trade route linking Taxila in the Punjab province of Pakistan to Kapisa in Afghanistan, and then to the ancient oasis city of Merv along the Silk Road in Turkmenistan.[8] It was during this time that Takshashila (Taxila in present-day Pakistan) became a major intersection for three trade routes, one of which went north to Balkh in what is now northern Afghanistan.[9]

- During the early development of the Silk Road, the Kushan Empire (30–375 AD) established political and economic stability of much of Central Asia and extended its control to the Indian Ganges Valley in the south.[10] The Kushans' trade-based economy ensured a steady flow of goods, people and cultures across the two regions and complemented the early development of the main routes by the Han Dynasty (206 BC – 220 AD) and in particular the Central Asian sections of the trade routes around 114 BC by the Han dynasty.

- In later development of the Silk Road and during the height of its commerce (13th century and first half of 14th century), the important secondary routes to the Indian subcontinent were part of the main southern route. During this period, Kashgar (in China and located near the border with Tajikistan and Kyrgyzstan) became the new crossroads of Asia and from here the routes again divided, heading across the Pamirs to Samarkand and from there to the south into the Indian subcontinent. Numerous commodities were traded

[6] J. McIntosh (2008), *The Ancient Indus Valley: New Perspectives.* Santa Barbara, California. ABC-CLIO, Inc. Available: http://books.google.co.th/books/about/The_Ancient_Indus_Valley.html?id=1AJO2A-CbccC&redir_esc=y.

[7] F.T. Hiebert and C.C. Lamberg-Karlovsky (2003), "Central Asia and the Indo-Iranian Borderlands". *Iran* 30:1-15. Available: http://www.jstor.org/discover/10.2307/4299865?uid=3739136&uid=2&uid=4&sid=21105330813613.

[8] S. Dwivedi (2011), "Ancient Merv- the Queen of the World and its link with India". Dialogue 13(1). Available: http://www.asthabharati.org/Dia_July%20011/suni.htm.

[9] K. J. Schmidt (1995), *An Atlas and Survey of South Asian History.* Armonk, N.Y.: M.E. Sharpe. Available: http://books.google.co.th/books/about/An_Atlas_and_Survey_of_South_Asian_Histo.html?id=FzmkFXSgxqgC&redir_esc=y.

[10] S. Mehendale (1996), "Begram: along ancient Central Asian and Indian trade routes". Cahiers d' Asie Centrale 1/2. Available: http://asiecentrale.revues.org/419.

along the route, ranging from gold, precious stones and ivory to exotic animals and plants.[11]

- During the reign of the Mongol Empire (1206-1368) under the leadership of Genghis Khan and his descendants, commercial activities grew rapidly. They stretched from the Sea of Japan to Central Europe, and then southwards into the Indian subcontinent, Indochina, and the Iranian plateau. Though the invasions into India failed, the Mongols encouraged trade between Central Asia and the India subcontinent.

- Under the Mughal Empire (1526-1857) of the Indian subcontinent, commercial and cultural links with Central Asia flourished, and especially under Emperor Jahangir (1569 – 1627). The main caravan routes went through the Khyber and Bolan passes to Kashmir, Afghanistan, and the vast area of Turkestan. The main products originating in Central Asia were horses, falcons, dry and fresh fruits, silk, furs, cotton and precious metals; from the Indian side there were spices, tea, medicinal herbs, textiles, and precious stones.[12] Regular diplomatic missions took place between the Central Asian countries and India to address economic and trade issues. When Portugal seized large trade ports in Goa, Diu and Daman, the Moguls turned to the ancient caravan routes through Afghanistan to Central Asia. Further development of Central Asian trade with the Indian subcontinent occurred after the capture by Russia of Kazan Republic of Tatarstan in 1552 and Astrakhan 1556.[13] From that time onwards the role of Central Asian merchants as mediators of Indo-Russian trade significantly increased.

- After the Russian Bolshevik Revolution of 1914 and Russia's support of India's anti-colonial struggle, Central Asia's role as a peripheral area of the Russian Empire meant that the two regions maintained contact with one another. Following renewed ties between Russia and India in 1955 and again in 1971, Indo-Central Asian commercial relations grew until the fall of the Soviet Union in 1992.[14]

- The New Silk Road (2011 onward) envisions Afghanistan's integration into the Central and South Asia regions by resuming traditional trading routes and reconstructing significant infrastructural links broken by decades of conflict. It supports the transition to trade and

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[11] O. Wild (1979), "The Silk Road". Online: http://www.ess.uci.edu/~oliver/silk3.html.

[12] M. Laruelle (2011), "Foreign policy and myth-making: great game, heartland and silk roads". In M. Laruelle and S. Peyrouse (eds.), *Mapping Central Asia: Indian Perceptions and Strategies,* Ashgate Publishing, Ltd. Available: http://books.google.co.th/books?id=ceehAgAAQBAJ&dq=ancient+trade+routes+%22central+asia%22+india+trade+renewal&source=gbs_navlinks_s.

[13] M. Kh. Abuseitova, "Historical and Cultural Relations between Kazakhstan, Central Asia and India from Ancient Times to the beginning of the 20th Century". In J. N. Roy, Braja Bihārī Kumāra (eds), *India and Central Asia: Classical to Contemporary Periods.* Concept Publishing Company. Available: http://books.google.co.th/books?id=-lJI9avHstYC&dq=trade+%22Central+Asia%22+%22Indian+Subcontinent%22&source=gbs_navlinks_s.

[14] M. Laruelle (2011) *op. cit.*

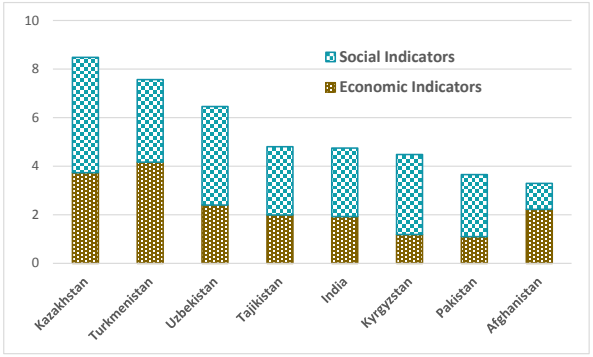
the opening of new markets connecting Afghanistan to Central Asia, Pakistan and India. The initiative is being promoted in four key areas: (a) regional energy markets to directing oil, gas and hydroelectric power southward from Central to South Asia through Afghanistan; (b) trade and transport improvements in hard infrastructure as well as soft infrastructure to help harmonize national customs systems, bring states into multilateral trade institutions, and eliminate institutional and bureaucratic barriers to trade; (c) custom and border operation procedures to facilitate trade and promote security and good governance; and (d) businesses connectivity to expand economic market opportunities for marginalized groups and enhance regional stability.[15]

C. Socio-Economic Profile

The Central and South Asia regions contain a rich mix of countries with distinct social and linguistic characteristics, though they share strong historical and cultural ties. Table 1.1 shows general socio-economic indicators about the countries. Although Central Asia has, on average, higher social and economic indicators that South Asia, there are considerable variations among countries within each region.

In order to arrive at some general comparison of the socio-economic levels across countries, each of the economic and social indicators in Table 1.1 have been standardized using a common rating scale of 1 (low) to 5 (high). The economic indicators consist of per capita GDP and economic growth rates, while social indicators are made up of human development index, life expectancy, literacy rates, and the proportion of all persons living below the poverty line.

Figure 1.1: Socio-Economic Indicators of Central and South Asia Economies (sum of social and economic indicators, each based on 1-5 rating)



Source: Table 1.1.

Figure 1.1 summarized the two sets of indicators for countries in the two regions, based on the mean average of the different economic and social indicators. Kazakhstan has the highest overall ranking, in large part because of its favorable social indicators, but also because of its high per capita GDP. Turkmenistan has the second highest ranking because of its high economic growth rate. At the lower end, Afghanistan and Pakistan have the lowest ratings because of unfavorable socio-economic indicators. In the case of Afghanistan, all indicators are at or near the bottom, except for its relatively high economic growth rate.

[15] United States Department of State (2014), "U.S. Support for the New Silk Road". Online: http://www.state.gov/p/sca/ci/af/newsilkroad/.

Table 1.1. Profile of Central and South Asian countries

	Central Asia					South Asia		
	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Afghanistan	India	Pakistan
Political Status	Declared Independence from USSR on 16 December 1991	Independence from the Soviet Union on 25 December 1991	Independence from the Soviet Union on 25 December 1991	Independence from the Soviet Union on 25 December 1991	Independence from the Soviet Union on 25 December 1991	First Afghan State in April 1709; recognized August 1919	Independence from British Empire on 15 August 1947	Independence from British Empire on 14 August 1947
Capital City	Astana	Bishkek	Dushanbe	Ashgabat	Tashkent	Kabul	New Delhi	Islamabad
Population (thousand)	17,949 (2014)	5,777 (2014)	8,208 (2013)	5,172 (2014)	30,185 (2013)	31,823 (2014)	1,210,193 (2011)	196,174 (2014)
Land Surface (sq.km)	2,724,900	199,951	143,100	491,210	449,978	652,864	3,287,590	803,940
Population density (persons/sq.km)	5.94 (2014)	27.4 (2014)	48.6 (2010)	10.5 (2014)	61.4 (2013)	43.5 (2014)	380.5 (2011)	234.4 (2014)
% Population in Urban Areas	55% (2012)	35% (2012)	26.55% (2012)	47% (2012)	51% (2012)	23% (2012)	31% (2012)	35% (2012)
Life Expectancy (years)	70 (2012)	70 (2012)	61 (2012)	65 (2012)	73 (2014)	61 (2012)	66 (2012)	66 (2012)
% Annual Population Growth	1.5% (2013)	2.0% (2013)	2.5% (2013)	1.3% (2013)	1.6% (2013)	2.4% (2013)	1.2% (2013)	1.7% (2013)
Gross Domestic Product (GRP, million US$)	224,415 (2013)	7,226 (2013)	8,508 (2013)	41,851 (2013)	56,796 (2013)	20,725 (2013)	1,876,797 (2013)	236,625 (2013)
Per Capital GDP (US$)	13,172 (2013)	1,263 (2013)	1,036.6 (2013)	7,986.7 (2013)	1,878.1 (2013	678.3 (2013)	1,498.9 (2013)	1,299.1 (2013)
% Annual GDP Growth	0.065	0.040	0.072	0.113	0.082	0.083	0.067	0.036
Total Employment (thousand)	4,325.72	2,317 (2013)	1,121 (2010-2014)	2,258.9 (2012)	12,998.64 (2012)	7,512.21 (2012)	484,343.28 (2012)	63,777.83 (2012)
Human Development Index	0.757 (2013) 70th	0.628 (2013) 125th	0.607 (2013) 133th	0.698 (2013) 103rd	0.661 (2013) 116th	0.468 (2013) 169th	0.586 (2013) 135th	0.537 (2013) 146th
Percent of Population Below Poverty Line	8.2% (2009)	38% (2012)	28.2% (2012)	30% (2004)	26% (2011)	35.8% (2011)	21.9% (2012)	12.4% (2011)
Adult (15+) Literacy Rate (%)	99.7% (2012)	99.2% (2009)	100% (2012)	100% (2012)	99% (2012)	32% (2011)	62.8% (2006)	55% (2011)
Ethnic Groups	Kazakh (63.6%) Russian (23.3%) Uzbek (2.9%) Ukrainian (2%) others (8.2%)	Kyrgyz (72.6%) Uzbek (14.4%) Russian (6.4%) Dungan (1.1%) others (5.5%)	Tajik (79.9%) Uzbek (15.3%) Russian (1.1%) others (2.6%)	Turkmen (85%) Uzbek (5%) Russian (4%) others (6%)	Uzbek (81.1%) Russian (5.4%) Tajik (4%) Kazakh (3%) Karakalpak (3%) Tatar (1.5%) others (2.5%)	Pashtun (42%), Tajik (27%), Hazara (9%), Uzbek (9%), Aimaks (4%), Turkmen (3%), others (6%)	Indo-Aryan (72%), Dravidian (25%), Mongoloid and other (3%) (2000)	Punjabi, Sindhi, Pashtun (Pathan), Baloch, Muhajir (immigrants from India and their descendants)
Language Spoken	Kazakh, Turkic, Russian, Uzbek, Ukranian, Uyghu, Kyrgyz, Tatar, Mongolian	Kyrgyz (national) Russian (official)	Tajik, Russian	Turkmen, Russian	Uzbek, Karakalpak	Pashto, Dari, Uzbeki, Turkmani, Baluchi, Pashai, Nuristani, Pamiri (alsana), Arab	Hindi, English, Assamese, Bengali, Bodo, Dogri, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Maithili, Malayalam, Marathi, Nepali, Punjabi, other	Punjabi, Pashto, Sindhi, Saraiki, Balochi, Kashmiri, Brahui, Dogri, Hindko, Shina, Balti, Khowar, Burushaski Yidgha, Dameli, Kalasha, Gawar-Bati, Domaaki
Currency (exchange rate, 25-11-2014)	1US$ = 180.935 Kazakhstani tenge (KZT)	1US$ = 57.567 Kyrgyzstan Som (KGS)	1US$ = 5.0845 Tajikistani Somoni (TJS)	1US$ = 2.8503 Turkmenistan Manat (TMT)	1US$ = 2,401.09 Uzbekistani Som (UZS)	1US$ = 58.22 Afghan Afghani (AFN)	1US$ = 61.85 Indian Rupee (INR)	1US$ = 101.8 Pakistani Rupee (PKR)

Source: World Bank, World Development Indicators; United Nations, Human Development Index (HDI) database; various other sources.

D. Coverage

The study is divided into four main parts:

- *Part I* introduces the study and explains the concept behind the growing international fragmentation of trade and why its application to the Central and South Asia regions could greatly bolster trade within and between them. It also describes the methods used to rate and rank the potential for regional trade of different products, as well as providing a discussion on whether trade-related policies and programs could substantially bolster trade. Finally, it explains the methodology used to assess whether trade-related policies and programs are being carried out independently by countries in the regions or whether they have similarities that lend themselves to a regional implementation approach.
- *Part II* investigates regional trade at the detailed product level with a view to identifying opportunities from comparative and competitive trade differences and determining whether those differences could give rise to regional fragmentation of production associated with value chains. The analysis begins by measuring the extent of geographic and product diversification among countries in the regions and the extent to which those countries have concentrated their exports on dynamic or slow-growing geographic or product markets. It then examines actual and potential trade within and between the regions by testing trade compatibility in areas that favor intra- and inter-regional trade, as well as the magnitude of intra-industry trade that is associated with product differentiation and regional and international fragmentation of production.
- *Part III* examines trade and macroeconomic-related policies and programs to bolster trade within and between the Central and South Asia regions. One of the major trade-related instruments for advancing regional trade takes various forms of preferential trade agreements. Those arrangements can target either broad issues or narrowly defined sectors or measures to facilitate trade, such as transport or customs treaties between countries. The other equally important trade-related instrument examined is that of trade costs. New data on these costs show the enormity of border and behind-the-border costs, notwithstanding declining tariffs associated with free trade agreements (FTAs) and WTO multilateral trade negotiations. At the macroeconomic level, the major determinant of the Central and South Asian countries' competitiveness is the real effective exchange rate. The analysis in this part of the study shows how real bilateral exchange rates have impacted on trade within and between the two regions. Part III concludes with a comprehensive analysis of potential regional value chains and suggestions for their prioritization.
- *Part IV* summarizes the findings and provides rankings of factors contributing to the expansion of regional trade. Those rankings are based on preference orderings of different stakeholder groups, whose objectives range from promoting pro-poor trade and helping small businesses to increase their participation in trade to maximizing commercial expansion by large multinationals, especially in global value chains. Finally, it orders the different types of policies, programs and institutional mechanisms in terms of their ease of implementation and highlights those instruments that have a high impact potential and are relatively easy to carry out.

E. Terminology

Throughout this study the following terms have specific meanings as indicated below:

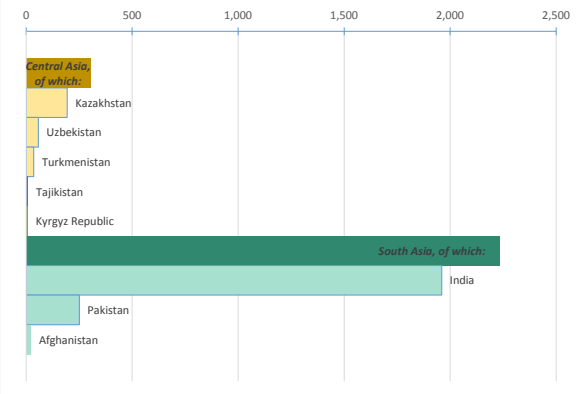
- *Central Asia* is made up of the Central Asian Republics (CARs) of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- *South Asia* is limited to Afghanistan, India and Pakistan.
- *Trade Compatibility* refers to the trade structure between two or more countries that is favorable to the volume of their transactions in goods and services, and that arises in either their trade in final goods or in value addition to production of intermediate or final goods.
- *Trade-Related Instruments* refer to policy, program and institutional mechanisms through border and behind-the-border initiatives at the national, bilateral, sub-regional, regional and international levels.

II. REGIONAL TRADE PATTERNS

A. Importance of Trade

The size of the Central and South Asian countries varies greatly, ranging from small economies like Kyrgyzstan and Tajikistan to huge ones like India, whose economy is ten times larger than that of Kazakhstan, the largest economy in Central Asia (Figure 2.1).[16] In the middle is Afghanistan, whose population is the same size as that of Uzbekistan but only half the size of that economy. Afghanistan is also the poorest country in the two regions, followed by Tajikistan and Kyrgyzstan, and it is the only country in the region that is classified as Least Developed by the United Nations.[17] At the other extreme is Kazakhstan, whose per capita income is 16 times larger than that of Afghanistan and over 7 times larger than that of India.

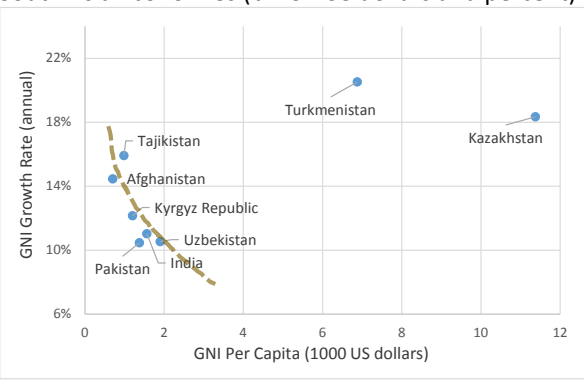
Figure 2.1: Gross National Income (GNI) of Central and South Asia Economies (billion US dollars)



Source: World Bank, World Development Indicators.

Economic convergence would, under neoclassical theory of growth, occur because lesser developed countries are expected to grow faster than the relatively more advanced ones as they mature and reach their stead-state growth.[18] The evidence for the Central and South Asia regions is mixed, however. The two countries with the largest per capita incomes, Kazakhstan and Turkmenistan, have achieved much faster growth rates than those with low per capita incomes. Among the other six countries, there is evidence of

Figure 2.2: Relationship between Gross National Income (GNI) and Economic Growth of Central and South Asia Economies (billion US dollars and percent)



Source: Based on data from World Bank, World Development Indicators.

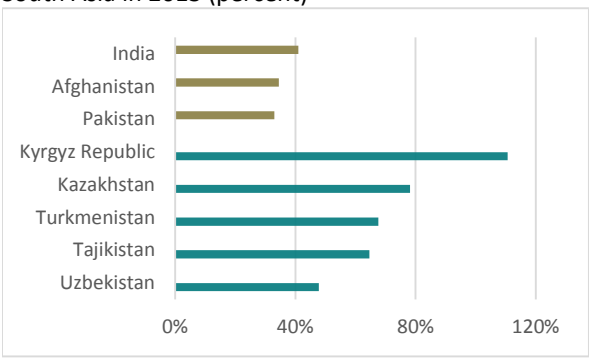
[16] Data based on the World Bank's Atlas method for calculating the current U.S. dollar value of gross national income (GNI), three-year average of exchange rates to smooth effects of transitory exchange rate fluctuations, adjusted for the difference between the rate of inflation in the country (using the country's GDP deflator) and that of developed countries (using a weighted average of their GDP deflators in SDR terms).

[17] United Nations, "Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings". Online: http://unstats.un.org/unsd/methods/m49/m49regin.htm#least.

[18] The neoclassical growth model is based on R. Solow (1956), "A contribution to the theory of economic growth". *Quarterly Journal of Economics* vol.70, pp-65-94 and is the basis for so-called conditional convergence, in which economies achieve similar income levels when they have similar conditions such as technologies and preferences.

convergence. The two countries with the lowest per capita incomes, Afghanistan and Tajikistan, have achieved faster growth rates than other countries in the two regions, excepting Kazakhstan and Turkmenistan. Similarly, Kyrgyzstan's economic growth has exceeded that of the relatively more developed economies of India, Pakistan and Uzbekistan. The result is an inverse relationship between per capita gross national income (GNI) and economic growth, as neoclassical growth theory would predict (Figure 2.2).

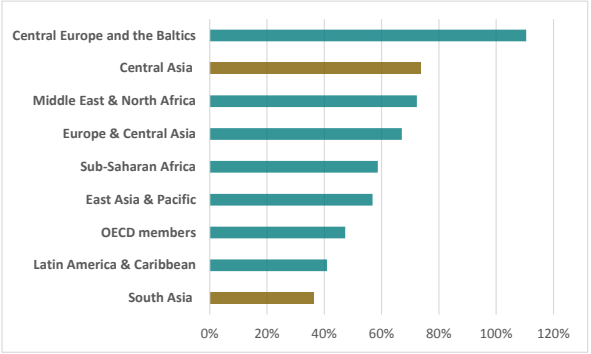
Figure 2.3: Trade as a Percent of GDP in Central and South Asia in 2013 (percent)



Source: Based on data from World Bank, World Development Indicators.
Note: Trade measured by sum of imports and exports.

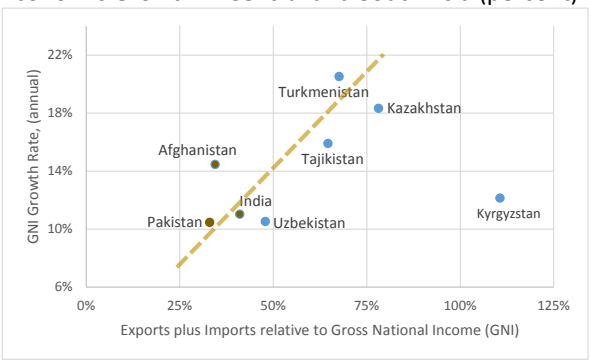
Nevertheless, size does matter. Large countries like India are at an advantage in terms of regional and global competition. India's large population, for example, draws investment from multinational corporations that are attracted to the large number of potential customers and marketing opportunities. Small countries like Turkmenistan, Kyrgyzstan and Tajikistan are mainly considered to be sources of raw material inputs and processing centers for component industries and other manufacturing activities. While attractive to investors, these countries have considerably less draw than the larger ones. Additionally, landlocked nations without seaports, like those of the Central Asian economies, face more expensive trading costs for their exports and imports than countries with access to the sea, unless they have low cost transit rights and cost-effective road transport and logistics costs. However, some countries are double-landlocked, meaning that they border landlocked countries, and therefore can face even greater difficulty in gaining access to sea freight services.

Figure 2.4: Trade as a Percent of GDP in Central and South Asia and Other Regions, 2013 (percent)



Source: Based on data from World Bank, World Development Indicators.
Note: Trade measured by sum of imports and exports.

Figure 2.6: Relationship between Openness and Economic Growth in Central and South Asia (percent)



Source: Based on data from World Bank, World Development Indicators.
Note: Trade measured by sum of imports and exports.

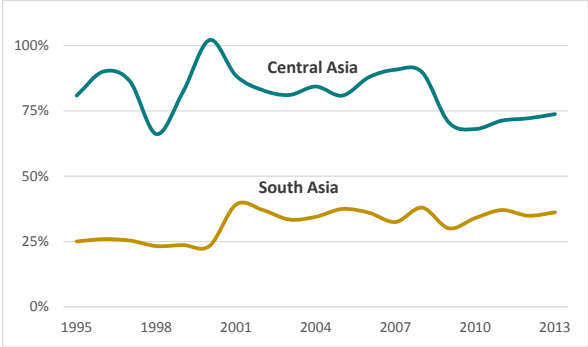
Convergence of per capita incomes through increased trade has long been recognized as a means of reducing inequality among countries. In general, trade drives economic growth by expanding access to goods, services, knowledge and technologies. The World Trade

Organization (WTO) has characterized this growth process as being driven by greater entrepreneurship in the private sector, private and foreign capital investments, employment creation, lower distortions of relative prices, development of competitive enterprises, and reinvestment of foreign exchange earnings.[19] The greater a country's trade openness, the more these factors help boost growth, and the greater the opportunity less-developed economies have to catch up with more developed ones.

Figure 2.3 shows the relationship of trade to GDP for the Central and South Asia economies. In general the Central Asian countries are two times more open than the South Asia ones, and the most open economy (Kyrgyzstan) is over three times more open than the least open ones (Afghanistan and Pakistan). In comparison with other regions of the world, Central Asia ranks second after Central Europe and the Baltics, whereas South Asia is the least open region (Figure 2.4).

Nevertheless, over time the South Asia region has become more open, while that of Central Asia has remained about the same (Figure 2.5). However, the overall trend belies changes within the regions. In Central Asia, openness has greatly increased in the more open economies of Kyrgyzstan and Kazakhstan, but it has decreased in other countries. In fact, in Tajikistan and Turkmenistan, openness is currently only one-half of what it was two-decades ago. In Uzbekistan, the economy's relatively small openness had been gradually increasing. However, since the 2007/08 global recession it has declined sharply and it is now back to its low 1995 level. In South Asia there have also been divergent trends among the countries. Afghanistan's openness is currently only one-half its level in the early 2000s; India's openness has steadily increase and is now over twice its level two decades ago; and Pakistan's openness has remained nearly unchanged in the last 20 years.

Figure 2.5: Trade as a percent of GDP in Central and South Asia, 1995-2013 (percent)



Source: Based on data from World Bank, World Development Indicators.
Note: Trade measured by sum of imports and exports.

Openness is usually uncorrelated with a country's stage of development.[20] But it does appear to be correlated with economic growth (Figure 2.6). There is a wide body of empirical literature examining the relationship and often deriving conflicting results based on measurement and methodology issues.[21] However, available evidence generally supports the positive relationship

[19] World Trade Organization (WTO, 2008), "World Trade Report 2008: Trade in a Globalizing World". Geneva. Available: http://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report08_e.pdf.

[20] E.E. Leamer (1988), "Measures of Openness". In R.E. Baldwin (ed.), *Trade Policy Issues and Empirical Analysis*. University of Chicago Press. Available: http://www.nber.org/books/bald88-2.

[21] M. Tahir and H.N. Ali (2014), "Trade Openness and Economic Growth: A Review of the Literature". *Asian Social Science* 10(9).

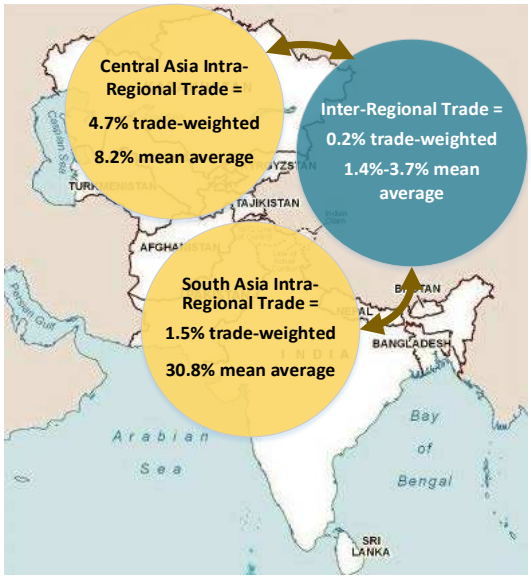
between openness and economic growth. For Central and South Asia, Figure 2.6 shows that openness is, in general, positively correlated with economic growth. That observation has been supported by econometric analysis of the South Asia economies showing openness has a strong positive impact on economic growth in the region.[22] For Central Asia's more open economies of Kazakhstan and Kyrgyzstan, recent evidence indicates that trade performance has mainly been explained by bilateral networking, that is, by factors such as transportation costs, regional trade agreements, and the extent to which countries are landlocked. In contrast, for the more closed economies of Tajikistan, Turkmenistan and Uzbekistan, trade performance is better explained by country-specific characteristics such as restrictive trade and economic policies.[23]

B. Regional Trade

1. Intra-Regional Trade

Within the literature on overall trade development strategy, regional trade is often advanced as a mechanism for reducing income inequalities among countries. This process is exemplified by the ASEAN economies whose significant trade openness, liberalization and regional integration has contributed to cross-country income convergence, which has allowed poorer countries to accelerate economic growth at rates high than those of the richer countries in the region.[24] In the case of the Central and South Asia regions, intra-regional trade is much lower than in ASEAN and most other important regions. The trade-weighted average of intra-regional trade in Central Asia is 4.7 percent, and in South Asia it is only 1.5 percent (Figure 2.7 and Table 2.1).

Figure 2.7: Intra- and Inter-Regional Trade in Central and South Asia, 2013 (percent)



Source: Based on data from IMF, Direction of Trade (DOT) database.

The regional trade-weighted average obscures the magnitude of intra-regional trade of the smaller countries. In South Asia, in particular, the average is dominated by India's low intra-regional trade share of 0.4 percent and its large volume of trade relative to other countries. In fact, Pakistan's intra-regional trade share is nearly 57 percent and that of Afghanistan is 36

[22] G. Mustafa (2014), "Openness, Economic Growth, and Human Development: Evidence from South Asian countries from 1990 – 2007". Middlesex University, Department of Economics and Statistics. Available: http://ukdataservice.ac.uk/media/263119/mustafa-poster.pdf.

[23] M. Mazhikeyev, T.H. Edwards, and M. Rizov (2014), "Openness and Isolation: the Comparative Trade Performance of the Former Soviet Central Asian Countries". Loughborough University, School of Business and Economics. Economics Discussion Paper Series 2014 – 02.

[24] M. Kawai and G. Wignaraja (2014), "Trade Policy and Growth in Asia". ADBI Working Paper Series No. 495. Tokyo, Asian Development Bank Institute. Available: http://www.adbi.org/files/2014.08.15.wp495.trade.policy.growth.asia.pdf.

Table 2.1: Bilateral, Intra-Regional and Inter-Regional Trade (million US dollars)

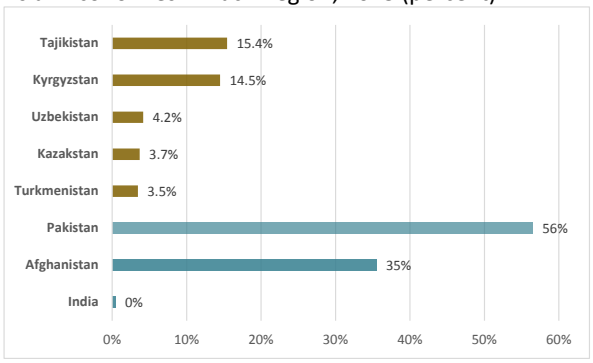
		EXPORTS										
		Afghanistan	India	Pakistan	*South Asia*	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	*Central Asia*	*World*
IMPORTS	Afghanistan		522.5	2,332.1	*2,854.5*	354.9	69.1	70.7	371.0	-	*865.6*	*8,455.9*
	India	209.1		373.7	*582.8*	435.7	0.6	0.5	12.7	35.0	*484.6*	*467,949.9*
	Pakistan	186.4	2,472.4		*2,658.8*	16.9	0.0	21.0	4.0	1.6	*43.5*	*54,554.8*
	South Asia	*395.5*	*2,994.9*	*2,705.8*	*6,096.2*	*807.5*	*69.7*	*92.1*	*387.8*	*36.6*	*1,393.8*	*530,960.6*
	Kazakhstan	0.7	299.0	23.5	*323.2*		372.9	76.4	177.3	915.0	*1,541.6*	*54,469.1*
	Kyrgyzstan	0.8	40.9	2.0	*43.7*	802.8		9.3	2.8	218.7	*1,033.6*	*10,684.7*
	Tajikistan	49.0	49.5	7.5	*106.0*	593.3	18.9		116.6	88.3	*817.1*	*4,946.0*
	Turkmenistan	1.3	57.7	1.1	*60.1*	180.5	7.3	2.0		237.6	*427.4*	*9,662.1*
	Uzbekistan	-	124.1	3.6	*127.7*	1,486.0	348.8	11.7	54.3		*1,900.8*	*14,226.0*
	Central Asia	*51.7*	*571.2*	*37.8*	*660.7*	*3,062.5*	*747.9*	*99.3*	*351.1*	*1,459.6*	*5,720.4*	*93,988.0*
	World	*604*	*315,127*	*26,282*	*342,013*	*62,618*	*1,130*	*935*	*11,937*	*63,308*	*139,930*	*394,647,540*

Source: IMF, Direction of Trade (DOT) database. Bilateral trade data from reported imports of each country.

percent. If instead the *mean average* of the three South Asian economies are used, the intra-regional share of South Asia is much higher (31 percent). In Central Asia, the mean average of intra-regional shares (8.2 percent) is also larger than the trade-weighted share (4.7 percent), although the difference is not as striking as for South Asia.

In comparison to other regions of the world, Central and South Asia's intra-regional trade ranks last (Figure 2.10). ASEAN's intra-regional trade share, for example, is eight times larger than the average share of the two regions.

Figure 2.8: Intra-Regional Trade of Central and South Asian Economies in Each Region, 2013 (percent)



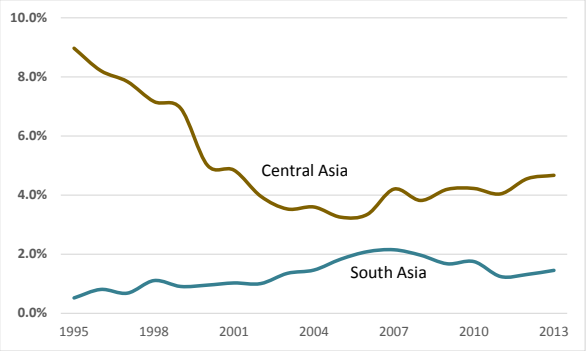
Source: Based on data from IMF, Direction of Trade (DOT) database.

Over time, South Asia's intra-regional trade share has risen. Between 1995 and 2013 it rose from 0.5 to 1.5 percent. This moderate gain mainly reflects India's experience because of its trade dominance in the region. Its total trade represents 98 percent of the combined trade value of the three South Asian countries, while the other two countries each contribute only 1 percent to the total. In Afghanistan, the intra-regional trade share rose from 11 to 36 percent in that period, and in Pakistan it doubled from 28 percent in 1995 to 57 percent in 2013. Although small in relation to India's total trade, Pakistan's intra-regional trade, which was about the same as India's intra-regional trade in 1995, now surpasses it by nearly 50 percent.

In Central Asia, intra-regional trade fell sharply between the mid-1990s and the mid-2000s as countries moved initially from trade dependence with Russia to intra-regional focus (1991-1996) following independence and then to international integration (1997-2005). All Central Asian countries reduced their intra-regional trade shares, but they fell more sharply in those countries

that undertook faster reforms during the transition period (Kazakhstan and Kyrgyzstan) than those in slower ones (Tajikistan, Turkmenistan and Uzbekistan). Kazakhstan, Turkmenistan and Uzbekistan reversed their downward intra-regional trends in the mid-2000s, and Kyrgyzstan's and Tajikistan's intra-regional shares began to rise around the beginning of the present decade as these two countries were more affected by the 2007 global financial crises and their interests shifted to trade with neighboring countries.

Figure 2.9: Intra-Regional Trade of Central and South Asian Economies in Each Region, 1995-2013 (percent)

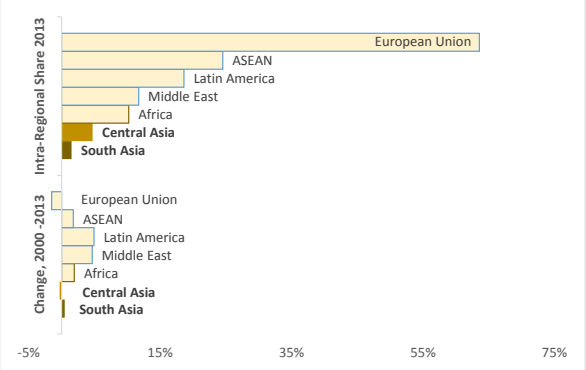


Source: Based on data from IMF, Direction of Trade (DOT) database.

2. Inter-Regional Trade

Inter-regional trade between Central Asia and South Asia is only 0.2 percent. This figure is based on the standard measure of inter-regional trade shares, which is the trade-weighted sum of South Asia trade with Central Asia relative to the trade-weighted sum of total trade of the South and Central Asia with the world.

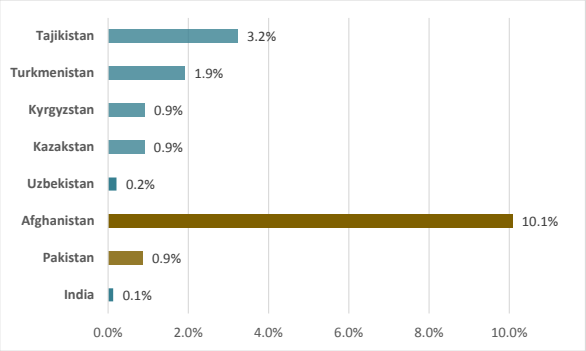
Figure 2.10: Intra-Regional Trade Shares of Major Regions (percent)



Source: Based on data from IMF, Direction of Trade database.
Note: Trade measured by sum of imports and exports.

There are two other methods for calculating inter-regional trade. The first uses the *unweighted* mean average share of inter-regional trade. In this case, the inter-regional trade share is somewhat higher at 1.4 percent, although still very low relative to other regions and relative to what it would be if the trade share were the same as the region's share of world trade. The advantage of this method is that it avoids large trading country bias of the inter-regional trade average. It is also a better reflection of individual country variations, especially when the average is combined with some measure of statistical dispersion, such as variance or standard deviation. In the case of Central and South Asia, individual country inter-regional trade shares are, in some cases, much higher or lower than the simple mean average, which indicates a wide dispersion around the mean. Afghanistan in particular has an inter-regional trade share of 10 percent, relative to a mean average of 1.4 percent (Figure 2.11). Other countries with above-average inter-regional trade shares are Tajikistan (3.2 percent) and Turkmenistan (1.9

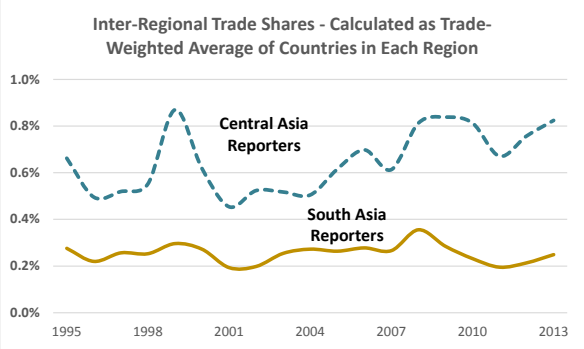
Figure 2.11: Inter-Regional Trade of Central and South Asian Economies, 2013 (percent)



Source: Based on data from IMF, Direction of Trade (DOT) database.

percent). Countries with the lowest shares of inter-regional trade are India (0.1 percent) and Uzbekistan (0.2 percent).

Figure 2.12: Trade-Weighted Inter-Regional Trade Share of Central and South Asian Economies, 1995-2013 (percent)

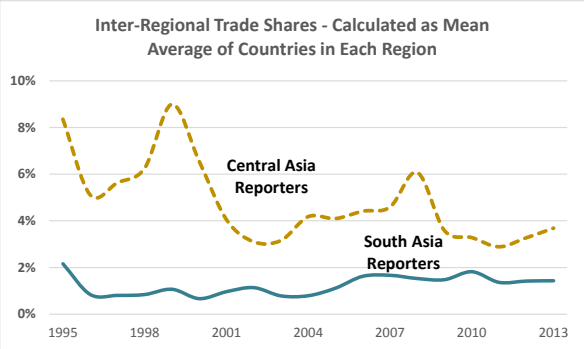


Source: Based on data from IMF, Direction of Trade (DOT) database.

A second way to calculate inter-regional trade is to use Central Asia's reported inter-regional trade with South Asia. In the previous calculation we used the reported total trade by the South Asian countries. If we instead used the Central Asian countries' reported trade, the unweighted mean average of inter-regional trade is 3.7 percent rather than 1.4 percent. The reason for this discrepancy is that reported trade often differs substantially between trading partners. For example, based on the IMF's Direction of Trade Statistics, Afghanistan's total trade with Kazakhstan in 2013 was reported as US$355.5 million. In contrast, Kazakhstan's total trade with Afghanistan in 2013 was reported as US$323.2 million, a 10 percent difference with the value reported by Afghanistan. As a result, the inter-regional trade shares reported by Central Asian countries often differ significantly from those reported by South Asian countries.

Differences in the way to calculate inter-regional trade shares over time are shown in Figures 2.12 and 2.13. For the trade-weighted calculations of inter-regional trade shares, Figure 2.12 shows an upward trend in those shares in recent years, as reported by the Central Asia economies, and a generally unchanged trend and somewhat lower shares reported by South Asia economies. For the South Asia reporters, the shares reflect India's dominance in trade and that country's generally unchanged share of trade with Central Asia in the last two decades.

Figure 2.13: Mean Average Inter-Regional Trade Share of Central and South Asian Economies, 1995-2013 (percent)



Source: Based on data from IMF, Direction of Trade (DOT) database.

In contrast, Afghanistan's share of Central Asian trade has varied considerably, first rising in the 1990s, then contracting in the early 2000s, expanding again in the second half of the 2000s, and remaining fairly unchanged in the first part of this decade. Pakistan had relatively high inter-regional trade shares with Central Asia in the second half of the 1990s, but since the early 2000s those shares have eroded over time.

For the Central Asia reporters, there have also been divergent trends. Kazakhstan and Tajikistan's inter-regional trade shares have risen, while shares of the other countries in the region have either remained unchanged or eroded modestly. Those differences are better reflected in the unweighted trade averages of the inter-regional trade shares reported by the Central Asia economies and those reported by the South Asia economies (Figure 2.13).

Box 2.1. Measuring Integration and Openness

Total trade is the sum of the value of exports and imports.

Trade growth is the percentage change in the value of total trade relative to the previous year.

Intra-regional trade share is the percentage of intra-regional trade to total trade of the region, calculated using total trade data. A higher share indicates a higher degree of dependency on regional trade. It is calculated as the percentage of intra-regional trade to total trade of the region:

$$T_{ii}/T_i \tag{2.1}$$

where T_{ii} is exports of region *i* to region *i* plus imports of region *i* from region *i* and T_i is total exports of region *i* to the world plus total imports of region *i* from the world.

Intra-regional trade intensity index is the ratio of intra-regional trade share to the share of world trade with the region. It indicates whether trade within the region is greater or smaller than would be expected on the basis of the region's importance in world trade. An index of more than one indicates that trade flows within the region are larger than expected, given the importance of the region in world trade. It is computed as:

$$(T_{ii}/T_i)/(T_i/T_w) \tag{2.2}$$

where T_{ii} is exports of region *i* to region *i* plus imports of region *i* from region *i*; T_i is total exports of region *I* to the world plus total imports of region *i* from the world; and T_w is total world exports plus imports.

Inter-regional trade intensity index is the ratio of a trading partner's share to another region's total trade and the share of world trade with the same trading partner. An index of more than one indicates that trade flows between countries/regions are larger than expected given their importance in world trade. It is calculated as:

$$(T_{ij}/T_{iw})/(T_{wj}/T_{ww}) \tag{2.3}$$

where T_{ij} is the dollar value of total trade of country or region *i* with region *j*, T_{iw} is the dollar value of the total trade of country or region *i* with the world, T_{wj} is the dollar value of world trade with region *j*, and T_{ww} is the dollar value of world trade.

Trade openness is measured by total trade of an economy expressed as a percentage of nominal Gross Domestic Product (GDP) in dollar terms. A higher value indicates a more open economy. It is calculated as:

$$T_i/Y_i \tag{2.4}$$

where T_i is total exports of country *i* to the world plus total imports of country *i* from the world, and T_i is GDP of country *i*. The term 'trade openness' can be misleading since low ratios do not necessarily imply high trade barriers, but can be associated with factors such as country size and geographic remoteness from potential trading partners.

C. Measuring Trade

There are several possible sources of error from the trade statistics of Central and South Asia. Two set of them are associate with formal trade statistics from the trade databased used in this study, namely, the IMF's Direction of Trade (DOT) database used in this chapter, and the United Nations' Commodity Trade Statistics Database (COMTRADE) used in the analytical chapters in Parts II and III of this study. The other is the large volume and variability of informal trade in the two regions.

1. Direction of Trade Statistics

The Direction of Trade (DOT) database contains data on the value of merchandise exports and imports between each country and all its trading partners. Total bilateral and multilateral exports and imports are aggregated at national or regional group level. All exports are valued free on board (f.o.b.). Imports are usually reported cost including insurance and freight (c.i.f.), although a small number of countries report imports as f.o.b. All trade data are expressed in U.S. dollars.

In Central and South Asia there are often inconsistencies between exports to a partner and the partner's recorded imports from a particular country. Among the reasons for these differences are ways that countries report their trade, for example, differences in classification concepts and detail, time of recording, valuation, and coverage, as well as processing errors. As shown in the previous section, differences between reported exports in one country's trade with another country's reported imports from that country can be large. Caution must therefore be used in assigning excessively precise measures to the results of the analysis.

2. Commodity Trade Statistics Database

The United Nations Statistics Division compiles original statistics from individual countries and makes secondary statistics easily accessible through COMTRADE. Those original statistics are often in different Harmonized System (HS) classifications that are converted into a common classification based on correlation tables. Differences between original and compiled trade statistics are generally modest.[25] A common source of discrepancy is the use imports from one country combined with bilateral imports from another country, which are often used as a means of obtaining more accurate estimates since importer statistics are usually more accurate than

Table 2.2. Availability of COMTRADE data in Central and South Asian countries

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan																			
India																			
Pakistan																			
Kazakhstan																			
Kyrgyzstan																			
Tajikistan																			
Turkmenistan																			
Uzbekistan																			

Source: Derived from information in COMTRADE database.

[25] D. Yu (2008), "The Harmonized System .Amendments and their Impact on WTO members' schedules". WTO Staff Working Paper ERSD-2998-02. Available: http://www.wto.org/english/res_e/reser_e/ersd200802_e.pdf.

exporter statistics. Since data from the two countries were originally compiles in different HS classifications, there is a real possibility of introducing inaccuracies, especially when unit prices are derived from the value and volume information reported in COMTRADE.[26]

This situation is particularly important for Central and South Asia trade because the lack of trade data for some countries often requires that 'mirror trade data' be used (see Tables 2.2 and 2.3). Possible discrepancies can then arise between actual (unreported) exports or imports in one country and the mirror-trade of its partner trading countries for any or all of the following reasons: (a) use of different national HS trade systems; (b) differences in quantity measures because some countries report gross weights and others report net weights; (c) time lags that give rise to discrepancies if exports are registered in one year and the corresponding imports in the following year; (d) transportation and insurance costs are included in the reported import value (CIF: Cost Insurance Freight) but are excluded from the reported export value (FOB: Free On Board); and (e) the existence of re-exports or transit trade, which may be taken into account by some countries, but not by others since the United Nations recommends that import statistics be compiled by country of origin, export statistics be compiled by last known destination, and goods in transit be excluded from trade statistics. But exporting countries do not always know the final destination of the product, and the country of origin may not be either the country that has re-exported the product or the country where the product has transited.

Table 2.3. Use of Reporter versus Mirror Trade data in Central and South Asian countries

		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Afghanistan	Reporter		2008-2013	2008-2013	2008-2013	2008-2013	2008-2013	2008-2013	2008-2013
	Mirror		1995-2007	2003-2007	1995-2007	1995, 2000-2007	2000	1997-2000	
India	Reporter	1995-2013		1995-2013	1995-2013	1995-2013	1995-2013	1995-2013	1995-2013
	Mirror								
Pakistan	Reporter	2003-2013	2003-2013		2003-2013	2003-2013	2003-2013	2003-2013	2003-2013
	Mirror		1995-2002		1995-2002	1995, 2000-2002	2000	1997-2000	
Kazakhstan	Reporter	1995-2013	1995-2013	1995-2013		1995-2013	1995-2013	1995-2013	1995-2013
	Mirror								
Kyrgyzstan	Reporter	1995, 2000-2013	1995, 2000-2013	1995, 2000-2013	1995, 2000-2013		1995, 2000-2013	1995, 2000-2013	1995, 2000-2013
	Mirror		1996-1999		1996-1999			1997-1999	
Tajikistan	Reporter	2000	2000	2000	2000	2000		2000	2000
	Mirror	2008-2013	1995-1999, 2001-2013	2003-2013		1995-1999, 2001-2013		1996-1999	
Turkmenistan	Reporter	1997-2000	1997-2000	1997-2000	1997-2000	1997-2000	1997-2000		1997-2000
	Mirror		1995-1996, 2001-2013	2003-2013	1995-1996, 2001-2013	2001-2013			
Uzbekistan	Reporter								
	Mirror	2008-2013	1995-2013	2003-2013	1995-2013	2000-2013	2000	1997-2000	

Source: Derived from information in COMTRADE database.

[26] M. Kumakura (2009) ''A note on using Comtrade for empirical trade research'', Economics Bulletin, Vol. 29 no.2 pp. 1330-1344. Available: https://ideas.repec.org/a/ebl/ecbull/eb-09-00256.html.

3. Informal Trade

Difference in reported imports by one country and the so-called mirror exports of a trading partner can arise because of the large volume of informal trade that exists in both of the regions covered by this study. For the Central Asia region, a recent survey found that informal trade is significant in nearly all major import categories, but with important differences across countries.[27] Smuggling of household electronics represents 90 percent of imports in Kazakhstan, 75 percent in Uzbekistan, and 25 to 30 percent in Tajikistan and Turkmenistan. Smuggling can, however, take various forms, ranging from products imported in illegal or semi-illegal ways, or under- or over-invoicing of imports and exports. For other categories, smuggling of food products ranges from 10 percent in Turkmenistan to 80 percent in Uzbekistan; cars from 5-15 percent (Kazakhstan) to 90 percent (Uzbekistan); and alcohol and cigarettes from 15-20% (Turkmenistan) to 90 percent (Uzbekistan).

The largest component of informal trade in Central Asia is Chinese imports of consumer goods, including textiles and footwear, which are either consumed domestically or re-exported to neighboring countries. Kazakhstan, Kyrgyzstan and Tajikistan apply low duties to imports of these goods by physical persons, and large volumes of re-exports take place from Kyrgyzstan and Tajikistan, destined for Kazakhstan, Uzbekistan and Afghanistan. There is also a growing trend towards imports of Chinese textiles and machinery by Kyrgyzstan for production of garments, which have become the third largest export product of that country after gold and radioactive elements.[28] While re-exports are large in Kyrgyzstan, estimated at over 2.5 times the value of official exports, they are also significant in Tajikistan and have been estimated at about 50 percent of the value of official exports.[29] The value of informal trade has, however, varied widely from year to year across the Central Asian economies, largely responding to changes in the real cross-exchange rates between neighboring countries in the region. Despite these differences in the size of informal trade in the Central Asian economies, the overall size of the informal sector is quite similar in Kazakhstan and Tajikistan (33 percent of GDP), while that of Kyrgyzstan is somewhat lower at 26 percent of GDP. [30]

There is less of a common motivation in South Asia than in Central Asia for Chinese importation and re-exportation of consumer goods. In Afghan-Pakistani relations, official bilateral trade has declined because of increased informal trade between the two countries.[31] One of the reasons

[27] Norwegian Institute of International Affairs (NUPI) and the OSCE Academy (2013), "Tariffs and formal and informal trade barriers in Central Asia". Central Asia Regional Data Review. Available: http://www.osce-academy.net/upload/file/CADGAT10.pdf.

[28] R. Mogilevskii (2012), "Trends and Patterns in Foreign Trade of Central Asian Countries". Working Paper No. 1. University of Central Asia, Graduate School of Development, Institute of Public Policy and Administration. Available: http://www.ucentralasia.org/downloads/UCA-Trends&PatternsForeignTradeCA-Eng-May2012.pdf.

[29] Ibid.

[30] Y. Abdih and L. Medina (2013), "Measuring the Informal Economy in the Caucasus and Central Asia". Washington, DC. International Monetary Fund, IMF Working Paper WP/13/137. Available: http://www.imf.org/external/pubs/ft/wp/2013/wp13137.pdf.

[31] The Economist Intelligence Unit (2014), "Poor outlook for Pakistan-Afghanistan bilateral trade". 24 April 2014. Online: http://country.eiu.com/article.aspx?articleid=1771757161&Country=Afghanistan&topic=Economy.

cited for the increase in smuggling is the requirement on the part of Pakistan that, effective 17 March 2014, all cross-border transactions must be in convertible currencies, namely, U.S. dollars rather than local currency.[32] In the case of India's relations with Pakistan, formal trade has been limited because of tensions between the two countries. But there is nevertheless widespread informal trade in textiles, automobiles, jewelry, and other items.[33] Estimates of the volume of informal trade are dated. However, the channels of informal trade remain unchanged: most of it occurs from Mumbai in India to Karachi in Pakistan via Dubai in the United Arab Emirates (UAE); and roughly half of that trade is channel through Bandar Abbas in Iran and then moved further via land across Afghanistan, to finally reach Pakistan. Since 2011 there have been significant developments in Pakistan–India trade relations, as both countries have made considerable efforts to remove some of the key barriers impeding bilateral trade.[34] But tensions between the two countries continue to undermine normalization of trade relations.[35]

[32] R.K. Daudzai (2014), "Tricks of the Pak-Afghan trade". (23 March 2014). Online: http://tns.thenews.com.pk/tricks-pak-afghan-trade/#.VHmisTGUfpo.

[33] S.A. Ramay and M.H. Abbas, "South Asian Free Trade Agreement (SAFTA) and Implications for Pakistan". Working Paper 138. Islamabad, Sustainable Development Policy Institute (SDPI). Available: http://www.sdpi.org/publications/files/SOUTH_ASIAN_FREE_TRADE_AGREEMENT_%28SAFTA%29_AND_IMPLICATIONS_FOR_PAKISTAN_%28W%20-%20138%29.pdf.

[34] In April 2011, the two countries announced a roadmap to boost trade relations. A year later (April 2012), the trade gate at the Wagah–Attari border was formally opened and India announced that it would allow direct Pakistani investment in India. While India promised to resolve the issue of non-tariff barriers (NTBs) that constrain Pakistani exports to its neighbor, Pakistan offered to grant most favored nation (MFN) status to India. Pakistan also relaxed constraints on Indian imports by switching to a 'negative list' approach to import controls. For a detailed historical review of India-Pakistan bilateral trade, see N. Taneja (2013), "Normalizing India Pakistan Trade". India Council for Research on International Economic Relations. Available: http://www.icrier.org/pdf/working_paper_267.pdf.

[35] In late November 2014 Pakistan declined to sign three multilateral pacts with the eight members of the South Asian Association for Regional Cooperation (SAARC) because of killings along the border in disputed Kashmir. See G. Sharma and F.J. Daniel (2014), "India-Pakistan friction threatens South Asia trade at SAARC summit". Reuters, 26 November 2014. Available: http://in.reuters.com/article/2014/11/26/nepal-summit-idINKCN0J928N20141126.

III. RANKING OPPORTUNITIES

A. Introduction

The overall objective of the present study is to investigate channels through which Central and South Asia's intra- and inter-regional trade could be increased. Different channels can, however, impact different sectors and groups more favorably than others. Certain interest groups may, for example, favor socio-economic development in the regions, that is, pro-poor trade mechanisms that reduce poverty and generally improve overall welfare in the countries; alternatively, multinational enterprises and other types of large enterprise groups could favor mechanisms that increase fragmentation of large scale production across borders based on purely commercial interests. It is therefore inappropriate to simply average trade compatibility and policy instrument ratings since simple averages are unlikely to take into account stakeholder group preferences. A weighted sum would be better, but there are many ways to weigh a series and the method selected needs to be justified.

In this chapter we develop the steps involved in constructing aggregates of trade compatibility channels and policy and program instruments for purposes of comparing and ranking countries in the regions. Without detailed the technical concepts, which are described later, the steps consist of the following:

1. Determine ratings of each trade-enhancing mechanism for the countries, based on structured analysis containing a Likert Scale of 1 to 5.
2. Aggregate the scores of the trade-enhancing mechanism for each country using a Cobb-Douglas function to represent the utility function for preference ordering of different stakeholder groups.
3. Assign weights to the parameters of the utility function for each stakeholder group that reflects their preference ordering.
4. Calculate the overall ratings and interpret results of trade-enhancing mechanisms for different stakeholder groups.

B. Evaluation Method

The first step in ranking regional trade opportunities is to establish a common scoring system so that factors affecting regional trade can be compared across countries and regions. The scoring system is applied at three levels:

- *Across factors affecting regional trade* in order to determine the extent to which competitiveness, product diversity, and trade complementarities can support greater intra- and inter-regional trade.
- *Across trade-related instruments* in order to assess the extent to which policies, programs and institutional mechanisms can be used to favorably influence the magnitude of intra- and inter-regional trade.

- *Across countries* in order to establish the capacity of Central and South Asia economies to use trade-related policies, programs and institutional mechanisms as a means of enhancing intra- and inter-regional trade.

(a) Conduct Structured Analysis

Design and carry out analysis of factors that can favorably impact regional trade using an ordered sequence for trade compatibility and policy and program instruments for each country in the region.

Scoring: For each trade compatibility and instrument measure, we use a so-called Likert Scale to measure the degree of agreement about a set of statements. In this type of evaluation, an ordinal scale is used to grade the degree to which the analysis reflects a statement.[36] The typical numerical values and associated levels of agreement are as follows:

1 – Strongly discourages
2 – Discourages
3 – Neither supports nor discourages
4 – Supports
5 – Strongly supports

An example of a Likert Scale evaluation that assesses selected trade-related policy instruments across countries in the regions is presented in Figure 3.1:

Figure 3.1. Hypothetical Example of Trade-Related Policies in Central and South Asian countries[37]

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Trade Policy Reform Effectiveness in Expanding Regional Trade by Lowering Trade Costs***					
1	Kazakhstan	1	2	3	4	**5**
2	Kyrgyzstan	1	**2**	3	4	5
3	Tajikistan	1	2	3	**4**	5
4	Turkmenistan	**1**	2	3	4	5
5	Uzbekistan	1	2	**3**	4	5
6	Afghanistan	1	**2**	3	4	5
7	India	**1**	2	3	4	5
8	Pakistan	**1**	2	3	4	5

Note: The interpretation of the scores in this example is as follows: a score of 5 for Kazakhstan means that lower trade costs would strongly support trade reforms; a score of 4 for Tajikistan means that lower trade costs would support trade reforms; a score of 3 for Uzbekistan means that lower trade costs would have a neutral effect on trade; a score of 2 in Kyrgyzstan and Afghanistan would mean that lower trade costs would have a disincentive on trade; and a score of 1 for Turkmenistan, India and Pakistan means that lower trade costs would have a very large disincentive on trade.

[36] An ordinal scale is a sequence of ordered numbers that does not necessarily have equal differences in attributes between numbers. In structured evaluations, their use implies that the segments between response values are not necessarily the same. Therefore the difference in agreement between a 4 and 5 is not necessarily the same as that between a 3 and 4 on the rating scale.

[37] The scores used in this example do not reflect the actual scores in the study. They are constructed in the present example in such a way as to illustrate different distributions around the mean, median and mode.

	B. *Real Exchange Rate Policy Effectiveness in Expanding Regional Trade by Lowering Cost of Imports and Increasing Export Competitiveness*					
1	Kazakhstan	1	2	3	4	5
2	Kyrgyzstan	1	2	3	4	5
3	Tajikistan	1	2	3	4	5
4	Turkmenistan	1	2	3	4	5
5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

Similarly structured evaluations apply to the other policy and program instruments, for example, multilateral, regional and bilateral preferential trade arrangements covering both broad spectrums of issues and specific sector or trade rules that lower trade barriers and promote trade.

(b) Summarizing Overall Ratings

Summary scores that provide averages of the results for countries, instruments and trade compatibility indicators are based on mean, median, mode and range that measure their central tendency. Although the mean is commonly used to describe an average, it is in fact only appropriate when the data is continuous and symmetrical in its distribution. For ordinal data like the ranking one used here, the most appropriate average is the median because the distribution of the data is not perfectly symmetrical around the mean, that is, it is skewed.[38] Information about the distribution is essential because it is important to know whether the average score for the trade-enhancing factor is representative of the individual scores for the elements that characterize it.[39]

Figure 3.2. Summary Statistics of Example of Trade-Related Policies in Central and South Asian countries

	Mean	Median	Mode	Range
Trade Policy Reform Effectiveness in Expanding Regional Trade by Lowering Trading Costs	2.4	2	1	4
Real Exchange Rate Policy Effectiveness in Expanding Regional Trade by Lowering Cost of Imports and Increasing Export Competitiveness	3.6	4	5	4

[38] AERD Statistics (2013), "Measures of Central Tendency". Online. Available at https://statistics.laerd.com/statistical-guides/measures-central-tendency-mean-mode-median.php.

[39] When the values of mean, median and mode are the same (i.e. mean = median = mode), the data has a symmetrical distribution. Conversely, when values of mean, median and mode are not equal, the distribution is known to have an asymmetrical or skewed distribution.

The averages presented Figure 3.2 are based on information contained in Figure 3.1. The distribution of the country performances in each of the policy and program instruments is different from the other:[40]

- For trade policy reforms that lower trading costs, the mean is greater than the median and the mode (mean > median > mode), which indicates that the country performances are 'skewed to the right' of their central tendency. Another way to explain this characteristic is to say that the distribution of country performances around the peak has a longer tail to the right than it does on the left.
- For exchange rate policies impacting competitiveness, the mean is smaller than the median and the median is smaller than the mode (mean < median < mode), which suggests that the country performances are 'skewed to the left' of the central tendency of the responses. The distribution of the responses has a longer tail to the left.

The most appropriate average of scores for trade compatibility and policy instruments is therefore the median because it is less skewed to the right than the mean for the distribution of country performances having a long tail to the right, and less skewed to the left than the mean of those having a long tail to the left.

C. Ranking Methodology

The decision-making framework for ranking various mechanisms favoring intra- and inter-regional trade in Central and South Asia should be sound from an economic point of view. In this study, we adopt a theoretical and empirical method for aggregating ratings that is based on stakeholders' preferences and the utility functions that represent those preferences.

The specification of that relationship is explained in Box 3.1 and illustrated in Box 3.2. An intuitive explanation of the aggregation process for scoring regional trade-enhancing mechanisms is exemplified by three groups of stakeholders with different preference orderings for the enhancement of trade within and between the Central and South Asia regions:

- *Stakeholder Group A: Neutral preferences among trade compatibility channels and policy and program instruments*. In this case, the stakeholder group does not have to be compensated for changes in the amount of one regional trade enhancing mechanism by another.[41]
- *Stakeholder Group B: Commercially oriented preferences in trade compatibility channels and policy and program instruments*: This stakeholder group prefers to develop those regional trade enhancing mechanisms that support purely large-scale commercial interests within and between the regions. In that case, for the group's utility function (equation 3.3 in Box 3.1), the parameter values have assigned values that are higher for

[40] There are some exceptions to the characterizations of the distribution when the mean, median and mode differ.

[41] In Box 3.1, for the relationship described by equation (3.3), all the parameters (α, β, … ω) of this group's utility function have equal values, whose sum equals unity.

intra- and inter-regional fragmentation, as well as FTAs and other policy and program instruments that facilitate and promote regional traded.

- *Stakeholder Group C: Pro-poor trade preferences in trade compatibility channels and policy and program instruments*: This stakeholder group prefers to develop those regional trade enhancing mechanisms that reduces poverty and support the socio-economic well-being of the population employed in the tradables sector. The stakeholder group could, for example, represent development partners and non-government organizations (NGOs) with a mandate to reduce poverty and promote socio-economic development. In this case, the weighting structure of the parameters in equation (3.3) of Box 3.1 becomes more complex. The reason is that there are two channels through which welfare improvements occur: (a) through *meso-policies* aimed at expanding expenditures on trade-related socio-economic programs, which are direct welfare improving mechanisms that can have an immediate or long-term impact on the local population; and (b) through *pro-poor growth policies* that can take the form of (i) *structural adjustment policies and programs* to ensure that finance reaches small enterprises, or that liberalization of cross-border trade reduces trading costs; and (ii) *regional growth policies* to make agriculture and labor intensive manufacturing more competitive, promote value chains and improve investment incentives. These pro-poor policies generate welfare improvements through indirect channels that improve economic growth in the regions, which in turn expands employment and incomes, SME business opportunities, and general living conditions of the local population.

In this study we will use these three preference orderings to aggregate the results of the analysis covering trade compatibility channels and trade-related policy and program instruments in each of the Central and South Asian countries.

Box 3.1. Preference Ordering of Stakeholders

The preference ordering of a group of representative stakeholders (for example, Central and South Asia governments, international development partners, multinationals, small businesses, the population in the tradables sector) can be represented by a *utility function* that takes the following form:

$$U(X_1, \ldots, X_n) \tag{3.1}$$

where U represents utility, X is the group of trade compatibility and policy instrument indicators numbered from 1 to *n*. For example, X_1 can represent the inter-regional trade gain obtained from PTAs; X_2 the gain obtained from improved competitiveness associated with exchange rate policies; and so forth.

Utility is an abstract measure of benefits obtained from a stakeholder group. Since it cannot be measured directly, it is inferred by 'revealed preferences' that are observed by the compensation that needs to be offered to the stakeholder for substituting one trade-enhancing factor for another. We can represent the rate of substitution between two factors in such a way that the stakeholder is indifferent between the two as long as he or she is compensated by an amount *d* for the difference between X_1 and X_2:

$$X_1 = d_2 X_2 \tag{3.2}$$

If substitution among factors takes place in the form of a *Cobb-Douglas utility function*, then the utility (or benefits) derived from the trade-enhancing factors by a particular stakeholder group can be measured according to the following preference ordering:

$$U(X_1, \ldots, X_n) = X_1^{\alpha} X_2^{\beta} \ldots X_n^{\omega} \tag{3.3}$$

The values of the parameters are such that $\alpha + \beta + \ldots + \omega = 1$, that is, the sum of all the parameters equals unity.

Box 3.2. Illustration of Stakeholder Preference Ordering

The relationship in equation (3.3) of Box 3.1 describes an *indifference curve* for a stakeholder because it expresses equal levels of gains for the stakeholder from various combinations of the trade-enhancing factors. In other words, there is not a single 'optimal' value of a factor such as exchange rate policies within countries. Instead, when forming part of a package of regional trade enhancing channels, policy and program incentives can be different, as long as they are *compensated* by changing the values of other instruments. Therefore, various combinations of trade-enhancing channels can form a trade-related program as long as they provide a stakeholder with the same value of overall gains from the program.

For example, consider a program with only two instruments having values of 3.5 and 4.5 respectively. Let α = 0.4 and β = (1-α) = 0.6. Then the indifference curve is represented as follows:

$$U(X_1, X_2) = 3.5^{0.4} * 4.5^{0.6} = 4.1 \quad (3.4)$$

The gains of the program for the stakeholder group is equal to 4.1 on an overall rating scale ranging from 1 to 5. The stakeholder group is indifferent between how much of the benefits X_1 it receives, as long as the group is compensated for any changes in its size by variations in the amount that X_2 receives, so that the stakeholder group's total benefits equal 4.1 for all combinations of X_1 and X_2.

Since the parameters α, β, …, ω represent the weights of the corresponding trade-enhancing factors preferred by any particular stakeholder group, we can use equation (3.3) to calculate the overall results of the instrument values derived from the analysis of regional trade-enhancing channels by assigning values to those parameters that would best characterize their choices.

PART II. INDICATORS OF REGIONAL TRADE EXPANSION OPPORTUNITIES

IV. EXPORT DIVERSIFICATION

A. Traded Products

1. Top Traded Products

Major exports of each Central and South Asia country are shown in Table 4.1. More detailed information is presented in the Statistical Appendix at two levels: (a) the top exports of each country to each intra-regional and inter-regional trading partner; and (b) the top exports of each country to all intra- and inter-regional trading partners. In all cases, the products are shown at the 6-digit level of the Harmonized System (HS) and the values represent the annual average U.S. dollar value of exports in 2010-2013.

The information on the left-hand-side of Table 4.1 shows exports of each country to all destinations. Observations about exports to all destinations suggest the universe of products that are either currently directed towards intra-regional and inter-regional trade or those that could potentially be directed at regional markets in the short to medium term.

Information on the right-hand-side of Table 4.1 shows the top exports to the Central and South Asia regional markets. The following observations are noteworthy about the product trade patterns:

- Afghanistan's top five exports are almost entirely directed at the Central and South Asia markets and half of its top 10 exports to those two regions are edible fruits and vegetables. The other important products directed at the two regions are either industrial or agricultural raw materials, namely, cotton, ferrous scrap, coal, and gums and resin. Of these, cotton, ferrous scrap, and coal are mainly destined to Pakistan, while gums and resins are shipped to India. In contrast, fruits and vegetables are exported to nearly all countries in the two regions.
- Most of India's and Pakistan's top product exports to Central and South Asia are not among its top product exports to the world market. India's top exports to the Central and South Asia regions consist of cotton, soybean meal, pharmaceutical products, sugar, fruits and vegetables, and p-Xylene (used in the production of plastic bottles and polyester clothing). Those of Pakistan are made up of petroleum oils and oils obtained from bituminous minerals (not crude), cement, and agricultural products.
- In Central Asia, different types of mineral fuels and products are leading regional export products of all the countries. Petroleum oils and oils obtained from bituminous minerals (not crude) are major regional exports of Tajikistan, Turkmenistan and Uzbekistan, while crude petroleum is the leading regional and worldwide export of Kazakhstan. In Kyrgyzstan, electricity is the leading export.
- Kazakhstan's other major regional exports consist of wheat and wheat flour, asbestos, and different types of mineral ores and fuels (zinc, ferrous waste, coal, petroleum and its products, and liquefied propane).

- Apart from electricity, Kyrgyzstan's main regional exports are made up of gold and other precious metals, refined petroleum, delivery trucks and vehicle parts, dairy products, fruits and vegetables, cement, precious metals, rubber tires, and float glass.
- Tajikistan's major regional exports are fruits, vegetables, wheat and cotton; aluminum; lead and zinc ores; footwear; and refined petroleum (to Afghanistan). Hydroelectric power is also growing in importance and Tajikistan is part of a Central Asia South Asia (CASA) Electricity Transmission and Trade Project that will transmit 1000 MW of surplus electricity from Tajikistan to Pakistan with power transit through Afghanistan.[42]
- Turkmenistan's regional exports are dominated by petroleum and gas (see next section). Its other leading regional export is cotton, which is directed to India and Pakistan, followed by a variety of agricultural and industrial raw materials and components.
- Uzbekistan's regional exports are also dominated by petroleum and gas. Its other leading regional exports are in the form of fruits and vegetables, cement, fertilizers, hides and skins, silk and cotton.

2. Trans-Afghanistan Gas Pipeline

The Turkmenistan–Afghanistan–Pakistan–India Pipeline (TAP or TAPI) is a natural gas pipeline being developed by the Asian Development Bank. It aims to become one of the major distribution channels for Turkmenistan's Galkynysh gas field, which has the second-largest volume of gas in the world, with reserves estimated at around 21 trillion cubic meters. The TAP is expected to be completed by 2017 or later and it will transport Caspian Sea natural gas from Turkmenistan through Afghanistan into Pakistan and then to India. The cost of the pipeline project is estimated at US$10 billion.[43] The initial framework agreement was signed in 2008 by Pakistan, India and Afghanistan in order to buy natural gas from Turkmenistan, and the intergovernmental agreement on the pipeline was signed in 2010. In May 2012 the Afghan parliament and Indian cabinet each approved the pipeline agreement, which included the transit fees on the pipeline segments passing through Afghanistan and Pakistan. Afghanistan will have the right to use 600 million to 5 billion cubic meters of gas per annum, and to earn about US$400 million per year in transit fees.[44] Another distribution route for Turkmenistan natural gas is through Uzbekistan and Kazakhstan to China, which will become the second largest buyer of gas from Turkmenistan, following Russia.

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[42] World Bank (2014), "CASA-1000: Central Asia South Asia Electricity Transmission and Trade Project Regional Environmental Assessment". Washington, DC. Available: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/04/02/000442464_20140402113144/Rendered/INDEX/E43510V30P14500Box385175B00PUBLIC0.txt.

[43] D.J. Graeber (2014), "Kazakhstan keen on TAPI gas pipeline". United Press International (UPI). Available: http://www.upi.com/Business_News/Energy-Resources/2014/12/03/Kazakhstan-keen-on-TAPI-gas-pipeline/1741417604335/.

[44] A.Q. Siddiqui (2013), "Transit fee for TAPI gas pipeline agreed". Pajhwok Afghan News. Available: http://www.pajhwok.com/en/2012/04/17/transit-fee-tapi-gas-pipeline-agreed.

Table 4.1: Top 10 Exports of Central and South Asian countries to World and Region, 2010-2013 average

AFGHANISTAN					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
520100	Cotton, not carded or combed	71,972,532	520100	Cotton, not carded or combed	71,414,941
720449	Ferrous waste or scrap, nes	45,316,969	720449	Ferrous waste or scrap, nes	45,316,969
999999	Commodities not specified according to kind	44,734,118	80420	Figs, fresh or dried	39,987,808
80420	Figs, fresh or dried	40,043,780	270119	Coal except anthracite or bituminous	38,036,531
80620	Grapes, dried	38,282,764	130190	Natural gum, resin, gum-resin, balsam	35,320,878
270119	Coal except anthracite or bituminous	38,037,566	80620	Grapes, dried	15,680,502
130190	Natural gum, resin, gum-resin, balsam	35,416,664	80610	Grapes, fresh	12,604,132
80250	Pistachios, fresh or dried	15,339,074	70310	Onions and shallots, fresh or chilled	12,562,491
430130	Raw Persian and similar lamb fur skins, whole	13,103,149	252610	Natural steatite, not crushed or powdered	9,642,132
840734	Engines, spark-ignition reciprocating, over 1000 cc	12,789,418	80250	Pistachios, fresh or dried	8,603,925

INDIA					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
271000	Oils petroleum, bituminous, distillates, not crude	58,561,050,106	520100	Cotton, not carded or combed	266,393,971
260111	Iron ore, concentrate, not iron pyrites	54,181,891,188	230400	Soya-bean oil-cake and other solid residues	218,182,617
100630	Rice, semi-milled or wholly milled	6,670,880,568	290243	P-xylene	156,846,952
230400	Soya-bean oil-cake and other solid residues	4,817,339,132	300490	Medicaments nes, in dosage	132,334,007
250100	Salt (sodium chloride) including solution, salt water	4,404,749,394	170199	Refined sugar, in solid form, nes, pure sucrose	104,084,215
100590	Maize except seed corn	3,689,339,376	070200	Tomatoes, fresh or chilled	89,211,625
251611	Granite, crude or roughly trimmed	3,400,599,554	090240	Tea, black (fermented or partly) in packages > 3 kg	74,948,585
870899	Motor vehicle parts nes	2,842,657,779	540710	Woven hi-ten filament, nylon, polyamide	63,122,909
270119	Coal except anthracite or bituminous	2,391,949,328	390210	Polypropylene in primary forms	50,622,030
260600	Aluminum ores and concentrates	2,173,873,564	852520	Transmit-receive apparatus for radio, TV, etc.	42,341,948

PAKISTAN					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
100630	Rice, semi-milled or wholly milled	1,833,319,464	271000	Oils petroleum, bituminous, distillates, not crude	394,828,486
520512	Cotton yarn >85% single uncombed	1,050,326,400	252329	Portland cement, other than white cement	287,206,416
271000	Oils petroleum, bituminous, distillates, not crude	840,124,734	110100	Wheat or muslin flour	171,598,510
711319	Jewelry and parts of precious metal except silver	735,341,171	151620	Veg fats, oils or fractions hydrogenated, esterified	159,474,239
630260	Toilet or kitchen linen, of cotton terry toweling	733,458,047	100630	Rice, semi-milled or wholly milled	93,817,606
630231	Bed linen, of cotton, nes	692,270,381	730690	Tube/pipe/hollow profile, iron/steel ,riveted	71,336,777
620342	Men's, boys trousers & shorts, of cotton, not knit	629,227,159	170199	Refined sugar, in solid form, nes, pure sucrose	69,311,319
630210	Bed linen, of textile knit or crochet materials	570,059,288	80410	Dates, fresh or dried	64,806,899
630239	Bed linen, of material nes,	546,744,338	70190	Potatoes, fresh or chilled except seed	62,842,894
252329	Portland cement, other than white cement	463,008,206	80520	Mandarin, clementine & hybrids, fresh or dried	61,365,371

KAZAKHSTAN					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
270900	Petroleum oils, oils from bituminous minerals, crude	68,343,870,432	270900	Petroleum oils, oils from bituminous minerals	638,445,349
270119	Coal except anthracite or bituminous	27,037,800,667	110100	Wheat or meslin flour	560,002,356
271121	Natural gas in gaseous state	15,028,956,692	100190	Wheat except durum wheat, and meslin	290,588,887
260111	Iron ore, concentrate, no iron, pyrites	8,923,317,062	271000	Oils petroleum, bituminous, distillates, no crude	182,005,882
260112	Iron ore, concentrate, not iron pyrites, agglomerated	8,561,949,798	271112	Propane, liquefied	108,901,261
100190	Wheat except durum wheat, and meslin	4,936,950,103	260800	Zinc ores and concentrates	74,767,916
271000	Oils petroleum, bituminous, distillates, except crude	4,863,991,378	252400	Asbestos	67,960,097
250310	Sulfur, crude or unrefined	4,016,433,314	730511	Pipe-line submerged arc welded steel ø >406mm	65,774,600
760110	Aluminum unwrought, not alloyed	2,675,193,648	720449	Ferrous waste or scrap, nes	50,272,954
110100	Wheat or meslin flour	2,075,523,542	270119	Coal except anthracite or bituminous cluster	37,879,678

KYRGYZSTAN					
Top Exports to All Destinations:			Top Inter-Regional and Intra-Regional Exports:		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
710812	Gold in unwrought forms non-monetary	743,179,536	271600	Electrical energy	51,381,421
271000	Oils petroleum, bituminous, distillates, not crude	105,870,396	870423	Diesel powered trucks weighing > 20 tones	27,726,342
999999	Commodities not specified according to kind	82,164,680	271000	Oils petroleum, bituminous, distillates, not crude	25,787,215
071333	Kidney beans and white pea beans dried shelled	52,031,608	261690	Precious metal ores and concentrates not silver	12,436,246
271600	Electrical energy	51,381,421	040120	Milk not concentrated nor sweetened 1-6% fat	12,064,182
870423	Diesel powered trucks weighing > 20 tones	28,515,962	070190	Potatoes, fresh or chilled except seed	11,805,057
520100	Cotton, not carded or combed	28,134,131	700529	Float glass etc. in sheets, non-wired, clear	9,998,425
261690	Precious metal ores and concentrates except silver	22,907,520	401199	Pneumatic tires new of rubber nes	9,798,884
620640	Women's, girls blouses, shirts, manmade fiber	21,475,171	080810	Apples, fresh	9,492,343
620443	Women's, girls dresses, synthetic fibers, not knit	18,944,044	252329	Portland cement, other than white cement	9,132,212

TAJIKISTAN					
Top Exports to All Destinations:			Top Inter-Regional and Intra-Regional Exports:		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
760110	Aluminum unwrought, not alloyed	461,571,520	271000	Oils petroleum, bituminous, distillates, not crude	21,302,658
520100	Cotton, not carded or combed	125,760,787	760110	Aluminum unwrought, not alloyed	14,793,711
999999	Commodities not specified according to kind	53,968,010	081310	Apricots, dried	9,759,264
760120	Aluminum unwrought, alloyed	49,154,341	260800	Zinc ores and concentrates	9,046,206
260700	Lead ores and concentrates	35,598,220	260700	Lead ores and concentrates	8,291,932
070310	Onions and shallots, fresh or chilled	23,741,956	520100	Cotton, not carded or combed	7,845,632
261710	Antimony ores and concentrates	23,465,954	081350	Mixtures of edible nuts, dried & preserved fruits	7,679,121
081310	Apricots, dried	23,216,715	070310	Onions and shallots, fresh or chilled	6,679,041
271000	Oils petroleum, bituminous, distillates, except crude	21,302,658	110100	Wheat or meslin flour	5,566,643
081350	Mixtures of edible nuts, dried and preserved fruits	18,438,645	640320	Footwear, soles/uppers leather, strap instep	2,299,771

TURKMENISTAN					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
271121	Natural gas in gaseous state	6,015,656,543	271000	Oils petroleum, bituminous, distillates, no crude	199,481,306
271000	Oils petroleum, bituminous, distillates, except crude	1,043,765,221	271121	Natural gas in gaseous state	174,093,615
710813	Gold, semi-manufactured forms, non-monetary	263,017,586	520100	Cotton, not carded or combed	22,980,088
520100	Cotton, not carded or combed	219,232,504	280120	Iodine	7,568,809
520512	Cotton yarn >85% single uncombed 714-232dtex,	139,818,958	390210	Polypropylene in primary forms	2,731,398
390210	Polypropylene in primary forms	103,826,206	520819	Woven cotton nes, >85% <200g/m2, unbleached	1,516,870
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	35,371,333	870590	Special purpose motor vehicles nes	1,393,345
999999	Commodities not specified according to kind	22,102,704	410210	Sheep or lamb skins, raw, wool on, no Persian etc	1,060,965
520942	Denim cotton >85% >200g/m2	20,874,783	070200	Tomatoes, fresh or chilled	963,028
270900	Petroleum oils, oils from bituminous minerals, crude	107,981,745	180690	Chocolate/cocoa food preparations nes	865,187

UZBEKISTAN					
Top Exports to All Destinations:			**Top Inter-Regional and Intra-Regional Exports:**		
HS Code	*Commodity Description*	*AVG 2010-2013*	*HS Code*	*Commodity Description*	*AVG 2010-2013*
520100	Cotton, not carded or combed	856,954,012	271000	Oils petroleum, bituminous, distillates, not crude	475,704,738
271121	Natural gas in gaseous state	619,983,059	271121	Natural gas in gaseous state	245,863,083
271000	Oils petroleum, bituminous, distillates, not crude	480,135,201	870322	Automobiles, spark ignition engine 1000-1500 cc	47,664,267
740311	Copper cathodes & sections of cathodes unwrought	475,704,738	310230	Ammonium nitrate, solution, pack >10 kg	45,727,566
284410	Natural uranium, its compounds, mixtures	419,951,836	80610	Grapes, fresh	43,492,204
870322	Automobiles, spark ignition engine of 1000-1500 cc	295,557,693	81090	Fruits, fresh nes	28,686,238
870321	Automobiles, spark ignition engine of <1000 cc	201,592,243	252329	Portland cement, other than white cement	23,689,772
710812	Gold in unwrought forms non-monetary	171,040,538	71331	Urd, mung, black or green beans dried shelled	21,304,359
520512	Cotton yarn >85% single uncombed 714-232 dtex	158,836,714	70200	Tomatoes, fresh or chilled	19,019,960
870323	Automobiles, spark ignition engine of 1500-3000 cc	138,566,425	70700	Cucumbers and gherkins, fresh or chilled	15,524,792

Source: Derived from data in United Nations, COMTRADE database.

B. Product Concentration

1. Number of Products Traded Intra- and Inter-Regionally

Intra-regional trade of the Central and South Asian countries are more diversified than is their inter-regional trade. Table 4.2 shows the number of product exports having an average of over US$10,000 in 2010-2013 for each of the countries in the two regions.

On average, the South Asian countries trade 4.5 times more products among themselves than with the Central Asian countries. Likewise, Central Asian countries trade nearly 4 times as many products among themselves than they do with the South Asian countries.

There are considerable variations among countries. In South Asia, Afghanistan exports over 10 times more to India and Pakistan together than it does to the Central Asian countries. It exports nearly twice as many products to Kyrgyzstan as it does to Kazakhstan. The number of products traded with Tajikistan, Turkmenistan and Uzbekistan is considerably smaller than that traded with Kazakhstan and Kyrgyzstan, both in terms of its exports and imports with those countries.

India is somewhat of an exception to the generalizations about intra- and inter-regional products traded. While the number of products exported intra-regional is 3 times greater than the number of products exported to Central Asia, it still exports a relatively large number of products to all the Central Asian countries, especially Kazakhstan and, to a somewhat lesser degree, Uzbekistan.

In Central Asia, the number of products traded by Kazakhstan and Kyrgyzstan are considerably larger than the overall number of products traded by the region as a whole. Tajikistan, Turkmenistan and Uzbekistan have the largest number of products that are exported to Kazakhstan and Kyrgyzstan and have little or no trade among themselves because of various issues ranging from religious and ethnic issues to border disputes.

Table 4.2 Number of product exports of over $10,000 value to each trading partners, 2010-2013 average

		IMPORTER							
		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
EXPORTER	Afghanistan		106	140	17	32	3	4	1
	India	894		1120	844	168	182	243	444
	Pakistan	962	742		99	35	29	31	47
	Kazakhstan	231	152	40		477	409	398	503
	Kyrgyzstan	66	27	5	441		219	41	349
	Tajikistan	28	19	13	98	66		0	0
	Turkmenistan	15	18	12	45	7	0		0
	Uzbekistan	30	105	19	538	221	0	0	

Source: Derived from data in United Nations, COMTRADE database.

2. Herfindahl-Hirschman Product Concentration Index

A more advanced measure of export concentration is the Herfindahl-Hirschman product concentration index, which calculates the degree to which a country's export earnings are either concentrated in a relatively few products or, alternatively, the extent to which they are diversified among many products. For Central and South Asia, the extent of export concentration or diversification are measured across each country's exports to (a) all destinations; (b) countries in the intra-regional market; and (c) countries in the inter-regional market.

The index is calculated as the square root of the sum of the squared market shares of a country's exports of its HS 6-digit products in total exports to a regional or world market (for the technical definition, see Box 4.1). The interpretation of the indices are as follows: countries with exports that are concentrated in a very few products have an index value approaching 1; and those with highly diversified product exports have an index value close to 0. In general, the degree of product concentration reflects the vulnerability of a country to trade shocks.

Table 4.3 shows the extent to which exports are diversified or concentrated in a few number of products in the Central and South Asian countries. India and Pakistan have the most diversified exports, followed by Kazakhstan and Kyrgyzstan. At the other extreme, Turkmenistan's, Tajikistan's and Afghanistan's exports are concentrated in a relatively few number of products. Uzbekistan's export concentration is near the average for the region.

Bilateral trade flows are mixed. For example, Afghanistan's exports to Turkmenistan and Tajikistan are highly concentrated in a few products, whereas those to Kyrgyzstan, India and Pakistan are relatively diversified. Only India and, to a somewhat lesser extent, Pakistan have consistently diversified bilateral trade flows with all countries in the region. Central Asian countries in general tend to have relatively diversified product exports with one another, but their exports to the South Asian countries tend to be concentrated in a fewer number of products.

Table 4.3 Herfindahl-Hirschman product concentration index, to each trading partners, 2010-2013 average

		IMPORTER								
		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	World
EXPORTER	Afghanistan		0.14	0.17	0.29	0.10	0.54	0.97	None	0.04
	India	0.04		0.05	0.07	0.12	0.08	0.04	0.06	0.05
	Pakistan	0.06	0.04		0.20	0.13	0.20	0.09	0.09	0.02
	Kazakhstan	0.23	0.43	0.17		0.05	0.15	0.03	0.12	0.41
	Kyrgyzstan	0.42	0.07	0.56	0.04		0.10	0.12	0.04	0.19
	Tajikistan	0.47	0.74	0.54	0.10	0.08		None	None	0.22
	Turkmenistan	0.70	0.41	0.68	0.84	0.21	None		None	0.54
	Uzbekistan	0.57	0.11	0.38	0.07	0.14	None	None		0.05
	World	0.03	0.09	0.06	0.01	0.04	0.01	0.01	0.01	

Source: Calculated from data in United Nations, COMTRADE database.

Box 4.1. Measuring Product Diversification

Export diversification is a reflection of trade development insofar as it reflects the ability of an economy to produce a wide variety of goods. In general, advanced economies are highly diversified in their production structures, whereas many developing and transition economies are characterized as being mono-exporters, with one type of good dominating their export performance.

Several measures are used in this chapter to describe diversification as well as other characteristics of a country's trade structure:*

- *Top traded products*: This indicator lists the top 10 products exported by each country to both the world market and the combined regions of Central and South Asia.
- *Number of products exported with trade values of at least US$ 10,000:* This measure provides a simple count of how many products are exported by each country in Central and South Asia.
- *Herfindahl-Hirschman Product Concentration Index:* This index measures the concentration or, alternatively, diversification of a country's export products. The Herfindahl-Hirschman Product Concentration Index (HH) is defined as follows:

$$\frac{\sum_{k=1}^{n_i}\left(\frac{x_{ik}}{X_i}\right)^2 - \frac{1}{n_i}}{\frac{1}{n_i}} \qquad \ldots(4.1)$$

where *X* is the total value of exports from reporter *I; x* is the value of exports of product *k* from country *I;* and *n* is the number of products exported by country *i*.

A higher index (close to 1) indicates that exports are concentrated in fewer sectors, whereas a country with a completely diversified portfolio will have an index close to 0.

- *Export survival rates:* This measure describes the survival rate over successive years of new product-market relationships of at least US$10,000 for each Central and South Asia country. Export Duration (ED) is defined as follows:

$$ED_{it} = \frac{n_{ijt}}{n_{ijt_{start}}} \qquad \ldots(4.2)$$

where *n* is the number of products exported from country *i* to partner *j* in year *t*, and t_{start} is the selected start year.

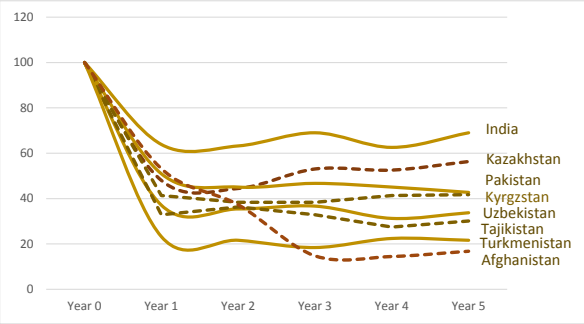
Source: World Bank (2013), "Online Trade Outcomes Indicators - User's Manual". Washington, DC. Available: http://wits.worldbank.org/WITS/docs/TradeOutcomes-UserManual.pdf.

C. Export Survival Rates

Regional trade in Central and South Asia consists of a relatively large and somewhat varied number of products, notwithstanding the dominance of a few products in overall export earnings. Export product variety suggests the potential for growing diversification if new product entrants can achieve market penetration. However, successful entry into regional as well as global export markets requires survival beyond the first years of entry.[45] Yet empirical evidence points to the short-lived success and high 'death' rates of new exports in developing countries. Typically, the median duration of these new export spells is very short, averaging two to three years.[46]

Export survival rate analysis is a new and rapidly expanding area of research in trade, due in large part to the availability of transactions-level export data. Initial studies have found that the probability of survival success rises with the number of same-country firms exporting the same product to the same destinations. The results suggest the existence of cross-firm externalities and information spillovers, based on the observation that a country's export success often takes the form of 'big hits', with one narrow export item suddenly growing rapidly.[47] If a sufficient number of exporters target one market simultaneously, our results imply that their chances of success increase, possibly triggering a cycle of entry, survival and growth.

Figure 4.1: Survival Rates in Central and South Asian Economies between 2010 and 2013 (2010 = 100)



Source: Based on data from World Bank World Integrated Trade Solution (WITS) trade outcomes analysis. Online: https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx.

The analysis is particularly useful for policy and program formulation in Central and South Asia, given that traditional export promotion efforts have tended to focus primarily on helping would-be exporters find new markets and develop export-ready products. Survival rate analysis suggests that such efforts may not yield significant results if flows of new products and destinations are not surviving in sufficient numbers. Information about survival rates can be very helpful in the search for robust and policy-related determinants of export growth, particularly when related to export sustainability.

[45] T. Besedes and T. Prusa (2006) "Ins, Outs and the Duration of Trade". *Canadian Journal of Economics* 104. Available: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.497.5145&rep=rep1&type=pdf.

[46] A. Obashi (2010) "Stability of International Production Networks: Is East Asia Special?" FREIT Working Papers. Available: http://www.freit.org/WorkingPapers/Papers/TradePatterns/FREIT158.pdf.

[47] W. Easterly, A. Reshef, and J. Schwenkenberg (2009), "The Power of Exports". Washington, DC, World Bank Policy Research Working Paper 5081. Available: https://openknowledge.worldbank.org/bitstream/handle/10986/4273/WPS5081.pdf?sequence=1.

The results for the Central and South Asian economies, summarized in Figure 4.1, are based on bilateral trade values of 6-digit HS level products with at least US$ 10,000 in the start year of 2010 and the number and percentage of those that survive in each succeeding year until the end date of 2013. The analysis suggests the following stylized facts about survival rates in these two regions:

- Only India and Kazakhstan have survival rates greater than 50 percent five years after the introduction of new export products.
- Kyrgyzstan, Uzbekistan and Tajikistan have low survival rates ranging from 30 to 40 percent after five years.
- Turkmenistan and Afghanistan have exceedingly low survival rates of 22 and 17 percent respectively after five years of the introduction of new export products.

The generally large scale deaths of trading relationships found in all but the largest economies of the region can reflect economic shocks or the result of new policies or regulatory requirements and procedures. From a practical perspective, there are possible gains in sustainability to be had from prior experience with the export products and destinations, networking with trading partners and using neighboring countries as launch platform for new product exports.

D. Ratings

Table 4.4 shows the scores assigned to export sophistication, survival rates, diversification and performance in each country, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 4.4. Summary Assessment of Export Diversification, Performance, Product Sophistication, Survival Rates

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Extent of export product diversification encourages intra- and inter-regional diversity of opportunities and stability of foreign exchange earnings.***					
1	Kazakhstan	1	2	3	**4**	5
2	Kyrgyzstan	1	2	3	**4**	5
3	Tajikistan	1	**2**	3	4	5
4	Turkmenistan	**1**	2	3	4	5
5	Uzbekistan	1	2	**3**	4	5
6	Afghanistan	1	**2**	3	4	5
7	India	1	2	3	4	**5**
8	Pakistan	1	2	3	4	**5**
	B. ***Survival rates of exporters are high enough to attract new entrants into export-oriented activities***					
1	Kazakhstan	1	2	3	**4**	5

2	Kyrgyzstan	1	2	3	4	5
3	Tajikistan	1	2	3	4	5
4	Turkmenistan	1	2	3	4	5
5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

V. COMPARATIVE ADVANTAGES

A. Product Sophistication

1. Distribution of Exports according to Degree of Technical Sophistication

The classification of trade flows according to technological sophistication provides insight into its level of economic development and its location in the global production chain. Specialization in some products can have a greater potential for backward and forward linkages along value chains, and offer opportunities to move up those value chains through technology spillover effects.

The classification system sorts all traded products into one of five mutually exclusive groupings: high tech, medium tech, low tech, primary products, and resource-based products.[48] Recent extensions of this approach have used measures of country export baskets found in advanced country exports to determine their relative degree of sophistication.[49] However, for purposes of identifying intra and inter-regional trade opportunities, we limit our analysis to the classification of exports into the standard five groupings:

- *Primary products* are based on natural resources from the agricultural, forestry, fishery and mining sectors of an economy.
- *Resource-based products* involve more processing and can be based on either agriculture or forestry products such as prepared meats and fruits, beverages, wood products, vegetable oil; or other resources such as ore concentrates, petroleum products, rubber products, and cement. Resource-based products tend to be simple and labor-intensive, as in the case of most food or leather processing products. Nevertheless, some industries use relatively high capital and skill-intensive technologies, like in petroleum refining or processed foods.
- *Low-technology manufactures* tend to have stable, well-diffused technologies that are primarily embodied in capital equipment. Some of these products occur in the textile, footwear and furniture industries, which produce textile fabrics, clothing, footwear, and different types of furniture.
- *Medium-technology products* comprise the bulk of capital and intermediate products, which are essential to industrial activity. These products tend to have relatively complex technologies, with moderately high levels of R&D, and require advanced skill and learning periods for their adoption, as in the case of automotive products, industries like synthetic fibers, chemicals and paints, fertilizers, plastics, and industrial machinery.

[48] The methodology is based on S. Lall, (2000), "The Technological Structure and Performance of Developing Country Manufactured Exports, 1985–98," *Oxford Development Studies* 28(3). http://www3.qeh.ox.ac.uk/pdf/qehwp/qehwps44.pdf.

[49] R. Hausmann, J. Hwang, and D. Rodrik (2007), "What You Export Matters," *Journal of Economic Growth* 12(1): 1–25. For an application, R. Anand, S. Mishra, and N. Spatafora (2012), "Structural Transformation and the Sophistication of Production". Washington, DC. International Monetary Fund. IMF Working Paper WP/12/59. Available: https://www.imf.org/external/pubs/cat/longres.aspx?sk=25746.0.

- *High-technology products* have advanced and fast-changing technologies. They require high R&D investments and emphasize product design. The more advanced technologies require sophisticated technological infrastructures, high levels of specialized technical skills, and close interactions among firms, and between firms and universities or research institutions. Examples include electronics and electrical products, pharmaceuticals, and optical and measuring instruments.

Table 5.1 shows the classification of all exports of each Central and South Asian economy according to their degree of sophistication, while Figure 5.1 provides a visual representation of the export classification of those countries. The following observations can be made from the results:

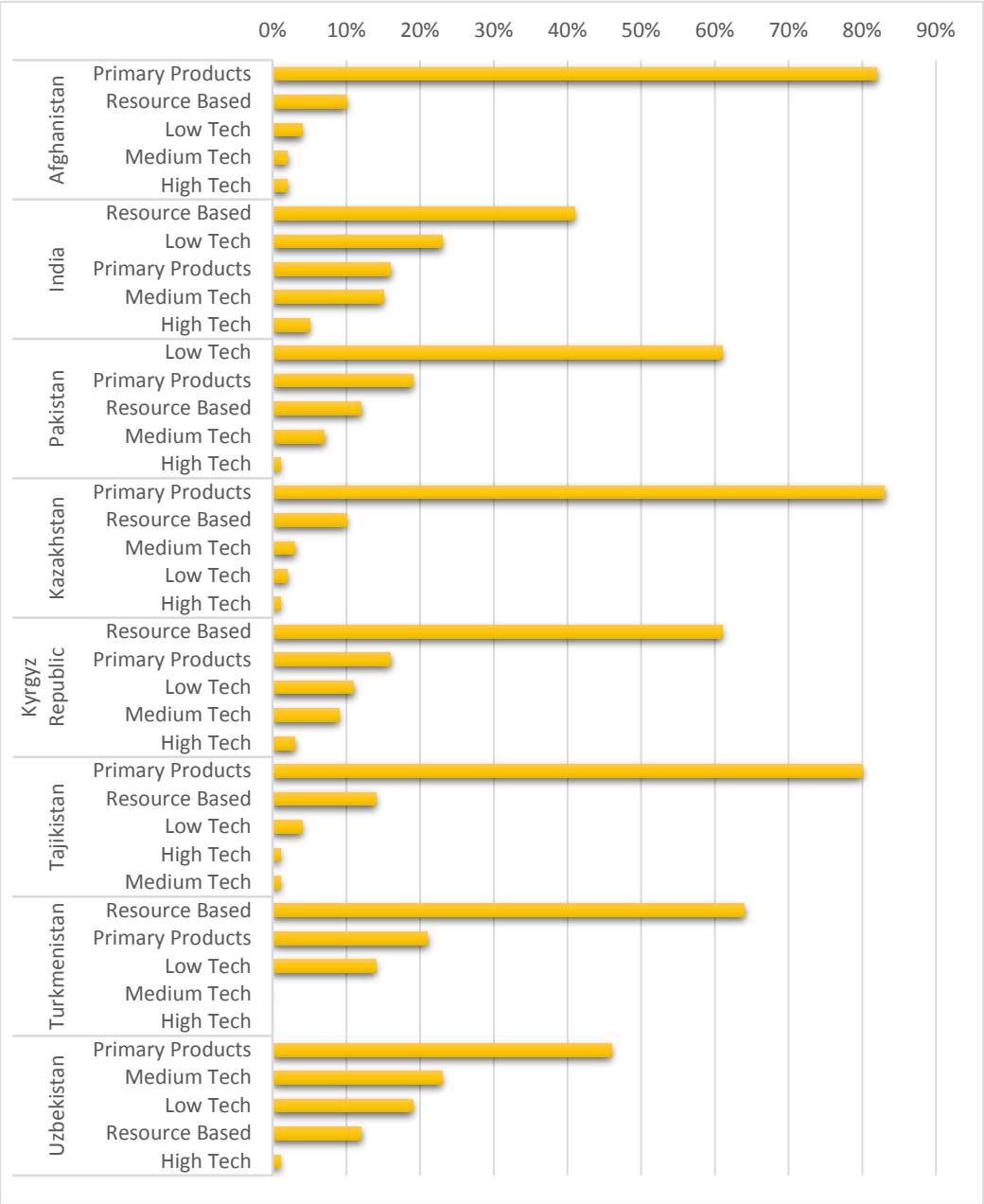
- Over 75 percent of all exports from Afghanistan and the Central Asian countries other than Uzbekistan are in the form of either primary or resource-based products.
- Over 50 percent of exports from India and Uzbekistan are technology-based products. In India, more than one-half of those exports are low-tech products and another one-third are in the form of medium tech products. In Uzbekistan, over one-half of those exports are in the form of medium-tech products and most of the remaining ones are low-tech products.
- Pakistan has the highest proportion of exports that are in the form of technology-based products, although the bulk of those exports are low-tech products.

Table 5.1: Classification of Central and South Asian Exports according to Degree of Sophistication

	Primary Products	Resource Based	Low Tech	Medium Tech	High Tech
Afghanistan	82%	10%	4%	2%	2%
India	16%	41%	23%	15%	5%
Pakistan	19%	12%	61%	7%	1%
Kazakhstan	83%	10%	2%	3%	1%
Kyrgyzstan	61%	16%	11%	9%	3%
Tajikistan	80%	14%	4%	1%	1%
Turkmenistan	21%	64%	14%	0%	0%
Uzbekistan	46%	12%	19%	23%	1%

Source: World Bank, "World Integrated Trade Solution (WITS)". Online: https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx.

Figure 5.1: Classification of Central and South Asian Exports according to Degree of Sophistication



Source: World Bank, "World Integrated Trade Solution (WITS)". Online: https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx.

B. Revealed Comparative Advantages

The nature of a country's exports and its specialization in the production and trade of products can be examined on the basis of the index of revealed comparative advantage (RCA). The RCA measures a country's export intensity in a given product relative to other countries in the world. The ratio of a product's export shares in the country relative to that in the world is taken as a measure of the comparative advantage. If the index is greater than 1, it is indication that the country is internationally competitive in exporting the product being measured. Box 5.1 shows the technical definition of the concept.

The RCA index has several applications:

(1) It is used to classify a country's exports into different categories, based on whether the types of products exports are (a) natural resource intensive; (b) unskilled-labor intensive; (c) technology intensive; and (d) human capital or skilled labor intensive. This section presents the results of that type of application.

(2) It is used to determine bilateral and regional trading patterns in cases where countries trade on the basis of their comparative advantages. Chapter 12 shows the results of that type of application.

Table 5.2: Revealed Comparative Advantage of Central and South Asian countries by HS Section

Section	Description	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
I	Live animals; animal products	1.00	1.70	6.86	0.10	3.26	1.59	0.01	1.30
II	Vegetable products	8.47	2.92	4.26	1.10	5.71	17.80	3.04	11.51
III	Animal or vegetable fats and oils	0.92	1.72	0.86	7.24	0.37	0.51	13.09	0.28
IV	Prepared foodstuffs; beverages	0.25	0.83	1.18	0.23	1.68	0.66	7.20	1.05
V	Mineral products	6.75	4.72	4.29	2.16	7.28	12.45	1.78	4.20
VI	Products of the chemical	0.92	2.21	0.44	0.99	0.79	0.50	0.43	2.55
VII	Plastics, rubber and articles thereof	0.44	0.80	0.46	0.05	0.42	0.37	0.12	0.25
VIII	Raw hides and skins, leather	13.96	1.57	8.45	0.11	7.16	3.14	0.44	2.98
IX	Wood and articles of wood	0.42	0.19	0.21	0.02	0.16	0.02	0.00	0.09
X	Wood pulp or other fibrous material	0.65	0.45	0.16	0.15	0.38	0.16	0.01	0.99
XI	Textiles and textile articles	7.92	3.79	28.78	0.13	2.96	5.40	2.68	7.07
XII	Footwear, headgear, umbrellas	0.72	2.39	1.16	0.02	0.30	2.68	0.01	1.67
XIII	Articles of stone, plaster, cement	0.68	1.33	0.48	0.17	4.59	0.86	0.02	1.05
XIV	Pearls, precious or semi-precious stones	3.98	4.76	0.98	2.67	2.26	0.68	1.18	1.55
XV	Base metals and articles of base metal	0.93	1.24	0.70	2.38	0.85	2.30	0.02	1.85
XVI	Machinery and electrical equipment	0.92	0.55	0.16	0.05	0.59	0.18	0.05	0.23
XVII	Vehicles, aircraft, vessels	1.27	1.27	0.17	0.18	1.17	0.14	0.11	1.05
XVIII	Optical, photographic	0.38	0.36	0.13	0.03	0.30	1.15	0.07	0.08
XIX	Arms and ammunition	1.36	0.69	0.74	na	na	0.13	na	0.05
XX	Miscellaneous manufactured articles	0.21	0.68	1.37	0.01	0.45	0.28	0.01	1.17
XXI	Works of art	4.35	3.26	0.41	0.00	0.24	0.48	0.07	0.22

Source: Derived from data in United Nations, COMTRADE database.
Note: The interpretation of the numbers is as follows: If the index is greater than one, the country is internationally competitive in exporting the product grouping in the HS section; If the number is equal to or less than one, then country is not internationally competitive in exporting the product grouping in the HS section.

(3) It is used in regional value chain analysis to determine potential cross-border fragmentation of production. Chapter 13 shows that results of that type of application.

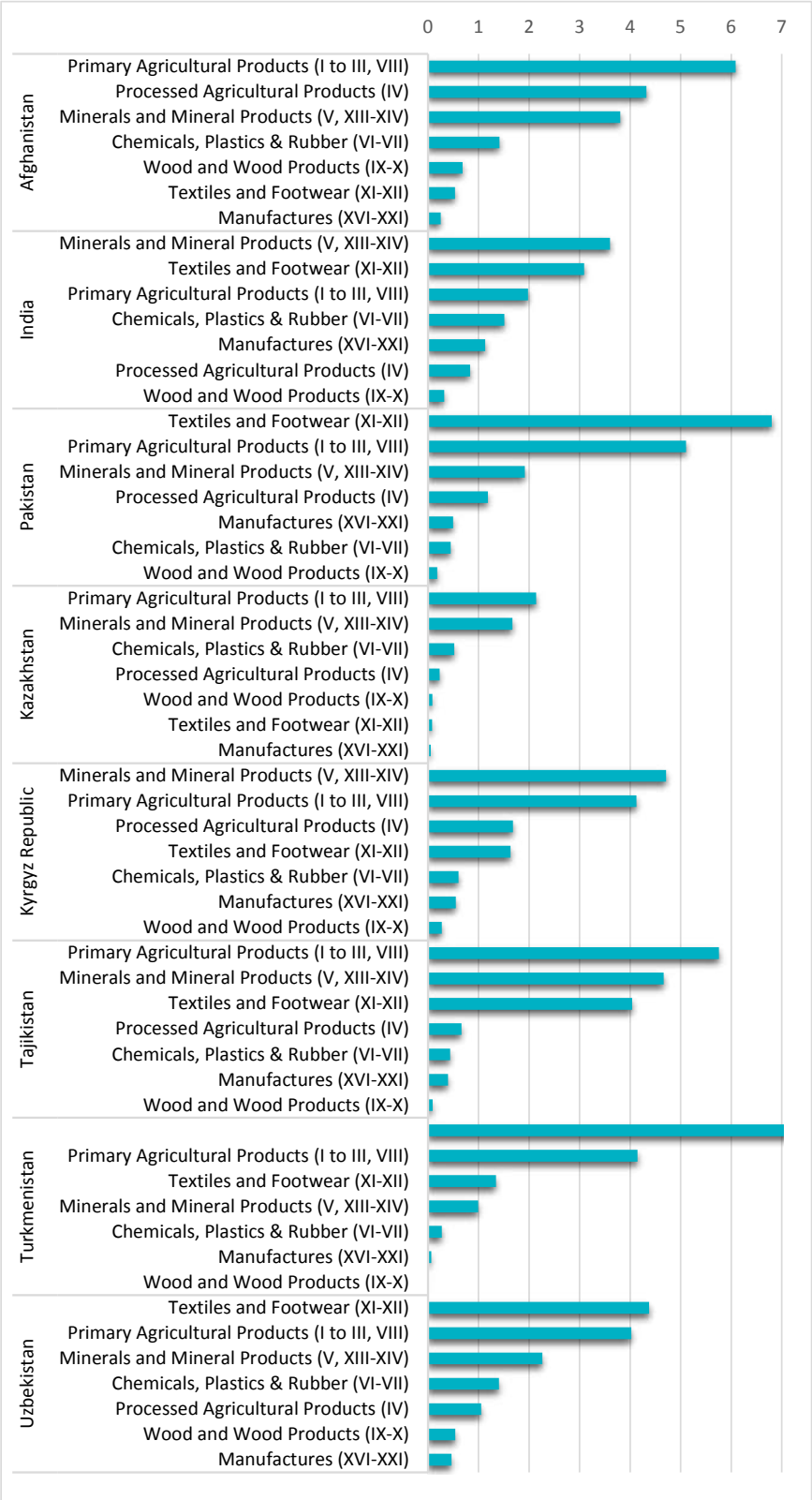
In the case of Central and South Asia, all of the RCA calculations are based on disaggregated trade data at the HS 6-digit level in 2010-2013. Table 5.2 summarizes the results according to the 21 HS sections, while Statistical Appendix Table A.11 summarizes them at the 2-digit HS level. The following are some of the key findings by country:

- Afghanistan has a comparative advantage in the production and export of (a) raw hides and skins, and leather; (b) vegetable products; (c) textiles and textile articles; (d) mineral products; (e) works of art; and (f) precious and semi-precious stones.
- India has a comparative advantage in the production and export of (a) precious or semi-precious stones; (b) mineral products; (c) textiles and textile articles; (d) vegetable products; (e) works of art; (f) footwear, headgear, umbrellas; (g) chemical products; (h) animal or vegetable fats and oils; (i) live animals; (j) animal products; (k) raw hides and skins, leather; (l) articles of stone, plaster, cement; (m) vehicles, aircraft, vessels; and (n) base metals and articles of base metal.
- Pakistan has a comparative advantage in the production and export of (a) textiles and textile articles; (b) raw hides and skins, leather; (c) live animals; animal products; (d) mineral products; (e) vegetable products; (f) manufactured articles; (g) prepared foodstuffs; (h) beverages; and (i) footwear, headgear and umbrellas.
- Kazakhstan has a comparative advantage in the production and export of (a) animal or vegetable fats and oils; (b) precious or semi-precious stones; (c) base metals and articles of base metal; (d) mineral products; and (e) vegetable products.
- Kyrgyzstan has a comparative advantage in the production and export of (a) mineral products; (b) raw hides and skins, leather; (c) vegetable products; (d) articles of stone, plaster, cement; (e) live animals; (f) animal products; (g) textiles and textile articles; (h) precious or semi-precious stones; (i) prepared foodstuffs; and (j) beverages.
- Tajikistan has a comparative advantage in the production and export of (a) vegetable products; (b) mineral products; (c) textiles and textile articles; (d) raw hides and skins, leather; (e) footwear, headgear, umbrellas; (f) base metals and articles of base metal; (g) live animals; and (h) animal products.
- Turkmenistan has a comparative advantage in the production and export of (a) animal or vegetable fats and oils; (b) prepared foodstuffs; (c) beverages; (d) vegetable products; (e) textiles and textile articles; (f) mineral products; and (g) precious or semi-precious stones.
- Uzbekistan has a comparative advantage in the production and export of (a) vegetable products; (b) textiles and textile articles; (c) mineral products; (d) raw hides and skins, leather; (e) products of the chemical; (f) base metals and articles of base metal; (g) footwear, headgear, and umbrellas; (h) precious or semi-precious stones; (i) live animals; and (j) animal products.

Figure 5.2 classifies each country's comparative advantages into seven broad categories with the following characteristics:

- Primary agricultural products have the highest average RCA among the countries in the two regions. Seven of the countries have a comparative advantage in the production and export of these types of products.
- Textiles and footwear have the second highest average RCA among the countries. All countries in the two regions have a comparative advantage in the production and export of these types of products.
- Minerals and mineral products have the third highest average RCA among the countries. All countries in the two regions have a comparative advantage in the production and export of these types of products.
- Processed agricultural products have the fourth highest average RCA among the countries. Five countries in the two regions have a comparative advantage in the production and export of these types of products. The ones with the highest RCAs are Afghanistan, Kyrgyzstan and Pakistan.
- Chemicals, plastics and rubber have the fourth highest average RCA among the countries. Two countries in the two regions (India and Uzbekistan) have a comparative advantage in the production and export of these types of products.
- Miscellaneous manufactures have the sixth highest average RCA among the countries. Two countries in the South Asia region (Afghanistan and India) have a comparative advantage in the production and export of these types of products.
- Wood and wood products. None of the countries in the two regions have a comparative advantage in the production and export of these types of products.

Figure 5.2: Revealed Comparative Advantage by Broad Product Categories



Note: Numbers in parenthesis refer to HS sections.
Source: Derived from data in United Nations, COMTRADE database.

Box 5.1. Measuring Product Sophistication and Revealed Comparative Advantage

- *Export sophistication*: This indicator classifies all products of each Central and South Asia country into one of five mutually exclusive technological groupings: high tech, medium tech, low tech, primary products, and resource-based products. The classification is described as follows:

$$100 * \sum_{k \in \Omega_{tec}} \frac{x_{ijk}}{X_{ij}} \qquad \forall \text{ for all } tec \in [\text{HT, MT, LT, PP, RB}] \qquad \text{...(5.1)}$$

  where *x* is the value of exports of product *k* from country *i* to partner *j*, and *X* is the total value of all exports of *i* to *j*. Ω_{tec} is the set of all products in mutually exclusive categories: high tech (HT), medium tech (MT), low tech (LT), primary products (PP), and resource-based (RB).

- *Revealed Comparative Advantage:* The concept of revealed comparative advantage (RCA) is defined as follows:

$$RCA = \frac{\frac{x_i}{\sum_i x_i}}{\frac{x_{iw}}{\sum_i x_{iw}}} \qquad \text{...(5.2)}$$

  where x_i represents the country's export of good *i* and x_{iw} represents the world's export of good *i*.

Source: World Bank (2013), "Online Trade Outcomes Indicators - User's Manual". Washington, DC. Available: http://wits.worldbank.org/WITS/docs/TradeOutcomes-UserManual.pdf.

C. Ratings

Table 5.3 shows the scores assigned to the comparative advantages in each country, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 5.3. Summary Assessment of Comparative Advantages

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Degree of sophistication of exported products promotes opportunities for trade in higher valued products***					
1	Kazakhstan	1	**2**	3	4	5
2	Kyrgyzstan	1	2	**3**	4	5
3	Tajikistan	1	**2**	3	4	5
4	Turkmenistan	1	2	**3**	4	5
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	1	**2**	3	4	5
7	India	1	2	3	**4**	5
8	Pakistan	1	2	3	4	**5**
	B. ***The revealed structure of exports promotes opportunities for trade within and between the two regions***					
1	Kazakhstan	1	2	**3**	4	5
2	Kyrgyzstan	1	2	3	4	**5**
3	Tajikistan	1	2	**3**	4	5
4	Turkmenistan	1	2	**3**	4	5
5	Uzbekistan	1	2	**3**	4	5
6	Afghanistan	1	2	3	**4**	5
7	India	1	2	3	4	**5**
8	Pakistan	1	2	3	4	**5**

VI. TRADE COMPLEMENTARITIES

Empirical evidence described in the previous chapter suggests that all the Central and South Asian countries have a comparative advantage in the production and export of natural resource and unskilled labor intensive products. In the context of traditional RCA analysis, these similarities suggest that there are few opportunities for trade between countries in the two regions. Comparative advantage analysis, however, is limited to static concepts. In reality, countries can alter their situations by adopting new technologies either internally through research and development or externally through foreign direct investment (FDI). Alternatively, they can do so through the development of cross-border production facilities involving value chains. These channels introduce a dynamic element to the ability of countries to alter their comparative advantages and thereby improve their economic structures and income levels.

A. Overall and Bilateral Trade Complementarities

One alternative approach to analyzing potential trade opportunities in a more dynamic setting is to assume that there are few natural resource and technological differences between countries, and to examine the actual or potential degree of concentration or so-called agglomeration of industries.[50] Traditionally, countries have achieved agglomeration through the activities of large multinational enterprises that concentrate industrial activity in particular locations, thereby allowing some countries to advance more quickly than others. More recently, it has been increasingly recognized that regional trading arrangements can be used to help countries achieve

Box 6.1. Measuring Trade Complementarity

The *Trade Complementarity Index* measures the extent to which exports of a country are compatible with imports of its trading partners and is formally defined as follows:

$$100 * \left[1 - \sum_k \left|\frac{m_{jk}}{M_k} - \frac{x_{ik}}{X_i}\right| /2\right] \quad \text{...(6.1)}$$

where *x* is the value of exports of product *k* from reporter country *i,* and *X* is country *i*'s total exports. Partner country *j*'s value of imports of product *k* is given by *m*, and its total imports value is denoted by *M*. The range of possible values are 0 to 100, where a score of 100 indicates that the exported products are compatible with imports of trading partners and a score near 0 indicates lack of compatibility.

Source: World Bank (2013), "Online Trade Outcomes Indicators - User's Manual". Washington, DC. Available: http://wits.worldbank.org/WITS/docs/TradeOutcomes-UserManual.pdf.

Note: There is a misprint in the World Bank's description of the formula insofar as the '2' in the denominator is missing from the formula in that publication.

[50] For applications to trade, see M. Lord (2004), "Partial-Equilibrium and Industrial-Shift Analysis of the U.S.–Colombia FTA". MPRA Paper 50635, University Library of Munich, Germany. Available: https://ideas.repec.org/e/plo59.html#works.

agglomeration. Agglomeration economies are closely associated with economies of scale and network effects of similar businesses acting together to benefit from proximity to upstream and downstream activities, and from technological spillovers of information flows that occur when clustering of production activities.

The central indicator of each country's ability to alter its comparative advantage is the degree of trade compatibility between its export structure and that of its regional trading partners. This approach has been widely adopted in measuring regional export-expansion potential using the so-called *trade complementarity index*.[51] Having established compatibility of traded products, one can then invoke performance indicators to reveal the extent to which each country can compete effectively in those markets. Success in export markets, measured by rapidly expanding exports and rising market shares, indicates the extent to which economies can alter their comparative advantage in the global marketplace.

The analysis of Central and South Asia's trade compatibility covers (a) all exports of each country; (b) product-specific performance measures at the 6-digit HS level; and (c) data analysis based on the last 10-year period for which data are available. The formal definition of the trade compatibility index is described in Box 6.1. It indicates the extent to which the export profile of an exporting country complements the import profile of its trading partners. A high index, one that approaches 100, indicates that two countries have considerable scope for trade expansion, while an index that is near 0 suggests that the two countries lack any opportunity to trade. The index of compatibility is usually between 50 and 60 for trade between industrialized countries, and it averages about 20 for trade between developing countries.

At the first stage of analysis for the Central and South Asian countries, the trade compatibility of all HS 6-digit products has been calculated for all potential regional trade between countries in

Table 6.1: Overall Bilateral Trade Complementarity Indices of Central and South Asian Exports

		IMPORTS							
		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
EXPORTS	Afghanistan		12	13	9	9	8	14	11
	India	34		41	27	39	26	22	27
	Pakistan	19	24		13	15	18	10	12
	Kazakhstan	8	11	22		12	13	5	13
	Kyrgyzstan	22	19	16	18		19	18	18
	Tajikistan	11	13	9	8	7		11	11
	Turkmenistan	14	17	18	8	16	11		7
	Uzbekistan	15	21	19	15	19	16	10	

Source: Derived from data in United Nations, COMTRADE database.

[51] This approach is associated with M. Michaely (1996), "Trade Preferential Agreements in Latin America: An Ex-Ante Assessment". Washington, DC. Policy Research Working Paper 1583. March 1996. Available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=620535.

the region and between each country and the regional aggregate of all imported products. The results are summarized in Figure 6.1. They show that India's exports are most compatible with the types of goods imported by the two regions, and especially with imports of Afghanistan, Pakistan and Kyrgyzstan. Pakistan's exports are also compatible with the types of goods imported by Central and South Asian countries, albeit less than exports of India. Among the Central Asian countries, Kazakhstan has considerable opportunities to expand its exports with Pakistan, while Kyrgyzstan could expand its trade with all its trading partners in the two regions. Turkmenistan has trade expansion opportunities with India and Pakistan, and Uzbekistan's exports are somewhat compatible with those of India, Pakistan and Kyrgyzstan. In general, Afghanistan has limited scope for developing export opportunities with India, Pakistan and Turkmenistan.

At the second level, export products of each country in the region are divided into the following four types: (a) *large non-fuel exports;* (b) *medium-size exports*; (c) *small-size exports;* and (d) *emerging exports.* Because country sizes differ considerably in the two regions, the dollar magnitude of the export categories varies among countries. They are specified at the bottom of each country-based analysis in Table 6.2. Both Table 6.2 and 6.3 present the results of the analysis by export size from different perspectives, while Figure 6.1 provides a visual summary of the information. The following are some of the highlights of the results:

- The South Asian countries have the highest trade complementarity with regional imports in medium- to large-size exports, whereas Kazakhstan, Kyrgyzstan and Tajikistan have the highest levels of complementarity in small-size and emerging exports, and Turkmenistan and Uzbekistan have the highest trade complementarities in medium-size exports (Figure 6.1).
- On a bilateral trade basis, trade complementarities are in some cases much higher than the overall level of each country's export compatibility with imports from the two regions. In Table 6.2, all bilateral trade in the two regions that have trade complementarity indices over 35 are highlighted. The results are striking. Whereas overall export figures of Afghanistan showed very little trade compatibility with the two regions, on a bilateral basis it has high levels of trade opportunities with its large-size exports to Pakistan and its small-size exports to Kazakhstan, Kyrgyzstan, and Turkmenistan. India has high levels of trade compatibility with Kazakhstan in all types of exports, as well as in its other exports to all countries in the regions, excepting Uzbekistan. Pakistan's export compatibility in the region is mainly with its medium-size exports to India and large-size exports to Uzbekistan. In Central Asia, Kyrgyzstan has the largest number of bilateral trade compatibility indices, while Uzbekistan's exports are highly compatible with Kazakhstan for all types of products. Tajikistan has high levels of compatibility with the South Asian countries in several product categories, while Turkmenistan has high levels of trade compatibility with India and Uzbekistan (Table 6.2).
- Medium- and large-size exports of the South Asian countries are composed of much needed products like cement, non-crude oils and coal, fruits and vegetables and other types of agricultural products, medicines and medical instruments, garments, and automobile parts. Small-size and emerging export products of Kazakhstan, Kyrgyzstan and Tajikistan are made up of a wide range of manufactures, minerals, agro-foods, and

agricultural and mineral raw materials. Medium-size exports of Turkmenistan and Uzbekistan are composed of products like agricultural and mineral raw materials and fruits and vegetables (Table 6.3).

Figure 6.1: Trade Complementarity Indices of Central and South Asian Exports, by Size of Export Products

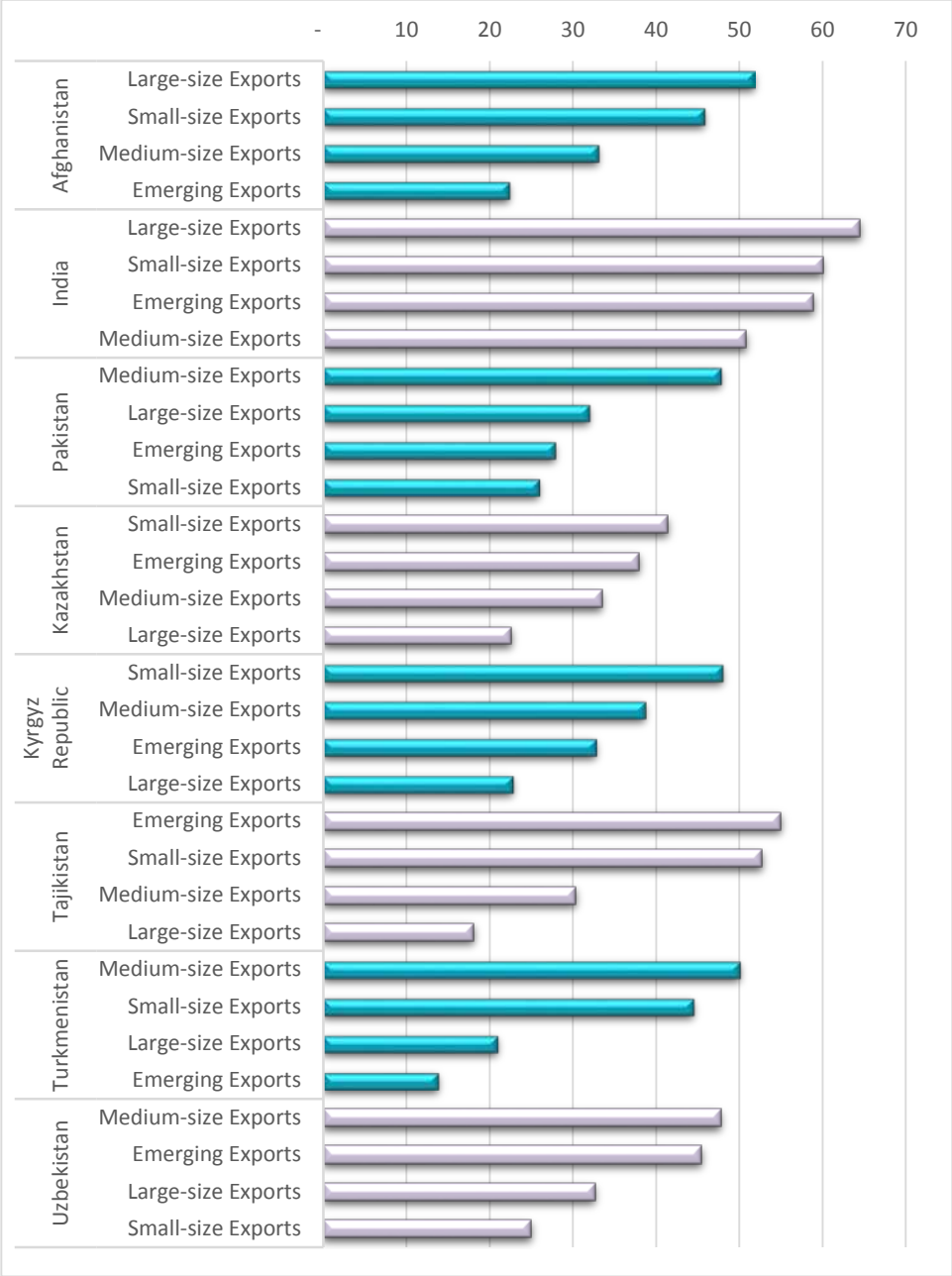


Table 6.2: Trade Complementarity Indices of Central and South Asian Exports, by Size of Exports

			IMPORTS							
			Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
EXPORTS	Afghanistan	Large size exports		37	**45**	26	19	19	13	20
		Medium size exports		28	26	28	29	20	5	23
		Small size exports		31	25	**44**	**53**	26	**44**	**35**
		Emerging exports		21	16	20	28	17	21	25
	India	Large size exports	**51**		**49**	**56**	**48**	**56**	22	**35**
		Medium size exports	23		30	**35**	33	22	31	25
		Small size exports	31		**36**	**38**	**37**	**37**	23	**41**
		Emerging exports	**39**		**41**	**41**	27	28	33	**37**
	Pakistan	Large size exports	22	30		26	18	30	**40**	19
		Medium size exports	18	**43**		26	21	30	25	23
		Small size exports	14	27		22	24	21	10	10
		Emerging exports	20	29		11	11	30	13	8
	Kazakhstan	Large size exports	9	15	**41**		11	23	8	34
		Medium size exports	**35**	21	27		**35**	30	17	31
		Small size exports	25	**36**	34		29	26	22	**37**
		Emerging exports	25	31	25		32	31	**36**	**42**
	Kyrgyzstan	Large size exports	20	21	15	27		21	26	23
		Medium size exports	19	31	32	**41**		**38**	32	20
		Small size exports	**41**	**36**	**45**	**49**		**54**	**45**	29
		Emerging exports	26	20	34	**62**		**44**	**38**	**39**
	Tajikistan	Large size exports	9	18	11	18	8		11	17
		Medium size exports	20	27	30	30	20		23	16
		Small size exports	**35**	**45**	30	**35**	24		31	27
		Emerging exports	**37**	**51**	**42**	**43**	34		34	33
	Turkmenistan	Large size exports	14	19	19	25	21	16		17
		Medium size exports	27	**44**	23	33	24	19		27
		Small size exports	20	**37**	34	32	15	14		12
		Emerging exports	8	8	33	31	29	28		**36**
	Uzbekistan	Large size exports	17	31	28	**39**	26	18	19	
		Medium size exports	15	**41**	25	**48**	**42**	20	23	
		Small size exports	21	19	29	**40**	23	12	29	
		Emerging exports	20	**35**	**36**	**46**	25	30	13	

Source: Derived from data in United Nations, COMTRADE database.
Note: The interpretation of the figures in the table is as follows: a score near 100 indicates that the exported products are compatible with imports of trading partners; a score near 0 indicates lack of compatibility between the exported products and imports of trading partners.

Table 6.3: Trade Complementarity Indices, by Size of Exports and Products Examples

AFGHANISTAN	*Index of Trade Complementarity*	*Examples of Afghanistan exports in category*
Large-size Exports	52	Cotton ● Ferrous scrap ● Coal ● Natural gum ● Wool carpets ● Fur skins ● Figs ● Grapes ● Pistachios ● Grapes ● Onions ● Apricots
Medium-size Exports	33	Skins and Hides ● Ferro-alloys ● Copper ● Antiques ● Almonds ● Beans ● Saffron ● Apricots ● Tomatoes ● Anise ● Caraway seeds
Small-size Exports	46	Parts for spray dispersers ● Video apparatus ● Aluminum tubes and pipe ● Vitamins ● Penicillin ● Hydrogen peroxide ● Insecticides ● Dates ● Melons ● Oil seeds ● Bovine animal ● Leguminous vegetables
Emerging Exports	22	Medicaments ● Hop extract ● Rugs ● Animal hair ● Marble ● Polypropylene ● Diesel engine parts ● Propeller engines ● Cargo containers ● Maize ● Palm oil

Note: Large-size exports (LS) = LS > US$ 4,500,000; Medium-size exports (MS): $1,500,000 < MS < $4,500,000; Small-size exports (SS): $750,000 < SS < $1,500,000; Emerging exports: $200,000 < MS < $400,000.

INDIA	*Index of Trade Complementarity*	*Examples of Indian exports in category*
Large-size Exports	64	Non-crude oils ● diamonds, jewelry ● iron ore ● copper ● medicines ● garments ● rice ● cotton ● frozen bovine ● frozen shrimps ● polypropylene ● car parts
Medium-size Exports	51	Gold ● aluminum ● manganese ● chromium ● steel ● p-xylene ● granite ● cashews ● cotton yarn ● sugar ● maize ● tea ● insecticides ● benzene ● garments
Small-size Exports	60	Nylon ● yarn ● footwear ● leather apparel ● furnishings ● pigments ● tobacco ● telephone line ● tires ● valves ● granite ● aluminum oxide ● zinc ● coffee
Emerging Exports	59	Iron or steel products ● pig iron ● stainless steel bar ● metal crap ● boots ● scarves ● handbag● pesticides ● dump trucks ● cargo vessels ● wood furniture

Note: Large-size exports (LS) = US$ 1,000,000,000 > LS; Medium-size exports (MS): $650,000,000 < MS < $1,000,000,000; Small-size exports (SS): $450,000,000 < SS < $650,000,000; Emerging exports: $350,000,000 < MS < $450,000,000.

PAKISTAN	*Index of Trade Complementarity*	*Examples of Afghanistan exports in category*
Large-size Exports	32	Non-crude oils ● cement ● polyethylene ● jewelry ● linens ● garments ● leather apparel ● medical instruments ● sugar ● wheat ● rice ● cotton ● cotton yarn
Medium-size Exports	48	Cotton yarn ● wheat ● fats and oils ● leathers ● leather gloves ● carpets ● weave cotton ● hosiery ● inflatable balls ● alcohol ● clementine ● chromium ores
Small-size Exports	26	Iron or steel structures ● garments ● bovine leather ● ethyl alcohol ● cotton yarn ● knitting pullovers ● footwear ● sheep or lamb skin leather● potatoes ● dates
Emerging Exports	28	Sport equipment for swimming ● polystyrene ● natural steatite ● plain weave cotton ● hosiery ● curtains ● maize except seed corn ● frozen shrimps

Note: Large-size exports (LS) = US$ $200,000,000 > LS.; Medium-size exports (MS): $100,000,000 < MS < $200,000,000; Small-size exports (SS): $55,00,000 < SS < $100,000,000; Emerging exports: $40,000,000 < MS < $55,000,000.

KAZAKHSTAN	*Index of Trade Complementarity*	*Examples of Indian exports in category*
Large-size Exports	23	Crude oils ● copper ● natural gas ● iron ore ● propane, liquefied ● zinc ● silver ● gold ● aluminum ● butanes ● chromium ores ● lead refined
Medium-size Exports	33	Bituminous coal ● concentrates zinc ores ● phosphorus ● titanium ● petroleum gases ● wire of refined copper ● digital computers ● linseed ● barley
Small-size Exports	41	Quartzite ● asbestos ● electrical energy ● petroleum bitumen● tantalum ● tugs and pusher craft ● lignite ● zinc ● frozen fish fillets ● durum wheat
Emerging Exports	38	Ammonium nitrate ● bituminous ● color television ● natural barium sulfate ● pipe-line ● beverage ● rice ● sugar ● bovine ● chocolate ● cotton-seed oil crude

Note: Large-size exports (LS) = US$ 250,000,000 > LS; Medium-size exports (MS): $65,000,000 < MS < $250,000,000; Small-size exports (SS): $30,000,000 < SS < $65,000,000; Emerging exports: $15,000,000 < MS < $30,000,000.

KYRGYZSTAN	*Index of Trade Complementarity*	*Examples of Afghanistan exports in category*
Large-size Exports	22.78791311	Gold ● none crude oil ● Portland cement ● automobiles, spark ignition engine of 1500-3000 cc ● float glass ● garments ● tobacco ● potatoes ● kidney beans
Medium-size Exports	38.64154841	Electric instrument part ● motor vehicle parts ● worked calcareous stone ● copper ● polyvinyl chloride ● carrots ● apricots ● walnuts ● milk powder
Small-size Exports	47.92981465	Hot rolled iron ● silver ● dump trucks ● articles of cement ● packing plastic article ● transmissions for motor vehicles ● ice cream ● butter
Emerging Exports	32.75804847	Engines, diesel except motor vehicle/marine ● glass containers ● limestone materials ● jewelry ● ammonium nitrate ● coal ●grapes ● tomatoes

Note: Large-size exports (LS) = US$ 8,000,000 > LS; Medium-size exports (MS): $4,000,000 < MS < $8,000,000; Small-size exports (SS): $2,500,000 < SS < $4,000,000; Emerging exports: $1,700,000 < MS < $2,500,000.

TAJIKISTAN	*Index of Trade Complementarity*	*Examples of Indian exports in category*
Large-size Exports	18.05188046	Aluminum ● parts of gas turbine engines except turbo-jet/prop ● lead ● copper ● none crude oil ●frozen fish fillets ● bovine leather ● walnuts ● prunes
Medium-size Exports	30.30999244	Wire, aluminum ● cotton yarn ● footwear ● medicaments in dosage ● precious stones ● frozen sardines, brisling, sprats ● rice ● carrots
Small-size Exports	52.69622242	Threaded fittings, iron ● natural gas ● cast glass sheet ● non-medical x-ray equipment ● rubies not set ● garments ● kidney beans
Emerging Exports	54.94548233	Radio receivers ● electrical energy ● telephonic apparatus ● antiques older than one hundred years ● raw silk ● plants pharmacy use

Note: Large-size exports (LS) = US$ 2,500,000 > LS; Medium-size exports (MS): $1,000,000 < MS < $2,500,000; Small-size exports (SS): $600,000 < SS < $1,000,000; Emerging exports: $400,000 < MS < $600,000.

TURKMENISTAN	*Index of Trade Complementarity*	*Examples of Afghanistan exports in category*
Large-size Exports	20.95852784	Natural gas ● none crude oil ● gold ● garments ● polypropylene ● kitchen linen ● electrical energy ● sulfur ● liquor ice extract
Medium-size Exports	50.02261142	Petroleum coke ● propane ● aluminum ● mineral waxes ● woven cotton ● knit fabric of cotton ● plants pharmacy use ● bovine hide
Small-size Exports	44.44647451	Automatic electric plasma ●diesel powered trucks ● butanes ● lead ● yarn of polyester ● coarse animal hair ● grapes ● tomatoes
Emerging Exports	13.88093397	Special purpose motor vehicles ● mobile cranes ● antiques● acid oils from refining ● chocolate ● raw silk ● cotton yarn

Note: Large-size exports (LS) = US$ 7,000,000 > LS; Medium-size exports (MS): $1,800,000 < MS < $7,000,000; Small-size exports (SS): $900,000 < SS < $1,800,000; Emerging exports: $500,000 < MS < $900,000.

UZBEKISTAN	*Index of Trade Complementarity*	*Examples of Indian exports in category*
Large-size Exports	32.637604	Electric conductors ● automobiles ● gold unwrought forms ● none crude oil ● copper cathodes● cotton yarn ● grapes ● melons
Medium-size Exports	47.7467293	Silver unwrought forms ● liquid dielectric transformers ● potassium chloride ● pullovers knit ● carpets ● grapes ● peaches ● apricots
Small-size Exports	24.94695267	Engines over 1000 cc ● polyethylene ● uranium ● mixtures nuts ● babies garments ● plants pharmacy use ● apple juice
Emerging Exports	45.39404611	Aluminum ● petroleum coke ● auto wheels ● plaster board ● brooms ● ground-nuts ● apricots ● carrots ● peppers ● preserved vegetables

Note: Large-size exports (LS) = US$ 40,000,000 > LS; Medium-size exports (MS): $15,000,000 < MS < $40,000,000; Small-size exports (SS): $8,000,000 < SS < $15,000,000; Emerging exports: $5,000,000 < MS < $8,000,000.

Source: Derived from data in United Nations, COMTRADE database.

B. Matching Top Product Export with Top Regional Imports

A second way to measure export opportunities is to examine whether countries are exporting the types of products most demanded by consumers and manufacturers in the Central and South Asia markets. Table 6.4 shows a mapping of the two regions' top 1000 imported products with the top 1000 most important exports of each country in the region in 2010-2013 for all products defined at the 6-digit HS level. For example, there are 434 products that are among Afghanistan's 1000 most important exports that matched the top 1000 imports of the Central and South Asia market. On average, the countries in the region have 485 products that match the top 1000 imports of the two regions, ranging from a low of 414 products of Pakistan to a high of 792 products of India. With the exception of India, however, the number of exports matching those top regional imports had a fairly narrow range of between 414 (Pakistan) to 480 (Kazakhstan).

The sectors having the largest number of products matching the top regional imports and top exports of each country in the region are machinery and electronic equipment (averaging 114 exported products by countries in the region), followed by textiles (75 exported products), base metals (50 products), chemical products (42 products), and animal and vegetable products (37

Table 6.4: Number of Matches between Top 1000 Import of Central and South Asia Regions and 1000 Top Product Exports of Each Country in the Regions in 2010-2013

HS SECTION	AND DESCRIPTION	AFGHANISTAN	INDIA	PAKISTAN	KAZAKHSTAN	KYRGYZSTAN	TAJIKISTAN	TURKMENISTAN	UZBEKISTAN
1+2	Animal and vegetable	38	50	47	35	32	39	19	33
3	Fats and oils	4	5	2	6	2	2	3	1
4	Prepared foods	14	28	25	24	25	16	11	17
5	Mineral products	12	32	9	26	10	12	18	12
6	Chemical products	33	120	32	37	25	33	19	40
7	Plastics and rubber	28	44	27	27	32	34	20	26
8	Leather & its products	4	13	13	5	3	5	7	4
9	Wood & its products	4	1	3	1	4	1	2	6
10	Pulp and paper	9	13	6	7	9	7	7	9
11	Textiles	39	132	103	24	62	77	95	72
12	Footwear	2	10	11	8	9	12	6	8
13	Cement & similar prod.	8	12	6	5	8	4	7	8
14	Semi-precious stones	7	15	2	4	5	8	7	5
15	Base metals	44	98	31	78	45	34	39	37
16	Machinery & equip.	130	149	59	131	110	117	111	103
17	Transport equipment	35	39	23	42	40	30	33	33
18	Measuring instruments	13	16	8	12	9	13	12	13
19	Arms & ammunition	0	0	0	0	0	0	0	0
20	Misc. manufactures	6	11	6	6	10	9	12	10
21	Work of Art	4	4	1	2	1	1	4	3
TOTAL		**434**	**792**	**414**	**480**	**441**	**454**	**432**	**440**

Source: Derived from data in United Nations, COMTRADE database.

exported products). Other sectors having a significantly large number of product exports matching the top regional imports are transport equipment, plastics and rubber, prepared foods, and various types of measuring instruments for optical, photographic, cinematographic, time-keeping and medical uses.

C. Matching Product Exports to Dynamic Regional Markets

The third way to measure export opportunities to the Central and South Asia market is to examine whether the region's countries' exports have been directed at dynamic product markets and, if so, whether exporters have been expanding their activities in those markets. The potential growth of firms and industries in the Central and South Asia market are reflected in high rates of export growth and rising market shares. This type of analysis is suggestive of the actual or potential penetration into dynamic markets for the region's exporters.[52]

The Central and South Asian countries' export growth in different types of product markets in the region has been measured by the trend growth rate of product exports in the four product categories (large, medium, small, and emerging exports), and the ratio of product exports relative to Central and South Asia imports of those products. The export performance of each of the countries has been classified into the following four categories:

- *Exploited Market Opportunities*: Products in which a country has a rising market share and Central and South Asia imports are expanding.
- *Increased Penetration in Stagnating Markets*: Products in which a country has a rising market share but Central and South Asia imports are contracting.
- *Missed Markets Opportunities*: Products in which a country has a falling market share despite expanding Central and South Asia imports.
- *Reduced Penetration in Stagnating Markets*: Products in which a country's market share is falling and the Central and South Asia market is contracting.

The most desirable situation is for exporters to be involved in either *exploited market opportunities*, where their products have made headway into dynamic markets, or *missed market opportunities*, where there is strong export growth potential if they improve their competitiveness and satisfy market access requirements.

1. Regional Import Growth

Table 6.5 shows the average annual growth rates of Central and South Asia imports in the 21 HS section categories for the last ten years for which data are available across all countries and products (2004-2013). The following are some of the important highlights of the results:

[52] The methodology was developed by the United Nations Economic Commission for Latin America (ECLAC) and applied to its Competitiveness Analysis of Nations (TradeCAN) softare. Available: http://www.cepal.org/cgi-bin/getprod.asp?xml=/ddpe/noticias/paginas/9/13779/P13779.xml&xsl=/ddpe/tpl/p18f.xsl&base=/ddpe/tpl-i/top-bottomudit.xsl.

- The fastest rising import categories are works of art, fats and oils, prepared foods, footwear, and animals and vegetables in their basic forms.
- The categories with below average growth rates are leather and its products, cement, chemical products, and pulp and paper.
- In general, processed goods and manufactures (HS III, V, VI-VIII, X-XIV, XVI, XXI) have performed better than primary commodity products, which are made up of agricultural products and minerals (HS I-II, IX, XV).

Table 6.5: Average Annual Growth Rate of Central and South Asia Imports, by HS Section, 2010-2013

HS SECTION		PERCENT
1+2	Animal and vegetable	24.5%
3	Fats and oils	29.5%
4	Prepared foods	29.1%
5	Mineral products	17.4%
6	Chemical products	7.1%
7	Plastics and rubber	8.8%
8	Leather & its products	8.0%
9	Wood & its products	14.8%
10	Pulp and paper	4.7%
11	Textiles	17.1%
12	Footwear	28.9%
13	Cement & similar prod.	7.5%
14	Semi-precious stones	8.2%
15	Base metals	10.6%
16	Machinery & equip.	10.2%
17	Transport equipment	16.0%
18	Measuring instruments	9.3%
19	Arms & ammunition	20.6%
20	Misc manufactures	6.6%
21	Work of Art	39.7%
	AVERAGE	**15.9%**

Source: Derived from data in UN, COMTRADE database.

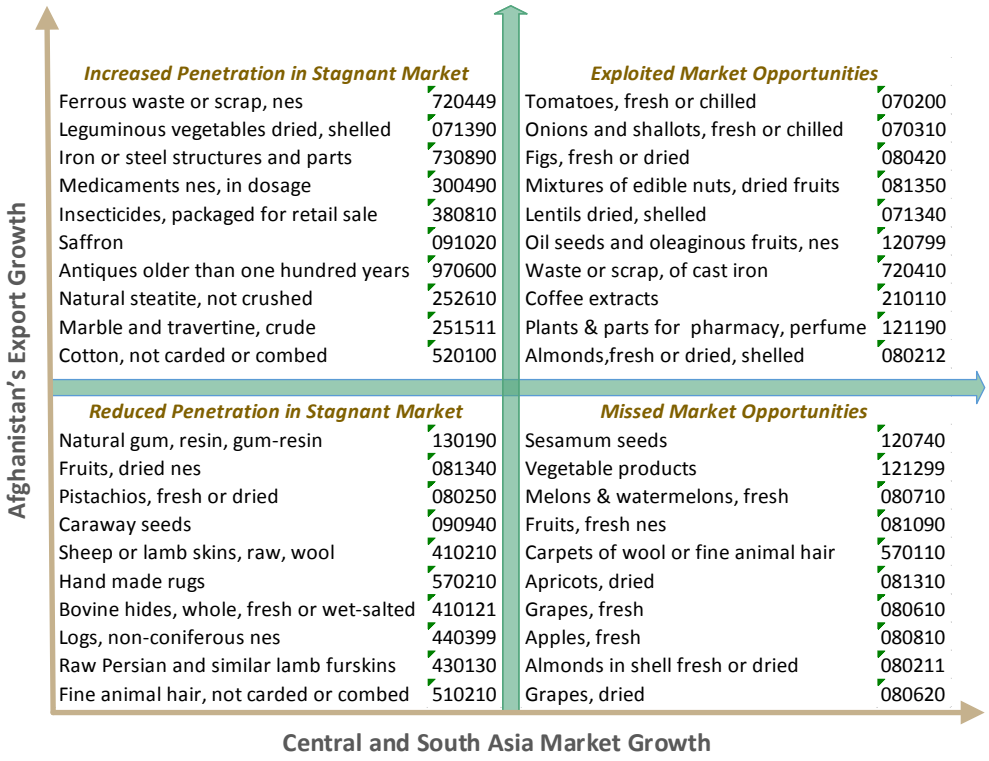
2. Matching Exports to Dynamic Markets

Among the countries' emerging exports, machinery parts are the predominant type of products with rapidly growing Central and South Asia markets where the regions' countries producers have increased their penetration. Among the rapidly growing markets where the region's countries exporters have lost market shares because of sluggish exports are fresh and processed fish and foods, footwear, jewelry, and bicycle and motorcycle parts. In contrast, exports have grown rapidly in markets with relatively slow or stagnant Central and South Asia markets, notably fresh animal products, rubber articles, and low-tech machinery and electronic products. Finally, stagnant Central and South Asia markets with slow-growing the region's exports include fresh and chilled fish, cement, plastics and paper.

Among medium-size exports, processed foods, chemicals, textiles and machinery and electronic equipment have high-growth Central and South Asia markets, where the regions' country exporters have increased their market penetration. Other fast-growing Central and South Asia markets where the regions' exporters have failed to increased their market shares are cocoa products (processed foods); acyclic alcohols, soaps and amino-compounds (chemicals), plastic containers (plastics); t-shirts; electric motors and generators and television and radio parts (electronics); and seats (furniture). The region's exporters have increased rapidly in a number of slow or stagnant Central and South Asia markets: prepared crustaceans and mollusks, cigars and cigarettes, plastic plates, footwear with uppers of textiles, electric transformers and accumulators, radios and electrical switches. In other stagnating markets like those of finished clothing, batteries, low-tech audio equipment, and plastics, the regions' exporters have reduced their market shares.

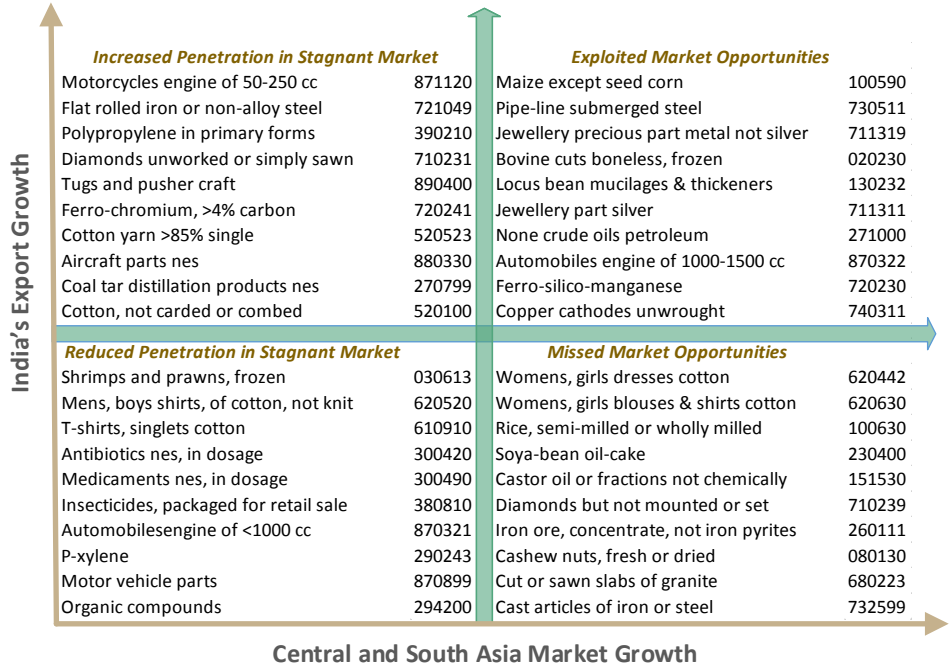
Figure 6.2: Matching High-Growth Exports with Dynamic Regional Imports, 2004-2013

AFGHANISTAN



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Ferrous waste or scrap, nes	720449	Tomatoes, fresh or chilled	070200
Leguminous vegetables dried, shelled	071390	Onions and shallots, fresh or chilled	070310
Iron or steel structures and parts	730890	Figs, fresh or dried	080420
Medicaments nes, in dosage	300490	Mixtures of edible nuts, dried fruits	081350
Insecticides, packaged for retail sale	380810	Lentils dried, shelled	071340
Saffron	091020	Oil seeds and oleaginous fruits, nes	120799
Antiques older than one hundred years	970600	Waste or scrap, of cast iron	720410
Natural steatite, not crushed	252610	Coffee extracts	210110
Marble and travertine, crude	251511	Plants & parts for pharmacy, perfume	121190
Cotton, not carded or combed	520100	Almonds,fresh or dried, shelled	080212
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Natural gum, resin, gum-resin	130190	Sesamum seeds	120740
Fruits, dried nes	081340	Vegetable products	121299
Pistachios, fresh or dried	080250	Melons & watermelons, fresh	080710
Caraway seeds	090940	Fruits, fresh nes	081090
Sheep or lamb skins, raw, wool	410210	Carpets of wool or fine animal hair	570110
Hand made rugs	570210	Apricots, dried	081310
Bovine hides, whole, fresh or wet-salted	410121	Grapes, fresh	080610
Logs, non-coniferous nes	440399	Apples, fresh	080810
Raw Persian and similar lamb furskins	430130	Almonds in shell fresh or dried	080211
Fine animal hair, not carded or combed	510210	Grapes, dried	080620

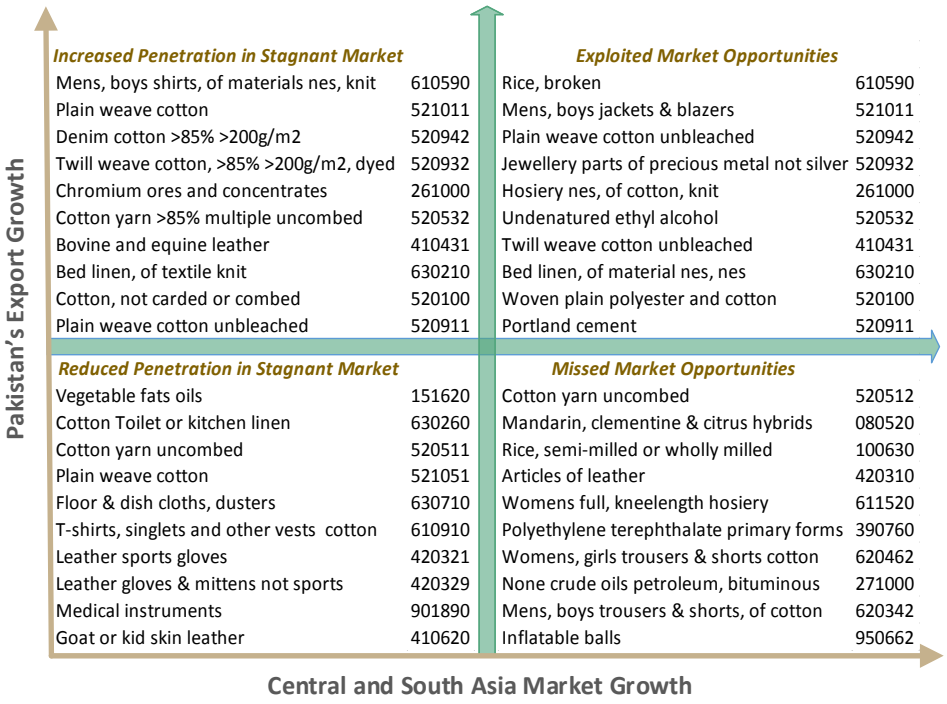
INDIA



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Motorcycles engine of 50-250 cc	871120	Maize except seed corn	100590
Flat rolled iron or non-alloy steel	721049	Pipe-line submerged steel	730511
Polypropylene in primary forms	390210	Jewellery precious part metal not silver	711319
Diamonds unworked or simply sawn	710231	Bovine cuts boneless, frozen	020230
Tugs and pusher craft	890400	Locus bean mucilages & thickeners	130232
Ferro-chromium, >4% carbon	720241	Jewellery part silver	711311
Cotton yarn >85% single	520523	None crude oils petroleum	271000
Aircraft parts nes	880330	Automobiles engine of 1000-1500 cc	870322
Coal tar distillation products nes	270799	Ferro-silico-manganese	720230
Cotton, not carded or combed	520100	Copper cathodes unwrought	740311
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Shrimps and prawns, frozen	030613	Womens, girls dresses cotton	620442
Mens, boys shirts, of cotton, not knit	620520	Womens, girls blouses & shirts cotton	620630
T-shirts, singlets cotton	610910	Rice, semi-milled or wholly milled	100630
Antibiotics nes, in dosage	300420	Soya-bean oil-cake	230400
Medicaments nes, in dosage	300490	Castor oil or fractions not chemically	151530
Insecticides, packaged for retail sale	380810	Diamonds but not mounted or set	710239
Automobilesengine of <1000 cc	870321	Iron ore, concentrate, not iron pyrites	260111
P-xylene	290243	Cashew nuts, fresh or dried	080130
Motor vehicle parts	870899	Cut or sawn slabs of granite	680223
Organic compounds	294200	Cast articles of iron or steel	732599

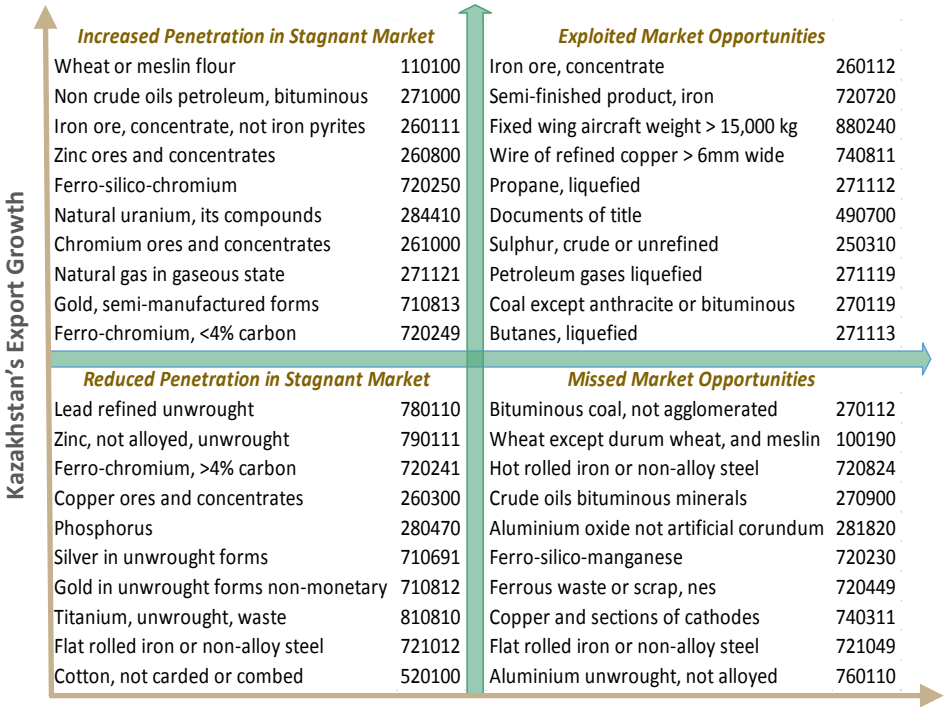
Figure 6.2: Matching High-Growth Exports with Dynamic Regional Imports, 2004-2013 (Continued)

PAKISTAN



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Mens, boys shirts, of materials nes, knit	610590	Rice, broken	610590
Plain weave cotton	521011	Mens, boys jackets & blazers	521011
Denim cotton >85% >200g/m2	520942	Plain weave cotton unbleached	520942
Twill weave cotton, >85% >200g/m2, dyed	520932	Jewellery parts of precious metal not silver	520932
Chromium ores and concentrates	261000	Hosiery nes, of cotton, knit	261000
Cotton yarn >85% multiple uncombed	520532	Undenatured ethyl alcohol	520532
Bovine and equine leather	410431	Twill weave cotton unbleached	410431
Bed linen, of textile knit	630210	Bed linen, of material nes, nes	630210
Cotton, not carded or combed	520100	Woven plain polyester and cotton	520100
Plain weave cotton unbleached	520911	Portland cement	520911
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Vegetable fats oils	151620	Cotton yarn uncombed	520512
Cotton Toilet or kitchen linen	630260	Mandarin, clementine & citrus hybrids	080520
Cotton yarn uncombed	520511	Rice, semi-milled or wholly milled	100630
Plain weave cotton	521051	Articles of leather	420310
Floor & dish cloths, dusters	630710	Womens full, kneelength hosiery	611520
T-shirts, singlets and other vests cotton	610910	Polyethylene terephthalate primary forms	390760
Leather sports gloves	420321	Womens, girls trousers & shorts cotton	620462
Leather gloves & mittens not sports	420329	None crude oils petroleum, bituminous	271000
Medical instruments	901890	Mens, boys trousers & shorts, of cotton	620342
Goat or kid skin leather	410620	Inflatable balls	950662

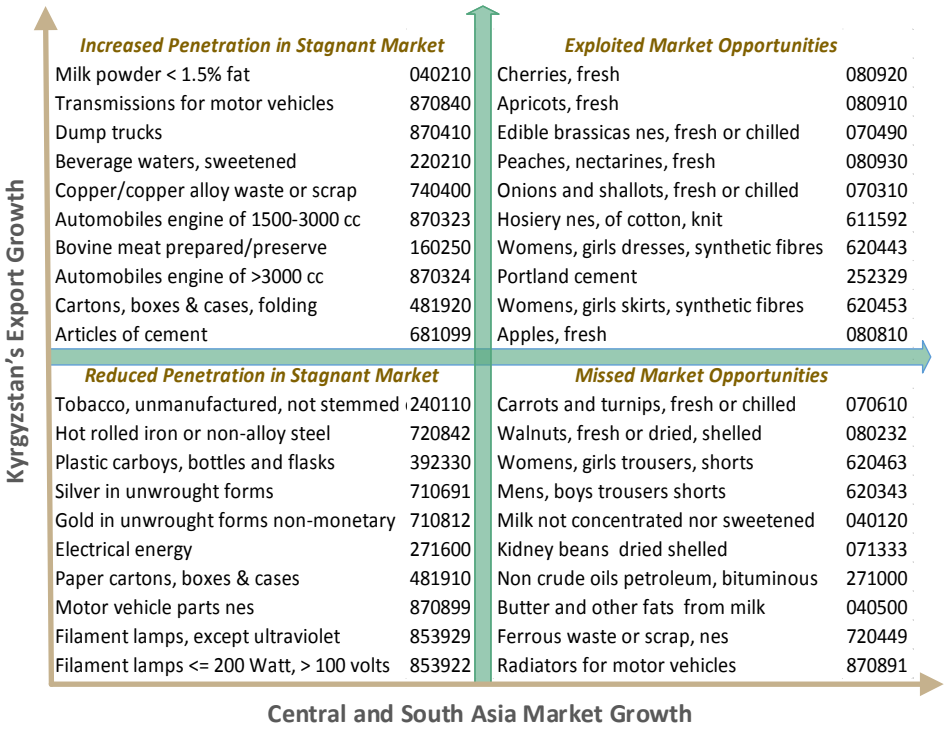
KAZAKHSTAN



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Wheat or meslin flour	110100	Iron ore, concentrate	260112
Non crude oils petroleum, bituminous	271000	Semi-finished product, iron	720720
Iron ore, concentrate, not iron pyrites	260111	Fixed wing aircraft weight > 15,000 kg	880240
Zinc ores and concentrates	260800	Wire of refined copper > 6mm wide	740811
Ferro-silico-chromium	720250	Propane, liquefied	271112
Natural uranium, its compounds	284410	Documents of title	490700
Chromium ores and concentrates	261000	Sulphur, crude or unrefined	250310
Natural gas in gaseous state	271121	Petroleum gases liquefied	271119
Gold, semi-manufactured forms	710813	Coal except anthracite or bituminous	270119
Ferro-chromium, <4% carbon	720249	Butanes, liquefied	271113
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Lead refined unwrought	780110	Bituminous coal, not agglomerated	270112
Zinc, not alloyed, unwrought	790111	Wheat except durum wheat, and meslin	100190
Ferro-chromium, >4% carbon	720241	Hot rolled iron or non-alloy steel	720824
Copper ores and concentrates	260300	Crude oils bituminous minerals	270900
Phosphorus	280470	Aluminium oxide not artificial corundum	281820
Silver in unwrought forms	710691	Ferro-silico-manganese	720230
Gold in unwrought forms non-monetary	710812	Ferrous waste or scrap, nes	720449
Titanium, unwrought, waste	810810	Copper and sections of cathodes	740311
Flat rolled iron or non-alloy steel	721012	Flat rolled iron or non-alloy steel	721049
Cotton, not carded or combed	520100	Aluminium unwrought, not alloyed	760110

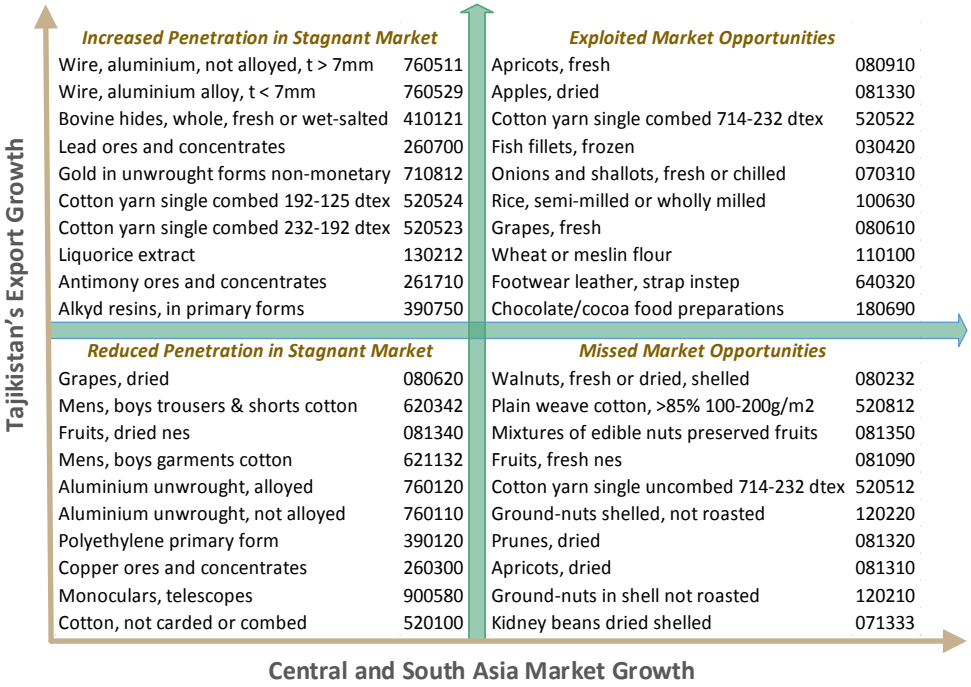
Figure 6.2: Matching High-Growth Exports with Dynamic Regional Imports, 2004-2013 (Continued)

KYRGYZSTAN



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Milk powder < 1.5% fat	040210	Cherries, fresh	080920
Transmissions for motor vehicles	870840	Apricots, fresh	080910
Dump trucks	870410	Edible brassicas nes, fresh or chilled	070490
Beverage waters, sweetened	220210	Peaches, nectarines, fresh	080930
Copper/copper alloy waste or scrap	740400	Onions and shallots, fresh or chilled	070310
Automobiles engine of 1500-3000 cc	870323	Hosiery nes, of cotton, knit	611592
Bovine meat prepared/preserve	160250	Womens, girls dresses, synthetic fibres	620443
Automobiles engine of >3000 cc	870324	Portland cement	252329
Cartons, boxes & cases, folding	481920	Womens, girls skirts, synthetic fibres	620453
Articles of cement	681099	Apples, fresh	080810
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Tobacco, unmanufactured, not stemmed	240110	Carrots and turnips, fresh or chilled	070610
Hot rolled iron or non-alloy steel	720842	Walnuts, fresh or dried, shelled	080232
Plastic carboys, bottles and flasks	392330	Womens, girls trousers, shorts	620463
Silver in unwrought forms	710691	Mens, boys trousers shorts	620343
Gold in unwrought forms non-monetary	710812	Milk not concentrated nor sweetened	040120
Electrical energy	271600	Kidney beans dried shelled	071333
Paper cartons, boxes & cases	481910	Non crude oils petroleum, bituminous	271000
Motor vehicle parts nes	870899	Butter and other fats from milk	040500
Filament lamps, except ultraviolet	853929	Ferrous waste or scrap, nes	720449
Filament lamps <= 200 Watt, > 100 volts	853922	Radiators for motor vehicles	870891

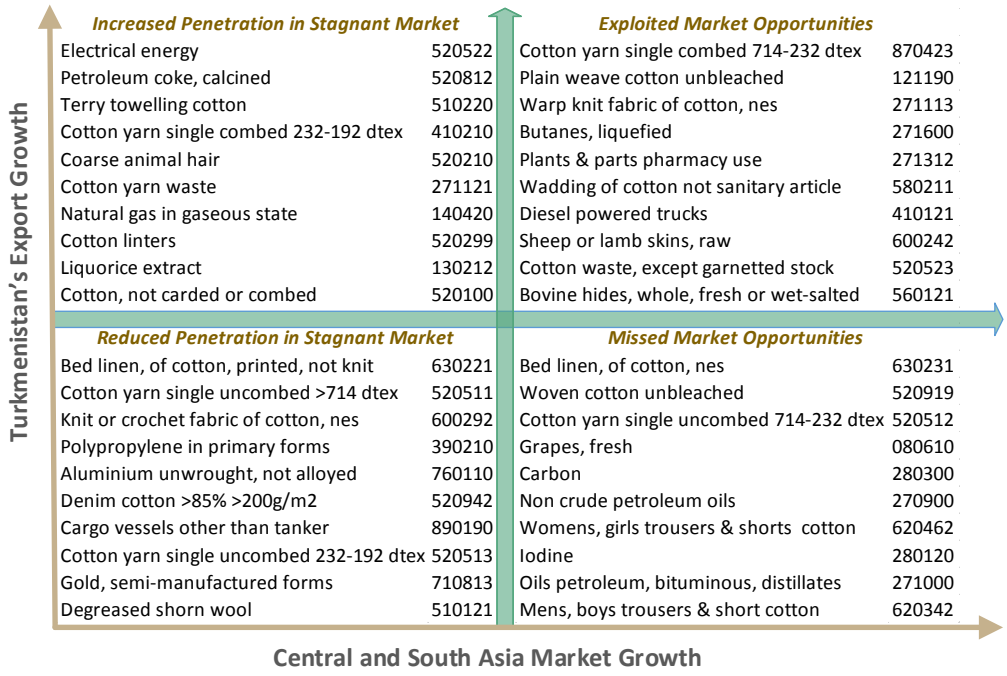
TAJIKISTAN



Increased Penetration in Stagnant Market		*Exploited Market Opportunities*	
Wire, aluminium, not alloyed, t > 7mm	760511	Apricots, fresh	080910
Wire, aluminium alloy, t < 7mm	760529	Apples, dried	081330
Bovine hides, whole, fresh or wet-salted	410121	Cotton yarn single combed 714-232 dtex	520522
Lead ores and concentrates	260700	Fish fillets, frozen	030420
Gold in unwrought forms non-monetary	710812	Onions and shallots, fresh or chilled	070310
Cotton yarn single combed 192-125 dtex	520524	Rice, semi-milled or wholly milled	100630
Cotton yarn single combed 232-192 dtex	520523	Grapes, fresh	080610
Liquorice extract	130212	Wheat or meslin flour	110100
Antimony ores and concentrates	261710	Footwear leather, strap instep	640320
Alkyd resins, in primary forms	390750	Chocolate/cocoa food preparations	180690
Reduced Penetration in Stagnant Market		*Missed Market Opportunities*	
Grapes, dried	080620	Walnuts, fresh or dried, shelled	080232
Mens, boys trousers & shorts cotton	620342	Plain weave cotton, >85% 100-200g/m2	520812
Fruits, dried nes	081340	Mixtures of edible nuts preserved fruits	081350
Mens, boys garments cotton	621132	Fruits, fresh nes	081090
Aluminium unwrought, alloyed	760120	Cotton yarn single uncombed 714-232 dtex	520512
Aluminium unwrought, not alloyed	760110	Ground-nuts shelled, not roasted	120220
Polyethylene primary form	390120	Prunes, dried	081320
Copper ores and concentrates	260300	Apricots, dried	081310
Monoculars, telescopes	900580	Ground-nuts in shell not roasted	120210
Cotton, not carded or combed	520100	Kidney beans dried shelled	071333

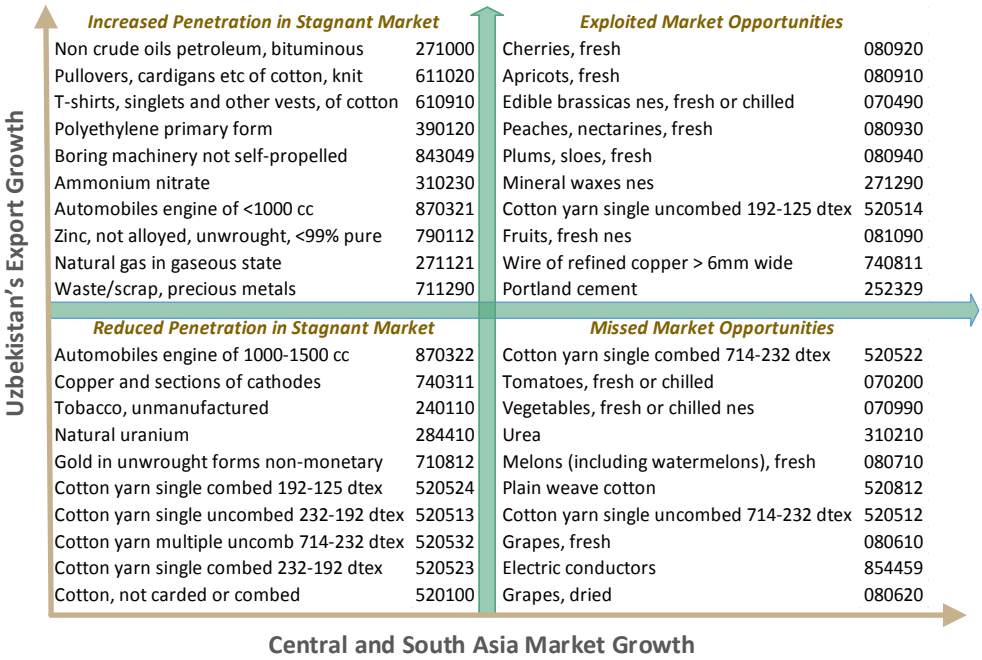
Figure 6.2: Matching High-Growth Exports with Dynamic Regional Imports, 2004-2013 (Continued)

TURKMENISTAN



Increased Penetration in Stagnant Market		Exploited Market Opportunities	
Electrical energy	520522	Cotton yarn single combed 714-232 dtex	870423
Petroleum coke, calcined	520812	Plain weave cotton unbleached	121190
Terry towelling cotton	510220	Warp knit fabric of cotton, nes	271113
Cotton yarn single combed 232-192 dtex	410210	Butanes, liquefied	271600
Coarse animal hair	520210	Plants & parts pharmacy use	271312
Cotton yarn waste	271121	Wadding of cotton not sanitary article	580211
Natural gas in gaseous state	140420	Diesel powered trucks	410121
Cotton linters	520299	Sheep or lamb skins, raw	600242
Liquorice extract	130212	Cotton waste, except garnetted stock	520523
Cotton, not carded or combed	520100	Bovine hides, whole, fresh or wet-salted	560121
Reduced Penetration in Stagnant Market		**Missed Market Opportunities**	
Bed linen, of cotton, printed, not knit	630221	Bed linen, of cotton, nes	630231
Cotton yarn single uncombed >714 dtex	520511	Woven cotton unbleached	520919
Knit or crochet fabric of cotton, nes	600292	Cotton yarn single uncombed 714-232 dtex	520512
Polypropylene in primary forms	390210	Grapes, fresh	080610
Aluminium unwrought, not alloyed	760110	Carbon	280300
Denim cotton >85% >200g/m2	520942	Non crude petroleum oils	270900
Cargo vessels other than tanker	890190	Womens, girls trousers & shorts cotton	620462
Cotton yarn single uncombed 232-192 dtex	520513	Iodine	280120
Gold, semi-manufactured forms	710813	Oils petroleum, bituminous, distillates	271000
Degreased shorn wool	510121	Mens, boys trousers & short cotton	620342

UZBEKISTAN



Increased Penetration in Stagnant Market		Exploited Market Opportunities	
Non crude oils petroleum, bituminous	271000	Cherries, fresh	080920
Pullovers, cardigans etc of cotton, knit	611020	Apricots, fresh	080910
T-shirts, singlets and other vests, of cotton	610910	Edible brassicas nes, fresh or chilled	070490
Polyethylene primary form	390120	Peaches, nectarines, fresh	080930
Boring machinery not self-propelled	843049	Plums, sloes, fresh	080940
Ammonium nitrate	310230	Mineral waxes nes	271290
Automobiles engine of <1000 cc	870321	Cotton yarn single uncombed 192-125 dtex	520514
Zinc, not alloyed, unwrought, <99% pure	790112	Fruits, fresh nes	081090
Natural gas in gaseous state	271121	Wire of refined copper > 6mm wide	740811
Waste/scrap, precious metals	711290	Portland cement	252329
Reduced Penetration in Stagnant Market		**Missed Market Opportunities**	
Automobiles engine of 1000-1500 cc	870322	Cotton yarn single combed 714-232 dtex	520522
Copper and sections of cathodes	740311	Tomatoes, fresh or chilled	070200
Tobacco, unmanufactured	240110	Vegetables, fresh or chilled nes	070990
Natural uranium	284410	Urea	310210
Gold in unwrought forms non-monetary	710812	Melons (including watermelons), fresh	080710
Cotton yarn single combed 192-125 dtex	520524	Plain weave cotton	520812
Cotton yarn single uncombed 232-192 dtex	520513	Cotton yarn single uncombed 714-232 dtex	520512
Cotton yarn multiple uncomb 714-232 dtex	520532	Grapes, fresh	080610
Cotton yarn single combed 232-192 dtex	520523	Electric conductors	854459
Cotton, not carded or combed	520100	Grapes, dried	080620

Source: Derived from data in United Nations, COMTRADE database.

Among large-size exports, parts for motor vehicles, refined copper and nickel metallurgy, tires, copper ore and concentrates, and palm oil have fast-growing Central and South Asia markets, where the regions' exports have also expanded rapidly. In contrast, the regions' exports have been sluggish in the fast-growing markets for furniture, motor vehicles, unprocessed crustaceans, coffee, plywood, footwear with leather uppers. Exports have, however, expanded rapidly in several slow-growing or stagnant Central and South Asia markets: margarine and fatty acids (animal and vegetable fats); cocoa beans; nickel ores; ammonia (chemicals); iron rods and copper wire (minerals); and wire insulation.

The pattern that emerges is one in which certain sectors like prepared foods, high-tech machinery and electronic equipment, and transportation equipment have strong growth markets, while other markets are mixed. In those markets without a clear sector-wide growth pattern, there exist strong markets for some furniture, different types of footwear, certain chemical products, and jewelry. In general, primary commodities have less dynamic markets than processed goods, as for example in the case of unprocessed fruits and vegetables versus processed food products, unprocessed versus processed metals, minerals and chemicals, and lumber and unfinished wood versus wood products and furniture.

D. Ratings

Table 6.6 shows the scores assigned to export complementarity, mapping exports to regional imports and matching exports to high growth rate markets, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 6.6. Summary Assessment of Trade Complementarities

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***The compatibility of exports with regional imports promotes regional trade***					
1	Kazakhstan	1	2	3	**4**	5
2	Kyrgyzstan	1	2	3	**4**	5
3	Tajikistan	1	2	**3**	4	5
4	Turkmenistan	1	2	**3**	4	5
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	1	2	**3**	4	5
7	India	1	2	3	4	**5**
8	Pakistan	1	2	3	**4**	5
	B. ***The number of exported products matching the top regional imports promotes inter- and intra-regional trade expansion***					
1	Kazakhstan	1	2	3	**4**	5
2	Kyrgyzstan	1	2	**3**	4	5
3	Tajikistan	1	2	**3**	4	5
4	Turkmenistan	1	2	**3**	4	5

5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5
A.	***Products with high export growth rates match those regional imports with high growth rates***					
1	Kazakhstan	1	2	3	4	5
2	Kyrgyzstan	1	2	3	4	5
3	Tajikistan	1	2	3	4	5
4	Turkmenistan	1	2	3	4	5
5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

VII. INTRA-INDUSTRY TRADE

A. Country Similarity and Two-Way Trade

Traditional comparative advantage deals with specialization in trade of homogeneous goods, produced in a setting of perfect competition and traded on the basis of differences in factor endowments and production technologies between trading partners. Yet a large portion of trade, especially between advanced economies, occurs through two-way trade of goods produced in the same industry. That kind of intra-industry trade occurs under conditions of imperfect competition with product differentiation, and it is measured by the amount of simultaneous export and import of goods produced within the same industry by trading partners (see Box 7.1). Two types of intra-industry trade occur under quite different circumstances. The first is characterized by horizontally differentiated products as a result of consumer demand for variety in the types of goods that they buy.[53] The other occurs because of economies of scale in the production and trade of vertically differentiated products.[54]

Empirical evidence points to the fact that intra-industry trade is more conducive to economic growth than inter-industry trade, which tends to take place between countries with similar factor endowments that, in turn, permits them to exploit economies of scale.[55] In a regional trading environment like that of Central and South Asia, trade gives rise to the transfer of technology between countries in the geographic area, which in turn can lead to greater intra-industry trade and economic convergence. Given the fact that there is a positive correlation between GDP growth and intensity of intra-industry trade, the landlocked and least developed countries in Central and South Asia like Afghanistan stand to benefit from increased connectivity and networking with the more developed countries in those region in order to facilitate intra- and inter-regional trade and cross-border investments.

The degree of convergence between economies is measured by index of similarity used by Helpman to measure two-way trade between countries in an industry (see Box 7.1 for a formal definition). For Central and South Asia, Tables 7.1 and 7.2 show the degree of economic similarity based on two alternative measures. The first table defines similarities between countries in terms of their economic size, calculated on the basis of gross national income in billions of current U.S. dollars in 2013. The second table uses 2013 per capital income in U.S. dollars to determine country similarities.

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[53] M. Lord (1991), *Imperfect Competition and International Commodity Trade*. Oxford: Clarendon Press. Available: http://books.google.co.th/books/about/Imperfect_competition_and_international.html?id=wXaLAAAAIAAJ&redir_esc=y.

[54] M. Lord (1997), "Trade, Investment and Trade in Financial Services." In *Brunei-Darussalam, Indonesia, Malaysia, Philippines - East Asia Growth Area*. Vol. II. Manila: Asian Development Bank. Available: http://www.adb.org/publications.

[55] E. Helpman (1987), "Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries". *Journal of Japanese and International Economics* 1, pages 62-81. Available: https://ideas.repec.org/a/eee/jjieco/v1y1987i1p62-81.html.

Box 7.1. Measuring Intra-Industry Trade and Country Similarities

The *Similarity Index (SI)* between two countries is defined as follows:

$$SI_{ik} = 100 * \left\{1 - \left[\frac{GDP_i}{(GDP_i+GDP_k)}\right]^2 - \left[\frac{GDP_k}{(GDP_i+GDP_k)}\right]^2\right\} * 2 \quad \text{...(7.1)}$$

where GDP is measured in real terms. The value of SI approaches 100 for countries that are similar, and it approaches 0 for countries that lack similarity.

The *Intra-Industry Trade Index (IIT)* for country *i* in product *j* with trading partner *k* is formally defined as follows:

$$IIT_{ijk} = 100 * \left[1 - \frac{|X_{ijk}-M_{ijk}|}{(X_{ijk}+M_{ijk})}\right] \quad \text{...(7.2)}$$

where *x* is the value of exports of product *j* from reporter country *i,* in its trade with partner country *k*, and *M* is country *i*'s imports of product *j* from partner trading country *k*. The value of *IIT* measures intra-industry trade between two countries as a percentage of their total trade in industry *i*. If the *IIT* index is zero, it means that there is an absence of intra-industry trade, so that either exports or imports of that industry are equal to zero. If *IIT* is equal close to 100, then the country both imports and exports products in an industry. Hence, rising values of *IIT* are consistent with convergence of industrial structures between trading partners.

The two approaches produce considerably different results. In the case of country similarities based on country size, Table 7.1 shows relatively few close matches between countries in the two regions. Where they do exist, they are represented by high similarity indices between Afghanistan and Turkmenistan; between Kazakhstan and Pakistan; between Kyrgyzstan and Tajikistan; and between Turkmenistan and Uzbekistan. Lesser, yet nonetheless significantly high, similarities exist between Afghanistan and Kyrgyzstan; Afghanistan and Tajikistan; Afghanistan and Uzbekistan; and Kazakhstan and Uzbekistan.

In contrast, the calculation of similarity indices based on per capita income in Table 7.2 finds many similarities between countries in the two regions. There are 13 pairs of countries that have similarity indices greater than 90, and another two having similarity indices between 80 and 90.

Table 7.1: Similarity Indices of Central and South Asian Exports Based on Size of Gross National Income

	Income	Similarity Index (SI)							
		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Afghanistan	*21.5*		4.3	29.1	36.0	73.5	79.5	93.6	79.3
India	*1,960.1*	4.3		40.3	32.8	1.4	1.6	7.1	11.1
Pakistan	*251.0*	29.1	40.3		98.3	10.4	12.1	43.9	60.6
Kazakhstan	*193.8*	36.0	32.8	98.3		13.2	15.4	52.9	70.5
Kyrgyzstan	*6.9*	73.5	1.4	10.4	26.5		99.3	53.8	38.2
Tajikistan	*8.1*	79.5	2.5	12.1	15.4	99.3		59.9	43.3
Turkmenistan	*36.1*	93.6	7.1	43.9	52.9	53.8	59.9		94.8
Uzbekistan	*57.4*	79.3	11.1	60.6	70.5	38.2	43.3	94.8	

Note: Per capita income is measured by gross national income (GNI) in billions of current US$ in 2013.
Source: World Bank online database. Available: http://data.worldbank.org/indicator/NY.GNP.ATLS.CD.

Table 7.2: Similarity Indices of Central and South Asian Exports Based on Per Capita Income

	Per Capita Income (US$)	Similarity Index (SI)							
		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Afghanistan	$ 704		**85.6**	**89.5**	21.9	**93.1**	**97.2**	33.7	78.9
India	$ 1,565	**85.6**		**99.6**	42.5	**98.3**	**94.9**	60.4	**99.1**
Pakistan	$ 1,378	**89.5**	**99.6**		38.5	**99.5**	**97.3**	55.6	**97.5**
Kazakhstan	$ 11,376	21.9	42.5	38.5		34.6	29.4	**93.9**	49.0
Kyrgyzstan	$ 1,203	**93.1**	**98.3**	**99.5**	34.6		**99.0**	50.7	**95.0**
Tajikistan	$ 987	**97.2**	**94.9**	**97.3**	29.4	**99.0**		43.9	**90.0**
Turkmenistan	$ 6,880	33.7	60.4	55.6	**93.9**	50.7	43.9		67.8
Uzbekistan	$ 1,898	78.9	**99.1**	**97.5**	49.0	**95.0**	**90.0**	67.8	

Note: Per capita income is measured by gross national income (GNI) in 1000 US$ in 2013.
Source: World Bank online database. Available: http://data.worldbank.org/indicator/NY.GNP.ATLS.CD.

For example, Afghanistan's per capita income has a high degree of similarity with Tajikistan and Kyrgyzstan, while India and Pakistan are similar to one another as well as Kyrgyzstan, Tajikistan and Uzbekistan.

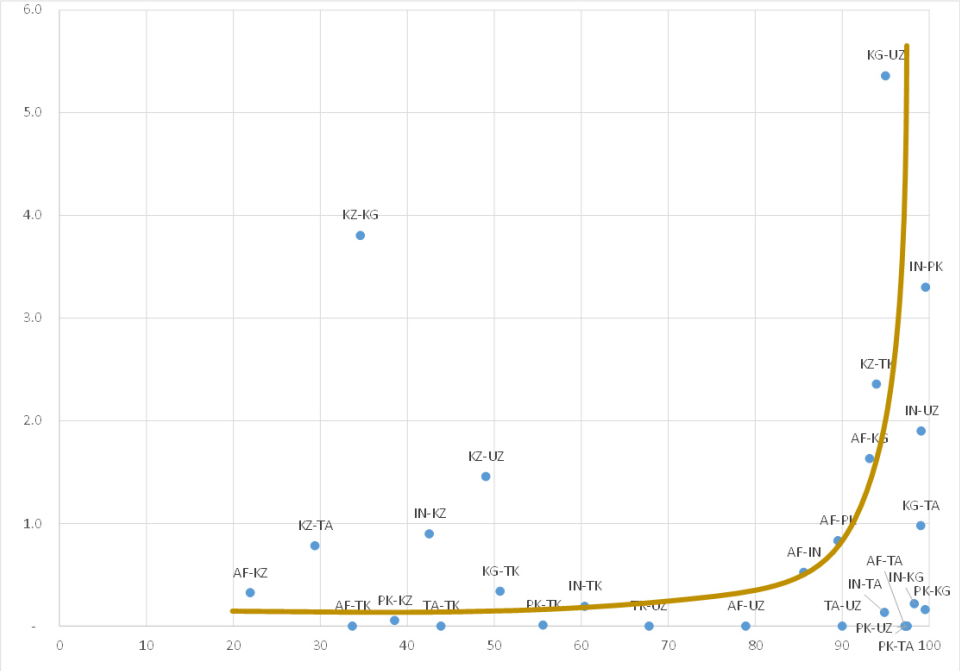
There are considerable difficulties in the computation of meaningful statistics on two-way trade, based on the index of intra-industry trade, which are discussed in the next section. In general, an index close to 100 indicates similarity between countries, whereas an index near 0 suggests dissimilarities between them. To the extent that trade between countries reflects intra-industry trade patterns in other countries, there should be considerable two-way trade in products from the same industries. If not significantly high, then they should be at least greater than those trading partners with low indices of similarities.

The relationship between country similarities and the amount of two-way trade of a product or industry is shown in Figures 7.1. It shows country similarities based on the size of the country, measured by gross national income. The explanation of how intra-industry trade in Central and South Asia in the next section of this chapter. For now, our interest is in assessing the extent to which higher levels of country similarities in the two regions are associated with greater values of intra-industry trade.

The fitted trend in Figure 7.1 shows that at higher levels of similarity between trading partners, the magnitude of intra-industry trade begins to be significant, though it still remains small relative to advanced economies. The fitted trend is an exponential functions and is concave upward. That means that at low levels of similarities, trading partners in Central and South Asia have little, if any, intra-industry trade. But as similarities increase, there is a more-than-proportional increase in the amount of intra-industry between trading partners in the two regions. Evidence of the same relationship between country similarities and intra-industry trade in developed economies also shows a positive relationship between the two. However, in the case of developed countries, the fitted curve is concave downward.[56] That means that, even at low levels of similarities,

[56] World Trade Organization (WTO, 2012), "A Practical Guide to Trade Policy Analysis". Geneva. Available: https://www.wto.org/english/res_e/publications_e/practical_guide12_e.htm.

Figure 7.1: Relation between Intra-Industry Trade and Similarity Index based on Per Capita Income



Sources: Derived from trade data in United Nations, Comtrade database, and gross national income (GNI) in World Bank online database at: http://data.worldbank.org/indicator/NY.GNP.ATLS.CD.

trading partners have relatively high proportions of intra-industry trade and that increasing similarities between trading partners leads to less-than-proportional increases in the amount of intra-industry trade.

The highest numerical values for the XY coordinates in Figure 7.1 occur for Kyrgyzstan and Uzbekistan, followed by India and Pakistan, Kazakhstan and Turkmenistan, and India and Uzbekistan. We will examine the product or industry-based sources of the comparatively high IIT values of these trading partners later in the chapter. The only significant outlier is Kazakhstan and Kyrgyzstan, which have a comparatively high level of intra-industry trade between them but are generally dissimilar.

B. Bilateral Intra-Industry Disaggregated Trade

1. Measuring Two-Way Trade

In calculating IIT of the Central and South Asia economies, we need to consider two measurement issues:[57]

- First, *sectoral aggregation bias* is one of the major concerns of IIT calculations. In general, the higher the level of aggregation of products into groups representing 'industries', the higher the probability of overlap between exports and imports of that industry. For that

[57] L. Fontagné, M. Freudenberg and G. Gaulier (2005), "Disentangling Horizontal and Vertical Intra-Industry Trade". Paris, CEPII. Available: http://www.cepii.fr/pdf_pub/wp/2005/wp2005-10.pdf.

reason, studies based on detailed industry breakdowns have indeed found lower shares of measured IIT than those using more aggregated information.

- Second, *geographic aggregation bias* occurs when a country's two-way trade is aggregated with trading partners, as in the case of regional or world trade. The consequence of this level of geographic aggregation is that it creates an artificially high IIT measurement. In such a situation, high IIT values may simply reflect 'triangular' trade relationship, whereby a country exports a given product to one partner and imports it from another one. This type of trade is compatible with traditional theories in which there exists a so-called chain of comparative advantages.[58]

The remedy to these two potential measurement biases is to calculate bilateral trade flows at the disaggregated product level. As such, the present analysis for the Central and South Asia economies is undertaken at the bilateral trade level and at a 6-digit HS product level of disaggregation. The period of analysis is 2010-2013. Generalizations about the results are reported as the trade-weighted averages of the disaggregated estimates of intra-industry trade.

Summaries of IIT for bilateral trade of each country in the two regions are presented in the Statistical Appendix. Those tables synthesize the detailed HS 6-digit product-level data for each country's trade with its regional trading partners according to the 21 sections of the Harmonized System. In the remainder of this chapter, we present a somewhat higher level of aggregation based on the following:

(a) Trade-weighted averages of IITs by country of all bilateral trade across the two regions; and
(b) Trade-weighted averages of IITs by product categories for each country's unweighted average of all bilateral trade across the two regions.

In discussing these results, we make reference to the more detailed information on product categories for all bilateral trade in the Statistical Appendix, as well as product or industry-based intra-industry trade included in the Statistical Appendix because of the voluminous amount of detailed information involved.

2. Country-Based Comparison of Two-Way Trade

A high share of intra-industry trade suggests advanced economic integration and a high level of industrial development. However, in Central and South Asia, Table 7.3 shows that there are generally very small amounts of intra-industry trade in bilateral trade at the HS 6-digit level. The largest IIT indices occur in trade between India and Pakistan, Kazakhstan and Kyrgyzstan, Kazakhstan and Turkmenistan, and Kyrgyzstan and Uzbekistan.

The amount of intra-industry trade of Afghanistan with trading partners in the region is negligible. Only trade with Kyrgyzstan has an IIT index above one percent. The reason for this negligible amount of IIT is not the lack of trade with partner countries, but rather the lack of two-way trade in the same product or industry. For example, in the case of Afghanistan's trade with India, the

[58] A. Deardorff (1979), "Weak Links in the Chain of Comparative Advantage", *Journal of International Economics*, Vol. 9, No 2, pages 197-209. Available: Available: https://ideas.repec.org/a/eee/inecon/v9y1979i2p197-209.html.

index is less than one percent because, in Afghanistan's product-level trade, it either exports a particular product to India or it imports it from India. It seldom does both for the same product.

It is worthwhile emphasizing that increased intra-industry trade is not a sufficient condition for countries to develop technologies and increase their regional and international competitiveness. The existence of intra-industry trade can be associated with either horizontal and vertical types of intra-industry trade. Horizontal intra-industry trade arises from product variety in trade and is mainly associated with trade of advanced economies like those of the European Union. That type of trade is usually ascribed to the existence of premium pricing that results from the differentiation of a country's or a multinational's products from those of others in the same industry. The result is not only a significant value added for the differentiated product, but also large investments in research and development, marketing, and logistics.

Table 7.3: Intra-Industry Trade of Central and South Asian countries, by Trading Partners (Average 2010-2-13)

	Afghanistan	*India*	*Pakistan*	*Kazakhstan*	*Kyrgyzstan*	*Tajikistan*	*Turkmenistan*	*Uzbekistan*
Afghanistan		0.5	0.8	0.3	1.6	-	-	-
India	0.5		3.3	0.9	0.2	0.1	0.2	1.9
Pakistan	0.8	3.3		0.1	0.2	0.0	0.0	-
Kazakhstan	0.3	0.9	0.1		3.8	0.8	2.4	1.5
Kyrgyzstan	1.6	0.2	0.2	3.8		1.0	0.3	5.4
Tajikistan	-	0.1	0.0	0.8	1.0		-	-
Turkmenistan	-	0.2	0.0	2.4	0.3	-		-
Uzbekistan	-	1.9	0.0	1.5	5.4	-	-	

Source: Based on data in United Nations, Comtrade database.

In contrast, vertical intra-industry trade involves fragmentation of production processes across countries and is more closely associated with the type of intra-industry trade undertaken by the countries in East Asia and what little of this type of trade exists in trade between the Central and South Asia economies. In the case of East Asia, the dramatic increase in vertical intra-industry trade has been largely due to the expansion of back-and-forth transactions in vertically fragmented production processes between countries, rather than trade of quality-differentiated goods.[59]

That type of trade involves the division of vertically integrated production processes into different production stages located in different countries. It necessarily requires costly service links to connect production stages such as efficient transportation and telecommunication services, which are often subject to economies of scale. Trade and regulatory barriers impose additional service link costs and these are discussed extensively in Chapter 9 of this study. Recent developments in measuring those trade costs have shown them to be much higher than previously recognized. Nonetheless, advances in logistics costs and reduced barriers to trade

[59] M. Ando (2006), "Fragmentation and vertical intra-industry trade in East Asia". North American Journal of Economics and Finance 17, pages 257–281. Available: http://venus.unive.it/mvolpe/Articolo%203.pdf.

create potentially large opportunities in Central and South Asia regional trade for extending production fragmentation across the region.

3. Two-Way Trade in Major Product Categories

In order to understand the source of actual and potential intra-industry trade in the Central and South Asia regions, disaggregated trade data at the HS 6-digit product level has been grouped into the 21 sections of the Harmonized System. Trade at this level of aggregation between each trading partner in the two regions is presented in the Statistical Appendix, while a summary of trade across the 21 sections for trade with all countries in the region is illustrated in this section.

Before summarizing intra-industry trade across the 21 HS sections, it is useful to first identify the distribution of trade across those sections in each of the countries in the two regions. Trade in Table 7.4 is made up of the sum of imports and exports in each product, and the sum refers to the average value of trade within the two regions in 2010-2013.

Table 7.4: Percentage Distribution of Total Bilateral Trade (Imports plus Exports) of Central and South Asia across HS Sections (2010-2013 Average)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	16.4%	16.3%	19.2%	27.4%	10.7%	48.4%	3.7%	14.8%
3	Fats and oils	5.7%	0.1%	5.8%	1.6%	2.4%	0.9%	0.2%	0.8%
4	Prepared foods	5.6%	11.1%	13.2%	5.2%	6.2%	6.8%	4.4%	2.4%
5	Mineral products	45.6%	4.3%	12.8%	28.5%	26.4%	17.4%	73.7%	53.8%
6	Chemical products	4.0%	21.4%	14.5%	5.1%	9.8%	6.4%	1.4%	4.0%
7	Plastics and rubber	2.7%	3.2%	3.6%	1.6%	4.8%	1.0%	1.1%	1.6%
8	Leather & its products	0.2%	0.8%	0.6%	0.2%	0.6%	0.1%	0.0%	0.1%
9	Wood & its products	1.3%	0.0%	1.3%	0.1%	0.2%	0.0%	0.1%	0.1%
10	Pulp and paper	0.3%	0.3%	0.3%	1.2%	1.7%	2.7%	0.0%	0.2%
11	Textiles	5.0%	22.2%	12.7%	3.6%	6.8%	5.2%	1.3%	2.1%
12	Footwear	0.2%	0.2%	0.1%	0.3%	0.3%	0.8%	0.0%	0.2%
13	Cement & similar prod.	0.4%	0.8%	0.6%	2.4%	4.1%	2.2%	0.4%	1.0%
14	Semi-precious stones	1.1%	3.6%	1.5%	0.4%	0.5%	0.0%	0.0%	0.0%
15	Base metals	8.0%	6.7%	10.2%	11.1%	9.4%	2.9%	2.8%	7.7%
16	Machinery & equip.	2.5%	5.8%	2.3%	5.1%	7.2%	3.6%	5.6%	3.1%
17	Transport equipment	0.5%	2.1%	0.7%	5.1%	8.3%	0.8%	4.3%	7.4%
18	Measuring instruments	0.1%	0.6%	0.1%	0.5%	0.2%	0.6%	0.7%	0.4%
19	Arms & ammunition	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20	Misc manufactures	0.2%	0.3%	0.3%	0.5%	0.5%	0.1%	0.4%	0.4%
21	Work of Art	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Derived from data in United Nations, Comtrade database.

In general, trade between countries in the two regions is highly concentrated in a few HS sections:

- Mineral products (Section 5) and animal and vegetable products (Sections 1 and 2) account for over 50 percent of the average of bilateral regional trade of the eight countries. These two HS sections are important to all countries. They contribute 62 percent of Afghanistan's total regional bilateral trade; 66 percent of that of Tajikistan's regional trade; 69 percent of Uzbekistan's regional trade; and 77 percent of Turkmenistan regional trade. In Kyrgyzstan, the two HS sections account for 37 percent of total regional

trade; in Pakistan, they contribute 32 percent; and in India, they account for 24 percent of trade with the two regions.

- Four other HS sections each contribute between 7 and 8 percent to total bilateral regional trade of all countries. They are chemical products (Section 6), textiles (Section 11), base metals (Section 15), and prepared foods (Section 4). Chemicals, textiles and prepared foods are particularly important to India's and Pakistan's regional trade, and together those three HS sections account for 55 percent of India's total regional trade and 40 percent of that of Pakistan.

Table 7.5: Intra-Industry Trade Indices for Bilateral Trade of Central and South Asian countries (Trade-weighted averages by country and unweighted averages of IITs for trading partners)

HS Section		*Afghanistan*	*India*	*Pakistan*	*Kazakhstan*	*Kyrgyzstan*	*Tajikistan*	*Turkmenistan*	*Uzbekistan*
1+2	Animal and vegetable	0.5	0.7	1.0	0.6	1.9	0.3	0.2	1.5
3	Fats and oils	1.7	0.0	0.0	2.0	0.1	0.0	-	0.2
4	Prepared foods	0.1	0.3	0.9	3.5	4.6	0.8	0.0	1.2
5	Mineral products	0.6	6.0	0.3	0.4	8.2	0.0	11.4	1.8
6	Chemical products	0.1	0.4	0.2	1.0	6.0	1.4	0.0	5.0
7	Plastics and rubber	1.1	2.9	2.0	5.0	5.8	0.6	0.0	1.6
8	Leather & its products	2.2	0.8	0.6	1.0	6.5	0.4	0.0	3.9
9	Wood & its products	0.1	1.5	1.6	10.7	12.0	1.7	0.0	2.7
10	Pulp and paper	0.1	2.4	2.0	3.1	3.2	1.3	0.1	3.2
11	Textiles	3.5	0.9	1.1	2.3	3.3	0.4	0.2	1.2
12	Footwear	0.0	7.4	0.7	1.6	8.1	0.2	0.0	0.6
13	Cement & similar prod.	0.1	0.6	1.0	2.1	1.5	0.4	0.0	2.1
14	Semi-precious stones	-	0.2	0.2	0.3	0.3	-	-	-
15	Base metals	0.8	0.6	0.5	0.7	1.3	0.2	0.1	0.3
16	Machinery & equip.	1.2	3.3	1.2	2.0	1.4	0.3	0.5	2.3
17	Transport equipment	2.0	0.2	1.6	7.1	2.9	2.9	3.5	0.7
18	Measuring instruments	2.4	7.1	4.8	25.3	7.1	11.4	2.7	9.0
19	Arms & ammunition	-	-	-	-	-	-	-	-
20	Misc manufactures	1.2	2.0	1.7	5.6	5.5	0.7	1.2	1.0
21	Work of Art	0.4	6.8	6.4	-	-	-	-	-
TRADE-WEIGHTED AVERAGE		**0.5**	**1.0**	**0.6**	**1.4**	**1.8**	**0.3**	**0.4**	**1.2**

Source: Based on data in United Nations, Comtrade database.

- Machinery and equipment (Section 16) and transport equipment (Section 17) each contribute 7 percent to total regional bilateral trade. Finally, those products that contribute between 1 and 2 percent of the total are made up of plastics and rubber (Section 7), fats and oils (Section 3), cement (Section 13), semi-precious stones (Section 14), and pulp and paper (Section 10). The remaining 7 HS sections each contribute less than 1 percent of the overall bilateral trade of the two regions.

Table 7.5 shows the intra-industry trade indices across the 21 HS sections. The following are highlights of two-way trade in those HS sections that contribute significantly to total intra- and inter-regional trade

- In mineral products (Section 5), there are three countries that have indices in excess of 5: India (6), Kyrgyzstan (8.2) and Turkmenistan (11.4). For India, that high level of intra-industry trade is due to its large amount of two-way trade with Turkmenistan (see Statistical Appendix). For Kyrgyzstan, the high index is associated with that country's two-

way trade with Turkmenistan. And for Uzbekistan, the high IIT index is due to its large volume of two-way trade with India and, to a lesser extent, with Kyrgyzstan.

- In animal and vegetable products (Sections 1 and 2), only two countries have IIT indices that are above 1: Kyrgyzstan (1.9) and Uzbekistan (1.5). Kyrgyzstan has significant amounts of two-way trade in this HS section with Kazakhstan and Tajikistan, while Uzbekistan has large volumes of two-way trade with Kyrgyzstan.
- In chemical products (Section 6), the high index for Kyrgyzstan (6) is associated with that country's large volume of two-way trade with Tajikistan.
- In transport equipment (Section 17), Kazakhstan has a large volume of two-way trade with Turkmenistan, Tajikistan and, to a somewhat lesser degree, Kyrgyzstan.
- In plastics and rubber (Section 7), Kazakhstan and Kazakhstan have an especially large volume of two-way trade in these types of products, and Kazakhstan also has significant two-way trade with Afghanistan and Pakistan.

C. Ratings

Table 7.6 shows the scores assigned to intra-industry trade, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 7.6. Summary Assessment of Intra-Industry Trade

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Country Similarities Matter Greatly in Developing Two-Way Trade in Similar Products***					
1	Kazakhstan	1	2	3	4	**5**
2	Kyrgyzstan	1	2	3	**4**	5
3	Tajikistan	1	2	**3**	4	5
4	Turkmenistan	1	2	**3**	4	5
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	1	2	3	**4**	5
7	India	1	2	3	**4**	5
8	Pakistan	1	2	3	4	**5**
	B. ***Existing Bilateral Trade Patterns Support Fragmentation of Production Processes across Countries***					
1	Kazakhstan	1	2	3	**4**	5
2	Kyrgyzstan	1	2	3	4	**5**
3	Tajikistan	1	**2**	3	4	5
4	Turkmenistan	1	2	**3**	4	5
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	1	**2**	3	4	5

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
7	India	1	2	3	(4)	5
8	Pakistan	1	2	(3)	4	5

C. ***Intra-Industry Trade Supports Fragmentation of Production Processes across Countries***

1	Kazakhstan	1	2	3	4	(5)
2	Kyrgyzstan	1	2	3	4	(5)
3	Tajikistan	1	2	(3)	4	5
4	Turkmenistan	1	2	3	4	(5)
5	Uzbekistan	1	2	3	(4)	5
6	Afghanistan	1	2	(3)	4	5
7	India	1	2	3	4	(5)
8	Pakistan	1	2	(3)	4	5

PART III. PRICE, NON-PRICE AND STRUCTURAL FACTORS

VIII. REAL EXCHANGE RATES AND INTERNATIONAL COMPETITIVENESS

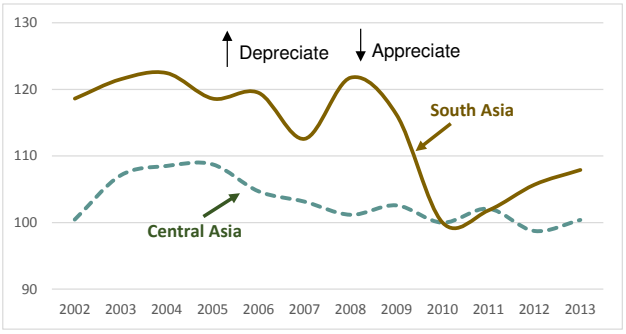
A. Measuring Inter- and Intra-Regional Competitiveness

International price competitiveness is reflected in a country's real exchange rate, which takes into account both general price movements in each country relative to that of its trading partners, and the cross exchange rate between a country and each of its trading partners. In this section, we report estimates of the overall price competitiveness, bilateral competitiveness, and inter-regional competitiveness of countries in the Central and South Asia economies. Box 8.1, later in this chapter, explains the measurement of real exchange rates in more detail, while Box 8.2 describes some of the key issues involved in measuring price competitiveness.

1. Overall Price Competitiveness

South Asia's export markets are dominated by the European Union (40 percent), China (29 percent) and the United States (24 percent). In the case of Central Asia, the major markets are the European Union (31 percent), China (35 percent), and the Russian Federation (24 percent).

Figure 8.1. International Price Competitiveness of Central and South Asia Economies, 2002-2013



Source: Based on calculated real effective exchange rates reported in Statistical Appendix.

In recent months, the Russian Federation has faced sharp declines in the value of its currency because of the fall in oil prices during the second half of 2014 and private capital flight. This situation, combined with the heavy dependence of Kazakhstan and Turkmenistan on oil and gas exports, has given rise to fears of contagion. However, the Central Asian economies are better equipped to withstand disruptions from major markets because of the buildup of substantial reserves that were not available during the 1997 Asian financial crisis. Nevertheless, these relative exchange rate movements has, in the short run, lowered the competitiveness of Central Asia in the Russian market. For example, Kazakhstan has kept the tenge pegged against the U.S. dollar and its currency has therefore surged against the ruble and other currencies of neighboring countries. As of early 2015, the tenge had maintained its position relative to the U.S. dollar through a series of central bank interventions, including large dollar reserve sales to support the local currency.[60]

From a longer term perspective, both regions have experienced a deterioration in their international price competitiveness (Figure 8.1). In Central Asia, the decline began in the mid-2000s. However, in South Asia the deterioration that occurred in the 2000s reversed itself at the beginning of this decade and, since then, the region's international competitiveness has strengthened.

[60] J. Farchy (2014), "Kazakh currency faces devaluation dilemma". Financial Times. 10 November 2014. Available: http://www.ft.com/intl/cms/s/0/8d534fe2-68c6-11e4-af00-00144feabdc0.html#axzz3MCSJgbFp.

2. Bilateral Price Competitiveness

Real bilateral exchange rate changes between the countries in the region have varied considerably and are presented in detail in the Statistical Appendix. Bilateral competitive improvements in one country are, by definition, reflected in a deterioration in the competitiveness of its partner trading country. While in principle the changes should be mirror images of one another, but in reverse directions, in practices some variations occur because of reporting differences in trade data.

Table 8.1 shows that in recent years there has been a deterioration in intra-regional price competitiveness of Afghanistan, Tajikistan and Uzbekistan. In other countries (India, Kazakhstan, Kyrgyzstan and Turkmenistan), intra-regional competitiveness has improved because of exchange rate and relative price changes. The same pattern has occurred in inter-regional price competition: Afghanistan, Tajikistan and Uzbekistan have weakened their competitive positions, while the other countries have experienced a strengthening of their positions.

Table 8.1. Annual Percentage Change in Bilateral Price Competitiveness of Central and South Asia Economies, 2010-2013

	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyz Republic	Tajikistan	Turkmenistan	Uzbekistan
Afghanistan		-1.0%	-0.9%	-1.7%	-1.0%	0.4%	-1.3%	2.1%
India	1.3%		0.4%	-0.4%	0.5%	1.8%	0.0%	3.5%
Pakistan	0.9%	-0.1%		-0.8%	-0.1%	1.3%	-0.4%	3.0%
Kazakhstan	1.8%	0.8%	0.9%		0.8%	2.1%	0.3%	3.8%
Kyrgyz Republic	1.3%	0.4%	0.3%	-0.5%		1.6%	-0.2%	3.2%
Tajikistan	-0.2%	-1.1%	-1.1%	-2.0%	-1.3%		-1.8%	1.7%
Turkmenistan	1.6%	0.7%	0.7%	-0.3%	0.5%	1.8%		3.5%
Uzbekistan	-1.8%	-2.7%	-2.8%	-3.7%	-2.9%	-1.6%	-3.4%	

Source: Based on calculated real effective exchange rates reported in Statistical Appendix.
Note: Bilateral price competitiveness measured by bilateral real exchange rates.

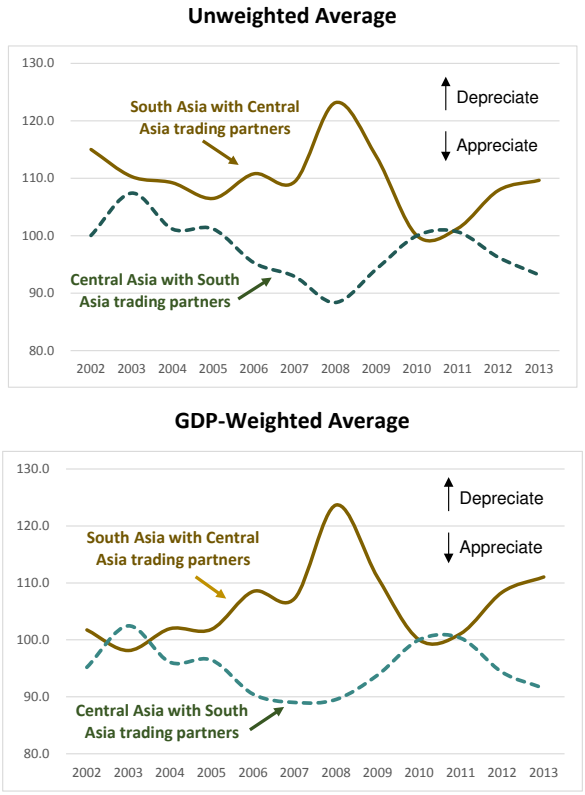
3. Inter-Regional Competitiveness

Changes in the inter-regional price competitiveness of the Central and South Asia regions differ considerably from the overall competitiveness changes in the two regions (Figure 8.2). There have been three distinct periods for inter-regional price competitiveness between the Central and South Asia economies. In the first part of the 2000s, South Asia's competitiveness rose while that of Central Asia declined, though the rate of change in the competitiveness between the two regions decelerated during this period. During the global financial crisis (2008-2010), South Asia's competitiveness initially rose sharply but in the next two years gave up those gains. In the present decade, South Asia has renewed its upward competitiveness trend relative to Central Asia. For Central Asia, particularly Kazakhstan and Kyrgyzstan, the renewal of South Asia's competitive gains has meant a continued long-term deterioration in their inter-regional competitiveness.

In general, inter-regional price competitiveness trends in the unweighted and GDP-weighted regional averages have been similar to one another since the 2008-2010 global financial crisis. However, in the early years, India's dominance in South Asia and its improved competitiveness in Central Asia more than offset competitiveness declines in Afghanistan and Pakistan. The result was a marked improvement in South Asia's GDP-weighted inter-regional competitiveness compared with movements that occurred in that region's unweighted average level of competitiveness. Likewise, Kazakhstan's large economic size relative to other Central Asia economies has dominated the GDP-weighted average for that region and its general deterioration in competitiveness relative to South Asia offset improvements that occurred elsewhere in the region.

Regional averages exclude Turkmenistan's real bilateral and effective exchange rates because in 1 January 2009 a new currency called the 'new manat' replaced the 'old manat' at the rate of 5,000 old manat to 1 new manat. Since then, the monetary authorities have maintained a fixed exchange rate against the U.S. dollar. The change in currency gave rise to a large change in the country's bilateral and effective exchange rates, in both nominal and real terms, which greatly impacted the regional averages (unweighted and GDP-weighted) between 2008 and 2009. Since this change was administered rather than a reflection of fundamental changes, Turkmenistan's exchange rate movements have been excluded from the regional calculations in order to avoid sharp exchange rate movements that do not reflect fundamentals.

Figure 8.2. Inter-Regional Competitiveness of Central and South Asia Economies, 2002-2013



Source: Based on calculated real effective exchange rates reported in Statistical Appendix.

Movements in regional competitiveness generally suggest that Central Asia's demand for South Asia's exports in the last 10 years has improved if the price responsiveness of importers in those markets has been the same. In recent years the strengthening of demand for South Asia's exports has been particularly large in India and, to a somewhat lesser degree, in Afghanistan. In contrast, Central Asian producers have faced a less favorable demand for their goods in South Asia markets in recent years. That deterioration has been especially noticeable in Kazakhstan, Kyrgyzstan and Turkmenistan.

Box 8.1. Definition of Real Effective Exchange Rate

The 'real effective exchange rate' is a fundamental indicator of a country's international price competitiveness. It take into account both general price movements in each country relative to that of each of its trading partners, and the cross exchange rate between the country and each of its trading partners. As such, the term refers to a country's 'inflation-adjusted, trade-weighted exchange rate':

- The term 'real' refers to the inflation-adjusted exchange rates since the impact of currency depreciation can be offset by domestic inflation. For example, if a currency depreciates 10 percent and the country's domestic price level rises by 10 percent above the rest of the world, then the country's competitiveness remains unchanged. In practice, the inflation adjustment is carried out by multiplying the nominal exchange rate by an appropriate index of relative inflation between the home country and its trading partners.
- The term 'effective' means trade-weighted. Normally, the partner country weights are constructed in proportion to the sum of exports plus imports in bilateral trade.

The real exchange rate concept is a measure of the relative price of tradables to non-tradables, and it therefore measures the cost of producing a good domestically. A relative price decline, for example, reflects an increase in the domestic cost of producing tradable goods, since it makes production of tradables less profitable and induces resources to move to the non-tradables sector.

While the concept is straightforward, its empirical measurement is difficult for most countries in Central and South Asia to use since price series for tradable and non-tradable products are not readily available. Instead, the practice is to construct the real effective exchange rate using partner-country and domestic price measures that represents the ratio between non-tradable and tradable prices. This approach uses the Purchasing Power Parity (PPP) concept to correct the nominal exchange rate by the relative price of domestic to foreign prices. Using this so-called price-based approach, the real exchange rate index (denoted e^r) is defined as follows:

$$e^r = e^n \frac{p^f}{p^d} \tag{8.1}$$

where e^n is the nominal exchange rate index, p^f is the foreign currency price of goods purchased abroad, and p^d is the domestic price level.

We can relate equation (8.1) to the relationship between the price of tradables (denoted p^T) and the price of non-tradables (p^{NT}) as follows:

$$e^r = \frac{p^T}{p^{NT}} = e^n \frac{p^f}{p^d} \tag{8.2}$$

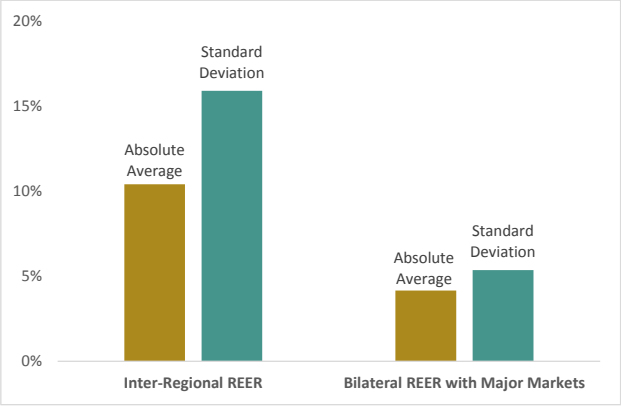
The relationship is based on the Law of One Price in which the prices of the tradables around the world are all equal to one another. However, while the Law of One Price applies to individual commodities, Purchasing Power Parity applies to the general price level.

The interpretation of (8.2) is as follows: *a rise in e^r means real depreciation (gain in competitiveness); conversely, a fall in e^r means real appreciation (loss of competitiveness)*. Another way to express this result is to say that when the real effective exchange rate increases, the home country currency depreciates relative to the currencies of the trading partners, which in turn means that the competitiveness of domestic goods in the home country increases. The opposite happens when the real effective exchange rate declines.

4. Variability of Competitiveness

Year-to-year variations in international price competitiveness is much higher for inter-regional competitiveness than it is for regional competitiveness with the major markets, namely, the European Union, China, Russia Federation and the United States (Figure 8.3). The average year-to-year changes in the real bilateral exchange rates between Central Asia and South Asia is 10 percent, measured in absolute terms, while those with the major markets of these two regions is only 4 percent. Similarly, the standard deviation for inter-regional real exchange rates is 16 percent, compared with only 5 percent for the major markets of the two regions. The reason is that inflation in the two regions, which has averaged 9 percent a year, is over twice as high as that in the major markets; and the standard deviation in the general price level is these regions is also more than twice as large as that of their major markets. The resulting inter-regional instability associated with price volatility is generally considered to be unfavorable to international competitiveness.

Figure 8.3. Bilateral Real Exchange Rate Volatility of Central and South Asia Regions, 2002-2013



5. Managing Volatility

In order to reduce exchange rate volatility, nearly all Central and South Asia governments have adopted managed floats in their currencies that allows them to fluctuate within a limited range over time (Table 8.2). The governments generally manage or peg their currencies to adjust to foreign exchange (forex) markets, as long as their currencies do not exceed some defined values that could affect foreign currency, inflation limit or monetary policy limits. Kazakhstan anchors

Table 8.2. De Facto Classification of Exchange Rate Regimes, 2014

	Exchange Rate Arrangement				Exchange Rate Anchor and Monetary Policy Framework			
	Managed Other	Stabilized Arrangement	Floating	Crawl-Like Arrangement & Conventional Peg	US dollar	Dual or Multiple Exchange Rate	Monetary Aggregate Target	Monitor indicators in conducting monetary policy
Afghanistan			◆				◆	
India			◆					◆
Pakistan	◆							◆
Kazakhstan		◆			◆			
Kyrgyzstan	◆					◆		
Tajikistan		◆					◆	
Turkmenistan				◆	◆			
Uzbekistan				◆		◆		

Source: IMF (2014), Annual Report on Exchange Rate Arrangements and Exchange Restrictions. Washington, DC.

its currency to the U.S. dollar, and in 2014 it moved from a crawl-like arrangement to a stabilized one following a 14 percent devaluation in the teng against the U.S. dollar. Turkmenistan also uses the dollar to anchor its currency. Kyrgyzstan in 2014 started using a monetary policy basis with interest rates as the target for developing and implementing monetary policy. It also uses a dual exchange rate in which government transactions use an official exchange rate that can differ as much as 2 percent from the market rate. Tajikistan uses a stabilization arrangement and has recently liberalized capital controls after a period in which there were large capital inflows into the country.

In contrast, all South Asia economies maintained a floating exchange rate until recently, when in 2014 Pakistan moved from a floating to a managed exchanged rate after a period of rapid appreciation in the Pakistan rupee. Afghanistan does not maintain any exchange rate restrictions and has few capital controls, mainly on money market instruments and real estate transactions. India and Pakistan have few exchange rate restrictions but maintains capital controls in nearly all areas. In an effort to stem capital outflows, India recently relaxed a number of its capital restrictions, such as limits on direct foreign investment that can be undertaken without prior approval.

B. Modeling Price Competitiveness

Knowledge about the transmission of real exchange rate variations on a country's exports and imports, and the size of the impact on the trade balance and the economy as a whole are critical for policymakers.

The transmission occurs as follows: In the case of a devaluation in a country's currency, prices of the home country's exports abroad will decrease and prices of imports at home will increase. The price chances will cause exports to expand and imports to contract, thereby influencing the trade balance positively. In the case of bilateral trade between the Central and South Asia economies, a real exchange rate devaluation in one country means that there will be a fairly symmetric response on the part of its trading partner in the form of a real exchange rate appreciation. In the case of an appreciation in the country's currency, the opposite occurs, namely, the price of the home country's exports abroad will rise and the price of imports at home will decrease, with the result that the trade balance will worsen.

In estimating the adjustment process of trade to exchange rate variation, we follow the conventional practice of measuring the size of the transmission using estimates of imports. The reason is that data for imports tend to be more reliable than those of exports because governments tend to be more careful in measuring that side of trade for revenue generating purposes. Since import adjustments in the home country are mirrored in the trading partner's export adjustments, we are in effect estimating the transmission of real exchange rate changes on trade between the Central and South Asia economies.

We also need to take into account the dynamics underlying the response over time to changes in the real exchange rate. Dynamics are important because of the possible occurrence of the well-known adjustment pattern associated with the theory of the J-curve. According to the J-curve theory, after a real depreciation or devaluation, the trade balance would be expected to deteriorate at first due to increased import value in terms of domestic currency associated with

sticky prices.[61] Subsequently, over time the volume of export will increase and the volume of import will decrease when adjusting to the new exchange rate, and the trade balance will then improve.

To estimate the import demand relationship and take into account differences between the short and long term response of trade to real exchange rate variations, we use the so-called Error Correction Mechanism (ECM) model.[62] It is part of a system of time series models that account for current deviations from their long-run relationship in the observed short-run adjustments to the long-term or steady-state equilibrium relationship between variables such as imports, income and relative price changes through the real exchange rate. They are a useful class of model when dealing with 'cointegrated data' as that in the present study and a full explanation of this modeling approach is therefore given in Annex A.

Table 8.3 shows the empirical results for measuring the impact on inter-regional imports of changes in the real inter-regional exchange rate of the Central and South Asian countries. It is important to mention that the estimated equations for all three South Asia economies were far more difficult to estimate than those of any of the Central Asian countries. This experience is contrary to expectations since two of the three South Asian countries have floating exchange rates and all Central Asian countries have some form of managed exchange rate arrangement.

Table 8.3. Central and South Asia Inter-Regional Import Demand Elasticities with Respect to Income and Real Exchange Rates

	Income a/			**Real Exchange Rate b/**		
	Short-Run		Long-Run	Short-Run		Long-Run
Afghanistan	0.42	c/	1.00	-0.97		-1.14
India	1.23		2.27	-0.31	c/	-0.84
Pakistan	0.78	c/	1.00	-2.04	c/	-2.62
Average, Trade-Weighted	*1.11*		*2.03*	*-0.54*		*-1.04*
Average, unweighted	*0.81*		*1.42*	*-1.11*		*-1.53*
Kazakhstan	4.50		1.20	-0.61		-1.55
Kyrgyzstan	1.36		1.00	-0.84		-0.77
Tajikistan	0.37	c/	2.43	-0.24		-2.87
Turkmenistan	1.56		4.42	-0.52		-1.84
Uzbekistan	6.91		1.61	-0.50		-0.53
Average, Trade-Weighted	*4.40*		*1.60*	*-0.58*		*-1.25*
Average, unweighted	*2.94*		*2.13*	*-0.54*		*-1.51*

Source: Technical Annex Table T1.
a/ Income Elasticity: Measures the percentage change in import volume of each country or grouping brought about by a 1 percent change in the domestic real GDP.
b/ Real Effective Exchange Rate (REER) Elasticity: Measures the percentage change in import volume of each country or grouping brought about by a 1 percent change in their REER.
c/ One-period lag.

[61] T. Demirden and I. Pastine (1995), "Flexible Exchange rates and the J-curve: An alternative approach". *Economic Letters* 48: 373-337. Available: https://ideas.repec.org/a/eee/ecolet/v48y1995i3-4p373-377.html.

[62] A useful online video explaining ECM model is available at https://www.youtube.com/watch?v=wYQ_v_0tk_c (Part I) and https://www.youtube.com/watch?v=xVIkb-QeZ40 (Part II).

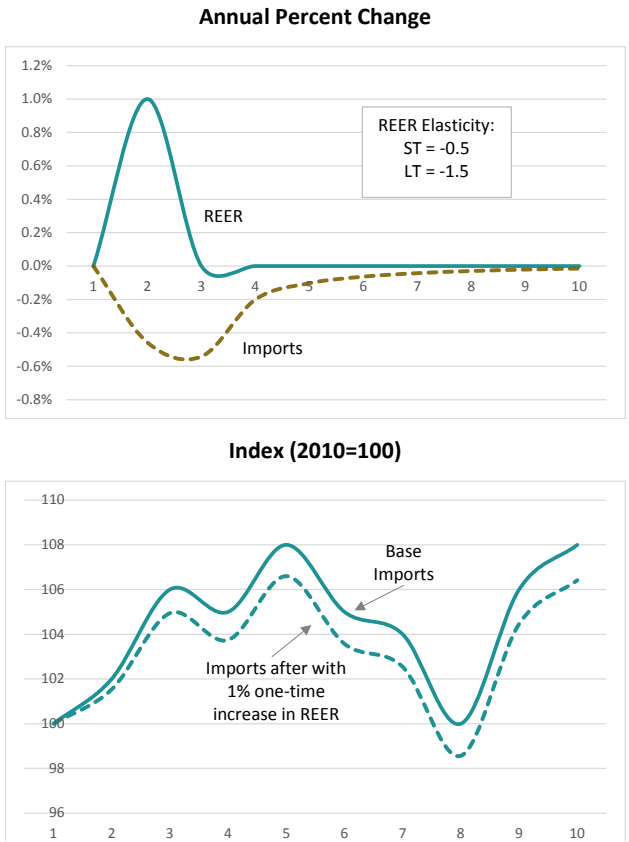
Nevertheless, the final equation estimates have the expected signs and provide reasonably robust parameter estimates.

The unweighted average real bilateral exchange rate elasticity of import demand for the two regions is about the same (-1.5) in the long-run. The interpretation of this elasticity is that a *one-time* 1 percent increase (appreciation) in the inter-regional exchange rate for each country leads to a 1.5 percent decrease in the volume of imports. The trade-weighted average of the two regions is, however, considerably different. Because of India's dominance in the South Asia region and because of its REER-inelastic import demand relationship, the regional REER average elasticity is only -1.04 compared with -1.25 in Central Asia. Nonetheless, these averages obscure considerable variation across the two regions, ranging from a low of -0.5 in Uzbekistan to a high of -2.9 in Tajikistan, with three countries having REER inelastic import demand relationships; one having a near-unitary elasticity; and the remaining four having import demand relationships that are REER elastic, that is, greater than unity.

It is worth noting the relatively high income elasticities of import demand in nearly all countries, which is consistent with expectations that trade expands at a faster rate than real GDP. The Central Asia economies have a relatively higher average unweighted income elasticity (2.1) than the South Asia economies (1.4). Among those countries with the highest import demand responsiveness to income changes are Turkmenistan, Tajikistan and India.

From a policy perspective, what matters is the size of the response of trade to the exchange rate policy instrument and also how quickly the response takes place. This second response is determined by the dynamics underlying the adjustment of trade to a new exchange rate. A high and fast response is preferred over a sluggish response that takes a long time to occur.

Figure 8.4. Average Inter-Regional Import Demand Adjustments to One-Time 1% Rise in REER of Central and South Asia Economies

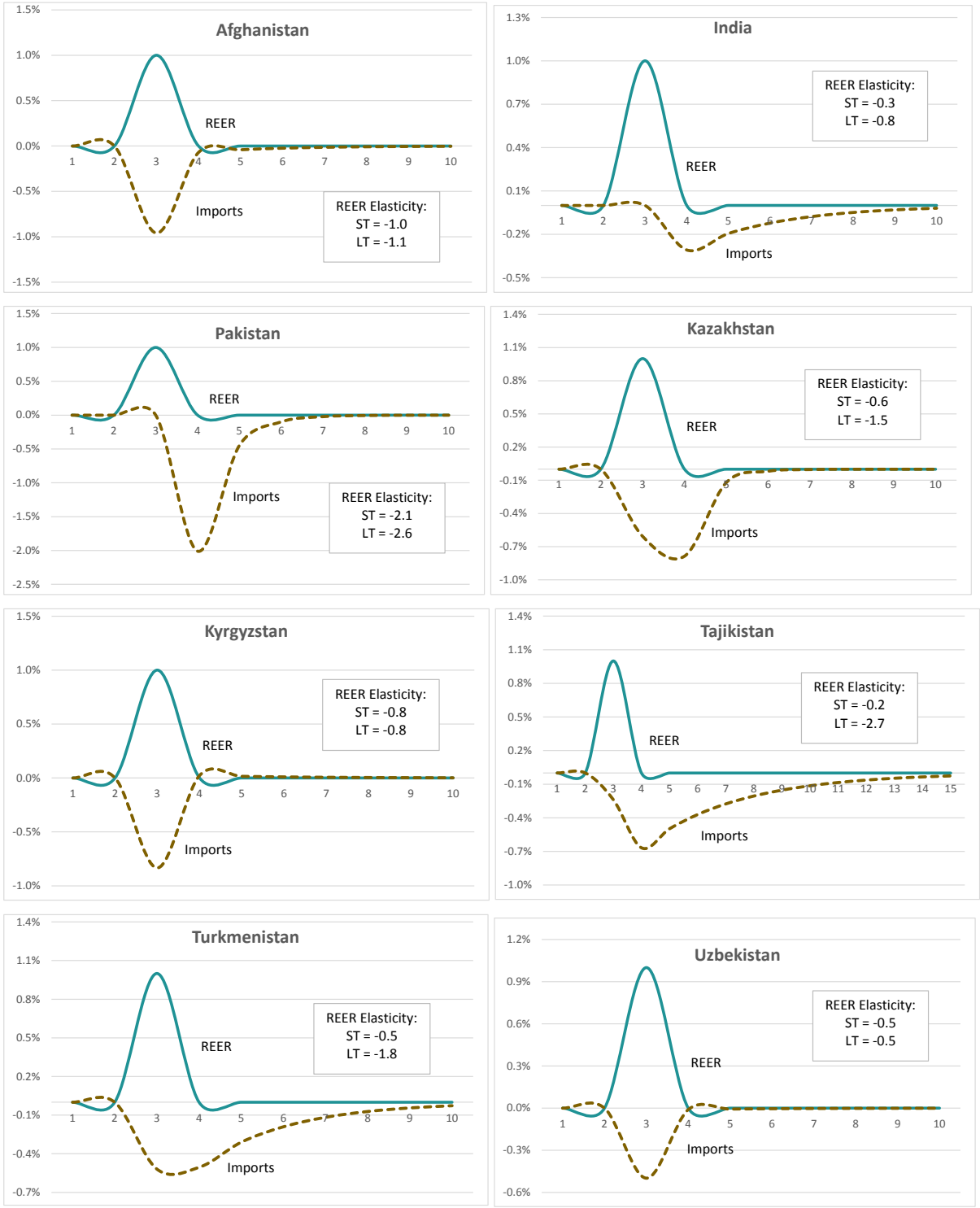


Figures 8.4 and 8.5 show the average and country-specific inter-regional import demand responses to a one-time change in the real inter-regional exchange rate of the Central and South Asia economies. The same-year response of imports to a 1 percent appreciation in the exchange rate, adjusted for relative price changes, is -0.5. In the long-run, the total impact on imports is -1.5 percent. It takes two years for two-thirds of that import adjustment to occur and another three years for over 90 percent of it to be completed.

In the South Asia region, Pakistan's inter-regional imports have the strongest and fastest response to a real inter-regional exchange rate change. In contrast, in India it takes 3 years for 60 percent of the adjustment in imports to be completed and six years to complete 90 percent of the adjustment. Afghanistan's imports adjust quickly to an inter-regional exchange rate variation, but the magnitude of the response is moderate.

In the Central Asia region, Tajikistan's, Turkmenistan's and Kazakhstan's imports have comparatively strong and fast import demand responses. The long-run import response to a one-time 1 percent increase in their real inter-regional exchange rates ranges from -1.5 (Kazakhstan) to -2.7 (Tajikistan). In the case of Kyrgyzstan and Uzbekistan, imports also respond quickly to exchange rate changes, but the magnitude of the response is much lower. Note that in the case of Kyrgyzstan, the short-term import real inter-regional elasticity is greater than the long-run elasticity. That means that importers tend to overreact when an exchange rate appreciation occurs and then adjust their purchases in subsequent periods to levels that are more consistent with their longer term response to the exchange rate change.

Figure 8.5. Regional Import Demand Adjustments to One-Time 1% Rise in REER of Central and South Asia Economies



C. Ratings

Based on the evaluation methodology described in Chapter 3 and the estimates presented in this chapter, Table 8.4 shows the scores assigned to the effectiveness of exchange rate policy instruments in each country.

Table 8.4. Regional Trade Impact Effectiveness of Exchange Rate Policy Instruments

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	Real Exchange Rate Policy Effectiveness in Expanding Regional Trade by Increasing Export Competitiveness					
1	Kazakhstan	1	2	3	(4)	5
2	Kyrgyzstan	1	2	(3)	4	5
3	Tajikistan	1	2	3	4	(5)
4	Turkmenistan	1	2	3	(4)	5
5	Uzbekistan	1	2	(3)	4	5
6	Afghanistan	1	2	3	(4)	5
7	India	1	2	(3)	4	5
8	Pakistan	1	2	3	4	(5)

Box 8.2. Practical Issues in Constructing the Real Effective Exchange Rate

There are four important issues involved in the construction of the 'real effective exchange rate':

1. *Exchange rate index base year*: The indices for the nominal and real exchange rates are constructed using the general formula:

$$e = \frac{e_t}{e_b} * 100 \quad (8.1)$$

where *e* refers to either the real or nominal exchange rate, e_t refers to the current (nominal or real) exchange rate, and e_b is the exchange rate in the base year.

In principle, the base year should represent the year in which there was internal and external equilibrium in a country. While it may be possible to determine such a period in a country's economic history, it is likely to differ across countries. However, a common base year is needed to compare movements in exchange rates across countries like those in Central and South Asia. To overcome this problem, percentage changes in the real exchange rates are reported, rather than their absolute levels over time.

2. *Prices*: In principle, the producer price indices (PPI) or the wholesale price indices (WPI) for domestic products are used to calculate the real effective exchange rate. However, there are several countries where these indices are not reported. In those cases, consumer price indices (CPI) are used instead. The more fundamental issue for the price series is that all indices (WPI, PPI and CPI) include prices of both tradables and non-tradables. We may possibly eliminate some of the bias by using WPI for the non-tradable prices in the home country and CPI for the tradables prices in the partner countries. The rationale is that WPI is mainly composed of non-tradables and CPI mainly consists of tradable goods.

3. *Aggregation*: There are three issues that arise in aggregation: (a) what to use as a weight for aggregation; (b) what years to use for the weights; and (c) what average to use for the aggregation.

(a) *Aggregation variables*: Use of trade weights are appropriate for the aggregation of real effective exchange rates of a region's member countries. However, for member countries' trade with specific trading partners, trade weights only reflect the importance of goods that are actually traded. Instead it is more appropriate to use the member countries' share of total regional production, so that the weights reflect both traded and non-traded goods in each country.

(b) *Period for weights*: In some cases, the period average is applied to the bilateral real exchange rates, while in others a sub-period is applied to all years. In neither case does the aggregation yield an accurate measure of the importance of the trading partners in any given year. Instead, it is more accurate to apply the trade-weights that correspond to each year in the calculations. In that way changes in the importance of trading partners are reflected in the real effective exchange rate for each year.

(Continued)

Box 8.2. Practical Issues in Constructing the Real Effective Exchange Rate (Continued)

(c) *Averaging method*: There are two ways to calculate the weighted average of bilateral exchange rates for the trading partners. Suppose there are *N* trading partners whose exchange rates need to be averaged and whose trade weights are represented by w_n, so that $\sum_{n=1}^{N} w_n = 1$.

- The *arithmetic* average of the exchange rates is calculated as:

$$\sum_{n=1}^{N} e_n * w_n \tag{8.2}$$

- The *geometric* average of the exchange rates is calculated as:

$$\prod_{n=1}^{N} e_n^{w_n} \tag{8.3}$$

The arithmetic average has the limitation that its percentage movements will differ in magnitude depending on whether the bilateral rates are expressed as units of home currency per foreign currency unit, or the other way around. Moreover, exchange rate indices based on arithmetic averages can also be distorted when the base period is changed.

In contrast, the geometrically averaged indices treat movements in exchange rates symmetrically, and the fact that the logarithm of a geometric average is the arithmetic average of the logs of the bilateral rates means that the linear representation in logarithms greatly simplifies their representation in an econometric model. For these reasons, the geometric average is preferred over the arithmetic average of real exchange rates for trading partners. We therefore use the geometric average of regional member countries to aggregate the real effective exchange rates for the Central and South Asia regions.

To summarize, based on best-practices for construction of real effective exchange rates, (a) we use GDP weights to aggregate member countries' trade with a specific trading partner and trade weights to aggregate across a region's member countries trade with all trading partners; (b) we use trade- or GDP-weights that correspond to each year for which the real effective exchange rate is calculate; and (c) we use the geometric average of member countries to arrive at regional real effective exchange rates.

4. *Formula*. There are different ways to calculate the REER. However, they essentially involve two general formulas the lead to opposite interpretations of REER movements: (a) The first is the one adopted in this study and given in equation (8.1), that is, $e^r = e^n \frac{p^f}{p^d}$. In this case, *a rise in REER means real appreciation (loss of competitiveness)*. Alternatively, some institutions use the inverse relationship, that is, $e^r = \frac{1}{e^n}\frac{p^d}{p^f}$. In this situation, *a rise in REER means real depreciation (gain in competitiveness)*. Either approach is valid as long as the interpretation of the results are in line with the formula used.

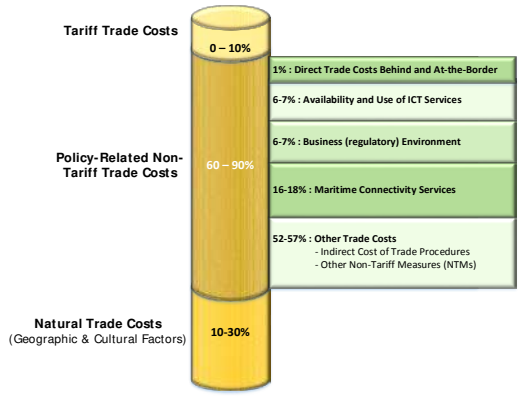
IX. TRADING COSTS

A. Why Border and Behind-the-Border Trade Costs Matter

While geographical distance remains a key factor in determining international transport and logistics costs, the long-term decline in international shipping costs has helped to level the playing field and shifted attention to border and behind-the border trade costs.[63] Unlike physical distance, economic distance can be reduced by lowering trade costs. Trade costs constitute a wedge between the cost of production at the origin and the price paid by consumers in destination markets. Trade costs can result from "natural" sources (geographic distance, transport costs, and common features between trading partners such as language, common history, and sharing a common border) or endogenous, policy-related characteristics such as logistical performance, international connectivity, tariffs, and nontariff barriers.

Overall, non-tariff trade costs account for as much as 90 percent of trade costs in developing economies. With rapidly falling shipping costs, what remains now are the large trade costs associated with indirect costs at-the-border and behind-the-border. These costs largely involve domestic, regional or international regulations and standards (Figure 9.1).[64] Tariffs, on average, account for no more than 10 percent of direct and indirect costs associated with factors other than transportation, whereas non-tariff measures (NTMs) can account for as much as 90 percent of those costs.

Figure 9.1. Trading Costs in Developing Countries



Source: World Bank (2014), "East Asia and Pacific Economic Update (April 2014)". Washington, DC. Available: http://www.worldbank.org/en/region/eap.

Those NTM costs, which include the costs of complying with a myriad of licenses, permits and certificates associated with moving goods across border, affect not only the international competitiveness of businesses in the region, but also the ability of small enterprises to understand the complexity of those measures and participate in regional and global value chains. Equally important for Central and South Asia businesses is the fact that trade in intermediate goods for production networks is more sensitive to trade costs than it is for final goods.[65]

[63] Global trade-weighted average transport costs have declined from 6 percent to 4 percent in the past 30 years.

[64] Available at http://data.worldbank.org/data-catalog/trade-costs-dataset.

[65] D. Saslavsky and B. Shepherd (2012). "Facilitating International Production Networks: The Role of Trade Logistics". Washington, DC: World Bank, Policy Research Working Papers. No. 6224. Available: http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-6224.

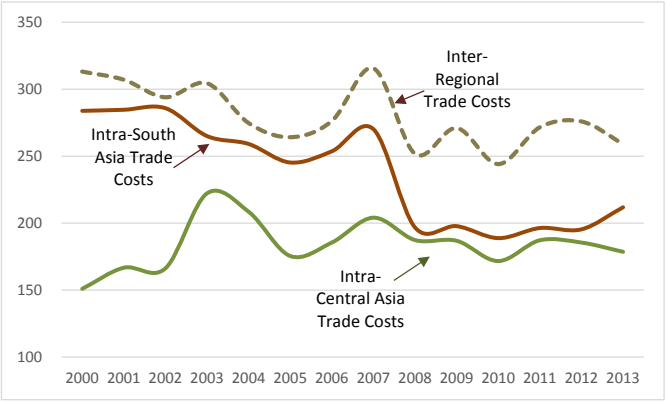
B. Evidence on Intra- and Extra-Regional Trade Costs

Measurement of Central and South Asia trade costs is based on the joint UNESCAP-World Bank 'Bilateral Comprehensive Trade Costs' database.[66] It captures all costs involved in trading goods bilaterally relative to those involved in trading goods domestically. Those costs cover (a) international shipping and logistics costs; (b) tariff and non-tariff costs involving direct and indirect costs associated with trade procedures and regulations; and (c) costs from differences in language, culture and currencies. The Statistical Appendix presents detailed information on bilateral trading costs between Central and South Asian countries, both for the total of all trade costs and those that specifically make up non-tariff costs. Estimates for 2013 are based on available information of trade costs from various sources and extrapolations from recent years in which stable trends could be identified. Box 9.1 contains the technical definition, based on the explanatory notes for the UNESCAP-World Bank trade costs database.[67]

1. Total Trade Costs

There are considerable differences in the long-term cost trends within and between the two regions. As Figure 9.2 shows, overall intra-South Asia trade costs trended downward throughout most of the 2000s, except for an upswing during the 2007 global financial crisis. However, the trend has reversed itself since 2010 as costs have escalated. In contrast, intra-regional trade costs in Central Asia generally trended upward in the 2000s, but have declined since the start of this decade. Trade costs between the two regions declined by 17 percent between 2000 and 2013, with considerable short-term variability. On average, year-to-year movements during the period equaled ±8 percent, and in several instances varied by as much as 10-20 percent in any one year.

Figure 9.2. Inter and Intra-Regional Trade Costs of Central and South Asia Economies



Source: Derived from data in Statistical Appendix.

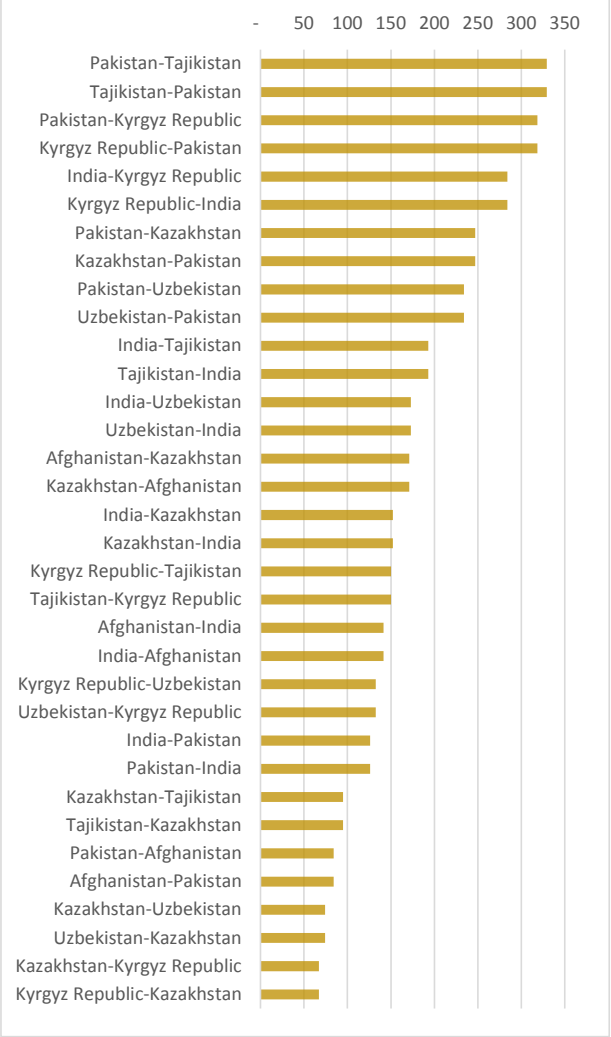
These averages conceal large differences across and within the two regions. The ad valorem equivalents in Figure 9.3 show all additional costs other than tariff costs involved in trading goods bilaterally rather than domestically, based on data for 2010-2013. The average of the comprehensive trade costs, excluding tariffs, equals 175 ad valorem equivalent for the 17 bilateral trade flows in the two regions, and the range is from a low of 67 percent ad valorem

[66] UNESCAP (2014), "ESCAP-World Bank Trade Cost Database". Online: http://artnet.unescap.org/trade-costs.asp.

[67] Ibid. For more details, see J.-F. Arvis et al. (2013), "Trade Costs in the Developing World: 1995-2010", ARTNeT Working Papers, No. 121. Available: http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-6309.

equivalent for Kazakhstan-Kyrgyzstan trade to over 300 percent ad valorem equivalent for trade between Pakistan and Tajikistan, and trade between Pakistan and Kyrgyzstan. Bilateral trade costs are repeated in the figure, for example, Pakistan trade costs with Tajikistan and Tajikistan trade costs with Pakistan, to emphasize that the coverage of costs applies to both countries. Thus costs incurred by Pakistan in trading with Tajikistan are symmetrical to those of Tajikistan's trade with Pakistan.

Figure 9.3. Non-Tariff Costs of Trade between Central and South Asia Economies, 2010-2013 average



Source: Derived from data in Statistical Appendix.

In Central Asia, Table 9.1 illustrates the types of formal and informal non-tariff barriers to trade that have been recently identified by the Central Asia Data Gathering and Analysis Team, under the Norwegian Institute of International Affairs (NUPI) and OSCE Academy in Bishkek, Kyrgyzstan.[68] Most countries in the region impose procedural and administrative obstacles on trade, as well as technical barriers to trade. Corruption is also widespread, both at the border and behind the border.

For 2014 Transparency International rated Turkmenistan, 169 out of 175 countries surveyed; Uzbekistan, 168; Tajikistan, 153; Kyrgyzstan, 138; and Kazakhstan, 129.[69] In South Asia, Afghanistan, 172 out of 175 countries surveyed; Pakistan, 131; and India, 86.

[68] Central Asia Data-Gathering and Analysis Team (CADGAT, 2013). Norwegian Institute of International Affairs (NUPI) and the OSCE Academy. Available: http://www.osce-academy.net/upload/GADGAT/CADGAT10.pdf.

[69] Transparency International, "Corruption Perception Index 2014: Results". Online: http://www.transparency.org/cpi2014/results#myAnchor1.

Table 9.1. Central Asia Formal and Informal Barriers to Trade

Kazakhstan		Kyrgyzstan		Tajikistan		Turkmenistan		Uzbekistan	
Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
• **Membership in Customs Union is diverting trade from non-member countries.** • **Non-tariffs regulations and bans imposed on group of goods such as electricity, carpets, chicken, tinned goods and margarine.** • **Overly complex and time-consuming customs procedures.** • **Double certification procedures on raw materials and final products contradict the state system of control over final output, which implies certification of final products only.**	• Weak governmental support of Kazak trade companies abroad. • Lack of information about foreign markets. • Underdeveloped transport infrastructure and extreme distances to sea ports. • High transport costs.	No serious formal trade regulation instruments. Instead, trade is subject to large formal obstacles in neighboring countries, particularly Kazakhstan and Uzbekistan.	High degree of corruption of customs officers.	• Logistical costs of trading in Tajikistan account for 22–25% of merchandise trade value: one of the highest ratios in the world. • Landlocked geographical conditions, poor customs infrastructure and transit system through Uzbekistan that creates serious disruptions to international trade add significantly to logistics costs. • The system of double certification on both raw materials and final products contradicts the state system of control over final production. • Tajikistan ranked second-to-last (188 out of 189 countries) in ease of trade indicators in the World Bank's Doing Business 2015 survey. • Poor trade facilitation.	• Complex and time-consuming customs procedures. • Protection of local producers.	• Unpredictable changes in tariff rates. • Restrictions on imports of products such as cigarettes, medical drugs, alcohol. • Restrictions on export of products of high national value like Turkmen carpets and raw materials. • Prohibitions, quotas and licenses on trade in goods that affect national security, public health and the environment, or are deemed to contravene social norms.	• Difficulties in getting quotas and licenses for trade activity. • Control by oligarchy of some businesses such as building materials, cigarettes, and alcohol.	• Frequent and unpredictable changes in tariff rates. • Quantitative restrictions on trade in goods that have implications for national security, public health and the environment, or are deemed to contravene social norms. • Uzbekistan ranked last (189 out of 189 countries) in ease of trade indicators in the World Bank's Doing Business 2015 survey.	• Foreign currency conversion difficulties, despite introduction of full local currency convertibility since 2003. • Lengthy closure of borders for exports of agricultural products, aimed at lowering prices in domestic market. • Some products like chewing gum, toys, cigarettes, and used equipment are not able to access foreign currency conversion because they are discourages by the government.

Source: Central Asia Data-Gathering and Analysis Team (CADGAT, 2013). Norwegian Institute of International Affairs (NUPI) and the OSCE Academy. Available: http://www.osce-academy.net/upload/GADGAT/CADGAT10.pdf.

Table 9.2 Ease of Trading across Borders in Central and South Asia Economies

	Rank (out of 183)	Country	EXPORTS			IMPORTS		
			Documents to export (number)	Per Container Time (days)	Per Container Cost (US$)	Documents to import (number)	Per Container Time (days)	Per Container Cost (US$)
Easiest	108	Pakistan	8	21	765	8	18	1,005
	126	India	7	17	1,332	10	21	1,462
	183	Kyrgyz Republic	9	63	4,760	11	73	6,000
	184	Afghanistan	10	86	5,045	10	91	5,680
	185	Kazakhstan	10	79	5,285	12	67	5,265
Most Difficult	188	Tajikistan	11	71	9,050	12	70	10,650
	189	Uzbekistan	11	54	5,090	13	104	6,452

Source: World Bank (2014), "Trading across Borders". In *Doing Business 2015*. Washington, DC. Available: http://www.doingbusiness.org/.

Box 9.1. Definition of Trade Costs

The UNESCAP-World Bank 'Bilateral Comprehensive Trade Costs' database is based on the work of J.E. Anderson and E. van Wincoop in their 2004 survey of the measurement of trade costs and suggestions for improvement estimates of the ad valorem tax equivalent of those costs. Trade costs are the price equivalent of the reduction of international trade compared with the potential implied by domestic production and consumption in the origin and destination markets. Total costs are broken down into tariff and non-tariff related costs.

Bilateral comprehensive trade costs are associated with both importing and exporting goods between a country *i* and its trading partner *j*. The total trade cost indicator can be denoted TC_{ij} and is measured in its ad valorem equivalent form.

Bilateral tariff costs are bi-directional and represent a geometric average of the tariffs imposed by the trading countries on imports from one another. They are defined as follows:

$$TG_{ij} = \sqrt{(1 + t_{ij})(1 + t_{ji})} \tag{9.1}$$

Where TG_{ij} = Geometric average of tariffs imposed by both trading partners on each other.
t_{ij} = Ad valorem tariff imposed by country *i* on country *j*.
t_{ji} = Ad valorem tariff imposed by country *j* on country *i*.

Bilateral non-tariff costs are defined as the comprehensive trade costs that exclude trade costs. They are calculated as follows:

$$NT_{ij} = \left\{ \left\{ \frac{\left[1 + \frac{TC_{ij}}{100}\right]}{TG_{ij}} \right\} - 1 \right\} / 100 \tag{9.2}$$

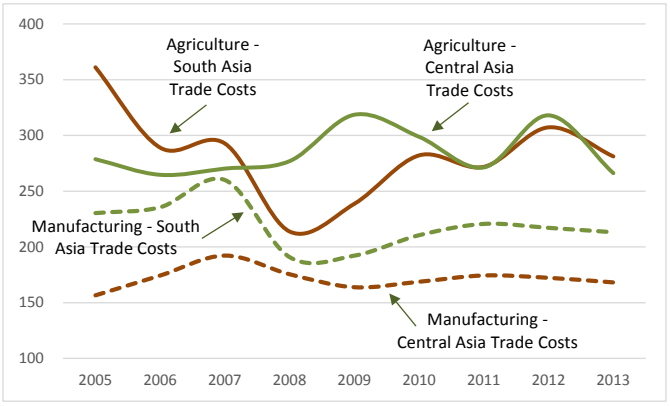
Since recent advances in regional and multilateral trade negotiations have focused on trade facilitation, the used of these bilateral non-tariff costs are an appropriate measure of costs associated with trade facilitation and logistics issues.

At-the-border-costs are also high in the Central and South Asia economies. Those costs are associated with the time and cost of shipping goods across borders and the complexity of procedures needed to ship the goods. Table 9.2 shows that all Central Asian countries as well as Afghanistan rank in the bottom 3 percent of countries in terms of ease of trading across borders; India ranks in the lower one-third; and Pakistan in the lower half.[70]

2. Agriculture versus Manufactures

Trade costs of agricultural products are considerably higher than those of manufacturing products in both regions. Figure 9.4 shows the cost differences since the mid-2000s. In Central Asia, agricultural trade costs are two-thirds higher than those of manufacturing products and, in South Asia, agricultural products cost almost 30 percent more to trade than manufacturing products.

Figure 9.4. Inter and Intra-Regional Trade Costs of Central and South Asia Economies

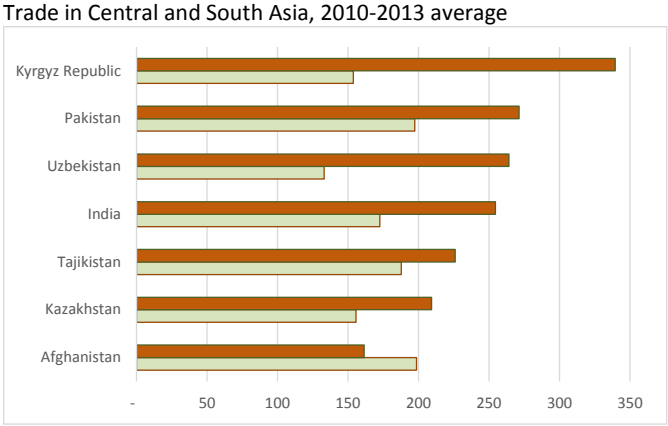


Source: Derived from data in Statistical Appendix.

Moreover, year-to-year variations in agricultural trade costs are much higher than those of manufacturing products in both regions. In Central Asia the absolute value of annual percentage variations in agricultural trade costs are 50 percent higher in manufactures, and in South Asia they are almost twice as high.

At the country level, all additional costs other than tariff costs involved in trading agricultural goods bilaterally rather than domestically ranges from 161 percent ad valorem equivalent in Afghanistan to nearly 340 percent ad valorem equivalent in Kyrgyzstan (Figure 9.5). Manufacturing trade costs are, in fact, higher in Afghanistan than in agricultural trade costs, whereas Kyrgyzstan's manufacturing trade costs are less than half of those for agricultural products. On average, agricultural trade costs are 50 percent higher than those of agricultural products in the Central and South Asia economies.

Figure 9.5. Non-Tariff Costs of Agricultural and Manufacturing Trade in Central and South Asia, 2010-2013 average



Source: Derived from data in Statistical Appendix.

[70] World Bank (2014), "Trading across Borders". In *Doing Business 2015*. Washington, DC. Available: http://www.doingbusiness.org/.

Bilateral trade costs differentials between agricultural and manufacturing products are fairly consistent within and across the two regions. Figure 9.6 shows the two-to-one relationship between bilateral trade costs of the two types of products. A 1:2 slope suggests that agricultural products are likely to be twice as costly to trade as manufactures between trading partners. The major exceptions are trade between Pakistan and Kyrgyzstan, where agricultural trade costs are 2.4 times more expensive than those of manufacturing products; and trade between Afghanistan and Kazakhstan, where the costs of agricultural trade other than those associated with tariffs are 40 percent lower than those of manufacturing products.

Figure 9.6. Bilateral Non-Tariff Costs of Agricultural and Manufacturing Trade, 2010-2013 average

Source: Derived from data in Statistical Appendix.

C. Trade Facilitation

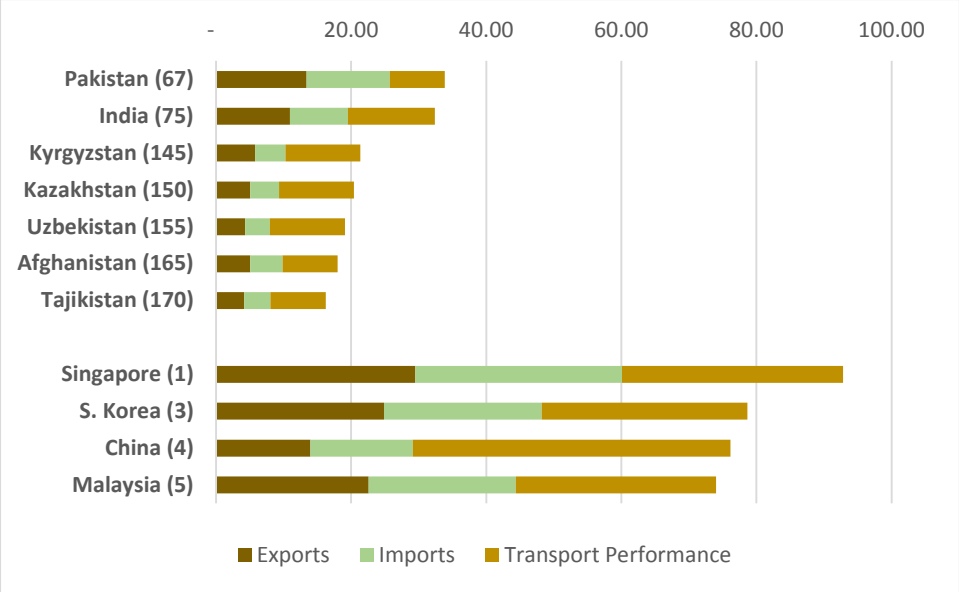
The Agreement on Trade Facilitation (ATF) concluded with its amendments on 27 November 2014 represents a major step towards reducing trade costs by expediting the release of customs goods and by cooperation between the customs authorities and other on trade facilitation and customs compliance authorities. The ATF is the first major multilateral trade agreement that has been concluded since the WTO itself was established in 1995. It goes well beyond the old view that trade facilitation should only focus on improving transactions at the border; instead, the AFT covers the entire range of issues impacting on trade costs along the supply chain.

The AFT will help address key issues for Central and South Asia's enterprises on behind-the-border issues, ranging from the importation of materials and components to the delivery of their products to markets. It recognizes that greater access to those markets provided by bilateral, regional and multilateral agreements needs to be complemented by measures that improve the ability of enterprises to compete on a level playing field if they are to effectively engage in international value chains.

These measures are especially important for all the countries in the two regions since they all score poorly in measures of international logistics and supply chain connectivity, especially when

compared with the world's most connected economies, located in the East Asia region: Singapore, Republic of Korea, China, and Malaysia, along with Hong Kong province of China (Figure 9.7). The Central Asian countries in particular all rank in the lowest quintile of a total of 177 countries in cross-country measures of supply chain performance. These ratings are based on the ISCC index, which measures connectivity performance based on the average of trading-across-borders indicators for exports and imports in the World Bank's Doing Business Report as well as UNCTAD's Linear Shipping Connectivity Index (LSCI) score. For landlocked countries, since they have no seaports, the study uses LSCI from the main transit country as a proxy to calculate their international shipping component.

Figure 9.7. Factors Explaining Central and South Asia's Connectivity, 2012-2014 Performance (International Supply Chain Connectivity Index)



Source: ESCAP, International Supply Chain Connectivity (ISCC) Database. Available: http://www.unescap.org/tid/artnet/iscci.asp.

On the positive side, three countries have substantially improved their overall International Supply Chain Connectivity Index measuring overall trade facilitation performance along the international supply chain. Between the mid-2000s and 2014, India improved its overall performance by 71 percent; Kyrgyzstan by 69 percent; and Uzbekistan by 64 percent because of improvements in their transport performances. Otherwise, these countries experienced little, if any, change in their underlying import and export indicators related to number of documents, time, and cost involved in trading across borders.

Other countries in the two regions have experienced deteriorations in their import and export indicators in the last 10 years. Afghanistan's combined import and export indicators fell by 20 percent, and Tajikistan's comparable indicators fell by 17 percent. In Kazakhstan and Pakistan, those performance indicators for number of documents, time, and cost involved in trading across borders fell by 8 to 10 percent during the period. These unfavorable trends point to the need for a reversal in trade facilitation trends, especially for those measures supporting regional and global production networks by (a) facilitating import of parts and components and their movement to a production facility; and (b) facilitating export of the processed good. While some

of these measures involve stroke-of-pen reforms that would eliminate trade impediments within a short time period, many NTMs require deeper reforms. For example, dissemination of information that helps businesses to initiate and sustain trade-related activities needs a great deal of investment in the full range of areas that meets specific requirements of different businesses. Broad information dissemination has little practical use to the private sector.

D. Ratings

Based on the evaluation methodology described in Chapter 3 and the estimates presented in this chapter, Table 9.3 shows the scores assigned to trade costs and trade facilitation in each country.

Table 9.3. Regional Trade Impact of Trade Costs and Trade Facilitation Measures

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Impact of all costs involved in trading goods intra- or inter-regionally relative to those involved in trading goods domestically***					
1	Kazakhstan	1	(2)	3	4	5
2	Kyrgyzstan	(1)	2	3	4	5
3	Tajikistan	1	(2)	3	4	5
4	Turkmenistan	(1)	2	3	4	5
5	Uzbekistan	(1)	2	3	4	5
6	Afghanistan	1	(2)	3	4	5
7	India	(1)	2	3	4	5
8	Pakistan	(1)	2	3	4	5
	B. ***Impact on intra- and inter-regional trade of discretionary non-tariff trade policies that differentiate between agricultural and manufacturing goods***					
1	Kazakhstan	1	2	(3)	4	5
2	Kyrgyzstan	(1)	2	3	4	5
3	Tajikistan	1	2	(3)	4	5
4	Turkmenistan	1	(2)	3	4	5
5	Uzbekistan	(1)	2	3	4	5
6	Afghanistan	1	2	(3)	4	5
7	India	1	(2)	3	4	5
8	Pakistan	(1)	2	3	4	5
	C. ***Impact of procedural, regulatory and technical barriers to trade on ease of trading across borders***					
1	Kazakhstan	1	(2)	3	4	5
2	Kyrgyzstan	(1)	2	3	4	5
3	Tajikistan	(1)	2	3	4	5

4	Turkmenistan	1	2	3	4	5
5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

D. *Impact of trade facilitation measures on intra- and inter-regional trade*

1	Kazakhstan	1	2	3	4	5
2	Kyrgyzstan	1	2	3	4	5
3	Tajikistan	1	2	3	4	5
4	Turkmenistan	1	2	3	4	5
5	Uzbekistan	1	2	3	4	5
6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

X. STRUCTURAL FACTORS IN TRADE

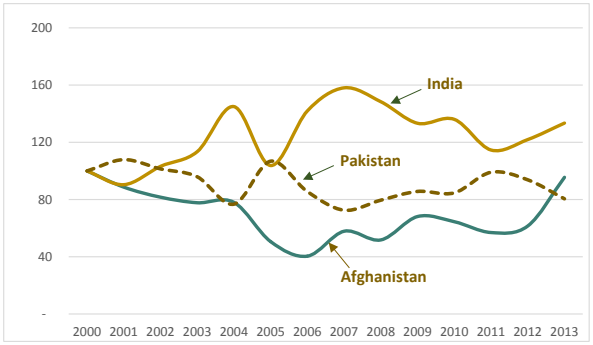
A. Export Performances

1. Intra-Regional Trade Performance

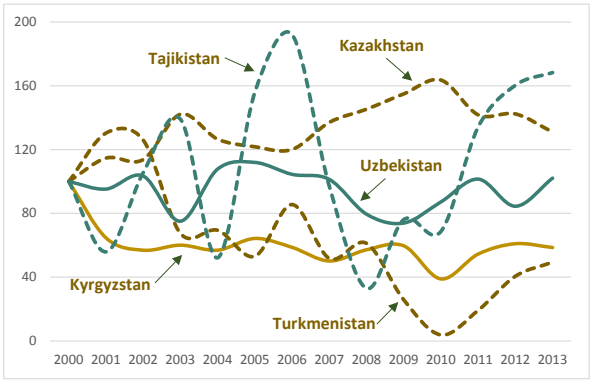
Export performance is measured by a country's change in market shares. Figure 10.1 shows the export performance of each South and Central Asian country relative to imports of all its intra-regional trading partners. Exports of each country are weighted by the value of exports to each trading partner in each year, while regional imports are weighted by the total value of imports of each country in the region for a given year.

Figure 10.1: Intra-Regional Market Shares, 2000-2013

South Asia:



Central Asia:



Source: Derived from data in United Nations, COMTRADE database.

In South Asia, Afghanistan's export performance in the intra-regional market has significantly improved since 2006. Its market share in South Asian rose from 4 percent in 2006 to 10 percent in 2013. However, the improvement represented a recovery of earlier declines since the early 2000s. India's intra-regional export performance has gradually improved, albeit with considerable year-to-year variations. Its intra-regional market share rose from 34 percent to 45 percent. These gains have occurred at the expense of Pakistan, which began the millennium with around 60 percent of the intra-regional market and whose share eroded by 15 percentage points by 2013.

In Central Asia, Kazakhstan has experienced the best export performance. Its intra-regional market share rose from 42 percent in 2000 to 60 percent in 2013, notwithstanding some erosion in those market shares since 2010. In contrast, there has been a considerable worsening of the intra-regional export performance of Turkmenistan and, to a somewhat lesser degree, Kyrgyzstan. For Turkmenistan, the decline was largely due to reduced exports directed at Kazakhstan, though trade with that country has increased significantly since 2011. Turkmenistan does not report any exports to either Tajikistan or Uzbekistan, so its performance is largely determined by trade with Kazakhstan and, to a considerably lesser extent, with Kyrgyzstan.

For its part, Tajikistan's export performance has varied greatly. But the large year-to-year changes are due to the very small intra-regional market share of that country, which has averaged only 1

percent of the total. So small changes in export market shares tend to be magnified when measured as an index.

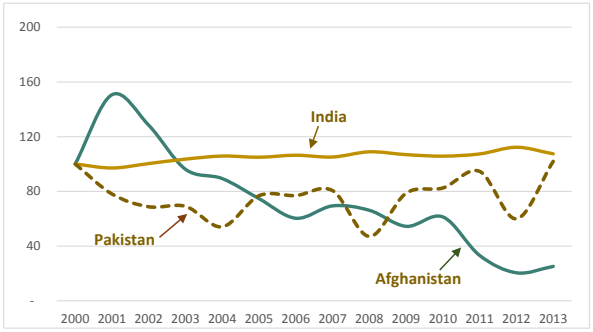
2. Inter-Regional Trade Performance

Figure 10.2 shows the inter-regional export performance of each South and Central Asian country relative to imports of all its intra-regional trading partners. As with intra-regional trade in the previous section, exports of each country are weighted by the value of exports to each trading partner in each year, while regional imports are weighted by the total value of imports of each country in the region for a given year.

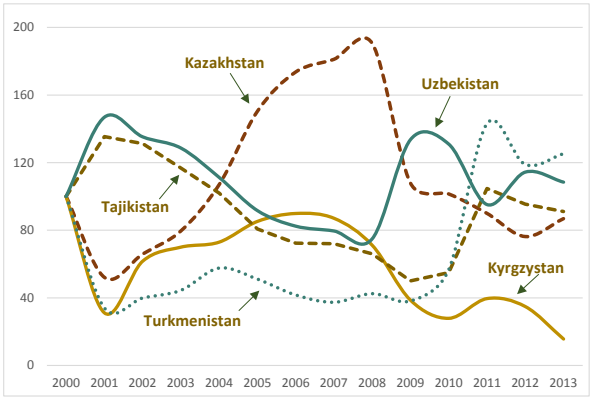
In South Asia, Afghanistan's export performance in the inter-regional market has deteriorated. Its market share in South Asia fell from a high of 13 percent in 2001 to 2 percent in 2013. In contrast, India's inter-regional export performance has strengthened. Its inter-regional market share rose from 83 percent to 89 percent during the period. Pakistan's market share of inter-regional trade has remained unchanged between 2000 and 2013. However, in the years in between its market shares fell from 9 percent to 4 percent in 2008, and then recovered to 9 percent by 2013.

Figure 10.2: Inter-Regional Market Shares, 2000-2013

South Asia:



Central Asia:



Source: Derived from data in United Nations, COMTRADE database.

In Central Asia, there have been large year-to-year variations in the inter-regional export performance of all the countries. Kazakhstan and Uzbekistan have the largest shares of inter-regional trade with South Asia. Kazakhstan's export market share nearly doubled in the 2000s, but after 2009 its share fell sharply and by 2013 it had declined to 23 percent. Uzbekistan has retained most of its inter-regional export market share since 2000, but it experienced large year-to-year changes in its share in the intervening years. Tajikistan, Turkmenistan and Kyrgyzstan also experienced large year-to-year variations in their inter-regional market shares, but their recent market shares are similar to those in 2000.

B. Constant-Market Share Analysis

Export performance is influenced by not only price (see Chapter 8) and non-price competitiveness (see Chapter 9), but also by the composition of exports. The composition of exports, in turn, refers to both the geographic destination of exports and the type of products exported. In this context, a country's export performance can be strong even though its price

competitiveness is modest or weak if either the demand for goods in an export market is particularly strong or the market for the types of goods exported is especially robust. In contrast, a country's price competitiveness may be strong but its export performance can nonetheless be weak because exports are directed to slowly expanding geographic markets or poorly performing product markets.

One way to separate a country's structural factors related to the geographic and commodity composition of its exports from competitiveness factors is through constant-market-share (CMS) analysis.[71] This technique decomposes a country's export growth into parts attributed to the general rise in world exports, the commodity composition, and the effect of competitiveness changes. Another way to describe the technique is that it serves to decompose a country's export growth relative to that of either or both overall regional exports and total world exports into (a) the portion of export growth concentrated in commodities in which the demand is either expanding relatively fast or growing at a relative slow rate compared with other markets; (b) export growth associated with relatively fast or slow growing trading partners within the Central and South Asia region; and (c) ability of each focal country to compete with other sources of supply. As such, it provides a way to measure whether a country's exports are succeeding (failing) to grow as rapidly as the world average for three reasons: (i) exports are concentrate in commodities whose demand is growing relatively fast (slowly); (ii) exports are destined for relatively fast growing (stagnant) regions; and (iii) exports are able (unable) to compete with other supply sources.

The *structure effect* refers to the change in a country's exports when its global market share remains constant. It simply describes export demand-related changes that are associated with changes in world imports. The differences between overall changes and actual changes that take place are associated with three structural effects:

(a) *Product composition effect*, which measures whether the country's specialization of exports are directed towards dynamic products in the world market;

(b) *Market-distribution effect*, which measures whether exports are directed to dynamic export markets; and

(c) *Residual effect*, which measures the interaction of product and market specialization.

The *competitiveness effect* refers to the difference between the actual export change and the hypothetical change if the country had maintained its share of export of each commodity group to each country. It is measured by the difference between actual change in overall exports and the structure effect.

It is important to emphasize that CMS analysis is CMS lacks causality and therefore is not intended to identify the reasons underlying a change in a country's export performance identified by their

[71] The original CMS approach was developed by Edward Leamer and Robert Stern methodology, using the methodology first proposed by (1951). See E.E. Leamer and R.M. Stern (1970), Quantitative International Economics. Boston: Allyn and Bacon International Series in Economics. Available: https://ideas.repec.org/a/eee/inecon/v1y1971i3p359-361.html.

export differential associated, for example, with changes in domestic cost structure or the exchange rate. Instead, the CMS components show the structural characteristics associated with shifts in export growth.

The results of the decomposition analysis for changes in exports of the Central and South Asian countries to both regions between 2000-03 and 2010-13 are shown in Table 10.1. The visual representation of those results are presented in Figure 10.3. The following are highlights of analysis:

- *Regional Import Growth Effect*: This effect shows the growth in exports that would have occurred had the exporting country maintained a constant share of the regional market. In the case of Afghanistan, exports would have grown by 90 percent of the actual increase that took place between the two periods. In other words, rather than having expanded by US$331 million, they would only have increased by US$297 million. Other countries whose percentage change in exports exceeded that of regional imports were Uzbekistan, Tajikistan, Kazakhstan and India. Between 2000-03 and 2010-13, total regional imports grew by 511 percent. Afghanistan's exports to regional trade partners expanded by 586 percent, that of Uzbekistan by 742 percent, Tajikistan by 618 percent, Kazakhstan by 602 percent, and India by 524 percent. In contrast, Turkmenistan's, Kyrgyzstan's and Pakistan's exports grew by less than overall regional imports. Between 2000-03 and 2010-13, Turkmenistan's exports increased by only 184 percent, Kyrgyzstan's exports increased by 308 percent, and Pakistan's exports grew by 430 percent.
- *Commodity Composition Effect*: Afghanistan was the only country to have focused it exports on high growth commodity markets in the region between 2000-03 and 2010-13. Its positive commodity structure drove exports 42 percent above the overall growth of intra- and inter-regional trade during the period. Kazakhstan and Tajikistan also benefitted from the structure of their commodity exports, but by a considerably smaller amount. Kazakhstan's exports expanded by 13 percent more than did overall intra- and inter-regional trade growth; and Tajikistan's exports expanded grew by 9 percent above the overall increased in intra- and inter-regional trade. In contrast, Turkmenistan's and Kyrgyzstan's exports experienced substantially less-than-proportional increases in their exports because of their commodity composition. Turkmenistan's exports were 39 percent below the growth in overall intra- and inter-regional trade during the period, while that of Kyrgyzstan's exports was 36 percent below the growth experienced by overall intra- and inter-regional trade. India, Pakistan and Uzbekistan also experienced less-than-proportional increases in their exports, relative to overall intra- and inter-regional trade growth.
- *Market Distribution Effect*: Turkmenistan, Kyrgyzstan and Pakistan had large market share losses because exports were focused on slow-growing trading partners. Turkmenistan's exports to the region were 178 percent below what they would otherwise have been had they maintained the same proportion as the overall geographic distribution of imports from intra- and inter-regional trade. Likewise, Kyrgyzstan's exports were 66 percent below overall intra- and inter-regional trade because of their unfavorable geographic distribution among trading partners. Pakistan's exports grew by 19 percentage points

below regional trade because of their geographic distribution. Unlike those three countries, Uzbekistan, Tajikistan, Kazakhstan, Afghanistan and India all expanded their exports above overall intra- and inter-regional trade because of their distribution to fast-growing trading partners. The magnitude of that structural effect of their exports ranged from a low of 2 percent for India to a high of 23 percent for Uzbekistan.

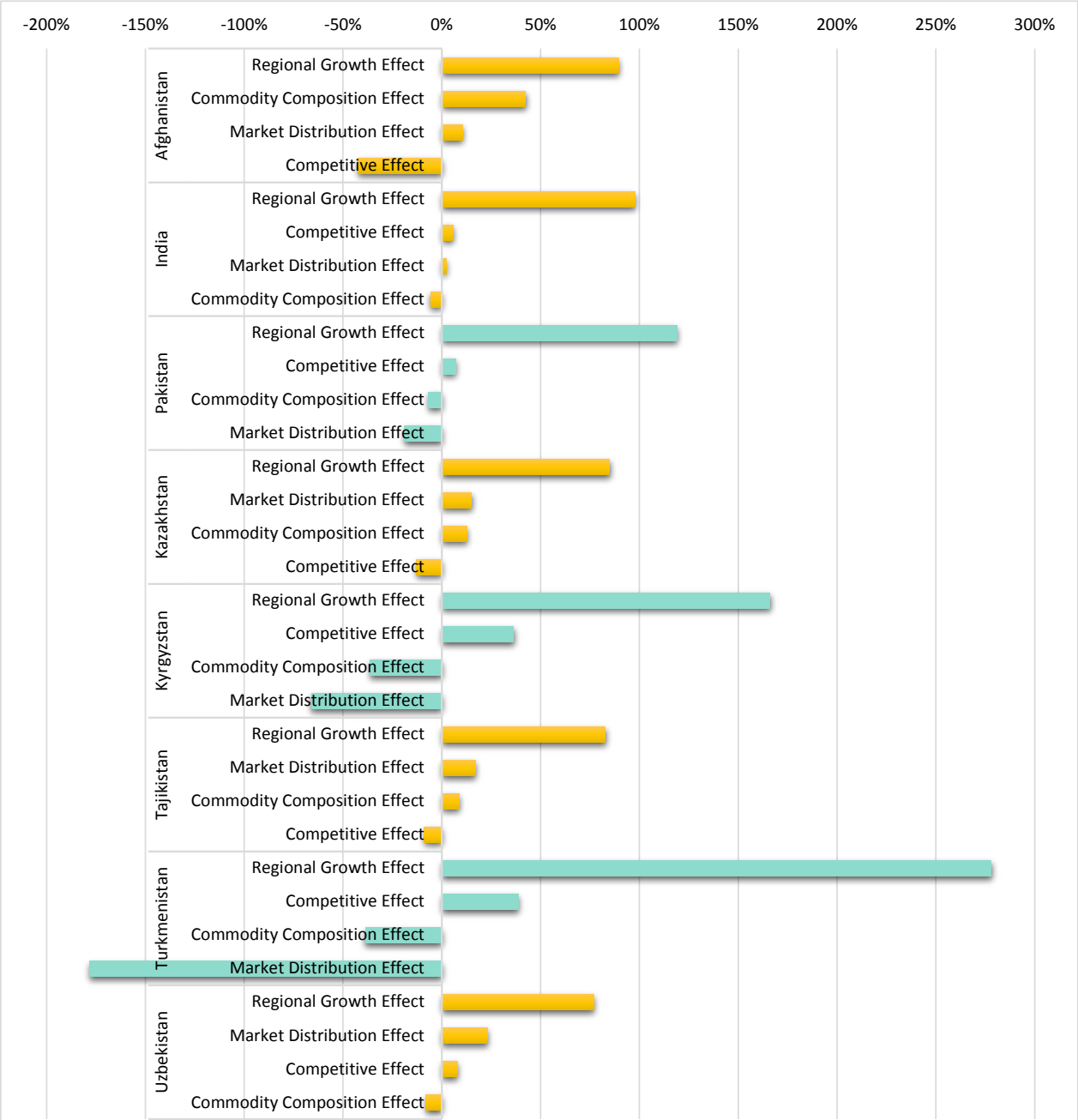
- *Price and Non-Price Competitive Effect*: Turkmenistan and Kyrgyzstan benefitted substantially from price and non-price factors affecting their trade within the two regions. Turkmenistan's exports rose by 39 percent above that of overall intra- and inter-regional trade because of those effects, while Kyrgyzstan's exports rose by 36 percent above overall trade. Uzbekistan, Pakistan and India also benefitted by between 6 and 8 percent because of those price and non-price effects. In comparison, Afghanistan suffered a 42 percent loss in the amount of intra- and inter-regional trade that took place because of its lack of price and non-price competitiveness, and Kazakhstan experienced a 13 percent loss in its exports because of its lack of competitiveness. Tajikistan's loss in exports associated with its lack of price and non-price competitiveness was somewhat lower at 9 percent.

Table 10.1: Decomposition Analysis of Exports to Central and South Asia between 2000-03 and 2010-13

	Total Change in Exports to Regions		**Percentage Decomposition of Export Growth between 2000-2003 and 2010-2013**			
	Million US dollars	Sum of Decomposition Analysis	Regional Import Growth Effect	Commodity Composition Effect	Market Distribution Effect	Price and Non-Price Competitive Effect
Afghanistan	331.0	100%	90%	42%	10%	-42%
India	2,412.8	100%	98%	-6%	2%	6%
Pakistan	2,190.3	100%	119%	-7%	-19%	7%
Kazakhstan	2,794.7	100%	85%	13%	15%	-13%
Kyrgyzstan	409.3	100%	166%	-36%	-66%	36%
Tajikistan	122.4	100%	83%	9%	17%	-9%
Turkmenistan	276.0	100%	278%	-39%	-178%	39%
Uzbekistan	1,474.8	100%	77%	-8%	23%	8%

Source: Derived from data in United Nations, Comtrade database.

Figure 10.3: Measuring Export Performance and Constant-Market Share Analysis



Box 10.1. Measuring Export Performance and Constant-Market Share Analysis

- *Market Shares Index:* This index measures the share of a country's exports in the Central Asia or South Asia market. The export market share index (S) is defined as follows:

$$S_{ij} = \frac{X_{ij}}{M_j} \quad \text{...(10.1)}$$

where X_{ij} represents exports of country *i* to market *j* and M_j is represents imports of market *j.* The ratio is normalized to an index with base 2000=100 in order to allow inter-country and inter-market comparisons.

- *Constant-Market-Share Analysis:* Changes in the share of a country's exports in the Central Asia or South Asia market are separated into the following components:

$$V_t^A - V_0^A = g^* V_0^A + \sum_k (g_k^* - g^*)\, V_{k0}^A + \sum_j \sum_k \left(g_{jk}^* - g_k^*\right) V_{jk0}^A + \sum_j \sum_k \left(V_{jkt}^A - V_{jk0}^A - g_{jk}^* V_{jk0}^A\right) \quad \text{...(10.2)}$$

where

$V_t^A - V_0^A$	represents the actual change in exports of country V^A between period *0* and period *t*.
$g^* V_0^A$	represents the growth of exports of country V^A from period *0* due to the general rise in Central and South Asia regional exports, denoted *g**.
$\sum_k (g_k^* - g^*)\, V_{k0}^A$	represents the growth of exports of country V^A from period *0* due to the commodity composition of exports, where g^*_k denotes the region's exports of product *k* and V^A_{k0} is the value of country A's exports of product *k*.
$\sum_j \sum_k \left(g_{jk}^* - g_k^*\right) V_{jk0}^A$	represents growth of exports of country V^A from period *0* due to the geographic market distribution of exports, where g^*_{jk} denotes the region's exports of product *k* to trading partner *k*, and V^A_{jk0} is the value of country A's exports of product *k* to trade partner *j.*
$\sum_j \sum_k \left(V_{jkt}^A - V_{jk0}^A - g_{jk}^* V_{jk0}^A\right)$	represents growth of exports of country V^A from period *0* due to the interaction of product and market specialization.

Sources: M. Dyadkova and G. Momchilov (2014), "Constant Market Shares Analysis Beyond the Intensive Margin of External Trade". Bulgarian National Bank. Available: http://www.bnb.bg/bnbweb/groups/public/documents/bnb_publication/discussion_2014_94_en.pdf, and World Bank (2013), "Online Trade Outcomes Indicators - User's Manual". Washington, DC. Available: http://wits.worldbank.org/WITS/docs/TradeOutcomes-UserManual.pdf.

C. Ratings

Table 10.2 shows the scores assigned to changes in market shares in each country, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 10.2. Summary Assessment of Changes in Market Shares

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***The commodity composition of trade has encouraged regional exports***					
1	Kazakhstan	1	2	3	**4**	5
2	Kyrgyzstan	**1**	2	3	4	5
3	Tajikistan	1	2	3	**4**	5
4	Turkmenistan	**1**	2	3	4	5
5	Uzbekistan	1	**2**	3	4	5
6	Afghanistan	1	2	3	4	**5**
7	India	1	**2**	3	4	5
8	Pakistan	1	**2**	3	4	5
	B. ***The geographic composition of trade has encouraged regional exports***					
1	Kazakhstan	1	2	3	4	**5**
2	Kyrgyzstan	**1**	2	3	4	5
3	Tajikistan	1	2	3	4	**5**
4	Turkmenistan	**1**	2	3	4	5
5	Uzbekistan	1	2	3	4	**5**
6	Afghanistan	1	2	3	**4**	5
7	India	1	2	**3**	4	5
8	Pakistan	1	**2**	3	4	5
	C. ***Price and non-price competitiveness have led to more-than-proportional increases in exports relative to overall regional trade***					
1	Kazakhstan	1	**2**	3	4	5
2	Kyrgyzstan	1	2	3	4	**5**
3	Tajikistan	1	**2**	3	4	5
4	Turkmenistan	1	2	3	4	**5**
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	**1**	2	3	4	5
7	India	1	2	3	**4**	5
8	Pakistan	1	2	3	**4**	5

PART III. MEASURING REGIONAL TRADE AND VALUE CHAIN OPPORTUNITIES

XI. REGIONAL TRADE AGREEMENTS AND GRAVITY MODELS

A. Bilateral and Regional Trade Agreements

The Central Asian countries (except Turkmenistan) and the South Asian countries have bilateral trade agreements (BTAs) with regional partner countries, but there are no BTAs between countries from the two regions (Table 11.1). The Afghanistan India Preferential Trade Agreement was signed in 2003. Few products covered under this bilateral agreement are eligible for preferential access. So far, India has reduced tariffs on 38 products, while Afghanistan has given India concessionary rates for 8 products.[72] For Afghanistan-Pakistan trade, a transit agreement was concluded in 2010, which allows Afghanistan to transit duty-free goods overland through Pakistan and via Pakistani ports to other countries. The agreement does not, however, permit India to transit goods through Pakistan for export to Afghanistan, as Pakistan and India continue to impose restrictions on their bilateral trade owing to security concerns.[73]

Regional trade arrangements are in the form of free trade agreements (FTAs), transport and trade facilitation (TTF) agreements, transit trade agreements (TTAs), and customs unions (CUs) (Table 11.1 and Figure 11.1).

- *Economic Cooperation Organization Trade Agreement (ECOTA)* – The Economic Cooperation Organization Trade Agreement is made up of Afghanistan, Kazakhstan, Kyrgyz Republic, Pakistan, Turkmenistan, Tajikistan, and Uzbekistan, as well as Azerbaijan, China, and Mongolia. ECOTA has had limited results to date, and has yet to be ratified by Azerbaijan, Turkmenistan and Uzbekistan. However, it does offer trade opportunities for Central and South Asia regional trade to those countries that have ratified the agreement.[74]
- *CIS Free Trade Agreement (CISFTA)* –The CIS Free Trade Agreement was signed in 2011 by Kazakhstan, Kyrgyzstan, Tajikistan and 5 other CIS countries (Armenia, Belarus, Moldova, Russian Federation and Ukraine). In December 2013 Uzbekistan signed and then ratified the treaty, and Kyrgyzstan ratified the treaty affective January 2014. Tajikistan is close to completing the ratification process.
- *Central Asia Regional Economic Cooperation (CAREC)* – The Central Asia Regional Economic Cooperation program is a regional initiative supported by Asian Development Bank to encourage transport and trade facilitation among all the countries in the Central and South Asia regions except India, and it also includes Azerbaijan, China and Mongolia. In trade-related activities, the program aims to increase trade and investment through

[72] Trade and Accession Facilitation for Afghanistan (TAFA, 2009), "South Asia Free Trade Area (SAFTA) – Afghanistan's Entry in to the Global Economy". Prepared for USAID. Internal document.

[73] The Economist Intelligence Unit (2014), "Poor outlook for Pakistan-Afghanistan bilateral trade". 24 April 2014. Online: http://country.eiu.com/article.aspx?articleid=1771757161&Country=Afghanistan&topic=Economy.

[74] M. Ali and N. Mujahid (2015), "An Analytical Study of Economic Cooperation Organization (ECO): Challenges and Perspectives". *European Academic Research* 2(2): 14031-14045. Available: http://euacademic.org/UploadArticle/1330.pdf.

Table 11.1: Bilateral and Regional Trade Arrangements in Central and South Asia

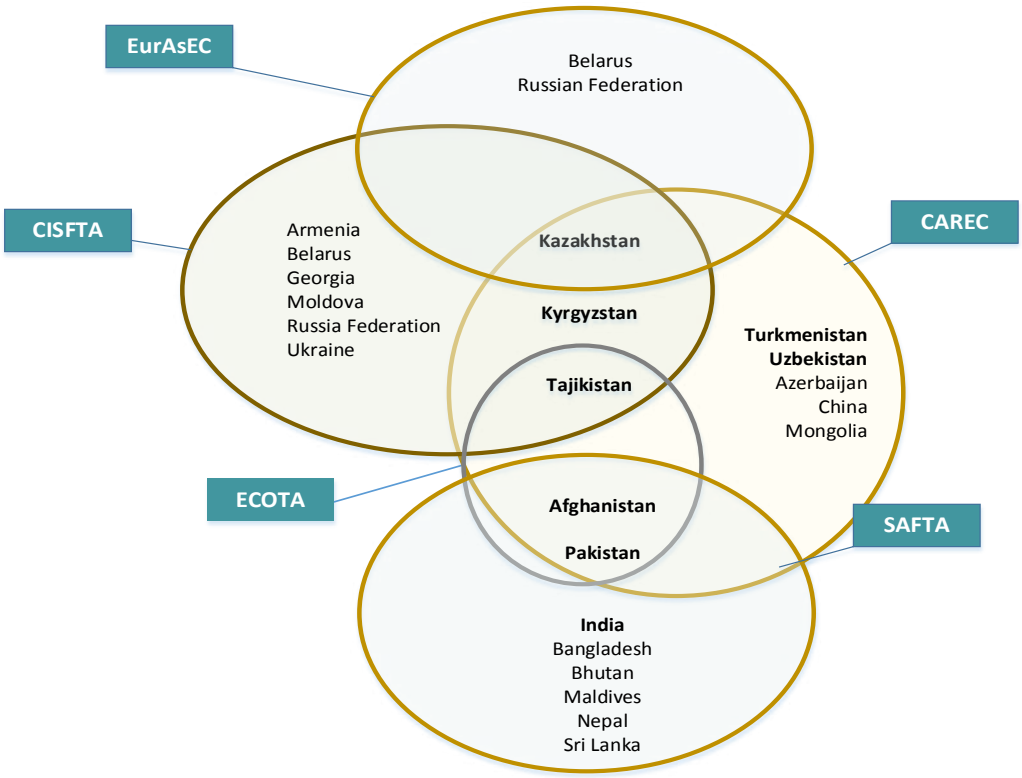
	Central Asia							
	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Afghanistan	India	Pakistan
Kazakhstan		BTA (1999)	BTA					
Kyrgyzstan	BTA (1999)		BTA		BTA (1999)			
Tajikistan								
Turkmenistan								
Uzbekistan		BTA (1999)						
Afghanistan							BTA (2003)	TTA (2010)
India						BTA (2003)		BTA (2004)
Pakistan							BTA (2004)	
CISFTA (2011)	FTA	FTA	FTA					
EurAsEC (1995)	CU	CU (acceding)						
ECOTA (2003)			FTA			FTA		FTA
SAFTA (2004)						FTA	FTA	FTA
CAREC (1997)	TTF	TTF	TTF	TTF	TTF	TTF		TTF

Notes: Dates in parenthesis refer to dates in which the agreement was signed.
BTA: Bilateral Trade Agreement.
CU: Customs Union.
FTA: Free Trade Agreement.
TTF: Transport and Trade Facilitation.
TTA: Transit Trade Agreement.
CAREC: Central Asia Regional Economic Cooperation. Also includes Azerbaijan, China, and Mongolia.
CISFTA: CIS Free Trade Agreement, not yet in force, but signed by some member countries. Also includes Armenia, Belarus, Georgia, Moldova, Russia Federation and Ukraine.
ECOTA: Economic Cooperation Organization Trade Agreement, not yet in force, but ratified by some countries. Also includes Iran and Turkey. Turkmenistan and Uzbekistan along with Azerbaijan have yet to ratify the treaty.

infrastructure connectivity, transport and trade facilitation, and energy trade. It also supports studies on how to overcome regional barriers to trade, and how to support accessions to the World Trade Organization (WTO) through capacity-building initiatives. A transit and motor vehicle cross-border trade agreement (CBTA) was signed in early 2013 between Afghanistan, Tajikistan and Kyrgyzstan.

- South Asia Free Trade Area (SAFTA) – The South Asia Free Trade Area came into force in 2006 and uses the following instruments to facilitate trade between signatory countries: (a) a trade liberalization program; (b) rules of origin; (c) institutional arrangements; (d) consultations and dispute settlement procedures; and (e) safeguard measures. It has

Figure 11.1: Regional Trade-Related Arrangements in Central and South Asia



sensitive lists in which Afghanistan has 1,072 items on the negative list; India has 25 items on the list for the least developed countries (LDCs) and 695 for the non-LDCs; and Pakistan originally had 1,169 items in its sensitive list but it has since cut that number down to 936.

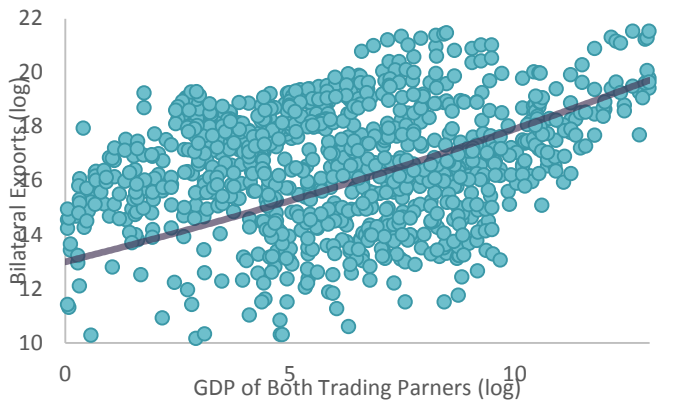
There are also FTAs and partnership agreements with the United States and the European Union. China is promoting an FTA with Central Asia. The Eurasian Economic Community (EAEC) is a customs union between Belarus, Kazakhstan and the Russian Federation. It introduces the free movement of goods, capital, services and people and provides for common transport, agriculture and energy policies, with provisions for a single currency and greater integration in the future. The EAEC has implemented common tariffs, harmonized customs procedures and eliminated internal customs controls. If fully implemented, the EAEC could cause considerable trade diversion from regional trade in Central Asia. Moreover, an analysis based on a computable general equilibrium (CGE) model of Kazakhstan suggests that implementing the customs union with a rise in Kazakhstan's external tariffs would substantially slow down the growth of real GDP in that country.[75]

[75] Asia Development Bank (ADB, 2006), "Central Asia: Increasing Gains from Trade Through Regional Cooperation in Trade Policy, Transport, and Customs Transit". Manila. Available: http://www.adb.org/publications/central-asia-increasing-gains-trade-through-regional-cooperation-trade-policy-transport.

World Trade Organization (WTO) members of the two regions consist of India, Pakistan, Kyrgyzstan and Tajikistan. That leaves Afghanistan, Kazakhstan, Turkmenistan and Uzbekistan outside the rules of the WTO. Kazakhstan is expected to join soon, and Afghanistan and Uzbekistan are observers. Since many countries with which Central Asian countries 'under-trade' in South Asia are WTO members, accession to the WTO could help the two regions fully realize their bilateral trade potential and diversify trade in terms of geographical distribution.

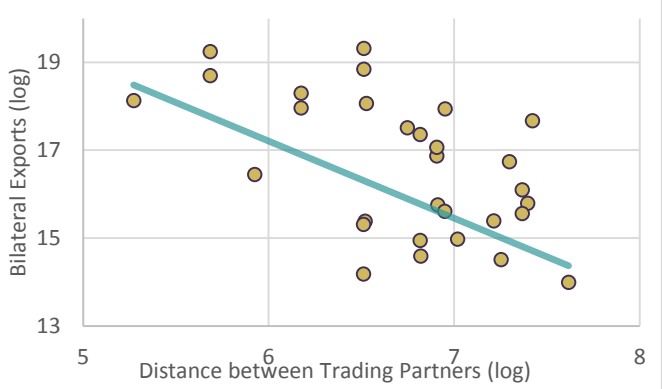
Most empirical studies find that the Central Asian countries generally have a narrow coverage and complex rules of origin, and most of them have remained on paper only. Consequently, their impact on trade has so far been limited. If fully implemented, however, the concluded and planned RTAs involving the CARs, such as the customs union of the Eurasian Economic Community (EAEC), may cause considerable trade diversion and have significant adverse effects on the CARs. An analysis based on a computable general equilibrium (CGE) model of Kazakhstan suggests that implementing the EAEC customs union with a rise in Kazakhstan's external tariffs would substantially slow down the growth of real GDP in Kazakhstan.[76] The cumulative shortfall in real GDP over ten years

Figure 11.2: Relationship between Bilateral Trade and GDP of Central and South Asian countries



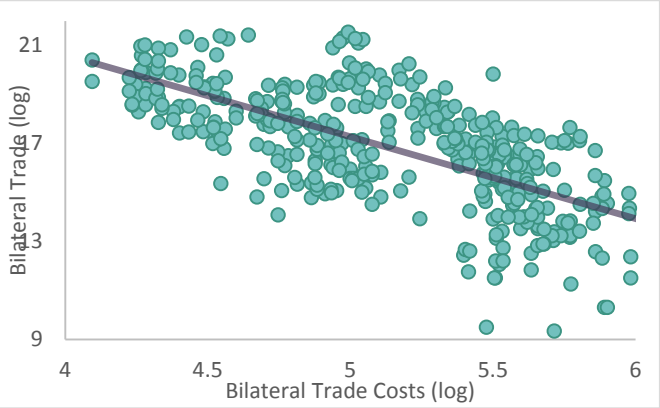
Source: See Statistical Appendix for data sources.

Figure 11.3: Relationship between Bilateral Trade and Distance of Central and South Asian countries



Source: See Statistical Appendix for data sources.

Figure 11.4: Relationship between Bilateral Trade and Trade Costs



Source: See Statistical Appendix for data sources.

[76] Asian Development Bank (ADB, 2006), ""Central Asia: Increasing Gains from Trade through Regional Cooperation in Trade Policy, Transport, and Customs Transit". Manila. Available: http://www.cefir.ru/download.php?id=816.

would exceed 31 percent of GDP in the base year. Implementing the EAEC customs union even with a reduction in Kazakhstan's external tariffs would slow down the growth of real GDP. However, its adverse effects on economic growth would be much smaller than in the previous scenario.

B. Modeling Regional Trade

Gravity models are commonly used to explain bilateral trade flows between two countries on the basis of their economic sizes, measured in terms of GDP, and direct geographical distances between the countries. Most estimates of gravity models add a certain number of dummy variables that test for specific effects. Instead of the use of total bilateral trade flows as the dependent variable, use of bilateral export flows are preferable since total bilateral trade cannot distinguish between the impact of regional exports from non-regional exports.[77]

In our augmented gravity model, we have added three additional variables:

- First, following earlier studies, we have included real bilateral exchange rates to measure price competitiveness.[78]
- Second, given the importance of the new bilateral trade costs database developed by UNESCAP and the World Bank, we have included total bilateral trade costs between partner trading countries, as described in Chapter 9 of this study and the Statistical Appendix.
- Third, we have included the number of days required to process exports, based on *Doing Business* data.[79]

Details about the variables and their sources of data are described at the end of the Statistical Appendix. The gravity equations have been estimated for the period 1995-2013 using dynamic panel data estimations.

In the model estimates, the expected signs of the coefficients are as follows:

- The coefficient for *GDP* of reporter and trading partners is expected to have a positive sign since larger-size economies are expected to trade more than smaller ones. The data of the Central and South Asian countries generally supports that hypothesis (Figure 11.2).
- The coefficient for distance between trading partners is expected to have a negative sign since the more remote the trading partners, the less likely is trade. The data for the Central and South Asian countries generally supports this hypothesis (Figure 11.3).

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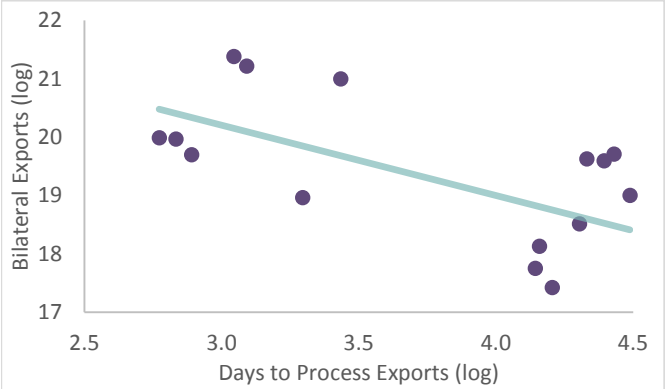
[77] L. Cernat (2001), "Assessing Regional Trade Arrangements: Are South-South RTAs More Trade Diverting?" *Global Economy Quarterly*, Vol. 2, No. 3, pp. 235-59. Available: http://unctad.org/en/Docs/itcdtab17_en.pdf.

[78] I. Soloaga and Winters, L.A. (2001), "Regionalism in the Nineties: What Effect on Trade?" *The North American Journal of Economics and Finance*, Vol. 12, pp.1-29. Available: http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-2156.

[79] E. Helpman, M. Melitz, and Y. Rubinstein (2008), "Estimating trade flows: trading partners and trading volumes". *Quarterly Journal of Economics* 123, no. 2: 441-487. Available: http://qje.oxfordjournals.org/content/123/2/441.short.

- The coefficient for the real bilateral exchange rate between trading partners is expected to have a positive sign since an increase in the price competitiveness of a country leads to greater exports. The data for the Central and South Asian countries generally supports this hypothesis.
- The coefficient for trade costs between trading partners is expected to have a negative sign since the longer the time needed to process exports, the less likely is trade between two countries. The data for the Central and South Asian countries generally supports this hypothesis (Figure 11.4).
- The coefficient for 'time needed to process exports' is expected to have a negative sign since the higher the cost of trade, the less likely is trade between two countries. The data for the Central and South Asian countries generally supports this hypothesis (Figure 11.5).
- The coefficients of the common border, language and colonizer variables are expected to have positive signs since countries that share borders, languages and colonial pasts tend to have relatively strong business and economic ties.

Figure 11.5: Relationship between Bilateral Trade and Time to Process Exports



Source: See Statistical Appendix for data sources.

The empirical findings of different applications of the gravity model have been mixed. For the South Asia FTA (SAFTA), the results indicate a small impact on India but larger ones in other member countries.[80] Other studies found that regional integration in South Asia would lead to a creation of net export, while others found that it predicted a net trade diversion.[81] Still others found that SAPTA would led to both trade creation for some countries (including India and Pakistan) and trade diversion for others.[82] In Central Asia, empirical studies have found that

[80] T.N. Srinivasan and G. Canonero (1995). "Preferential agreements in South Asia: theory, empirics and policy". Yale Growth Centre, Yale University; and Sengupta, N., and A. Banik. 1997. "Regional trade and investment: case of SAARC". *Economic and Political Weekly* 32 (November 15-21): 2930-2931.

[81] S. Coulibaly, (2004). "On the Assessment of Trade Creation and Trade Diversion Effects of Developing RTAs," Paper Presented at the Annual Meeting 2005 of the Swiss Society of Economics and Statistics on Resource Economics, Technology, and Sustainable Development. (available at http://www.wif.ethz.ch/resec/sgvs/078.pdf); and M.K. Hassan (2001). "Is SAARC a Viable Economic Block? Evidence from gravity model", *Journal of Asian Economics,* Volume 12, No. 2, pp.263-290. Available: https://ideas.repec.org/a/eee/asieco/v12y2001i2p263-290.html.

[82] M. Rahman, Shadat, W., and Das, N.C. (2006). "Trade Potential in SAFTA: An Application of

Augmented Gravity Model", Centre for Policy Dialogue, Occasional Paper 61. Available: http://cpd.org.bd/pub_attach/OP61.pdf.

regional trade arrangements have had little, if any, impact on trade flows.[83] For the more open economies of Kazakhstan and Kyrgyzstan, trade costs have influenced bilateral trade, whereas for the closed economies of Tajikistan, Turkmenistan and Uzbekistan, country size has dominated trade patterns between partner countries.

C. Estimating and Forecasting Intra- and Inter-Regional Trade

The model has been estimated for the following relationships:

- Central Asia intra-regional trade
- Central Asia inter-regional trade with South Asia
- South Asia intra-regional trade
- South Asia inter-regional trade with Central Asia
- Afghanistan trade with rest-of-South Asia
- Afghanistan trade with Central Asia

Central and South Asia trade of each country in the corresponding regions as well as Afghanistan trade are disaggregated into bilateral trade relationships. For each of those bilateral relationships, there are associated data with (a) bilateral trade costs between trading partners in and between the two regions; (b) bilateral real exchange rates measuring competitiveness between trading partners; and (c) a series of binary variables measuring contiguousness, or lack thereof, of borders between trading partners and others factors measuring possible linkages in terms of common languages or colonial pasts that could enhance trade opportunities. In the case of the income variables for both the reporter country and the partner countries, as well as the 'time to process exports' variable, the values are common to all bilateral relationships of each reporter country.

[83] A. Mazhikeyev, T.H. Edwards, and M. Rizov (2014), "Openness and Isolation: the comparative trade performance of the Former Soviet Central Asian countries". School of Business and Economics, Loughborough University. Economics Discussion Paper Series WP 2014 – 02. Available: https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/15706/1/Mazhikeyev_Edwards_Rizov_DP2014_02.pdf.

Box 11.1: The Gravity Model for Central and South Asia Trade

The gravity model for trade within and between Central and South Asia is estimated by:

$$ln(X_{ijt}) = \beta_0 + \beta_1 ln(Y_{it}) + \beta_2 ln(Y_{jt}) + \beta_3 ln(D_t) + \beta_4 ln(R_{ijt}) + \beta_5 ln(C_{ijt}) + \beta_6 ln(B_{it}) + \beta_7 d1_{ij}) + \beta_8 d2_{ij} + \beta_9 d3_{ij} + \beta_{10} d4_{ij} + \beta_{11} d5_{ij})$$

where Y_i = GDP of reporter country
Y_j = GDP of partner country
D_{ij} = Distance between trading partners
R_{ij} = Real cross exchange rate between trading partners
C_{ij} = Trade costs between trading partners
B_i = Time to process exports in reporter country
$d1_{ij}$ = Binary variable, which takes value of 1 if two countries are contiguous and "0" otherwise
$d2_{ij}$ = Binary variable, which takes value of 1 if two countries share official language; 0 otherwise
$d3_{ij}$ = Binary variable, which takes value of 1 if two countries share ethno-common language; 0 otherwise
$d4_{ij}$ = Binary variable, which takes value of 1 if two countries have had a colonial link; 0 otherwise
$d5_{ij}$ = Binary variable, which takes value of 1 if two countries have had a common colonizer; 0 otherwise

Table B11.1 reports the results of the estimates of the gravity model for the period 1995-2013. The estimated coefficients and use of the model to project trade under different assumptions are discussed in Section C of this chapter.

(Continued)

Box 11.1: The Gravity Model for Central and South Asia Trade *(Continued)*

Table B11.1 Results of Estimation of Gravity Model on Central and South Asia Intra-Regional and Inter-Regional Exports

	Central Asia Trade		*South Asia Trade*		*Afghanistan Trade*	
	with Central Asia	with South Asia	with South Asia	with Central Asia	with South Asia	with Central Asia
GDP of reporter (log)	0.913***	0.839***	0.499***	0.950***	0.418	1.744***
	(0.110)	(0.188)	(0.073)	(0.061)	(0.292)	(0.335)
GDP of partner (log)	0.331***		0.17**	0.503***	1.073**	0.535***
	(0.112)		(0.065)	(0.070)	(0.413)	(0.159)
Distance (log)	-0.172	-0.335	-0.385		-2.297**	-5.189***
	(0.281)	(0.725)	(0.425)		(0.857)	(0.569)
Real bilateral exchange rate	0.169	5.617	1.551**			
	(1.59)	(3.235)	(0.933)			
Trade costs	-1.127	-4.795***	-3.642***	-0.836**		
	(0.737)	(0.969)	(0.829)	(0.424)		
Export processing time	-2.385*					
	(1.340)					
Contiguity dummy	0.645			4.819***		
	(0.253)			(0.525)		
Constant	30.164	16.401	29.774	13.647	25.464	43.457
R-squared	0.825	0.603	0.871	0.866	0.930	0.775

Notes:
(a) See Appendix table for data sources.
(b) Standard errors are given in parentheses.
(c) ***p < 0.01, **p < 0.05, *p < 0.1

Estimates of the relationships are shown in Box 11.1 and have the following characteristics:

- The own income variable, measured by the nominal U.S. dollar value of GDP in the reported country, is statistically significant at the 1 percent level of confidence, with the exception of Afghanistan trade with other South Asian countries. In those cases where the variable was statistically significant, the estimated parameters have the expected positive sign.
- The partner country income variable, measured in the same way as the own income variable, is statistically significant at the 1 percent level for intra-regional Central Asia trade, South Asia inter-regional trade, and Afghanistan trade with Central Asia; it is statistically significant at the 5 percent level for inter-regional South Asia trade and Afghanistan trade with South Asia; and it is not considered to be statistically significant at

the 10 percent level of confidence for Central Asia trade with South Asia. In those cases where the variable was statistically significant, the estimated parameters have the expected positive sign.

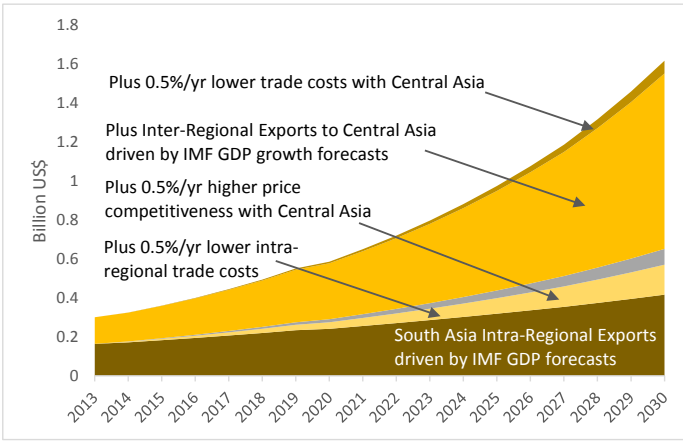
- The distance variable, measured in kilometers, is statistically significant at the 1 percent level for Afghanistan trade with Central Asia; it is statistically significant at the 5 percent level for Afghanistan trade with South Asia; and it is not considered to be statistically significant at the 10 percent level of confidence for Central and South Asia inter- and intra-regional trade. Where the variables are statistically significant, the estimated parameters have the expected negative sign in all the relationships except South Asia trade with Central Asia, indicating that trade is likely to be greater with nearby countries than with remote countries.
- The competitiveness variable, measured in terms of the bilateral or cross real exchange rate index, is statistically significant at the 5 percent level for South Asia intra-regional trade. The estimated parameters have the expected positive sign in that estimated relationships as well as in those of Central Asia intra- and inter-regional trade.
- The cost of trade variable, which covers tariff and non-tariff barriers to trade, is statistically significant at the 1 percent level for Central Asia trade with South Asia and South Asia intra-regional trade; it is statistically significant at the 5 percent level for South Asia trade with Central Asia; and it is not considered to be statistically significant at the 10 percent level of confidence for Central Asia trade with South Asia. In all these cases as well as in the case of Central Asia intra-regional trade, the estimated parameters have the expected negative sign.
- The time to process exports variable, measured in terms of number of days needed to process exports in the reporter country, is only statistically significant at the 10 percent level for Central Asia intra-regional trade, and it has the expected negative sign.
- The contiguity variable, measured by a binary variable that takes the value of 1 for contiguous countries and 0 otherwise, is only statistically significant at the 1 percent level for South Asia trade with Central Asia, and it has the expected positive sign for that relationship as well as Central Asia intra-regional trade.
- The binary variables for common languages and colonial past of trading countries are not considered to be statistically significant at the 10 percent level for Central and South Asia intra- and inter-regional trade in general or Afghanistan trade in particular.

Simulations of intra- and inter-regional trade based on changes in income, price and non-price factors have been performed on each of the estimated relationships. The main results are as follows:

- South Asia
  - The baseline forecast has been generated on the basis of the nominal U.S. dollar GDP forecasts of the International Monetary Fund (IMF) *World Economic Outlook*. The IMF's GDP projections are available for 2015 to 2019. Extension of the projections to 2030 is based on the average 2015-2019 average annual GDP growth rate of each country. The

results of the forecasts for the baseline intra-regional trade of South Asia are summarized in Figure 11.6. They show an average annual growth of intra-regional trade equivalent to 6 percent in the period 2015-2030. [84]

Figure 11.6: Projected Changes in South Asia Intra- and Inter-Regional Exports, 2014-2030

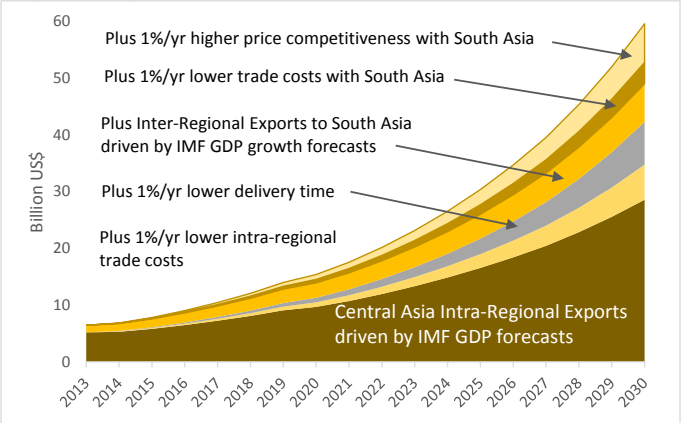


- A 0.5 percent annual decrease in the cost of trade with each bilateral trade flow within South Asia during the period of the simulation (2014-2030) leads to a 118 percent annual increase in the baseline value of intra-regional trade by 2030. The results are robust and underscore the importance of reducing trade barrier, especially behind the border ones in each of the South Asian countries.
- A 0.5 percent annual improvement in bilateral price competitiveness of each South Asia exporter would lead to an 8 percent yearly increase in earnings from intra-regional exports.
- The expansion of inter-regional exports to Central Asia associated with GDP growth forecasted by the International Monetary Fund causes the largest improvement in export earnings because of the relatively high income elasticity of foreign demand. The IMF forecast for Central Asia is for a 10 percent annual growth in GDP and the resulting expansion in South Asia exports to that region is 12 percent annually. This large expansion is associated with the combination of own and partner country income elasticities estimated for the inter-regional trade relationship.
- A 0.5 percent annual decrease in the cost of trade with each bilateral trade flow in Central Asia during the simulation period leads to another 12 percent annual increase in the baseline value of intra-regional trade. Again, the results underscore the importance of reducing trade barrier both within and between the two regions.

[84] International Monetary Fund (IMF, 2014), "World Economic Outlook". Washington, DC. Available: http://www.imf.org/external/pubs/ft/weo/2015/update/01/info.htm.

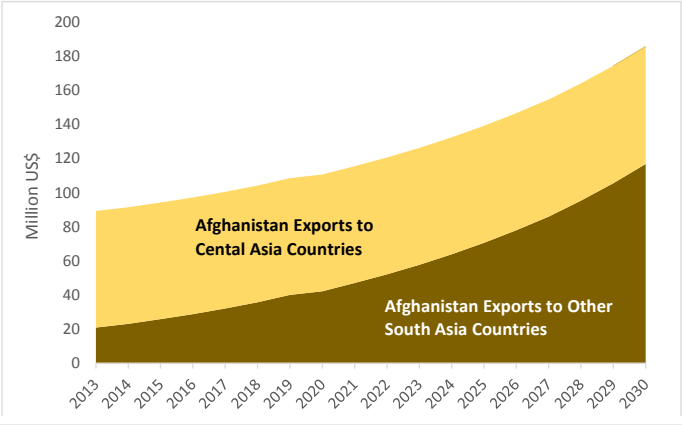
- Central Asia
  - As with South Asia, the baseline forecasts is based on the nominal U.S. dollar GDP forecasts of the International Monetary Fund (IMF) *World Economic Outlook*.[85] The results are summarized in Figure 11.7, which shows an average annual growth of intra-regional trade equivalent to 11 percent in the period 2015-2030. This expansion is considerably greater than the income responsiveness of exports in South Asia because the IMF's GDP forecasts for the region are higher in Central Asia than for those of South Asia.

Figure 11.7: Projected Changes in Central Asia Intra- and Inter-Regional Exports, 2014-2013



  - A 1 percent annual decrease in the cost of trade with each bilateral trade flow within the region in 2014-2030 leads to an 11 percent annual increase in the value of intra-regional trade. Like in South Asia, the results are robust and underscore the importance of reducing trade barrier.
  - A 1 percent annual reduction in the time required to export leads to a 15 percent yearly increase in export earnings from intra-regional exports.
  - The expansion of inter-regional exports to South Asia associated with GDP growth forecasted by the International Monetary Fund causes export earnings to improve by over 9 percent a year. The response of inter-regional exports of Central Asia to changes in income in the South Asian countries is not considered to be statistically significant at the 10 percent level of confidence.

Figure 11.8: Projected Changes of Afghanistan's Intra- and Inter-Regional Exports, 2014-2013



  - A 0.5 percent annual decrease in the cost of trade with each bilateral trade flow with Central Asia during the simulation period leads to another 12 percent annual

[85] Ibíd.

increase in the baseline value of intra-regional trade. These estimates are robust since the coefficient estimate is statistically significant at the 1 percent level, and they therefore point to the importance of focusing efforts on lowering trade barriers.

- Afghanistan
  - Price and non-price variables in the form of the real bilateral exchange rates, trade costs and time needed to export are not considered to be statistically significant at the 10 percent level of confidence. Intra- and inter-regional trade is only responsive to income changes and distance to markets. The magnitude of responsiveness to these two variables is high.
  - Trade with other South Asian countries has historically grown much faster than with the Central Asian countries and this pattern is reflected in the projected value of intra- and inter-regional trade in 2014-2030 (Figure 11.8).

D. Ratings

Table 11.2 shows the scores assigned to the impact on intra- and inter-regional trade from economic growth, price and non-price factors, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 11.2: Summary Assessment of Trade Responsiveness to Income, Price and Non-Price Movements

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. Economic growth has significant impact on intra-regional trade					
1	Kazakhstan	1	2	3	(4)	5
2	Kyrgyzstan	1	2	3	(4)	5
3	Tajikistan	1	2	3	(4)	5
4	Turkmenistan	1	2	3	(4)	5
5	Uzbekistan	1	2	3	(4)	5
6	Afghanistan	1	2	(3)	4	5
7	India	1	(2)	3	4	5
8	Pakistan	1	(2)	3	4	5
	B. Economic growth has significant impact on inter-regional trade					
1	Kazakhstan	1	2	(3)	4	5
2	Kyrgyzstan	1	2	(3)	4	5
3	Tajikistan	1	2	(3)	4	5

4	Turkmenistan	1	2	(3)	4	5
5	Uzbekistan	1	2	(3)	4	5
6	Afghanistan	1	2	3	4	(5)
7	India	1	2	3	(4)	5
8	Pakistan	1	2	3	(4)	5
	C. *Trade costs have significant impact on regional trade*					
1	Kazakhstan	1	2	3	4	(5)
2	Kyrgyzstan	1	2	3	4	(5)
3	Tajikistan	1	2	3	4	(5)
4	Turkmenistan	1	2	3	4	(5)
5	Uzbekistan	1	2	3	4	(5)
6	Afghanistan	1	(2)	3	4	5
7	India	1	2	3	4	(5)
8	Pakistan	1	2	3	4	(5)
	D. *Price competitiveness have significant impact on regional trade*					
1	Kazakhstan	1	2	(3)	4	5
2	Kyrgyzstan	1	2	(3)	4	5
3	Tajikistan	1	2	(3)	4	5
4	Turkmenistan	1	2	(3)	4	5
5	Uzbekistan	1	2	(3)	4	5
6	Afghanistan	1	(2)	3	4	5
7	India	1	2	3	(4)	5
8	Pakistan	1	2	3	(4)	5
	E. *Time to process exports has significant impact on regional trade*					
1	Kazakhstan	1	2	(3)	4	5
2	Kyrgyzstan	1	2	(3)	4	5
3	Tajikistan	1	2	(3)	4	5
4	Turkmenistan	1	2	(3)	4	5
5	Uzbekistan	1	2	(3)	4	5

6	Afghanistan	1	2	3	4	5
7	India	1	2	3	4	5
8	Pakistan	1	2	3	4	5

XII. REGIONAL TRADE BASED ON COMPARATIVE ADVANTAGES

A. Trade Possibilities Approach

The calculated RCAs in Chapter 5.B offer a way to determine intra- and inter-regional opportunities based on traditional comparative advantage trade analysis. The methodology follows conventional practices and assumptions used in other studies to calculate trade possibilities.[86] It assumes homogeneous products traded under conditions of perfect competition and without barriers and other impediments to trade in and between the Central and South Asia regions. The analysis matches the product exports in which a country has a revealed comparative advantage with imports from other countries in the two regions that do not have a comparative advantage in the same product.

Although the assumptions underlying the approach seldom hold in reality, they do point to the direction that regional trade movements could take under expanded regional trade movements. The reasoning is that countries are more likely to export only those products in which they have a competitive advantage relative to their trading partners. In fact, since the RCAs are based on actual trade with partner countries, the RCAs do indeed 'reveal' the products that are likely to be exchanged between countries based on their relative costs and difference in non-price factors.

B. Potential for Regional Trade Patterns

The analysis of regional trade possibilities is conducted at the HS 6-digit level for each Central and South Asia country and all of the product exports that are revealed to have a comparative advantage in 2010-2013. Table 12.1 show the results for the top exports of each country, matched with import demand from other countries in the two regions. They show that total inter- and intra-regional trade in 2010-2013 could have been 25 percent higher than the amount of trade that actually took place if trade had taken place according to each country's comparative advantage in each of their product exports. Without the dominance of India's trade, trade in and between the two regions could have nearly doubles.

Among countries there is a large diversion of actual and potential trade differentials. Three countries (India, Pakistan and Turkmenistan) have actual trade that exceeds that predicted by their corresponding revealed comparative advantages across all their exported products. In the case of India, for example, RCA-based trade would have been only 40 percent of the actual value that took place in 2010-2013. That of Pakistan and Turkmenistan would have been 70 to 80 percent of actual exports in the same period.

In contrast, potential exports of both Afghanistan and Kazakhstan predicted by their RCAs would have been much higher than the amount that actually occurred. In the case of Afghanistan, trade would have been 72 times greater than actual trade and, in the case of Kazakhstan, it would have been 42 times greater. The major lost opportunities for Afghanistan were its exports of coal, ferrous scrap, logs, dried beans, semi-precious stones, and fresh fruits and vegetables. For

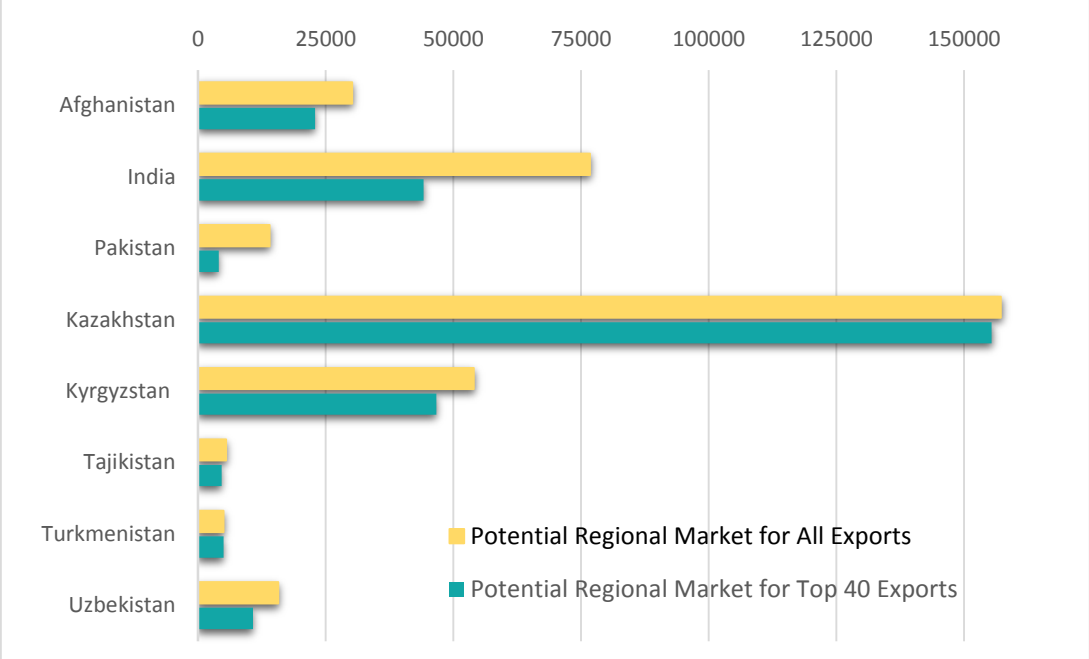
[86] N. Taneja et al. (2013), "Normalizing India Pakistan Trade". Indian Council for Research on International Economic Relations. Working Paper No. 267. Available: http://icrier.org/pdf/working_paper_267.pdf.

Kyrgyzstan, lost opportunities occurred in crude oil, copper ores, liquefied propane and other liquefied fuels, silver unwrought, and casings, tubing and pipes for oil drilling.

The potential value of regional trade for the three remaining countries relative to their actual trade was more modest than in the case of Afghanistan and Kazakhstan, but still very large. Among individual countries, Tajikistan's potential regional earnings are nearly 8 times actual export revenue; Uzbekistan's potential earnings are nearly 4 5 times those of actual exports; and Kazakhstan's potential earnings are 2.5 times those of actual exports.

In many cases, the top 40 products having revealed comparative advantages contribute nearly all the potential regional earnings to the countries (Figure 12.1). This situation is reflected in the exports of Kazakhstan and Turkmenistan, where the top 40 products exported by each country account for 99 to 100 percent of their potential regional earnings. Over 75 percent of total potential earnings derive from the top 40 products in Afghanistan, Kyrgyzstan and Tajikistan. In India, nearly 60 percent of all potential earnings are from its top 40 products. Only Pakistan has a large number of products having comparative advantages with high export potentials relative to actual regional exports. In that country, over 70 percent of potential earnings are associated with products other than the top 40.

Figure 12.1: Market Potential in Central and South Asia Regional Exports based on Revealed Comparative Advantages



Source: Derived from data in 3.2.

Table 12.1: Potential Exports of Products with Revealed Comparative Advantage in Central and South Asia Markets

Afghanistan				India			
Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual	Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual
	(Million US dollars)				(Million US dollars)		
Ferrous waste or scrap, nes (720449)	45.3	2,680.4	59.1	Oils petroleum, bituminous, distillates, except crude (271000)	52,772.9	13,032.7	0.2
Figs, fresh or dried (080420)	40.0	41.1	1.0	Diamonds (jewellery) worked but not mounted or set (710239)	25,186.6	1,848.1	0.1
Grapes, dried (080620)	38.3	24.7	0.6	Jewellery and parts of precious metal except silver (711319)	11,996.5	2,107.6	0.2
Coal except anthracite or bituminous, not agglomerate (270119)	38.0	13,795.8	362.7	Medicaments nes, in dosage (300490)	6,061.8	105.5	0.0
Natural gum, resin, gum-resin, balsam, not gum arabic (130190)	35.4	79.0	2.2	Iron ore, concentrate, not iron pyrites,unagglomerate (260111)	3,521.2	58.8	0.0
Pistachios, fresh or dried (080250)	15.3	77.1	5.0	Bovine cuts boneless, frozen (020230)	2,903.3	10.7	0.0
Raw Persian and similar lamb furskins, whole (430130)	13.1	1.8	0.1	Mucilages & thickeners, from locust bean, guar seeds (130232)	2,812.8	1,018.1	0.4
Engines, spark-ignition reciprocating, over 1000 cc (840734)	12.8	341.8	26.7	Organic compounds, nes (294200)	2,238.2	253.6	0.1
Grapes, fresh (080610)	12.6	73.8	5.8	Soya-bean oil-cake and other solid residues (230400)	2,201.8	2,601.1	1.2
Natural steatite, not crushed or powdered (252610)	9.6	10.2	1.1	Motor vehicle parts nes (870899)	2,043.1	8.2	0.0
Plants & parts, pharmacy, perfume, insecticide use ne (121190)	9.1	52.6	5.8	Shrimps and prawns, frozen (030613)	1,722.3	1,215.4	0.7
Almonds,fresh or dried, shelled (080212)	8.1	56.8	7.1	Floating docks, special function vessels nes (890590)	1,420.2	1,174.6	0.8
Carpets of wool or fine animal hair, knotted (570110)	7.8	8.6	1.1	Aircraft parts nes (880330)	1,384.2	808.5	0.6
Helicopters of an unladen weight > 2,000 kg (880212)	7.3	273.1	37.4	Pipe-line submerged arc welded steel diameter >406mm (730511)	1,265.4	13,079.8	10.3
Beans dried, shelled, nes (071339)	5.3	119.0	22.5	Diamonds (jewellery) unworked or simply sawn, cleaved (710231)	1,251.9	136.1	0.1
Apples, fresh (080810)	5.0	266.3	53.4	Motorcycles, spark ignition engine of 50-250 cc (871120)	1,201.2	1,618.2	1.3
Sesamum seeds (120740)	5.0	37.3	7.5	Floating, submersible drilling or production platform (890520)	1,121.8	9.4	0.0
Potatoes, fresh or chilled except seed (070190)	4.8	94.9	20.0	Womens, girls blouses & shirts, of cotton, not knit (620630)	1,035.5	11.7	0.0
Rubies, sapphires and emeralds worked but not set (710391)	4.5	231.3	50.9	Maize except seed corn (100590)	981.9	1,023.3	1.0
Fine animal hair, not carded or combed (510210)	3.9	5.8	1.5	Tugs and pusher craft (890400)	962.9	5.3	0.0
Urd,mung,black or green gram beans dried shelled (071331)	3.9	466.7	119.8	Gold/silversmith wares of/clad with precious metal ne (711419)	941.7	4.9	0.0
Saffron (091020)	3.0	6.6	2.2	Cotton yarn >85% single combed 232-192 dtex,not retai (520523)	909.8	70.7	0.1
Sheep or lamb skins, raw, wool on, except Persian etc (410210)	2.9	36.0	12.2	Coal tar distillation products nes (270799)	881.9	45.3	0.1
Ferro-alloys, nes (720299)	2.8	45.3	16.1	Mens, boys shirts, of cotton, not knit (620520)	848.6	1,192.7	1.4
Antiques older than one hundred years (970600)	2.7	37.9	14.2	P-xylene (290243)	810.3	43.6	0.1
Almonds in shell fresh or dried (080211)	2.7	358.3	134.4	Cut or sawn slabs of granite (680223)	801.5	206.6	0.3
Parts of turbo-jet or turbo-propeller engines (841191)	2.4	55.8	23.2	Antibiotics nes, in dosage (300420)	789.3	884.1	1.1
Turbo-propeller engines of a power > 1100 kW (841122)	2.4	49.4	20.9	Cashew nuts, fresh or dried (080130)	787.5	66.6	0.1
Logs, non-coniferous nes (440399)	2.4	1,556.6	662.2	Jewellery and parts, silver, including plated silver (711311)	757.7	11.5	0.0
Parts of electric accumulators, including separators (850790)	2.3	100.2	43.9	Womens, girls dresses, of cotton, not knit (620442)	749.9	89.5	0.1
Electricity supply, production and calibrating meters (902830)	2.2	35.7	15.9	Cast articles of iron or steel, nes (732599)	749.7	417.0	0.6
Tanks and other armoured fighting vehicles (871000)	2.2	80.7	37.1	Insecticides, packaged for retail sale (380810)	727.3	0.4	0.0
Caraway seeds (090940)	2.0	5.1	2.5	Castor oil or fractions not chemically modified (151530)	725.5	279.8	0.4
Pigment, opacifier, colours etc for ceramics or glass (320710)	2.0	55.2	27.2	Wheeled tractors nes (870190)	721.0	12.6	0.0
Anise or badian seeds (090910)	1.9	11.3	5.9	Ground-nuts shelled, not roasted or cooked (120220)	672.3	34.2	0.1
Bovine hides, whole, fresh or wet-salted (410121)	1.8	13.2	7.3	Bedspreads, textile material, nes, not knit or croche (630419)	661.7	522.7	0.8
Precious, semi-precious stones unworked, partly worke (710310)	1.7	184.4	106.0	Tea, black (fermented or partly) in packages > 3 kg (090240)	661.6	45.8	0.1
Staple fibres of polyesters, not carded or combed (550320)	1.7	240.9	138.7	Benzene (290220)	651.9	82.3	0.1
Vegetable products nes for human consumption (121299)	1.7	1.0	0.6	Woven hi-ten filament, nylon, polyamide or polyester (540710)	644.0	9.2	0.0
Polyethylene - specific gravity <0.94 in primary form (390110)	1.7	1,293.4	778.9	Footwear, soles, uppers of leather, over ankle, nes (640351)	632.5	17.1	0.0

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Table 12.1: Potential Exports of Products with Revealed Comparative Advantage in Central and South Asia Markets (continued)

Pakistan				Kazakhstan			
Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual	Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual
	(Million US dollars)				(Million US dollars)		
Rice, semi-milled or wholly milled (100630)	1,833.3	162.4	0.1	Petroleum oils, oils from bituminous minerals, crude (270900)	50,955.1	134,407.0	2.6
Cotton yarn >85% single uncombed 714-232 dtex,not ret (520512)	1,050.3	5.7	0.0	Ferro-chromium, >4% carbon (720241)	2,035.8	22.2	0.0
Toilet or kitchen linen, of cotton terry towelling (630260)	733.5	79.7	0.1	Iron ore, concentrate, not iron pyrites, agglomerated (260112)	1,123.0	181.9	0.2
Bed linen, of cotton, nes (630231)	692.3	8.5	0.0	Wheat except durum wheat, and meslin (100190)	1,042.2	339.8	0.3
Mens, boys trousers & shorts, of cotton, not knit (620342)	629.2	81.2	0.1	Propane, liquefied (271112)	785.4	1,494.4	1.9
Bed linen, of textile knit or crochet materials (630210)	570.1	2.8	0.0	Copper ores and concentrates (260300)	708.7	5,565.3	7.9
Bed linen, of material nes, nes (630239)	546.7	3.6	0.0	Zinc, not alloyed, unwrought, >99% pure (790111)	676.6	98.9	0.1
Portland cement, other than white cement (252329)	463.0	509.2	1.1	Silver in unwrought forms (710691)	637.9	2,857.6	4.5
Womens, girls trousers & shorts, of cotton, not knit (620462)	414.1	44.1	0.1	Butanes, liquefied (271113)	354.4	2,701.5	7.6
Denim cotton >85% >200g/m2 (520942)	391.7	37.9	0.1	Sulphur, crude or unrefined (250310)	341.4	337.0	1.0
Articles of apparel of leather or composition leather (420310)	366.0	13.5	0.0	Flat rolled iron or non-alloy steel, coated with zinc, width >600mm	311.1	734.0	2.4
Floor & dish cloths, dusters, etc, textile material (630710)	353.3	11.8	0.0	Semi-finished product, iron or non-alloy steel >0.25%C (720720)	305.6	66.9	0.2
Mens, boys shirts, of cotton, knit (610510)	313.7	23.8	0.1	Aluminium oxide, except artificial corundum (281820)	302.4	355.5	1.2
Instruments, appliances for medical, etc science, nes (901890)	269.7	719.2	2.7	Hot rolled iron or non-alloy steel, coil,width >600mm, t <3mm thic	290.5	703.8	2.4
Cotton yarn >85% multiple uncomb 714-232 dtex,not ret (520532)	239.9	0.6	0.0	Ferro-silico-manganese (720230)	254.6	24.2	0.1
Mens, boys shirts, of materials nes, knit (610590)	235.4	3.0	0.0	Lead refined unwrought (780110)	250.5	288.7	1.2
Rice, broken (100640)	229.8	46.8	0.2	Ferro-silico-chromium (720250)	202.2	0.1	0.0
Refined sugar, in solid form, nes, pure sucrose (170199)	216.4	657.8	3.0	Documents of title (bonds etc), unused stamps etc (490700)	198.5	1,125.0	5.7
Polyethylene terephthalate, in primary forms (390760)	213.9	283.3	1.3	Ferro-chromium, <4% carbon (720249)	197.1	51.8	0.3
Wheat or meslin flour (110100)	211.9	784.4	3.7	Phosphorus (280470)	168.4	70.8	0.4
Cotton yarn >85% single uncombed >714 dtex,not retail (520511)	188.1	11.3	0.1	Flat rolled iron or non-alloy steel, coated with tin, w >600mm, t <0	164.4	142.2	0.9
Woven plain >85% polyester + cotton, <170g/m2 printed (551341)	181.0	0.8	0.0	Titanium, unwrought, waste or scrap, powders (810810)	150.0	2.5	0.0
Cotton yarn >85% single combed 714-232 dtex,not retai (520522)	176.2	7.0	0.0	Petroleum gases & gaseous hydrocarbons nes, liquefied (271119)	144.0	1,006.9	7.0
Durum wheat (100110)	171.3	71.4	0.4	Cold rolled iron or non-alloy steel, coil, width >600mm, t 0.5-1mm	134.7	465.5	3.5
Plain weave cotton, >85% >200g/m2, unbleached (520911)	167.1	1.3	0.0	Manganese ores, concentrates, iron ores >20% Manganes (26020	88.2	427.8	4.9
Veg fats, oils or fractions hydrogenated, esterified (151620)	160.7	260.1	1.6	Linseed (120400)	80.5	8.6	0.1
Plain weave cotton, >85% 100-200g/m2, unbleached (520812)	157.7	14.8	0.1	Barley (100300)	74.4	31.9	0.4
Leather, composition gloves & mittens except sports (420329)	154.1	5.4	0.0	Gold powder non-monetary (710811)	72.6	0.3	0.0
Inflatable balls (950662)	152.8	6.7	0.0	Hot rolled iron or non-alloy steel, flat,width >600mm, t <3mm, nes	67.7	30.4	0.4
Twill weave cotton, >85% >200g/m2, dyed (520932)	152.5	11.1	0.1	Chromium oxides, hydroxides except chromium trioxide (281990)	67.0	2.6	0.0
Undenatured ethyl alcohol > 80% by volume (220710)	150.9	16.9	0.1	Bearings, cylindrical roller, nes (848250)	66.3	49.2	0.7
Goat or kid skin leather, nes (410620)	140.7	6.9	0.0	Quartzite, slabs etc. (250629)	64.5	1.3	0.0
Twill weave cotton, >85% >200g/m2, unbleached (520912)	130.1	1.1	0.0	Asbestos (252400)	62.7	300.3	4.8
Mandarin, clementine & citrus hybrids, fresh or dried (080520)	129.1	98.5	0.8	Casings, tubing and drill pipe, for oil drilling (730420)	62.3	777.6	12.5
Twill weave cotton, >85% <200g/m2, unbleached (520813)	124.7	4.7	0.0	Sodium triphosphate (283531)	58.1	85.1	1.5
Womens full, kneelength hosiery, yarn <67 dtex/sy,kni (611520)	123.8	2.1	0.0	Hot rolled iron or non-alloy steel, coil,width >600mm, t >10mm, ne	56.0	277.4	5.0
Chromium ores and concentrates (261000)	120.7	39.5	0.3	Tantalum unwrought, bars, rods simply sintered, scrap (810310)	55.8	21.5	0.4
Bovine and equine leather, full or split grain, nes (410431)	120.4	11.2	0.1	Cold rolled iron or non-alloy steel, coil, width >600mm, t >3mm, n	52.2	46.0	0.9
Plain weave cotton, <85% +manmade fibre, <200g print (521051)	117.3	1.9	0.0	Cold rolled iron or non-alloy steel, flat, width >600mm, t >3mm, n	49.1	3.8	0.1
Leather, composition sports gloves, mittens and mitts (420321)	114.3	0.7	0.0	Cold rolled iron or non-alloy steel, coil, width >600mm, t 1-3mm, r	45.4	268.4	5.9

Table 12.1: Potential Exports of Products with Revealed Comparative Advantage in Central and South Asia Markets (continued)

Kyrgyzstan				Tajikistan			
Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual	Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual
	(Million US dollars)				(Million US dollars)		
Gold in unwrought forms non-monetary (710812)	743.2	42,938.5	57.8	Aluminium unwrought, not alloyed (760110)	461.6	374.2	0.8
Kidney beans and white pea beans dried shelled (071333)	52.0	131.8	2.5	Aluminium unwrought, alloyed (760120)	49.2	360.3	7.3
Electrical energy (271600)	51.4	168.5	3.3	Lead ores and concentrates (260700)	35.6	136.4	3.8
Diesel powered trucks weighing > 20 tonnes (870423)	28.5	575.1	20.2	Onions and shallots, fresh or chilled (070310)	23.7	54.9	2.3
Precious metal ores and concentrates except silver (261690)	22.9	155.2	6.8	Antimony ores and concentrates (261710)	23.5	24.0	1.0
Womens, girls blouses, shirts, manmade fibre, not kni (620640)	21.5	14.6	0.7	Apricots, dried (081310)	23.2	22.6	1.0
Womens, girls dresses, synthetic fibres, not knit (620443)	18.9	20.7	1.1	Mixtures of edible nuts, dried and preserved fruits (081350)	18.4	22.4	1.2
Filament lamps, of a power <= 200 Watt, > 100 volts (853922)	18.8	19.4	1.0	Zinc ores and concentrates (260800)	11.5	145.8	12.7
Womens, girls trousers, shorts, synth fibres, not kni (620463)	15.1	12.2	0.8	Fish fillets, frozen (030420)	11.1	14.2	1.3
Tobacco, unmanufactured, not stemmed or stripped (240110)	15.1	9.6	0.6	Bovine and equine leather, tanned or retanned, nes (410429)	5.9	142.9	24.3
Radiators for motor vehicles (870891)	13.7	49.1	3.6	Wire, aluminium, not alloyed, t > 7mm (760511)	5.2	19.2	3.7
Float glass etc in sheets, non-wired, clear (700529)	11.1	72.3	6.5	Parts of gas turbine engines except turbo-jet/prop (841199)	3.5	478.3	136.5
Pneumatic tyres new of rubber nes (401199)	10.0	194.4	19.4	Prunes, dried (081320)	2.5	4.5	1.8
Milk not concentrated nor sweetened 1-6% fat (040120)	9.8	74.6	7.6	Fruits, dried nes (081340)	2.5	13.1	5.3
Mens, boys trousers shorts, synthetic fibre, not knit (620343)	8.6	15.5	1.8	Waste or scrap, aluminium (760200)	2.4	1,202.7	491.6
Hosiery nes, of cotton, knit (611592)	8.1	33.9	4.2	Monoculars, telescopes, etc (900580)	1.9	8.4	4.3
Carrots and turnips, fresh or chilled (070610)	7.8	12.6	1.6	Unrefined copper, copper anodes, electrolytic refinin (740200)	1.8	122.1	69.0
Womens, girls skirts, synthetic fibres, not knit (620453)	7.5	5.2	0.7	Sections, U, iron or non-alloy steel, nfw hot-roll/drawn/extruded >	1.6	74.0	47.2
Polyvinyl chloride in primary forms (390410)	6.7	203.5	30.2	Precious & semi-precious stones, nes, worked, not set (710399)	1.5	55.0	37.8
Walnuts, fresh or dried, shelled (080232)	6.5	3.3	0.5	Fittings, pipe or tube, iron or steel, nes (730799)	1.3	203.3	152.0
Womens, girls anoraks etc of manmade fibres, not knit (620293)	6.5	26.3	4.0	Nickel-cadmium electric accumulators (850730)	1.2	46.8	39.6
Plastic carboys, bottles and flasks, etc (392330)	6.2	55.7	8.9	Sardines,brisling,sprats, frozen, whole (030371)	1.2	2.3	2.0
Rock drilling or earth boring tools except carbide (820712)	5.6	142.7	25.6	Footwear, soles/uppers leather, strap instep & big to (640320)	1.2	15.3	13.2
Womens, girls blouses & shirts, manmade fibre, knit (610620)	5.1	7.0	1.4	Heat exchange units, non-domestic, non-electric (841950)	1.1	223.4	206.7
Milk powder < 1.5% fat (040210)	4.9	200.1	41.1	Alkyd resins, in primary forms (390750)	1.1	8.3	7.7
Parts/accessories nes for optical/electric instrument (903300)	4.9	506.5	104.2	Chocolate/cocoa food preparations nes (180690)	1.0	289.6	280.6
Worked calcareous stone nes (680292)	4.3	5.2	1.2	Wire, aluminium alloy, t < 7mm (760529)	1.0	9.7	9.6
Womens, girls dresses, of synthetic fibres, knit (610443)	4.2	10.5	2.5	Apples, dried (081330)	1.0	1.5	1.6
Beverage waters, sweetened or flavoured (220210)	4.2	84.8	20.4	Liquorice extract (130212)	0.9	0.4	0.5
Hot rolled iron or non-alloy steel, flat,width >600mm, t >10mm, ne	3.9	542.1	138.3	Threaded fittings, iron or steel except stainless/cas (730792)	0.9	28.2	32.6
Butter and other fats and oils derived from milk (040500)	3.7	77.7	20.8	Ground-nuts in shell not roasted or cooked (120210)	0.9	6.2	7.2
Bovine meat, offal nes, not livers, prepared/preserve (160250)	3.7	14.7	3.9	Machinery to fill, close, aerate,etc bottle, containe (842230)	0.9	266.3	308.5
Bovine animals, live, except pure-bred breeding (010290)	3.7	13.5	3.7	Mens, boys garments nes, of cotton, not knit (621132)	0.9	5.1	6.0
Cartons, boxes & cases, of corrugated paper or board (481910)	3.4	47.8	14.2	Cast glass sheet, non-wired, clear (700319)	0.7	8.2	11.0
Womens, girls overcoats etc manmade fibre, not knit (620213)	3.1	6.8	2.2	Non-medical X-ray equipment (902219)	0.6	72.9	118.6
Articles of cement, concrete or artificial stone nes (681099)	3.1	21.7	7.0	Trailers for housing or camping (871610)	0.6	4.0	6.6
Cartons, boxes & cases, folding, non-corrugated paper (481920)	2.9	45.8	15.7	Braids in the piece (580810)	0.6	3.5	5.8
Filament lamps, except ultraviolet or infra-red, nes (853929)	2.8	35.2	12.4	Parts of electric sound & visual signalling apparatus (853190)	0.4	109.3	250.3
Signals etc for rail, tram, water-way, port, airfield (860800)	2.8	87.1	31.3	Pineapples, otherwise prepared or preserved (200820)	0.4	6.8	15.9
Ice cream and other edible ice (210500)	2.8	29.9	10.8	Aluminium pipe or tube fittings (760900)	0.4	10.4	26.4

Table 12.1: Potential Exports of Products with Revealed Comparative Advantage in Central and South Asia Markets (continued)

Turkmenistan				Uzbekistan			
Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual	Product	Actual Exports	Potential Regional Exports	Exports as a Multiple of Actual
	(Million US dollars)				(Million US dollars)		
Natural gas in gaseous state (271121)	6,015.7	428.0	0.1	Cotton, not carded or combed (520100)	857.0	1,037.0	1.2
Gold, semi-manufactured forms, non-monetary (710813)	263.0	2,920.0	11.1	Copper cathodes and sections of cathodes unwrought (740311)	475.7	162.6	0.3
Polypropylene in primary forms (390210)	103.8	939.5	9.0	Natural uranium, its compounds, mixtures (284410)	420.0	4.2	0.0
Iodine (280120)	17.3	126.7	7.3	Automobiles, spark ignition engine of 1000-1500 cc (870322)	295.6	424.7	1.4
Cotton seed oil-cake and other solid residues (230610)	15.0	0.3	0.0	Automobiles, spark ignition engine of <1000 cc (870321)	201.6	268.8	1.3
Petroleum coke, not calcined (271311)	4.7	384.9	81.4	Automobiles, spark ignition engine of 1500-3000 cc (870323)	138.6	1,336.8	9.6
Terry towelling etc of cotton, not narrow fabric, unb (580211)	3.9	0.0	0.0	Zinc, not alloyed, unwrought, <99% pure (790112)	106.2	75.4	0.7
Cranes & lifting frames, self-propelled, not on tyres (842649)	1.8	162.1	88.1	T-shirts, singlets and other vests, of cotton, knit (610910)	78.3	49.7	0.6
Pile-drivers and pile-extractors (843010)	1.4	10.9	8.0	Wire of refined copper < 6mm wide (740819)	75.1	70.8	0.9
Cotton yarn >85% single uncombed <125 dtex, not retai (520515)	1.0	1.4	1.4	Ammonium nitrate, including solution, in pack >10 kg (310230)	67.7	180.6	2.7
Cotton-seed or fractions simply refined (151229)	0.6	2.1	3.7	Urea, including aqueous solution in packs >10 kg (310210)	61.2	2,467.0	40.3
Degras, residues from treatment animal & veg waxes (152200)	0.6	10.6	19.1	Cotton yarn >85% single uncombed 232-192 dtex,not ret (520513)	60.2	3.8	0.1
Plain weave cotton, >85% >200g/m2, yarn dyed (520941)	0.3	2.2	7.9	Wire of refined copper > 6mm wide (740811)	57.6	351.8	6.1
Twill weave cotton, >85% <200g/m2, printed (520853)	0.1	-	-	Fruits, fresh nes (081090)	55.1	61.4	1.1
Cotton yarn <85% multiple combed <125 dtex, not retai (520645)	0.1	0.3	5.4	Electric conductors, 80-1,000 volts, no connectors (854459)	50.1	609.9	12.2
				Tomatoes, fresh or chilled (070200)	43.9	138.2	3.1
				Cotton yarn >85% single uncombed 192-125 dtex,not ret (520514)	43.8	0.5	0.0
				Melons (including watermelons), fresh (080710)	41.4	18.7	0.5
				Apricots, fresh (080910)	36.8	26.5	0.7
				Polyethylene - specific gravity >0.94 in primary form (390120)	36.4	933.5	25.6
				Vegetables, fresh or chilled nes (070990)	31.2	41.5	1.3
				Waste/scrap, precious metals except pure gold/platinu (711290)	30.7	4.3	0.1
				Cherries, fresh (080920)	29.6	17.9	0.6
				Peaches, nectarines, fresh (080930)	28.1	25.3	0.9
				Fertilizers with nitrogen and phosphorus nes, <=10kg (310559)	26.5	254.3	9.6
				Potassium chloride, in packs >10 kg (310420)	26.5	1,313.2	49.6
				Boring or sinking machinery nes, not self-propelled (843049)	23.6	253.8	10.7
				Plums, sloes, fresh (080940)	20.0	20.1	1.0
				Pullovers, cardigans etc of cotton, knit (611020)	19.9	36.7	1.8
				Edible brassicas nes, fresh or chilled (070490)	19.6	15.7	0.8
				Cotton yarn >85% single combed 192-125 dtex, not ret. (520524)	19.4	4.4	0.2
				Mineral waxes nes (271290)	18.8	76.8	4.1
				Waste/scrap containing platinum as sole precious meta (711220)	18.3	0.8	0.0
				Carpets of manmade yarn, woven pile, made up,nes (570242)	18.0	115.3	6.4
				Cucumbers and gherkins, fresh or chilled (070700)	17.3	21.4	1.2
				Copper sulphates (283325)	16.7	13.4	0.8
				Liquid dielectric transformers 650-10,000KVA (850422)	15.6	59.9	3.8
				Beetroot,salsify,celeriac,radishes etc. fresh, chille (070690)	15.2	14.4	0.9
				Knit or crochet fabric of cotton, nes (600292)	14.0	14.8	1.1
				Monoammonium phosphate & mix with diammonium, <=10 kg (31	13.9	221.2	15.9

C. Ratings

Table 12.2 shows the scores assigned to potential regional exports based on the revealed comparative advantages of each country. The ratings are based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

Table 12.2. Summary Assessment of RCA-Based Potential Regional Exports

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***There is considerable untapped potential intra- and inter-regional trade based on country RCAs***					
1	Kazakhstan	1	(2)	3	4	5
2	Kyrgyzstan	1	2	3	4	(5)
3	Tajikistan	1	(2)	3	4	5
4	Turkmenistan	1	2	(3)	4	5
5	Uzbekistan	1	2	3	(4)	5
6	Afghanistan	1	2	3	(4)	5
7	India	1	2	3	(4)	5
8	Pakistan	1	2	3	4	(5)
	B. ***There is a large untapped ratio of potential to actual regional exports in the country***					
1	Kazakhstan	1	2	3	(4)	5
2	Kyrgyzstan	1	2	(3)	4	5
3	Tajikistan	1	(2)	3	4	5
4	Turkmenistan	(1)	2	3	4	5
5	Uzbekistan	1	(2)	3	4	5
6	Afghanistan	(1)	2	3	4	5
7	India	1	2	3	4	(5)
8	Pakistan	1	2	(3)	4	5

XIII. REGIONAL VALUE CHAINS

A. Fragmentation of Production

1. Trade in Products versus Trade in Tasks

The nature of international trade is changing from simply creating final products and trading those goods, based on the comparative advantages of countries, to 'trade in tasks', based on the cross-border exchange of intermediate goods and services. Specialization in tasks gives rise to 'trade in value added' that represents the difference between the value of primary or intermediate products that are imported and the value of the transformation into further processed goods. This type of fragmentation of production across countries now accounts for over one-half of total international trade.[87] In this framework, countries can specialize in the same industry, but in different stages of the production chain and trade with one another to create value-added from trade.

In the Central and South Asia context, the traditional regional model for generating trade and investment has relevance in terms of differences in skilled and unskilled labor endowments and production technologies; but it has less relevance in terms of natural resource endowments than in other regions because countries share similar natural resources and therefore tend to produce similar types of goods. For example, in terms of endowments, the natural resource-rich countries of Kazakhstan, Turkmenistan and Uzbekistan export oil, gas, ferrous and non-ferrous metals. Raw cotton and cotton yarn is a leading export of Afghanistan, Tajikistan and Uzbekistan; Kyrgyzstan and Uzbekistan both export gold; fruits and vegetables are major exports of Afghanistan and Kyrgyzstan; and Afghanistan and Kazakhstan are both leading exporters of coal.

Comparative country differences in production technologies and both the size and skill-levels of the labor force cause relative labor productivity to differ across industries, and these differences give rise to considerable potentials for trade creation. For example, India and Pakistan are major exporters of refined oil and textiles, and rely on imports of crude oil and, to some extent, raw cotton for material inputs. There are therefore opportunities for growth of intra-regional trade resulting from differences in factor endowments within regions and possibly between them.

In terms of traded products, however, the two regions share similar patterns. Each of the sub-regions exports relatively unprocessed products and imports processed goods. Moreover, the same products are often exported by two or more countries in the regions. Areas of trade and investment complementarity are therefore limited, and strategic planning for growth needs to also invoke explanations of trade and investment between countries trading the same types of products, which indeed are increasingly characterizing trade throughout the world economy. Under these conditions, the appropriate trade and investment model for the Central and South Asia regions is one that not only determines the growth potential of intra-regional trade resulting from differences in factor endowments, but also one that builds on the growing world-wide trend towards the globalization of production and the reduction of production costs by exploiting

[87] Organisation for Economic Co-operation and Development (OECD, 2014), "Global Trade and Specialisation Patterns over the Next 50 Years". Paris. OECD Economic Policy Paper No. 10. Available: http://www.oecd.org/economy/Trade-and-specialisation-patterns-for-the-next-fifty-years.pdf.

economies of scale and expanding both intra-industry and intra-firm trade within the region as well as extra-regional trade.

2. Global versus Regional Value Chains

Global value chains (GVCs) consist of the establishment of production bases for product components in multiple countries, based on locational cost advantages, with the final assembly occurring in other countries, and then being exported to global markets. Production of products is therefore spread across many countries in order for large businesses to become competitive in the global marketplace. The greater the number of stages of production in trading across borders, the larger the investment opportunities for value-added activities.[88] In general, the industries with the highest level of fragmentation are electronic and communication equipment, motor vehicles, basic metals, electrical machinery, textiles, leather and footwear. In services, transport and storage have the longest value chains.[89]

Linking production activities into global value chains can create gains in terms of higher value additions to exports, transfer of technologies, and employment generation. But for developing economies it can also entrench businesses into the production of low-end and low-value added inputs, with small gains in domestic value added additions. Instead, the distribution of greater value added benefits occurs in those countries, typically the more advanced ones, that are involved in upstream activities (research and development, design, innovation), and downstream activities (marketing, branding and logistics). The least amount of value added often takes place in the fabrication process, usually located in the lesser developed countries.

Figure 13.1 illustrates the value added created at different stages of the production and distribution process in what is widely known as the 'smiling curve'.[90] This situation differs from that of the 1970s, when the value added in the pre- and post-production stages did not differ significantly from that of the fabrication process. Hence, while fabrication is an important part of the value chains, pre-production and post-production intangibles in the value chain are what currently provide the greatest value added.

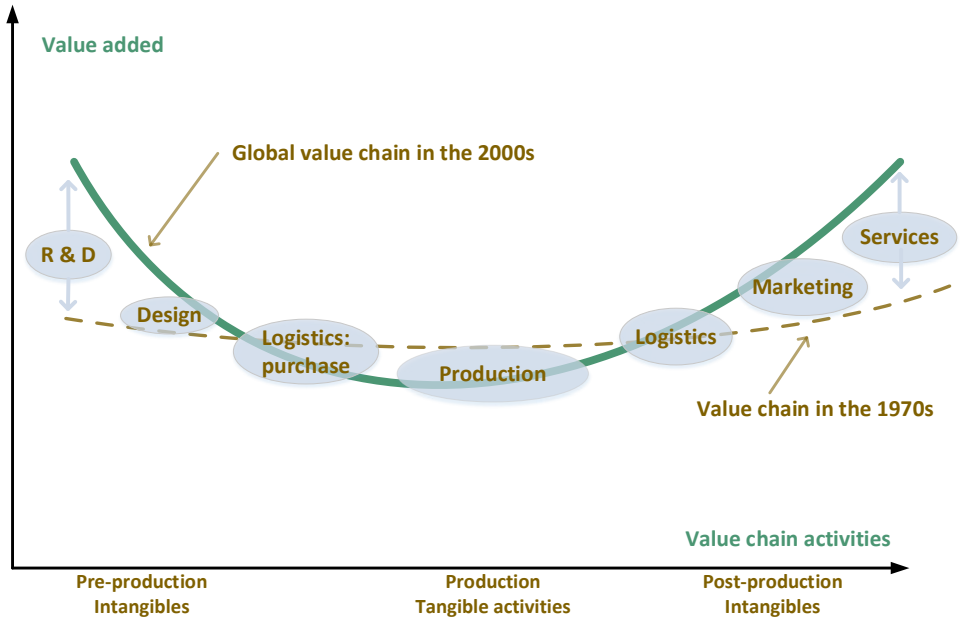
Regional value chains (RVCs) provide an opportunity for countries in the area to both source the raw materials and intermediate products as well as the higher value activities within the region. One of the principal motivations for the 'regionalization of trade and investment' is the savings that can occur from geographical proximity to transport costs, time to consumption, and flow of information across borders. For the Central Asian economies and Afghanistan, which rely on land

[88] T. Fally (2011). "On the Fragmentation of Production in the US", University of Colorado-Boulder, July. Available: http://sciie.ucsc.edu/14AIEC/Fragmentation_Fally.pdf.

[89] K de Backer and S. Miroudot (2014), "Mapping Global Value Chains". European Central Bank. Working Paper Series No 1677/May 2014. http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1677.pdf

[90] Organisation for Economic Co-operation and Development (OECD, 2013), "Interconnected Economies: Benefiting from Value Chains". Paris. Available: http://www.oecd.org/sti/ind/interconnected-economies-GVCs-synthesis.pdf.

Figure 13.1. The Smiling Curve for Value Added in Regional and Global Value Chains



Source: Organisation for Economic Co-operation and Development (OECD, 2013), "Interconnected Economies: Benefiting from Value Chains". Paris.

and air connectivity with each other and neighboring countries to access international markets, these cost-saving opportunities are especially important.

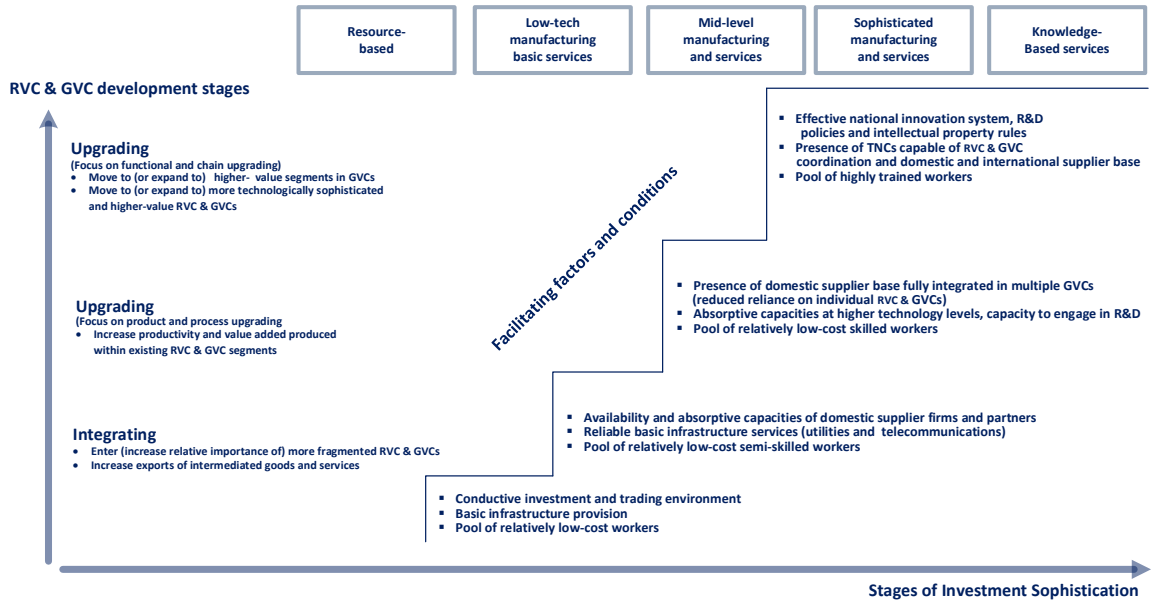
Proximity to economic activity is fundamental. The sheer size of Central Asia, along with Afghanistan, is a key feature of that region and it increases distances to markets. Kazakhstan is the largest landlocked country by area and the ninth largest country in the world, and Afghanistan ranks ninth in the list of largest landlocked countries of the world. In South Asia, India is the seventh largest country in the world, while Pakistan ranks thirty-third. In principle, countries close to one another but differing in their production fundamentals can utilize their dynamic regional comparative advantages and complementarities to exploit differences in factor endowments and production technologies. This is the traditional motivation driving regionalization of production activity, which is based on the notion that participating countries can expand the production of those goods in which they have lower relative marginal costs, and thereby derive economies of scale in the production of their goods and services.

The creation of regional value chains (RVCs) would offer opportunities for economies of scale by spreading the production of goods across countries in Central and South Asia. This larger production area could, in turn, provide the basis with which to develop intra-firm trade, implement marketing processes that take advantage of vertical and horizontal product differentiation in markets outside the region, expand the volume of intra-industry trade within the two regions, and bring in much needed domestic and foreign investments. Together these changes could transform some leading sectors from a dependence on the traditional growth model based on comparative advantage and competitiveness in exports of final products to one based on the regionalization of production activities in which different stages of production are

distributed across countries in the region in order to achieve greater cost competitiveness and a more diversified production structure into higher levels of production sophistication.

The key issue to be considered by the Central and South Asian countries in terms of cross-border value chain investments is how much value is captured by each country in terms of employment, income, technology diffusion, and sustainable development. That issue refers to the extent of product upgrading, that is, shifting cross-border investments to more sophisticated products with higher unit prices (Figure 13.2). In this context, the degree of trade competitiveness is measured by the extent to which each country in the region is able to move up to higher levels of sophistication in regional value chains.

Figure 13.2. Stages of Cross-Border Value Added Investment by Level of Sophistication



Source: Adapted from J.R. Nascimento (2011), "Analysis of International Investments in the Agricultural Sector of Brazil". Rome. Food and Agriculture Organization of the United Nations (FAO).

B. Classification of RVCs based on Product Sophistication

1. Classification of Value Chains according to Value Added Contribution to Trade

In order to identify regional value chains according to their possible contribution to value added trade, we need to invoke a methodology that classifies industries according to their technology intensity and maps the industry classifications into the Harmonized System classification of international trade. It will be recalled that Section V.A divided Central and South Asia's intra- and inter-regional traded goods into five categories based on degrees of product sophistication (high tech, medium tech, low tech, primary products, and resource-based products). While useful to understanding the types of products traded in the regions, the classification had limited use in terms of its ability to classify major industries.

This chapter adopts a different methodology for the classification of trade according product sophistication, one that permits a higher degree of disaggregation in Central and South Asia's

traded products. The classification is based on the OECD methodological work classifying manufacturing industries in four categories of technological intensity: high, medium-high, medium-low and low technology.[91] This classification is based on indicators of (direct as well as indirect) technological intensity that reflect to some degree "technology-producer" or "technology-user" aspects. It is generic insofar as it does not necessarily differentiate the degree of high-technology content in each high-technology industry, nor does it distinguish between those lower technology-intensive industries that contain different levels of technological intensity. High technology products contribute over 20 percent of the total value of global manufactured exports.[92] In the advanced economies, they account for more than half of manufacturing activity.[93] Low technology products rank in the lower half of global trade in terms of importance, and they contribute less value added to producing countries than do medium to high technology intensive products.[94]

In the present case, the OECD classification is extended in two ways. First, the OECD's consolidation of textile and textile products and leather and footwear has been separated into (i) textile and textile products, (ii) leather, and (iii) footwear. Second, raw material and intermediate products have been added to four industries: (a) petroleum, gas and electricity; (b) wood products; (c) food products; and (d) other manufactures. Table 13.1 presents the classification and the International Standard Industrial Classification (ISIC, Revision 3) codes associated with each industry. The concordance between the broad ISIC codes and the corresponding Harmonized System codes used for the trade data are available from the United Nations.[95]

2. Comparative Advantages and Intra-Industry Trade

The methodology adopted in the present study to identify regional value chains is based on the revealed comparative advantage calculations reported in Chapter 5. This approach is the standard one used to identify which countries are most competitive in supplying raw materials and intermediate and final products to an industry. Apart from identifying the industries that have regional value chain development potential, it also shows whether the countries specialize in low, medium or high technology industries.

Value chain opportunities are identified for two or more countries having a revealed comparative advantage. Each of the industry traded products are then ranked in terms of the importance of

[91] Organisation for Economic Co-operation and Development (OECD, 2011), "ISIC Rev 3 Technology Intensity Definition: Classification of manufacturing industries into categories based on R&D intensities". Paris, OECD Directorate for Science, Technology and Industry. Available: http://www.oecd.org/sti/ind/48350231.pdf.

[92] United Nations Industrial Development Organization (UNIDO, 2013), "Industrial Development Report 2013. Sustaining Employment Growth: The Role of Manufacturing and Structural Change". Available: https://www.unido.org/fileadmin/user_media/Research_and_Statistics/UNIDO_IDR_2013_main_report.pdf.

[93] Organisation for Economic Co-operation and Development (OECD, 2011), "OECD Science, Technology and Industry Scoreboard 2013". Paris. Available: http://dx.doi.org/10.1787/sti_scoreboard-2013-en.

[94] Organisation for Economic Co-operation and Development (OECD, 2013), *Interconnected Economies: Benefiting from Global Value Chains*. Paris, OECD Publishing. Available: http://dx.doi.org/10.1787/9789264189560-en.

[95] United Nations, "Correspondence Tables". Online: http://unstats.un.org/unsd/cr/registry/regot.asp?Lg=1.

the industries' traded products within and between the Central and South Asia regions, and the product export rank for each country. Finally, existing intra-industry trade is identified as a further means of integrating national production processes into intra- and inter-regional value chains.

3. Limitations of Gross Trade Flows

Use of gross trade flows in the calculation of revealed comparative advantage has well-known limitation. The degree of fragmentation of exports shows a considerable gap when estimated with gross export data versus and value added export data, with the result that revealed comparative advantage calculations differ substantially.[96] The Trade in Value Added (TiVA) initiative addresses the double counting that occurs in conventional trade data because intermediate goods and services cross borders many times, especially with more sophisticated cross-border value chains. The full decomposition of gross exports into value added components is based on the recently released World Input Output Database (WIOD) covering 40 countries plus an estimation of the rest of the world, and 35 sectors for the period 1995-2009.[97]

TiVA measures trade flows related to the value that is *added* by a country in the production of any good or services that is exported. The new dataset shows, for example, that trade in East Asia is increasingly shifting from trade in products to trade in tasks as firms becoming more closely integrated into global value chains. The proportion of GVCs in the region's total trade is now nearly 40 percent more than it was two decades ago.[98] The East Asia's GVC participation rate, equal to more than half of all trade, is larger than any other developing region.[99] That changing dynamic has driven much of the regional clustering of value chains and paved the way for closer regional integration. It would be useful and appropriate to use the TiVA dataset to identify regional value chains in Central and South Asia. Unfortunately, information on value added trade is only available for India and is not available for the other seven countries in the two regions.[100]

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[96] J. Taborda (2014), "Sector relatedness, revealed comparative advantages and production in global value chains". Paper to be presented at the DRUID Academy conference in Rebild, Aalborg, Denmark on January 15-17, 2014. Available: https://www.iioa.org/conferences/22nd/papers/files/1523.pdf.

[97] M.P. Timmer, ed (2012), "The World Input-Output Database (WIOD): Contents, Sources and Methods", WIOD Working Paper Number 10/ Available: http://www.wiod.org/publications/papers/wiod10.pdf.

[98] A country's integration in GVCs is measured as the share of imported intermediate inputs embodied in its exports following their incorporation in the production of goods and services. Data from OECD-WTO, Trade in Value Added (TiVA) Database, http://oe.cd/tiva as reported in Statlink at http://dx.doi.org/10.1787/888932904355. See also OECD, "Measuring Trade in Value Added: An OECD-WTO Joint Initiative". Available: http://www.oecd.org/sti/ind/measuringtradeinvalue-addedanoecd-wtojointinitiative.htm. For access to the TiVA database, see http://stats.oecd.org/Index.aspx?DataSetCode=TiVA_OECD_WTO.

[99] Based on data reported in UNCTAD (2013) from UNCTAD-Eora GVC database.

[100] For TiVA information on India, see "OECD/WTO Trade in Value Added (TIVA) Indicators: India." Paris. Available: http://www.oecd.org/sti/ind/TiVA_INDIA_MAY_2013.pdf.

A second limitation of revealed comparative advantage is that the calculations are based on past information that does not take into account current and possible future structural adjustments in the trade sectors. An alternative measure is the Domestic Resource Cost (DRC) coefficient, which compares the cost of domestic production with world prices. The DRC measures the dollar cost in domestic resources of earning or saving a net dollar of foreign exchange. Therefore, values below 1.0 indicate a comparative advantage and values above 1.0 a disadvantage. To the extent that a country persists in producing commodities whose DRCs are greater than one, its resources are being poorly utilized. The country would have little chance of increasing exports of those items or increasing domestic production to substitute for imports, since they are inherently non-competitive in world markets. More importantly, the process of compiling DRCs can be done in

Table 13.1: Classification of Industries according to Technological Intensity

Industry Group	Industry	Sub-Industry	ISIC Rev. 3
High-technology industries	Aircraft and spacecraft		353
	Pharmaceuticals		2423
	Office, accounting and computing machinery		30
	Radio, TV and communications equipment		32
	Medical, precision and optical instruments		33
Medium-high-technology industries	Electrical machinery and apparatus		31
	Motor vehicles, trailers and semi-trailers		34
	Chemicals excluding pharmaceuticals		24 excl. 2423
	Railroad equipment and transport equipment		352 + 359
	Machinery and equipment		29
Medium-low-technology industries	Building and repairing of ships and boats		351
	Rubber and plastics products		25
	Petroleum, manuf of gas, electricity, of which:		23+40
	Other non-metallic mineral products		26
	Basic metals and fabricated metal products		27-28
Low-technology industries	Manufacturing not elsewhere classified		36+37
	Wood, pulp, paper, paper products, printing and publishing, of which	Forestry Products	02
		Wood processing	20-22
	Food products, beverages and tobacco, of which:	Agricultural & Fishery Products	01 + 05
		Food processing	15-16
	Textiles and textile products		17-18
	Leather and footwear		19

Source: Extended classification of the OECD (2011), "ISIC Rev 3 Technology Intensity Definition: Classification of manufacturing industries into categories based on R&D intensities". Paris, OECD Directorate for Science, Technology and Industry. Available: http://www.oecd.org/sti/ind/48350231.pdf.

such a way that disaggregated cost data are separated according to productive stages along the value chain. However, this type of information is unavailable for Afghanistan and the Central Asian countries. For that reason, we adopt the standard RCA approach when identifying comparative advantages in regional value chains.

C. Potential Regional Value Chains

This section describes the results of an analysis of potential regional value chains based on the existence of comparative advantages in the production of goods from the 20 potential industry groups described in the previous section. Regional value chains generally cover two or more countries having a revealed comparative advantage index that exceeds unity. Based on that criterion, there is an extensive list of possible regional value chains in and between the two regions. Statistical Appendix Table A.61 list those products where two or more countries in the two regions have a comparative advantage.[101]

Because Comtrade data does not differentiate between exports from domestic production and re-exports, it is unclear whether the comparative advantages derived from that database reflect domestic production and exports of products from industries, or whether the trade data reflect re-exports.[102] For that reason, the identification of potential regional value chains in this section is limited to four of the OECD industry groups described in the previous section where it is clear that countries in the two regions are producing and exporting products within those industry groups. The categories are as follows: (a) food products and beverages (ISIC 01+05+15); (b) mineral and metal fabrication (ISIC 26+27+28); (c) textiles and textile products (ISIC 17+18); and (d) pharmaceuticals (ISIC 2423). In this section, we highlight industries and associated products where either (a) the products represent an important share of total intra- and inter-regional trade; or (b) Afghanistan has a comparative advantage in the production of the industries' goods; or (c) there is potential for inter-regional value chains (e.g., unprocessed to processed products) that would require products to move through Afghanistan.

1. Agricultural Foods and Raw Materials (ISIC 01+05+15)

Agricultural food products are one of the largest industries throughout the Central and South Asia regions. There are over 70 products in the processed foods industry where the regions' countries have a comparative advantage, and another 70 unprocessed agricultural products that are either consumed directly or serve as inputs to the food processing industry. In some cases, it is possible to map the unprocessed products used as inputs to the processed food industry (Table 13.2); in others, it is not (Table 13.3). The large and widespread distribution of food manufacturing in the Central and South Asia regions makes this industry one of the obvious candidates for a regional value chain. Most countries in both regions are involved in farm-level production and the supply of intermediate inputs, manufacturing and distribution stages along the value chain, through both multinationals and SMEs.

The following are some of the regional value chains that could be developed in this industry grouping:

[101] Caution should be exercised in the interpretation of the information since it is based on the United Nations Comtrade database, which includes products re-exports.

[102] These situations arises especially the following industries: aircraft (ISIC 353); radio, television and communications equipment (ISIC 32); electrical machinery and apparatus (ISIC 31); building and repairing of ships and boats (ISIC 351); and machinery and equipment (ISIC 29).

(a) Fresh and Chilled Fruits and Vegetables

In Central and South Asia, potential products in the fresh and chilled fruit and vegetable RVC are apples (HS 080810 from Afghanistan and Kyrgyzstan); aubergines or egg-plants (HS 070930 from Kyrgyzstan and Uzbekistan); beetroots and radishes (HS 070690 from Kyrgyzstan, Tajikistan, and Uzbekistan); carrots and turnips (HS 070610 from Kyrgyzstan, Tajikistan, and Uzbekistan); garlic (HS 070320 from Kyrgyzstan and Uzbekistan); mangoes and mangosteen (HS 080450 from India and Pakistan); leeks and other alliaceous vegetables (HS 070390 from Kyrgyzstan and Uzbekistan); legumes, excepting peas and beans (HS 070890 from Pakistan and Uzbekistan); pears (HS 080820 from Kyrgyzstan and Uzbekistan); peas (HS 080820 from Afghanistan and Pakistan); plums (HS 080940 from Kyrgyzstan and Uzbekistan); potatoes (HS 070190 from Afghanistan, Pakistan and Kyrgyzstan); and other citrus fruits (HS 080590 from Pakistan and India).

The regional value chain for fresh and chilled fruits and vegetables consists of inputs needed for production such as seeds, fertilizers, agrochemicals like herbicides, fungicides and pesticides, farm equipment, and irrigation equipment; cultivation and harvesting; packing and processing services, such as washing, chopping, and mixing as well as bagging, branding, and applying bar codes; and distribution to regional or global markets. Competition in the industry is growing and there are an increasing number of public and private industry standards that need to be met. Because of the fragile and perishable nature of the products, the industry requires a high degree of coordination at different stages along the supply chain. Logistics and transportation are key supporting activities in the region value chain to ensure that perishable product reach their destination in acceptable conditions. Cool storage units are often used throughout the chain to keep produce fresh.

(b) Processed Foods

The potential products for the regional processed food value chain are preserved and dried apricots (HS 200850 and HS 81310 from Afghanistan, Pakistan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan); preserved cherries (HS 81210 from Kyrgyzstan and Tajikistan); preserved cucumbers (HS 71140 and 200110 from India, Kyrgyzstan, Tajikistan and Uzbekistan); fruit and vegetable juices (HS 200980 and HS 200950 from Pakistan, Tajikistan and Uzbekistan); preserved fruits and nuts (HS 81290 and HS 81340 from Afghanistan, India, Pakistan, Kyrgyzstan, Tajikistan and Uzbekistan); semi-milled rice (HS 100630 from India and Pakistan); jams, fruit jellies, fruit sweet (HS 200799 from India, Kyrgyzstan and Uzbekistan); dried prunes (HS 81320 from Afghanistan, Kyrgyzstan, Tajikistan and Uzbekistan); refined sugar (HS 170199 from India and Pakistan); and tea (HS 902300 and HS 902100 from Afghanistan, India, Pakistan and Kyrgyzstan).

The main stages of the processed foods value chain share some common features as that for fresh and chilled fruits and vegetables. The consist of input elements needed for production; production of fruit and vegetables and all processes related to the growth and harvesting of the produce, such as planting, weeding, spraying, and picking; packing and cold storage, grading, washing, trimming, chopping, mixing, packing, and labeling; processing through dried, frozen, preserved, juices, and pulps; and distribution and marketing.

(c) Raw Material Inputs

There are a number of raw material inputs that have RVC potential. They include liquorice roots used primly in the pharmaceutical industry (HS 121110 from Afghanistan and Uzbekistan); raw hides (HS 410130, HS 410121 and HS 410390 from Afghanistan, Kyrgyzstan, Tajikistan and Turkmenistan); cotton linters (HS 140420 from India, Pakistan, Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan). These inputs serve the pharmaceutical, leather and textile industries respectively.

(d) Herbs and Spices

Among the major herbs and spices in which Central and South Asia countries have a comparative advantage and where there is RVC potentials are the following: Anise (HS 090910 from Afghanistan, India, Pakistan and Tajikistan); caraway (HS 090940 from Afghanistan, India, Pakistan, Kyrgyzstan and Tajikistan); coriander (HS 090920 from Afghanistan and India); cumin (HS 090930 from Afghanistan, India and Pakistan); safflower (HS 120760 from India and Kazakhstan); sesame (HS 120740 from Afghanistan, India, Pakistan and Uzbekistan); and turmeric (HS 091030 from India and Pakistan). The major channels for moving up the value chain in this industry is through the focus on higher added-value areas such as organic certification, quality assurance, packaging and branding.

In general, access to developed markets requires compliance with high product standards. Success in the development of a regional value chain will depend on the ability and willingness of countries to cooperate in sanitary and phytosanitary (SPS) requirements as well as quality standards under the World Trade Organization (WTO) rules in order to achieve globally competitiveness.[103] One of the ways to upgrade the regional value chain for all the agricultural food and raw material industries is through their transformation into the production of organically certified products. That transformation has been shown to have large paybacks since organic products have multiple price premiums over conventional products.[104]

[103] United Nations Industrial Development Organization (UNIDO, 2006), "Global Value Chains in the Agrifood Sector". Vienna. Available: https://www.unido.org/fileadmin/user_media/Publications/Pub_free/Global_value_chains_in_the_agrifood_sector.pdf.

[104] M. Lord and P. Tangtrongjita (2011), "Mapping the organic vegetable value chain along the EWEC". Manila, Asia Development Bank. Available: http://mpra.ub.uni-muenchen.de/42591/.

Table 13.2: Mapping of Unprocessed and Processed Foods for Potential Regional Value Chain

Unprocessed Agricultural Products	RCAs of Unprocessed Agricultural Products								RCAs of Processed Food Products								Processed Food Products
Description and HS Code	AF	IN	PK	KZ	KG	TA	TK	UZ	AF	IN	PK	KZ	KG	TA	TK	UZ	Description and HS code
Apricots, fresh-080910	129.5				126.8	23.9		178.6	1.1				1.1	3.3		4.3	**Apricotspreserved-200850**
									46.8		1.8	1.3	4.4	584.9		35.7	**Apricots, dried-81310**
Bovine animals, live-010290	3.2				3.8	1.6				2.3	2.0						**Bovine meat frozen -20629**
														1.3	1.0		**Bovine hides, raw, nes-410130**
									7.6				3.1	4.8	1.0		**Bovine hides-410121**
									7.8				15.4	10.2	2.2		**Bovine skins raw-410110**
											4.4		10.4				**Buttermilk-40390**
Cherries, fresh-80920					24.9	4.5		44.2					12.8	5.1			**Cherries preserved-81210**
Cotton, not carded or combed-520100	73.9	10.9	8.5		10.7	68.4	15.2	96.8		12.0	5.6	2.1		5.1	96.1	121.1	**Cotton linters-140420**
										3.6	5.9	14.9			164.6		**Cotton seed oil-cake-230610**
												48.2		2.6	76.5		**Cotton-seed oil crude-151221**
Cucumbers and gherkins-070700					4.0			17.3		24.2			1.1				**Cucumbers preserved-71140**
										11.4			1.4	2.8		7.5	**Cucumbers preserved -200110**
Fruits, fresh nes-081090	18.4				3.3	3.9		24.5			2.6			2.3		1.5	**Fruit & veg juice -200980**
									5.7	1.4				2.9			**Fruits and nuts -81290**
									29.8	1.9	40.3		12.2	48.2		30.2	**Fruits, dried nes-81340**
Grapes, fresh-080610	33.4				2.0	1.6		26.8	46.9					9.0		37.3	**Grapes, dried-80620**
Nuts shell -120210	2.3	1.2				24.4		18.9	2.0	8.8							**Ground-nut oil -150890**
Ground-nuts shelled-120220		18.4				7.6		7.1		12.4	1.7						**Ground-nut oil-cake -230500**
Onions and shallots -070310	85.3	9.2	4.8		16.6	90.9				12.7	7.1			1.1		3.8	**Onions, dried-71220**
Rice in the husk -100610	1.3	2.9								5.4	71.0						**Rice, broken-100640**
										21.2	75.9						**Rice, semi-milled-100630**
Salmonid, not trout or salmon-030219		7.2	6.6							6.4	70.7						**Salmonid, frozen-30329**
Tobacco, unman-240110	1.9	2.1	1.9		46.8	3.0		17.9	3.7	6.7							**Tobacco extracts -240399**
Tomatoes, fresh or chilled-070200	4.7				2.0			11.5						11.1		1.7	**Tomato juice -200950**
Veg products-21299	69.6					13.1		3.2	1.7	1.3	29.4					1.1	**Veg fats & oils-151620**
Vegetables, fresh or chilled nes-070990		1.5	6.0		2.3			22.9		2.0	2.8					1.6	**Veg, fruit, nut -200190**
										17.7	3.9	2.2					**Vegetable oil-cake -230690**
											1.1		20.0			25.7	**Vegetables preserved-71190**

Table 13.3: Other Processed and Unprocessed Foods for Potential Regional Value Chain

Other Processed Food Products	RCAs of Processed Food Products								Other Unprocessed Food Products	RCAs of Non Processed Food Products							
Description and HS code	AF	IN	PK	KZ	KG	TA	TK	UZ	**Description and HS code**	AF	IN	PK	KZ	KG	TA	TK	UZ
Cane molasses - 170310		4.3	17.6					1.0	Animals, live, except farm animals-010600	2.0					1.2		6.8
Cereal flour except wheat, meslin, rye, maize, rice - 110290		1.8	4.3						Anise seeds-090910	345.8	4.5	5.1			1.6		
Cereal groats- 110319			4.0	3.9	13.4				Apples, fresh-080810	14.9				9.0			1.1
Chewing gum containing sugar - 170410			17.0					3.5	Aborigines(egg-plants), fresh or chilled-070930					1.9			19.5
Cuttle fish, squid, frozen, dried, salted or in brine - 30749	2.6	5.7							Beans dried, shelled, nes-071339	258.1				3.5	3.4		17.0
Degas & residues from fatty substances - 152200							5.9	1.1	Beans, small red-071332	4.8				4.4	2.8		21.8
Fish meat & mince, except liver, roe & fillets, froze - 30490		2.2	1.5			2.1			Beetroot, radishes -070690	1.9				4.2	10.0		64.1
Fish nes, frozen, whole - 30379		4.4	1.8						Caraway seeds-090940	199.9	3.6	10.0		19.4	2.3		
Fish prepared or preserved, except whole or in pieces - 160420		1.5	5.5						Carrots and turnips, fresh or chilled-070610	2.0				51.2	10.7		12.5
Flatfish except halibut, plaice or sole, frozen, whole - 30339		1.1	90.4						Chickpeas, dried, shelled-071320	2.7	14.4						
Flour or meal of dried legumes-110610	19.1	11.8	4.3						Citrus fruits, fresh or dried, nes-080590		1.9	13.8		1.2			
Flour, meal, powder of fruit/nut, citrus or melon pee- 110630	2.1	5.3							Coarse animal hair-510220	830.5		4.9		5.5	51.8	93.4	16.7
Flours, meals & pellets - 30510		1.4	98.4						Coriander seeds-090920	4.4	19.9						
Greasy wool not carded or combed - 510119	2.5		1.9		13.1	2.2	2.2		Crabs, not frozen-030624		2.4	10.6					
Homogenized vegetables prep-200510		2.4			2.3				Cumin seeds-090930	48.7	44.1	7.7					
Jams, fruit jellies, fruit sweet - 200799		2.7			1.2			3.3	Dates, fresh or dried-080410	36.9		50.6					
Mackerel, frozen, whole - 30374	3.6	1.7	1.7						Durum wheat-100110		1.5	10.1					2.4
Maize (corn) flour - 110220	44.8		2.2			1.2			Edible brassicas -070490					17.7	3.0		31.7
Maize (corn) groats or meal - 110313	2.1	1.7							Fennel seeds, juniper berries-090950	2.9	35.7	21.8					
Maize (corn) starch - 110812		3.4	4.6						Fine animal hair, not carded or combed-510210	150.3				1.5			
Maple sugar and maple syrup - 170230		1.5	4.8						Flax fiber, raw or retted-530110		2.9		2.7				
Milk not concentrated nor sweetened 1 - 6% fat - 40120			4.6		15.7				Garlic, fresh or chilled-070320					3.5			1.5

Milk powder < 1.5% fat - 40210		1.3			4.9					Goats, live-010420		2.6	1.8		9.4			
Mixtures of edible nuts, dried and preserved fruits - 81350	72.2			2.2	3.1	78.3		19.5		Mangoes and mangosteens-080450		6.7	14.2					
Molasses nes - 170390				1.8	12.6					Honey, natural-040900		2.3	1.8		5.0			
Mushrooms and truffles, dried, not further prepared - 71230		1.4	3.2		1.8					Hop cones, not ground-121010	28.3		9.2					
Prunes, dried - 81320	8.1				2.0	55.9		18.3		Kidney beans and white pea beans-071333					225.6	5.4		8.1
Rape/colza sed oil - cake - 230640		6.5	3.5							Leeks & other alliaceous vegetables-070390					1.1			5.7
Raw sugar, beet - 170112			5.3		1.2					Legumes except peas & beans-070890			6.6					1.1
Refined sugar, in solid form, nes - 170199		4.4	10.5							Leguminous vegetables dried-071390	29.1							4.4
Sardines, brisling, sprats, frozen, whole - 30371		1.2				18.9				Liquorice roots primly in pharm-121110	53.4							23.1
Sesame oil & its fractions - 151550	5.3	3.5								Millet-100820	11.6	12.9						
Sheep carcasses fresh or chilled - 20421	9.0	11.3	67.8		45.0					Mixtures of spices-091091	1.1	7.0	51.0					
Sheep carcasses and half carcasses, frozen - 20441				1.1	14.2					oil seeds and oleaginous fruits-120799	34.5	2.1	1.3					
Sheep or lamb skins, pickled, without wool - 410221	9.6					4.7				Peaches, nectarines, fresh-080930					11.7			27.3
Sheep or lamb skins, raw- 410229	35.7				183.4	36.4				Pears and quinces, fresh-080820					7.6			2.0
Sheep or lamb skins, raw, wool on-410210	57.1				7.9	1.0	1.5			Peas dried, shelled-071310	2.3		1.1					
Shrimps and prawns, frozen - 30613		7.9	1.9							Plants & pts of plants-121190	86.5	4.9	3.5		2.8	2.8	3.8	11.4
Sole, frozen, whole - 30333		12.3	3.4							Plums, sloes, fresh-080940					21.6	7.4		50.9
Tea, black in packages < 3 kg - 90230	4.2	2.9	1.0		3.7					Potatoes, fresh or chilled except seed-070190	28.7		15.6		26.4			
Tea, green in packages < 3 kg - 90210		1.4			3.1					Raw hide/skins -410390	9.5				5.7	3.5	2.1	
Un-denatured ethyl alcohol - 220710		1.1	14.8							Roses-060240					1.6			27.0
Waters - 220210			1.1		4.4					Safflower seeds, whether or not broken-120760		25.1		61.5				
Wheat or meslin flour - 110100		1.2	36.3	34.0		17.9		1.9		Seeds, fruit and spores for sowing-120999	48.7	2.2				7.1		

2. Minerals and Metal Fabricated Products (ISIC 26+27+28)

There are 13 products in the basic metals and fabricated metal industry (ISIC 27+28) and ten products in the non-metallic mineral industry (ISIC 26) where two or more Central and South Asia countries have a comparative advantage (Figure 13.2 and Table 13.4). The main suppliers to the ferrous and non-ferrous metal industry are the mining of metal ores and recycling industries. Regional value chains in these types of industry consists of mining of ore into concentrates or intermediate raw materials for refining; refining of primary (mined) supplies and secondary (recycles) raw materials; processing of unwrought metal into semi-manufactured products such as plates, sheets, strips, foils, bars, rods and tubes) or processing into pure chemical compounds, for use by the manufacturing industry. The following are potential regional value chains in mineral and metals:

(a) Precious and Semi-Precious Stones

One important non-ferrous metal industry is precious and semi-precious stones, either unworked or partly worked (HS 710310 and HS 710391) produced and exported by Afghanistan, India, Pakistan and Tajikistan. Rubies (HS 710391) are mined in Tajikistan and Pakistan, as well as Afghanistan, where there are also emeralds and sapphires. Afghanistan also has semi-precious lapis lazuli, tourmaline, aquamarine, kunzite, topaz, garnets, fluorite and varieties of quartz. There is considerable fragmentation of the industry along its mining, processing and distribution stages. Processing involves cleaving or sawing; sorting; cutting and polishing; and manufacturing into jewelry products. It is in the downstream activities of manufacturing and retailing that most of the value addition occurs, and retail products often sell at over ten times the cost of the rough stones.[105] As such, the major beneficiaries in the industry are those who are able to carry out the gemstone and jewelry manufacturing, as is the case of India and, to a lesser extent, Pakistan and Uzbekistan. India along with Hong Kong and Thailand dominate the global gemstone cutting, polishing and jewelry manufacturing industry, since the mass production of these products requires sophisticated and automated production equipment.

(b) Other Non-Ferrous and Ferrous Metals

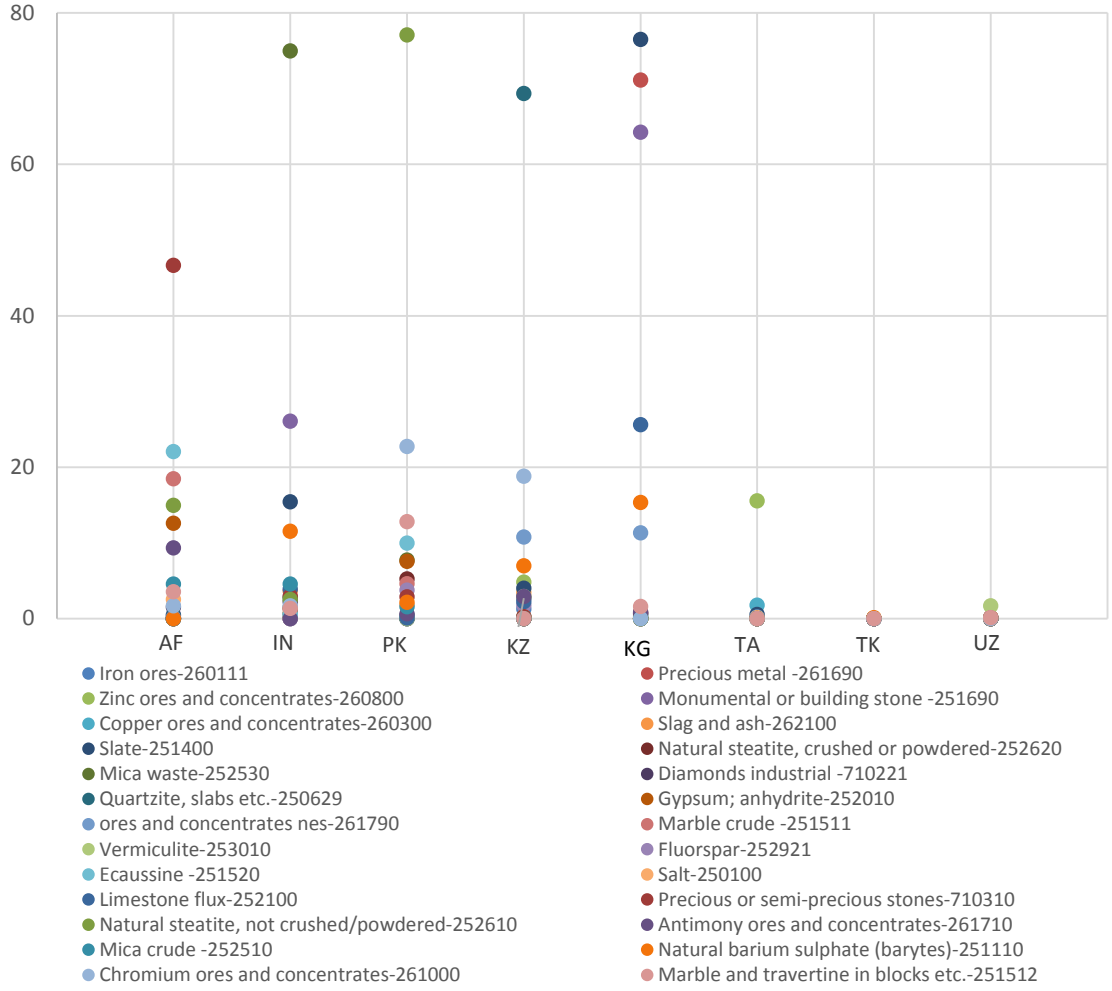
There are several other important non-ferrous and ferrous metal industries in the Central and South Asia regions. In aluminum (HS 760110 and HS 760122), India, Kyrgyzstan and Tajikistan have comparative advantages in its production and export. Unwrought aluminum ranks first among Tajikistan's exports. In lead (HS 780110), India, Pakistan and Kazakhstan have a comparative advantage. Iron or non-alloy steel is produced in various forms (HS 721650, HS 721631 and HS 720720) and Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan have comparative advantages in their production and export.

[105] A. Thomas (2008) *Gemstones Handbook.* United Kingdom: New Holland Publishers. Available: http://books.google.co.th/books/about/The_Gemstones_Handbook.html?id=sKBHSwAACAAJ&redir_esc=y.

(c) Slabs of Marble and Other Stones

Afghanistan has a comparative advantage in the production and export of cut or sawn slabs of marble and other types of stones, as do India, Pakistan and Kyrgyzstan. Afghan white marble is a high quality stone but the product has difficulty reaching the international market and there is considerable inefficiency in the domestic supply chain.[106] Most of the marble quarried in that country is exported as rough-hewn blocks to Pakistan, and most of the value in production of marble is created in the final stages of production that take place in Pakistan. There are considerable opportunities for improvements in the processing and cutting stages of production as well as measures to lower transportation costs in order to make exports more competitive.

Figure 13.3: Comparative Advantage of Mineral Extraction Industry (ISIC 12)



[106] Ministry of Commerce and Industries and Ministry of Mines and Petroleum (undated), "Implementing the SME Strategy: An Updated Action Plan for Developing Afghanistan's Marble Sector". October 2013- September 2016. Available: http://afghanenterprise.com/wp-content/uploads/2014/04/Marble-Sector-Action-Plan-4-14.pdf.

Table 13.4: Potential Value Chains in Minerals and Metal Fabricated Products

Industry	HS 6-digit	Description	Indicator	Central and South Asian countries								Rank Order in Total Regional
				AF	IN	PK	KZ	KG	TA	TK	UZ	
Non-metallic mineral products (ISIC 26)	680221	Cut or sawn slabs of marble, travertine	RCA:	1.1	***2.9***	***1.8***	0.0	0.2	-	-	0.5	651
			IIT:	96.9	3.4	63.2	-	-	-	-	-	
			Rank:	394	617	495	2,615	833	1,917	2,243	442	
	691090	Ceramic for bathroom kitchen sanitary	RCA:	-	***1.5***	***1.7***	-	-	-	-	-	714
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	1,923	630	382	2,592	1,154	1,394	1,865	2,032	
	700529	Float glass in sheets, non-wired, clear	RCA:	-	-	1.1	-	***26.8***	0.3	-	-	804
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	5,002	2,717	360	909	16	222	1,280	1,383	
	681190	Articles of asbestos or fiber cement	RCA:		**2.2**	1.1	**7.5**	**66.6**	-	-	**6.2**	961
			IIT:	-	-	-	42.7	42.6	0.1	-	0.1	
			Rank:	4,956	1,937	1,203	190	108	1,345	1,833	347	
	690390	Refractory ceramic articles	RCA:		***1.6***	-	-	***2.9***	-	-	-	1349
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	4,980	1,093	2,129	1,946	304	1,708	2,081	2,760	
	680911	Plaster board	RCA:	-	-	0.3	***1.9***	-	-	-	***14.4***	1412
			IIT:	-	-	-	85.2	-	-	-	85.2	
			Rank:	4,944	4,019	942	132	1,698	2,333	2,557	81	
	690710	Unglazed ceramic mosaic tiles <7cm wide	RCA:	***1.2***	***4.7***	***2.1***	-	0.2	-	0.1		1686
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	795	1,269	885	3,172	1,497	2,238	484	2,275	
	690410	Building bricks	RCA:	-	0.0	0.8	-	***6.0***	-	-	***22.1***	1699
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	4,981	4,056	926	1,242	261	1,692	2,068	103	
	680229	Cut or sawn slabs of stone	RCA:	0.4	***1.9***	0.6	-	***2.2***			0.1	2331
			IIT:	47.4	-	47.4	-	-	-	-	-	
			Rank:	1,037	1,631	1,222	2,700	577	1,807	2,160	1,148	
	681490	Worked mica and articles of mica	RCA:	***29.5***	***4.1***	-	-	-				2981
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	293	2,104	3,335	2,864	2,216	2,615	2,794	3,165	
Basic metals and fabricated metal products (ISIC 27+28)	721049	Flat rolled iron or non-alloy steel, coated	RCA:	0.1	***2.2***	0.1	***2.9***	0.1	-	-	-	33
			IIT:	-	-	-	0.2	0.2	-	-	-	
			Rank:	297	37	554	20	276	448	1,398	2,510	
	720230		RCA:	0.1	***14.8***	-	***15.1***	-	-	-	-	50

		Ferro-silicon-manganese	IIT:	-	-	-	-	-	-	-	-	
			Rank:	623	35	5,507	25	2,420	2,749	2,898	3,224	
	720241	Ferro-chromium, >4% carbon	RCA:	-	***7.6***	-	***63.1***	-	-	-	-	57
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	5,077	36	5,508	5	2,412	2,743	2,894	3,221	
	760110	Aluminum unwrought, not alloyed	RCA:	-	***1.6***	-	***3.6***		***198.5***	0.3	-	69
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	968	55	1,532	17	2,417	1	26	2,059	
	720719	Semi-finished product, iron or non-alloy steel	RCA:	-	***6.0***	-	***1.3***	-	-	-	-	205
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	5,093	128	5,518	103	2,452	2,773	2,917	3,239	
	780110	Lead refined unwrought	RCA:	-	***1.7***	***2.1***	***15.0***	0.9	0.2	-	-	339
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	5,410	369	227	26	256	250	1,294	2,461	
	760120	Aluminum unwrought, alloyed	RCA:	0.1	0.3	-	0.1	0.5	***20.6***	-	-	418
			IIT:	-	7.4	-	-	-	-	-	7.4	
			Rank:	286	328	2,381	137	92	4	1,187	326	
	721650	Sections of iron or non-alloy steel	RCA:	-	0.5	0.1	0.1	***4.6***	-	-	***2.1***	506
			IIT:	-	-	-	24.3	18.4	-	-	3.2	
			Rank:	5,194	1,437	1,466	607	153	1,655	2,035	207	
	721631	Sections, U, iron or non-alloy steel > 80m	RCA:	-	0.2	0.1	-	***5.4***	***10.0***	-	***2.1***	702
			IIT:	-	-	-	18.9	29.7	-	-	8.1	
			Rank:	5,192	2,122	1,544	1,151	121	33	442	196	
	720720	Semi-finished product, iron or non-alloy steel	RCA:	-	0.1	-	***18.1***	***2.2***	-	-	-	884
			IIT:	-	67.8	67.8	-	-	-	-	-	
			Rank:	5,094	2,156	2,864	21	138	1,648	2,030	2,733	
	821220	Safety razor blades, including blanks	RCA:	-	***1.3***	***2.3***	-	-	-	-	-	944
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	2,305	648	282	1,965	2,962	3,180	3,269	1,861	
	720990	Cold rolled iron or non-alloy steel, flat, width	RCA:	***6.7***	***1.4***	-	***1.5***	-	-	-	-	1228
			IIT:	-	14.7	14.7	-	-	-	-	-	
			Rank:	207	1,362	3,415	234	1,665	2,318	2,546	1,382	
	720299	Ferro-alloys, nes	RCA:	***79.2***	***2.4***	-	0.2	0.0	-	-	-	1383
			IIT:	-	-	-	-	-	-	-	-	
			Rank:	30	892	5,516	625	2,246	2,630	2,806	3,173	

3. Textiles and textile products (ISIC 17+18)

Textile and textile product manufacturing is widespread throughout Central and South Asia, and there is a high rank ordering of many of the 350 traded products in the industry where the regions' countries have a comparative advantage (Figure 13.4). Region-wide value chains would rationalize the different stages of production involving spinning mills, the weaving and knitting and process stages, and the stitching for producing garments and apparel. The major exports from the two regions consist of garments and carpets. In the textile manufacturing stages of fiber production, spinning of yarn, and weaving and knitting of fabrics, only India and Pakistan are significant exporters of fiber, yarn and fabrics.

India and Pakistan have a comparative advantage in the largest number of products in the industry, namely, around 300 of the 350 products. Kyrgyzstan has a comparative advantage in over 91 of the products, while Uzbekistan has a comparative advantage in 83 of the products. Afghanistan, Tajikistan and Turkmenistan each have comparative advantages in 30 to 50 of the products. The ranking order of the products in this industry ranges from as high as 19 in order of importance. The two industries that lend themselves to regional value chains are those involving the production and export of garments and carpets.

(a) Garments

The greatest value addition in the textile chain is generated in the apparel segment. It involves the cutting and stitching process for the garment confection and its dyeing and finishing processes consisting of cleaning, pressing and the final preparations. India and Pakistan are the large garment producers in South Asia. Afghanistan exports some clothing such as men's and boys' shirts of manmade fibers (HS 610520), women's and girls' suits of synthetic fibers (HS 620413), men's and boys' dressing gowns (HS 620799), girls' cotton garments (HS 621142).

Different types of blankets and bed linens are also exported by Afghanistan as well as India and Pakistan in South Asia, and all Central Asia countries. Tajikistan and Uzbekistan, followed by Kyrgyzstan, produce a large variety of linens for table, kitchen and toilet, as well as curtain drapes, bedspreads, sacks and bags, hats and other types of headgear.

In practice, garment manufacturers compete with one another and there is little room for collaboration, even in the training of needed skilled workers for fear that, once trained, they will be hired by rival firms. While cross-country alliances across the Central and South Asia regions might seem difficult, there is room for collaboration in information sharing areas that are currently lacking in Central Asia and Afghanistan, namely, inventory management, lead time, technology and logistics. One such area of collaboration that addresses these issues, for example, is the use of Quick Response process used in European and North American apparel industries. The QR process shortens lead times to improve quality, reduce costs and increasing the organization's competitiveness and market share by serving customers more quickly.[107]

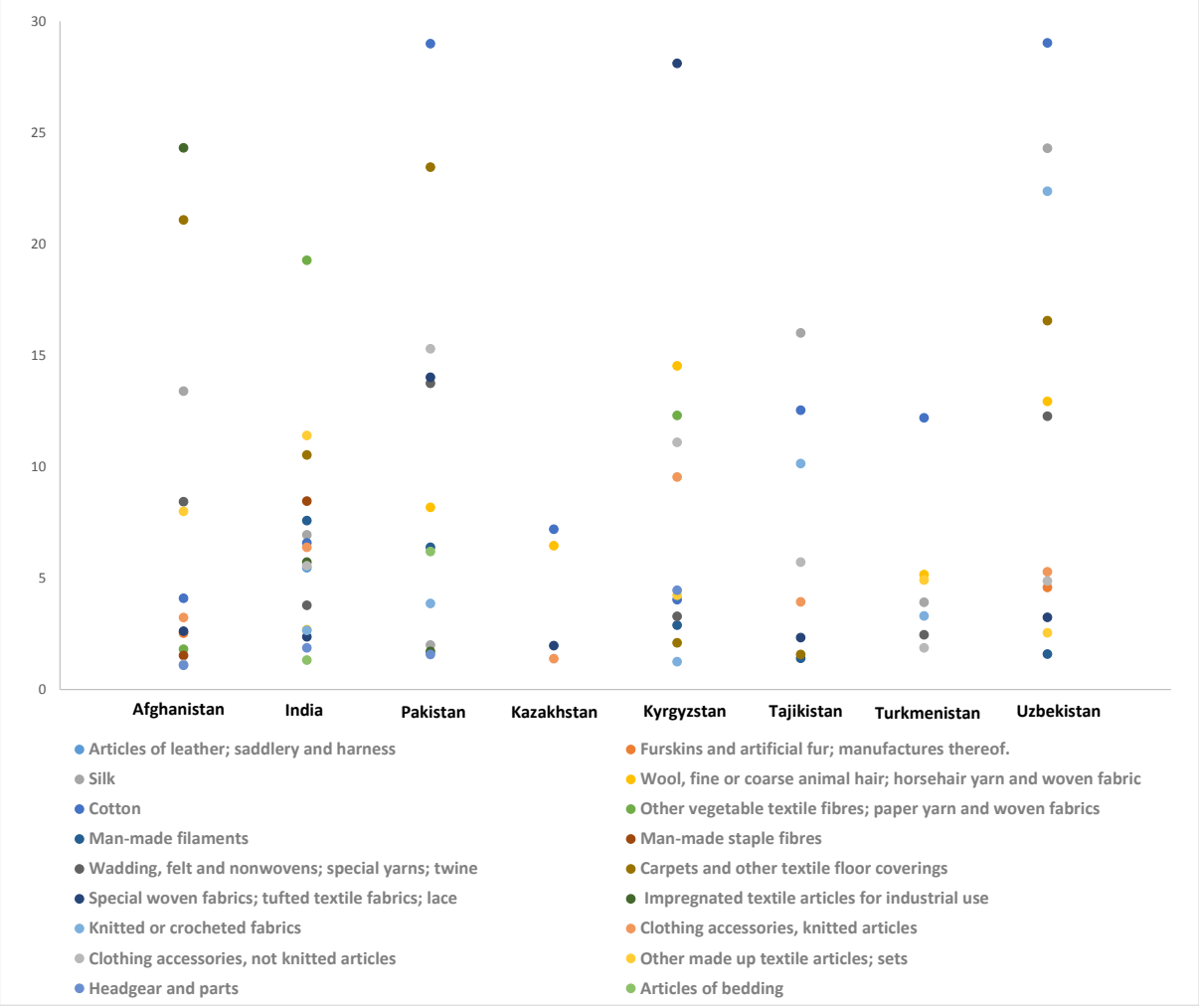
[107] For details, see Wikipedia, "Quick Response Manufacturing". Available: http://en.wikipedia.org/wiki/Quick_response_manufacturing.

(b) Carpets

India and Pakistan are the major exporters of carpets throughout Central and South Asia. But exports from Pakistan also reflect production of unfinished carpets from Afghanistan, where several types of handmade carpets are produced. They include felted wool carpets, flat non-pile fabric woven carpets, and pile and knotted carpets made from wool, silk, and cotton. The industry lacks capacity to undertake the finishing stages of production and, for that reason, cutting and washing are done in Pakistan and from there they are distributed to wholesale buyers in Europe, North America and elsewhere. While investment in finishing facilities within Afghanistan could add substantial value to the industry, an integrated regional value chain could help to improve returns to the large network of weavers working individually or through fragmented carpet associations throughout the country.

Elsewhere in the regions, there are some carpets exported by Kyrgyzstan in the form of wool carpets of woven pile (HS 570231 and HS 570291) and by Uzbekistan in the form of carpets of manmade yarn of woven pile (HS 570232).

Figure 13.4: Comparative Advantage of Products in Textiles and Textile Industry (ISIC 17-18)



Note: Product names refer to HS 2-digit sections.

4. Pharmaceuticals (ISIC 2423)

There is a RVC potential for bulk pharmaceutical ingredients, or active pharmaceutical ingredients (API) in the form of powders. In the global market, India and China are the world's largest producers of bulk pharmaceuticals. In Central Asia, countries having a comparative advantage in the production and export of API are Uzbekistan and Tajikistan. Pakistan's pharmaceutical industry is still in an infant stage of development, and it has a negative list of the industry's products for trade with India.[108]

Table 13.5: Pharmaceuticals (ISIC 2423)

	Glycosides & their salts, ethers, esters & other derivatives (HS 293890)		Vegetable alkaloids, salts, ethers, esters in bulk (HS 293990)	
	RCA:	Rank:	RCA:	Rank:
Afghanistan	-	1,734		3,760
India	1.1	1,369	6.6	445
Pakistan	-	3,580	-	2,622
Kazakhstan	0.2	546	-	1,616
Kyrgyzstan	-	2,066		2,844
Tajikistan	2.5	167	5.4	3,089
Turkmenistan	-	1,257	-	3,188
Uzbekistan	23.3	83	-	188

Note: - refers to an RCA of less than 0.1.

Herbal medications also form part of potential regional value chains. However, traditional herbal medicines and other traditional natural health products do not have a specific HS code and are not themselves classified under medicaments in the Harmonized System. So it is not possible to identify the potential for this industry in the region. Nevertheless, it appears to have possibilities and further study of the industry is warranted.

The pharmaceutical industry has a large potential in the region. While Good Manufacturing Practices (GMPs) for pharmaceutical manufacturing exist throughout the two regions, there remains the need to establish regulatory mechanisms to ensure that GMPs also apply to herbal medicines. At present there is no intra- or inter-industry trade in these pharmaceutical products, meaning that India, Uzbekistan and Tajikistan export but do not import the products. The development of a regional value chain in this industry could give rise to intra-industry trade if downstream linkages to suppliers and upstream linkages to distribution channels were to emerge among industry supplies in the two regions.[109]

D. Ratings

Table 13.6 shows the scores assigned to regional value chains, based on the evaluation methodology described in Chapter 3 and the analysis of the topics in this chapter.

[108] M. Panj and D. Pande (2014), "India-Pakistan Trade: An Analysis of the Pharmaceutical Sector". Indian Council for Research on International Economic Relations. Working Paper 275. Available: http://icrier.org/pdf/working_paper_275.pdf.

[109] S.M. Thangavelu and S.S. Pattnayak (undated), "Linkages, Spillovers and Foreign Ownership: Evidence from the Indian Pharmaceutical Firms". Department of Economics, National University of Singapore. Available: http://www.fep.up.pt/conferences/earie2005/cd_rom/session%20iv/iv.m/pattnayak.pdf.

Table 13.6. Summary Assessment of Regional Value Chains

		Strongly Discourages	Discourages	Neither	Supports	Strongly Supports
	A. ***Regional value chains will, in general, be a major catalyst for intra- and inter-regional trade expansion.***					
1	Kazakhstan	1	2	**3**	4	5
2	Kyrgyzstan	1	2	**3**	4	5
3	Tajikistan	1	2	3	**4**	5
4	Turkmenistan	1	**2**	3	4	5
5	Uzbekistan	1	2	3	**4**	5
6	Afghanistan	1	2	**3**	4	5
7	India	1	2	3	4	**5**
8	Pakistan	1	2	3	4	**5**

PART IV. FINDINGS AND IMPLICATIONS

XIV. SUMMARY

A. Rankings across Countries and Categories

This study has examined the following 11 types of regional trade enhancing mechanisms:

- Export Diversification
- Export Sophistication
- Comparative Advantages
- Trade Complementarities
- Intra-Industry Trade
- Price Competitiveness
- Trade Costs
- Trade Facilitation
- Structural Factors
- Survival Rates
- Economic Growth
- Regional Value Chains

We also tested the significance of distance and cultural, colonial and language ties on the enhancement of intra- and inter-regional trade. Distance was the only one of these factors that was found to have a significant statistical impact on regional trade enhancement. It is not included in the present comparative analysis of trade enhancing mechanisms since it is not a policy-related measure.

In assessing the importance of each of the policy-related mechanisms to the Central and South Asia countries' intra- and inter-regional trade, we used a common rating scale based on a structured statistical analysis. There are three features of the ratings that we need to examine:

(a) The comparative ratings for each trade enhancing mechanisms based on a 'neutral' rating scale in which no preference is given to different mechanisms.

(b) The same comparative ratings from the point of view of different stakeholder groups having different preference ordering.

(c) The degree of independence between different trade enhancing mechanisms.

The ratings in the common evaluation scoring allow us to compare the degree to which the regional analysis of trade enhancing mechanisms support intra- and inter-regional trade in Central and South Asia. The preference ordering of difference stakeholder groups developed in Chapter 3 suggests different rankings for channels through which trade-related policy and program instruments would best achieve the objectives of different groups of stakeholders. We begin with a neutral preference ordering in which all channels supporting trade in and between the two regions are given equal weights and note the following stylized facts:

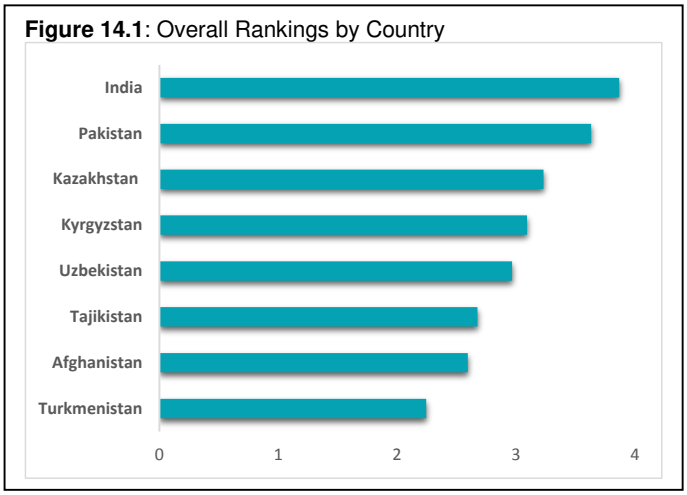
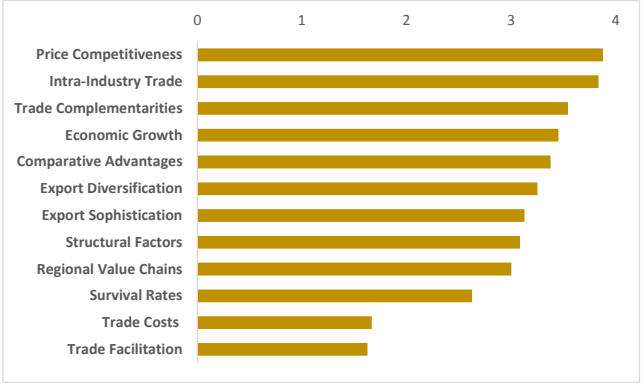


Figure 14.1: Overall Rankings by Country

- Based on overall ratings across countries (Figure 14.1), the larger economies have a higher rating than the smaller, less developed ones, suggesting that size and level of development matter in the development of regional trade. India, Kazakhstan and Pakistan have above-average overall ratings, while Afghanistan and Turkmenistan have below-average ratings.

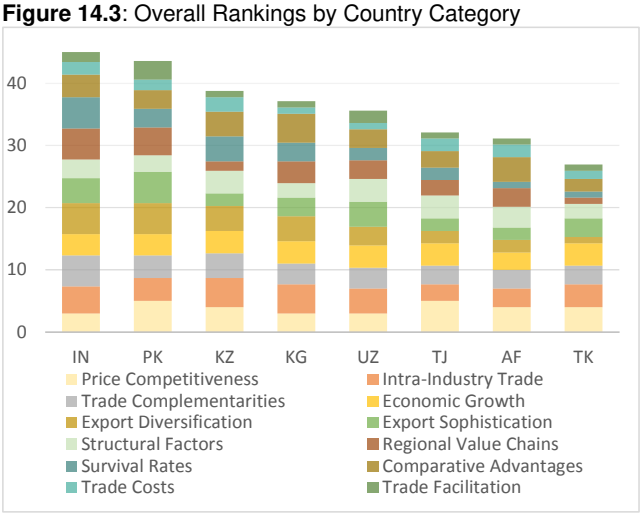
Figure 14.2: Overall Rankings by Category



- Based on the breakdown of rankings according to channels for enhancing trade (Figure 14.2), the five most effective ones are (a) measures that promote price competitiveness; (b) intra-industry trade; (c) trade complementarities; (d) economic growth; and (e) comparative advantages. The main factors that have been a drag to regional trade are (i) poor trade facilitation measures; (ii) high trade costs and poor trade facilitation measures; (iii) low survival rates among new exporters; (iv) the high proportion of exports that are concentrated in low value-added labor and resource-intensive products; (v) lack of export diversification.

- Based on the breakdown of ratings by category in each country (Figure 14.3), India has mainly benefited from export diversification, high survival rates of exporters, value chains (actual and potential), and trade complementarities. Pakistan has especially benefited from its export sophistication, price competitiveness, and export diversification. Kazakhstan has benefited the most from its intra-industry trade, price competitiveness, comparative advantages, export diversification, and survival rates of exporters. Kyrgyzstan has especially benefitted from it comparative advantages, intra-industry trade and export diversification. Uzbekistan has benefited the most from intra-industry trade and export sophistication; Afghanistan could benefit the most from its potential trade based on its comparative advantages; and Tajikistan and Turkmenistan have both benefited the most from price competitiveness.

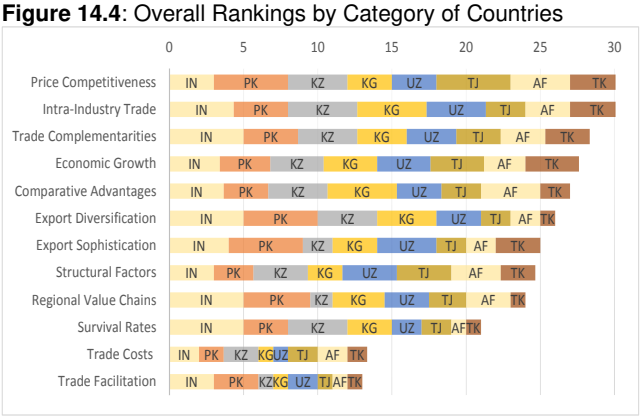
Figure 14.3: Overall Rankings by Country Category



- Based on the breakdown of country ratings in each category (Figure 14.4), the dominance of price competitiveness and intra-industry trade is largely due to the strong ratings in

Pakistan and Tajikistan, and in Kazakhstan and Kyrgyzstan respectively. Trade complementarities is the third most important mechanisms, due to the high ratings of India and Kazakhstan in that category. The forth most important mechanisms, economic growth, has especially high ratings in most countries with the exception of Afghanistan, which has experienced a fairly low export responsiveness to own income changes as well as those of its trading partners. Comparative advantages rate high mainly because of the potential intra- and inter-regional trade that could occur in countries like Afghanistan, Kyrgyzstan, and Kazakhstan. Export diversification and export sophistication have especially high ratings in India and Pakistan, while structural factors are especially important to exports of Kyrgyzstan, Uzbekistan and Tajikistan. Regional value chains (actual and potential) have a high rating in India, Pakistan and Kyrgyzstan. Survival rates are among the highest in India and Kazakhstan, and they are especially low in Afghanistan and Tajikistan. Trade costs are a drag on all countries in Central and South Asia and trade facilitation is ranked poorly in nearly all countries, with the exception of India and Pakistan.

Figure 14.4: Overall Rankings by Category of Countries



B. Rankings across Different Interest Groups

There are a wide range of preference ordering by difference stakeholder groups with interests in intra- and inter-regional trade in Central and South Asia. In this section we illustrate two of them and compare the results to the benchmark results for a neutral preference ordering described in Chapter 3 and in the previous section of this chapter. Table 12.1 provides three characterizations of preference orderings:

(a) Neutral preferences with a general interest in regional trade expansion;

(b) Commercial interest preferences with interests in large-scale projects extending over several countries in order to gain economies of scale and cost advantages either through conventional trade based on comparative advantages of countries, or fragmentation of production across intra- or inter-regional value chains; and

(c) Socio-economic developmental preference interests on the part of such stakeholders as governments, development partners, regional development authorities, NGOs, SMEs, marginalized groups and the poor.

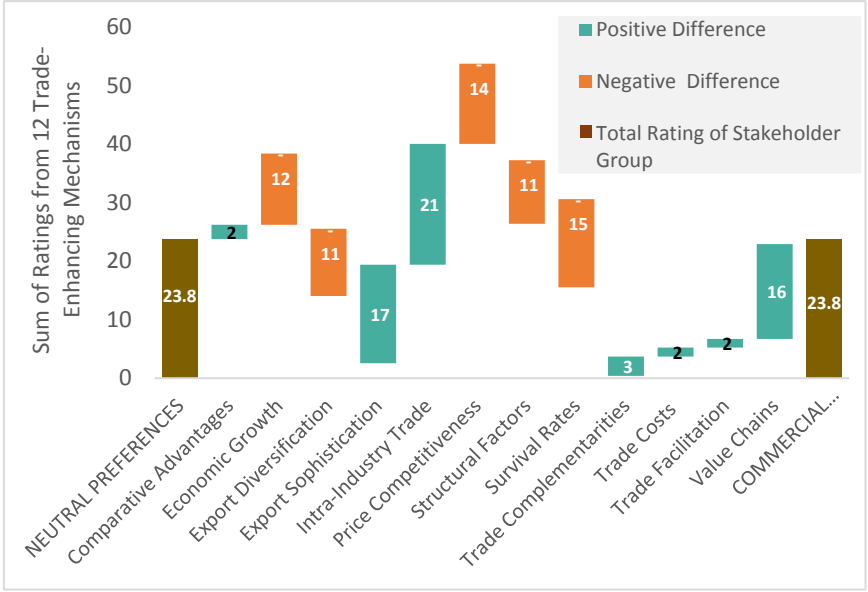
Table 14.1: Illustration of Different Stakeholder Interests in Regional Trade Enhancing Mechanisms

	General Regional Trade Expansion Interests		*Large-Scale Commercial Interests*		*Socio-Economic Development Interests*	
	Relative Importance	Cobb-Douglas parameters	Relative Importance	Cobb-Douglas parameters	Relative Importance	Cobb-Douglas parameters
Export Diversification	++	0.08	++	0.05	+++	0.11
Survival Rates	++	0.08	+	0.03	++++	0.06
Export Sophistication	++	0.08	++++	0.16	++	0.06
Comparative Advantages	++	0.08	+++	0.11	+++	0.11
Trade Complementarities	++	0.08	+++	0.11	++	0.06
Intra-Industry Trade	++	0.08	++++	0.16	+	0.03
Price Competitiveness	++	0.08	++	0.05	++	0.06
Trade Costs	++	0.08	+++	0.11	+++	0.11
Trade Facilitation	++	0.08	+++	0.11	+++	0.11
Structural Factors	++	0.08	++	0.05	+++	0.11
Value chains	++	0.08	++++	0.03	++	0.06
Economic Growth	++	0.08	++	0.05	+++	0.11
Sum of Cobb-Douglas parameters		1.00		1.00		1.00

Note: The Cobb-Douglas utility function of the stakeholder groups is given by $U(X_1, \ldots, X_n) = X_1^{\alpha} X_2^{\beta} \ldots X_n^{\omega}$, where α + β + … + ω = 1, that is, the sum of all the parameters equals unity.

All three stakeholder groups are assumed to share a similar representation of their preference ordering in the form of a Cobb-Douglas utility function. However, each group has distinct preferences for the 12 trade-enhancing mechanisms, which are reflected in the parameters for each of those mechanisms shown in Table 14.1.

Figure 14.5: Overall Commercial Rating Relative to Neutral Benchmark



Based on the difference preference orderings, we note the following results:

(1) *Commercial interests* – The effectiveness ranking of trade-enhancing mechanisms to serve the needs of the group favoring large-scale projects shows a distinct preference for (a) the degree of export sophistication; (b) value chains; and (c) intra-industry trade (Figure 14.5). These three commercial development mechanisms are given higher importance than in the case of the group having a neutral preference, at the expense of (i) exporter survival rates; (b) price competitiveness; (c) economic growth; (d) export diversification; and (e) structural factors. Positive difference in preference over the neutral preference group are compensated for by the negative differences in these five channels of regional trade development. Positive differences compensate the negative differences so that the net benefits, or utility, to commercial interest groups are equal to the net benefits derived by the neutral preferences group.

(2) *Socio-Economic Development interests* – In the case of the group of stakeholders that are development oriented, such as NGOs and other types of development partners, the rankings of trade-enhancing mechanisms to serve the needs of this group shows a distinct preference for (a) economic growth; (b) export diversification; and (c) exporter survival rates (Figure 14.6). These three trade-related development-oriented mechanisms are given higher importance than in the case of the group having a neutral preference, at the expense of (i) intra-industry trade; (b) export sophistication; (c) value chains; and (d) comparative advantages. Positive difference in preference of this group of development-oriented stakeholders relative to those of the neutral preference group are compensated for by the negative differences in these four channels of regional trade development. The reason is that positive differences compensate the negative differences so that the net benefits, or utility, to socio-economic development-oriented stakeholders are equal to the net benefits derived by the group having a neutral preference ordering.

Figure 14.6: Overall Socio-Economic Development Rating Relative to Neutral Benchmark

C. Test for Independence of Categories

It is important to examine whether the regional trade enhancing mechanisms for the Central and South Asia regions have characteristics are independent of one another. The analysis permits policymakers to determine whether programs need to target specific measures or whether the inter-relationship between measures have positive or negative spillover effects on regional trade enhancements.

The standard procedure is to use the chi-square test of independence to calculate whether the trade-enhancing mechanism of each country in the region is independent of others. In the case of the 11 mechanisms covered in the present study, the chi-square needs to be calculated on 2^{11} combinations, or 2,048, of hypotheses. This is an omnibus test and is beyond the scope of the present study.

We instead use a correlation matrix to examine the degree to which any combination of regional trade enhancing measures are statistical dependence. The results of the analysis show that, in the case of the Central and South Asia countries, there is a high correlation among export diversification, survival rates, export sophistication, and comparative advantages. There is also a correlation, although somewhat more modest, among trade complementarities, intra-industry trade, and trade facilitation. The direction of causality is not implied by these interrelationships. They nonetheless suggests that programs that address one regional trade enhancing mechanism will have spillover effects on other mechanisms that bolster regional trade. For example, export diversification can increase survival rates by encouraging more types of businesses to enter a country's tradable sector and by creating cross-firm externalities that help to sustain new entrants into the export market.

Table 14.2: Correlation Matrix of Trade-Enhancing Mechanisms

Regional Trade Enhancing Mechanism	*Export Diversification*	*Survival Rates*	*Export Sophistication*	*Comparative Advantages*	*Trade Complementarities*	*Intra-Industry Trade*	*Price Competitiveness*	*Trade Costs*	*Trade Facilitation*	*Structural Factors*	*Economic Growth*	*Regional Value Chains*
Export Diversification	1.00											
Survival Rates	0.87	1.00										
Export Sophistication	0.58	0.30	1.00									
Comparative Advantages	0.51	0.45	(0.20)	1.00								
Trade Complementarities	0.78	0.93	0.39	0.30	1.00							
Intra-Industry Trade	0.61	0.67	0.26	0.51	0.58	1.00						
Price Competitiveness	(0.20)	(0.29)	(0.13)	(0.45)	(0.36)	(0.66)	1.00					
Trade Costs	0.13	0.34	(0.42)	0.11	0.37	(0.21)	0.45	1.00				
Trade Facilitation	0.71	0.54	0.88	(0.10)	0.67	0.18	(0.07)	0.00	1.00			
Structural Factors	(0.08)	0.04	(0.38)	0.02	0.03	(0.26)	0.12	0.49	(0.11)	1.00		
Economic Growth	0.10	0.27	0.16	(0.29)	0.09	0.42	(0.09)	(0.34)	(0.03)	(0.09)	1.00	
Regional Value Chains	0.74	0.52	0.65	0.34	0.56	0.12	(0.19)	(0.03)	0.80	(0.15)	(0.26)	1.00

XV. RECOMMENDATIONS

A. Policy Implications

The empirical results presented in this study indicate that, under existing trade patterns, the potential value of intra- and inter-regional trade in Central and South Asia is nearly twice as large as the actual level. The considerable expansion in trade assumes that countries are able to export to regional trading partners according to their existing comparative advantages and in the absence of price, non-price and structural impediments.[110] The findings are not surprising. Opportunities for regional trade abound and there are numerous policy initiatives that could be taken to help spur trade and investment in and between the two regions. This section highlights key aspects that need to be taken into consideration when formulating those regional trade enhancing measures.

Matching policies with stakeholders: Regional trade policy, program and institution-building mechanisms should reflect the preferences of the particular stakeholder group or groups being targeted. For example, in the case of commercial interests, regional trade measures may include the expansion of value chains and intra-industry trade in sophisticated product exports with high value added content. In the case of governments and their development partners, the focus is likely to instead be on pro-poor trade and employment generating measures, especially those that improve survival rates among exporters and promote the diversification of exports in favor of industries having comparative advantages in skilled and unskilled labor-intensive products.

Interdependence of regional policies: Regional trade enhancing mechanisms are often highly interrelated in the sense that one aspect of regional trade cannot be advanced without also developing other trade-enhancing areas. For example, the expansion of regional value chains cannot be effectively undertaken in isolation because their growth and proliferation are closely association with export diversification, trade facilitation, export sophistication, trade complementarities, and survival rates among exporters.

Policy interdependence does not imply causality: Caution should be exercised when linking regional policies and programs since causality is not implied in the association between and among trade enhancing mechanism. For example, the introduction of export diversification measures does not, in itself, necessarily lead to regional value chains, greater export sophistication, or improved survival rates. Instead interdependence among the various trade enhancing measures means that appropriate attention needs to be given to all measures that are important to the interests of different stakeholder groups.

Export diversification policies are for all: All countries in Central and South Asia have considerable scope for deepening their regional trade in terms of number of products traded. Diversification matter for growth and stability in the two regions. Reliance on a few export products tends to hamper productivity and increases a country's vulnerability to sharp declines in terms of trade. By diversifying export bundles along product and destination lines, countries with export-

[110] The estimate excludes India because the size of its trade unduly biases the results.

oriented growth strategies hedge against product- or market-specific external shocks.[111] Diversification exists in more developed economies and provide greater opportunities for more value added export products, which is currently lacking in the Central Asian countries whose exports are largely concentrated in natural resource abundant products.

Policies that promote diversification are likely to boost export performances. Our findings show that the performance of the more diversified Central and South Asian countries have been better than those whose exports are concentrated in a few products. It follows that policies that promote greater export diversification are likely to increase export markets shares, while continued concentration in exports of a few number of products will tend to inhibit new exports.

Regional export enhancing strategies need to address low export survival rates. Knowledge about the determinants of export survival and their consequences is important for understanding export dynamics in Central and South Asia, and it can also be a useful tool for policymakers to properly target export promotion activities. At the same time, policies that focus exclusively on supporting new exports miss out on a fundamental aspect of export dynamics, namely, the survival of exporters once they enter the tradables sector. Incumbents have a natural advantage based on their prior experience in learning-by-doing, and that knowledge can be an important input to be shared with newcomers.

Trade costs remain high for all Central and South Asia economies, both at the border and behind-the-borders. Non-tariff trade restrictions account for as much as 90 percent of trade costs and are mainly concentrated in indirect costs involving national and international standards. In Central and South Asia, inter-regional trade costs are higher than intra-regional trade costs. The multiplicity of licenses, permits and certificates affect not only the international competitiveness of businesses in both regions, but also the ability of small enterprises to understand the complexity of those measures. Also, lists of sensitive and prohibited goods protecting domestic producers are often in conflict with potential intra-industry trade opportunities that could otherwise take place between trading partners in the regions. In some cases, total bilateral trade costs exceed 300 percent ad valorem equivalent, and agricultural products generally have much higher levels of protection than do non-agricultural products. Not surprisingly, Central Asian countries as well as Afghanistan rank in the bottom 3 percent of countries throughout the world in terms of ease of trading across borders. Failure to deal with these trade costs will prevented the development of intra- and inter-regional trade unless comprehensive reforms are implemented.

Regional trade agreements have proliferated in and between the regions, but implementation remains key to their success. Numerous bilateral trade agreements exists between countries in the two regions, and regional trade arrangements exist in the form of free trade agreements, transport and trade facilitation agreements, and transit trade agreements. Without full implementation of these various arrangements, however, their impact on trade is limited. So far,

[111] These findings are supported by G.J. Varela (2013), "Export Diversification in Twelve European and Central Asian Countries and the Role of the Commodity Boom". Washington, DC. World Bank, Poverty Reduction and Economic Management Network. International Trade Department. Policy Research Working Paper 6472. Available: http://www.researchgate.net/publication/251352737_Export_Diversification_in_Twelve_European_and_Central_Asian_Countries_and_the_Role_of_the_Commodity_Boom.

they appear to have had little impact and, for that reason, the regional gravity model developed in this study has been unable to measure their significance on actual trade flows in the regions.

Regional trade facilitation efforts should embrace measures recently put forward under the WTO's Agreement on Trade Facilitation. The improvement of existing low ratings on trade facilitation measures throughout the two regions could greatly benefit from implementation of the new ATF provisions. Attention should focus on those measures having the greatest overall impact on regional trade volumes, namely, information availability and the simplification of documents, automated processes, streamlining border procedures, and good governance.[112] While trade facilitation measures under the ATF are more important for manufactured goods than for agricultural goods because they involve both imports of inputs and exports processed goods, agriculture is more important for poverty reduction and inclusive growth.

Trade facilitation improvements are especially important for regional production networks. Regional value chains require (a) import facilitation of parts and components and their movement to production facilities; and (b) export facilitation of processed goods. While some of the measures involve stroke-of-pen reforms that would eliminate trade impediments within a short time period, many NTMs require deeper reforms. For example, dissemination of information that helps businesses to initiate and sustain trade-related activities needs a great deal of investment in the full range of areas that meets specific requirements of different businesses. Broad information dissemination that lacks practicality is of little use to the private sector.

Exchange controls have undermined price competitiveness, especially in South Asia. From a policy perspective, the difficulties of estimating robust parameters for real bilateral exchange rates in the models for Afghanistan, India and Pakistan suggest that attention should be directed at structural and administrative controls that are likely to be undermining the effectiveness of this policy instrument. Most Central Asia economies have developed exchange rate policy instruments that have successfully impacted the trade-related price competitiveness of their economies. Nevertheless, in Kyrgyzstan and Uzbekistan the strength of those policy instruments could stand improvements since the trade impact of real bilateral exchange rate changes is fairly modest. These types of reform are important for countries like Uzbekistan since there has been a tightening of their exchange controls recently that could make exchange rate pass-through effects on trade transactions more difficult to realize.

Exchange-rate pass-through to the domestic economy could strengthen regional export competitiveness. The adoption of inflation targeting, floating exchange rates, and the elimination of capital controls could help to facilitate the exchange rate pass-through, that is, the transmission of exchange rate movements to the domestic price level. There are, however, costs to making these transmissions stronger, mainly associated with possible increases in output and inflation volatility. While movements from fixed to more flexible exchange rate regimes help the transmission of market signals, it does not necessarily follow that a floating exchange rate regime

[112] Organisation for Economic Co-operation and Development (OECD, 2013), "Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade". Paris, OECD Trade Policy Papers No. 144. Available: http://www.oecd.org/dac/aft/TradeFacilitationIndicators_ImpactDevelopingCountries.pdf.

offers the best solution for the Central and South Asia economies.[113] Further investigation of these issues is warranted before general exchange rate policy recommendations are made for particular countries.

B. Regional Value Chain Opportunities

There are several industries where regional value chains could be developed in and between Central and South Asia: (a) fresh and chilled fruits and vegetables; (b) processed foods; (c) agricultural raw materials; (d) herbs and spices; (e) precious and semi-precious stones; (f) other non-ferrous and ferrous metals; (g) slabs of marble and other stones; (h) garments; (i) carpets; and (j) pharmaceuticals and herbal medications.

The selection of these industries is based on (i) the number of countries having a comparative advantage in the industries; (ii) the potential participation of Afghanistan because of either its comparative advantages in products exported by the industries or its geographic location for transit trade; and (iii) the benefits of diversifying industries across resource-intensive industries, labor-intensive industries, and technology-intensive industries. In the case of labor-intensive industries like those of food and textiles, there are benefits to be derived from their labor absorption requirements for the large populations in India and Pakistan as well as Afghanistan, Kazakhstan and Uzbekistan. Natural resource intensive industries in minerals and fabricated metal products generally support government revenue-generating objectives since the Central Asia countries in particular are heavily dependent on these types of exports for much of their foreign exchange earnings. And technology-intensive industries like those of pharmaceuticals generally contribute more value added to producers than do low-technology industries, and they create opportunities for market development from product differentiation based on quality (vertical differentiation) and consumers' desire for variety (horizontal differentiation).

The *food industry group* is widespread throughout the Central and South Asia regions, which makes it an easily identifiable candidate for a regional value chain. Regional value chains would combine farm-level production and the supply of intermediate inputs, manufacturing and distribution stages along the value chains. Some of the potential candidates for sub-industry value chains are fresh and chilled fruits and vegetables; processed foods; agricultural raw materials; and herbs and spices. In many of these areas, it will be necessary to adopt food safety standards that are in line with the WTO's sanitary and phytosanitary (SPS) requirements in order for the products to be globally competitiveness.

The *minerals and fabricated metals industry group* has a number of products that rank among the top 100 most important products traded in and between the two regions. They cover precious and semi-precious stones; other non-ferrous and ferrous metals; and slabs of marble and other stones. These products can form part of value chains that manufacture metal structures for construction and a wide range of other end uses that are important to all of the

[113] See, for example, N. Yoshino, S. Kaji, and T. Asonuma (2014), "Dynamic Analysis of Exchange Rate Regimes: Policy Implications for Emerging Countries in Asia". ADBI Working Paper 502. Tokyo: Asian Development Bank Institute. Available: http://www.adbi.org/working-paper/2014/10/24/6488.dynamic.analysis.exchange.rate.regimes/.

regions' countries. Competitiveness of the industries depends largely on the modernization of manufacturing facilities, which often require large capital investments. Scale economies at the regional level could provide the capital necessary for those investments, as well as cost-savings through production sharing facilities.

The *textiles and textile products industry group* is also widespread throughout Central and South Asia. There are 350 products that are traded throughout the two regions and many of those products rank among the top exports of several countries. While India and Pakistan have a comparative advantages in the most products in this industry, Afghanistan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan also have comparative advantages in a large number of the industry's products. There exists a potential for regional value chains in carpets and garments since most of the fiber, yarn and fabrics made are used as inputs to the production of garments in all countries except India and Pakistan, which are also major exporters of these products. While competition and rivalry among firms is likely to prevent alliances in some areas, there is potential for collaboration in information sharing areas that are currently lacking in Central and South Asia, namely, inventory management, lead time, technology and logistics associated with the use of the Quick Response process used in more advanced economies.

In the case of *pharmaceuticals*, many countries in the two regions have a comparative advantage in the production and export of bulk ingredients for the industry, especially active pharmaceutical ingredients (API) in the form of powders. India is one of the largest producers of bulk pharmaceuticals and other countries like Tajikistan and Uzbekistan could form part of API regional value chains. In addition to low-cost manufacturing needs, quality assurance is one of the most important requirements for this high-level supply chain. Good manufacturing practices for pharmaceutical manufacturing are essential for the implementation of RVCs, while the industry could benefit from the introduction of international regulatory mechanisms in the herbal medications industry.

The common policy prescriptions for these regional value chains are as follows: First, policymakers could step up their efforts to promote high value added activities in which the Central and South Asian countries can be competitive in international markets. Second, consideration should be given to clustering of activities surrounding value chains to help industries move up the value chain by developing more technological sophistication. Third, greater efforts are needed to reduce the high trading costs that exist throughout the two regions in order to eliminate trade distortions within supply chains and strengthen the regional competitiveness of industries. Finally, governments and development partners need to focus attention on measures that facilitate trade in order to diversify product exports, increase survival rates among exporters, improve trade logistics, lower transportation costs, and reduce non-tariff barriers to trade at and behind the border.

ANNEX A: ECONOMETRIC MODELING OF TRADE

Estimates of the relationships for domestic consumption, foreign import demand and Central and South Asia's export demand follow a sequence of steps to (a) identify the characteristics of each series, (b) specify the parsimonious model used to characterize the data-generating process, and (c) estimate the model. This Technical Annex describes the steps needed to identify the characteristics of each series and, where appropriate, to model their relationship to one another.

Step 1: Unit Root Tests

An economic relationship generally refers to a state where there is no inherent tendency to change. Such a relationship is, for example, described by the export demand relationship of the log linear form $x_i = \beta y_j$, where export changes in country *i* are related to changes in the economic activity of a foreign market *j*. In practice, however, an equilibrium relationship is seldom observed, so that measures of the observed relationship between x_i and y_j include both the equilibrium state and the discrepancy between the outcome and the postulated equilibrium. The discrepancy, denoted *d*, cannot have a tendency to grow systematically over time, nor is there any systematic tendency for the discrepancy to diminish in a real economic system since short-term disturbances are a continuous occurrence. The discrepancy is therefore said to be stationary insofar as over a finite period of time it has a mean of zero.

Individual time series that are themselves stationary are statistically related to each other, regardless of whether there exists a true equilibrium relationship. Thus, before estimating the export demand for Central and South Asia, it is useful to determine whether the data generating process of each of the series is itself stationary. Since economic activity variables have a tendency to grow (positively or negatively) over time, the variables themselves cannot be stationary, but changes in those series might be stationary. Series that are integrated of the same order, however, are said to be cointegrated and to have a long-run equilibrium relationship.[114] For trending variables that are themselves non-stationary, but can be made stationary by being differenced exactly *k* times, then the linear combination of any two of those series will itself be stationary. It is therefore important to test the order of integration of the key series in the model.

Tests for stationarity are derived from the regression of the changes in a variable against the lagged level of that variable. Consider the following simple levels regression:

$$y_t = a + by_{t-1} + d \qquad \text{(A.1)}$$

where *a* and *b* are constants and *d* is an error term. The term *y* is a stationary series if $-1 < b < 1$. If $=1$, *y* is a non-stationary series and is instead a random walk with drift; if the absolute value of *b* is greater than one, the series is explosive.

[114] A series is said to be integrated of order *k*, denoted I(*k*), if the series needs to be difference k times to form a stationary series. Thus, for example, a trending series that is I(1) needs to be differenced one time to achieve stationarity.

By subtracting y_{t-1} from both sides, we obtain

$$\Delta y_t = a + (b-1)y_{t-1} + d \qquad (A.2)$$

The disturbance term *d* now has a constant distribution and the t-statistic on y_{t-1} provides a means for testing non-stationarity. If the coefficient on y_{t-1} is zero, then *b* must be equal to 1, and *y* is therefore stationary. The Augmented Dickey-Fuller test is a test on the t-statistic of the coefficient on y_{t-1}. The hypothesis $H_0 = b-1 = 0$ is called the unit-root hypothesis and it implies that y_t is non-stationary.

The second test for non-stationarity is the Durbin-Watson (DW) test on the levels regression specified above. Since the DW statistically is given by

$$DW = 2(1-r) \qquad (A.3)$$

where *r* is the correlation coefficient between y_t and y_{t-1}, then *y* is white noise when *r* is zero. The DW is therefore 2 when *y* is stationary.

Step 2: Modeling Supply and Demand Relationships in Trade

Economic series that are related to the long-run adjustment processes of other variables have been designated to be cointegrated series by Granger and Weiss (1983) and Engle and Granger (1987). The theory of cointegration states that if two series, *x* and *y*, grow over time in such a way that the linear combination of these two variables, given by $d_t = x_t - \alpha y_t$, is stationary, and if α is unique, then *x* and *y* are said to be cointegrated. The series d_t measures the disequilibrium at period *t* when the long-run relationship between the two variables is $x_t = \alpha y_t$. The theory of cointegration states that movements in variables are related in a predicable way to the discrepancy between observed and equilibrium states. The sequence of this discrepancy tends to decay to its mean of zero.

Engle and Granger (1987) have demonstrated that a data-generating process of the form known as the "error-correction mechanism" (ECM) adjusts for any disequilibrium between variables that are cointegrated. The ECM specification thus provides the means by which the short-run observed behavior of variables is associated with their long-run equilibrium growth paths. Davidson *et al.* (1978) established a closely-related specification know as the "equilibrium-correcting mechanism" (also having the acronym ECM) that models both the short and long-run relationships between variables. Rearranging the terms of a first-order stochastic difference equation yields the following ECM:

$$\Delta x_t = \alpha_o + \alpha_1(x - y)_{t-1} + \alpha_2 \Delta y_t + \alpha_3 y_{t-1} + v_t \qquad (A.4)$$

where $-1 < \alpha_1 < 0$, $\alpha_2 > 0$ and $\alpha_3 > -1$, and where all variables are measured in logarithmic terms.

The second term, $\alpha_1(x - y)_{t-1}$, is the mechanism for adjusting any disequilibrium in the previous period. When the rate of growth of the dependent variable x_t falls below its steady-state path, the value of the ratio of variables in the second term decreases in the subsequent period. That decrease, combined with the negative coefficient of the term, has a positive influence on the growth rate of the dependent variable. Conversely, when the growth rate of the dependent variable increases above its steady-state path, the adjustment mechanism embodied in the second term generates downward pressure on the growth rate of the dependent variable until it

reaches that of its steady-state path. The speed with which the system approaches its steady-state path depends on the proximity of the coefficient to minus one. If the coefficient is close to minus one, the system converges to its stead-state path quickly; if it is near to zero, the approach of the system to the steady-state path is slow. Since the variables are measure in logarithms, Δx and Δy can be interpreted as the rate of change of the variables. Thus the third term, $\alpha_2 \Delta y_t$, expresses the steady-state growth in *X* associated with *Y*. Finally, the fourth term, $\alpha_3 y_{t-1}$, shows that the steady-state response of the dependent variable *X* to the variable *Y* is non-proportional when the coefficient has non-zero significance.

The equilibrium solution of equation (A.4) is a constant value if there is convergence. Since the solution is unrelated to time, the rate of change over time of the dependent variable *X* (given by Δx_t) and the explanatory variable *Y* (given by Δy_t) are equal to zero. However, in dynamic equilibrium, equation (A.4) generates a steady-state response in which growth occurs at a constant rate, say *g.* For the dynamic specification of the relationship in (A.4), if g_1 is defined as the steady-state growth rate of the dependent variable *X,* and g_2 corresponds to the steady-state growth rate of the explanatory variable *Y,* then, since lower-case letters denote the logarithms of variables, $g_1 = \Delta x$ and $g_2 = \Delta y$ in dynamic equilibrium. In equilibrium the systematic dynamics of equation (A.4) are expressed as:

$$g_1 = \alpha_o + \alpha_1(x - y) + \alpha_2 g_2 + \alpha_3 y \qquad \text{(A.5)}$$

or, in terms of the original (anti-logarithmic) values of the variables:

$$X = k_0 Y^{\beta} \qquad \text{(A.6)}$$

where $k_0 = \exp\{(-\alpha_o/\alpha_1) + [(\alpha_1 - \alpha_2\alpha_1 - \alpha_3)/ \alpha_1^2]g_2$, and where $\beta = 1 - \alpha_3/\alpha_1$.

The dynamic solution of equation (A.6) therefore shows *X* to be influenced by changes in the rate of growth of *Y*, as well as the long-run elasticity of *X* with respect to *Y*. For example, where the rate of growth of the explanatory variable accelerate, say from g_2 to g'_2, the value of the variable *X* would increase. However, it is important to reiterate that the response to each explanatory variable can be either transient or steady-state. When theoretical considerations suggest that an explanatory variable generates a transient, rather than steady-state, response, it is appropriate to constrain its long-run effect to zero.

Step 3: Modeling Exchange Rate Effects

The effects of changes in the international competitiveness of Central and South Asia inter-regional trade can be measured by extending the first-order stochastic difference equation to include that variable. Transformation of an autoregressive distributed lag into an ECM with a 'differences' formulation of the relative price or exchange rate term nested in the levels form of the equation yields the equation:

$$\Delta x_t = \alpha_o + \alpha_1(x - y)_{t-1} + \alpha_2 \Delta y_t + \alpha_3 y_{t-1} + \alpha_4 \Delta r_t + \alpha_5 r_{t-1} + v_t \qquad \text{(A.7)}$$

where $-1 < \alpha_1 < 0$, $\alpha_2 > 0$, $\alpha_3 > -1$, $\alpha_4 > 0$ and $\alpha_5 > 0$, and where all variables are measured in logarithmic terms.

We measure the competitiveness, *r*, of Central and South Asia as the inverse of the real effective exchange rate, *e*. The real exchange rate (RER) is the bilateral rate which takes into account changes in relative price levels between Central and South Asia and a foreign country. It measures changes in the purchasing power between the domestic and the foreign economy, and it provides an indicator of changes in the international competitiveness of the domestic economy in its ability to purchase more (or less) goods and services per unit of foreign currency. As an extension, the real effective exchange rate (REER) measures the average relative strength of the local currency, and it is calculated as the weighted average of RERs, where the weights are the value of imports from and exports to a given partner country *i* divided by total imports and total exports of Central and South Asia.

Formally the real effective exchange rate is defined as $e^r_t = \Sigma_i w_i [e^n_t(P^f_t/P_t)]$ where e^n is the nominal exchange rate, P^f is the foreign currency price of goods purchased abroad, and *P* is the domestic price level. A rise in e^r represents a real *devaluation* in a fixed exchange rate system, and a *depreciation* in a flexible exchange rate system, which can be brought about by either a rise in the nominal exchange rate e^n, or a rise in the relative price of foreign goods (equivalent to a relative fall in the price of domestic goods). Conversely, a fall in e^r represents a real *revaluation* under a fixed exchange rate system, and an *appreciation* under a flexible exchange rate system. The fall is associated with either a drop in the nominal exchange rate e^n or a fall in relative prices of foreign goods (equivalent to a rise in relative prices of domestic goods).

Step 4: Modeling Price and Income Effects of Foreign and Domestic Imports

An important characteristic of the import demand for any one product is that its long-term response to the growth of domestic income is not necessarily proportional. This suggests that the dynamic specification of the import demand equation should not introduce any restrictions that would impose long-run unitary elasticity with respect to income. In contrast, the model should encompass long-term proportionality responses when they exist.

A second feature of the present modeling approach is that the dynamics for import demand relationships can be restricted to one period since the adjustment of imports to price and income changes tends to decline exponentially over time. The third and final important characteristic is that prices of traded goods are measured in U.S. dollar terms. If prices of imports were measured in local currency units, then the demand for imports by Central and South Asia would also be directly affected by the real exchange rate, which would take into account changes in both the relative prices of domestic and foreign goods and the nominal exchange rate, as well as the foreign market price of the product.

The dynamic specification for imports, M, in terms of income, Y, and the price of the product, P, relative to the general price index, D, can be expressed as:

$$m_t = \alpha_0 + \alpha_1 m_{t-1} + \beta_1 y_t + \beta_2 y_{t-1} + \gamma_1 (p-d)_t + \gamma_2 (p-d)_{t-1} + u_t \qquad ...(A.8)$$

where lower case letters denote logarithms of corresponding capital letters, e.g., (p-d) = ln(P/D), and the expected signs of the coefficients are $0 < \alpha_1 < 1$; β_1 and $\beta_2 > 0$; γ_1 and $\gamma_2 < 0$. Income is treated as (weakly) exogenous for the parameters of interest.

The use of the logarithmic specification in equation (A.8) provides a means by which the elasticity

can be calculated directly from the estimated equation; the results are consistent when the elasticities remain constant over time. Tests of parameter constancy provide a means of validating that hypothesis.

On a steady-state growth path, the long-run dynamic equilibrium relationship implicit in equation (A.8) is:

$$M = kY^{\varepsilon_y} P/D^{\varepsilon_p} \qquad \text{(A.9)}$$

where $\varepsilon_y = (\beta_1 + \beta_2)/(1-\alpha_1)$ and $\varepsilon_p = (\gamma_1 + \gamma_2)/(1-\alpha_1)$.

The results of the estimates provide quantitative measures of the impact that Central and South Asia's market access concessions could have on its trade. Since data limitations restrict the application of the model, it is useful to review some of the widely used empirical models which equation (A.8) encompasses. These embedded models have been described by Hendry, Pagan and Sargan (1984) as follows:

(a) Static Model ($\alpha_1 = \beta_2 = \gamma_2 = 0$): $m_t = \alpha_0 + \beta_1 y_t + \gamma_1 (p-d)_t$

(b) Distributed Lag Model ($\alpha_1 = 0$): $m_t = \alpha_0 + \beta_1 y_t + \beta_2 y_{t-1} + \gamma_1 (p-d)_t + \gamma_2 (p-d)_{t-1}$

(c) Partial Adjustment Model ($\beta_2 = \gamma_2 = 0$): $m_t = \alpha_0 + \alpha_1 m_{t-1} + \beta_1 y_t + \gamma_1 (p-d)_t$

(d) First-Difference Model ($\alpha_1 = 1$, $\gamma_1 = -\gamma_2$): $\Delta m_t = \alpha_0 + \beta_1 \Delta y_t + \xi_1 \Delta p_t$

The following are the estimates for inter-regional import demand of the Central and South Asia economies:

Table T1. Regression Results of Real Exchange Rate Transmissions on Inter-Regional Import Demand

$Dm_t = a_0 + a_1(m - y)_{t-1} + a_2 Dy_t + a_3 y_{t-1} + a_4 Dr_t + a_5 r_{t-1} + v_t$

							Summary Statistics			
	$\ln(M/Y)_{t-1}$	$D\ln(Y)_t$	$\ln Y_{t-1}$	$D\ln(R)_t$	$\ln R_{t-1}$	Const	R^2	dw	SE	dof
Afghanistan a/	-0.42			-0.97	-0.48	2.51	0.86	1.95	0.17	14
	(3.3)			(2.8)	(1.9)					
India	-0.37	1.23	0.47		-0.31	-0.63	0.65	2.55	0.24	11
	(1.6)	(1.2)	(1.5)		(1.6)					
Pakistan	-0.78				-2.04	9.41	0.62	2.37	0.85	11
	(3.0)				(1.9)					
Kazakhstan a/,b/	-0.85	4.50	0.17	-0.61	-1.31	4.92	0.83	2.33	0.18	12
	(4.7)	(2.3)	(1.1)	(1.1)	(2.0)					
Kyrgyzstan c/	-0.34	1.36		-0.84	-0.26	1.39	0.63	2.52	0.16	13
	(2.1)	(1.0)		(1.6)	(1.9)					
Tajikistan d/	-0.26		0.37	-0.24	-0.73	1.68	0.64	2.63	0.11	13
	(2.4)		(1.6)	(1.1)	(1.9)					
Turkmenistan	-0.39	1.56	1.32	-0.52	-0.71	-2.93	0.66	2.20	0.23	12
	(4.7)	(2.3)	(1.1)	(1.1)	(2.0)					
Uzbekistan	-0.38	6.91	0.24	-0.50	-0.20	-0.60	0.43	1.67	0.22	12
	(1.7)	(1.4)	(1.5)	(1.1)	(1.7)					

Notations (lower-case letters denote logarithms of upper-case letters):

M = Import volume

Y = Real GDP.

R = Real inter-regional exchange rate

a/ Includes a binary variable for 2011 (1 in 2011; 0 otherwise).

b/ Includes a binary variable for 2011-12 (1 in 2011-12; 0 otherwise).

c/ Includes a binary variable for 2009 (1 in 2009; 0 otherwise).

d/ Includes a binary variable for 2012 (1 in 2012; 0 otherwise).

Notes: R^2 is the adjusted square of the multiple correlation coefficient; figures in parentheses below the coefficients are t-statistics.

ANNEX B: TERMS OF REFERENCE OF STUDY

Background. The Afghanistan Trade and Revenue Project provides technical support and assistance aimed to strengthen the business climate of Afghanistan to enable private investment, enhanced trade, job creation, and fiscal sustainability through the critical Transition period and continuing into the Transformational Decade. This will be achieved through interventions aimed at 1) improving the capacity of the Government of the Islamic Republic of Afghanistan (GIRoA) to formulate and implement a liberal policy framework for trade and investment in accordance with international standards; 2) enhancing integration in the regional and world economy through the promotion of trade and agreements, enhanced economic corridors governance, and private sector linkages throughout South and Central Asia; and 3) strengthening revenue generation for fiscal sustainability and trade facilitation through reforms and anti-corruption measures in customs and taxation.

Support Trade Policy Liberalization (Component 1). The Afghanistan Trade and Revenue Project will support GIRoA to establish a sustainable liberalized trade system that permits the country to take full advantage of World Trade Organization (WTO) membership. This will be accomplished by building the necessary capacity within the implementing institutions to conduct negotiations, draft legislation and institute reforms required to improve the trade regime within the region and otherwise meet WTO requirements. The project will work to improve GIRoA's ability to formulate a strong, well-coordinated trade and tariff policy that contributes to improved trade policies, laws, and regulations, resulting in deeper, more-diverse trade links in the region and world markets.

Facilitative Enhanced Access to Regional Markets (Component 2). The Afghanistan Trade and Revenue Project will support enhanced regional economic integration in Central and South Asia through the adoption of cross border transit agreements (CBTAs), enhancing corridor governance, reforming customs clearance procedures, and improving regional government and private sector linkages. The project will assist in the development of trade support businesses and business associations through improved coordination and collaboration of private sector engagement.

Improved Customs and Tax Administration (Component 3). The Afghanistan Trade and Revenue Project will work to build GIRoA's capacity to generate revenue, through both tax and customs revenue mechanisms, and will assist in strengthening the capacity of the Afghan Revenue Department (ARD) and Afghan Customs Department (ACD). The project will work closely with ARD on the implementation, administration, and enforcement of the planned Value Added Tax (VAT), and assist ACD to develop and sustain modernized customs systems.

Position Description.

Increasing trade, investment, and economic cooperation among countries in Central Asia and South Asia is critical for regional economic development, stability, and security and for the creation of new region-wide economic opportunities. Central Asian Republics and Afghanistan are landlocked economies which rely on each other to access each other's markets and open seas. The region includes, and is surrounded by, countries of various degrees of transit and transport efficiency and risk. Having multiple viable alternatives for trade and transit will increase the economic security of all countries in the region and lead to greater competition in lowering transport costs and delays. In addition, there is untapped potential for increasing regional trade and investment across Central Asia, Afghanistan, and South Asia. Trade and transit facilitation in the region van be achieved through a

variety of mechanisms including bilateral and/or regional trade, transit, transport agreements as well as membership in the World Trade Organization (WTO).

The objective of the consultancy is to explore opportunities and challenges, based on economic analysis, for intra- and inter-regional trade in the Central and South Asia by analyzing trade competitiveness and complementarities and the comparative advantages of the region's economies. The Central and South Asia regional coverage consists of the Central Asian Republics (CARs) countries of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, and the South Asian countries of Afghanistan, India and Pakistan

Specific Tasks/ Activities

The Trade Economist shall perform the following specific activities:

A. Database Creation

1. **Trade Database**: Develop a disaggregated database on trade, detailed by product and trading partner for each country in the region based on the United Nations Commodity Trade Statistics Database (UN COMTRADE) and the World Bank's World Integrated Trade Solution (WITS) database for each country in the region and, where data are unavailable, derive mirror trade data to reconstruct data for those countries based on data reported by partner countries.

2. **Trade-Related Indicators**: Develop trade-related databases for the analysis of countries in the region for at least the following series: (a) trading costs based on the World Bank's Trade Costs database; (b) trade in value added based on the joint OECD – WTO Trade in Value-Added (TiVA) initiative; (c) key trade indicators and determinants from IMF International Financial Statistics (IFS); (d) data on the total value of merchandise exports and imports between each country in the region and all its trading partners from IMF Direction Of Trade Statistics (DOTS).

B. Preliminaries: Overall Trade Patterns

3. **Trade Structure**: Analyze the overall trade patterns of focal economies in the context of their level of development and openness to trade, long-term growth dynamism and short-term price and output variability, structure and performance of productive sectors, and associated trade structure of major product categories.

4. **Trade Performances**: Examine the potential for the external sectors of the focal countries to act as the engines of growth for their economies and trade policies to promote export growth. The analysis should include growth trends of major imports and exports, import and export product concentration indicators and the associated degree of vulnerability to external shocks and, where possible, nominal rates of protection.

C. Aggregated Analysis of Trade

5. **Intra-Regional Trade Potential**: Based on econometric estimates of an Augmented Gravity Model, estimate the potential trade among the Central and South Asian countries and compare those estimates to actual market shares.

6. **Preferential Intra- and Extra-Regional Trade Arrangements (RTAs):** Survey existing RTA initiatives in the form of both bilateral as well as regional trade and economic cooperation initiatives within the region and with extra-regional partners, and examine focal issues

addressed by those RTAs, such as tariff reductions subject to negative lists, and areas needing strengthening, such as rules of origin and non-tariff barriers (NTBs).

7. **Export Expansion Potential from RTAs**: Apply Michaely's bilateral trade-complementarity index to the Central and South Asia region to estimate the regional export-expansion potential expected from different preferential agreements. Analyze the extent to which changes in complementarity indices could affect the prospects for broad-ranging regional cooperation among the focal countries.

8. **Macroeconomic Determinants of Trade 1 – Trading Costs:** Based on the World Bank's Trade Cost Database, empirically assess the magnitude of intra-regional trade costs in Central and South Asia and how they have changed over time relative to extra-regional trade costs and intra- and extra-regional trade costs of the comparator region of East Asia. Also compare how agricultural trade costs have differed from manufacturing trade costs in order to evaluate the extent to which trade facilitation efforts could most impact on intra-regional trade.

9. **Macroeconomic Determinants of Trade 2 – Real Exchange Rate, Trade Competitiveness and Elasticity Estimates**: Calculate nominal and real effective exchange rates and associated trade performances of each country in the region and examine their associated competitiveness. The analysis should be conducted at the level of each country's real cross-rates with trading partners in the region, as well as overall trade. Based on the calculated time series, estimate the international transmission of price changes caused by exchange rate variations on export and import demand for each country using econometric estimates of aggregate trade data for imports and exports of each country in the region.

D. Product-Level Analysis of Trade

10. **Structural and Competitiveness Factors Determining Trade – Constant Market Share Analysis**: Decompose each country's export growth relative to that of both overall regional exports and total world exports into (a) the portion of export growth concentrated in commodities in which the demand is either growing relatively fast or slow relative to other markets; (b) export growth associated with relatively fast or slow growing trading partners within the Central and South Asia region; (c) ability of each focal country to compete with other sources of supply.

11. **Country-Level Product and Geographic Diversification:** Calculate alternative measures of export diversification for products and destinations of each focal country using Herfindahl's and Theil's concentration indices and compare the results with Hummels and Klenow's more recent measure of product and geographic concentration. Analyze the significance of product and geographic diversification for countries in the region, especially as they relate to intra-regional trade.

12. **Revealed Comparative Advantage (RCA)**: Calculate both RCAs and Hausmann, Hwang and Rodrik's PRODY index of the 'revealed' technology content of products for each focal country's exports in order to determine whether the region's countries have different comparative advantages and therefore greater opportunities for trade or whether they share a high degree of similarity in factor endowments and possibly fewer trade opportunities.

13. **Trade Complementarity Index (TCI)**: Calculate the TCI's for the Central and South Asian countries over time to determine whether trade profiles of countries are becoming more or less compatible, and use results to analyze (a) whether similarities between types of goods exported and goods imported in the region is a factor underlying the expansion of intra-regional trade; (b) whether those similarities or differences have a favorable or unfavorable impact on the prospects for successful trade cooperation among countries in the region.

14. **Intra-Industry Trade (IIT)**: Analyze the historical and perspective trends in horizontal intra-industry trade and vertical intra-industry trade among the Central and South Asian countries. Based on those results, determine the degree of product differentiation associated with horizontal intra-industry trade and the degree of fragmentation at different stages of the production process.

15. **Value Chain Analysis**: Use the results of the IIT analysis and the empirical findings from the Trade in Value Added (TiVA) database to analyze changing patterns of trade along value chains in the Central and South Asia region and implications about the cost of protection for global and regional value chains, trade facilitation, and their implications for regional trade agreements.

E. Findings and Conclusions

A. **A detailed report on the trade competitiveness, comparative advantage and trade complementarities of the Central Asian countries, Afghanistan, India and Pakistan including**:

16. **Synthesis of Findings**: Develop a common evaluation scoring and rate each factor determining the degree to which the regional analysis of the competitiveness, comparative advantage and trade complementarity among countries could support greater intra-regional trade.

17. **Policy Recommendations**: Based on the findings of the study, rank factors affecting intra-regional trade on a sliding scale from a high score for greatest opportunities to a low score for largest bottlenecks, and indicate what policies, programs and institutional mechanisms could successfully promote greater trade within the region.

18. **Opportunities**: Using easy-to-understand English, describe potential trade (including intra-industry) and value chain opportunities between and within Central and South Asia. Profile key potential opportunities.

ANNEX C: MAPPING STUDY CHAPTERS WITH TERMS OF REFERNCE

The following tables shows the location in the present study of the Specific Tasks and Activities in the Terms of Reference:

Specific Tasks and Activities in the Terms of Reference	Location of Material in Study.
A. Database Creation	A. Database Creation
1. Trade Database	Database in Excel spreadsheets
2. Trade-Related Indicators	Tables and figures in Excel and Visio format in database
B. Preliminaries: Overall Trade Patterns	B. Preliminaries: Overall Trade Patterns
3. Trade Structure	Chapters 1 and 10
4. Trade Performances	Chapters 2 and 10
C. Aggregated Analysis of Trade	C. Aggregated Analysis of Trade
5. Intra-Regional Trade Potential	Chapter 12, Section A
6. Preferential Intra- and Extra-Regional Trade Arrangements (RTAs)	Chapter 11
7. Export Expansion Potential from RTAs	Chapter 12, Section B
8. Macroeconomic Determinants of Trade 1 – Trading Costs	Chapter 9
9. Macroeconomic Determinants of Trade 2 – Real Exchange Rate, Trade Competitiveness and Elasticity Estimates	Chapter 8
D. Product-Level Analysis of Trade	D. Product-Level Analysis of Trade
10. Structural and Competitiveness Factors Determining Trade – Constant Market Share Analysis	Chapter 10
11. Country-Level Product and Geographic Diversification	Chapter 4
12. Revealed Comparative Advantage (RCA)	Chapter 5
13. Trade Complementarity Index (TCI)	Chapter 6
14. Intra-Industry Trade (IIT)	Chapter 7
15. Value Chain Analysis	Chapter 13
E. Findings and Conclusions	E. Findings and Conclusions
16. Synthesis of Findings	Chapters 3 and 15, Section A
17. Policy Recommendations	Chapter 15, Section B
18. Opportunities	Chapter 15, Section C

STATISTICAL APPENDIX

List of Appendix Tables

Table A.1: Afghanistan – Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
520100	Cotton, not carded or combed	71,414,941
720449	Ferrous waste or scrap, nes	45,316,969
080420	Figs, fresh or dried	39,987,808
270119	Coal except anthracite or bituminous, not agglomerate	38,036,531
130190	Natural gum, resin, gum-resin, balsam, not gum Arabic	35,320,878
080620	Grapes, dried	15,680,502
080610	Grapes, fresh	12,604,132
070310	Onions and shallots, fresh or chilled	12,562,491
252610	Natural steatite, not crushed or powdered	9,642,132
080250	Pistachios, fresh or dried	8,603,925
080212	Almonds, fresh or dried, shelled	7,881,306
081310	Apricots, dried	6,853,596
090910	Anise or badian seeds	5,637,762
680100	Stone setts, curbstones, flagstones (except slate)	5,059,524
071331	Urd, mung, black or green gram beans dried shelled	5,050,576
080810	Apples, fresh	4,129,986
081090	Fruits, fresh nes	3,102,418
080910	Apricots, fresh	2,881,028
720299	Ferro-alloys, nes	2,813,393
071339	Beans dried, shelled, nes	2,808,539
070190	Potatoes, fresh or chilled except seed	1,452,030
630619	Tarpaulins, awnings and sun blinds, of material nes	669,996
880212	Helicopters of weight > 2,000 kg	360,000
860610	Railway tank cars	315,000
410110	Bovine skins, whole, raw	252,768
410210	Sheep or lamb skins, raw, wool on, except Persian etc.	163,809
870333	Automobiles, diesel engine of >2500 cc	131,763
761510	Aluminum table/kitchen/household articles, scourers	124,205
261710	Antimony ores and concentrates	108,210
681490	Worked mica and articles of mica except sheet mica	99,324
080520	Mandarin, clementine & citrus hybrids, fresh or dried	88,677
300490	Medicaments nes, in dosage	82,512
271000	Oils petroleum, bituminous, distillates, except crude	81,938
841440	Air compressors mounted on wheeled chassis for towing	60,603
100630	Rice, semi-milled or wholly milled	53,110
100620	Rice, husked (brown)	49,440
151219	Sunflower or safflower oil, fractions simply refined	46,559
090300	Mate	30,870
080120	Brazil nuts, fresh or dried	30,000
251512	Marble and travertine in blocks etc.	18,372

Source: United Nations, COMTRADE database.

Table A.2: India - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)		
	Commodity Description	AVG 2010-2013
520100	Cotton, not carded or combed	266,393,971
230400	Soya-bean oil-cake and other solid residues	218,182,617
290243	P-xylene	156,846,952
300490	Medicaments nes, in dosage	132,334,007
170199	Refined sugar, in solid form, nes, pure sucrose	104,084,215
070200	Tomatoes, fresh or chilled	89,211,625
090240	Tea, black (fermented or partly) in packages > 3 kg	74,948,585
540710	Woven hi-ten filament, nylon, polyamide or polyester	63,122,909
390210	Polypropylene in primary forms	50,622,030
852520	Transmit-receive apparatus for radio, TV, etc.	42,341,948
071320	Chickpeas, dried, shelled	42,023,155
540772	Woven fabric >85% synthetic filament, dyed, nes	36,629,778
711790	Imitation jewelry nes	28,253,624
240399	Products of tobacco, substitute nes, extract, essence	27,455,020
540760	Woven fabric >85% non-textured polyester filament, ne	27,044,235
550410	Staple fibers of viscose rayon, not carded or combed	23,101,597
320416	Reactive dyes and preparations based thereon	21,840,902
100190	Wheat except durum wheat, and meslin	21,457,847
300420	Antibiotics nes, in dosage	19,213,750
300220	Vaccines, human use	16,434,495
020230	Bovine cuts boneless, frozen	16,405,533
761410	Aluminum wire, cables, etc., steel core, uninsulated	12,844,332
870600	Motor vehicle chassis fitted with engine	12,814,856
401120	Pneumatic tires new of rubber for buses or lorries	12,448,872
540754	Woven fabric >85% textured polyester, printed, nes	10,053,449
870410	Dump trucks designed for off-highway use	9,240,000
300450	Vitamins, derivatives, in dosage	5,085,926
391739	Plastic tube, pipe or hose, flexible, nes	4,902,020
848180	Taps, cocks, valves and similar appliances, nes	4,631,350
610520	Men's, boys shirts, of manmade fibers, knit	4,411,891
690390	Refractory ceramic articles nes	3,472,837
842649	Cranes & lifting frames, self-propelled, not on tires	3,419,557
090230	Tea, black (fermented or partly) in packages < 3 kg	3,206,982
902920	Speed indicators, tachometers, stroboscopes	3,193,569
292142	Aniline derivatives, salts thereof	3,174,839
842951	Front end shovel loaders	3,069,977
610990	T-shirts, singlet's etc., of material nes, knit	2,660,310
841989	Machinery for treatment by temperature change nes	2,650,453
902990	Parts and accessories of revolution counters, etc.	2,300,543
841370	Centrifugal pumps nes	2,228,588
847920	Machines to process animal or fixed veg fats or oils	2,218,899
842199	Parts for filter/purifying machines for liquid/gas	2,163,250
841182	Gas turbine engines nes of a power > 5000 kW	1,442,002
841810	Combined refrigerator-freezers, two door	1,341,808
870422	Diesel powered trucks weighing 5-20 tones	1,333,972
850619	Primary cells, primary batteries nes, volume < 300 cc	1,259,960
240120	Tobacco, unmanufactured, stemmed or stripped	1,198,374
854211	Monolithic integrated circuits, digital	1,014,659
610910	T-shirts, singlet's and other vests, of cotton, knit	967,988
170111	Raw sugar, cane	881,018
020220	Bovine cuts bone in, frozen	749,000
630629	Tents, of textile material nes	616,116
843880	Industrial machinery nes for food, drink preparation	609,719
300410	Penicillin's and streptomycin's, derives, in dosage	515,055

Source: United Nations, COMTRADE database.

Table A.3: Pakistan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
271000	Oils petroleum, bituminous, distillates, except crude	394,828,486
252329	Portland cement, other than white cement	287,206,416
110100	Wheat or meslin flour	171,598,510
151620	Veg fats, oils or fractions hydrogenated, esterified	159,474,239
100630	Rice, semi-milled or wholly milled	93,817,606
730690	Tube/pipe/hollow profile, iron/steel, riveted/open sea	71,336,777
170199	Refined sugar, in solid form, nes, pure sucrose	69,311,319
080410	Dates, fresh or dried	64,806,899
070190	Potatoes, fresh or chilled except seed	62,842,894
080520	Mandarin, clementine & citrus hybrids, fresh or dried	61,365,371
730890	Structures and parts of structures, iron or steel, ne	54,376,713
740400	Copper/copper alloy waste or scrap	44,109,622
710812	Gold in unwrought forms non-monetary	32,487,523
520100	Cotton, not carded or combed	28,940,217
290250	Styrene	22,797,238
271111	Natural gas, liquefied	16,022,432
290321	Vinyl chloride (chloroethylene)	12,910,357
780199	Lead unwrought nes	10,300,627
300490	Medicaments nes, in dosage	7,824,370
300390	Medicaments nes, formulated, in bulk	1,838,430
360500	Matches	961,318
300510	Medical dressings etc. having an adhesive layer	913,695
620342	Men's, boys trousers & shorts, of cotton, not knit	592,029
040120	Milk not concentrated nor sweetened 1-6% fat	559,240
170410	Chewing gum containing sugar, except medicinal	484,765
531090	Woven fabric of jute/baste fiber, not unbleached/bleached	475,937
630622	Tents, synthetic fibers	386,743
620462	Women's, girls trousers & shorts, of cotton, not knit	373,056
842839	Continuous action elevators or conveyors for goods ne	347,400
960329	Shaving, hair, nail, eyelash and other toilet brushes	334,105
040390	Buttermilk, curdled milk, cream, kephir, etc.	315,019
240110	Tobacco, unmanufactured, not stemmed or stripped	281,802
300410	Penicillin's and streptomycin's, derives, in dosage	271,464
630699	Camping goods nes, textile material, not cotton	257,400
170490	Sugar confectionery not chewing gum, no cocoa content	217,828
240120	Tobacco, unmanufactured, stemmed or stripped	210,806
300450	Vitamins, derivatives, in dosage	207,838
300420	Antibiotics nes, in dosage	201,883
902211	Medical X-ray apparatus	188,202
300439	Hormones nes, except contraceptives, in dosage	186,610
901890	Instruments, appliances for medical, etc. science, nes	176,881
847989	Machines and mechanical appliances nes	146,500
846291	Hydraulic presses for working metal	102,803
950662	Inflatable balls	82,931
300339	Hormones nes, no antibiotics, bulk, not contraceptive	72,385
340120	Soaps nes	71,345
080450	Guavas, mangoes and mangos teens, fresh or dried	70,568
630120	Blankets (non-electric) & travelling rug, wool or Hai	54,500

Source: United Nations, COMTRADE database.

Table A.4: Kazakhstan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
270900	Petroleum oils, oils from bituminous minerals, crude	638,445,349
110100	Wheat or meslin flour	560,002,356
100190	Wheat except durum wheat, and meslin	290,588,887
271000	Oils petroleum, bituminous, distillates, except crude	182,005,882
271112	Propane, liquefied	108,901,261
260800	Zinc ores and concentrates	74,767,916
252400	Asbestos	67,960,097
730511	Pipe-line submerged arc welded steel diameter >406mm	65,774,600
720449	Ferrous waste or scrap, nes	50,272,954
270119	Coal except anthracite or bituminous, not agglomerate	37,879,678
240220	Cigarettes containing tobacco	36,958,115
271121	Natural gas in gaseous state	35,327,036
760110	Aluminum unwrought, not alloyed	25,011,742
271600	Electrical energy	24,685,747
710691	Silver in unwrought forms	20,451,570
860210	Rail locomotives, diesel-electric	18,400,000
790111	Zinc, not alloyed, unwrought, >99% pure	17,057,771
710812	Gold in unwrought forms non-monetary	16,976,380
790112	Zinc, not alloyed, unwrought, <99% pure	16,626,806
720990	Cold rolled iron or non-alloy steel, flat, width >600mm, nes	16,390,544
780110	Lead refined unwrought	13,968,136
251110	Natural barium sulphate (barites)	13,235,881
100630	Rice, semi-milled or wholly milled	13,117,171
220210	Beverage waters, sweetened or flavored	12,657,027
252329	Portland cement, other than white cement	12,268,130
721049	Flat rolled iron or non-alloy steel, coated with zinc, width >600mm, ne	9,049,376
890600	Warships, lifeboats, hospital ships, vessels nes	7,356,788
720824	Hot rolled iron or non-alloy steel, coil, width >600mm, t <3mm thick, ne	6,860,666
721049	Flat rolled iron or non-alloy steel, coated with zinc, width >600mm, ne	6,722,905
490700	Documents of title (bonds etc.), unused stamps etc.	6,666,716
844390	Parts of printing machinery and ancillary equipment	6,605,844
721420	Bar/rod, iron or non-alloy steel, indented or twisted, nes	6,021,803
190110	Infant foods of cereals, flour, starch or milk, retail	5,982,757
120400	Linseed	5,828,771
681190	Articles nes, of asbestos or cellulose fiber cement	5,739,714
890400	Tugs and pusher craft	5,488,453
281910	Chromium trioxide	4,837,331
270810	Pitch	4,831,830
680911	Plaster board etc. not ornamental, paper reinforced	4,603,891
210690	Food preparations nes	4,312,461
251020	Natural calcium phosphates, ground	4,261,743
441219	Plywood, all softwood, each ply < 6mm thick	4,039,124
310559	Fertilizers with nitrogen and phosphorus nes, <=10kg	4,025,344
720241	Ferro-chromium, >4% carbon	3,358,701
720249	Ferro-chromium, <4% carbon	3,209,432
720923	Cold rolled iron or non-alloy steel, coil, width >600mm, t 0.5-1mm, nes	2,648,966
720823	Hot rolled iron or non-alloy steel, coil, width >600mm, t 3-4.75mm, nes	1,359,614
720922	Cold rolled iron or non-alloy steel, coil, width >600mm, t 1-3mm, nes	1,294,517
720822	Hot rolled iron or non-alloy steel, coil, width >600mm, t 4.75-10mm, nes	1,155,339
720924	Cold rolled iron or non-alloy steel, coil, width >600mm, t <0.5mm, nes	1,142,265
730420	Casings, tubing and drill pipe, for oil drilling	538,159
720719	Semi-finished product, iron or non-alloy steel <0.25%C, nes	418,216
721012	Flat rolled iron or non-alloy steel, coated with tin, w >600mm, t <0.5m	409,810

Source: United Nations, COMTRADE database.

Table A.5: Kyrgyzstan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S.$)

	Commodity Description	AVG 2010-2013
271600	Electrical energy	57,923,438
870423	Diesel powered trucks weighing > 20 tones	27,726,342
271000	Oils petroleum, bituminous, distillates, except crude	25,787,215
261690	Precious metal ores and concentrates except silver	12,436,246
040120	Milk not concentrated nor sweetened 1-6% fat	12,064,182
070190	Potatoes, fresh or chilled except seed	11,805,057
700529	Float glass etc. in sheets, non-wired, clear	9,998,425
401199	Pneumatic tires new of rubber nes	9,798,884
080810	Apples, fresh	9,492,343
252329	Portland cement, other than white cement	9,132,212
620640	Women's, girls blouses, shirts, manmade fiber, not knit	8,311,057
284410	Natural uranium, its compounds, mixtures	8,114,998
853922	Filament lamps, of a power <= 200 Watt, > 100 volts	7,578,067
820712	Rock drilling or earth boring tools except carbide	7,405,330
070610	Carrots and turnips, fresh or chilled	7,031,971
620443	Women's, girls dresses, synthetic fibers, not knit	6,814,896
390410	Polyvinyl chloride in primary forms	6,740,994
720449	Ferrous waste or scrap, nes	3,974,453
720842	Hot rolled iron or non-alloy steel, flat, width >600mm, t >10mm, nes	3,920,007
880212	Helicopters of an unloaded weight > 2,000 kg	3,335,082
860800	Signals etc. for rail, tram, water-way, port, airfield	2,778,159
220210	Beverage waters, sweetened or flavored	2,516,520
392330	Plastic carboys, bottles and flasks, etc.	1,623,476
010290	Bovine animals, live, except pure-bred breeding	1,525,654
040210	Milk powder < 1.5% fat	1,280,349
870190	Wheeled tractors nes	1,022,202
270900	Petroleum oils, oils from bituminous minerals, crude	879,427
842952	Shovels and excavators with revolving superstructure	851,491
240220	Cigarettes containing tobacco	822,846
841981	Commercial equipment, hot drinks/cooking/heating food	785,077
392330	Plastic carboys, bottles and flasks, etc.	752,858
070310	Onions and shallots, fresh or chilled	656,822
180631	Chocolate, cocoa preps, block, slab, bar, filled, >2k	639,527
270220	Lignite, agglomerated	618,689
110319	Cereal groats or meal except wheat, maize, rice, oats	487,854
842240	Packing or wrapping machinery nes	386,214
440710	Lumber, coniferous (softwood) thickness < 6 mm	376,691
870891	Radiators for motor vehicles	345,172
761510	Aluminum table/kitchen/household articles, scourers	341,343
853929	Filament lamps, except ultraviolet or infra-red, nes	323,274
870899	Motor vehicle parts nes	292,962
280540	Mercury	267,722
720429	Waste or scrap, of alloy steel, other than stainless	266,943
851610	Electric instant, storage and immersion water heaters	265,137
720241	Ferro-chromium, >4% carbon	258,052
880240	Fixed wing aircraft, unladed weight > 15,000 kg	257,741
940330	Office furniture, wooden, nes	255,243
811000	Antimony, articles thereof, waste or scrap	240,082
310559	Fertilizers with nitrogen and phosphorus nes, <=10kg	234,000
732620	Articles of iron or steel wire, nes	174,627
848330	Bearing housings, shafts, without ball/roller bearing	152,429
252400	Asbestos	143,027
410221	Sheep or lamb skins, pickled, without wool	142,267
410429	Bovine and equine leather, tanned or retained, nes	130,067
841111	Turbo-jet engines of a thrust < 25 KN	124,467

Source: United Nations, COMTRADE database.

Table A.6: Tajikistan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
271000	Oils petroleum, bituminous, distillates, except crude	38,782,072
760110	Aluminum unwrought, not alloyed	14,793,711
081310	Apricots, dried	9,759,264
260800	Zinc ores and concentrates	9,046,206
260700	Lead ores and concentrates	8,291,932
520100	Cotton, not carded or combed	7,845,632
081350	Mixtures of edible nuts, dried and preserved fruits	7,679,121
070310	Onions and shallots, fresh or chilled	6,679,041
110100	Wheat or meslin flour	5,566,643
640320	Footwear, soles/uppers leather, strap instep & big to	2,299,771
261710	Antimony ores and concentrates	1,593,829
721631	Sections, U, iron or non-alloy steel, nfw hot-roll/drawn/extruded > 80m	1,568,495
180690	Chocolate/cocoa food preparations nes	1,542,453
620640	Women's, girls blouses, shirts, manmade fiber, not knit	1,387,743
080232	Walnuts, fresh or dried, shelled	1,248,865
870891	Radiators for motor vehicles	1,190,007
081320	Prunes, dried	1,164,091
081340	Fruits, dried nes	846,999
080610	Grapes, fresh	773,080
271121	Natural gas in gaseous state	753,242
847490	Parts for mineral sort, screen, mix, etc. machines	623,022
842920	Graders and levelers, self-propelled	502,700
130190	Natural gum, resin, gum-resin, balsam, not gum Arabic	495,713
240110	Tobacco, unmanufactured, not stemmed or stripped	493,615
720291	Ferro-titanium and Ferro-silicon-titanium	449,020
271600	Electrical energy	444,812
760120	Aluminum unwrought, alloyed	216,112
360200	Prepared explosives, except propellant powders	213,101
760511	Wire, aluminum, not alloyed, t > 7mm	187,170
391721	Tube, pipe or hose, rigid, of polyethylene	169,505
071331	Urd, mung, black or green gram beans dried shelled	146,751
841490	Parts of vacuum pumps, compressors, fans, blowers, hoods	134,182
240120	Tobacco, unmanufactured, stemmed or stripped	130,218
520542	Cotton yarn >85% multiple combed 714-232 dtex, not ret	124,991
760529	Wire, aluminum alloy, t < 7mm	118,960
780199	Lead unwrought nes	107,705
390410	Polyvinyl chloride in primary forms	100,532

Source: United Nations, COMTRADE database.

Table A.7: Turkmenistan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
271000	Oils petroleum, bituminous, distillates, except crude	199,481,306
271121	Natural gas in gaseous state	174,093,615
520100	Cotton, not carded or combed	22,980,088
280120	Iodine	7,568,809
390210	Polypropylene in primary forms	2,731,398
890600	Warships, lifeboats, hospital ships, vessels nes	2,122,876
520819	Woven cotton nes, >85% <200g/m2, unbleached	1,516,870
870590	Special purpose motor vehicles nes	1,393,345
410210	Sheep or lamb skins, raw, wool on, except Persian etc.	1,060,965
070200	Tomatoes, fresh or chilled	963,028
180690	Chocolate/cocoa food preparations nes	865,187
151221	Cotton-seed oil crude	734,522
520525	Cotton yarn >85% single combed <125 dtex, not retail	713,618
151800	Processed animal, vegetable oils, industrial preps ne	635,510
080610	Grapes, fresh	618,104
151229	Cotton-seed or fractions simply refined	570,348
510119	Greasy wool (other than shorn) not carded or combed	562,255
901580	Surveying, etc. instruments nes	503,166
890400	Tugs and pusher craft	480,842
520511	Cotton yarn >85% single uncombed >714 dtex, not retail	473,377
848140	Valves, safety or relief	439,953
500200	Raw silk (not thrown)	399,462
847490	Parts for mineral sort, screen, mix, etc. machines	288,038
110100	Wheat or meslin flour	228,525
510129	Degreased wool nes, not carded, combed or carbonized	191,142
271119	Petroleum gases & gaseous hydrocarbons nes, liquefied	136,760
550130	Filament tow of acrylic or mod acrylic	127,340
140420	Cotton linters	125,607
841330	Fuel, lubricating and cooling pumps for motor engines	114,474
410221	Sheep or lamb skins, pickled, without wool	113,931
580810	Braids in the piece	97,728
871499	Bicycle parts nes	87,557
520522	Cotton yarn >85% single combed 714-232 dtex, not retail	81,902
071331	Urd, mung, black or green gram beans dried shelled	77,368
340120	Soaps nes	61,876
841480	Air or gas compressors, hoods	50,002
340119	Soaps for purposes other than toilet soap, solid	40,837
320300	Coloring matter of vegetable or animal origin	29,505
380810	Insecticides, packaged for retail sale	17,094

Source: United Nations, COMTRADE database.

Table A.8: Uzbekistan - Top Exports to Intra- and Inter-Regional Markets, 2010-2013 average (6-digit HS92, million U.S. dollars)

	Commodity Description	AVG 2010-2013
271000	Oils petroleum, bituminous, distillates, except crude	674,928,252
271121	Natural gas in gaseous state	245,863,083
870322	Automobiles, spark ignition engine of 1000-1500 cc	47,664,267
310230	Ammonium nitrate, including solution, in pack >10 kg	45,727,566
080610	Grapes, fresh	43,492,204
081090	Fruits, fresh nes	28,686,238
252329	Portland cement, other than white cement	23,689,772
071331	Urd, mung, black or green gram beans dried shelled	21,304,359
070200	Tomatoes, fresh or chilled	19,019,960
070700	Cucumbers and gherkins, fresh or chilled	15,524,792
570242	Carpets of manmade yarn, woven pile, made up, nes	15,094,030
080910	Apricots, fresh	15,046,731
710812	Gold in unwrought forms non-monetary	14,049,100
310210	Urea, including aqueous solution in packs >10 kg	13,321,466
740311	Copper cathodes and sections of cathodes unwrought	8,374,909
520100	Cotton, not carded or combed	7,439,443
180690	Chocolate/cocoa food preparations nes	7,145,506
110100	Wheat or meslin flour	5,398,443
310540	Monoammonium phosphate & mix with diammonium, <=10 kg	5,158,356
310420	Potassium chloride, in packs >10 kg	3,919,220
270400	Coke, semi-coke of coal, lignite, peat & retort carbon	3,912,710
130190	Natural gum, resin, gum-resin, balsam, not gum Arabic	2,998,929
640199	Waterproof footwear(Wellington) no toe cap, nes	2,405,605
790112	Zinc, not alloyed, unwrought, <99% pure	2,147,554
080920	Cherries, fresh	2,101,400
741012	Foil, copper alloy, not backed, t < 0.15mm	2,077,497
240220	Cigarettes containing tobacco	2,002,644
847490	Parts for mineral sort, screen, mix, etc. machines	1,995,903
680911	Plaster board etc. not ornamental, paper reinforced	1,986,050
270500	Coal gas, water gas, etc. (not gaseous hydrocarbons)	1,837,292
740921	Plate/sheet/strip, copper-zinc alloy, colt > 0.15mm	1,667,201
500200	Raw silk (not thrown)	1,610,357
870410	Dump trucks designed for off-highway use	1,568,890
844520	Textile yarn spinning machines	1,435,429
760900	Aluminum pipe or tube fittings	882,273
250310	Sulphur, crude or unrefined	398,590
310490	Potassic fertilizers, mixes, nes, pack >10 kg	383,611
550130	Filament tow of acrylic or modacrylic	291,116
410519	Sheep or lamb skin leather, tanned or retanned, nes	204,985
390110	Polyethylene - specific gravity <0.94 in primary form	161,877
550330	Staple fibers of acrylic, modacrylic, not carded/combed	95,806
500400	Silk yarn (except from waste) not retail	79,364
410619	Goat or kid skin leather, tanned or retanned, nes	64,514

Source: United Nations, COMTRADE database.

Table A.9: Total Trade (exports plus imports) with Central and South Trade as a Percent of Total Trade with World, 1995-2013

TOTAL TRADE WITH SOUTH ASIA																				
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South Asia (INTRA)		***0.5%***	***0.8%***	***0.7%***	***1.1%***	***0.9%***	***1.0%***	***1.0%***	***1.0%***	***1.4%***	***1.5%***	***1.8%***	***2.1%***	***2.1%***	***2.0%***	***1.7%***	***1.7%***	***1.2%***	***1.3%***	***1.5%***
	Afghanistan	10.6%	8.4%	10.6%	17.1%	29.0%	29.2%	34.6%	30.9%	35.5%	35.6%	43.1%	42.4%	41.9%	39.9%	30.1%	28.8%	26.7%	30.4%	35.5%
	India	0.2%	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%	0.6%	0.6%	0.5%	0.5%	0.5%	0.3%	0.4%	0.4%
	Pakistan	27.9%	37.3%	30.2%	68.8%	55.9%	52.0%	74.3%	41.4%	41.2%	52.5%	61.2%	72.1%	75.2%	64.0%	37.7%	51.5%	38.9%	46.3%	56.5%
Central Asia (INTER)		***0.7%***	***0.5%***	***0.5%***	***0.6%***	***0.9%***	***0.6%***	***0.5%***	***0.5%***	***0.5%***	***0.5%***	***0.6%***	***0.7%***	***0.6%***	***0.8%***	***0.8%***	***0.8%***	***0.7%***	***0.8%***	***0.8%***
	Kazakstan	0.2%	0.4%	0.6%	0.6%	0.8%	0.9%	0.5%	0.6%	0.6%	0.6%	0.7%	0.7%	0.5%	0.9%	1.0%	0.9%	0.7%	0.8%	0.9%
	Kyrgyzstan	8.0%	1.1%	1.2%	1.4%	1.2%	0.8%	0.6%	1.3%	0.9%	0.3%	1.6%	3.4%	3.7%	1.1%	0.8%	1.0%	0.9%	0.9%	0.9%
	Tajikistan	0.3%	0.8%	0.2%	0.2%	0.3%	0.2%	2.8%	2.6%	0.6%	0.7%	0.8%	1.1%	1.2%	3.2%	3.1%	3.9%	2.7%	3.1%	3.2%
	Turkmenistan	2.0%	1.6%	1.6%	1.7%	2.4%	1.2%	0.7%	1.0%	1.6%	2.2%	2.3%	2.7%	2.7%	2.2%	2.4%	3.2%	2.4%	2.1%	1.9%
	Uzbekistan	0.3%	0.3%	0.3%	0.4%	0.7%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%	0.1%	0.2%	0.2%	0.2%
MEAN AVERAGE:																				
INTRA:	*South Asia*	12.9%	15.3%	13.7%	28.8%	28.4%	27.2%	36.4%	24.2%	25.7%	29.5%	34.9%	38.4%	39.3%	34.8%	22.8%	26.9%	22.0%	25.7%	30.8%
INTER:	*Central Asia*	2.2%	0.8%	0.8%	0.8%	1.1%	0.7%	1.0%	1.1%	0.8%	0.8%	1.1%	1.6%	1.7%	1.5%	1.5%	1.8%	1.4%	1.4%	1.4%
TOTAL TRADE WITH CENTRAL ASIA																				
South Asia (INTER)		***0.3%***	***0.2%***	***0.3%***	***0.3%***	***0.3%***	***0.3%***	***0.2%***	***0.2%***	***0.3%***	***0.3%***	***0.3%***	***0.3%***	***0.3%***	***0.4%***	***0.3%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***
	Afghanistan	14.8%	4.5%	5.5%	5.8%	10.6%	15.0%	7.9%	6.9%	8.3%	10.4%	10.7%	12.0%	12.3%	16.8%	10.4%	9.0%	8.0%	9.0%	10.1%
	India	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
	Pakistan	10.2%	10.8%	11.3%	12.8%	16.3%	4.5%	4.2%	2.3%	1.1%	2.0%	1.4%	1.1%	1.3%	1.3%	0.2%	0.7%	0.6%	0.7%	0.9%
Central Asia (INTRA)		***9.0%***	***8.2%***	***7.8%***	***7.2%***	***6.9%***	***5.0%***	***4.8%***	***4.0%***	***3.5%***	***3.6%***	***3.3%***	***3.3%***	***4.2%***	***3.8%***	***4.2%***	***4.2%***	***4.0%***	***4.6%***	***4.7%***
	Kazakstan	9.6%	7.7%	4.6%	4.2%	3.5%	2.7%	3.3%	2.9%	2.9%	3.0%	2.4%	2.3%	3.1%	2.9%	3.0%	3.1%	3.2%	3.7%	3.7%
	Kyrgyzstan	42.5%	41.0%	32.4%	25.6%	22.4%	27.0%	26.8%	24.8%	23.8%	23.5%	23.4%	19.4%	21.3%	17.4%	10.0%	13.1%	12.7%	14.5%	14.5%
	Tajikistan	30.9%	36.0%	34.8%	35.6%	41.1%	28.9%	30.4%	23.8%	21.8%	21.6%	21.7%	17.9%	19.0%	13.4%	16.6%	13.0%	11.4%	15.4%	15.4%
	Turkmenistan	7.0%	3.3%	13.4%	8.9%	4.2%	3.0%	3.7%	2.7%	2.9%	3.5%	2.9%	3.9%	4.2%	4.4%	4.2%	4.4%	3.4%	3.5%	3.5%
	Uzbekistan	5.5%	4.9%	5.1%	4.9%	5.3%	4.2%	3.5%	2.6%	2.0%	2.2%	2.3%	2.7%	3.7%	3.5%	4.0%	3.9%	3.5%	3.8%	4.2%
MEAN AVERAGE:																				
INTER:	*South Asia*	8.4%	5.1%	5.6%	6.3%	9.0%	6.6%	4.1%	3.1%	3.2%	4.2%	4.1%	4.4%	4.6%	6.1%	3.6%	3.3%	2.9%	3.3%	3.7%
INTRA:	*Central Asia*	19.1%	18.6%	18.1%	15.8%	15.3%	13.1%	13.5%	11.4%	10.7%	10.7%	10.5%	9.2%	10.3%	8.3%	7.5%	7.5%	6.9%	8.2%	8.2%

Source: Based on data from IMF, Direction of Trade (DOT) database.

Table A.10: Trade Intensity Ratios: Total trade (exports plus imports) with Central and South Asia as a percent of total trade, 1995-2013

TOTAL TRADE WITH SOUTH ASIA																			
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South Asia (INTRA)		***0.8***	***1.2***	***1.0***	***1.6***	***1.2***	***1.3***	***1.4***	***1.2***	***1.5***	***1.5***	***1.6***	***1.7***	***1.5***	***1.4***	***1.0***	***0.9***	***0.6***	***0.6***	***0.7***
	Afghanistan	16.4	12.8	15.2	24.2	39.0	40.1	45.6	36.0	39.0	36.8	37.3	33.9	29.6	27.5	17.3	14.7	12.2	13.7	16.3
	India	0.3	0.5	0.4	0.6	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2
	Pakistan	43.1	56.8	43.6	97.4	75.3	71.3	98.0	48.3	45.2	54.3	52.9	57.6	53.0	44.1	21.6	26.3	17.7	20.8	26.0
Central Asia (INTER)		***1.0***	***0.8***	***0.7***	***0.8***	***1.2***	***0.8***	***0.6***	***0.6***	***0.6***	***0.5***	***0.5***	***0.6***	***0.4***	***0.6***	***0.5***	***0.4***	***0.3***	***0.3***	***0.4***
	Kazakstan	0.4	0.6	0.9	0.8	1.1	1.3	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.6	0.6	0.5	0.3	0.4	0.4
	Kyrgyzstan	12.3	1.7	1.8	1.9	1.7	1.1	0.8	1.6	0.9	0.3	1.4	2.7	2.6	0.8	0.4	0.5	0.4	0.4	0.4
	Tajikistan	0.4	1.2	0.3	0.2	0.4	0.3	3.7	3.1	0.7	0.8	0.7	0.9	0.9	2.2	1.7	2.0	1.2	1.4	1.5
	Turkmenistan	3.0	2.4	2.4	2.4	3.2	1.6	0.9	1.1	1.8	2.2	2.0	2.2	1.9	1.5	1.4	1.6	1.1	0.9	0.9
	Uzbekistan	0.5	0.5	0.5	0.5	0.9	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEAN AVERAGE:																				
INTRA:	***South Asia***	**19.9**	**23.4**	**19.7**	**40.7**	**38.3**	**37.3**	**48.0**	**28.2**	**28.2**	**30.5**	**30.2**	**30.6**	**27.7**	**24.0**	**13.1**	**13.8**	**10.0**	**11.6**	**14.2**
INTER:	***Central Asia***	**3.3**	**1.3**	**1.2**	**1.2**	**1.4**	**0.9**	**1.3**	**1.3**	**0.9**	**0.8**	**1.0**	**1.3**	**1.2**	**1.1**	**0.8**	**0.9**	**0.6**	**0.6**	**0.7**
TOTAL TRADE WITH CENTRAL ASIA																				
South Asia (INTER)		***0.9***	***0.7***	***0.8***	***0.9***	***1.2***	***0.9***	***0.6***	***0.6***	***0.7***	***0.6***	***0.6***	***0.6***	***0.5***	***0.5***	***0.5***	***0.4***	***0.3***	***0.3***	***0.4***
	Afghanistan	45.9	13.5	17.6	21.3	42.6	50.7	23.9	20.6	22.3	24.6	24.1	24.7	22.5	25.7	18.2	16.8	13.6	14.2	15.9
	India	0.2	0.1	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
	Pakistan	31.6	32.9	36.6	47.1	65.8	15.3	12.6	6.8	2.9	4.7	3.2	2.4	2.5	2.0	0.4	1.3	1.0	1.2	1.4
Central Asia (INTRA)		***27.8***	***24.9***	***25.3***	***26.3***	***28.0***	***16.9***	***14.7***	***11.8***	***9.5***	***8.5***	***7.3***	***6.9***	***7.7***	***5.8***	***7.4***	***7.9***	***6.9***	***7.2***	***7.4***
	Kazakstan	29.8	23.5	15.0	15.3	14.1	9.0	9.9	8.5	7.9	7.1	5.3	4.8	5.6	4.4	5.2	5.9	5.5	5.9	5.8
	Kyrgyzstan	132.0	124.3	104.6	94.0	90.4	91.1	81.4	73.9	64.1	55.4	52.5	39.9	39.0	26.7	17.5	24.3	21.7	22.9	22.8
	Tajikistan	95.9	109.3	112.2	130.8	165.7	97.5	92.3	70.8	58.7	50.9	48.5	36.8	34.7	20.6	29.1	24.2	19.5	24.3	24.3
	Turkmenistan	21.7	10.1	43.1	32.7	16.9	10.2	11.1	7.9	7.9	8.2	6.6	8.0	7.7	6.8	7.4	8.1	5.8	5.5	5.4
	Uzbekistan	17.1	14.9	16.6	17.9	21.2	14.0	10.6	7.8	5.4	5.2	5.2	5.6	6.8	5.3	7.0	7.2	6.0	6.0	6.6
MEAN AVERAGE:																				
INTER:	***South Asia***	**25.9**	**15.5**	**18.2**	**23.0**	**36.3**	**22.1**	**12.3**	**9.2**	**8.5**	**9.9**	**9.2**	**9.1**	**8.4**	**9.3**	**6.3**	**6.1**	**4.9**	**5.2**	**5.8**
INTRA	***Central Asia***	**59.3**	**56.4**	**58.3**	**58.2**	**61.7**	**44.4**	**41.0**	**33.8**	**28.8**	**25.3**	**23.6**	**19.0**	**18.7**	**12.7**	**13.2**	**13.9**	**11.7**	**12.9**	**13.0**

Note: For definition of trade intensity ratio, see Box 2.1 in text.
Source: Based on data from IMF, Direction of Trade (DOT) database.

Table A.11: Revealed Comparative Advantage of Central and South Asian countries, by 2-Digit HS Chapter

Chapter	description	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
01	Live animals.	1.63	0.22	1.22	0.03	5.59	1.39	0.00	1.43
02	Meat and edible meat offal.	0.91	0.79	10.89	0.15	4.72	0.02	0.00	0.04
03	Fish & crustacean, mollusc & other aquatic invertebrate	1.40	1.86	8.80	0.11	0.24	3.81	0.00	0.19
04	Dairy prod; birds' eggs; natural honey; edible prod nes	0.18	0.69	1.07	0.03	2.42	0.16	0.01	0.08
05	Products of animal origin, nes or included.	1.89	6.47	3.80	0.25	3.10	0.40	0.03	4.44
06	Live tree & other plant; bulb, root; cut flowers etc	0.27	0.91	0.12	0.08	0.44	0.03	0.00	3.65
07	Edible vegetables and certain roots and tubers.	14.56	1.34	1.40	0.06	11.67	4.75	0.10	8.51
08	Edible fruit and nuts; peel of citrus fruit or melons.	78.54	0.74	5.30	0.13	7.66	50.35	0.05	17.61
09	Coffee, tea, mat- and spices.	115.93	8.89	4.33	0.06	2.00	0.38	0.01	0.72
10	Cereals.	1.37	3.17	12.54	0.77	0.12	0.55	0.06	0.39
11	Prod mill indust; malt; starches; inulin; wheat gluten	6.22	1.08	3.03	2.97	2.08	3.26	0.10	0.47
12	Oil seed, oleagi fruits; miscell grain, seed, fruit etc	236.47	2.54	5.55	4.04	1.05	4.75	0.79	26.19
13	Lac; gums, resins & other vegetable saps & extracts.	205.45	12.76	3.59	0.17	0.17	22.43	53.89	7.44
14	Vegetable plaiting materials; vegetable products nes	18.72	3.00	3.41	1.07	0.15	1.76	48.23	40.57
15	Animal/veg fats & oils & their cleavage products; etc	0.92	1.72	0.86	7.24	0.37	0.51	13.09	0.28
16	Prep of meat, fish or crustaceans, molluscs etc	0.21	0.59	0.59	0.07	6.35	0.29	0.03	0.03
17	Sugars and sugar confectionery.	0.25	1.07	4.23	0.34	1.64	0.10	0.00	0.76
18	Cocoa and cocoa preparations.	0.01	0.05	0.01	0.08	1.01	0.26	0.04	0.19
19	Prep of cereal, flour, starch/milk; pastrycooks' prod	0.01	0.44	0.30	0.15	1.46	0.09	0.00	0.04
20	Prep of vegetable, fruit, nuts or other parts of plants	0.20	0.59	0.59	0.02	0.42	1.51	0.02	1.63
21	Miscellaneous edible preparations.	0.43	0.77	0.14	0.04	1.15	0.02	0.01	0.03
22	Beverages, spirits and vinegar.	0.04	0.18	3.65	0.08	0.48	0.03	0.00	1.22
23	Residues & waste from the food indust; prepr ani fodder	0.29	2.39	1.35	1.26	0.04	0.00	55.09	0.76
24	Tobacco and manufactured tobacco substitutes.	1.55	1.65	0.63	0.17	6.51	1.05	0.01	3.06
25	Salt; sulphur; earth & ston; plastering mat; lime & cem	56.06	8.40	5.48	2.51	8.11	0.12	0.30	2.22
26	Ores, slag and ash.	1.74	0.86	4.87	2.63	8.33	95.51	0.12	0.25
27	Mineral fuels, oils & product of their distillation;etc	3.55	1.29	0.27	1.23	4.54	2.50	3.90	9.38
28	Inorgn chem; compds of prec met, radioact elements etc	2.95	1.41	0.40	3.25	2.05	0.78	1.55	6.55
29	Organic chemicals.	0.83	3.23	0.11	0.04	0.49	0.15	0.00	1.95
30	Pharmaceutical products.	1.11	1.78	1.07	0.02	0.04	0.06	0.00	0.12
31	Fertilisers.	0.07	0.07	0.02	0.30	4.29	0.02	0.10	7.02
32	Tanning/dyeing extract; tannins & derivs; pigm etc	1.35	2.63	0.25	0.03	0.21	0.04	0.01	0.07
33	Essential oils & resinoids; perf, cosmetic/toilet prep	0.34	4.43	0.10	0.04	0.03	0.14	0.00	0.01
34	Soap, organic surface-active agents, washing prep, etc	0.41	0.57	0.51	0.09	0.16	0.06	0.02	0.08
35	Albuminoidal subs; modified starches; glues; enzymes.	0.04	0.77	0.31	0.02	0.39	0.10	0.00	0.00
36	Explosives; pyrotechnic prod; matches; pyrop alloy; etc	0.30	2.01	11.28	0.06		0.93		1.54
37	Photographic or cinematographic goods.	0.12	0.87	0.06	0.01	0.08	5.14	0.00	0.00
38	Miscellaneous chemical products.	0.28	0.98	0.09	0.02	0.18	0.12	0.03	0.19
39	Plastics and articles thereof.	0.51	0.55	0.54	0.04	0.39	0.40	0.20	0.34
40	Rubber and articles thereof.	0.32	1.27	0.31	0.06	0.46	0.32	0.01	0.02
41	Raw hides and skins (other than furskins) and leather.	63.36	1.51	12.47	0.23	15.51	8.08	0.95	6.58
42	Articles of leather; saddlery/harness; travel goods etc	0.11	2.35	12.60	0.02	0.06	0.01	0.00	0.01
43	Furskins and artificial fur; manufactures thereof.	592.71	0.06	1.00	0.05	4.55	0.09		1.68
44	Wood and articles of wood; wood charcoal.	0.43	0.21	0.22	0.02	0.19	0.03	0.00	0.09
45	Cork and articles of cork.		0.10	0.06	0.00	0.00			
46	Manufactures of straw, esparto/other plaiting mat; etc	0.36	0.11	0.14	0.00	0.01	0.00	0.00	0.09
47	Pulp of wood/of other fibrous cellulosic mat; waste etc	0.08	0.01	0.09	0.17	0.31		0.01	13.93
48	Paper & paperboard; art of paper pulp, paper/paperboard	0.83	0.41	0.18	0.03	0.47	0.20	0.00	0.07
49	Printed books, newspapers, pictures & other product etc	0.21	1.05	0.08	0.64	0.06	0.09	0.02	0.05
50	Silk.	171.35	4.83	1.53	0.13	0.46	261.58	8.68	81.10
51	Wool, fine/coarse animal hair, horsehair yarn & fabric	75.32	1.08	9.01	1.18	10.29	11.28	11.82	14.35
52	Cotton.	4.29	5.27	82.11	0.45	1.50	9.42	6.14	22.67
53	Other vegetable textile fibres; paper yarn & woven fab	0.52	5.79	4.04	0.23	3.98	2.12	0.03	0.32
54	Man-made filaments.	0.43	3.26	1.57	0.13	1.07	0.45	0.01	0.13
55	Man-made staple fibres.	1.53	2.43	18.92	0.06	4.68	3.35	0.23	1.26
56	Wadding, felt & nonwoven; yarns; twine, cordage, etc	1.35	2.04	3.95	0.02	0.28	0.30	0.82	2.53
57	Carpets and other textile floor coverings.	16.48	10.47	5.07	0.01	0.33	0.20	0.07	2.71
58	Special woven fab; tufted tex fab; lace; tapestries etc	1.99	2.33	7.75	0.13	5.98	3.66	21.76	1.32
59	Impregnated, coated, cover/laminated textile fabric etc	10.03	0.88	0.49	0.02	0.14	0.16	0.03	0.37
60	Knitted or crocheted fabrics.	0.22	0.84	0.95	0.00	0.40	3.53	1.13	11.94
61	Art of apparel & clothing access, knitted or crocheted.	0.25	3.50	30.10	0.05	2.87	0.39	0.04	1.79
62	Art of apparel & clothing access, not knitted/crocheted	0.09	3.51	10.07	0.02	3.82	0.66	0.10	0.35
63	Other made up textile articles; sets; worn clothing etc	1.00	7.22	65.21	0.02	0.78	0.15	0.73	0.41
64	Footwear, gaiters and the like; parts of such articles.	1.03	3.11	1.95	0.04	0.22	4.18	0.02	2.41
65	Headgear and parts thereof.	0.23	0.95	0.31	0.01	0.81	0.05	0.00	0.37
66	Umbrellas, walking-sticks, seat-sticks, whips, etc	0.01	0.08	0.19	0.01	0.06	0.00	0.00	0.00
67	Prepr feathers & down; arti flower; articles human hair	0.04	3.41	0.00	0.00	0.06	0.30		0.67
68	Art of stone, plaster, cement, asbestos, mica/sim mat	1.33	2.10	0.92	0.40	8.90	0.08	0.02	1.70
69	Ceramic products.	0.16	0.97	0.33	0.01	0.74	0.02	0.01	1.35
70	Glass and glassware.	0.29	0.85	0.16	0.01	1.38	1.58	0.02	0.29
71	Natural/cultured pearls, prec stones & metals, coin etc	3.98	4.76	0.98	2.67	2.26	0.68	1.18	1.55
72	Iron and steel.	3.05	1.67	0.50	4.97	1.87	1.71	0.02	0.24
73	Articles of iron or steel.	0.24	1.63	0.54	0.16	0.33	0.23	0.02	0.06
74	Copper and articles thereof.	0.20	0.82	1.66	1.27	0.46	0.92	0.02	3.35
75	Nickel and articles thereof.	0.11	0.90	0.06	0.03	0.44			0.22
76	Aluminium and articles thereof.	0.55	1.04	0.19	0.25	0.16	17.33	0.06	0.41
78	Lead and articles thereof.	1.57	1.17	0.63	2.63	4.14	1.52		0.94
79	Zinc and articles thereof.	0.00	1.02	0.08	3.37	0.00	0.00		34.87
80	Tin and articles thereof.	1.54	0.22	0.22	0.05	0.52			
81	Other base metals; cermets; articles thereof.	0.48	0.33	0.03	17.49	0.13	0.49		18.77
82	Tool, implement, cutlery, spoon & fork, of base met etc	0.29	1.05	1.58	0.03	0.85	0.07	0.01	0.02
83	Miscellaneous articles of base metal.	0.63	0.49	0.04	0.03	0.29	0.02	0.01	0.03
84	Nuclear reactors, boilers, mchy & mech appliance; parts	1.18	0.58	0.21	0.05	0.43	0.22	0.07	0.17
85	Electrical mchy equip parts thereof; sound recorder etc	0.58	0.48	0.05	0.04	0.93	0.15	0.02	0.31
86	Railw/tramw locom, rolling-stock & parts thereof; etc	1.60	0.38	0.14	0.46	2.76	0.07	0.36	1.86
87	Vehicles o/t railw/tramw roll-stock, pts & accessories	0.67	0.88	0.09	0.06	0.99	0.15	0.09	1.08
88	Aircraft, spacecraft, and parts thereof.	0.09	1.93	0.05	0.00		0.01		
89	Ships, boats and floating structures.	1.24	4.53	0.60	0.48	0.33	0.09	0.21	0.34
90	Optical, photo, cine, meas, checking, precision, etc	0.43	0.34	0.10	0.02	0.33	1.33	0.03	0.08
91	Clocks and watches and parts thereof.	0.07	0.47	0.04	0.09	0.29	0.58	0.07	0.09
92	Musical instruments; parts and access of such articles	0.48	0.22	0.51	0.00	0.01	0.01	0.51	0.01
93	Arms and ammunition; parts and accessories thereof.	1.36	0.69	0.74			0.13		0.05
94	Furniture; bedding, mattress, matt support, cushion etc	0.04	0.43	0.25	0.01	0.22	0.02	0.00	0.03
95	Toys, games & sports requisites; parts & access thereof	0.14	0.29	4.11	0.01	0.12	0.05	0.00	0.04
96	Miscellaneous manufactured articles.	0.42	1.11	0.58	0.00	0.81	0.82	0.03	3.53
97	Works of art, collectors' pieces and antiques.	4.35	3.26	0.41	0.00	0.02	0.37	0.07	0.18

Table A.12: Exports of Afghanistan by Size of Exports (HS 6-digit category and U.S. dollars)

		Afghanistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**1,035,791,742**		**3,922,812,505**	**149,422,979,326**	**30,225,903,290**	**7,172,912,408**	**2,497,120,990**	**811,191,243**	**1,657,162,170**	**2,103,643,937**	**194,062,648,477**
LARGE-SIZE EXPORTS (> $4.5 MILLION)												
520100	Cotton, not carded or combed	71,972,532	1.18	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,352,558,758
720449	Ferrous waste or scrap, nes	45,316,969	3.37	1,097,021	696,267	340,039,501	2,900,649	2,626	409,714	19,112	53,729,270	398,894,161
080420	Figs, fresh or dried	40,043,780	0.99	67,132	158,725	74,076	553,164	31,803	3,300	38,981	3,650	930,832
080620	Grapes, dried	38,282,764	0.24	95,052	28,552,186	139,549	7,187,931	43,512	113,446	45,047	47,192	36,223,913
270119	Coal except anthracite or bituminous, not agglomerate	38,037,566		215,972	152,314,587	467,962,062	1,277,625	37,885,951	263,007	-	3,126,534	663,045,737
130190	Natural gum, resin, gum-resin, balsam, not gum arabic	35,416,664	0.25	344,047	121,148,807	2,543,537	305,963	26,092	-	6,853	15,998	124,391,296
080250	Pistachios, fresh or dried	15,339,074	0.26	3,911,666	285,115	1,652,117	4,415,782	754,119	9,264,817	1,149,291	1,606,183	23,039,088
430130	Raw Persian and similar lamb furskins, whole	13,103,149	0.15	-	866	41,957	-	-	-	-	17,538	-
840734	Engines, spark-ignition reciprocating, over 1000 cc	12,789,418		8,807,480	50,274,513	1,042,722	25,823,402	1,159,834	107,099	889,703	110,204,766	198,309,520
080610	Grapes, fresh	12,645,405	0.24	226,963	126,246,572	15,259,770	51,238,714	723,589	46,714	25,306	35,664	193,803,290
070310	Onions and shallots, fresh or chilled	11,790,779	0.59	2,519,178	432,756,655	30,054,389	13,454,790	46,260	414,977	4,154,036	2,115,098	485,515,381
252610	Natural steatite, not crushed or powdered	9,645,120	1.50	16,919	5,581,813	11,201,493	880	121	-	2,050	1,792	-
121190	Plants & parts, pharmacy, perfume, insecticide use ne	9,101,912	2.09	344,146	175,626,980	6,196,609	1,328,012	60,492	1,968	32,692	557,329	184,148,227
080212	Almonds,fresh or dried, shelled	8,055,129	0.62	72,941	686,717	4,420,521	3,621,511	6,428	1,073	416,443	406	9,226,040
570110	Carpets of wool or fine animal hair, knotted	7,796,236	0.05	3,053,196	275,201,344	2,724,348	410,613	5,162	519,471	1,320,370	57,576	283,292,079
880212	Helicopters of an unladen weight > 2,000 kg	7,294,676	-	17,375,981	19,594,796	14,604,561	31,868,448	6,504,537	-	61,443,465	-	151,391,787
081310	Apricots, dried	7,284,341	0.49	3,999	28,779	38,636	13,935,683	4,962	31,315	363,682	1,700	14,408,754
071339	Beans dried, shelled, nes	5,276,390		161,863	881,456	12,929,983	3,031,935	1,773	490	17,939	484	17,025,922
080810	Apples, fresh	4,985,227	0.57	3,527,950	12,968,673	6,498,763	59,960,348	4,104,575	1,952,269	12,568,639	79,478	101,660,694
120740	Sesamum seeds	4,950,765	0.51	576,844	542,328,736	48,294	565,684	6,975	87	6,659	26,714	543,559,992
070190	Potatoes, fresh or chilled except seed	4,751,568		59,318,934	28,537,259	456,530	22,612,066	76,380	288,178	11,356,426	816,286	123,462,058
710391	Rubies, sapphires and emeralds worked but not set	4,545,806		105,250	235,690,046	166	30,760	-	-	-	-	-
081090	Fruits, fresh nes	4,533,581	0.27	6,701,169	49,537,790	3,433,218	38,457,755	110,716	107,134	956,244	330,712	99,634,737
	SUB-TOTAL	**412,958,848**		**109,636,069**	**5,889,714,323**	**1,637,041,114**	**286,992,985**	**51,826,959**	**13,608,778**	**94,836,323**	**173,557,364**	**8,004,522,265**

		Afghanistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($4.5 MILLION > x > $1.5 MILLION)												
510210	Fine animal hair, not carded or combed	3,899,289	0.03	11,961	22,901	-	13,004	152,600	-	397	-	-
071331	Urd,mung,black or green gram beans dried shelled	3,894,111		84,558	1,199,588	707,665	22,360	445	-	-	-	2,014,615
091020	Saffron	3,037,073	3.28	6,215	1,766,969	10,451	7,730	38	-	28,800	-	-
410210	Sheep or lamb skins, raw, wool on, except Persian etc	2,938,571	0.55	38,910	38,696	34,167,616	72,979	259,526	18,164	-	4,800	34,600,690
080910	Apricots, fresh	2,935,150		815	43,605	3,145,645	22,292,787	1,229,773	-	10,623	12,481	26,735,729
720299	Ferro-alloys, nes	2,813,393	-	-	29,032,628	46,948	490,616	14,294	27,685	5,700	29,437	29,647,308
970600	Antiques older than one hundred years	2,672,073	2.67	-	2,959,214	36,035,249	28,030	-	19,198	2,485	-	-
080211	Almonds in shell fresh or dried	2,665,716	0.40	78,958	1,452,009	5,023,804	814,973	63,384	-	32,162	300	7,465,591
841191	Parts of turbo-jet or turbo-propeller engines	2,403,193		3,364,984	7,960,008	141,341	2,716,243	15,743	111,485	351,558	968,299	15,629,661
841122	Turbo-propeller engines of a power > 1100 kW	2,366,910		7,548,905	1,512,447	22,290	2,979,052	235,921	-	2,452	882,559	13,183,626
440399	Logs, non-coniferous nes	2,350,548	0.19	-	1,657,569	7,855,076	558,031	39,642	154,944	15,733	1,732,405	12,013,399
850790	Parts of electric accumulators, including separators	2,279,910		474,779	12,397,165	2,588,055	2,720,492	31,893	44,339	211,018	1,879,185	20,346,926
902830	Electricity supply, production and calibrating meters	2,238,682		2,231,179	69,581,051	1,500,489	10,087,626	1,601,545	1,717,231	478,400	10,112,987	97,310,507
740400	Copper/copper alloy waste or scrap	2,220,835		100,701	37,944,824	4,180,705	1,527,784	833,227	319	-	3,547	44,591,105
871000	Tanks and other armoured fighting vehicles	2,173,667		80,462,100	30,851,638	67,053	-	176,231	-	-	-	111,557,022
090940	Caraway seeds	2,042,425	0.20	682	1,265,715	549,671	33,848	38,781	277	464	36,110	1,925,548
320710	Pigment, opacifier, colours etc for ceramics or glass	2,032,530	-	2,968	18,253,773	2,083,494	823,272	15,210	45	61,202	857,406	22,097,369
070200	Tomatoes, fresh or chilled	1,952,160	3.93	8,038,656	58,534,805	108,171,862	38,401,362	232,038	11,684	138,933	4,000	213,533,339
090910	Anise or badian seeds	1,900,873		2,241	8,355,460	1,061,845	26,993	104	30	160	4,414	9,451,247
410121	Bovine hides, whole, fresh or wet-salted	1,821,009	0.56	77,176	1,089,198	5,868,419	9,641	1,560,531	35,981	-	-	8,640,944
890520	Floating, submersible drilling or production platform	1,773,291	-	-	1,121,812,729	419,937	36,785,721	-	-	356,445,333	-	-
710310	Precious, semi-precious stones unworked, partly worke	1,740,270		200	37,428,623	350,351	986,017	34,749	-	418	166,157	-
550320	Staple fibres of polyesters, not carded or combed	1,737,067	-	129,833	277,470,866	176,503,615	2,713,068	35,679	30,185	246,808	3,033,012	460,163,065
121299	Vegetable products nes for human consumption	1,719,001	0.09	29,280	1,015,854	58,132	357,789	6,375	183,646	51,143	2,497	1,704,715
390110	Polyethylene - specific gravity <0.94 in primary form	1,660,510		449,954	46,648,013	221,461,187	32,171,009	3,236,217	684,633	1,243,298	7,116,363	313,010,674
480252	Paper, fine, woodfree, 40 - 150 g/m2, uncoated	1,565,014		1,415,331	155,141,692	29,524,365	61,379,290	6,030,507	2,589,145	3,719,105	30,710,750	290,510,184
	SUB-TOTAL	**60,833,269**		**104,550,384**	**1,925,437,037**	**641,545,263**	**218,019,716**	**15,844,451**	**5,628,988**	**363,046,191**	**57,556,708**	**1,736,133,262**

(Continued)

Table A.12: Exports of Afghanistan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Afghanistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($1.5 MILLION > x > $750,000)												
844240	Parts of machinery for print preparation	1,492,756	-	332,308	388,643	253,261	106,456	13,729	2,707	24,217	78,415	1,199,737
080410	Dates, fresh or dried	1,458,085		6,704,065	2,210,802	4,129,610	3,328,907	377,494	811,241	232,360	110,093	17,904,570
071340	Lentils dried, shelled	1,425,644	3.15	425,505	600,495	47,680,789	439,036	99,741	589,158	416,497	113,550	50,364,771
080710	Melons (including watermelons), fresh	1,418,386	0.20	2,051,928	4,715,439	1,606,684	15,103,900	16,945	-	80,013	8,222	23,583,130
852610	Radar apparatus	1,337,652	0.33	12,877,674	5,543,478	33,261	13,619,242	431,530	634,059	12,808,591	2,275,288	48,223,122
210110	Coffee extracts, essences, concentrates, preparations	1,336,247	3.12	718,824	237,732,802	1,381,915	29,048,469	6,355,415	2,174,606	9,916,776	8,021,198	295,350,003
340213	Non-ionic surface active agents	1,314,599		59,498	80,957,544	25,724,994	8,080,229	47,543	138,753	846,858	1,589,066	117,444,485
284700	Hydrogen peroxide	1,300,378		9,853	989,897	5,587,836	9,361,113	73,547	51,639	479,810	2,030,102	18,583,797
842490	Parts for sprays and powder dispersers	1,260,317		753,100	42,196,954	3,802,012	11,992,810	303,843	104,523	1,143,900	3,302,018	63,599,160
852110	Video recording/reproducing apparatus, magnetic tape	1,249,266		5,306,276	13,375,066	3,749,832	36,340,115	14,639	2,135,693	1,909,667	1,151,414	63,982,701
120799	Oil seeds and oleaginous fruits, nes	1,218,053	3.95	5,343	25,560,552	213,170	67,159	193,224	68,092	54,701	488,169	26,650,410
880330	Aircraft parts nes	1,193,204	1.52	83,243,249	1,384,169,865	16,932,886	32,869,775	1,654,456	1,361,744	4,188,079	3,250,452	1,527,670,505
120999	Seed, fruits and spores for sowing, nes	1,189,897		140,294	18,052,006	7,636,144	691,356	61,658	41,823	88,122	1,247,723	27,959,126
010290	Bovine animals, live, except pure-bred breeding	1,152,731	-	8,229,300	7,410	3,013,340	678,727	-	1,525,654	-	755,009	-
071390	Leguminous vegetables dried, shelled	1,015,602	0.64	61,701	3,378,987	35,895,226	533,872	2,780	-	4,964	-	39,877,529
380810	Insecticides, packaged for retail sale	994,108	0.80	1,472,720	727,341,648	58,539,471	17,377,868	3,025,049	212,203	3,271,630	4,268,801	815,509,387
760820	Tubes and pipe, aluminium alloy	993,273		705,758	4,070,802	1,057,599	1,116,675	576,519	59,473	332,663	759,230	8,678,719
300310	Penicillins or streptomycins and derivatives, in bulk	990,857	(0.06)	938,081	36,818,386	407,826	34,260	46,001	79,654	34,842	69,416	38,428,465
081350	Mixtures of edible nuts, dried and preserved fruits	980,384	0.88	131,290	450,661	1,164,425	21,159,957	19,508	18,587	1,429	119	22,945,976
842839	Continuous action elevators or conveyors for goods ne	929,038		534,151	4,732,066	6,036,726	13,848,168	1,100,458	690,581	2,756,028	8,946,756	38,644,934
293627	Vitamin C, derivatives, unmixed	886,646	-	48,497	1,658,765	5,284,434	339,513	147,348	5,757	10,146	92,188	7,586,647
830260	Door closures, automatic, of base metal	886,646		109,070	846,656	711,622	1,228,803	29,312	22,621	155,973	66,872	3,170,928
843149	Parts of cranes, work-trucks, shovels, constr machine	884,538		2,583,920	236,633,360	27,206,403	42,558,960	17,616,166	2,315,281	13,188,649	8,981,637	351,084,375
720410	Waste or scrap, of cast iron	844,183	1.19	5,377	554,074	834,329	19,900	-	-	1,723	1,809	1,417,212
081340	Fruits, dried nes	813,318	0.32	685,146	17,876,445	4,902,220	6,509,199	3,333	1,806	46,928	5,525	30,030,600
	SUB-TOTAL	**28,565,806**		**128,132,926**	**2,850,862,799**	**263,786,014**	**266,454,465**	**32,210,237**	**13,045,654**	**51,994,562**	**47,613,067**	**3,639,890,287**

		Afghanistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS (< x < $750,000)												
580410	Tulles, other nets (not woven, knit or crochet)	749,144		871,126	1,934,231	140,840	4,498,504	466,980	169,790	184,093	1,022,604	9,288,167
852520	Transmit-receive apparatus for radio, TV, etc.	724,432	0.82	23,809,210	2,483,267,961	662,500,861	329,917,745	37,906,706	1,508,544	2,761,654	10,867,946	3,552,540,628
570210	Hand made rugs including Kelem,Schumacks,Karamanie,et	683,383	0.19	57,009	21,377,237	236,930	32,030	230	1,426	19,342	3,734	21,727,937
300490	Medicaments nes, in dosage	669,518	1.75	68,980,267	6,061,804,282	228,831,001	733,057,931	124,639,081	35,640,189	60,670,714	325,526,259	7,639,149,722
251511	Marble and travertine, crude or roughly trimmed	669,452	0.89	67,759	218,195	362,543	859,687	9,013	16,360	409,931	71,707	2,015,194
852530	Television cameras	666,183		5,699,236	11,789,089	4,912,601	55,007,712	989,779	232,476	3,296,609	2,287,460	84,214,961
730890	Structures and parts of structures, iron or steel, ne	666,018	3.18	77,698,994	322,793,020	44,599,270	242,663,610	9,533,548	15,283,081	171,275,123	23,513,896	907,360,542
130213	Hop extract	654,741	-	96,221	7,816	289	881,828	2,905	2,111	-	129,082	1,120,251
841121	Turbo-propeller engines of a power < 1100 kW	643,614	2.24	3,742,278	13,985	3,045,928	5,953,184	-	-	-	-	-
510220	Coarse animal hair, not carded or combed	624,508	1.68	139,819	159,402	-	67,536	20,000	-	-	-	-
271000	Oils petroleum, bituminous, distillates, except crude	616,391		1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	66,307,909,461
930690	Munitions of war, ammunition/projectiles and parts	610,623	-	4,099,926	1,426,212	715,492	-	-	38,581	402,847	-	6,683,057
110220	Maize (corn) flour	609,499		71,550	847,643	44,695	38,654	8,217	3,779	4,904	538	1,019,980
151190	Palm oil or fractions simply refined	608,723	-	54,791,258	564,402	1,609,730,827	12,229,539	2,890,270	1,516,394	1,067,544	14,681,590	1,697,471,823
730830	Doors, windows, frames of iron or steel	601,998	2.61	5,025,766	7,732,913	2,060,574	28,163,326	9,586,854	20,641,622	9,793,195	3,244,333	86,248,583
843920	Machinery for making paper or paperboard	595,766	-	20,698	3,479,973	9,796,482	5,294,107	69,508	158,601	53,908	1,439,123	20,312,398
860900	Cargo containers designed for carriage	593,264		8,142,628	20,805,890	1,803,107	26,974,626	5,008,929	81,988	1,290,876	321,818	64,429,861
390210	Polypropylene in primary forms	589,636	0.36	309,500	1,094,757,714	378,006,858	18,277,878	3,291,944	307,688	1,055,027	40,068,231	1,536,074,840
840999	Parts for diesel and semi-diesel engines	574,171		7,509,379	518,175,430	64,482,286	48,030,008	2,109,357	1,745,067	11,787,553	11,485,045	665,324,125
090930	Cumin seeds	573,387	0.13	38,648	177,019,342	2,667,115	26,928	4,083	415	13,194	177,916	179,947,640
843830	Machinery for sugar refining and manufacture	571,773	-	29,450	41,318,524	936,593	54,540	112,183	31,667	121,778	849,590	43,454,325
870421	Diesel powered trucks weighing < 5 tonnes	567,043	3.66	19,007,338	269,169,247	66,251,822	44,937,581	18,443,262	7,754,135	7,996,150	7,004,851	440,564,386
870390	Automobiles nes including gas turbine powered	562,000		1,739,516	28,267,067	7,209,384	3,268,955	45,745	178,644	64,267	83,302	40,856,880
271119	Petroleum gases & gaseous hydrocarbons nes, liquefied	559,470		3,449,920	162,080,479	62,366,189	171,862	2,258,595	3,771,320	6,337	407,524	234,512,225
490199	Printed reading books, except dictionaries etc	553,213		3,867,193	43,604,338	21,202,255	34,689,911	1,860,463	892,663	487,114	1,947,503	108,551,440
	SUB-TOTAL	**15,537,947**		**1,619,086,873**	**64,045,475,504**	**12,570,579,254**	**2,814,989,038**	**1,148,678,848**	**373,312,201**	**318,704,009**	**773,094,829**	**83,650,778,425**

Table A.13 Exports of India by Size of Exports (HS 6-digit category and U.S. dollars)

		India Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**389,464,486,756**		**5,674,971,662**	**389,464,486,756**	**30,644,893,091**	**12,725,230,824**	**3,158,371,167**	**1,612,796,742**	**3,146,496,979**	**5,285,309,407**	**62,248,069,871**
LARGE-SIZE EXPORTS (> $1.0 BILLION)												
271000	Oils petroleum, bituminous, distillates, except crude	52,772,861,114	0.39	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	13,535,048,347
710239	Diamonds (jewellery) worked but not mounted or set	25,186,606,090	0.15	4,970	25,186,606,090	332,773	48,267	141,183	-	-	-	527,193
711319	Jewellery and parts of precious metal except silver	11,996,505,824	0.30	427,594	11,996,505,824	33,929,271	65,067,293	3,094,902	17,155,961	7,362,594	24,218,293	151,255,907
999999	Commodities not specified according to kind	6,408,966,321	0.51	653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	1,465,524,738
300490	Medicaments nes, in dosage	6,061,804,282	0.26	68,980,267	6,061,804,282	228,831,001	733,057,931	124,639,081	35,640,189	60,670,714	325,526,259	1,577,345,441
100630	Rice, semi-milled or wholly milled	4,932,723,934	0.27	96,302,507	4,932,723,934	9,323,413	11,561,590	7,114,344	10,737,279	25,023,642	1,491,221	161,553,996
520100	Cotton, not carded or combed	3,630,615,645	0.94	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	721,943,113
260111	Iron ore, concentrate, not iron pyrites,unagglomerate	3,521,219,991	0.20	806	3,521,219,991	28,437,277	15,912,102	727,259	39,676	1,496,716	803	46,614,638
020230	Bovine cuts boneless, frozen	2,903,259,553	0.35	10,310,744	2,903,259,553	3,519,885	27,547,263	1,626,954	6,931,979	3,899,248	5,018,091	58,854,164
740311	Copper cathodes and sections of cathodes unwrought	2,821,383,962	0.59	25,723	2,821,383,962	71,318,896	252,800	5,402	-	40,422	-	71,643,242
130232	Mucilages & thickeners, from locust bean, guar seeds	2,812,767,729	0.68	321,326	2,812,767,729	2,614,146	1,839,321	108,483	6,647	52,231	61,182	5,003,336
870322	Automobiles, spark ignition engine of 1000-1500 cc	2,617,206,066	0.48	13,005,626	2,617,206,066	319,701,327	75,800,824	13,267,675	2,808,791	1,533,035	2,626,444	428,743,722
852520	Transmit-receive apparatus for radio, TV, etc.	2,483,267,961	2.28	23,809,210	2,483,267,961	662,500,861	329,917,745	37,906,706	1,508,544	2,761,654	10,867,946	1,069,272,667
294200	Organic compounds, nes	2,238,153,561	0.09	587,505	2,238,153,561	327,261	263,228	12,646	39,351	288,011	523,098	2,041,100
230400	Soya-bean oil-cake and other solid residues	2,201,756,734	0.29	38,868	2,201,756,734	264,856,043	7,286,401	1,083,619	3,157,630	552,218	9,456,538	286,431,316
870899	Motor vehicle parts nes	2,043,141,647	0.27	46,488,682	2,043,141,647	54,465,448	66,691,396	15,083,488	10,378,284	17,857,496	647,116,455	858,081,249
030613	Shrimps and prawns, frozen	1,722,317,393	0.15	1,031,981	1,722,317,393	15,871	2,073,713	30,569	3,936	19,873	42,096	3,218,038
610910	T-shirts, singlets and other vests, of cotton, knit	1,693,212,457	0.09	2,809,929	1,693,212,457	2,315,021	21,828,818	1,471,693	2,028,664	1,518,205	1,731,441	33,703,770
890590	Floating docks, special function vessels nes	1,420,195,520		7,383	1,420,195,520	1,817,673	30,343,299	109	-	21,456,403	-	53,624,867
870321	Automobiles, spark ignition engine of <1000 cc	1,388,258,732	0.29	4,727,462	1,388,258,732	253,384,507	16,145,083	7,568,128	1,182,949	504,681	818,221	284,331,031
880330	Aircraft parts nes	1,384,169,865	0.88	83,243,249	1,384,169,865	16,932,886	32,869,775	1,654,456	1,361,744	4,188,079	3,250,452	143,500,640
730511	Pipe-line submerged arc welded steel diameter >406mm	1,265,403,661	0.72	27,054	1,265,403,661	7,182,737	615,120,291	58,748	163,387	128,512,530	55,130,254	806,195,000
710231	Diamonds (jewellery) unworked or simply sawn, cleaved	1,251,904,429	0.75	-	1,251,904,429	-	-	-	-	-	52,806	52,806
871120	Motorcycles, spark ignition engine of 50-250 cc	1,201,217,417	0.32	43,947,458	1,201,217,417	81,390,180	1,744,351	83,401	253,264	3,836,763	1,812,392	133,067,809
890520	Floating, submersible drilling or production platform	1,121,812,729		-	1,121,812,729	419,937	36,785,721	-	-	356,445,333	-	393,650,991
390210	Polypropylene in primary forms	1,094,757,714	0.34	309,500	1,094,757,714	378,006,858	18,277,878	3,291,944	307,688	1,055,027	40,068,231	441,317,126
620630	Womens, girls blouses & shirts, of cotton, not knit	1,035,518,913	0.06	188,070	1,035,518,913	79,858	5,524,628	367,112	125,090	148,083	187,883	6,620,723
	SUB-TOTAL	**149,211,009,241**		**2,380,632,853**	**149,211,009,241**	**12,583,647,436**	**3,421,721,613**	**1,173,596,388**	**455,533,960**	**1,038,845,760**	**1,685,188,957**	**22,739,166,968**

		India Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($650 MILLION > x > $1.0 BILLION)												
100590	Maize except seed corn	981,926,491	0.98	448,173	981,926,491	450,329	190,449	171,132	1,287,854	130,580	1,270,289	3,948,805
890400	Tugs and pusher craft	962,894,518	0.63	3	962,894,518	458	79,384,511	-	-	4,530,614	-	83,915,586
711419	Gold/silversmith wares of/clad with precious metal ne	941,700,692		56,518	941,700,692	37,576	394,223	174,116	237,774	306,659	10,606	1,217,472
520523	Cotton yarn >85% single combed 232-192 dtex,not retai	909,785,885	0.47	110,951	909,785,885	2,924,729	10,572	125,714	-	-	-	3,171,966
170199	Refined sugar, in solid form, nes, pure sucrose	882,247,249		82,817,477	882,247,249	32,147,172	115,936,882	61,348,370	35,238,766	32,592,502	48,818,692	408,899,860
270799	Coal tar distillation products nes	881,863,783	3.80	31,993	881,863,783	13,388,076	284,380	640,483	405,067	-	14,219	14,764,217
620520	Mens, boys shirts, of cotton, not knit	848,646,381	0.05	1,381,009	848,646,381	359,567	11,602,985	616,203	656,455	601,908	899,929	16,118,055
720230	Ferro-silico-manganese	841,823,517	0.87	26,167	841,823,517	16,012,431	2,796,201	-	485	290,359	1,212,326	20,337,969
720241	Ferro-chromium, >4% carbon	827,418,317	0.58	-	827,418,317	407,376	1,116,424	61,522	8,212	-	-	1,593,534
721049	Flat rolled iron or non-alloy steel, coated with zinc, width >6	821,818,581	0.57	11,993,309	821,818,581	167,034,282	51,893,379	15,439,695	25,686,783	5,777,838	137,357,315	415,182,600
290243	P-xylene	810,287,418	0.25	-	810,287,418	493,256,789	1,144	75	-	119	-	493,258,127
680223	Cut or sawn slabs of granite	801,476,665	0.13	524,789	801,476,665	6,132,940	20,083,438	109,427	953,513	2,361,538	405,266	30,570,909
300420	Antibiotics nes, in dosage	789,254,212	0.22	18,016,263	789,254,212	26,841,458	69,779,393	7,919,286	5,582,281	6,414,393	33,281,401	167,834,474
080130	Cashew nuts, fresh or dried	787,487,185	0.13	463,885	787,487,185	1,474,695	5,373,622	12,445	938	6,407	342,176	7,674,167
880240	Fixed wing aircraft, unladen weight > 15,000 kg	782,623,933		3,011,728	782,623,933	10,996,102	389,631,677	17,878,456	526,522	41,423,519	180,171,408	643,639,412
711311	Jewellery and parts, silver, including plated silver	757,684,058	0.31	128,244	757,684,058	887,165	3,362,569	2,151,396	42,600	25,118	32,414	6,629,506
710812	Gold in unwrought forms non-monetary	755,238,236		-	755,238,236	245,810,350	328,470	16,990,471	-	37,188,449	14,595	300,332,334
620442	Womens, girls dresses, of cotton, not knit	749,913,329	0.19	1,424,477	749,913,329	77,773	5,041,226	1,188,140	16,841	322,692	443,605	8,514,754
732599	Cast articles of iron or steel, nes	749,725,549	0.24	825,773	749,725,549	1,070,434	7,558,115	108,794	51,980	898,669	2,053,238	12,567,003
380810	Insecticides, packaged for retail sale	727,341,648	0.14	1,472,720	727,341,648	58,539,471	17,377,868	3,025,049	212,203	3,271,630	4,268,801	88,167,740
151530	Castor oil or fractions not chemically modified	725,501,613	0.25	-	725,501,613	44,013	59,131	9,313	660	2,695	128,116	243,928
870190	Wheeled tractors nes	720,989,147	0.47	13,462,810	720,989,147	38,707,507	87,467,034	10,749,490	10,106,859	42,384,999	45,285,181	248,163,880
120220	Ground-nuts shelled, not roasted or cooked	672,342,310	0.35	75,224	672,342,310	4,650,416	7,174,164	693	-	94,487	-	11,994,983
630260	Toilet or kitchen linen, of cotton terry towelling	666,583,209	0.44	101,888	666,583,209	299,353	7,373,623	4,231,901	59,039,618	4,474,423	3,970,043	79,490,849
630419	Bedspreads, textile material, nes, not knit or croche	661,678,029	0.28	93,240	661,678,029	67,586	1,421,732	547,467	122,265	95,058	108,342	2,455,689
090240	Tea, black (fermented or partly) in packages > 3 kg	661,594,962	0.14	46,478,568	661,594,962	336,296,461	99,879,864	3,939,159	950,438	645,898	3,168,472	491,358,860
290220	Benzene	651,865,426	0.69	-	651,865,426	50,932	16,442	1,679	301	768	2,546	72,668
760110	Aluminium unwrought, not alloyed	650,959,537	0.26	26,533	650,959,537	32,297,572	2,515,198	125,515	2,246	210	28,307,208	63,274,481
	SUB-TOTAL	**22,022,671,876**		**182,971,738**	**22,022,671,876**	**1,490,263,012**	**988,054,709**	**147,565,989**	**141,130,661**	**183,841,530**	**491,566,185**	**3,625,393,823**

(Continued)

Table A.13: Exports of India by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		India Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($450 MILLION > x > $650 MILLION)												
540710	Woven hi-ten filament, nylon, polyamide or polyester	644,038,470	0.12	63,394,398	644,038,470	2,477,714	462,548	196,830	108,097	83,604	237,990	66,961,180
640351	Footwear, soles, uppers of leather, over ankle, nes	632,468,098	0.15	75,544	632,468,098	10,118	4,355,136	555,386	47,114	148,473	719,307	5,911,077
630492	Furnishing articles nes, of cotton, not knit, crochet	632,197,441	0.03	181,218	632,197,441	42,782	80,128	27,301	28,999	32,877	55,892	449,196
540233	Textured yarn nes, of polyester filaments, not retail	630,451,396	0.49	1,912	630,451,396	210,661,032	472,507	10,052	326,404	40,610	5,127,284	216,639,801
520524	Cotton yarn >85% single combed 192-125 dtex, not ret.	624,762,492	0.47	69,206	624,762,492	2,002,891	391,609	-	-	-	-	2,463,706
281820	Aluminium oxide, except artificial corundum	611,501,160	0.74	175,000	611,501,160	1,498,432	1,124,367	14,065	18,891,120	111,973	1,191,006	23,005,962
240120	Tobacco, unmanufactured, stemmed or stripped	610,582,807	0.23	79,902	610,582,807	13,512,245	45,521,085	3,714,064	1,507	-	8,706,491	71,535,294
851790	Parts of line telephone/telegraph equipment, nes	605,820,044	0.99	26,487,505	605,820,044	91,252,884	78,036,715	7,637,136	3,080,989	8,855,235	19,049,927	234,400,390
401120	Pneumatic tyres new of rubber for buses or lorries	585,102,625	0.13	48,420,773	585,102,625	172,731,825	140,131,565	17,327,969	7,214,140	33,035,181	61,746,252	480,607,704
848180	Taps, cocks, valves and similar appliances, nes	571,942,150	0.26	9,278,879	571,942,150	60,148,624	359,823,016	2,599,416	4,812,920	120,752,789	39,157,831	596,573,474
790111	Zinc, not alloyed, unwrought, >99% pure	570,347,460	1.51	53,051	570,347,460	8,229,561	1,292,025	6,404	13,134	1,671	26,842	9,622,688
090111	Coffee, not roasted, not decaffeinated	557,314,873	0.19	56,701	557,314,873	1,345	213,769	46,247	68	64	34,913	353,106
401199	Pneumatic tyres new of rubber nes	554,889,764	0.40	3,470,431	554,889,764	4,691,321	73,650,626	20,012,223	1,485,017	2,780,895	26,361,999	132,452,511
120740	Sesamum seeds	542,328,736	0.23	576,844	542,328,736	48,294	565,684	6,975	87	6,659	26,714	1,231,256
420310	Articles of apparel of leather or composition leather	541,358,414	0.10	74,764	541,358,414	1,839,464	7,048,953	593,937	394,090	569,167	1,108,819	11,629,193
170111	Raw sugar, cane	536,491,938	1.73	2,525,607	536,491,938	9,257	166,195,874	514,975	881,018	-	11,190,086	181,316,817
320417	Synthetic organic pigments and preps based thereon	530,228,847	0.18	39,764	530,228,847	24,087,487	2,900,224	203,208	62,676	441,320	6,177,820	33,912,499
294190	Antibiotics nes, in bulk	526,304,423	0.18	215,910	526,304,423	61,258,261	7,810,951	127,354	173,592	73,854	2,563,292	72,223,213
390760	Polyethylene terephthalate, in primary forms	520,115,717	0.42	7,207,873	520,115,717	11,054,047	86,471,217	20,901,057	6,166,783	4,469,444	58,448,307	194,718,728
840999	Parts for diesel and semi-diesel engines	518,175,430	0.21	7,509,379	518,175,430	64,482,286	48,030,008	2,109,357	1,745,067	11,787,553	11,485,045	147,148,695
030379	Fish nes, frozen, whole	518,139,046	0.26	595,517	518,139,046	209,207	6,538,452	3,181,154	1,149,697	1,717,597	907,923	14,299,546
720824	Hot rolled iron or non-alloy steel, coil,width >600mm, t <3m	487,067,694	0.58	1,580,522	487,067,694	245,642,951	4,458,616	2,997,848	110,497	1,488,262	35,650,095	291,928,790
251611	Granite, crude or roughly trimmed	479,360,503	0.15	-	479,360,503	72,906	435,218	119,291	-	300	932,374	1,560,088
410439	Bovine and equine leather, nes	471,211,946	0.23	246,888	471,211,946	10,159,070	1,134,146	750	-	383	37,266	11,578,503
620342	Mens, boys trousers & shorts, of cotton, not knit	464,183,892	0.13	846,478	464,183,892	950,092	24,123,639	14,174,546	1,101,874	529,108	1,349,038	43,074,774
	SUB-TOTAL	**13,966,385,362**		**173,164,065**	**13,966,385,362**	**987,074,096**	**1,061,268,073**	**97,077,544**	**47,794,887**	**186,927,016**	**292,292,510**	**2,845,598,189**

		India Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS (350 MILLION < x < $450,000)												
611120	Babies garments, accessories of cotton, knit	446,189,598	0.19	753,903	446,189,598	774,640	3,905,306	784,915	200,454	70,327	423,404	6,912,949
732690	Articles of iron or steel, nes	442,055,222	0.20	14,928,169	442,055,222	33,584,730	285,182,136	2,549,464	3,431,650	37,025,789	14,715,893	391,417,830
100190	Wheat except durum wheat, and meslin	437,382,335		28,139,464	437,382,335	5,756,427	1,877,949	76,439,065	122,514,224	512,908	86,051,618	321,291,654
070310	Onions and shallots, fresh or chilled	432,756,655	0.23	2,519,178	432,756,655	30,054,389	13,454,790	46,260	414,977	4,154,036	2,115,098	52,758,727
090420	Capsicum or Pimenta, dried, crushed or ground	431,351,629	0.25	96,498	431,351,629	6,825,555	898,366	21,765	2,571	93,077	15,410	7,953,241
610990	T-shirts, singlets etc, of material nes, knit	423,256,606	0.37	1,320,716	423,256,606	2,738,081	5,849,789	621,559	6,121,109	157,932	308,995	17,118,180
890190	Cargo vessels other than tanker or refrigerated	419,907,205	0.39	-	419,907,205	5,155,329	44,311,099	2,036	-	49,727,234	-	99,195,697
722220	Stainless steel bar nfw than cold formed/cold finishe	419,560,531	0.29	3,096	419,560,531	709,340	932,261	938	26,615	77,213	496,206	2,245,669
621490	Shawls, scarves, etc, of material nes, not knit	419,121,703	0.23	1,143,093	419,121,703	913,769	535,300	403,692	5,757,978	206,218	251,426	9,211,475
870410	Dump trucks designed for off-highway use	418,225,448	0.79	1,974,905	418,225,448	7,538,503	91,836,946	52,621,282	3,311,621	4,047,693	3,427,254	164,758,203
392690	Plastic articles nes	414,006,714	0.25	18,298,139	414,006,714	33,382,652	97,246,641	3,753,372	2,184,272	11,856,746	16,762,271	183,484,092
711290	Waste/scrap, precious metals except pure gold/platinum	394,364,496	1.20	-	394,364,496	422	101,835	467,659	-	-	22,891	592,806
380890	Pesticides, rodenticides, nes, for retail sale	389,978,970	0.46	328,963	389,978,970	1,248,727	3,161,850	286,828	178,422	265,559	461,129	5,931,478
850440	Static converters, nes	379,668,430	0.51	14,446,596	379,668,430	54,949,497	102,868,322	3,159,223	2,948,213	13,237,353	17,246,786	208,855,988
300410	Penicillins and streptomycins, derivs, in dosage	377,354,564	0.25	4,043,268	377,354,564	5,186,339	17,138,766	4,750,925	2,836,075	1,894,053	10,477,032	46,326,456
420231	Articles for pocket or handbag, leather outer surface	375,098,406	0.12	148,169	375,098,406	113,211	1,842,512	58,877	753,033	64,835	149,035	3,129,671
620640	Womens, girls blouses, shirts, manmade fibre, not kni	371,440,231	0.19	339,304	371,440,231	44,679	9,576,455	92,114	17,104	352,910	34,922	10,457,487
890600	Warships, lifeboats, hospital ships, vessels nes	369,458,425		24,757	369,458,425	344,987	33,534,971	6,693	887	4,067,296	66,000	38,045,590
640391	Boots, sole rubber or plastic upper leather, nes	369,063,411	0.26	2,520,110	369,063,411	36,821	43,368,805	1,583,469	316,623	840,360	579,350	49,245,537
720110	Pig iron, non-alloy, <0.5% phosphorus	366,753,929	0.56	-	366,753,929	5,959,414	2,115,007	446,284	339,302	105,585	961,738	9,927,329
300390	Medicaments nes, formulated, in bulk	365,948,265	0.11	7,376,167	365,948,265	4,948,757	4,447,710	88,403	482,775	450,936	5,031,303	22,826,050
940360	Furniture, wooden, nes	359,974,164	0.22	1,821,104	359,974,164	3,058,991	124,263,771	9,373,369	2,140,596	33,110,307	7,540,917	181,309,054
610510	Mens, boys shirts, of cotton, knit	357,724,289	0.01	490,688	357,724,289	458,061	3,061,551	3,385,538	7,614,050	333,384	1,276,346	16,619,617
320416	Reactive dyes and preparations based thereon	351,535,678	0.17	891	351,535,678	57,678,683	58,883	1,937	346,315	982,437	5,192,031	64,261,176
	SUB-TOTAL	**9,532,176,900**		**100,717,175**	**9,532,176,900**	**261,462,002**	**891,571,016**	**160,945,663**	**161,938,863**	**163,634,185**	**173,607,052**	**1,913,875,955**

Table A.14: Exports of Pakistan by Size of Exports (HS 6-digit category and U.S. dollars)

		Pakistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**37,739,953,977**		**6,804,837,604**	**210,401,666,355**	**21,706,084,127**	**6,322,749,266**	**2,581,671,954**	**1,567,286,887**	**1,666,896,169**	**2,758,975,309**	**232,104,083,544**
LARGE-SIZE EXPORTS (> $200 MILLION)												
100630	Rice, semi-milled or wholly milled	1,833,319,464	0.17	96,302,507	4,932,723,934	9,323,413	11,561,590	7,114,344	10,737,279	25,023,642	1,491,221	5,084,954,516
520512	Cotton yarn >85% single uncombed 714-232 dtex,not ret	1,050,326,400	0.14	-	329,165,047	4,644,908	671,993	355,632	-	857	52,554	330,246,082
271000	Oils petroleum, bituminous, distillates, except crude	840,124,734	0.23	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	56,909,234,147
711319	Jewellery and parts of precious metal except silver	735,341,171	0.88	427,594	11,996,505,824	33,929,271	65,067,293	3,094,902	17,155,961	7,362,594	24,218,293	12,113,832,460
630260	Toilet or kitchen linen, of cotton terry towelling	733,458,047	0.07	101,888	666,583,209	299,353	7,373,623	4,231,901	59,039,618	4,474,423	3,970,043	745,774,704
630231	Bed linen, of cotton, nes	692,270,381	(0.03)	123,818	244,035,500	78,883	4,991,296	222,853	2,539,098	179,944	182,169	252,274,677
620342	Mens, boys trousers & shorts, of cotton, not knit	629,227,159	0.08	846,478	464,183,892	950,092	24,123,639	14,174,546	1,101,874	529,108	1,349,038	506,308,574
630210	Bed linen, of textile knit or crochet materials	570,059,288	0.38	29,028	72,145,102	847,895	514,783	26,372	7,125	53,751	83,413	72,859,573
630239	Bed linen, of material nes, nes	546,744,338	0.29	93,464	20,968,506	959,340	1,124,516	1,041,162	15,691	185,710	41,727	23,470,775
252329	Portland cement, other than white cement	463,008,206	0.55	282,371,857	132,582,484	1,155,730	113,102,067	3,262,219	24,986,188	33,131,466	1,520,172	590,956,451
620462	Womens, girls trousers & shorts, of cotton, not knit	414,096,811	0.23	341,798	301,894,560	322,204	19,259,368	9,656,022	218,321	144,282	428,177	331,942,527
520942	Denim cotton >85% >200g/m2	391,717,749	0.38	-	218,393,949	6,744,803	1,721,653	1,462	97,552	203,707	89,742	220,508,064
420310	Articles of apparel of leather or composition leather	365,987,193	0.05	74,764	541,358,414	1,839,464	7,048,953	593,937	394,090	569,167	1,108,819	551,148,143
630710	Floor & dish cloths, dusters, etc, textile material	353,273,794	0.09	1,052,078	103,508,768	380,337	4,666,862	342,131	92,330	526,261	145,983	110,334,412
610510	Mens, boys shirts, of cotton, knit	313,701,544	(0.05)	490,688	357,724,289	458,061	3,061,551	3,385,538	7,614,050	333,384	1,276,346	373,885,844
520100	Cotton, not carded or combed	291,583,408	0.27	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	3,636,880,447
901890	Instruments, appliances for medical, etc science, nes	269,736,185	0.09	4,579,745	146,864,673	57,916,070	131,208,051	6,281,165	1,942,569	12,446,610	11,432,562	314,755,374
610910	T-shirts, singlets and other vests, of cotton, knit	247,688,460	0.09	2,809,929	1,693,212,457	2,315,021	21,828,818	1,471,693	2,028,664	1,518,205	1,731,441	1,724,601,206
520532	Cotton yarn >85% multiple uncomb 714-232 dtex,not ret	239,911,167	0.32	135,093	44,250,874	118,360	191,371	19,949	-	-	1,699	44,598,986
610590	Mens, boys shirts, of materials nes, knit	235,422,189	2.21	69,183	64,081,698	682,230	222,233	1,314,202	333,409	67,225	30,875	66,118,825
100640	Rice, broken	229,772,155	0.51	43,763,639	167,470,356	3	13,661	1,718,076	106,962	567,243	612,870	214,252,805
170199	Refined sugar, in solid form, nes, pure sucrose	216,409,887		82,817,477	882,247,249	32,147,172	115,936,882	61,348,370	35,238,766	32,592,502	48,818,692	1,258,999,937
390760	Polyethylene terephthalate, in primary forms	213,928,955	0.12	7,207,873	520,115,717	11,054,047	86,471,217	20,901,057	6,166,783	4,469,444	58,448,307	703,780,397
110100	Wheat or meslin flour	211,858,594		330,287,933	68,338,053	17,087,823	1,313,117	31,741,774	92,745,581	23,091,244	279,518,991	827,036,692
	SUB-TOTAL	**12,088,967,275**		**2,184,841,384**	**80,371,831,310**	**10,297,608,104**	**1,845,377,161**	**1,101,991,560**	**545,981,294**	**193,436,006**	**765,296,903**	**87,008,755,617**

		Pakistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($100 MILLION < x < $200 MILLION)												
520511	Cotton yarn >85% single uncombed >714 dtex,not retail	188,056,206	0.19	161	232,075,655	6,183,567	96,994	173,263	-	11,169	8	232,357,249
551341	Woven plain >85% polyester + cotton, <170g/m2 printed	181,027,341	0.85	6,380	460,263	36,453	17,068	2,977	476,076	404	10,862	974,029
520522	Cotton yarn >85% single combed 714-232 dtex,not retai	176,163,715	(0.01)	32,569	316,211,696	5,963,500	1,531,131	51,647	-	6,054	-	317,833,097
100110	Durum wheat	171,277,126		11,368,708	251,463,802	58,520,622	175,547	350,430	1,376,810	146,363	565,187	265,446,846
520911	Plain weave cotton, >85% >200g/m2, unbleached	167,143,850	3.30	18,164	39,461,878	18,273	265,054	16,430	-	81,588	60,000	39,903,113
151620	Veg fats, oils or fractions hydrogenated, esterified	160,731,070	0.22	175,848,355	67,026,842	32,292,422	24,876,673	172,030	781,000	1,250,860	12,579,320	282,535,079
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	157,719,715	1.83	482,133	42,554,215	318,370	282,245	14,007	5,963,048	590,138	5,704,656	55,590,441
420329	Leather, composition gloves & mittens except sports	154,064,922	0.15	597,670	223,589,975	412,775	2,541,730	26,048	176,627	207,055	30,181	227,169,285
950662	Inflatable balls	152,770,740	0.06	48,165	26,798,514	233,018	1,808,571	45,477	434,771	91,666	346,615	29,573,779
520932	Twill weave cotton, >85% >200g/m2, dyed	152,497,840	2.29	5,612	63,188,920	523,206	964,833	553	-	-	-	64,159,919
220710	Undenatured ethyl alcohol > 80% by volume	150,874,743	0.83	12,393	104,712,198	26,022	813	421	-	15,657,421	419	120,383,664
410620	Goat or kid skin leather, nes	140,667,548	0.09	626,113	311,308,825	2,568,311	5,846	-	-	4,753	14,123	311,959,660
520912	Twill weave cotton, >85% >200g/m2, unbleached	130,134,700		-	19,028,245	90,056	207,029	101,636	-	-	-	19,336,909
080520	Mandarin, clementine & citrus hybrids, fresh or dried	129,065,798	0.26	49,497,162	168,861	24,451	39,482,013	7,031,002	95,242	1,475,037	557,743	98,307,058
520813	Twill weave cotton, >85% <200g/m2, unbleached	124,684,472	1.71	-	5,653,257	25,807	371,630	781	-	-	-	6,025,668
611520	Womens full, kneelength hosiery, yarn <67 dtex/sy,kni	123,787,880	0.05	47,671	1,206,018	728,582	694,546	23,690	174,562	95,752	14,043	2,256,281
570110	Carpets of wool or fine animal hair, knotted	121,938,601	(0.05)	3,053,196	275,201,344	2,724,348	410,613	5,162	519,471	1,320,370	57,576	280,567,731
261000	Chromium ores and concentrates	120,653,523	0.50	-	86,260,583	297,656	58,015	-	-	-	30,000	86,348,598
410431	Bovine and equine leather, full or split grain, nes	120,431,221	0.27	248,921	143,478,662	488,945	1,825,937	750	-	20,138	100,311	145,674,718
521051	Plain weave cotton, <85% +manmade fibre, <200g print	117,267,722	0.02	1,180	1,531,598	42,776	3,735	-	1,151,146	290	310	2,688,259
420321	Leather, composition sports gloves, mittens and mitts	114,262,631	0.10	12,087	18,177,724	68,386	115,088	12,380	4,729	23,931	5,386	18,351,324
610339	Mens, boys jackets & blazers, material nes, knit	113,746,993	1.80	5,095,785	13,054,321	156,560	106,511	99,237	710,098	559,777	330,522	19,956,250
521011	Plain weave cotton <85% +manmade fibre <200g unbleach	106,994,861	0.46	271,512	3,945,652	144,791	8,383	8,011	4,697,563	-	25,013	8,956,134
611592	Hosiery nes, of cotton, knit	104,235,221	1.98	1,031,646	9,175,411	1,077,988	16,065,626	641,527	12,921,690	701,212	349,212	40,886,324
030339	Flatfish except halibut, plaice or sole, frozen, whol	103,091,859	2.00	37,582	5,649,222	3,012,335	294,277	20,688	4,121	-	465	6,006,353
130232	Mucilages & thickeners, from locust bean, guar seeds	102,524,326	0.57	321,326	2,812,767,729	2,614,146	1,839,321	108,483	6,647	52,231	61,182	2,815,156,920
730690	Tube/pipe/hollow profile, iron/steel,riveted/open sea	101,705,786	2.31	72,996,703	102,809,884	1,805,037	20,929,100	3,377,468	343,094	11,040,749	880,085	212,377,081
740400	Copper/copper alloy waste or scrap	100,823,113	0.63	100,701	37,944,824	4,180,705	1,527,784	833,227	319	-	3,547	40,410,401
	SUB-TOTAL	**3,788,343,521**		**321,761,891**	**5,214,906,112**	**124,579,107**	**116,506,110**	**13,117,322**	**29,837,012**	**33,336,955**	**21,726,767**	**5,751,192,167**

(Continued)

Table A.14: Exports of Pakistan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Pakistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($55 MILLION < x < $100 MILLION)												
521021	Plain weave cotton <85% +manmade fibre, <200g bleache	99,955,135	0.14	16,334	1,389,500	207,513	40,857	947	40,997	-	-	1,488,635
620349	Mens, boys trousers & shorts, material nes, not knit	98,099,493	0.69	295,643	103,527,540	3,289,971	4,237,913	2,618,530	91,106	77,521	106,913	110,955,166
521031	Plain weave cotton, <85% +manmade fibre, <200g/m2 dye	92,672,937	0.90	39,131	9,955,850	37,304	26,673	917	134,576	6,834	13,968	10,177,948
070190	Potatoes, fresh or chilled except seed	90,928,835	0.92	59,318,934	28,537,259	456,530	22,612,066	76,380	288,178	11,356,426	816,286	123,005,528
940490	Articles of bedding nes	86,529,821	1.05	470,670	178,641,712	381,810	5,382,637	213,545	8,719,187	820,088	863,918	195,111,757
410439	Bovine and equine leather, nes	84,143,299	(0.03)	246,888	471,211,946	10,159,070	1,134,146	750	-	383	37,266	472,631,378
520819	Woven cotton nes, >85% <200g/m2, unbleached	82,207,992	(0.10)	324,069	10,055,404	6,514,678	403,253	56,798	1,049,218	129,420	181,569	12,199,730
620322	Mens, boys ensembles, of cotton, not knit	81,763,705	0.96	180,333	11,201,558	73,986	4,172,680	117,952	135,041	845,580	495,274	17,148,417
220720	Ethyl alcohol and other spirits, denatured	81,313,890	0.54	24,768	17,006,302	55,284	31,459	98	-	783	-	17,063,408
551311	Woven plain >85% polyester+cotton, <170g/m2 unbl/blch	78,794,080	0.81	62,609	2,020,943	471,653	19,357	4,284	-	-	56,169	2,163,362
610349	Mens, boys trousers & shorts, of material nes, knit	75,281,084	1.22	502,853	16,661,466	192,068	441,967	680,681	6,121,800	55,318	14,140	24,478,227
521142	Denim cotton nes, <85% +manmade fibre, >200g/m2	75,156,193	0.32	224,549	31,921,437	2,789,830	134,374	-	42,004	-	73,936	32,396,299
999999	Commodities not specified according to kind	75,026,834		653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	7,826,900,376
020110	Bovine carcasses and half carcasses, fresh or chilled	73,178,565	0.59	1,609,821	53,086	11,860	4,613,125	45,447	75,899	-	29,262	6,426,638
080410	Dates, fresh or dried	70,763,593	0.14	6,704,065	2,210,802	4,129,610	3,328,907	377,494	811,241	232,360	110,093	13,774,960
520513	Cotton yarn >85% single uncombed 232-192 dtex,not ret	68,645,900	0.13	34,890	120,141,834	1,837,749	80,170	127,936	-	1,594	8,035	120,394,459
521211	Woven cotton fabric, > 200g/m2, unbleached, nes	67,954,084	0.43	3,710	7,941,825	182,422	12,231	50,059	-	283	25,924	8,034,031
520919	Woven cotton nes, >85% >200g/m2, unbleached, nes	65,641,003	1.30	12,140	11,724,863	599,909	102,681	15,004	-	19,454	-	11,874,141
410790	Leather, of animals nes	64,251,591		-	12,623,349	600,496	2,220	178	-	8,016	3,828	12,637,590
611090	Pullovers, cardigans etc of material nes knit	62,900,186	0.93	4,158,644	29,845,381	2,827,840	4,497,532	1,434,970	1,693,796	1,010,390	2,464,702	45,105,414
520523	Cotton yarn >85% single combed 232-192 dtex,not retai	61,947,212	0.10	110,951	909,785,885	2,924,729	10,572	125,714	-	-	-	910,033,122
640399	Footwear, sole rubber, plastics uppers of leather, ne	60,987,939	0.88	4,838,335	235,733,950	10,982,108	39,339,826	1,650,832	450,614	785,574	2,131,240	284,930,372
630629	Tents, of textile material nes	59,335,891	1.44	4,200,487	1,741,946	642,551	1,003,174	688,261	86,785	229,471	128,649	8,078,772
520811	Plain weave cotton, >85% <100 g/m2, unbleached	58,547,606	2.16	415,198	181,984,243	312,838	687,339	22,850	1,362,463	715	10,021	184,482,828
410520	Sheep or lamb skin leather, nes	55,787,943	0.17	314	108,735,552	1,770,849	39,547	4,513	2,629	-	25,727	108,808,282
730890	Structures and parts of structures, iron or steel, ne	55,428,452	0.56	77,698,994	322,793,020	44,599,270	242,663,610	9,533,548	15,283,081	171,275,123	23,513,896	862,761,272
	SUB-TOTAL	**1,927,243,259**		**814,616,713**	**9,236,412,971**	**143,642,612**	**416,877,581**	**42,413,919**	**114,672,138**	**540,512,894**	**257,555,893**	**11,423,062,110**

		Pakistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($40 MILLION < x < $55 MILLION)												
300490	Medicaments nes, in dosage	52,657,734	0.13	68,980,267	6,061,804,282	228,831,001	733,057,931	124,639,081	35,640,189	60,670,714	325,526,259	7,410,318,722
821420	Manicure or pedicure sets and instruments	52,282,874	0.22	38,560	3,230,660	368,858	1,061,334	62,800	21,064	9,717	106,084	4,530,219
610990	T-shirts, singlets etc, of material nes, knit	52,255,029	0.55	1,320,716	423,256,606	2,738,081	5,849,789	621,559	6,121,109	157,932	308,995	437,636,706
551321	Woven plain >85% polyester + cotton, <170g/m2 dyed	52,079,005	0.72	1,857,357	3,391,159	917,752	92,043	41,940	908,612	42,581	80,725	6,414,416
611692	Gloves, mittens or mitts, nes, of cotton, knit	49,719,875	0.12	14,434	4,413,004	42,278	1,945,222	73,361	4,694,821	84,300	264,640	11,489,782
390319	Polystyrene, except expansible in primary forms	49,609,045	0.45	30,065	99,577,547	6,160,465	9,913,737	586,058	91,873	221,281	2,670,495	113,091,055
610462	Womens, girls trousers & shorts, of cotton, knit	47,658,920	0.14	54,073	114,697,296	84,387	3,153,807	400,558	13,348,849	419,955	1,732,616	133,807,155
630391	Curtains drapes blinds valances, cotton, not knit	47,365,275	(0.03)	5,401	97,975,634	13,690	288,264	10,103	18,261	191,150	5,620	98,494,433
520831	Plain weave cotton, >85% <100 g/m2, dyed	47,229,767	1.81	1,975,361	83,112,009	5,405,836	42,549	42,532	-	7,771	10,398	85,190,619
620469	Womens, girls trousers, shorts, material nes, not kni	46,957,977		554,981	51,679,887	159,186	2,759,381	2,985,737	259,355	22,757	310,537	58,572,636
520852	Plain weave cotton, >85% 100-200g/m2, printed	46,687,582	0.73	907,322	167,841,673	1,799,287	1,481,579	42,158	54,018	-	42,697	170,369,447
950699	Equipment nes for sports, swimming and paddling pools	46,384,578	(0.05)	817,531	70,320,890	6,927,445	7,148,790	243,440	504,783	2,960,763	948,648	82,944,845
610332	Mens, boys jackets & blazers, cotton, knit	46,207,342	0.17	98,370	24,779,208	4,325	426,528	132,683	3,286,013	69,735	14,812	28,807,349
520851	Plain weave cotton, >85% <100 g/m2, printed	45,033,508	0.19	38,960	110,501,458	20,657,116	289,268	37,096	-	-	184	110,866,966
100590	Maize except seed corn	43,671,325		448,173	981,926,491	450,329	190,449	171,132	1,287,854	130,580	1,270,289	985,424,967
050400	Guts, bladders and stomachs of animals except fish	43,668,204	0.18	19,703	5,524,075	273,741	3,268,051	60,344	185	-	101,595	8,973,952
080450	Guavas, mangoes and mangosteens, fresh or dried	43,658,857	0.15	2,293,603	199,988,034	1,860	200,820	3,699	146	28,577	5,081	202,519,960
030613	Shrimps and prawns, frozen	43,635,509	0.17	1,031,981	1,722,317,393	15,871	2,073,713	30,569	3,936	19,873	42,096	1,725,519,560
520839	Woven cotton nes, >85% <200g/m2, dyed	43,070,858	1.13	22,271	4,516,149	772,057	151,850	268,887	32,933	11,544	5,204	5,008,837
630399	Curtains drapes blinds valances, material nes, woven	42,458,775	0.35	94,664	40,267,749	87,419	1,201,936	30,507	9,366	474,558	46,764	42,125,542
610342	Mens, boys trousers & shorts, of cotton, knit	41,943,134	0.06	125,947	74,473,885	142,156	3,769,830	595,080	26,797,802	352,098	1,362,079	107,476,721
611599	Hosiery nes, of materials nes, knit	40,813,262	0.21	452,156	26,505,886	157,607	4,246,033	2,233,733	71,832	284,295	50,485	33,844,419
252610	Natural steatite, not crushed or powdered	40,374,502	1.18	16,919	5,581,813	11,201,493	880	121	-	2,050	1,792	5,603,574
	SUB-TOTAL	**1,065,422,934**		**81,198,814**	**10,377,682,785**	**287,212,240**	**782,613,782**	**133,313,176**	**93,153,000**	**66,162,230**	**334,908,091**	**11,869,031,878**

Table A.15: Exports of Kazakhstan by Size of Exports (HS 6-digit category and U.S. dollars)

		Kazakhstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**157,230,982,468**		**5,230,971,622**	**174,676,807,311**	**40,800,641,965**	**18,367,371,900**	**3,061,731,614**	**1,849,626,438**	**1,834,203,457**	**4,481,599,994**	**231,935,582,400**
LARGE-SIZE EXPORTS (> $250 MILLION)												
270900	Petroleum oils, oils from bituminous minerals, crude	50,955,129,402	0.28	22,156,647	8,742,703	5,314,340,632	2,220,511,507	3,507,613	106,694,120	664	304,245,137	5,759,687,515
740311	Copper cathodes and sections of cathodes unwrought	2,691,222,024	0.22	25,723	2,821,383,962	71,318,896	252,800	5,402	-	40,422	-	2,892,774,404
271000	Oils petroleum, bituminous, distillates, except crude	2,639,889,370	0.35	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	65,088,018,103
284410	Natural uranium, its compounds, mixtures	2,279,278,219	0.46	-	58,261	4,484	4,111,046	-	-	-	-	62,745
720241	Ferro-chromium, >4% carbon	2,035,813,862	0.32	-	827,418,317	407,376	1,116,424	61,522	8,212	-	-	827,895,426
271121	Natural gas in gaseous state	1,831,871,662	0.40	-	5,129,862	11,669	360,728,868	67,236,551	-	-	12,458	72,390,540
260112	Iron ore, concentrate, not iron pyrites, agglomerated	1,123,043,573	0.34	-	70,455,849	10,706,702	5,040,010	-	32,621	113,826	-	81,308,998
100190	Wheat except durum wheat, and meslin	1,042,240,515	0.31	28,139,464	437,382,335	5,756,427	1,877,949	76,439,065	122,514,224	512,908	86,051,618	756,796,040
260111	Iron ore, concentrate, not iron pyrites,unagglomerate	854,447,911	0.42	806	3,521,219,991	28,437,277	15,912,102	727,259	39,676	1,496,716	803	3,551,922,527
271112	Propane, liquefied	785,351,555	0.40	31,267,579	1,346,743	114,987	8,409,324	2,635,000	78,591,054	141,762	-	114,097,124
270119	Coal except anthracite or bituminous, not agglomerate	743,314,929	0.36	215,972	152,314,587	467,962,062	1,277,625	37,885,951	263,007	-	3,126,534	661,768,113
260300	Copper ores and concentrates	708,659,248	0.32	-	18,138,533	-	2,966,852	9,632	-	-	19,848,850	37,997,015
790111	Zinc, not alloyed, unwrought, >99% pure	676,583,186	0.25	53,051	570,347,460	8,229,561	1,292,025	6,404	13,134	1,671	26,842	578,678,123
710691	Silver in unwrought forms	637,937,268	0.24	579	1,646,198	16,807,110	1,849,464	-	-	-	-	18,453,886
710812	Gold in unwrought forms non-monetary	608,087,438	0.21	-	755,238,236	245,810,350	328,470	16,990,471	-	37,188,449	14,595	1,055,242,100
110100	Wheat or meslin flour	567,243,336	0.35	330,287,933	68,338,053	17,087,823	1,313,117	31,741,774	92,745,581	23,091,244	279,518,991	842,811,399
760110	Aluminium unwrought, not alloyed	442,718,991	0.20	26,533	650,959,537	32,297,572	2,515,198	125,515	2,246	210	28,307,208	711,718,820
271113	Butanes, liquefied	354,371,910	0.34	264,916	82,691	1,930	1,024,734	772,286	1,495,280	4,235	10,156	2,631,494
250310	Sulphur, crude or unrefined	341,434,550	1.15	23,745	47,161,313	15,237,808	243,439	107,347	29,695	2,546	148,595	62,711,049
721049	Flat rolled iron or non-alloy steel, coated with zinc, width >6	311,084,682	0.07	11,993,309	821,818,581	167,034,282	51,893,379	15,439,695	25,686,783	5,777,838	137,357,315	1,185,107,802
720720	Semi-finished product, iron or non-alloy steel >0.25%C	305,559,472	0.41	58,432	4,366,958	11,219,225	2,043,958	10,687	43,510	40,901,221	121,572	56,721,604
281820	Aluminium oxide, except artificial corundum	302,431,969	0.10	175,000	611,501,160	1,498,432	1,124,367	14,065	18,891,120	111,973	1,191,006	633,382,755
720824	Hot rolled iron or non-alloy steel, coil,width >600mm, t <3m	290,540,364	0.22	1,580,522	487,067,694	245,642,951	4,458,616	2,997,848	110,497	1,488,262	35,650,095	774,537,868
261000	Chromium ores and concentrates	285,670,204	0.42	-	86,260,583	297,656	58,015	-	-	-	30,000	86,588,238
720230	Ferro-silico-manganese	254,605,504	0.24	26,167	841,823,517	16,012,431	2,796,201	-	485	290,359	1,212,326	859,365,285
780110	Lead refined unwrought	250,505,313	0.28	-	97,100,060	69,597,981	828,566	-	96,806	2,013	7,249,997	174,046,857
	SUB-TOTAL	**73,319,036,456**		**1,756,118,563**	**65,680,164,296**	**16,144,510,938**	**3,913,865,409**	**1,186,135,284**	**730,593,708**	**157,108,168**	**1,232,084,873**	**86,886,715,830**

		Kazakhstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($65 MILLION < x < $250 MILLION)												
270112	Bituminous coal, not agglomerated	219,598,153	0.30	5,812	817,698	1,264,143	265,889	1,169,146	151,249	13,519	3,780	3,425,347
710813	Gold, semi-manufactured forms, non-monetary	212,983,459	0.39	-	5,919,464	787	285,648	132,159	-	52,620	-	6,105,029
720250	Ferro-silico-chromium	202,181,442	0.50	-	6,287,980	-	-	-	-	-	-	6,287,980
490700	Documents of title (bonds etc), unused stamps etc	198,526,936	1.81	4,864,267	19,891,412	306,651,379	570,858,489	2,241,847	8,099,028	5,544,592	4,511,243	351,803,767
720249	Ferro-chromium, <4% carbon	197,058,930	0.35	-	3,578,368	157,422	304,141	1,038,061	-	-	1,215,774	5,989,624
260800	Zinc ores and concentrates	191,833,936	1.04	-	88,355,577	-	9,147,568	52	-	-	74,767,916	163,123,544
720449	Ferrous waste or scrap, nes	184,401,705	0.23	1,097,021	696,267	340,039,501	2,900,649	2,626	409,714	19,112	53,729,270	395,993,512
280470	Phosphorus	168,429,865	0.28	-	3,760,018	762,757	5,100	-	-	-	107,983	4,630,757
721012	Flat rolled iron or non-alloy steel, coated with tin, w >600mr	164,382,402	0.03	87,505	58,276,872	24,068,609	355,467	688,115	326,747	12,834	11,073,101	94,533,782
810810	Titanium, unwrought, waste or scrap, powders	149,983,687	0.12	-	756,228	904	48,563	-	-	-	13,067	770,198
271119	Petroleum gases & gaseous hydrocarbons nes, liquefied	144,047,478	0.83	3,449,920	162,080,479	62,366,189	171,862	2,258,595	3,771,320	6,337	407,524	234,340,362
740811	Wire of refined copper > 6mm wide	135,151,536	2.67	267,000	162,692,679	654,379	1,293,128	21,319	260,134	116,048	147,070	164,158,629
720923	Cold rolled iron or non-alloy steel, coil, width >600mm, t 0.5	134,741,635	(0.02)	2,878,449	57,267,891	18,595,515	12,043,865	1,296,169	72,951	90,789	49,587,347	129,789,109
847120	Digital computers with cpu and input-output units	127,109,676		24,421,275	58,129,062	117,956,603	458,951,616	6,816,615	2,447,910	29,262,411	5,127,613	244,161,488
880240	Fixed wing aircraft, unladen weight > 15,000 kg	123,258,492	1.79	3,011,728	782,623,933	10,996,102	389,631,677	17,878,456	526,522	41,423,519	180,171,408	1,036,631,667
520100	Cotton, not carded or combed	89,547,018	0.00	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,348,547,486
260200	Manganese ores, concentrates, iron ores >20% Manganes	88,168,828	0.35	-	11,481,141	574,263	461,765	-	-	39,501	2,015,211	14,110,117
120400	Linseed	80,506,696	3.46	6,669,602	7,548,981	43,612	714,031	-	158,275	-	935,615	15,356,084
100300	Barley	74,406,664	0.41	1,940,845	41,313,656	759,461	14,250,555	1,644,957	1,374,117	-	8,140,013	55,173,049
710811	Gold powder non-monetary	72,628,114	0.90	-	2,935	-	3,078	-	-	3,977	-	6,912
720845	Hot rolled iron or non-alloy steel, flat,width >600mm, t <3m	67,660,296	0.38	1,954,168	10,009,817	1,185,754	4,914,477	2,360,981	2,195,475	957,887	10,628,303	29,292,385
281990	Chromium oxides, hydroxides except chromium trioxide	66,991,248	0.34	-	632,735	245,816	126,427	5,137	-	960	54,742	939,389
848250	Bearings, cylindrical roller, nes	66,307,869	0.30	83,131	37,243,457	2,315,668	5,516,555	157,477	68,532	751,576	1,352,075	41,971,915
	SUB-TOTAL	**3,159,906,061**		**51,823,090**	**5,149,982,291**	**1,604,317,174**	**1,476,261,820**	**37,982,766**	**19,945,696**	**78,319,064**	**404,772,050**	**7,347,142,131**

(Continued)

Table A.15: Exports of Kazakhstan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Kazakhstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($30 MILLION < x < $65 MILLION)												
250629	Quartzite, slabs etc.	64,526,513		243	8,694,771	132,756	453,457	29,830	47,388	11,663	484,361	9,401,012
740200	Unrefined copper, copper anodes, electrolytic refinin	64,248,467	0.43	1,999	1,828,898	123,050	19,711	-	-	14,103	3,794	1,971,844
252400	Asbestos	62,743,341	0.15	-	28,359	3,590,182	45,514	4,217,089	101,843	2,846,664	32,419,093	43,203,229
240220	Cigarettes containing tobacco	62,731,340	0.26	64,875,998	79,581,877	1,657,094	97,079,003	45,207,737	4,703,363	17,454,871	15,751,284	229,232,223
730420	Casings, tubing and drill pipe, for oil drilling	62,344,971	1.54	645,144	202,262,862	74,190,241	365,306,386	1,818,015	1,275,534	117,978,872	76,040,727	474,211,395
271600	Electrical energy	59,945,857	0.41	2,197,663	161,506	5,272,532	134,275,338	115,888	-	-	22,896,775	30,644,362
740400	Copper/copper alloy waste or scrap	59,204,044	0.64	100,701	37,944,824	4,180,705	1,527,784	833,227	319	-	3,547	43,063,321
030420	Fish fillets, frozen	58,417,333	0.28	5,541,003	58,639,621	1,596,462	4,915,196	278,537	21,716	109,399	337,819	66,524,556
283531	Sodium triphosphate	58,081,187	0.43	1,220	182,692	8,279,204	615,348	43,696	5,845	134,618	1,669,126	10,316,400
284420	Uranium (enriched U235), plutonium compounds, alloys	57,501,260	0.65	-	10,635	-	77,833,638	-	-	-	-	10,635
720821	Hot rolled iron or non-alloy steel, coil,width >600mm, t >10mm, nes	55,991,462	2.76	143,629	75,629,928	8,896,419	185,319	-	10,732	34,016	962,505	85,677,228
810310	Tantalum unwrought, bars, rods simply sintered, scrap	55,762,329	0.39	-	398,340	1,171	21,282,740	-	-	-	-	399,511
720921	Cold rolled iron or non-alloy steel, coil, width >600mm, t >3mm, nes	52,157,073	0.66	53,358	37,060,389	20,016,161	64,987	29,116	-	31,567	1,550	57,192,140
720924	Cold rolled iron or non-alloy steel, coil, width >600mm, t <0.5mm, nes	50,339,457	0.12	1,115,881	193,742,895	27,972,142	88,521	87,026	46,662	1,433	675,276	223,641,314
720941	Cold rolled iron or non-alloy steel, flat, width >600mm, t >3mm, nes	49,138,637		84,027	11,833,831	316,188	824,078	57,665	31,434	59,008	429,790	12,811,941
100110	Durum wheat	46,510,207	0.44	11,368,708	251,463,802	58,520,622	175,547	350,430	1,376,810	146,363	565,187	323,791,921
720922	Cold rolled iron or non-alloy steel, coil, width >600mm, t 1-3mm, nes	45,411,537	0.06	437,080	53,037,959	62,829,787	358,815	876,120	36,780	85,006	8,200,392	125,503,124
721070	Flat rolled iron or non-alloy steel, painted/plastic coated,width>600mm	45,145,849		3,659,289	200,919,732	20,971,976	88,866,007	11,434,584	13,430,522	3,711,977	52,813,910	306,941,990
890400	Tugs and pusher craft	41,418,608		3	962,894,518	458	79,384,511	-	-	4,530,614	-	967,425,593
270210	Lignite, not agglomerated	39,802,437	0.76	-	1,183,624	21,902	830,325	684,630	153,024	-	1,734,944	3,778,124
281910	Chromium trioxide	37,739,470	0.18	48	597,475	1,314,387	32,771	6,080	362	-	188,788	2,107,141
848180	Taps, cocks, valves and similar appliances, nes	35,183,359	0.25	9,278,879	571,942,150	60,148,624	359,823,016	2,599,416	4,812,920	120,752,789	39,157,831	808,692,608
850710	Lead-acid electric accumulators (vehicle)	34,331,025	0.36	22,671,646	40,729,623	386,493	40,474,730	6,651,102	4,656,112	9,834,937	7,191,527	92,121,440
390210	Polypropylene in primary forms	33,625,684		309,500	1,094,757,714	378,006,858	18,277,878	3,291,944	307,688	1,055,027	40,068,231	1,517,796,963
261690	Precious metal ores and concentrates except silver	32,772,743	0.29	13,010	27,444,649	2,564	151,122,067	233	-	-	-	27,460,455
271320	Petroleum bitumen	31,663,962		41,250,481	31,378,129	21,983,663	117,856,824	21,697,450	7,255,987	11,406,850	20,867,281	155,839,839
790112	Zinc, not alloyed, unwrought, <99% pure	30,767,044	1.24	1,369,862	23,909,249	9,872,595	76,403	55	-	4,922	47,633	35,204,315
720843	Hot rolled iron or non-alloy steel, flat,width >600mm, t 4.75-10mm, nes	30,502,879	0.07	1,555,974	32,417,732	3,656,505	13,803,937	4,333,353	1,730,909	3,669,345	9,995,208	57,359,026
740500	Master alloys of copper	30,326,472	0.29	-	6,161,405	60,252	66,905	12,387	-	610	109,555	6,344,209
	SUB-TOTAL	**1,388,334,546**		**166,675,344**	**4,006,839,186**	**774,000,994**	**1,575,666,750**	**104,655,605**	**40,005,948**	**293,874,649**	**332,616,131**	**5,718,667,856**
		Kazakhstan Exports		**Imports of Central and South Asia**								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($15 MILLION < x < $30 MILLION)												
120500	Rape or colza seeds	29,899,776	1.59	4,516	201,693	439,575,837	2,659,610	1,350	86,307	-	29,706	439,899,409
890600	Warships, lifeboats, hospital ships, vessels nes	29,850,898	1.20	24,757	369,458,425	344,987	33,534,971	6,693	887	4,067,296	66,000	373,969,045
720942	Cold rolled iron or non-alloy steel, flat, width >600mm, t 1-3mm, nes	29,458,539	0.16	630,053	5,712,044	10,547,975	945,956	2,009,994	1,460,088	466,924	19,853,200	40,680,277
720711	Rectangular iron or non-alloy steel bars, <.25%C, width< twice thicknes	28,451,139		-	30,790,956	4,736,312	1,161,224	4,639	-	3,161,197	-	38,693,105
271500	Bituminous mix, mastic from asphalt, bitumen/tar/pitc	28,207,787		151,830	1,163,605	1,792,074	12,526,426	787,954	379,897	517,731	934,855	5,727,946
310559	Fertilizers with nitrogen and phosphorus nes, <=10kg	26,566,845	0.69	4,105,856	103,396	3,237,777	1,369,099	804,170	792,403	36,201	10,865	9,090,668
890590	Floating docks, special function vessels nes	25,805,224		7,383	1,420,195,520	1,817,673	30,343,299	109	-	21,456,403	-	1,443,477,088
720943	Cold rolled iron or non-alloy steel, flat, width >600mm, t 0.5-1mm, nes	25,804,337	(0.02)	1,568,561	10,661,422	20,302,826	179,010	1,779,771	170,996	393,526	11,586,220	46,463,321
410429	Bovine and equine leather, tanned or retanned, nes	25,765,884		447,622	2,635,634	2,372,091	115,453	320,979	-	-	-	5,776,325
730511	Pipe-line submerged arc welded steel diameter >406mm	25,067,891		27,054	1,265,403,661	7,182,737	615,120,291	58,748	163,387	128,512,530	55,130,254	1,456,478,369
720421	Waste or scrap, of stainless steel	25,048,597	0.21	103,708	7,458,001	5,612,430	158,317	93,100	-	21,818	283,975	13,573,031
251110	Natural barium sulphate (barytes)	24,968,720	0.27	62,187	138,765,238	1,471,154	54,994	141,849	856,059	15,551,554	1,854,052	158,702,093
310230	Ammonium nitrate, including solution, in pack >10 kg	24,897,017	1.51	224,300	6,774,124	2,771,585	63,173,309	38,896,165	1,297,223	1,864,431	2,540,799	54,368,627
260700	Lead ores and concentrates	24,122,298	0.82	-	53,331,187	107,329	84,092,251	665	-	-	-	53,439,181
720823	Hot rolled iron or non-alloy steel, coil,width >600mm, t 3-4.75mm, nes	23,342,486	0.10	21,197	222,426,456	76,944,076	699,650	301,287	3,553	83,208	7,026,893	306,806,669
220210	Beverage waters, sweetened or flavoured	22,999,311	0.53	26,613,287	1,809,233	4,125,749	19,187,618	14,313,348	8,145,597	7,173,564	837,785	63,018,563
851782	Telegraphic apparatus, nes	22,926,811	2.25	95,091,796	246,087,410	463,855,403	288,468,833	-	15,795,106	38,300,779	75,385,187	934,515,681
170490	Sugar confectionery not chewing gum, no cocoa content	21,694,877	0.44	38,726,818	54,711,788	4,105,952	68,466,064	18,282,486	19,590,380	22,334,537	4,479,390	162,231,351
180690	Chocolate/cocoa food preparations nes	20,319,491	0.60	5,701,933	33,260,044	1,413,364	126,470,748	38,672,391	32,447,184	33,620,934	9,621,823	154,737,673
284130	Sodium dichromate	20,151,141	0.17	-	3,466,996	2,725,320	6,197	2,007	-	750,170	93,545	7,038,039
251020	Natural calcium phosphates, ground	19,783,943	0.86	4,758	46,430	1,344,579	56,888	-	5	4,262,975	2,090,258	7,749,005
852810	Colour television receivers/monitors/projectors	19,598,305	1.60	11,513,389	265,784,159	3,686,371	208,917,173	7,061,287	4,052,520	26,442,832	20,489,607	339,030,165
210690	Food preparations nes	19,492,677	0.61	35,013,465	122,200,851	38,601,249	160,987,874	18,361,366	5,871,101	14,358,200	9,318,082	243,724,313
720822	Hot rolled iron or non-alloy steel, coil,width >600mm, t 4.75-10mm, nes	19,223,117	0.42	191	264,359,931	28,081,285	459,954	26,079	9,524	71,759	4,900,033	297,448,800
720719	Semi-finished product, iron or non-alloy steel <0.25%C, nes	18,971,532		47,955	286,360,603	-	3,746,101	3,773	408,483	221,546	11,549	287,053,910
252329	Portland cement, other than white cement	17,722,197	2.85	282,371,857	132,582,484	1,155,730	113,102,067	3,262,219	24,986,188	33,131,466	1,520,172	479,010,114
100630	Rice, semi-milled or wholly milled	17,199,922		96,302,507	4,932,723,934	9,323,413	11,561,590	7,114,344	10,737,279	25,023,642	1,491,221	5,082,716,340
720844	Hot rolled iron or non-alloy steel, flat,width >600mm, t 3.0-4.75mm, ne	16,833,686	0.06	796,937	9,000,341	2,118,126	4,666,771	2,483,157	976,056	693,992	8,179,845	24,248,454
852520	Transmit-receive apparatus for radio, TV, etc.	16,540,624	1.34	23,809,210	2,483,267,961	662,500,861	329,917,745	37,906,706	1,508,544	2,761,654	10,867,946	3,222,622,883
151221	Cotton-seed oil crude	16,251,551	0.80	90,050	-	-	4,258	4,730,269	2,346,536	33,994	10,009,110	17,209,958
720842	Hot rolled iron or non-alloy steel, flat,width >600mm, t >10mm, nes	15,488,839	0.16	16,287,832	95,622,192	14,569,404	34,480,237	4,473,894	2,061,054	2,470,215	8,893,155	144,377,744
710692	Silver semi-manufactured including gold/platinum plat	15,377,890	(0.99)	5,277	23,641,064	15,967,267	215,101	5,173	-	11,474	5,876	39,636,130
720944	Cold rolled iron or non-alloy steel, flat, width >600mm, t <0.5mm, nes	15,211,610	(0.01)	1,090,744	4,067,222	937,661	31,647	105,810	57,893	3,296	3,507,522	9,770,148
760200	Waste or scrap, aluminium	15,169,215	0.92	21,787	7,343,884	44,163,281	1,011,251	80,373	63,617	-	308,019	51,980,961
	SUB-TOTAL	**748,214,171**		**640,868,814**	**12,501,417,884**	**1,877,491,877**	**2,217,891,971**	**202,092,153**	**134,267,867**	**387,799,847**	**271,326,943**	**16,015,265,383**

Table A.16: Exports of Kyrgyzstan by Size of Exports (HS 6-digit category and U.S. dollars)

		Kyrgyzstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**3,093,944,682**		**6,911,069,380**	**170,272,421,686**	**24,621,924,286**	**11,252,128,148**	**3,196,667,509**	**1,319,730,994**	**2,108,518,173**	**4,433,444,540**	**220,919,237,207**
LARGE-SIZE EXPORTS (> $8 MILLION)												
710812	Gold in unwrought forms non-monetary	743,179,536	0.23	-	755,238,236	245,810,350	328,470	16,990,471	-	37,188,449	14,595	1,038,580,099
271000	Oils petroleum, bituminous, distillates, except crude	105,870,396	0.26	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	65,378,488,262
999999	Commodities not specified according to kind	82,164,680	2.92	653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	7,849,924,826
071333	Kidney beans and white pea beans dried shelled	52,031,608	0.41	53,051	41,204	47,571,317	2,068,406	5,675	6,423	80,728	1,446	49,822,574
271600	Electrical energy	51,381,421	0.09	2,197,663	161,506	5,272,532	134,275,338	115,888	-	-	22,896,775	164,803,812
870423	Diesel powered trucks weighing > 20 tonnes	28,515,962		47,298,973	46,635,603	15,314,213	194,775,403	41,073,174	36,134,353	97,583,904	117,797,536	555,539,983
520100	Cotton, not carded or combed	28,134,131	(0.05)	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,352,287,701
261690	Precious metal ores and concentrates except silver	22,907,520		13,010	27,444,649	2,564	151,122,067	233	-	-	-	178,582,289
620640	Womens, girls blouses, shirts, manmade fibre, not kni	21,475,171		339,304	371,440,231	44,679	9,576,455	92,114	17,104	352,910	34,922	381,805,604
620443	Womens, girls dresses, synthetic fibres, not knit	18,944,044	0.61	4,107,961	323,443,905	29,690	11,982,077	477,378	946,842	395,425	443,187	341,349,087
853922	Filament lamps, of a power <= 200 Watt, > 100 volts	18,751,417	0.06	439,839	1,398,872	1,841,030	6,965,869	397,567	107,702	3,091,955	5,545,493	19,390,759
620463	Womens, girls trousers, shorts, synth fibres, not kni	15,131,763	0.48	297,336	36,527,308	3,714	9,820,755	659,124	26,335	91,748	63,030	46,830,225
240110	Tobacco, unmanufactured, not stemmed or stripped	15,061,568	0.05	16,254	85,319,916	80,940	7,000,907	1,547,520	21,845	-	652,256	93,092,118
870891	Radiators for motor vehicles	13,730,060	0.30	1,870,221	38,920,073	2,160,623	15,630,773	1,506,615	435,544	2,239,801	4,082,046	65,339,079
070190	Potatoes, fresh or chilled except seed	11,719,192		59,318,934	28,537,259	456,530	22,612,066	76,380	288,178	11,356,426	816,286	123,385,679
700529	Float glass etc in sheets, non-wired, clear	11,120,722		5,238,311	2,009,016	3,655,648	40,323,986	1,881,565	3,606,307	613,898	7,370,973	62,818,138
401199	Pneumatic tyres new of rubber nes	10,004,165		3,470,431	554,889,764	4,691,321	73,650,626	20,012,223	1,485,017	2,780,895	26,361,999	667,330,052
040120	Milk not concentrated nor sweetened 1-6% fat	9,754,581	0.17	40,894,680	4,072,906	38,911	32,056,203	234,266	590,000	707,632	51,884	78,412,216
252329	Portland cement, other than white cement	9,463,870	3.30	282,371,857	132,582,484	1,155,730	113,102,067	3,262,219	24,986,188	33,131,466	1,520,172	588,849,962
620343	Mens, boys trousers shorts, synthetic fibre, not knit	8,615,521	0.12	443,497	72,485,081	53,280	9,738,952	1,139,974	1,017,613	576,019	119,616	84,434,057
870323	Automobiles, spark ignition engine of 1500-3000 cc	8,180,218	2.67	24,986,746	295,521,213	144,565,162	727,227,158	148,278,139	53,482,867	40,751,518	159,712,719	1,446,247,383
080810	Apples, fresh	8,132,746	0.52	3,527,950	12,968,673	6,498,763	59,960,348	4,104,575	1,952,269	12,568,639	79,478	97,556,119
611592	Hosiery nes, of cotton, knit	8,051,492	1.39	1,031,646	9,175,411	1,077,988	16,065,626	641,527	12,921,690	701,212	349,212	41,322,785
	SUB-TOTAL	**1,302,321,780**		**2,461,954,601**	**65,611,256,387**	**10,642,269,293**	**2,944,045,447**	**1,196,755,111**	**499,729,183**	**643,835,425**	**903,102,475**	**83,706,192,809**

		Kyrgyzstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($4 MILLION < x < $8 MILLION)												
070610	Carrots and turnips, fresh or chilled	7,762,181	0.49	66,872	139,684	59,610	12,231,082	13,183	6,553	265,343	126	12,769,270
080910	Apricots, fresh	7,733,850	0.72	815	43,605	3,145,645	22,292,787	1,229,773	-	10,623	12,481	25,505,956
620453	Womens, girls skirts, synthetic fibres, not knit	7,480,727	0.60	471,530	64,712,528	1,217	3,713,011	84,878	154,292	40,051	21,310	69,113,938
740400	Copper/copper alloy waste or scrap	6,986,053	1.15	100,701	37,944,824	4,180,705	1,527,784	833,227	319	-	3,547	43,757,878
390410	Polyvinyl chloride in primary forms	6,741,986	-	697,184	1,008,352	24,788,755	26,785,703	4,269,601	2,898,691	1,668,094	41,074,817	98,921,595
080232	Walnuts, fresh or dried, shelled	6,517,791	0.22	30,546	44,333,791	1,643	3,032,848	-	7,515	12,390	336	47,419,068
620293	Womens, girls anoraks etc of manmade fibres, not knit	6,505,972		99,724	581,198	11,434	18,929,519	477,106	4,705,206	411,841	637,815	25,376,736
392330	Plastic carboys, bottles and flasks, etc	6,236,946	0.14	2,947,110	15,859,870	4,355,154	19,619,361	1,545,851	1,779,935	2,780,153	1,313,620	48,655,203
070310	Onions and shallots, fresh or chilled	6,161,995	0.75	2,519,178	432,756,655	30,054,389	13,454,790	46,260	414,977	4,154,036	2,115,098	485,469,122
870899	Motor vehicle parts nes	5,777,455	0.12	46,488,682	2,043,141,647	54,465,448	66,691,396	15,083,488	10,378,284	17,857,496	647,116,455	2,886,139,408
820712	Rock drilling or earth boring tools except carbide	5,562,945		224,306	67,283,347	17,241,553	71,793,534	7,333,530	1,106,493	11,640,591	15,807,545	185,097,368
720449	Ferrous waste or scrap, nes	5,297,217	0.23	1,097,021	696,267	340,039,501	2,900,649	2,626	409,714	19,112	53,729,270	398,891,535
610620	Womens, girls blouses & shirts, manmade fibre, knit	5,080,567		31,453	41,273,150	59,704	1,785,194	30,592	71,807	349,344	678,815	44,249,465
080920	Cherries, fresh	4,926,324	1.50	673,362	29,356	59	15,250,498	1,051,759	16,524	339,689	-	16,309,487
040210	Milk powder < 1.5% fat	4,866,605	0.77	5,763,171	160,802,922	79,742,925	59,510,055	320,204	556,338	1,995,081	1,212,924	309,583,415
903300	Parts/accessories nes for optical/electric instrument	4,859,634		204,778,421	141,523,107	3,084,549	4,109,695	720,330	40,689	1,049,582	527,412	355,113,454
880240	Fixed wing aircraft, unladen weight > 15,000 kg	4,452,792	3.97	3,011,728	782,623,933	10,996,102	389,631,677	17,878,456	526,522	41,423,519	180,171,408	1,408,384,889
680292	Worked calcareous stone nes	4,261,462		-	629,829	-	4,705,538	540	-	510	101,637	5,437,514
610443	Womens, girls dresses, of synthetic fibres, knit	4,212,620		1,048,380	56,845,738	23,520	3,186,516	65,976	4,455,359	214,853	40,946	65,815,310
220210	Beverage waters, sweetened or flavoured	4,150,408	2.98	26,613,287	1,809,233	4,125,749	19,187,618	14,313,348	8,145,597	7,173,564	837,785	67,892,833
	SUB-TOTAL	**115,575,528**		**296,663,471**	**3,894,039,031**	**576,377,661**	**760,339,255**	**65,300,725**	**35,674,812**	**91,405,870**	**945,403,346**	**6,599,903,445**

(Continued)

Table A.16: Exports of Kyrgyzstan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Kyrgyzstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($2.5 MILLION < x < $4 MILLION)												
720842	Hot rolled iron or non-alloy steel, flat,width >600mm, t >10r	3,920,007	0.47	16,287,832	95,622,192	14,569,404	34,480,237	4,473,894	2,061,054	2,470,215	8,893,155	174,384,088
710691	Silver in unwrought forms	3,855,847	0.28	579	1,646,198	16,807,110	1,849,464	-	-	-	-	20,303,350
040500	Butter and other fats and oils derived from milk	3,737,771	0.39	1,305,762	41,747,395	911,850	30,650,138	902,359	2,105,859	2,998,963	13,112,449	92,832,416
160250	Bovine meat, offal nes, not livers, prepared/preserve	3,729,621	0.65	1,233,994	431,957	197,800	4,491,842	1,570,196	1,513,348	5,224,239	469,624	13,562,804
010290	Bovine animals, live, except pure-bred breeding	3,685,578		8,229,300	7,410	3,013,340	678,727	-	1,525,654	-	755,009	14,209,439
080930	Peaches, nectarines, fresh	3,554,796	1.58	212,613	56	534	23,854,166	808,878	5,833	402,426	1,557	24,477,184
481910	Cartons, boxes & cases, of corrugated paper or board	3,365,081	0.24	3,277,782	30,840,937	9,876,919	11,746,385	2,006,500	1,062,236	800,065	1,079,607	58,683,930
870410	Dump trucks designed for off-highway use	3,277,845	3.75	1,974,905	418,225,448	7,538,503	91,836,946	52,621,282	3,311,621	4,047,693	3,427,254	530,362,369
070490	Edible brassicas nes, fresh or chilled	3,225,267	2.89	539,573	1,542,954	663,571	13,502,630	56,262	9,013	780,510	-	17,038,250
620213	Womens, girls overcoats etc manmade fibre, not knit	3,126,063		17,983	2,023,583	5,525	5,496,891	84,332	482,743	81,269	124,268	8,232,262
681099	Articles of cement, concrete or artificial stone nes	3,116,391	1.31	961,339	9,887,812	181,946	13,674,251	429,763	69,202	3,829,246	132,491	28,736,287
870324	Automobiles, spark ignition engine of >3000 cc	2,940,465	2.19	23,898,826	3,248,140	26,298,407	293,790,242	68,512,951	4,314,227	20,030,513	16,310,545	387,890,900
481920	Cartons, boxes & cases, folding, non-corrugated paper	2,917,765	2.48	1,884,199	29,859,066	1,606,917	30,405,614	2,514,713	831,337	185,262	1,126,380	65,898,774
870840	Transmissions for motor vehicles	2,849,098	1.42	7,546,210	217,186,465	1,275,173	21,899,359	3,696,795	331,041	1,904,963	95,617,501	345,760,712
853929	Filament lamps, except ultraviolet or infra-red, nes	2,828,980	0.04	281,661	19,687,013	4,348,156	2,751,055	187,396	517,550	941,941	731,989	29,259,364
860800	Signals etc for rail, tram, water-way, port, airfield	2,778,159	1.38	210,172	3,585,092	2,303,323	57,483,162	1,507,236	176,860	4,140,750	8,255,237	76,154,595
210500	Ice cream and other edible ice	2,756,471	(0.03)	2,066,613	940,852	200,248	24,194,302	1,322,339	78,231	498,896	14,531	27,993,674
410429	Bovine and equine leather, tanned or retanned, nes	2,751,154	2.83	447,622	2,635,634	2,372,091	115,453	320,979	-	-	-	5,570,799
392390	Plastic articles for goods conveyance or packing nes	2,715,512		7,772,705	76,880,725	5,972,830	9,490,201	491,256	564,852	563,787	1,202,035	102,447,134
080820	Pears and quinces, fresh	2,708,799	0.31	490,412	313,137	473,600	10,311,038	850,016	725,015	496,989	28,490	12,838,680
721520	Bar/rod, iron or non-alloy steel, cold formed/finished, <0.25	2,666,509	0.02	339	19,948,442	164,988	3,737,917	150,788	237,598	3,135	707,208	24,799,625
620433	Womens, girls jackets, blazers, synth fibres, not kni	2,512,132		91,107	18,795,357	137,882	2,482,244	53,342	59,917	45,480	59,844	21,671,830
080940	Plums, sloes, fresh	2,510,626	0.71	19,411	140,615	6,660	18,180,436	60,223	616	107,179	11	18,454,927
010119	Horses, live except pure-bred breeding	2,505,211	0.28	53,033	151,920	140,676	130,007	56,034	84,940	-	549,666	1,110,241
	SUB-TOTAL	**74,035,146**		**78,803,971**	**995,348,396**	**99,067,451**	**707,232,704**	**142,677,531**	**20,068,745**	**49,553,521**	**152,598,849**	**2,102,673,636**

		Kyrgyzstan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($1.7 MILLION < x < $2.5 MILLION)												
840890	Engines, diesel except motor vehicle/marine	2,372,835		7,760,348	282,669,419	13,760,669	66,763,640	2,812,617	76,246	2,391,177	3,559,642	376,981,141
870190	Wheeled tractors nes	2,363,349	1.37	13,462,810	720,989,147	38,707,507	87,467,034	10,749,490	10,106,859	42,384,999	45,285,181	958,403,536
620312	Mens, boys suits, synthetic fibres, not knit	2,346,015	0.53	66,490	13,773,486	7,281	1,852,311	77,610	6,228,912	173,665	14,847	22,116,991
620193	Mens, boys anoraks etc, of manmade fibres, not knit	2,344,024		1,777,223	1,312,721	136,180	20,377,139	705,037	20,568,027	205,789	815,448	45,192,527
070200	Tomatoes, fresh or chilled	2,261,211	1.88	8,038,656	58,534,805	108,171,862	38,401,362	232,038	11,684	138,933	4,000	213,301,302
040390	Buttermilk, curdled milk, cream, kephir, etc.	2,251,990	0.10	13,527,407	1,222,849	48,014	41,067,614	4,245,627	3,484,678	3,833,073	168,505	63,352,139
040610	Fresh cheese, unfermented whey cheese, curd	2,239,813	0.05	855,491	3,400,817	1,960,108	19,554,546	753,858	114,562	170,183	547,885	26,603,592
081090	Fruits, fresh nes	2,214,869	1.37	6,701,169	49,537,790	3,433,218	38,457,755	110,716	107,134	956,244	330,712	99,524,021
880212	Helicopters of an unladen weight > 2,000 kg	2,170,410		17,375,981	19,594,796	14,604,561	31,868,448	6,504,537	-	61,443,465	-	144,887,250
711319	Jewellery and parts of precious metal except silver	2,134,820	2.12	427,594	11,996,505,824	33,929,271	65,067,293	3,094,902	17,155,961	7,362,594	24,218,293	12,144,666,830
270119	Coal except anthracite or bituminous, not agglomerate	2,116,490	2.08	215,972	152,314,587	467,962,062	1,277,625	37,885,951	263,007	-	3,126,534	625,159,786
551219	Woven fabric >85% polyester staple fibres, nes	2,086,375	3.44	1,540,473	46,258,674	570,445	1,842,901	20,394,750	1,349,297	93,125	2,474,949	54,129,864
080610	Grapes, fresh	2,026,364		226,963	126,246,572	15,259,770	51,238,714	723,589	46,714	25,306	35,664	193,079,702
310230	Ammonium nitrate, including solution, in pack >10 kg	2,016,940		224,300	6,774,124	2,771,585	63,173,309	38,896,165	1,297,223	1,864,431	2,540,799	78,645,770
870590	Special purpose motor vehicles nes	2,004,475		442,325,857	22,778,009	55,317,289	90,903,767	6,993,380	7,829,930	49,544,032	15,370,371	684,069,254
410121	Bovine hides, whole, fresh or wet-salted	1,983,232	0.30	77,176	1,089,198	5,868,419	9,641	1,560,531	35,981	-	-	7,080,414
210410	Soups and broths and preparations thereof	1,958,097	0.44	845,674	2,803,759	30,388	9,169,109	1,488,239	1,667,208	1,625,166	1,221,130	17,362,433
040690	Cheese except fresh, grated, processed or blue-veined	1,885,232	0.12	6,643,171	4,477,422	43,948	59,770,229	612,926	201,438	5,177,185	3,012,720	79,326,112
701090	Glass containers nes for packing or conveyance goods	1,880,924	0.33	141,418	140,473,292	7,671,315	131,569,963	10,877,646	921,992	6,655,704	4,847,388	292,281,072
721440	Bar/rod, iron or non-alloy steel, hot formed <0.25%C, nes	1,867,828	1.73	3,047,878	29,128,137	10,096,232	63,003,126	4,739,798	12,599,534	8,847,569	4,283,760	131,006,234
842951	Front end shovel loaders	1,841,234		6,975,674	17,595,161	11,611,409	121,289,337	6,942,823	6,050,373	28,975,821	18,072,032	210,569,806
190590	Communion wafers, rice paper, bakers wares nes	1,832,895	0.22	26,349,494	96,101,510	6,973,276	54,156,643	6,466,368	5,260,955	10,875,929	2,454,474	202,172,281
252100	Limestone materials for manufacture of lime or cement	1,806,279	1.63	6,150	34,705,629	1,193	1,091,360	4,223,383	4,376	-	1,805,943	37,614,651
620413	Womens, girls suits, synthetic fibres, not knit	1,798,343	0.07	9,326,186	79,075,849	2,353	863,707	503,243	11,875	701	167,563	89,448,232
760120	Aluminium unwrought, alloyed	1,768,107	0.29	196,352	110,683,098	17,921,054	274,599	343,846	53,745	14,654	9,518,302	138,661,805
720843	Hot rolled iron or non-alloy steel, flat,width >600mm, t 4.75	1,744,426		1,555,974	32,417,732	3,656,505	13,803,937	4,333,353	1,730,909	3,669,345	9,995,208	66,829,610
401120	Pneumatic tyres new of rubber for buses or lorries	1,723,310		48,420,773	585,102,625	172,731,825	140,131,565	17,327,969	7,214,140	33,035,181	61,746,252	1,048,382,361
	SUB-TOTAL	**55,039,888**		**618,112,648**	**14,635,567,029**	**993,247,738**	**1,214,446,669**	**193,600,387**	**104,392,758**	**269,464,271**	**215,617,601**	**18,050,848,713**

Table A.17: Exports of Tajikistan by Size of Exports (HS 6-digit category and U.S. dollars)

		Tajikistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**1,987,031,367**		**5,373,922,709**	**170,785,090,362**	**23,455,089,045**	**8,765,756,085**	**2,864,176,749**	**1,222,756,875**	**1,645,804,738**	**3,384,688,673**	**216,274,528,361**
LARGE-SIZE EXPORTS (> $2.5 MILLION)												
760110	Aluminium unwrought, not alloyed	461,571,520	0.06	26,533	650,959,537	32,297,572	2,515,198	125,515	2,246	210	28,307,208	714,231,772
520100	Cotton, not carded or combed	125,760,787	0.01	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,352,475,035
999999	Commodities not specified according to kind	53,968,010		653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	7,796,207,534
760120	Aluminium unwrought, alloyed	49,154,341	0.19	196,352	110,683,098	17,921,054	274,599	343,846	53,745	14,654	9,518,302	138,951,905
260700	Lead ores and concentrates	35,598,220	3.67	-	53,331,187	107,329	84,092,251	665	-	-	-	137,531,432
070310	Onions and shallots, fresh or chilled	23,741,956	0.35	2,519,178	432,756,655	30,054,389	13,454,790	46,260	414,977	4,154,036	2,115,098	485,100,405
261710	Antimony ores and concentrates	23,465,954	0.45	-	128	408	-	6,069,695	-	-	-	6,070,231
081310	Apricots, dried	23,216,715	0.21	3,999	28,779	38,636	13,935,683	4,962	31,315	363,682	1,700	14,377,439
271000	Oils petroleum, bituminous, distillates, except crude	21,302,658		1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	66,024,573,799
081350	Mixtures of edible nuts, dried and preserved fruits	18,438,645	0.14	131,290	450,661	1,164,425	21,159,957	19,508	18,587	1,429	119	22,927,389
620342	Mens, boys trousers & shorts, of cotton, not knit	16,077,425	0.11	846,478	464,183,892	950,092	24,123,639	14,174,546	1,101,874	529,108	1,349,038	506,156,792
260800	Zinc ores and concentrates	11,522,066		-	88,355,577	-	9,147,568	52	-	-	74,767,916	172,271,112
030420	Fish fillets, frozen	11,077,646	1.05	5,541,003	58,639,621	1,596,462	4,915,196	278,537	21,716	109,399	337,819	71,418,036
260300	Copper ores and concentrates	8,689,172	0.10	-	18,138,533	-	2,966,852	9,632	-	-	19,848,850	40,963,867
410429	Bovine and equine leather, tanned or retanned, nes	5,877,861		447,622	2,635,634	2,372,091	115,453	320,979	-	-	-	5,891,778
110100	Wheat or meslin flour	5,566,643	0.98	330,287,933	68,338,053	17,087,823	1,313,117	31,741,774	92,745,581	23,091,244	279,518,991	751,378,934
760511	Wire, aluminium, not alloyed, t > 7mm	5,198,640	1.58	34,131	24,400,601	900,284	6,890,706	187,170	-	210,228	9,872,732	42,495,850
520512	Cotton yarn >85% single uncombed 714-232 dtex,not ret	5,158,326	0.13	-	329,165,047	4,644,908	671,993	355,632	-	857	52,554	334,890,990
841199	Parts of gas turbine engines except turbo-jet/prop	3,504,357	(1.00)	3,108,432	78,018,240	94,951,558	30,144,322	6,459	191,124	10,694,673	12,999,008	229,922,692
080232	Walnuts, fresh or dried, shelled	3,111,674	0.25	30,546	44,333,791	1,643	3,032,848	-	7,515	12,390	336	47,411,553
390120	Polyethylene - specific gravity >0.94 in primary form	2,807,507	0.19	2,001,115	201,234,337	199,915,390	176,164,155	1,426,341	2,000,239	1,748,779	5,717,999	588,208,114
740400	Copper/copper alloy waste or scrap	2,792,973		100,701	37,944,824	4,180,705	1,527,784	833,227	319	-	3,547	44,590,787
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	2,639,459	0.10	482,133	42,554,215	318,370	282,245	14,007	5,963,048	590,138	5,704,656	49,945,764
081320	Prunes, dried	2,540,927	0.20	56,780	630,989	84,745	3,672,192	3,950	1,229	4,965	4	4,453,625
	SUB-TOTAL	**922,783,482**		**2,329,851,163**	**65,519,226,475**	**10,570,532,190**	**1,706,162,444**	**1,010,221,243**	**464,256,423**	**441,148,592**	**1,005,304,726**	**82,582,446,833**

		Tajikistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($1 MILLION < x < $2.5 MILLION)												
081340	Fruits, dried nes	2,486,690	0.27	685,146	17,876,445	4,902,220	6,509,199	3,333	1,806	46,928	5,525	30,028,794
760200	Waste or scrap, aluminium	2,446,822		21,787	7,343,884	44,163,281	1,011,251	80,373	63,617	-	308,019	52,928,596
410121	Bovine hides, whole, fresh or wet-salted	2,166,601	0.48	77,176	1,089,198	5,868,419	9,641	1,560,531	35,981	-	-	8,604,964
520523	Cotton yarn >85% single combed 232-192 dtex,not retai	2,001,002	0.97	110,951	909,785,885	2,924,729	10,572	125,714	-	-	-	912,957,851
900580	Monoculars, telescopes, etc	1,932,375	-	624,279	1,297,218	41,544	870,562	108,127	42,457	148,997	947,223	4,037,950
300490	Medicaments nes, in dosage	1,920,928		68,980,267	6,061,804,282	228,831,001	733,057,931	124,639,081	35,640,189	60,670,714	325,526,259	7,603,509,533
081090	Fruits, fresh nes	1,798,830	0.14	6,701,169	49,537,790	3,433,218	38,457,755	110,716	107,134	956,244	330,712	99,527,603
740200	Unrefined copper, copper anodes, electrolytic refinin	1,768,764		1,999	1,828,898	123,050	19,711	-	-	14,103	3,794	1,991,555
721631	Sections, U, iron or non-alloy steel, nfw hot-roll/drawn/extru	1,568,495		2,798,444	4,616,654	1,179,970	53,538,416	4,041,220	1,421,777	2,834,344	7,319,638	76,328,686
120220	Ground-nuts shelled, not roasted or cooked	1,539,088	0.12	75,224	672,342,310	4,650,416	7,174,164	693	-	94,487	-	684,337,293
080620	Grapes, dried	1,455,195	0.07	95,052	28,552,186	139,549	7,187,931	43,512	113,446	45,047	47,192	36,110,468
710399	Precious & semi-precious stones, nes, worked, not set	1,454,035		2,051	196,054,873	53,080	28,390	70,002	-	-	204,268	196,412,663
710812	Gold in unwrought forms non-monetary	1,446,530	3.53	-	755,238,236	245,810,350	328,470	16,990,471	-	37,188,449	14,595	1,055,570,570
730799	Fittings, pipe or tube, iron or steel, nes	1,337,029		939,938	51,802,300	21,744,243	52,509,190	1,107,239	460,699	11,855,015	7,425,305	147,383,228
100630	Rice, semi-milled or wholly milled	1,244,863	0.92	96,302,507	4,932,723,934	9,323,413	11,561,590	7,114,344	10,737,279	25,023,642	1,491,221	5,083,540,650
850730	Nickel-cadmium electric accumulators	1,182,862	-	367,745	28,963,941	2,632,249	5,118,054	28,439	105,049	818,456	190,851	38,119,735
030371	Sardines,brisling,sprats, frozen, whole	1,161,767	-	21,001	13,067,652	-	2,169,342	31,537	600	11,005	14,362	15,314,899
640320	Footwear, soles/uppers leather, strap instep & big to	1,160,403	3.21	328,685	112,630,399	3,512,000	559,031	46,600	9,331	6,654	43,567	117,126,936
070610	Carrots and turnips, fresh or chilled	1,138,724		66,872	139,684	59,610	12,231,082	13,183	6,553	265,343	126	12,775,900
080610	Grapes, fresh	1,127,020	0.34	226,963	126,246,572	15,259,770	51,238,714	723,589	46,714	25,306	35,664	193,756,576
841950	Heat exchange units, non-domestic, non-electric	1,081,173	-	338,738	111,983,409	10,179,636	50,208,988	1,516,296	314,358	37,242,427	8,751,856	220,221,348
390750	Alkyd resins, in primary forms	1,074,356	0.43	25,709	62,707,191	2,132,191	621,167	79,332	206,092	31,365	3,369,825	68,966,779
520532	Cotton yarn >85% multiple uncomb 714-232 dtex,not ret	1,070,663	(0.04)	135,093	44,250,874	118,360	191,371	19,949	-	-	1,699	44,717,346
010290	Bovine animals, live, except pure-bred breeding	1,043,721	-	8,229,300	7,410	3,013,340	678,727	-	1,525,654	-	755,009	12,683,785
180690	Chocolate/cocoa food preparations nes	1,031,836	1.48	5,701,933	33,260,044	1,413,364	126,470,748	38,672,391	32,447,184	33,620,934	9,621,823	248,761,237
080910	Apricots, fresh	1,024,069	0.77	815	43,605	3,145,645	22,292,787	1,229,773	-	10,623	12,481	26,735,729
760529	Wire, aluminium alloy, t < 7mm	1,002,418	1.84	105,144	5,119,519	557,628	96,466	140,886	953	70,224	5,913	6,095,780
	SUB-TOTAL	**39,666,256**		**192,963,983**	**14,230,314,392**	**615,212,274**	**1,184,151,247**	**198,497,328**	**83,286,869**	**210,980,305**	**366,426,925**	**16,998,546,453**

(Continued)

Table A.17: Exports of Tajikistan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Tajikistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($600,000 < x < $1 MILLION)												
081330	Apples, dried	973,076	0.73	10,948	4,327	24,639	675,725	50	3,639	14,827	11	730,526
130212	Liquorice extract	925,159	0.47	-	153,676	11,425	74,764	1,587	-	-	380	241,832
520524	Cotton yarn >85% single combed 192-125 dtex, not ret.	893,707	2.13	69,206	624,762,492	2,002,891	391,609	-	-	-	-	627,226,198
071333	Kidney beans and white pea beans dried shelled	881,534	0.08	53,051	41,204	47,571,317	2,068,406	5,675	6,423	80,728	1,446	49,821,827
730792	Threaded fittings, iron or steel except stainless/cas	864,578		219,254	11,822,267	968,618	8,272,444	524,696	142,701	4,471,247	618,750	26,897,275
120210	Ground-nuts in shell not roasted or cooked	864,482	0.27	518,620	7,907,111	1,394,102	3,910,168	4,946	4,650	25,392	-	13,760,338
842230	Machinery to fill, close, aerate,etc bottle, containe	863,329	-	8,086,014	78,593,483	56,903,274	30,076,562	5,120,781	800,874	8,353,484	13,939,515	201,073,112
621132	Mens, boys garments nes, of cotton, not knit	850,710	0.33	656,825	61,494,346	11,764	2,200,044	919,495	105,706	708,676	376,701	66,367,851
520522	Cotton yarn >85% single combed 714-232 dtex,not retai	845,573	3.94	32,569	316,211,696	5,963,500	1,531,131	51,647	-	6,054	-	323,796,597
271121	Natural gas in gaseous state	753,242	0.21	-	5,129,862	11,669	360,728,868	67,236,551	-	-	12,458	433,119,408
700319	Cast glass sheet, non-wired, clear	743,492	0.76	3,550	2,388,365	1,319,407	606,259	200,493	1,154,953	293,043	835,491	5,646,607
620640	Womens, girls blouses, shirts, manmade fibre, not kni	696,963		339,304	371,440,231	44,679	9,576,455	92,114	17,104	352,910	34,922	381,880,614
240110	Tobacco, unmanufactured, not stemmed or stripped	680,214	0.57	16,254	85,319,916	80,940	7,000,907	1,547,520	21,845	-	652,256	94,617,793
520544	Cotton yarn >85% multiple combed 192-125 dtex,not ret	662,032	1.18	-	51,935,308	177,210	21,201	-	-	-	-	52,133,719
710391	Rubies, sapphires and emeralds worked but not set	651,724		105,250	235,690,046	166	30,760	-	-	-	-	235,826,221
847330	Parts and accessories of data processing equipment ne	649,820	3.05	7,251,112	146,650,269	11,927,539	39,540,693	3,642,782	959,572	3,431,626	4,743,470	217,187,490
621142	Womens, girls garments nes, of cotton, not knit	635,788	0.57	410,150	172,681,337	1,675	977,359	239,573	55,733	27,635	383,900	174,721,629
843041	Boring or sinking machinery nes, self-propelled	632,096		896,685	130,914,723	1,743,605	81,874,003	6,066,321	1,694,376	15,063,033	14,962,674	251,521,045
080920	Cherries, fresh	620,570	0.74	673,362	29,356	59	15,250,498	1,051,759	16,524	339,689	-	17,344,722
902219	Non-medical X-ray equipment	614,833	-	2,204,910	1,693,047	5,915,695	20,117,890	257,286	315,683	4,750,033	5,844,389	40,783,249
870891	Radiators for motor vehicles	610,885	2.46	1,870,221	38,920,073	2,160,623	15,630,773	1,506,615	435,544	2,239,801	4,082,046	66,410,150
121299	Vegetable products nes for human consumption	610,462	0.97	29,280	1,015,854	58,132	357,789	6,375	183,646	51,143	2,497	1,521,070
080940	Plums, sloes, fresh	607,017	0.79	19,411	140,615	6,660	18,180,436	60,223	616	107,179	11	18,514,534
300439	Hormones nes, except contraceptives, in dosage	605,068	-	883,923	76,442,519	23,933,443	43,459,808	1,047,446	805,459	1,188,447	7,486,031	154,441,617
871610	Trailers for housing or camping	600,237	-	100,744	797,539	851,747	2,846,481	52,536	61,986	147,875	3,979	4,800,900
	SUB-TOTAL	**18,336,589**		**24,450,643**	**2,422,179,660**	**163,084,778**	**665,401,028**	**89,636,470**	**6,787,030**	**41,652,819**	**53,980,924**	**3,460,386,322**

		Tajikistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($400,000 < x < $600,000)												
852721	Radio receivers, external power,sound reproduce/recor	599,121		1,949,042	58,616	234,299	2,431,598	21,140	1,013	129,983	3,801,983	8,626,659
580810	Braids in the piece	593,830	0.52	428,177	2,921,013	762,808	276,462	273,773	276,335	57,839	169,448	4,889,520
390760	Polyethylene terephthalate, in primary forms	572,391	0.50	7,207,873	520,115,717	11,054,047	86,471,217	20,901,057	6,166,783	4,469,444	58,448,307	708,667,661
121190	Plants & parts, pharmacy, perfume, insecticide use ne	552,148	3.35	344,146	175,626,980	6,196,609	1,328,012	60,492	1,968	32,692	557,329	184,146,259
401110	Pneumatic tyres new of rubber for motor cars	550,180	3.67	12,197,059	115,937,514	22,590,878	131,122,680	9,278,398	3,551,552	13,325,723	71,348,687	375,800,938
620462	Womens, girls trousers & shorts, of cotton, not knit	534,733		341,798	301,894,560	322,204	19,259,368	9,656,022	218,321	144,282	428,177	332,046,411
843143	Parts of boring or sinking machinery	533,733		4,909,086	174,591,302	32,587,218	80,607,179	10,891,401	3,156,698	44,958,081	26,516,579	375,060,845
410110	Bovine skins, whole, raw	526,243	0.22	16,945	1,746,147	207,638	10,075	1,079,041	11,860	-	-	3,059,846
842920	Graders and levellers, self-propelled	502,700		4,496,336	3,908,953	1,080,756	28,581,463	3,192,056	1,093,737	10,615,504	3,784,377	55,659,442
200980	Single fruit, veg juice nes, not fermented or spirite	496,697	(0.23)	8,185,445	9,494,896	969,868	7,917,906	1,141,864	399,561	1,374,900	107,273	29,192,151
130190	Natural gum, resin, gum-resin, balsam, not gum arabic	495,713		344,047	121,148,807	2,543,537	305,963	26,092	-	6,853	15,998	124,391,296
970600	Antiques older than one hundred years	491,344		-	2,959,214	36,035,249	28,030	-	19,198	2,485	-	39,024,979
070690	Beetroot,salsify,celeriac,radishes etc. fresh, chille	490,873	0.65	131,025	1,144,027	74,609	14,115,956	4,074	57	3,269	280	15,473,241
847193	Computer data storage units	486,243	1.10	5,041,824	87,866,537	10,142,427	71,559,381	3,423,737	677,224	5,126,259	2,459,545	185,619,709
030490	Fish meat & mince, except liver, roe & fillets, froze	480,765	1.36	69,510	88,521,382	1,182,721	363,258	41,962	234	37,671	69,970	90,286,474
170199	Refined sugar, in solid form, nes, pure sucrose	477,364	0.88	82,817,477	882,247,249	32,147,172	115,936,882	61,348,370	35,238,766	32,592,502	48,818,692	1,255,908,343
854511	Carbon and graphite furnace electrodes	473,470	-	22,771	304,675,751	806,472	23,888,758	204,533	49,626	713,309	8,123,529	338,435,123
550330	Staple fibres of acrylic, modacrylic,not carded/combe	464,562	(0.52)	158,784	14,290,971	34,273,660	79,121	1,138,167	10,882	83,310	66,455	50,090,466
271600	Electrical energy	448,906	0.78	2,197,663	161,506	5,272,532	134,275,338	115,888	-	-	22,896,775	164,919,700
520513	Cotton yarn >85% single uncombed 232-192 dtex,not ret	443,085	0.47	34,890	120,141,834	1,837,749	80,170	127,936	-	1,594	8,035	122,232,208
853190	Parts of electric sound & visual signalling apparatus	436,728		1,333,178	16,530,491	36,036,613	4,196,714	145,005	44,288	2,970,123	508,788	61,720,911
200820	Pineapples, otherwise prepared or preserved	428,571	1.44	32,146	92,237	3,739,849	2,103,791	75,788	28,058	41,176	180,102	6,265,087
847490	Parts for mineral sort, screen, mix, etc machines	422,681		1,143,460	107,881,007	9,326,786	59,394,761	8,646,744	5,895,203	7,523,622	12,313,259	206,229,638
851781	Telephonic apparatus, nes	415,618		5,497,091	108,942,896	127,078,539	42,818,993	1,933,007	206,639	4,908,622	5,961,176	297,140,324
520299	Cotton waste, except garnetted stock	408,247	0.94	737,631	57,230,999	975,936	10,251	6,790	115	1,413	47,000	59,010,019
500200	Raw silk (not thrown)	403,413	0.01	58,167	694,052	1,235,105	-	-	-	-	-	1,987,324
	SUB-TOTAL	**12,729,357**		**139,695,566**	**3,220,824,654**	**378,715,281**	**827,163,324**	**133,733,334**	**57,048,116**	**129,120,653**	**266,631,762**	**5,095,884,572**

Table A.18: Exports of Turkmenistan by Size of Exports (HS 6-digit category and U.S. dollars)

		Turkmenistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**16,528,049,003**		**5,212,019,563**	**203,097,496,406**	**33,655,696,018**	**11,772,080,616**	**2,625,461,402**	**1,793,439,708**	**1,642,840,532**	**3,098,720,917**	**261,254,914,630**
LARGE-SIZE EXPORTS (> $7 MILLION)												
271121	Natural gas in gaseous state	6,015,656,543	0.56	-	5,129,862	11,669	360,728,868	67,236,551	-	-	12,458	433,119,408
271000	Oils petroleum, bituminous, distillates, except crude	1,043,765,221	0.25	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	66,261,967,609
710813	Gold, semi-manufactured forms, non-monetary	263,017,586	-	-	5,919,464	787	285,648	132,159	-	52,620	-	6,338,057
520100	Cotton, not carded or combed	219,232,504	0.43	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,352,535,371
520512	Cotton yarn >85% single uncombed 714-232 dtex,not ret	139,818,958	0.22	-	329,165,047	4,644,908	671,993	355,632	-	857	52,554	334,890,133
270900	Petroleum oils, oils from bituminous minerals, crude	107,981,745	0.24	22,156,647	8,742,703	5,314,340,632	2,220,511,507	3,507,613	106,694,120	664	304,245,137	7,980,198,358
390210	Polypropylene in primary forms	103,826,206	0.15	309,500	1,094,757,714	378,006,858	18,277,878	3,291,944	307,688	1,055,027	40,068,231	1,535,019,814
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	35,371,333	0.92	482,133	42,554,215	318,370	282,245	14,007	5,963,048	590,138	5,704,656	55,318,674
999999	Commodities not specified according to kind	22,102,704		653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	7,520,833,494
520942	Denim cotton >85% >200g/m2	20,874,783	0.08	-	218,393,949	6,744,803	1,721,653	1,462	97,552	203,707	89,742	227,049,161
630260	Toilet or kitchen linen, of cotton terry towelling	19,363,073		101,888	666,583,209	299,353	7,373,623	4,231,901	59,039,618	4,474,423	3,970,043	741,599,634
271600	Electrical energy	18,369,922	2.47	2,197,663	161,506	5,272,532	134,275,338	115,888	-	-	22,896,775	164,919,700
280120	Iodine	17,257,139	0.19	40	5,644,160	2,680,688	290,344	23,146	6,036	17,166	254,041	8,898,455
230610	Cotton seed oil-cake and other solid residues	15,036,161	(0.02)	116,416	7,579,825	149,874	-	29,766	47,100	-	-	7,922,980
630231	Bed linen, of cotton, nes	15,035,525	0.13	123,818	244,035,500	78,883	4,991,296	222,853	2,539,098	179,944	182,169	252,173,616
140420	Cotton linters	13,600,847	0.50	567	38,919,271	-	30,955	116,833	-	-	-	39,067,625
520511	Cotton yarn >85% single uncombed >714 dtex,not retail	13,504,960	0.23	161	232,075,655	6,183,567	96,994	173,263	-	11,169	8	238,529,647
250310	Sulphur, crude or unrefined	13,154,555		23,745	47,161,313	15,237,808	243,439	107,347	29,695	2,546	148,595	62,951,942
620462	Womens, girls trousers & shorts, of cotton, not knit	12,726,777	0.17	341,798	301,894,560	322,204	19,259,368	9,656,022	218,321	144,282	428,177	332,120,449
620342	Mens, boys trousers & shorts, of cotton, not knit	8,029,740	0.22	846,478	464,183,892	950,092	24,123,639	14,174,546	1,101,874	529,108	1,349,038	506,729,558
271312	Petroleum coke, calcined	8,014,755	2.07	-	135,167,460	232,756	3,378,801	-	7,647,371	16,231	-	146,426,387
630221	Bed linen, of cotton, printed, not knit	7,319,740	0.07	47,226	76,058,821	27,868	5,477,674	209,322	15,470,135	320,827	607,199	97,898,245
520513	Cotton yarn >85% single uncombed 232-192 dtex,not ret	7,186,296	0.26	34,890	120,141,834	1,837,749	80,170	127,936	-	1,594	8,035	122,230,614
130212	Liquorice extract	7,090,976	0.44	-	153,676	11,425	74,764	1,587	-	-	380	241,832
	SUB-TOTAL	**8,147,338,046**		**2,010,819,908**	**66,856,866,712**	**15,899,297,135**	**4,107,938,091**	**1,057,988,265**	**560,864,563**	**407,223,105**	**935,206,088**	**91,428,980,762**

		Turkmenistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($1.8 MILLION < x < $7 MILLION)												
121190	Plants & parts, pharmacy, perfume, insecticide use ne	5,923,182	3.13	344,146	175,626,980	6,196,609	1,328,012	60,492	1,968	32,692	557,329	184,115,535
760110	Aluminium unwrought, not alloyed	5,232,900	0.20	26,533	650,959,537	32,297,572	2,515,198	125,515	2,246	210	28,307,208	714,233,808
100190	Wheat except durum wheat, and meslin	5,224,909		28,139,464	437,382,335	5,756,427	1,877,949	76,439,065	122,514,224	512,908	86,051,618	758,161,081
271311	Petroleum coke, not calcined	4,727,276	(0.42)	-	53,221,000	9,808,322	875,564	-	5,284,432	-	-	69,189,318
271112	Propane, liquefied	4,545,608		31,267,579	1,346,743	114,987	8,409,324	2,635,000	78,591,054	141,762	-	122,364,686
520919	Woven cotton nes, >85% >200g/m2, unbleached, nes	4,234,809	0.36	12,140	11,724,863	599,909	102,681	15,004	-	19,454	-	12,454,597
610910	T-shirts, singlets and other vests, of cotton, knit	4,167,616	(0.18)	2,809,929	1,693,212,457	2,315,021	21,828,818	1,471,693	2,028,664	1,518,205	1,731,441	1,725,398,022
842911	Bulldozers and angledozers, crawler type	4,116,164		4,434,518	6,319,162	3,163,865	44,595,040	5,344,474	2,270,620	15,212,111	13,869,566	79,997,245
580211	Terry towelling etc of cotton, not narrow fabric, unb	3,949,042	2.05	-	89,519	268	25,541	2	73	-	-	115,403
410121	Bovine hides, whole, fresh or wet-salted	3,640,542	1.93	77,176	1,089,198	5,868,419	9,641	1,560,531	35,981	-	-	8,640,944
510121	Degreased shorn wool, not carded, combed or carbonize	3,586,152	0.12	489,284	-	179,667	139,980	270,994	-	-	-	1,079,924
600292	Knit or crochet fabric of cotton, nes	3,461,998	0.30	13,893	133,741,251	108,467	350,386	72,137	617,244	142,907	590,984	135,494,362
520523	Cotton yarn >85% single combed 232-192 dtex,not retai	3,387,418	1.57	110,951	909,785,885	2,924,729	10,572	125,714	-	-	-	912,957,851
520299	Cotton waste, except garnetted stock	2,745,109	0.44	737,631	57,230,999	975,936	10,251	6,790	115	1,413	47,000	59,008,721
310210	Urea, including aqueous solution in packs >10 kg	2,364,619	(0.24)	437,438	9,076,490	411,739,753	5,663,043	4,535,941	1,802,801	4,269,874	1,902	433,257,367
280300	Carbon (carbon blacks and other forms of carbon, nes)	2,169,526	0.27	45,552	225,939,184	9,313,268	1,284,393	23,835	735	7,110	2,324,513	238,931,480
520522	Cotton yarn >85% single combed 714-232 dtex,not retai	2,138,551	0.98	32,569	316,211,696	5,963,500	1,531,131	51,647	-	6,054	-	323,790,543
890600	Warships, lifeboats, hospital ships, vessels nes	2,122,876	1.98	24,757	369,458,425	344,987	33,534,971	6,693	887	4,067,296	66,000	403,436,719
271290	Mineral waxes nes	1,985,098		60,601	8,809,831	3,302,103	191,224	57,104	23,684	33,614	1,822,230	14,266,776
711290	Waste/scrap, precious metals except pure gold/platinu	1,868,229		-	394,364,496	422	101,835	467,659	-	-	22,891	394,957,302
842649	Cranes & lifting frames, self-propelled, not on tyres	1,839,900	(0.36)	541,494	2,745,725	9,725,223	22,493,173	465,815	569,464	8,930,561	4,371,408	40,912,302
	SUB-TOTAL	**73,431,522**		**69,605,653**	**5,458,335,773**	**510,699,454**	**146,878,722**	**93,736,102**	**213,744,190**	**34,896,171**	**139,764,089**	**6,632,763,983**

(Continued)

Table A.18: Exports of Turkmenistan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Turkmenistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($900,000 < x < $1.8 MILLION)												
260700	Lead ores and concentrates	1,494,064	-	-	53,331,187	107,329	84,092,251	665	-	-	-	137,531,432
871610	Trailers for housing or camping	1,404,704	-	100,744	797,539	851,747	2,846,481	52,536	61,986	147,875	3,979	4,715,011
843010	Pile-drivers and pile-extractors	1,367,561	-	122,140	1,188,718	791,506	3,463,371	57,000	50,211	1,511,457	680,203	6,353,148
520210	Cotton yarn waste (including thread waste)	1,354,372	0.66	34,513	21,531,173	249,029	72,207	27,440	-	6,070	-	21,914,363
520819	Woven cotton nes, >85% <200g/m2, unbleached	1,282,522		324,069	10,055,404	6,514,678	403,253	56,798	1,049,218	129,420	181,569	18,584,988
870423	Diesel powered trucks weighing > 20 tonnes	1,236,643	3.57	47,298,973	46,635,603	15,314,213	194,775,403	41,073,174	36,134,353	97,583,904	117,797,536	499,029,254
600242	Warp knit fabric of cotton, nes	1,220,136	1.77	6,609	946,387	126,342	191,883	19,610	27,000	-	25,349	1,343,180
890190	Cargo vessels other than tanker or refrigerated	1,212,181	0.31	-	419,907,205	5,155,329	44,311,099	2,036	-	49,727,234	-	469,375,669
520524	Cotton yarn >85% single combed 192-125 dtex, not ret.	1,204,618		69,206	624,762,492	2,002,891	391,609	-	-	-	-	627,226,198
410210	Sheep or lamb skins, raw, wool on, except Persian etc	1,179,423	0.73	38,910	38,696	34,167,616	72,979	259,526	18,164	-	4,800	34,600,690
230640	Rape or colza seed oil-cake and other solid residues	1,132,322	-	1,651	313,546,771	5,501,018	24,785	36,255	110,000	-	-	319,220,479
550953	Yarn of polyester & cotton, not retail, nes	1,103,364	(0.98)	2,330,514	177,388,143	215,700	212,303	-	-	-	953,162	181,099,821
560121	Wadding, products, of cotton, except sanitary article	1,074,868	1.46	19,012	25,912,166	76,937	6,726,210	842,179	85,242	126,858	268,849	33,930,595
271113	Butanes, liquefied	1,071,639	2.97	264,916	82,691	1,930	1,024,734	772,286	1,495,280	4,235	10,156	3,651,993
080610	Grapes, fresh	1,061,548	0.40	226,963	126,246,572	15,259,770	51,238,714	723,589	46,714	25,306	35,664	193,777,984
510220	Coarse animal hair, not carded or combed	1,043,704	0.88	139,819	159,402	-	67,536	20,000	-	-	-	386,757
520515	Cotton yarn >85% single uncombed <125 dtex, not retai	1,037,635	(0.14)	-	1,187,258	711,827	25,499	90,406	-	-	-	2,014,989
880240	Fixed wing aircraft, unladen weight > 15,000 kg	1,000,000	-	3,011,728	782,623,933	10,996,102	389,631,677	17,878,456	526,522	41,423,519	180,171,408	1,384,839,826
070200	Tomatoes, fresh or chilled	963,028		8,038,656	58,534,805	108,171,862	38,401,362	232,038	11,684	138,933	4,000	213,394,406
851531	Automatic electric plasma, other arc welding equipmen	934,317	-	231,078	2,340,103	523,356	6,331,328	26,529	33,075	2,704,730	4,340,422	13,825,890
	SUB-TOTAL	**23,378,646**		**62,259,499**	**2,667,216,244**	**206,739,182**	**824,304,682**	**62,170,521**	**39,649,448**	**193,529,539**	**304,477,097**	**4,166,816,674**

		Turkmenistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($500,000 < x < $900,000)												
410110	Bovine skins, whole, raw	887,440		16,945	1,746,147	207,638	10,075	1,079,041	11,860	-	-	3,071,706
180690	Chocolate/cocoa food preparations nes	877,325	0.07	5,701,933	33,260,044	1,413,364	126,470,748	38,672,391	32,447,184	33,620,934	9,621,823	247,587,486
850423	Liquid dielectric transformers > 10,000 KVA	849,915	(0.10)	2,926,690	164,524,834	21,647,261	76,656,272	16,812,484	6,412,731	15,394,927	7,103,752	296,084,023
846229	Machine tools to bend, fold, shear or press metal, ne	842,999	2.14	1,246,049	9,665,359	1,278,260	8,359,991	294,650	123,060	869,527	1,366,865	22,334,234
842952	Shovels and excavators with revolving superstructure	839,100	(0.30)	2,515,621	45,058,509	432,197	151,355,913	22,962,036	14,928,182	23,382,358	91,962,056	329,214,513
500200	Raw silk (not thrown)	837,365	0.58	58,167	694,052	1,235,105	-	-	-	-	-	1,987,324
580219	Terry towelling etc of cotton nes, width > 30cm	831,213	0.60	9,321	2,664,770	271,535	782,195	373,161	-	4,080	290	4,101,270
151919	Industrial monocarboxylic fatty acids, nes, acid oils	803,750	-	54,521	65,310,734	20,167,068	1,202,725	245,044	1,893	4,021	110,926	87,092,911
410429	Bovine and equine leather, tanned or retanned, nes	796,365	0.35	447,622	2,635,634	2,372,091	115,453	320,979	-	-	-	5,891,778
520521	Cotton yarn >85% single combed >714dtex, not retail	779,988		-	165,536,602	866,902	9,208	115,535	-	-	-	166,528,247
870590	Special purpose motor vehicles nes	778,153	2.23	442,325,857	22,778,009	55,317,289	90,903,767	6,993,380	7,829,930	49,544,032	15,370,371	641,518,602
620292	Womens, girls anoraks etc of cotton, not knit	778,113		73,377	1,062,219	7,099	1,664,141	280,393	658,585	192,720	333,193	4,079,005
151221	Cotton-seed oil crude	734,522	2.53	90,050	-	-	4,258	4,730,269	2,346,536	33,994	10,009,110	17,180,222
870510	Mobile cranes	722,169	3.72	3,718,893	1,910,145	3,139,490	75,601,750	3,150,026	2,770,135	32,385,454	10,593,410	100,883,848
970600	Antiques older than one hundred years	692,176	1.83	-	2,959,214	36,035,249	28,030	-	19,198	2,485	-	39,041,692
860610	Railway tank cars	683,573	-	198,250	5,742,438	27,140,460	217,411,486	3,864	215,292	16,240,000	2,710,861	253,422,651
151800	Processed animal, vegetable oils, industrial preps ne	635,510	0.02	21,230	14,045,935	1,862,850	164,226	11,988	77,998	180,486	130,067	16,314,294
520525	Cotton yarn >85% single combed <125 dtex, not retail	590,687	0.18	-	145,475,527	23,901,514	14,783	69,000	-	-	6,719	169,467,543
151920	Acid oils from refining	579,186	0.13	1,830	149,813,973	865,887	1,048	-	310	52,248	132,088	150,815,136
151229	Cotton-seed or fractions simply refined	570,348	-	-	142,411	1,863	131,821	321,026	551,322	-	996,899	2,145,341
520852	Plain weave cotton, >85% 100-200g/m2, printed	554,002	3.59	907,322	167,841,673	1,799,287	1,481,579	42,158	54,018	-	42,697	172,168,734
152200	Degras, residues from treatment animal & veg waxes	551,497	1.42	129,612	872,276	9,090,627	71,197	41,313	29,323	-	163,456	10,397,804
902610	Equipment to measure or check liquid flow or level	539,765	3.94	1,444,039	38,762,826	1,189,623	36,796,002	1,058,592	363,280	6,481,177	3,537,747	83,152,110
843390	Parts of agricultural machinery	536,850	(0.38)	123,865	9,283,677	338,734	10,661,012	367,099	98,939	6,405,226	9,695,469	30,568,794
520911	Plain weave cotton, >85% >200g/m2, unbleached	535,165	(0.02)	18,164	39,461,878	18,273	265,054	16,430	-	81,588	60,000	39,839,797
621142	Womens, girls garments nes, of cotton, not knit	531,897		410,150	172,681,337	1,675	977,359	239,573	55,733	27,635	383,900	174,749,726
710239	Diamonds (jewellery) worked but not mounted or set	511,113	2.70	4,970	25,186,606,090	332,773	48,267	141,183	-	-	-	25,187,133,283
901420	Instruments nes for aeronautical/space navigation	504,080	3.43	826,175	1,095,865	93,740	2,576,645	93,642	117,298	448,605	3,848,871	8,652,236
610462	Womens, girls trousers & shorts, of cotton, knit	502,025	(0.28)	54,073	114,697,296	84,387	3,153,807	400,558	13,348,849	419,955	1,732,616	133,471,587
	SUB-TOTAL	**19,876,289**		**463,324,722**	**26,566,329,473**	**211,112,238**	**806,918,813**	**98,835,812**	**82,461,654**	**185,771,452**	**169,913,185**	**28,398,895,896**

Table A.19: Exports of Uzbekistan by Size of Exports (HS 6-digit category and U.S. dollars)

		Uzbekistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
	TOTAL	**11,666,155,833**		**5,041,328,637**	**185,184,451,094**	**25,153,848,769**	**8,330,604,564**	**2,872,285,118**	**1,475,298,562**	**1,750,451,244**	**2,055,278,038**	**231,863,546,026**
LARGE-SIZE EXPORTS (> $40 MILLION)												
520100	Cotton, not carded or combed	856,954,012	0.04	1,092,369	3,630,615,645	715,678,311	4,011,272	271,057	83,723	23,387	782,996	4,352,558,758
271121	Natural gas in gaseous state	619,983,059	0.72	-	5,129,862	11,669	360,728,868	67,236,551	-	-	12,458	433,119,408
271000	Oils petroleum, bituminous, distillates, except crude	480,135,201	0.54	1,329,822,185	52,772,861,114	9,398,675,314	1,219,891,358	929,421,199	283,335,662	45,941,852	327,960,777	66,307,909,461
740311	Copper cathodes and sections of cathodes unwrought	475,704,738	0.19	25,723	2,821,383,962	71,318,896	252,800	5,402	-	40,422	-	2,893,027,204
284410	Natural uranium, its compounds, mixtures	419,951,836	0.39	-	58,261	4,484	4,111,046	-	-	-	-	4,173,791
870322	Automobiles, spark ignition engine of 1000-1500 cc	295,557,693	0.36	13,005,626	2,617,206,066	319,701,327	75,800,824	13,267,675	2,808,791	1,533,035	2,626,444	3,045,949,787
870321	Automobiles, spark ignition engine of <1000 cc	201,592,243	0.43	4,727,462	1,388,258,732	253,384,507	16,145,083	7,568,128	1,182,949	504,681	818,221	1,672,589,763
710812	Gold in unwrought forms non-monetary	171,040,538	0.33	-	755,238,236	245,810,350	328,470	16,990,471	-	37,188,449	14,595	1,055,570,570
520512	Cotton yarn >85% single uncombed 714-232 dtex,not ret	158,836,714	0.17	-	329,165,047	4,644,908	671,993	355,632	-	857	52,554	334,890,990
870323	Automobiles, spark ignition engine of 1500-3000 cc	138,566,425		24,986,746	295,521,213	144,565,162	727,227,158	148,278,139	53,482,867	40,751,518	159,712,719	1,594,525,522
790112	Zinc, not alloyed, unwrought, <99% pure	106,162,667	0.41	1,369,862	23,909,249	9,872,595	76,403	55	-	4,922	47,633	35,280,717
999999	Commodities not specified according to kind	102,795,206	0.18	653,122,385	6,408,966,321	47,590,683	81,859,269	24,566,233	78,283,525	353,657,564	226,445,078	7,874,491,059
080610	Grapes, fresh	92,452,819	0.27	226,963	126,246,572	15,259,770	51,238,714	723,589	46,714	25,306	35,664	193,803,290
610910	T-shirts, singlets and other vests, of cotton, knit	78,258,347	0.45	2,809,929	1,693,212,457	2,315,021	21,828,818	1,471,693	2,028,664	1,518,205	1,731,441	1,726,916,227
740819	Wire of refined copper < 6mm wide	75,143,508		500,811	41,455,962	1,588,221	914,813	230,884	60,661	103,596	183,033	45,037,981
310230	Ammonium nitrate, including solution, in pack >10 kg	67,730,640	0.52	224,300	6,774,124	2,771,585	63,173,309	38,896,165	1,297,223	1,864,431	2,540,799	117,541,935
310210	Urea, including aqueous solution in packs >10 kg	61,180,884	0.39	437,438	9,076,490	411,739,753	5,663,043	4,535,941	1,802,801	4,269,874	1,902	437,527,241
520513	Cotton yarn >85% single uncombed 232-192 dtex,not ret	60,236,755	0.16	34,890	120,141,834	1,837,749	80,170	127,936	-	1,594	8,035	122,232,208
740811	Wire of refined copper > 6mm wide	57,608,909	0.56	267,000	162,692,679	654,379	1,293,128	21,319	260,134	116,048	147,070	165,451,757
081090	Fruits, fresh nes	55,075,075	0.41	6,701,169	49,537,790	3,433,218	38,457,755	110,716	107,134	956,244	330,712	99,634,737
854459	Electric conductors, 80-1,000 volts, no connectors	50,128,234	0.41	34,825,635	46,133,555	39,092,316	185,171,933	10,536,497	7,934,122	104,179,147	12,555,287	440,428,493
070200	Tomatoes, fresh or chilled	43,885,392	0.26	8,038,656	58,534,805	108,171,862	38,401,362	232,038	11,684	138,933	4,000	213,533,339
520514	Cotton yarn >85% single uncombed 192-125 dtex,not ret	43,766,515	0.97	199,105	213,493,501	233,018	44,015	27,638	-	-	-	213,997,277
080710	Melons (including watermelons), fresh	41,380,165	0.22	2,051,928	4,715,439	1,606,684	15,103,900	16,945	-	80,013	8,222	23,583,130
	SUB-TOTAL	**4,754,127,572**		**2,084,470,180**	**73,580,328,913**	**11,799,961,781**	**2,912,475,501**	**1,264,891,900**	**432,726,653**	**592,900,074**	**736,019,640**	**93,403,774,643**

		Uzbekistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
MEDIUM-SIZE EXPORTS ($15 MILLION < x < $40 MILLION)												
080910	Apricots, fresh	36,833,111	0.61	815	43,605	3,145,645	22,292,787	1,229,773	-	10,623	12,481	26,735,729
390120	Polyethylene - specific gravity >0.94 in primary form	36,435,464	0.58	2,001,115	201,234,337	199,915,390	176,164,155	1,426,341	2,000,239	1,748,779	5,717,999	590,208,353
070990	Vegetables, fresh or chilled nes	31,231,895	0.39	27,193,089	75,761,529	3,221,320	10,636,736	12,016	5,711	51,248	7,580	116,889,229
711290	Waste/scrap, precious metals except pure gold/platinu	30,692,172	0.58	-	394,364,496	422	101,835	467,659	-	-	22,891	394,957,302
080920	Cherries, fresh	29,626,205	3.84	673,362	29,356	59	15,250,498	1,051,759	16,524	339,689	-	17,361,246
080620	Grapes, dried	29,026,636	0.21	95,052	28,552,186	139,549	7,187,931	43,512	113,446	45,047	47,192	36,223,913
080930	Peaches, nectarines, fresh	28,121,088	0.47	212,613	56	534	23,854,166	808,878	5,833	402,426	1,557	25,286,061
310559	Fertilizers with nitrogen and phosphorus nes, <=10kg	26,539,574		4,105,856	103,396	3,237,777	1,369,099	804,170	792,403	36,201	10,865	10,459,767
310420	Potassium chloride, in packs >10 kg	26,475,997		99,816	7,424,977	5,550,100	4,338,202	18,247	288,582	4,746,334	368,551	22,834,808
520523	Cotton yarn >85% single combed 232-192 dtex,not retai	24,214,840	0.01	110,951	909,785,885	2,924,729	10,572	125,714	-	-	-	912,957,851
252329	Portland cement, other than white cement	23,917,824	0.52	282,371,857	132,582,484	1,155,730	113,102,067	3,262,219	24,986,188	33,131,466	1,520,172	592,112,181
843049	Boring or sinking machinery nes, not self-propelled	23,640,759	1.33	227,796	42,934,871	46,276,753	63,361,965	3,749,463	1,829,744	15,062,178	12,394,801	185,837,571
520532	Cotton yarn >85% multiple uncomb 714-232 dtex,not ret	23,460,679	0.12	135,093	44,250,874	118,360	191,371	19,949	-	-	1,699	44,717,346
520522	Cotton yarn >85% single combed 714-232 dtex,not retai	22,548,631	0.20	32,569	316,211,696	5,963,500	1,531,131	51,647	-	6,054	-	323,796,597
080940	Plums, sloes, fresh	19,988,579	0.54	19,411	140,615	6,660	18,180,436	60,223	616	107,179	11	18,515,150
611020	Pullovers, cardigans etc of cotton, knit	19,888,059	0.42	293,824	124,093,843	231,652	19,112,277	8,303,331	311,666	571,293	2,407,780	155,325,665
070490	Edible brassicas nes, fresh or chilled	19,592,983	0.59	539,573	1,542,954	663,571	13,502,630	56,262	9,013	780,510	-	17,094,512
240110	Tobacco, unmanufactured, not stemmed or stripped	19,529,803	0.12	16,254	85,319,916	80,940	7,000,907	1,547,520	21,845	-	652,256	94,639,638
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	19,394,632	0.01	482,133	42,554,215	318,370	282,245	14,007	5,963,048	590,138	5,704,656	55,908,812
520524	Cotton yarn >85% single combed 192-125 dtex, not ret.	19,380,455	0.28	69,206	624,762,492	2,002,891	391,609	-	-	-	-	627,226,198
271290	Mineral waxes nes	18,789,869	0.45	60,601	8,809,831	3,302,103	191,224	57,104	23,684	33,614	1,822,230	14,300,390
711220	Waste/scrap containing platinum as sole precious meta	18,290,737	0.90	-	4,828,597	-	1,353	-	-	-	-	4,829,950
570242	Carpets of manmade yarn, woven pile, made up,nes	17,999,700	1.75	18,015,410	31,462,967	3,716,703	37,105,149	3,366,488	27,556,725	19,061,706	1,784,368	142,069,516
070700	Cucumbers and gherkins, fresh or chilled	17,283,346	0.90	1,735,020	183,497	48,771	19,327,600	119,836	3,136	170,444	463	21,588,765
710691	Silver in unwrought forms	16,860,216	1.53	579	1,646,198	16,807,110	1,849,464	-	-	-	-	20,303,350
283325	Copper sulphates	16,680,145	0.26	103	904,200	1,227,556	1,299,351	199,905	608,690	2,726	4,235	4,246,765
850422	Liquid dielectric transformers 650-10,000KVA	15,564,449	0.60	2,783,524	44,225,531	1,059,207	9,785,628	1,106,208	598,583	6,409,519	3,029,608	68,997,807
070690	Beetroot,salsify,celeriac,radishes etc. fresh, chille	15,216,892	0.37	131,025	1,144,027	74,609	14,115,956	4,074	57	3,269	280	15,473,298
	SUB-TOTAL	**647,224,735**		**341,406,644**	**3,124,898,626**	**301,190,011**	**581,538,341**	**27,906,304**	**65,135,731**	**83,310,440**	**35,511,673**	**4,560,897,770**

(Continued)

Table A.19: Exports of Uzbekistan by Size of Exports (HS 6-digit category and U.S. dollars) – Continued

		Uzbekistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
SMALL-SIZE EXPORTS ($8 MILLION < x < $15 MILLION)												
081350	Mixtures of edible nuts, dried and preserved fruits	14,764,260	0.41	131,290	450,661	1,164,425	21,159,957	19,508	18,587	1,429	119	22,945,976
071331	Urd,mung,black or green gram beans dried shelled	14,392,842	0.55	84,558	1,199,588	707,665	22,360	445	-	-	-	2,014,615
600292	Knit or crochet fabric of cotton, nes	13,982,830	0.16	13,893	133,741,251	108,467	350,386	72,137	617,244	142,907	590,984	135,637,269
310540	Monoammonium phosphate & mix with diammonium, <=10	13,880,338	0.87	-	770,904	16,458,203	99,221	2,798	2,226	57	67,299	17,400,707
390110	Polyethylene - specific gravity <0.94 in primary form	12,665,004	0.54	449,954	46,648,013	221,461,187	32,171,009	3,236,217	684,633	1,243,298	7,116,363	313,010,674
711319	Jewellery and parts of precious metal except silver	12,436,343	1.51	427,594	11,996,505,824	33,929,271	65,067,293	3,094,902	17,155,961	7,362,594	24,218,293	12,147,761,731
284420	Uranium (enriched U235), plutonium compounds, alloys	11,811,462	1.77	-	10,635	-	77,833,638	-	-	-	-	77,844,273
200970	Apple juice not fermented or spirited	11,358,818	0.32	2,381,633	173,578	4,165,396	16,487,526	1,909,668	257,458	929,297	98,800	26,403,356
560300	Nonwovens textiles except felt	11,314,141	0.24	156,530	61,641,159	29,676,739	20,787,116	1,246,152	154,112	3,204,475	5,649,677	122,515,959
520210	Cotton yarn waste (including thread waste)	11,222,040	0.16	34,513	21,531,173	249,029	72,207	27,440	-	6,070	-	21,920,433
410429	Bovine and equine leather, tanned or retanned, nes	10,892,472	1.12	447,622	2,635,634	2,372,091	115,453	320,979	-	-	-	5,891,778
121190	Plants & parts, pharmacy, perfume, insecticide use ne	10,883,696	3.98	344,146	175,626,980	6,196,609	1,328,012	60,492	1,968	32,692	557,329	184,148,227
610831	Womens, girls nightdress or pyjamas, of cotton, knit	10,655,448	2.74	45,299	207,440,327	9,052	3,153,468	428,061	28,995	37,356	118,116	211,260,674
140420	Cotton linters	10,489,209	(0.04)	567	38,919,271	-	30,955	116,833	-	-	-	39,067,625
100110	Durum wheat	10,434,968		11,368,708	251,463,802	58,520,622	175,547	350,430	1,376,810	146,363	565,187	323,967,468
270112	Bituminous coal, not agglomerated	10,369,961	-	5,812	817,698	1,264,143	265,889	1,169,146	151,249	13,519	3,780	3,691,236
100190	Wheat except durum wheat, and meslin	10,288,359	0.81	28,139,464	437,382,335	5,756,427	1,877,949	76,439,065	122,514,224	512,908	86,051,618	758,673,989
520912	Twill weave cotton, >85% >200g/m2, unbleached	9,835,973	0.02	-	19,028,245	90,056	207,029	101,636	-	-	-	19,426,965
080232	Walnuts, fresh or dried, shelled	9,668,715	0.21	30,546	44,333,791	1,643	3,032,848	-	7,515	12,390	336	47,419,068
611120	Babies garments, accessories of cotton, knit	9,527,293	1.76	753,903	446,189,598	774,640	3,905,306	784,915	200,454	70,327	423,404	453,102,547
840734	Engines, spark-ignition reciprocating, over 1000 cc	8,873,825		8,807,480	50,274,513	1,042,722	25,823,402	1,159,834	107,099	889,703	110,204,766	198,309,520
252210	Quicklime	8,707,718	1.78	22,504	1,448,504	2,596	8,866,615	1,746,406	41,492	17,433	6,562	12,152,111
701090	Glass containers nes for packing or conveyance goods	8,513,764	0.42	141,418	140,473,292	7,671,315	131,569,963	10,877,646	921,992	6,655,704	4,847,388	303,158,718
560121	Wadding, products, of cotton, except sanitary article	8,341,208	0.10	19,012	25,912,166	76,937	6,726,210	842,179	85,242	126,858	268,849	34,057,453
470610	Cotton linters pulp	8,167,265	0.45	-	432,286	-	77,098	-	-	-	-	509,384
	SUB-TOTAL	**273,477,951**		**53,806,445**	**14,105,051,227**	**391,699,235**	**421,206,454**	**104,006,886**	**144,327,260**	**21,405,379**	**240,788,869**	**15,482,291,754**

		Uzbekistan Exports		Imports of Central and South Asia								
	Commodity Description	AVG 2010-13	2004-13%	Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	TOTAL
EMERGING EXPORTS ($5 MILLION < x < $8 MILLION)												
760421	Profiles, hollow, aluminium, alloyed	7,951,549	1.70	967,723	4,801,386	121,792	9,251,700	1,734,771	3,381,275	8,884,104	722,456	29,865,207
271312	Petroleum coke, calcined	7,893,918	1.01	-	135,167,460	232,756	3,378,801	-	7,647,371	16,231	-	146,442,618
610711	Mens, boys underpants or briefs, of cotton, knit	7,851,289	1.10	292,325	166,110,532	99,572	2,908,412	269,031	206,763	300,264	100,379	170,287,278
680911	Plaster board etc not ornamental, paper reinforced	7,599,864	2.85	522,471	138,169	368,424	12,243,516	6,854,263	5,532,059	2,234,935	320,751	28,214,587
081340	Fruits, dried nes	7,507,299	0.62	685,146	17,876,445	4,902,220	6,509,199	3,333	1,806	46,928	5,525	30,030,600
293890	Glycosides and salts, ethers, esters, derivs nes, bul	7,493,620	1.59	55,901	13,505,008	1,089,248	17,595	410	-	717	30,780	14,699,658
500200	Raw silk (not thrown)	7,424,349	0.21	58,167	694,052	1,235,105	-	-	-	-	-	1,987,324
610342	Mens, boys trousers & shorts, of cotton, knit	7,255,314	0.88	125,947	74,473,885	142,156	3,769,830	595,080	26,797,802	352,098	1,362,079	107,618,877
120220	Ground-nuts shelled, not roasted or cooked	6,930,982	0.12	75,224	672,342,310	4,650,416	7,174,164	693	-	94,487	-	684,337,293
810299	Molybdenum, articles thereof nes	6,832,129		-	392,681	1,309	56,062	1,385	-	-	-	451,436
081310	Apricots, dried	6,817,394	0.18	3,999	28,779	38,636	13,935,683	4,962	31,315	363,682	1,700	14,408,754
960310	Brooms/brushes of vegetable material	6,524,378	0.25	32,900	2,310,650	311,579	3,265,123	112,327	865	8,460	2,665	6,044,568
070610	Carrots and turnips, fresh or chilled	6,413,336	2.58	66,872	139,684	59,610	12,231,082	13,183	6,553	265,343	126	12,782,453
071333	Kidney beans and white pea beans dried shelled	6,346,795	0.38	53,051	41,204	47,571,317	2,068,406	5,675	6,423	80,728	1,446	49,828,249
070960	Peppers (Capsicum, Pimenta) fresh or chilled	6,255,899	0.20	517,148	19,581,417	4,010,983	10,753,861	245,003	774	133,921	693	35,243,800
610462	Womens, girls trousers & shorts, of cotton, knit	6,100,985	0.22	54,073	114,697,296	84,387	3,153,807	400,558	13,348,849	419,955	1,732,616	133,891,542
600191	Pile knit or crochet fabric, of cotton, nes	6,091,237	2.40	11,814	9,745,593	654,603	32,293	95,691	-	471	30,070	10,570,535
810291	Molybdenum, unwrought, bars/rods simply sintered,scra	5,824,476	1.88	-	143,364	54,258	2,341,965	2,318	-	-	-	2,541,906
870870	Wheels including parts/accessories for motor vehicles	5,806,683	0.05	5,713,345	81,986,454	2,418,281	33,723,892	3,021,954	782,171	2,764,595	5,357,490	135,768,180
721420	Bar/rod, iron or non-alloy steel, indented or twisted, nes	5,707,472	0.29	30,219,776	9,513,235	6,170,729	105,391,248	24,477,682	24,566,350	160,791,455	3,342,673	364,473,146
611592	Hosiery nes, of cotton, knit	5,632,729	0.45	1,031,646	9,175,411	1,077,988	16,065,626	641,527	12,921,690	701,212	349,212	41,964,312
600230	Knit or crochet fabric, width > 30 cm, >5% elastomer	5,569,578	0.94	381,347	11,025,999	1,928,949	199,348	833,494	166,304	56,716	1,694,882	16,287,039
090420	Capsicum or Pimenta, dried, crushed or ground	5,413,052	0.21	96,498	431,351,629	6,825,555	898,366	21,765	2,571	93,077	15,410	439,304,870
071190	Vegetables nes and mixtures provisionally preserved	5,003,335		15,681	6,704,141	23,484	712,008	2,366	58,699	353	247,886	7,764,616
	SUB-TOTAL	**158,247,659**		**40,981,051**	**1,781,946,781**	**84,073,358**	**250,081,985**	**39,337,469**	**95,459,638**	**177,609,729**	**15,318,838**	**2,484,808,847**

Table A.20: Afghanistan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable		74,749,400.9	327,422,844.6	45,738,802.7	81,090.0	5,682,546.5	238,529.5	7,691,252.5	461,604,466.7
3.0	Fats and oils		25,424.0	160,500,280.3	809,337.5	1.0	1.0	1.0	1.0	161,335,045.8
4.0	Prepared foods		8,153,361.5	144,357,054.0	3,069,702.2	118,380.5	1,557,303.0	890,134.5	751,936.5	158,897,872.2
5.0	Mineral products		944,174.5	311,472,142.9	51,050,022.9	13,776,010.0	4,679,651.5	223,675,465.5	679,632,038.0	1,285,229,505.3
6.0	Chemical products		45,860,174.6	66,036,880.5	1,418,838.8	164,402.3	46,275.0	64,831.0	108,977.0	113,700,379.3
7.0	Plastics and rubber		15,567,979.1	57,557,507.1	3,278,917.6	38,033.0	123,453.5	2,592.0	16,545.5	76,585,027.8
8.0	Leather & its products		625,244.0	3,522,783.1	1,997.5	316,304.3	1.0	1.0	1.0	4,466,331.9
9.0	Wood & its products		184,029.9	36,607,682.8	691,115.3	37,681.5	1.0	1.0	1.0	37,520,512.5
10.0	Pulp and paper		1,794,232.8	4,905,936.3	1,834,923.5	12,718.0	3,945.0	1.0	1.0	8,551,757.6
11.0	Textiles		119,476,623.3	20,097,800.3	63,628.5	861,198.0	1,447,125.5	97,728.0	1.0	142,044,104.5
12.0	Footwear		1,127,393.2	2,253,347.3	17.0	45.0	2,299,771.0	196.0	476,916.0	6,157,685.5
13.0	Cement & similar prod.		1,468,743.6	9,445,468.2	128,141.5	120,109.0	559,524.0	1.0	1.0	11,721,988.3
14.0	Semi-precious stones		29,794,472.3	246,023.0	148.0	1.0	1.0	1.0	1.0	30,040,647.3
15.0	Base metals		14,722,960.8	198,960,482.0	8,410,120.1	501,513.0	2,123,811.5	3,772.0	1,928,941.0	226,651,600.3
16.0	Machinery & equip.		33,572,157.1	31,959,536.9	2,728,930.6	546,157.7	70,617.5	28,838.0	199,614.0	69,105,851.8
17.0	Transport equipment		6,865,074.9	2,798,080.2	2,297,785.3	1,338,600.0	1,660.0	1.0	1.0	13,301,202.4
18.0	Measuring instruments		2,821,202.2	256,403.8	259,721.9	87,380.5	318,122.0	2,111.0	381,020.5	4,125,961.9
19.0	Arms & ammunition		1.0	1.0	1.0	1.0	1.0	1.0	1.0	7.0
20.0	Misc manufactures		816,427.4	5,323,582.7	50,377.8	331,044.5	1.0	1.0	1.0	6,521,435.4
21.0	Work of Art		37,169.7	1.0	1.0	1.0	1.0	1.0	1.0	37,175.7
TOTAL			**358,606,246.6**	**1,383,723,837.8**	**121,832,530.8**	**18,330,671.3**	**18,913,813.0**	**225,004,207.5**	**691,187,252.0**	**2,817,598,559.0**

Table A.21: India's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	74,749,401		207,119,531	45,927,539	2,170,417	7,576,509	4,469,100	9,765,809	351,778,305
3	Fats and oils	25,424		2,940,648	214,515	11,444	1	1	1	3,192,034
4	Prepared foods	8,153,362		226,946,815	2,198,415	1,579,983	271,328	171,957	269,755	239,591,614
5	Mineral products	944,175		48,844,919	41,703,205	96,868	220,203	94,387	1,347,122	93,250,879
6	Chemical products	45,860,175		331,196,753	30,216,637	14,203,330	9,846,844	3,339,547	27,598,039	462,261,325
7	Plastics and rubber	15,567,979		43,100,855	5,527,526	194,380	30,902	1,235,562	2,946,307	68,603,511
8	Leather & its products	625,244		12,735,651	1,851,513	319,182	288,770	15,875	586,052	16,422,286
9	Wood & its products	184,030		293,936	259,442	11,752	9,848	154,896	64,896	978,799
10	Pulp and paper	1,794,233		3,180,361	633,196	45,444	89,549	74,325	231,528	6,048,635
11	Textiles	119,476,623		325,269,130	14,315,005	2,114,897	8,425,404	2,136,917	7,095,236	478,833,211
12	Footwear	1,127,393		336,389	2,034,035	34,170	30,067	58,522	399,034	4,019,610
13	Cement & similar prod.	1,468,744		6,422,826	6,217,641	165,884	393,289	1,409,179	423,176	16,500,739
14	Semi-precious stones	29,794,472		42,488,654	5,446,400	307,781	389	1	1	78,037,698
15	Base metals	14,722,961		76,849,283	44,740,104	700,441	434,778	2,894,971	4,032,413	144,374,951
16	Machinery & equip.	33,572,157		32,712,043	28,664,585	4,888,953	2,996,265	10,216,047	13,000,240	126,050,290
17	Transport equipment	6,865,075		18,101,523	2,461,206	281,757	166,710	81,049	17,587,099	45,544,419
18	Measuring instruments	2,821,202		3,254,237	2,709,576	209,207	229,163	460,720	4,202,223	13,886,328
19	Arms & ammunition	1		1	1	1	1	1	1	7
20	Misc manufactures	816,427		3,612,959	1,675,367	162,985	36,081	211,095	410,898	6,925,812
21	Work of Art	37,170		19,133	9,195	1	1	1	1	65,501
TOTAL		**358,606,247**		**1,385,425,646**	**236,805,102**	**27,498,876**	**31,046,101**	**27,024,151**	**89,959,828**	**2,156,365,951**

Table A.22: Pakistan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	327,422,845	207,119,531		5,697,346	283,128	902,476	423,336	430,468	542,279,130
3	Fats and oils	160,500,280	2,940,648		151	14,002	1	1	1	163,455,084
4	Prepared foods	144,357,054	226,946,815		291,852	91,233	887,627	15,972	19,709	372,610,261
5	Mineral products	311,472,143	48,844,919		289	69,219	811,683	37,981	400,751	361,636,984
6	Chemical products	66,036,881	331,196,753		5,608,778	1,912,099	594,964	1,098,700	1,951,253	408,399,426
7	Plastics and rubber	57,557,507	43,100,855		33,372	14,093	18,787	5,586	169,292	100,899,492
8	Leather & its products	3,522,783	12,735,651		118,309	29,905	1,716	104,134	107,150	16,619,646
9	Wood & its products	36,607,683	293,936		3,338	9,144	1	953	277	36,915,332
10	Pulp and paper	4,905,936	3,180,361		13,167	25,661	6,381	7,410	63,354	8,202,269
11	Textiles	20,097,800	325,269,130		1,270,437	244,505	661,212	3,772,062	7,175,713	358,490,861
12	Footwear	2,253,347	336,389		181,643	9,467	23,264	559	10,794	2,815,462
13	Cement & similar prod.	9,445,468	6,422,826		42,379	82,206	1	10,763	1	16,003,644
14	Semi-precious stones	246,023	42,488,654		1,801	111	1	1	1	42,736,592
15	Base metals	198,960,482	76,849,283		10,258,414	39,031	93,160	19,762	840,284	287,060,415
16	Machinery & equip.	31,959,537	32,712,043		474,404	176,154	58,973	142,903	168,420	65,692,433
17	Transport equipment	2,798,080	18,101,523		20,171	24,203	948	15,495	1	20,960,422
18	Measuring instruments	256,404	3,254,237		381,065	8,488	9,235	1,444	288,378	4,199,251
19	Arms & ammunition	1	1		1	1	1,588	1	1	1,594
20	Misc manufactures	5,323,583	3,612,959		148,792	68,033	9,778	120,789	22,473	9,306,406
21	Work of Art	1	19,133		12	1	1	1	1	19,149
TOTAL		**1,383,723,838**	**1,385,425,646**		**24,545,719**	**3,100,683**	**4,081,795**	**5,777,851**	**11,648,320**	**2,818,303,852**

Table A.23: Kazakhstan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	45,738,803	45,927,539	5,697,346		45,296,750	140,260,187	13,178,500	212,983,626	509,082,750
3	Fats and oils	809,338	214,515	151		12,353,603	2,787,465	52,262	12,781,943	28,999,276
4	Prepared foods	3,069,702	2,198,415	291,852		22,513,581	13,680,418	21,258,679	34,187,462	97,200,109
5	Mineral products	51,050,023	41,703,205	289		84,859,190	28,391,672	167,770,450	156,124,910	529,899,739
6	Chemical products	1,418,839	30,216,637	5,608,778		24,135,840	9,708,698	2,883,437	21,583,603	95,555,832
7	Plastics and rubber	3,278,918	5,527,526	33,372		8,419,054	1,150,396	2,795,755	8,715,105	29,920,125
8	Leather & its products	1,998	1,851,513	118,309		2,348,533	8,047	9,668	256,051	4,594,117
9	Wood & its products	691,115	259,442	3,338		525,710	19,019	154,334	1,015,371	2,668,329
10	Pulp and paper	1,834,924	633,196	13,167		8,529,433	8,259,048	65,966	3,349,656	22,685,390
11	Textiles	63,629	14,315,005	1,270,437		29,107,212	5,121,959	606,333	15,689,214	66,173,789
12	Footwear	17	2,034,035	181,643		1,066,563	95,643	46,407	1,381,589	4,805,896
13	Cement & similar prod.	128,142	6,217,641	42,379		18,659,551	5,972,997	537,818	12,146,342	43,704,869
14	Semi-precious stones	148	5,446,400	1,801		2,389,400	56	3,545	1	7,841,350
15	Base metals	8,410,120	44,740,104	10,258,414		28,821,070	5,986,599	11,642,154	97,210,806	207,069,267
16	Machinery & equip.	2,728,931	28,664,585	474,404		15,683,276	6,293,043	16,701,094	23,466,520	94,011,853
17	Transport equipment	2,297,785	2,461,206	20,171		3,393,183	565,003	22,307,325	63,499,047	94,543,720
18	Measuring instruments	259,722	2,709,576	381,065		325,633	1,337,193	3,172,943	1,086,762	9,272,894
19	Arms & ammunition	1	1	1		1	1	1	1	7
20	Misc manufactures	50,378	1,675,367	148,792		914,140	92,097	1,968,161	4,458,701	9,307,636
21	Work of Art	1	9,195	12		2,712	1	1	14,796	26,717
TOTAL		**121,832,531**	**236,805,102**	**24,545,719**		**309,344,435**	**229,729,541**	**265,154,832**	**669,951,505**	**1,857,363,665**

Table A.24: Kyrgyzstan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	81,090	2,170,417	283,128	45,296,750		2,741,729	1,320,542	5,840,185	57,733,840
3	Fats and oils	1	11,444	14,002	12,353,603		23,748	791,870	527	13,195,193
4	Prepared foods	118,381	1,579,983	91,233	22,513,581		5,651,870	887,304	2,695,351	33,537,702
5	Mineral products	13,776,010	96,868	69,219	84,859,190		22,321,001	54,279	21,813,979	142,990,545
6	Chemical products	164,402	14,203,330	1,912,099	24,135,840		508,904	200,212	11,995,511	53,120,298
7	Plastics and rubber	38,033	194,380	14,093	8,419,054		1,771,559	1,569,370	14,209,828	26,216,316
8	Leather & its products	316,304	319,182	29,905	2,348,533		95,555	11,558	47,844	3,168,881
9	Wood & its products	37,682	11,752	9,144	525,710		15,329	2,820	242,889	845,325
10	Pulp and paper	12,718	45,444	25,661	8,529,433		515,243	1,495	215,049	9,345,044
11	Textiles	861,198	2,114,897	244,505	29,107,212		1,317,408	62,201	3,326,729	37,034,151
12	Footwear	45	34,170	9,467	1,066,563		101,611	34	249,037	1,460,926
13	Cement & similar prod.	120,109	165,884	82,206	18,659,551		362,949	1	3,042,224	22,432,925
14	Semi-precious stones	1	307,781	111	2,389,400		1	1	1	2,697,296
15	Base metals	501,513	700,441	39,031	28,821,070		752,899	360,266	19,620,087	50,795,308
16	Machinery & equip.	546,158	4,888,953	176,154	15,683,276		2,402,506	2,676,880	12,510,751	38,884,678
17	Transport equipment	1,338,600	281,757	24,203	3,393,183		1,809,866	648,374	37,333,052	44,829,035
18	Measuring instruments	87,381	209,207	8,488	325,633		124,189	74	240,465	995,437
19	Arms & ammunition	1	1	1	1		1	1	1	7
20	Misc manufactures	331,045	162,985	68,033	914,140		119,991	365	855,285	2,451,843
21	Work of Art	1	1	1	2,712		1	1	1	2,718
TOTAL		**18,330,671**	**27,498,876**	**3,100,683**	**309,344,435**		**40,636,360**	**8,587,646**	**134,238,796**	**541,737,467**

Table A.25: Tajikistan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	5,682,547	7,576,509	902,476	140,260,187	2,741,729		-	-	157,163,447
3	Fats and oils	1	1	1	2,787,465	23,748		-	-	2,811,215
4	Prepared foods	1,557,303	271,328	887,627	13,680,418	5,651,870		-	-	22,048,545
5	Mineral products	4,679,652	220,203	811,683	28,391,672	22,321,001		-	-	56,424,210
6	Chemical products	46,275	9,846,844	594,964	9,708,698	508,904		-	-	20,705,684
7	Plastics and rubber	123,454	30,902	18,787	1,150,396	1,771,559		-	-	3,095,097
8	Leather & its products	1	288,770	1,716	8,047	95,555		-	-	394,088
9	Wood & its products	1	9,848	1	19,019	15,329		-	-	44,198
10	Pulp and paper	3,945	89,549	6,381	8,259,048	515,243		-	-	8,874,166
11	Textiles	1,447,126	8,425,404	661,212	5,121,959	1,317,408		-	-	16,973,109
12	Footwear	2,299,771	30,067	23,264	95,643	101,611		-	-	2,550,356
13	Cement & similar prod.	559,524	393,289	1	5,972,997	362,949		-	-	7,288,760
14	Semi-precious stones	1	389	1	56	1		-	-	448
15	Base metals	2,123,812	434,778	93,160	5,986,599	752,899		-	-	9,391,248
16	Machinery & equip.	70,618	2,996,265	58,973	6,293,043	2,402,506		-	-	11,821,404
17	Transport equipment	1,660	166,710	948	565,003	1,809,866		-	-	2,544,187
18	Measuring instruments	318,122	229,163	9,235	1,337,193	124,189		-	-	2,017,902
19	Arms & ammunition	1	1	1,588	1	1		-	-	1,592
20	Misc manufactures	1	36,081	9,778	92,097	119,991		-	-	257,948
21	Work of Art	1	1	1	1	1		-	-	5
TOTAL		**18,913,813**	**31,046,101**	**4,081,795**	**229,729,541**	**40,636,360**		**-**	**-**	**324,407,610**

Table A.26: Turkmenistan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	238,530	4,469,100	423,336	13,178,500	1,320,542	-		-	19,630,006
3	Fats and oils	1	1	1	52,262	791,870	-		-	844,135
4	Prepared foods	890,135	171,957	15,972	21,258,679	887,304	-		-	23,224,045
5	Mineral products	223,675,466	94,387	37,981	167,770,450	54,279	-		-	391,632,563
6	Chemical products	64,831	3,339,547	1,098,700	2,883,437	200,212	-		-	7,586,727
7	Plastics and rubber	2,592	1,235,562	5,586	2,795,755	1,569,370	-		-	5,608,864
8	Leather & its products	1	15,875	104,134	9,668	11,558	-		-	141,235
9	Wood & its products	1	154,896	953	154,334	2,820	-		-	313,003
10	Pulp and paper	1	74,325	7,410	65,966	1,495	-		-	149,197
11	Textiles	97,728	2,136,917	3,772,062	606,333	62,201	-		-	6,675,241
12	Footwear	196	58,522	559	46,407	34	-		-	105,718
13	Cement & similar prod.	1	1,409,179	10,763	537,818	1	-		-	1,957,762
14	Semi-precious stones	1	1	1	3,545	1	-		-	3,549
15	Base metals	3,772	2,894,971	19,762	11,642,154	360,266	-		-	14,920,926
16	Machinery & equip.	28,838	10,216,047	142,903	16,701,094	2,676,880	-		-	29,765,762
17	Transport equipment	1	81,049	15,495	22,307,325	648,374	-		-	23,052,243
18	Measuring instruments	2,111	460,720	1,444	3,172,943	74	-		-	3,637,292
19	Arms & ammunition	1	1	1	1	1	-		-	5
20	Misc manufactures	1	211,095	120,789	1,968,161	365	-		-	2,300,410
21	Work of Art	1	1	1	1	1	-		-	5
TOTAL		**225,004,208**	**27,024,151**	**5,777,851**	**265,154,832**	**8,587,646**				**531,548,688**

Table A.27: Uzbekistan's Total Bilateral Trade (Exports plus Imports) in Central and South Asia, by HS Section (U.S. dollars)

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Trade with Central and South Asia
1+2	Animal and vegetable	7,691,253	9,765,809	430,468	212,983,626	5,840,185	-	-		236,711,341
3	Fats and oils	1	1	1	12,781,943	527	-	-		12,782,474
4	Prepared foods	751,937	269,755	19,709	34,187,462	2,695,351	-	-		37,924,213
5	Mineral products	679,632,038	1,347,122	400,751	156,124,910	21,813,979	-	-		859,318,799
6	Chemical products	108,977	27,598,039	1,951,253	21,583,603	11,995,511	-	-		63,237,382
7	Plastics and rubber	16,546	2,946,307	169,292	8,715,105	14,209,828	-	-		26,057,078
8	Leather & its products	1	586,052	107,150	256,051	47,844	-	-		997,097
9	Wood & its products	1	64,896	277	1,015,371	242,889	-	-		1,323,434
10	Pulp and paper	1	231,528	63,354	3,349,656	215,049	-	-		3,859,588
11	Textiles	1	7,095,236	7,175,713	15,689,214	3,326,729	-	-		33,286,893
12	Footwear	476,916	399,034	10,794	1,381,589	249,037	-	-		2,517,368
13	Cement & similar prod.	1	423,176	1	12,146,342	3,042,224	-	-		15,611,744
14	Semi-precious stones	1	1	1	1	1	-	-		5
15	Base metals	1,928,941	4,032,413	840,284	97,210,806	19,620,087	-	-		123,632,531
16	Machinery & equip.	199,614	13,000,240	168,420	23,466,520	12,510,751	-	-		49,345,545
17	Transport equipment	1	17,587,099	1	63,499,047	37,333,052	-	-		118,419,200
18	Measuring instruments	381,021	4,202,223	288,378	1,086,762	240,465	-	-		6,198,849
19	Arms & ammunition	1	1	1	1	1	-	-		5
20	Misc manufactures	1	410,898	22,473	4,458,701	855,285	-	-		5,747,357
21	Work of Art	1	1	1	14,796	1	-	-		14,800
TOTAL		**691,187,252**	**89,959,828**	**11,648,320**	**669,951,505**	**134,238,796**				**1,596,985,702**

Table A.28: Afghanistan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable		0.2	2.9	0.1	0.1	-	-	-
3	Fats and oils		-	0.1	11.5	-	-	-	-
4	Prepared foods		0.8	0.1	-	-	-	-	-
5	Mineral products		3.7	0.1	0.3	0.0	-	-	-
6	Chemical products		0.1	0.3	-	-	-	-	-
7	Plastics and rubber		0.6	0.1	0.0	6.8	-	-	-
8	Leather & its products		2.3	0.1	-	13.2	-	-	-
9	Wood & its products		0.7	0.2	-	-	-	-	-
10	Pulp and paper		0.6	0.1	0.0	-	-	-	-
11	Textiles		0.1	1.5	9.6	13.1	-	-	-
12	Footwear		0.0	-	-	-	-	-	-
13	Cement & similar prod.		0.1	0.4	0.1	0.0	-	-	-
14	Semi-precious stones		-	-	-	-	-	-	-
15	Base metals		0.2	0.0	0.3	5.3	-	-	-
16	Machinery & equip.		3.4	1.9	0.9	2.5	-	-	-
17	Transport equipment		0.8	6.3	0.7	6.5	-	-	-
18	Measuring instruments		2.3	0.1	14.0	0.2	-	-	-
19	Arms & ammunition		-	-	-	-	-	-	-
20	Misc manufactures		1.6	0.5	1.8	4.6	-	-	-
21	Work of Art		2.8	-	-	-	-	-	-
TRADE-WEIGHTED AVERAGE			**0.5**	**0.8**	**0.3**	**1.6**	**-**	**-**	**-**
Note: Based on 2010-2013 average trade values.									

Table A.29: India Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	0.2		4.1	0.3	-	-	-	0.0
3	Fats and oils	-		0.0	-	-	-	-	-
4	Prepared foods	0.8		1.3	0.0	-	-	-	0.3
5	Mineral products	3.7		1.8	1.1	-	-	26.3	9.0
6	Chemical products	0.1		1.0	1.1	0.0	0.0	0.2	0.6
7	Plastics and rubber	0.6		7.9	2.2	1.4	3.5	0.0	5.0
8	Leather & its products	2.3		2.1	-	0.6	0.0	-	0.3
9	Wood & its products	0.7		7.7	0.3	-	-	-	1.5
10	Pulp and paper	0.6		6.1	1.1	0.2	8.4	-	0.2
11	Textiles	0.1		5.8	0.2	-	-	-	0.0
12	Footwear	0.0		4.7	1.4	45.1	0.5	-	-
13	Cement & similar prod.	0.1		3.9	0.1	-	-	-	0.1
14	Semi-precious stones	-		1.3	0.0	-	-	-	-
15	Base metals	0.2		3.4	0.4	-	0.1	-	0.2
16	Machinery & equip.	3.4		6.6	1.5	0.7	1.1	0.2	9.3
17	Transport equipment	0.8		0.4	0.2	0.2	-	-	0.1
18	Measuring instruments	2.3		33.7	12.9	-	-	-	0.7
19	Arms & ammunition	-		-	-	-	-	-	-
20	Misc manufactures	1.6		8.3	1.0	3.3	-	-	0.0
21	Work of Art	2.8		44.6	-	-	-	-	-
TRADE-WEIGHTED AVERAGE		**0.5**		**3.3**	**0.9**	**0.2**	**0.1**	**0.2**	**1.9**
Note: Based on 2010-2013 average trade values.									

Table A.30: Pakistan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	2.9	4.1		-	0.1	-	-	0.2
3	Fats and oils	0.1	0.0		-	-	-	-	-
4	Prepared foods	0.1	1.3		-	4.6	-	-	-
5	Mineral products	0.1	1.8		-	-	-	-	-
6	Chemical products	0.3	1.0		0.0	-	-	-	-
7	Plastics and rubber	0.1	7.9		1.3	4.9	-	-	-
8	Leather & its products	0.1	2.1		0.1	-	2.2	-	-
9	Wood & its products	0.2	7.7		3.5	-	-	-	-
10	Pulp and paper	0.1	6.1		7.5	-	-	-	-
11	Textiles	1.5	5.8		0.3	0.0	-	-	-
12	Footwear	-	4.7		0.0	-	-	-	-
13	Cement & similar prod.	0.4	3.9		2.5	-	-	-	-
14	Semi-precious stones	-	1.3		-	-	-	-	-
15	Base metals	0.0	3.4		0.0	0.1	-	-	-
16	Machinery & equip.	1.9	6.6		0.1	-	-	-	-
17	Transport equipment	6.3	0.4		1.0	-	-	3.8	-
18	Measuring instruments	0.1	33.7		0.0	-	-	-	-
19	Arms & ammunition	-	-		-	-	-	-	-
20	Misc manufactures	0.5	8.3		2.7	-	-	-	-
21	Work of Art	-	44.6		-	-	-	-	-
TRADE-WEIGHTED AVERAGE		**0.8**	**3.3**		**0.1**	**0.2**	**0.0**	**0.0**	**-**

Note: Based on 2010-2013 average trade values.

Table A.31: Kazakhstan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	0.1	0.3	-		1.8	0.3	1.4	0.4
3	Fats and oils	11.5	-	-		0.7	0.3	-	1.2
4	Prepared foods	-	0.0	-		19.3	3.2	0.1	1.9
5	Mineral products	0.3	1.1	-		0.4	0.0	0.0	0.6
6	Chemical products	-	1.1	0.0		1.7	0.7	0.1	3.3
7	Plastics and rubber	0.0	2.2	1.3		25.8	0.1	0.0	5.6
8	Leather & its products	-	-	0.1		5.3	-	0.1	1.1
9	Wood & its products	-	0.3	3.5		63.1	-	0.0	8.2
10	Pulp and paper	0.0	1.1	7.5		6.0	0.7	0.7	5.9
11	Textiles	9.6	0.2	0.3		1.4	0.4	1.6	2.3
12	Footwear	-	1.4	0.0		8.0	-	0.3	1.4
13	Cement & similar prod.	0.1	0.1	2.5		2.6	0.0	0.1	9.0
14	Semi-precious stones	-	0.0	-		1.8	-	-	-
15	Base metals	0.3	0.4	0.0		1.9	0.4	0.6	1.2
16	Machinery & equip.	0.9	1.5	0.1		3.5	0.5	3.5	4.2
17	Transport equipment	0.7	0.2	1.0		8.0	17.5	20.6	2.0
18	Measuring instruments	14.0	12.9	0.0		19.3	49.4	18.9	62.3
19	Arms & ammunition	-	-	-		-	-	-	-
20	Misc manufactures	1.8	1.0	2.7		22.4	0.1	8.1	3.1
21	Work of Art	-	-	-		-	-	-	-
TRADE-WEIGHTED AVERAGE		**0.3**	**0.9**	**0.1**		**3.8**	**0.8**	**2.4**	**1.5**

Note: Based on 2010-2013 average trade values.

Table A.32: Kyrgyzstan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	0.1	-	0.1	1.8		1.5	-	10.0
3	Fats and oils	-	-	-	0.7		-	-	-
4	Prepared foods	-	-	4.6	19.3		2.3	-	6.1
5	Mineral products	0.0	-	-	0.4		0.1	53.6	3.1
6	Chemical products	-	0.0	-	1.7		9.1	-	31.2
7	Plastics and rubber	6.8	1.4	4.9	25.8		0.7	-	0.8
8	Leather & its products	13.2	0.6	-	5.3		0.6	-	25.8
9	Wood & its products	-	-	-	63.1		12.2	-	9.0
10	Pulp and paper	-	0.2	-	6.0		0.1	-	16.2
11	Textiles	13.1	-	0.0	1.4		2.4	-	6.0
12	Footwear	-	45.1	-	8.0		0.8	-	2.9
13	Cement & similar prod.	0.0	-	-	2.6		2.5	-	5.4
14	Semi-precious stones	-	-	-	1.8		-	-	-
15	Base metals	5.3	-	0.1	1.9		1.0	-	0.8
16	Machinery & equip.	2.5	0.7	-	3.5		0.5	-	2.4
17	Transport equipment	6.5	0.2	-	8.0		2.8	-	2.7
18	Measuring instruments	0.2	-	-	19.3		30.2	-	-
19	Arms & ammunition	-	-	-	-		-	-	-
20	Misc manufactures	4.6	3.3	-	22.4		4.6	-	3.7
21	Work of Art	-	-	-			-	-	-
TRADE-WEIGHTED AVERAGE		**1.6**	**0.2**	**0.2**	**3.8**		**1.0**	**0.3**	**5.4**
Note: Based on 2010-2013 average trade values.									

Table A.33: Tajikistan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	-	-	-	0.3	1.5		-	-
3	Fats and oils	-	-	-	0.3	-		-	-
4	Prepared foods	-	-	-	3.2	2.3		-	-
5	Mineral products	-	-	-	0.0	0.1		-	-
6	Chemical products	-	0.0	-	0.7	9.1		-	-
7	Plastics and rubber	-	3.5	-	0.1	0.7		-	-
8	Leather & its products	-	0.0	2.2	-	0.6		-	-
9	Wood & its products	-	-	-	-	12.2		-	-
10	Pulp and paper	-	8.4	-	0.7	0.1		-	-
11	Textiles	-	-	-	0.4	2.4		-	-
12	Footwear	-	0.5	-	-	0.8		-	-
13	Cement & similar prod.	-	-	-	0.0	2.5		-	-
14	Semi-precious stones	-	-	-	-	-		-	-
15	Base metals	-	0.1	-	0.4	1.0		-	-
16	Machinery & equip.	-	1.1	-	0.5	0.5		-	-
17	Transport equipment	-	-	-	17.5	2.8		-	-
18	Measuring instruments	-	-	-	49.4	30.2		-	-
19	Arms & ammunition	-	-	-	-	-		-	-
20	Misc manufactures	-	-	-	0.1	4.6		-	-
21	Work of Art	-	-	-	-	-		-	-
TRADE-WEIGHTED AVERAGE		**-**	**0.1**	**0.0**	**0.8**	**1.0**		**-**	**-**
Note: Based on 2010-2013 average trade values.									

Table A.34: Turkmenistan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	-	-	-	1.4	-	-		-
3	Fats and oils	-	-	-	-	-	-		-
4	Prepared foods	-	-	-	0.1	-	-		-
5	Mineral products	-	26.3	-	0.0	53.6	-		-
6	Chemical products	-	0.2	-	0.1	-	-		-
7	Plastics and rubber	-	0.0	-	0.0	-	-		-
8	Leather & its products	-	-	-	0.1	-	-		-
9	Wood & its products	-	-	-	0.0	-	-		-
10	Pulp and paper	-	-	-	0.7	-	-		-
11	Textiles	-	-	-	1.6	-	-		-
12	Footwear	-	-	-	0.3	-	-		-
13	Cement & similar prod.	-	-	-	0.1	-	-		-
14	Semi-precious stones	-	-	-	-	-	-		-
15	Base metals	-	-	-	0.6	-	-		-
16	Machinery & equip.	-	0.2	-	3.5	-	-		-
17	Transport equipment	-	-	3.8	20.6	-	-		-
18	Measuring instruments	-	-	-	18.9	-	-		-
19	Arms & ammunition	-	-	-	-	-	-		-
20	Misc manufactures	-	-	-	8.1	-	-		-
21	Work of Art	-	-	-	-	-	-		-
TRADE-WEIGHTED AVERAGE		**-**	**0.2**	**0.0**	**2.4**	**0.3**	**-**		**-**
Note: Based on 2010-2013 average trade values.									

Table A.35: Uzbekistan Intra-Industry Trade Indices for Bilateral Trade in Central and South Asia

HS Section		Afghanistan	India	Pakistan	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1+2	Animal and vegetable	-	0.0	0.2	0.4	10.0	-	-	
3	Fats and oils	-	-	-	1.2	-	-	-	
4	Prepared foods	-	0.3	-	1.9	6.1	-	-	
5	Mineral products	-	9.0	-	0.6	3.1	-	-	
6	Chemical products	-	0.6	-	3.3	31.2	-	-	
7	Plastics and rubber	-	5.0	-	5.6	0.8	-	-	
8	Leather & its products	-	0.3	-	1.1	25.8	-	-	
9	Wood & its products	-	1.5	-	8.2	9.0	-	-	
10	Pulp and paper	-	0.2	-	5.9	16.2	-	-	
11	Textiles	-	0.0	-	2.3	6.0	-	-	
12	Footwear	-	-	-	1.4	2.9	-	-	
13	Cement & similar prod.	-	0.1	-	9.0	5.4	-	-	
14	Semi-precious stones	-	-	-	-	-	-	-	
15	Base metals	-	0.2	-	1.2	0.8	-	-	
16	Machinery & equip.	-	9.3	-	4.2	2.4	-	-	
17	Transport equipment	-	0.1	-	2.0	2.7	-	-	
18	Measuring instruments	-	0.7	-	62.3	-	-	-	
19	Arms & ammunition	-	-	-	-	-	-	-	
20	Misc manufactures	-	0.0	-	3.1	3.7	-	-	
21	Work of Art	-	-	-	-	-	-	-	
TRADE-WEIGHTED AVERAGE		**-**	**1.9**	**0.0**	**1.5**	**5.4**	**-**	**-**	
Note: Based on 2010-2013 average trade values.									

Table A.36: Real Effective Exchange Rates of Afghanistan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
India	148.5	173.3	164.9	150.8	137.1	125.5	120.9	118.7	99.8	104.0	102.2	99.3	106.8	84.7	92.2	100.0	97.4	94.5	96.5
Pakistan	228.6	259.0	230.3	204.8	176.0	155.7	135.8	140.9	116.4	121.0	118.6	118.9	117.1	93.6	100.1	100.0	100.8	103.9	103.9
South Asia	***193.0***	***220.7***	***204.1***	***183.3***	***163.6***	***147.9***	***132.9***	***135.8***	***111.8***	***116.1***	***116.0***	***116.1***	***115.4***	***91.8***	***97.8***	***100.0***	***100.1***	***101.8***	***102.2***
Kazakhstan	138.7	204.6	195.0	184.7	118.8	103.9	106.4	104.4	88.4	101.4	102.5	110.4	116.0	106.7	101.9	100.0	99.4	104.4	109.4
Kyrgyz Republic	198.9	259.5	215.1	181.6	120.5	107.5	110.6	112.7	96.9	100.8	100.4	101.8	111.4	109.0	108.5	100.0	106.0	108.5	113.4
Tajikistan	434.8	297.4	374.7	255.7	189.3	166.6	160.0	152.2	121.4	129.1	121.0	121.0	128.2	110.8	105.2	100.0	94.8	99.8	104.0
Turkmenistan	572.1	249.0	327.3	297.1	312.7	310.5	338.1	356.2	292.0	301.8	306.7	312.0	305.8	330.2	104.6	100.0	96.1	102.9	111.0
Uzbekistan	711.1	950.2	893.0	740.9	657.6	397.7	276.7	187.2	141.7	130.9	118.9	116.2	116.1	96.3	108.1	100.0	95.7	99.1	99.9
Central Asia	***242.0***	***247.1***	***278.9***	***252.2***	***244.5***	***158.6***	***195.2***	***178.4***	***172.3***	***173.5***	***161.8***	***161.7***	***160.8***	***143.9***	***103.3***	***100.0***	***98.0***	***103.5***	***109.7***
China, P.R.	168.4	214.5	201.2	183.3	163.8	150.9	148.3	142.6	112.0	113.5	107.2	105.1	106.5	95.1	104.8	100.0	100.9	107.7	113.7
Euro Area	199.8	231.0	186.7	170.2	153.2	128.1	124.2	126.2	119.2	130.8	125.5	125.6	129.7	113.6	111.8	100.0	101.3	97.8	101.9
Russian Federation	118.1	181.8	168.0	117.3	77.9	75.7	86.5	90.2	81.3	93.7	98.8	106.0	113.3	102.5	97.9	100.0	102.3	104.1	108.7
United States	195.6	235.6	219.4	204.4	189.4	179.9	180.5	177.6	141.0	141.3	134.1	130.2	123.6	98.8	107.5	100.0	94.2	97.7	100.1
Total	***204.1***	***226.6***	***205.8***	***184.0***	***175.7***	***150.3***	***143.9***	***144.7***	***125.0***	***131.9***	***128.1***	***128.8***	***127.7***	***111.2***	***103.7***	***100.0***	***98.3***	***101.2***	***103.8***

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.37: Real Effective Exchange Rates of India, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	67.3	57.7	60.6	66.3	72.9	79.7	82.7	84.2	100.2	96.2	97.8	100.7	93.6	118.0	108.5	100.0	102.7	105.9	103.6
India	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pakistan	153.9	149.4	139.7	135.9	128.4	124.1	112.3	118.7	116.6	116.4	116.0	119.7	109.6	110.5	108.5	100.0	103.5	110.0	107.6
South Asia	***133.6***	***133.2***	***124.4***	***124.8***	***114.5***	***114.1***	***107.3***	***109.8***	***110.9***	***110.6***	***112.1***	***117.1***	***107.3***	***112.0***	***108.5***	***100.0***	***103.3***	***109.1***	***106.8***
Kazakhstan	93.4	118.1	118.3	122.5	86.6	82.8	88.0	87.9	88.6	97.6	100.3	111.1	108.6	125.9	110.6	100.0	102.1	110.5	113.4
Kyrgyz Republic	134.0	149.8	130.4	120.4	87.9	85.6	91.4	95.0	97.1	97.0	98.2	102.5	104.3	128.6	117.6	100.0	108.8	114.9	117.5
Tajikistan	292.8	171.6	227.2	169.6	138.1	132.7	132.3	128.2	121.6	124.2	118.4	121.8	120.0	130.8	114.1	100.0	97.4	105.6	107.7
Turkmenistan	385.3	143.7	198.5	197.0	228.1	247.3	279.6	300.0	292.5	290.3	300.0	314.1	286.3	389.7	113.5	100.0	98.7	108.9	115.0
Uzbekistan	478.9	548.3	541.5	491.4	479.7	316.8	228.8	157.7	142.0	125.9	116.3	117.0	108.7	113.6	117.2	100.0	98.2	104.9	103.5
Central Asia	***246.7***	***222.1***	***179.0***	***164.6***	***141.4***	***114.7***	***118.8***	***118.2***	***119.0***	***118.1***	***119.3***	***128.6***	***123.6***	***139.6***	***112.6***	***100.0***	***101.0***	***109.2***	***111.9***
China, P.R.	113.4	123.7	122.0	121.6	119.5	120.2	122.6	120.1	112.2	109.2	104.9	105.8	99.7	112.2	113.7	100.0	103.6	114.0	117.8
Euro Area	134.6	133.3	113.2	112.9	111.8	102.1	102.7	106.3	119.4	125.8	122.8	126.5	121.4	134.1	121.2	100.0	104.0	103.5	105.6
Russian Federation	79.5	104.9	101.9	77.8	56.8	60.3	71.5	76.0	81.5	90.2	96.6	106.7	106.1	121.0	106.1	100.0	105.1	110.2	112.7
United States	131.7	136.0	133.1	135.6	138.1	143.3	149.2	149.6	141.2	135.9	131.2	131.1	115.7	116.7	116.6	100.0	96.7	103.4	103.7
Total	***129.8***	***132.6***	***119.5***	***119.4***	***118.7***	***115.2***	***117.8***	***121.0***	***124.0***	***125.0***	***121.1***	***122.7***	***114.3***	***124.0***	***117.6***	***100.0***	***102.3***	***106.7***	***108.7***

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.38: Real Effective Exchange Rates of Pakistan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	43.7	38.6	43.4	48.8	56.8	64.2	73.6	71.0	85.9	82.6	84.3	84.1	85.4	106.9	99.9	100.0	99.2	96.3	96.3
India	65.0	66.9	71.6	73.6	77.9	80.6	89.1	84.3	85.8	85.9	86.2	83.6	91.2	90.5	92.1	100.0	96.6	90.9	92.9
Pakistan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
South Asia	***59.4***	***62.0***	***63.9***	***69.0***	***69.7***	***73.5***	***83.3***	***76.8***	***85.9***	***84.4***	***85.2***	***83.8***	***88.7***	***97.7***	***96.2***	***100.0***	***97.8***	***93.4***	***94.4***
Kazakhstan	60.7	79.0	84.7	90.2	67.5	66.7	78.3	74.1	76.0	83.8	86.5	92.8	99.1	114.0	101.9	100.0	98.6	100.5	105.4
Kyrgyz Republic	87.0	100.2	93.4	88.6	68.5	69.0	81.4	80.0	83.3	83.3	84.7	85.7	95.1	116.5	108.4	100.0	105.1	104.5	109.2
Tajikistan	190.2	114.8	162.7	124.8	107.5	106.9	117.8	108.1	104.3	106.7	102.0	101.8	109.5	118.4	105.1	100.0	94.0	96.0	100.1
Turkmenistan	250.3	96.2	142.1	145.0	177.7	199.3	249.0	252.9	250.9	249.4	258.6	262.5	261.2	352.8	104.6	100.0	95.3	99.0	106.9
Uzbekistan	311.1	366.9	387.7	361.7	373.7	255.3	203.8	132.9	121.8	108.2	100.3	97.8	99.2	102.9	108.0	100.0	94.9	95.4	96.2
Central Asia	***218.9***	***190.0***	***200.0***	***196.5***	***282.7***	***139.8***	***146.2***	***117.5***	***96.0***	***120.8***	***123.6***	***134.0***	***128.7***	***152.6***	***104.7***	***100.0***	***96.5***	***98.6***	***103.0***
China, P.R.	73.7	82.8	87.4	89.5	93.1	96.9	109.2	101.2	96.2	93.8	90.4	88.4	90.9	101.6	104.8	100.0	100.0	103.6	109.5
Euro Area	87.4	89.2	81.1	83.1	87.1	82.3	91.5	89.6	102.4	108.1	105.9	105.7	110.8	121.4	111.7	100.0	100.5	94.2	98.1
Russian Federation	51.7	70.2	73.0	57.3	44.2	48.6	63.7	64.1	69.9	77.5	83.3	89.2	96.8	109.5	97.8	100.0	101.5	100.2	104.7
United States	85.6	91.0	95.3	99.8	107.6	115.5	132.9	126.1	121.1	116.8	113.1	109.6	105.5	105.6	107.5	100.0	93.4	94.0	96.4
Total	**86.0**	**89.5**	**87.1**	**89.7**	**95.8**	**94.8**	**106.3**	**102.2**	**106.3**	**106.9**	**103.1**	**99.8**	**101.1**	**109.8**	**107.1**	**100.0**	**98.7**	**97.8**	**102.1**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.39: Real Effective Exchange Rates of Kazakhstan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	72.1	48.9	51.3	54.2	84.2	96.3	94.0	95.8	113.1	98.6	97.5	90.6	86.2	93.7	98.1	100.0	100.6	95.8	91.4
India	107.1	84.7	84.6	81.6	115.4	120.8	113.7	113.7	112.9	102.5	99.7	90.0	92.1	79.4	90.4	100.0	97.9	90.5	88.2
Pakistan	164.8	126.6	118.1	110.9	148.2	149.9	127.6	134.9	131.6	119.3	115.7	107.7	100.9	87.7	98.2	100.0	101.4	99.5	94.9
South Asia	***73.3***	***75.3***	***85.1***	***79.1***	***110.0***	***106.8***	***108.6***	***108.3***	***113.9***	***103.4***	***99.4***	***90.7***	***86.9***	***90.0***	***94.9***	***100.0***	***99.7***	***93.8***	***90.2***
Kazakhstan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kyrgyz Republic	143.4	126.9	110.3	98.3	101.5	103.5	103.9	108.0	109.6	99.4	97.9	92.3	96.0	102.2	106.4	100.0	106.6	103.9	103.7
Tajikistan	313.5	145.3	192.1	138.5	159.4	160.3	150.4	145.8	137.3	127.3	118.0	109.6	110.5	103.9	103.2	100.0	95.4	95.6	95.0
Turkmenistan	412.4	121.7	167.8	160.9	263.3	298.8	317.8	341.2	330.3	297.6	299.1	282.7	263.6	309.5	102.7	100.0	96.7	98.5	101.4
Uzbekistan	512.7	464.4	457.9	401.2	553.7	382.8	260.1	179.4	160.3	129.1	116.0	105.3	100.0	90.2	106.0	100.0	96.2	94.9	91.3
Central Asia	***226.4***	***207.4***	***240.0***	***196.0***	***215.0***	***239.1***	***163.6***	***126.0***	***112.5***	***107.7***	***108.4***	***102.4***	***100.8***	***96.8***	***102.3***	***100.0***	***98.4***	***98.3***	***97.1***
China, P.R.	121.4	104.8	103.2	99.2	137.9	145.3	139.4	136.6	126.6	112.0	104.5	95.3	91.8	89.1	102.9	100.0	101.4	103.1	103.9
Euro Area	144.1	112.9	95.7	92.2	129.0	123.3	116.8	120.8	134.9	129.0	122.4	113.9	111.8	106.5	109.6	100.0	101.9	93.7	93.1
Russian Federation	85.1	88.8	86.2	63.5	65.6	72.8	81.3	86.4	92.0	92.4	96.3	96.1	97.7	96.1	96.0	100.0	102.9	99.7	99.4
United States	141.0	115.2	112.5	110.7	159.4	173.2	169.6	170.1	159.5	139.3	130.8	118.0	106.5	92.7	105.5	100.0	94.7	93.6	91.5
Total	**193.7**	**182.5**	**180.5**	**131.6**	**164.0**	**167.1**	**137.7**	**123.1**	**115.0**	**107.1**	**107.0**	**100.7**	**99.0**	**96.9**	**101.9**	**100.0**	**101.2**	**100.9**	**100.9**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.40: Real Effective Exchange Rates of Kyrgyzstan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	50.3	38.5	46.5	55.1	83.0	93.0	90.4	88.7	103.2	99.2	99.6	98.2	89.8	91.7	92.2	100.0	94.4	92.1	88.2
India	74.6	66.8	76.7	83.0	113.8	116.8	109.4	105.3	103.0	103.1	101.8	97.5	95.9	77.7	85.0	100.0	91.9	87.0	85.1
Pakistan	114.9	99.8	107.1	112.8	146.0	144.9	122.8	124.9	120.1	120.0	118.1	116.7	105.1	85.9	92.3	100.0	95.2	95.7	91.6
South Asia	***51.1***	***59.4***	***77.1***	***80.5***	***108.4***	***103.2***	***104.5***	***100.3***	***103.9***	***104.1***	***101.5***	***98.3***	***90.6***	***88.1***	***89.2***	***100.0***	***93.6***	***90.3***	***87.0***
Kazakhstan	69.7	78.8	90.7	101.7	98.6	96.7	96.2	92.6	91.2	100.6	102.1	108.4	104.2	97.9	94.0	100.0	93.8	96.2	96.5
Kyrgyz Republic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tajikistan	218.5	114.6	174.2	140.8	157.1	155.0	144.7	135.0	125.2	128.1	120.5	118.8	115.1	101.7	97.0	100.0	89.5	91.9	91.7
Turkmenistan	287.5	95.9	152.2	163.6	259.5	288.8	305.8	315.9	301.3	299.4	305.4	306.4	274.6	302.9	96.5	100.0	90.7	94.8	97.9
Uzbekistan	357.4	366.1	415.2	408.0	545.8	370.0	250.3	166.1	146.2	129.9	118.4	114.1	104.2	88.3	99.6	100.0	90.3	91.3	88.1
Central Asia	***157.9***	***163.5***	***217.6***	***199.3***	***211.9***	***231.1***	***157.4***	***116.7***	***102.7***	***108.4***	***110.7***	***110.9***	***105.0***	***94.8***	***96.2***	***100.0***	***92.4***	***94.6***	***93.7***
China, P.R.	84.6	82.6	93.6	100.9	135.9	140.4	134.2	126.5	115.5	112.6	106.8	103.2	95.6	87.2	96.7	100.0	95.2	99.2	100.3
Euro Area	100.4	89.0	86.8	93.7	127.1	119.2	112.3	111.9	123.0	129.8	125.0	123.4	116.4	104.2	103.1	100.0	95.6	90.1	89.8
Russian Federation	59.4	70.0	78.1	64.6	64.6	70.4	78.2	80.0	83.9	93.0	98.4	104.1	101.7	94.1	90.2	100.0	96.6	95.9	95.9
United States	98.3	90.8	102.0	112.6	157.1	167.4	163.2	157.5	145.5	140.2	133.6	127.9	110.9	90.7	99.2	100.0	88.9	90.0	88.3
Total	**135.0**	**143.9**	**163.6**	**133.9**	**161.7**	**161.5**	**132.5**	**114.0**	**104.9**	**107.7**	**109.2**	**109.1**	**103.1**	**94.8**	**95.8**	**100.0**	**94.9**	**97.0**	**97.4**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.41: Real Effective Exchange Rates of Tajikistan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	23.0	33.6	26.7	39.1	52.8	60.0	62.5	65.7	82.4	77.5	82.6	82.7	78.0	90.2	95.0	100.0	105.5	100.2	96.2
India	34.2	58.3	44.0	59.0	72.4	75.4	75.6	78.0	82.3	80.5	84.5	82.1	83.3	76.5	87.6	100.0	102.7	94.7	92.8
Pakistan	52.6	87.1	61.5	80.1	93.0	93.5	84.9	92.5	95.9	93.7	98.0	98.2	91.3	84.5	95.1	100.0	106.4	104.1	99.9
South Asia	***48.1***	***63.0***	***39.3***	***49.3***	***60.4***	***62.3***	***74.5***	***75.7***	***82.5***	***78.6***	***84.3***	***82.7***	***79.2***	***84.7***	***92.9***	***100.0***	***105.1***	***99.2***	***95.8***
Kazakhstan	31.9	68.8	52.0	72.2	62.8	62.4	66.5	68.6	72.8	78.6	84.7	91.2	90.5	96.3	96.9	100.0	104.9	104.6	105.3
Kyrgyz Republic	45.8	87.3	57.4	71.0	63.7	64.5	69.1	74.1	79.9	78.1	83.0	84.2	86.9	98.4	103.1	100.0	111.8	108.8	109.1
Tajikistan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Turkmenistan	131.6	83.7	87.3	116.2	165.2	186.4	211.3	234.0	240.6	233.8	253.5	257.9	238.6	297.9	99.5	100.0	101.4	103.1	106.8
Uzbekistan	163.6	319.6	238.3	289.8	347.5	238.7	173.0	123.0	116.8	101.4	98.3	96.1	90.6	86.9	102.7	100.0	100.9	99.4	96.1
Central Asia	***140.1***	***222.7***	***184.0***	***215.4***	***254.9***	***170.5***	***142.0***	***118.8***	***106.2***	***99.0***	***102.2***	***103.8***	***95.3***	***105.2***	***99.4***	***100.0***	***104.0***	***104.0***	***104.5***
China, P.R.	38.7	72.1	53.7	71.7	86.5	90.6	92.7	93.7	92.3	88.0	88.6	86.9	83.1	85.8	99.6	100.0	106.4	107.9	109.4
Euro Area	46.0	77.7	49.8	66.6	80.9	76.9	77.6	82.9	98.2	101.3	103.7	103.9	101.2	102.5	106.2	100.0	106.9	98.0	98.0
Russian Federation	27.2	61.1	44.8	45.9	41.1	45.4	54.0	59.3	67.0	72.6	81.6	87.6	88.4	92.5	93.0	100.0	107.9	104.3	104.6
United States	45.0	79.2	58.6	79.9	100.0	108.0	112.8	116.7	116.2	109.5	110.9	107.6	96.4	89.2	102.2	100.0	99.3	97.9	96.3
Total	**78.5**	**157.7**	**122.4**	**147.3**	**178.0**	**110.2**	**102.8**	**92.3**	**96.3**	**96.2**	**99.8**	**100.4**	**94.3**	**98.1**	**97.9**	**100.0**	**106.0**	**105.2**	**105.9**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.42: Real Effective Exchange Rates of Turkmenistan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	17.5	40.2	30.6	33.7	32.0	32.2	29.6	28.1	34.3	33.1	32.6	32.1	32.7	30.3	95.6	100.0	104.0	97.2	90.1
India	26.0	69.6	50.4	50.8	43.8	40.4	35.8	33.3	34.2	34.4	33.3	31.8	34.9	25.7	88.1	100.0	101.3	91.8	87.0
Pakistan	40.0	104.0	70.4	69.0	56.3	50.2	40.2	39.5	39.9	40.1	38.7	38.1	38.3	28.3	95.6	100.0	104.9	101.0	93.6
South Asia	***31.4***	***69.4***	***35.9***	***38.2***	***36.7***	***34.4***	***31.6***	***30.5***	***34.4***	***33.8***	***33.1***	***32.4***	***33.4***	***29.4***	***94.0***	***100.0***	***103.6***	***96.2***	***89.6***
Kazakhstan	24.2	82.2	59.6	62.2	38.0	33.5	31.5	29.3	30.3	33.6	33.4	35.4	37.9	32.3	97.4	100.0	103.4	101.5	98.6
Kyrgyz Republic	34.8	104.2	65.7	61.1	38.5	34.6	32.7	31.7	33.2	33.4	32.7	32.6	36.4	33.0	103.6	100.0	110.2	105.5	102.2
Tajikistan	76.0	119.4	114.5	86.1	60.5	53.7	47.3	42.7	41.6	42.8	39.5	38.8	41.9	33.6	100.5	100.0	98.6	97.0	93.7
Turkmenistan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Uzbekistan	124.3	381.6	272.8	249.4	210.3	128.1	81.8	52.6	48.5	43.4	38.8	37.3	38.0	29.2	103.3	100.0	99.5	96.4	90.0
Central Asia	***36.6***	***99.7***	***112.4***	***105.8***	***94.9***	***58.8***	***53.3***	***42.0***	***37.4***	***38.3***	***36.9***	***36.6***	***38.3***	***31.5***	***100.4***	***100.0***	***100.9***	***99.0***	***94.5***
China, P.R.	29.4	86.1	61.5	61.7	52.4	48.6	43.9	40.0	38.3	37.6	35.0	33.7	34.8	28.8	100.2	100.0	104.9	104.7	102.5
Euro Area	34.9	92.8	57.0	57.3	49.0	41.3	36.7	35.4	40.8	43.3	40.9	40.3	42.4	34.4	106.8	100.0	105.4	95.1	91.8
Russian Federation	20.6	73.0	51.3	39.5	24.9	24.4	25.6	25.3	27.9	31.1	32.2	34.0	37.1	31.1	93.5	100.0	106.5	101.2	98.0
United States	34.2	94.6	67.0	68.8	60.6	57.9	53.4	49.9	48.3	46.8	43.7	41.7	40.4	29.9	102.8	100.0	98.0	95.0	90.2
Total	**35.3**	**91.4**	**82.7**	**68.6**	**53.1**	**34.1**	**37.6**	**35.5**	**37.0**	**41.1**	**39.2**	**37.8**	**39.0**	**32.4**	**101.3**	**100.0**	**104.8**	**102.0**	**99.2**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.43: Real Effective Exchange Rates of Uzbekistan, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	14.1	10.5	11.2	13.5	15.2	25.1	36.1	53.4	70.6	76.4	84.1	86.0	86.1	103.9	92.5	100.0	104.5	100.9	100.1
India	20.9	18.2	18.5	20.3	20.8	31.6	43.7	63.4	70.4	79.4	86.0	85.5	92.0	88.0	85.3	100.0	101.8	95.3	96.6
Pakistan	32.1	27.3	25.8	27.6	26.8	39.2	49.1	75.2	82.1	92.4	99.7	102.3	100.9	97.2	92.6	100.0	105.4	104.8	103.9
South Asia	***28.5***	***25.1***	***23.4***	***25.2***	***25.3***	***34.8***	***45.4***	***67.0***	***71.7***	***81.4***	***88.6***	***88.7***	***94.1***	***89.5***	***85.6***	***100.0***	***101.9***	***95.6***	***96.8***
Kazakhstan	19.5	21.5	21.8	24.9	18.1	26.1	38.4	55.8	62.4	77.5	86.2	94.9	100.0	110.8	94.3	100.0	104.0	105.3	109.5
Kyrgyz Republic	28.0	27.3	24.1	24.5	18.3	27.0	40.0	60.2	68.4	77.0	84.4	87.6	95.9	113.2	100.4	100.0	110.8	109.5	113.5
Tajikistan	61.1	31.3	42.0	34.5	28.8	41.9	57.8	81.3	85.6	98.6	101.8	104.1	110.4	115.1	97.4	100.0	99.1	100.7	104.0
Turkmenistan	80.4	26.2	36.7	40.1	47.5	78.1	122.2	190.2	206.0	230.5	257.9	268.4	263.4	343.0	96.8	100.0	100.5	103.8	111.1
Uzbekistan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Central Asia	***34.0***	***26.8***	***31.3***	***29.6***	***25.5***	***33.8***	***50.1***	***72.8***	***79.6***	***91.4***	***100.4***	***106.4***	***107.9***	***120.5***	***95.9***	***100.0***	***104.7***	***105.8***	***110.1***
China, P.R.	23.7	22.6	22.5	24.7	24.9	38.0	53.6	76.1	79.0	86.7	90.1	90.4	91.7	98.8	97.0	100.0	105.4	108.6	113.8
Euro Area	28.1	24.3	20.9	23.0	23.3	32.2	44.9	67.4	84.1	99.9	105.6	108.1	111.7	118.0	103.4	100.0	105.9	98.7	102.0
Russian Federation	16.6	19.1	18.8	15.8	11.8	19.0	31.2	48.2	57.4	71.6	83.1	91.2	97.6	106.5	90.6	100.0	107.0	105.0	108.8
United States	27.5	24.8	24.6	27.6	28.8	45.2	65.2	94.8	99.5	107.9	112.8	112.0	106.4	102.7	99.5	100.0	98.5	98.5	100.2
Total	**26.1**	**23.1**	**22.6**	**22.8**	**22.4**	**30.2**	**44.3**	**66.5**	**77.2**	**88.7**	**96.1**	**100.7**	**104.4**	**112.6**	**96.2**	**100.0**	**105.7**	**104.8**	**109.3**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.44: Real Effective Exchange Rates of Central Asia, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	44.1	34.2	35.2	38.2	49.0	62.3	67.2	73.0	88.1	81.8	83.2	80.0	77.4	88.1	96.5	100.0	101.6	96.8	92.7
India	65.5	59.3	58.1	57.6	67.2	78.2	81.3	86.6	87.9	85.0	85.1	79.4	82.7	74.6	89.0	100.0	98.9	91.5	89.5
Pakistan	100.9	88.6	81.1	78.3	86.2	97.0	91.3	102.8	102.5	99.0	98.7	95.0	90.7	82.4	96.6	100.0	102.4	100.6	96.3
South Asia	***67.3***	***66.8***	***58.2***	***58.1***	***68.0***	***72.3***	***78.3***	***83.2***	***88.5***	***84.1***	***84.8***	***80.5***	***80.1***	***82.8***	***93.7***	***100.0***	***100.6***	***94.3***	***91.1***
Kazakhstan	61.2	70.0	68.7	70.6	58.2	64.7	71.5	76.2	77.9	82.9	85.3	88.3	89.8	93.9	98.4	100.0	101.0	101.1	101.5
Kyrgyz Republic	87.8	88.8	75.8	69.4	59.0	67.0	74.4	82.2	85.4	82.4	83.6	81.4	86.2	96.0	104.7	100.0	107.6	105.1	105.2
Tajikistan	191.9	101.7	132.0	97.7	92.7	103.8	107.6	111.1	106.9	105.6	100.7	96.7	99.2	97.6	101.6	100.0	96.3	96.6	96.4
Turkmenistan	252.5	85.2	115.3	113.5	153.2	193.4	227.4	259.8	257.1	246.8	255.2	249.5	236.8	290.7	101.0	100.0	97.6	99.6	102.9
Uzbekistan	313.9	325.1	314.6	283.1	322.2	247.8	186.1	136.6	124.8	107.1	99.0	93.0	89.9	84.8	104.3	100.0	97.2	96.0	92.6
Central Asia	***161.7***	***130.1***	***144.1***	***128.6***	***133.5***	***125.7***	***121.6***	***113.3***	***105.1***	***100.6***	***98.7***	***97.8***	***96.0***	***100.7***	***101.6***	***100.0***	***100.1***	***99.7***	***99.1***
China, P.R.	74.3	73.4	70.9	70.0	80.2	94.0	99.7	104.0	98.6	92.9	89.2	84.1	82.5	83.7	101.2	100.0	102.4	104.3	105.4
Euro Area	88.2	79.0	65.8	65.0	75.1	79.8	83.5	92.0	105.0	107.0	104.5	100.5	100.4	100.0	107.9	100.0	102.9	94.7	94.5
Russian Federation	52.1	62.2	59.2	44.8	38.1	47.1	58.1	65.8	71.6	76.7	82.2	84.8	87.7	90.3	94.5	100.0	103.9	100.8	100.8
United States	86.3	80.6	77.3	78.1	92.8	112.1	121.4	129.5	124.2	115.6	111.6	104.1	95.7	87.0	103.8	100.0	95.7	94.6	92.8
Total	**92.9**	**85.7**	**81.1**	**72.4**	**80.9**	**76.6**	**83.0**	**89.8**	**93.9**	**96.0**	**96.5**	**94.1**	**93.6**	**94.8**	**102.5**	**100.0**	**102.4**	**98.8**	**100.0**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.45: Real Effective Exchange Rates of South Asia, 1995-2013 (Indices, 2010 = 100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan	63.5	54.8	58.2	63.9	70.9	77.6	81.6	82.6	98.4	94.5	96.2	98.6	92.8	116.5	107.5	100.0	102.3	104.8	102.8
India	94.3	95.1	96.0	96.3	97.2	97.4	98.7	98.1	98.2	98.2	98.3	97.9	99.1	98.7	99.1	100.0	99.6	99.0	99.2
Pakistan	145.2	142.0	134.1	130.8	124.7	120.9	110.8	116.4	114.5	114.4	114.0	117.2	108.6	109.1	107.5	100.0	103.2	108.8	106.7
South Asia	***105.7***	***104.2***	***103.4***	***104.0***	***100.7***	***101.6***	***99.5***	***101.0***	***104.9***	***103.5***	***104.5***	***106.7***	***101.8***	***107.7***	***105.2***	***100.0***	***101.9***	***104.8***	***103.4***
Kazakhstan	88.1	112.2	113.5	117.9	84.2	80.6	86.8	86.3	87.0	95.8	98.6	108.8	107.6	124.3	109.6	100.0	101.7	109.4	112.5
Kyrgyz Republic	126.3	142.3	125.2	115.9	85.4	83.4	90.2	93.2	95.3	95.3	96.6	100.4	103.3	127.0	116.6	100.0	108.4	113.7	116.6
Tajikistan	276.1	163.1	218.2	163.3	134.1	129.3	130.5	125.8	119.4	122.0	116.4	119.3	118.9	129.1	113.1	100.0	97.0	104.5	106.8
Turkmenistan	363.3	136.6	190.5	189.7	221.6	241.0	275.9	294.4	287.2	285.2	294.9	307.6	283.7	384.7	112.5	100.0	98.3	107.8	114.1
Uzbekistan	451.6	521.2	519.9	473.1	466.1	308.7	225.7	154.8	139.4	123.7	114.4	114.6	107.7	112.2	116.1	100.0	97.9	103.9	102.7
Central Asia	***212.6***	***218.7***	***205.6***	***193.3***	***212.0***	***123.4***	***133.7***	***128.6***	***136.5***	***138.0***	***139.1***	***146.1***	***139.4***	***158.6***	***111.3***	***100.0***	***100.4***	***108.2***	***111.7***
China, P.R.	107.0	117.6	117.1	117.0	116.1	117.1	121.0	117.8	110.1	107.3	103.1	103.7	98.8	110.8	112.7	100.0	103.2	112.8	116.9
Euro Area	126.9	126.7	108.7	108.7	108.6	99.5	101.3	104.3	117.3	123.6	120.7	123.9	120.3	132.4	120.1	100.0	103.7	102.5	104.7
Russian Federation	75.0	99.7	97.8	74.9	55.2	58.7	70.5	74.6	80.0	88.6	95.0	104.5	105.1	119.5	105.2	100.0	104.7	109.1	111.8
United States	124.2	129.2	127.7	130.5	134.2	139.6	147.2	146.8	138.7	133.5	129.0	128.4	114.6	115.2	115.6	100.0	96.4	102.3	102.9
Total	**123.0**	**126.3**	**115.2**	**115.4**	**116.2**	**112.7**	**116.5**	**118.8**	**121.8**	**122.7**	**118.9**	**119.8**	**112.8**	**122.2**	**116.2**	**100.0**	**101.8**	**105.7**	**107.9**

Source: IMF, International Financial Statistics database; IMF, Direction of Trade Statistics database; IMF World Economic Outlook database.

Table A.46: Afghanistan: Average of All Trading Costs (tij)

	2008	2009	2010	2011	2012	2013
India						
Agriculture, hunting, forestry; fishing (A+B)	147	164	196	216	202	220
Manufacturing (D)	264	269	217	265	212	204
Total Goods (GTT)	142	151	164	157	176	186
Kazakhstan						
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	225	189	189	189
Manufacturing (D)	168	219	338	338	338	338
Total Goods (GTT)	182	245	189	177	177	177
Kyrgyz Republic						
Agriculture, hunting, forestry; fishing (A+B)	340	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	320	n.a.	n.a.	n.a.	n.a.	n.a.
Pakistan						
Agriculture, hunting, forestry; fishing (A+B)	117	115	126	115	133	139
Manufacturing (D)	76	81	87	87	91	96
Total Goods (GTT)	84	88	97	94	104	108
Tajikistan						
Agriculture, hunting, forestry; fishing (A+B)	217	380	364			
Manufacturing (D)	155	119	118	141	143	144
Total Goods (GTT)	170	141	140	169	172	175
Uzbekistan						
Agriculture, hunting, forestry; fishing (A+B)	264	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	177	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	200	n.a.	n.a.	n.a.	n.a.	n.a.

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.47: India: Average of All Trading Costs (tij)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	147	164	196	216	202	220
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	264	269	217	265	212	204
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	142	151	164	157	176	186
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	487	189	231	298	384	317	330	304	304
Manufacturing (D)	182	211	247	234	217	199	226	200	188	185	178	188	150	149
Total Goods (GTT)	188	217	261	244	225	209	194	206	199	198	188	207	168	167
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	469	466	398	445	409	449	396	580	425	449	473	717	512	507
Manufacturing (D)	217	216	221	219	215	228	238	245	276	265	286	287	292	299
Total Goods (GTT)	248	249	254	253	248	264	273	287	310	301	318	332	332	334
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	195	186	164	178	161	162	169	167	176	161	158
Manufacturing (D)	n.a.	n.a.	n.a.	194	148	142	126	136	135	144	137	143	144	141
Total Goods (GTT)	n.a.	n.a.	n.a.	184	158	148	140	145	143	153	147	155	151	148
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B)	305	305	304	303	467	316	292	319	285	405	350	398	376	386
Manufacturing (D)	261	278	604	401	249	335	240	230	209	203	202	215	192	199
Total Goods (GTT)	265	296	635	260	247	247	239	246	225	221	222	246	222	231
Turkmenistan														
Agriculture, hunting, forestry; fishing (A+B)	632	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	242	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	292	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B)	381	307	324	298	374	368	335	850	297	361	359	349	375	408
Manufacturing (D)	296	252	209	194	186	178	190	219	193	217	225	184	195	194
Total Goods (GTT)	265	237	241	216	212	206	215	240	201	230	236	208	214	213

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.48: Pakistan: Average of All Trading Costs (tij)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	117	115	126	115	133	139
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	76	81	87	87	91	96
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	84	88	97	94	104	108
India											
Agriculture, hunting, forestry; fishing (A+B)	195	186	164	178	161	162	169	167	176	161	158
Manufacturing (D)	194	148	142	126	136	135	144	137	143	144	141
Total Goods (GTT)	184	158	148	140	145	143	153	147	155	151	148
Kazakhstan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	302	323	396	468	487	507	528
Manufacturing (D)	241	258	238	252	246	258	222	226	286	239	240
Total Goods (GTT)	270	287	264	284	244	239	253	250	315	269	271
Kyrgyz Republic											
Agriculture, hunting, forestry; fishing (A+B)			823	759	674	590	726	863	852	740	647
Manufacturing (D)	303	307	312	341	299	342	372	298	304	386	307
Total Goods (GTT)	358	362	365	410	361	395	436	351	359	440	324
Tajikistan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	278	330	338	346	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	320	269	305	398	383	274	294	409	314	321
Total Goods (GTT)	397	253	226	280	293	286	276	275	475	350	359
Uzbekistan											
Agriculture, hunting, forestry; fishing (A+B)	362	396	354	370	334	314	555	454	397	461	439
Manufacturing (D)	258	233	206	289	257	236	309	296	248	265	271
Total Goods (GTT)	268	238	238	237	235	255	348	258	280	294	301

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.49: Kazakhstan: Average of All Trading Costs (tij)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			225	189	189	189
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	168	219	338	338	338	338
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	182	245	189	177	177	177
India														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	487	189	231	298	384	317	330	304	304
Manufacturing (D)	182	211	247	234	217	199	226	200	188	185	178	188	150	149
Total Goods (GTT)	188	217	261	244	225	209	194	206	199	198	188	207	168	167
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	122	140	137	143	133	138	133	121	128	163	97	95	75	73
Manufacturing (D)	79	72	64	59	53	55	51	52	58	64	63	64	53	51
Total Goods (GTT)	92	89	82	76	71	72	70	68	72	81	75	75	60	58
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	302	323	396	468	487	507	528
Manufacturing (D)	n.a.	n.a.	n.a.	241	258	238	252	246	258	222	226	286	239	240
Total Goods (GTT)	n.a.	n.a.	n.a.	270	287	264	284	244	239	253	250	315	269	271
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B)	140	160	199	179	199	98	99	95	147	149	109	95	82	81
Manufacturing (D)	114	135	137	114	106	103	104	96	107	113	121	121	123	124
Total Goods (GTT)	110	136	141	123	117	95	93	92	118	123	111	96	87	86
Turkmenistan														
Agriculture, hunting, forestry; fishing (A+B)	221.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	120.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	149.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B)	167.4	171.0	196.6	244.6	169.6	144.0	126.8	118.5	148.7	166.4	113.3	87.1	84.6	81.5
Manufacturing (D)	104.7	93.7	86.2	83.4	72.5	70.2	71.7	58.7	57.3	79.1	69.0	72.8	67.7	65.9
Total Goods (GTT)	110.9	106.5	108.7	107.1	92.2	88.9	86.5	71.4	71.2	92.9	79.0	75.7	72.2	70.1

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.50: Kyrgyzstan: Average of All Trading Costs (tij)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	340	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	320	n.a.	n.a.	n.a.	n.a.	n.a.
India														
Agriculture, hunting, forestry; fishing (A+B	469	466	398	445	409	449	396	580	425	449	473	517	512	507
Manufacturing (D)	217	216	221	219	215	228	238	245	276	265	286	287	292	299
Total Goods (GTT)	248	249	254	253	248	264	273	287	310	301	318	332	332	334
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B	122	140	137	143	133	138	133	121	128	163	97	95	75	73
Manufacturing (D)	79	72	64	59	53	55	51	52	58	64	63	64	53	51
Total Goods (GTT)	92	89	82	76	71	72	70	68	72	81	75	75	60	58
Pakistan														
Agriculture, hunting, forestry; fishing (A+B	n.a.	n.a.	n.a.	n.a.	n.a.	823	759	674	590	726	863	852	740	647
Manufacturing (D)	n.a.	n.a.	n.a.	303	307	312	341	299	342	372	298	304	386	307
Total Goods (GTT)	n.a.	n.a.	n.a.	358	362	365	410	361	395	436	351	359	440	324
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B	251	224	240	230	366	309	345	381	307	341	274	230	184	184
Manufacturing (D)	144	139	116	110	108	112	114	123	122	124	130	132	129	129
Total Goods (GTT)	165	160	139	132	132	139	144	155	150	153	156	160	143	142
Turkmenistan														
Manufacturing (D)	76	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	107	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B	225	323	328	390	228	185	211	216	235	314	243	310	262	274
Manufacturing (D)	73	80	92	99	87	84	92	88	90	93	107	109	112	117
Total Goods (GTT)	99	112	129	137	119	115	123	118	117	117	131	133	131	136

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.51: Tajikistan: Average of All Trading Costs (tij)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	217	380	364	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	155	119	118	141	143	144
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	170	141	140	169	172	175
India														
Agriculture, hunting, forestry; fishing (A+B)	305	305	304	303	467	316	292	319	285	405	350	398	657	386
Manufacturing (D)	261	278	604	401	249	335	240	230	209	203	202	215	192	199
Total Goods (GTT)	265	296	635	260	247	247	239	246	225	221	222	246	222	231
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	140	160	199	179	199	98	99	95	147	149	109	95	82	81
Manufacturing (D)	114	135	137	114	106	103	104	96	107	113	121	121	123	124
Total Goods (GTT)	110	136	141	123	117	95	93	92	118	123	111	96	87	86
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	251	224	240	230	366	309	345	381	307	341	274	230	184	184
Manufacturing (D)	144	139	116	110	108	112	114	123	122	124	130	132	129	129
Total Goods (GTT)	165	160	139	132	132	139	144	155	150	153	156	160	143	142
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	278	330	338	346	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	320	269	305	398	383	274	294	409	314	321
Total Goods (GTT)	n.a.	n.a.	n.a.	397	253	226	280	293	286	276	275	475	350	359
Turkmenistan														
Manufacturing (D)	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	94	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.52: Turkmenistan: Average of All Trading Costs (tij)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
India															
Agriculture, hunting, forestry; fishing (A+B)	413	632	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	249	242	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	273	292	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kazakhstan															
Agriculture, hunting, forestry; fishing (A+B)	n.a.	221	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	121	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	149	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kyrgyz Republic															
Manufacturing (D)	n.a.	76	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	107	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tajikistan															
Manufacturing (D)	97	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	115	94	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan															
Agriculture, hunting, forestry; fishing (A+B)	294	378	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	105	84	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	131	122	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.53: Uzbekistan: Average of All Trading Costs (tij)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	264	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	177	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	n.a.	n.a.	n.a.	n.a.	n.a.
India														
Agriculture, hunting, forestry; fishing (A+B)	381	307	324	298	374	368	335	850	297	361	359	349	375	408
Manufacturing (D)	296	252	209	194	186	178	190	219	193	217	225	184	195	194
Total Goods (GTT)	265	237	241	216	212	206	215	240	201	230	236	208	214	213
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	167	171	197	245	170	144	127	119	149	166	113	87	85	82
Manufacturing (D)	105	94	86	83	73	70	72	59	57	79	69	73	68	66
Total Goods (GTT)	111	106	109	107	92	89	86	71	71	93	79	76	72	70
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	225	323	328	390	228	185	211	216	235	314	243	310	262	274
Manufacturing (D)	73	80	92	99	87	84	92	88	90	93	107	109	112	117
Total Goods (GTT)	99	112	129	137	119	115	123	118	117	117	131	133	131	136
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	362	396	354	370	334	314	555	454	397	461	439
Manufacturing (D)	n.a.	n.a.	n.a.	258	233	206	289	257	236	309	296	248	365	271
Total Goods (GTT)	n.a.	n.a.	n.a.	268	238	238	237	235	255	348	258	280	294	301
Turkmenistan														
Agriculture, hunting, forestry; fishing (A+B)	378	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	84	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	122	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.54: Afghanistan: Average of Nontariff Trade Costs

	2008	2009	2010	2011	2012	2013
India						
Agriculture, hunting, forestry; fishing (A+B)	118	133	161	178	166	182
Manufacturing (D)	227	232	185	228	180	173
Total Goods (GTT)	116	124	136	129	146	155
Kazakhstan						
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	221	185	185	185
Manufacturing (D)	155	206	320	320	320	320
Total Goods (GTT)	171	234	180	168	168	168
Kyrgyz Republic						
Agriculture, hunting, forestry; fishing (A+B)	327	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	310	n.a.	n.a.	n.a.	n.a.	n.a.
Pakistan						
Agriculture, hunting, forestry; fishing (A+B)	103	99	109	99	116	121
Manufacturing (D)	59	64	69	69	73	77
Total Goods (GTT)	69	72	80	78	87	91

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.55: India: Average of Nontariff Trade Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	118	133	161	178	166	182
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	227	232	185	228	180	173
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	116	124	136	129	146	155
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	396	144	180	237	306	249	260	239	238
Manufacturing (D)	137	164	195	183	175	174	199	175	164	155	149	157	124	122
Total Goods (GTT)	139	169	207	192	180	183	169	180	174	166	157	174	139	139
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	323	359	326	359	324	482	372	394	424	641	455	451
Manufacturing (D)	183	183	174	178	181	202	212	219	235	225	243	244	249	255
Total Goods (GTT)	211	213	203	208	209	232	243	256	268	259	274	286	287	289
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	138	134	124	136	122	125	127	126	133	121	118
Manufacturing (D)	n.a.	n.a.	n.a.	148	105	108	95	104	113	121	115	120	122	118
Total Goods (GTT)	n.a.	n.a.	n.a.	138	113	113	106	111	119	128	123	130	127	124
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	284	284	405	262	241	264	235	349	299	342	323	332
Manufacturing (D)	n.a.	n.a.	497	325	207	286	202	193	174	169	169	180	160	165
Total Goods (GTT)	n.a.	n.a.	526	207	207	207	200	206	187	185	186	207	186	194
Turkmenistan														
Agriculture, hunting, forestry; fishing (A+B)	566	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	194	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	245	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	216	228	209	279	273	247	658	216	268	266	258	279	305
Manufacturing (D)	n.a.	196	160	148	130	141	152	177	155	176	183	147	157	156
Total Goods (GTT)	n.a.	179	182	162	153	162	170	192	158	184	188	165	170	169

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.56: Pakistan: Average of Nontariff Trade Costs

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	103	99	109	99	116	121
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	59	64	69	69	73	77
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	69	72	80	78	87	91
India											
Agriculture, hunting, forestry; fishing (A+B)	138	134	124	136	122	125	127	126	133	121	118
Manufacturing (D)	148	105	108	95	104	113	121	115	120	122	118
Total Goods (GTT)	138	113	113	106	111	119	128	123	130	127	124
Kazakhstan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	274	307	361	428	447	465	485
Manufacturing (D)	n.a.	234	218	220	221	225	198	202	257	213	215
Total Goods (GTT)	n.a.	261	243	251	219	211	225	223	282	240	242
Kyrgyz Republic											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	568	630	757	757	648	565
Manufacturing (D)	281	286	269	314	279	290	333	266	272	346	274
Total Goods (GTT)	334	327	318	379	338	344	377	303	310	382	278
Tajikistan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	260	309	317	336	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	231	268	348	329	242	261	367	279	286
Total Goods (GTT)	n.a.	n.a.	197	247	259	247	247	247	431	316	324
Uzbekistan											
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	316	302	272	290	517	421	368	429	407
Manufacturing (D)	n.a.	n.a.	163	241	210	198	253	241	200	215	220
Total Goods (GTT)	n.a.	n.a.	194	196	194	216	290	212	231	243	249

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.57: Kazakhstan: Average of Nontariff Trade Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	221	185	185	185
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	155	206	320	320	320	320
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	171	234	180	168	168	168
India														
Agriculture, hunting, forestry; fishing (A+B)						396	144	180	237	306	249	260	239	238
Manufacturing (D)	137	164	195	183	175	174	199	175	164	155	149	157	124	122
Total Goods (GTT)	139	169	207	192	180	183	169	180	174	166	157	174	139	139
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	116	132	124	131	125	130	130	119	128	163	97	95	75	73
Manufacturing (D)	70	63	50	47	48	50	49	50	58	64	63	64	53	51
Total Goods (GTT)	83	79	66	64	65	67	68	66	72	81	75	75	60	58
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	274	307	361	428	447	465	485
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	234	218	220	221	225	198	202	257	213	215
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	261	243	251	219	211	225	223	282	240	242
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	184	96	97	92	145	149	109	95	82	81
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	96	100	101	94	104	113	121	121	123	124
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	106	93	90	89	115	123	111	96	87	86
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	166	141	124	115	145	166	113	87	84	81
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	65	68	70	57	56	79	69	73	68	66
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	84	87	84	69	69	93	79	76	72	70

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset,
and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.58: Kyrgyzstan: Average of Nontariff Trade Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	327	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	310	n.a.	n.a.	n.a.	n.a.	n.a.
India														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	323	359	326	359	324	482	372	394	424	641	455	451
Manufacturing (D)	183	183	174	178	181	202	212	219	235	225	243	244	249	255
Total Goods (GTT)	211	213	203	208	209	232	243	256	268	259	274	286	287	289
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	116	132	124	131	125	130	130	119	128	163	97	95	75	73
Manufacturing (D)	70	63	50	47	48	50	49	50	58	64	63	64	53	51
Total Goods (GTT)	83	79	66	64	65	67	68	66	72	81	75	75	60	58
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	568	630	757	748	648	565
Manufacturing (D)	n.a.	n.a.	n.a.	281	286	269	314	279	290	333	266	272	346	274
Total Goods (GTT)	n.a.	n.a.	n.a.	334	327	318	379	338	344	377	303	310	382	278
Tajikistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	232	222	355	309	345	381	307	341	274	230	184	184
Manufacturing (D)	n.a.	n.a.	99	96	93	107	114	123	122	124	130	132	129	129
Total Goods (GTT)	n.a.	n.a.	120	116	116	133	144	155	150	153	156	160	143	142
Turkmenistan														
Manufacturing (D)	74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	104	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	301	285	352	203	177	211	216	235	314	243	310	262	274
Manufacturing (D)	n.a.	71	75	85	74	81	92	88	90	93	107	109	112	117
Total Goods (GTT)	n.a.	102	109	121	104	111	123	118	117	117	131	133	131	136

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset,
and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.59: Tajikistan: Average of Nontariff Trade Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
India														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	284	284	405	262	241	264	235	349	299	342	572	332
Manufacturing (D)	n.a.	n.a.	497	325	207	286	202	193	174	169	169	180	160	165
Total Goods (GTT)	n.a.	n.a.	526	207	207	207	200	206	187	185	186	207	186	194
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	184	96	97	92	145	149	109	95	82	81
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	96	100	101	94	104	113	121	121	123	124
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	106	93	90	89	115	123	111	96	87	86
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	232	222	355	309	345	381	307	341	274	230	184	184
Manufacturing (D)	n.a.	n.a.	99	96	93	107	114	123	122	124	130	132	129	129
Total Goods (GTT)	n.a.	n.a.	120	116	116	133	144	155	150	153	156	160	143	142
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	260	309	317	336	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	231	268	348	329	242	261	367	279	286
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	197	247	259	247	247	247	431	316	324

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.60: Turkmenistan: Average of Nontariff Trade Costs

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
India															
Agriculture, hunting, forestry; fishing (A+B	389	566	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing (D)	214	194	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	244	245	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kyrgyz Republic															
Manufacturing (D)	n.a.	74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Goods (GTT)	n.a.	104	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.61: Uzbekistan: Average of Nontariff Trade Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
India														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	216	228	209	279	273	247	658	216	268	266	258	279	305
Manufacturing (D)	n.a.	196	160	148	130	141	152	177	155	176	183	147	157	156
Total Goods (GTT)	n.a.	179	182	162	153	162	170	192	158	184	188	165	170	169
Kazakhstan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	166	141	124	115	145	166	113	87	84	81
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	65	68	70	57	56	79	69	73	68	66
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	84	87	84	69	69	93	79	76	72	70
Kyrgyz Republic														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	301	285	352	203	177	211	216	235	314	243	310	262	274
Manufacturing (D)	n.a.	71	75	85	74	81	92	88	90	93	107	109	112	117
Total Goods (GTT)	n.a.	102	109	121	104	111	123	118	117	117	131	133	131	136
Pakistan														
Agriculture, hunting, forestry; fishing (A+B)	n.a.	n.a.	n.a.	n.a.	n.a.	316	302	272	290	517	421	368	429	407
Manufacturing (D)	n.a.	n.a.	n.a.	n.a.	n.a.	163	241	210	198	253	241	200	301	220
Total Goods (GTT)	n.a.	n.a.	n.a.	n.a.	n.a.	194	196	194	216	290	212	231	243	249

Source: World Bank, Trade Costs Dataset. Online: http://data.worldbank.org/data-catalog/trade-costs-dataset, and UNESCAP, "ESCAP-World Bank Trade Cost Database. Online: http://artnet.unescap.org/databases.html#first.

Table A.61: Potential Regional Value Chains for Industry Products having Two or More Countries with RCAs>1

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
High-technology industries										
Pharmaceuticals (2423)										
293990	Vegetable alkaloids, salts, ethers, esters in bulk	688		***6.6***	0.0	0.0				***5.4***
300590	Dressings & similar articles, coated or package for md use,	851	0.0	0.8	***1.2***	0.0	0.0	0.0		***1.0***
293890	Glycosides & their salts, ethers, esters & other derivatives	1,999	0.0	***1.1***	0.0	0.2	0.0	***2.5***		***23.3***
AIRCRAFT AND SPACECRAFT (353)										
840710	Aircraft engines, spark-ignition reciprocating or rotary type	258		***4.8***	***4.2***	0.0	***2.5***			
880212	Helicopters of an un-laden weight > 2,000 kg	382		0.3	0.0	0.5	***4.0***			
880510	Aircraft launching and deck-arrestor gear and parts thereof	1,952		***2.8***	***1.6***	0.0	0.5			0.3
841122	Turbo-propellers of a power exceeding 1100 KW	2,113		0.1		0.1	0.3		0.0	***2.2***
Office, accounting and computing machinery (30)										
847310	Parts and accessories of typewriters, word processors	2,021	***8.1***	***1.0***	0.0	0.0				0.0
Radio, TV and communications equipment (32)										
903300	Parts/accessories nes for optical/electric instrument	156		***2.4***	0.0	0.0	***10.6***			0.0
Medium-high-technology industries										
Electrical machinery and apparatus (31)										
850211	Generating sets, diesel, output < 75 kVA	413	***2.6***	***1.9***	0.2		0.2			
850423	Liquid dielectric transformers > 10,000 KVA	185		***2.2***		0.1			0.3	***2.1***
850730	Nickel-cadmium electric accumulators	1,180	***1.8***	0.9			0.0	***6.8***	0.0	0.0
853521	Automatic circuit breakers for voltage 1-72.5 kV	891		***1.8***	0.1		0.1			***7.8***
854511	Carbon and graphite furnace electrodes	165		***5.6***			0.2	***1.6***		
850161	AC generators, of an output < 75 kVA	1,189	***1.0***	1.0		0.1	0.1	0.0	0.1	***1.2***
Motor vehicles, trailers and semi-trailers (34)										
870321	Automobiles, spark ignition engine of <1000 cc	22		***6.2***		0.0	0.0			***33.7***
870290	Buses except diesel powered	603		0.3	0.2	0.0	0.0	0.1		***1.7***
870891	Radiators for motor vehicles	784		0.4	0.1	0.0	***18.5***	***1.2***	0.0	0.0
860900	Cargo containers designed for carriage	809		0.4	0.1	0.1	***1.3***	0.1	0.0	0.1
Chemicals excluding pharmaceuticals (24 exclude 2423)										
390210	Polypropylene in primary forms	24	0.5	***2.5***	0.0	0.3	0.0	0.0	***5.4***	0.0
380810	Insecticides, packaged for retail sale or formulated	58	***2.8***	***6.1***	0.2	0.0			0.0	0.1

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
310230	Ammonium nitrate, whether or not in aqueous sol in pack weight > 10 k	493		0.1		***1.4***	***4.4***			***43.7***
280519	Alkali metals nes	645		***38.5***	0.0			***3.8***		
281511	Sodium hydroxide (caustic soda) solid	724		***3.6***	***2.8***	0.0		0.0		0.3
390750	Alkyd resins, in primary forms	762		***3.9***	0.7			***12.2***		
350300	Gelatin and gelatin; isinglass; glues of animal origin, nes	866		***2.0***	***2.6***		***2.3***			
280610	Hydrogen chloride (hydrochloric acid)	2,016		***1.4***	***9.8***	0.1	***1.3***			***1.4***
310559	Fertilizers containing nitrogen & phosphorus, nes, in pack weight</=10k	2,324		0.0	0.0	***3.1***	***1.0***			***34.8***
284150	Chromates, dichromate, nes	3,636		***2.4***		***14.4***		***8.3***		
260120	Roasted iron pyrites	4,177		0.0	***72.7***	***4.7***				
Railroad equipment and transport equipment (352+359)										
860610	Railway tank cars	220	***4.9***	0.3	0.8	***1.6***	0.5		0.7	***8.1***
860210	Rail locomotives, diesel-electric	312		***1.1***		***1.3***	0.2			
860110	Rail locomotives, externally electrically powered	475		***1.0***		***2.5***	***1.5***			
Machinery and equipment (29)										
870410	Dump trucks designed for off-highway use	95	0.6	***2.3***	0.0	0.1	***2.3***	0.0	0.0	0.3
844520	Textile yarn spinning machines	462		***3.1***	0.5		0.1			***1.6***
847432	Machines for mixing mineral substances with bitumen	999	0.6	***1.2***	0.1	0.1	***7.9***			
844820	Parts/access, machines for preparing manmade textiles	1,244	0.2	***4.6***	***1.1***					
847751	Pneumatic tire molding and retreading machinery, etc.	2,032		***1.8***	0.0	0.3		***2.6***		0.0
844512	Textile fiber combing machines	2,603		***2.3***	0.3		***3.3***			
844842	Reeds, herald-frames for weaving looms	2,790		***1.6***	***1.6***		0.0			
Medium-low-technology industries										
Building and repairing of ships and boats (351)										
890520	Floating, submersible drilling or production platform	26		***6.8***	0.6	0.0				
890590	Floating docks, special function vessels nes	27		***21.7***	0.7	***1.3***				
890400	Tugs and pusher craft	39		***15.3***	0.3	***2.2***			0.2	
890600	Warships, lifeboats, hospital ships and vessels nes	131		***5.8***	0.1	***1.6***			0.8	
890510	Dredgers	214		***12.4***	***5.6***	0.1				
Rubber and plastics products (25)										
391721	Tube, pipe or hose, rigid, of polyethylene	627	***2.6***	***1.4***	***1.2***	0.6	0.5	***1.2***		***1.7***

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
391890	Floor/wall/ceiling cover, roll/tile not vinyl chloride	1,211		***2.2***	***5.3***	0.0	0.0	***1.4***	0.0	
391722	Tube, pipe or hose, rigid, of polypropylene	1,354	***3.2***	0.1	***9.3***	0.1	0.1		0.0	0.1
401390	Inner tubes of rubber except bicycle or motor vehicle	1,523	0.0	***2.8***	***2.3***	0.0	0.1			
Coke, refined petroleum, manuf of gas, electricity										
Crude oil and gas (10+11)										
271000	Oils petroleum, bituminous, distillates, except crude	1		***3.9***	0.6	0.7	1.0	0.3	***1.8***	***1.3***
270119	Coal nes, whether or not pulverized but not agglomerated	80	***24.4***	0.3	0.0	***4.7***	0.5	0.0		0.0
271121	Natural gas in gaseous state	120		0.0	***1.8***		0.0	***41.0***	***6.9***	
271312	Petroleum coke	394		***2.3***	0.0	0.0			***3.2***	***5.1***
271210	Petroleum jelly	984	***8.9***	***7.6***	0.0	0.0				
271290	Mineral waxes nes and similar products obtained by synthesis etc.	2,029	0.1	0.3	0.0	0.0			***1.4***	***22.1***
270500	Coal gas, water gas, etc., o/than petroleum gases & gaseous hydrocarbon	3,756		***3.5***	0.2			***21.8***	***1.1***	***158.8***
Petroleum and other energy manufactures (23+40)										
271119	Petroleum gases and other gaseous hydrocarbons nes, liquefied	259	***1.2***	***1.1***	0.0	***3.2***			0.0	
271220	Paraffin wax containing by weight less than 0.75% of oil	1,888	0.1	0.5	0.1	0.0				0.2
Other non-metallic mineral products (26)										
680221	Cut or sawn slabs of marble, travertine or alabaster	651	***1.1***	***2.9***	***1.8***	0.0	0.2			0.5
691090	Ceramic bathroom kitchen sanitary items not porcelain	714		***1.5***	***1.7***	0.0	0.0	0.0		0.0
700529	Float glass etc. in sheets, non-wired, clear	804		0.0	***1.1***	0.0	***26.8***	0.3		0.0
681190	Articles nes, of asbestos or cellulose fiber cement	961		***2.2***	***1.1***	***7.5***	***66.6***	0.0		***6.2***
690390	Refractory ceramic articles nes	1,349		***1.6***	0.0	0.0	***2.9***			
680911	Plaster board etc. not ornamental, paper reinforced	1,412		0.0	0.3	***1.9***	0.0			***14.4***
690710	Unglazed ceramic mosaic tiles etc., <7cm wide	1,686	***1.2***	***4.7***	***2.1***	0.0	0.2		0.1	
690410	Building bricks	1,699		0.0	0.8	0.0	***6.0***			***22.1***
680229	Cut or sawn slabs of stone nes	2,331	0.4	***1.9***	0.6	0.0	***2.2***			0.1
681270	Compressed asbestos fiber jointing, in sheets, rolls	2,349		***18.5***	0.0	0.6	***61.8***		0.1	
681410	Mica plates, sheets and strips	2,468	0.3	***1.6***		***3.8***		0.3		
681490	Worked mica and articles of mica except sheet mica	2,981	***29.5***	***4.1***	0.0	0.0	0.0			
691190	Household & toilet articles nes of porcelain or china	3,165	0.0	0.6	***1.8***	0.0	***2.5***	0.0		0.1
681260	Asbestos paper, millboard and felt	3,891		***5.0***			***48.1***			
Basic metals and fabricated metal products (27+28)										

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
721049	Flat rolled iron or non-alloy steel, coated with zinc, width >600mm, ne	33	0.1	***2.2***	0.1	***2.9***	0.1	0.0		
720230	Ferro-silicon-manganese	50	0.1	***14.8***		***15.1***				
720241	Ferro-chromium, >4% carbon	57		***7.6***		***63.1***				
760110	Aluminum unwrought, not alloyed	69		***1.6***		***3.6***		***198.5***	0.3	0.0
720719	Semi-finished product, iron or non-alloy steel <0.25%C, nes	205		***6.0***		***1.3***				
780110	Lead refined unwrought	339		***1.7***	***2.1***	***15.0***	0.9	0.2		
760120	Aluminum unwrought, alloyed	418	0.1	0.3		0.1	0.5	***20.6***		0.0
721650	Sections, nes, iron or non-alloy steel, nfw hot-roll/drawn/extruded	506		0.5	0.1	0.1	***4.6***			***2.1***
721631	Sections, U, iron or non-alloy steel, nfw hot-roll/drawn/extruded > 80m	702		0.2	0.1	0.0	***5.4***	***10.0***		***2.1***
720720	Semi-finished product, iron or non-alloy steel >0.25%C	884		0.1		***18.1***	***2.2***			
821220	Safety razor blades, including blanks in strips	944	0.0	***1.3***	***2.3***	0.0				0.0
741820	Sanitary ware and parts thereof of copper	1,039	0.1	***4.8***	***7.2***	0.0				
820320	Pliers, pincers, tweezers and similar tools	1,177	0.1	***1.1***	***1.3***	0.0	***2.6***			
720990	Cold rolled iron or non-alloy steel, flat, width >600mm, nes	1,228	***6.7***	***1.4***		***1.5***	0.0			0.0
790112	Zinc, not alloyed, unwrought, <99% pure	1,249		0.6	0.2	***2.7***				***104.4***
720299	Ferro-alloys, nes	1,383	***79.2***	***2.4***		0.2	0.0			
780191	Lead unwrought containing mostly antimony	1,463		***2.3***		0.2				***1.9***
741012	Foil, copper alloy, not backed, t < 0.15mm	2,099		0.5		0.7	***4.4***	0.2		***8.9***
810199	Tungsten (wolfram) and articles thereof nes	2,223		***1.9***		0.0	0.1			***11.5***
820190	Scythes, sickles etc. used in agriculture, etc.	2,232		***1.8***	0.6	0.0	***19.3***	0.1		
810191	Tungsten unwrought, bars/rods simply sintered, scrap	2,361		***1.4***		***2.5***				***8.2***
760320	Powders/flakes, aluminum, of lamellar structure	2,415		***3.6***		***1.4***				
740322	Copper-tin base alloys, unwrought	2,639		0.9	0.6	***6.0***				***1.2***
740500	Master alloys of copper	2,735		***1.7***	***41.2***	***27.9***	0.2			
720249	Ferro-chromium, <4% carbon	2,751		0.2		***37.1***	***8.2***	0.6		
720250	Ferro-silicon-chromium	2,754		***2.0***		***215.1***				
760529	Wire, aluminum alloy, t < 7mm	2,775		***1.0***	0.0	0.0		***36.3***		
820510	Drilling, threading or tapping tools	2,814	0.3	***1.4***	***1.7***	0.0	0.0	0.0	0.0	0.0
741910	Chain and parts thereof of copper	3,104		***4.8***	0.1	0.0				
810291	Molybdenum, unwrought, bars/rods simply sintered, scrap	3,467		0.0		***2.1***				***47.0***
780420	Lead powders and flakes	3,931		***2.0***	0.0	***1.7***	***6.9***			

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
810710	Cadmium, unwrought, waste or scrap, powders	4,637		0.0		***12.4***				***52.0***
Low-technology industries										
Manufacturing i.e., of which: [NO]										
Mineral (ISIC 12)										
260111	Iron ores & concentrates, other than roasted iron pyrites, non-agglomerated	9		***1.5***	0.0	***1.3***	0.0		0.0	0.0
261690	Precious metal ores and concentrates nes	332		0.7	0.0	***2.7***	***71.1***	0.0		0.0
260800	Zinc ores and concentrates	344		0.7	0.0	***4.8***		***15.6***		
251110	Natural barium sulfur	365		***11.6***	***2.2***	***7.0***	***15.4***	0.0	0.1	
250100	Salt (include table salt & denatured salt) pure sodium chloride & sea	559	***2.5***	***1.5***	***1.8***	0.2	0.0	0.1	0.0	0.1
261000	Chromium ores and concentrates	638	***1.7***	***1.7***	***22.8***	***18.8***				
251690	Monumental or building stone nes, porphyry and basalt	746	0.5	***26.1***	0.0	0.0	***64.2***			0.2
252400	Asbestos	1,086		0.0	0.0	***19.7***	***5.0***			
252100	Limestone flux; limestone & other calcareous stone, for lime or cement	1,108		***3.9***	0.1	***2.3***	***25.6***	0.0		0.1
260300	Copper ores and concentrates	1,123		0.0	0.0	***2.7***	0.0	***1.8***		0.0
251512	Marble and travertine in blocks etc.	1,149	***3.6***	***1.3***	***12.8***	0.0	***1.6***			0.1
710310	Precious or semi-precious stones, unworked or partly worked	1,166	***46.7***	***2.9***	***2.9***	0.2	0.7	0.0		0.0
262100	Slag and ash nes, including seaweed ash (kelp)	1,326		***3.6***	0.4	***3.4***	0.0	0.1		
251400	Slate	1,579		***15.4***	0.4	***4.0***	***76.5***	0.6		0.0
252620	Natural steatite, crushed or powdered	1,789		***1.3***	***5.2***	0.0				0.0
252610	Natural steatite, not crushed/powdered	1,865	***15.0***	***2.5***	***177.1***					
252530	Mica waste	2,126		***281.5***	***7.7***					
710221	Diamonds industrial unworked or simply sawn, cleaved or brute	2,350	***1.5***	***2.3***						
250629	Quartzite, slabs etc.	2,379	0.4	***2.8***	0.1	***69.4***	0.3	0.1		0.0
261710	Antimony ores and concentrates	2,780	***9.4***	0.0	0.6	***2.9***	0.8	***107.3***		
252510	Mica crude or rifted into sheets or splitting	2,880	***4.6***	***4.6***	***1.6***					
252010	Gypsum; anhydrite	3,270	***12.6***	0.1	***7.6***	0.2	0.0	0.1		0.2
261790	ores and concentrates nes	3,477		0.5	0.3	***10.8***	***11.3***	0.2		0.0
251511	Marble and travertine, crude or roughly trimmed	3,601	***18.5***	0.0	***4.6***	0.0	0.9			0.2
253010	Vermiculite, perlite and chlorites, unexpanded	3,822		0.1	0.0	***2.9***				***1.7***

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
252921	Fluorspar, containing by weight 97% or less of calcium fluoride	3,914	0.1	0.0	***3.8***	***1.8***	0.7			
251520	Ecaussine & other calcareous monumental or building stone; alabaster	3,988	***22.1***	0.5	***10.0***	0.2	0.6			
Processing and manufacturing (36-37)										
711319	Jewelry and parts of precious metal except silver	3	0.1	***15.8***	***9.3***	0.0	0.4	0.0	0.0	0.6
711419	Gold/silversmith wares of/clad with precious metal ne	44		***68.1***	0.0	0.0	***1.8***			
711311	Jewelry and parts, silver, including plated silver	61	0.1	***6.8***	***2.6***	0.0	0.0	0.0	0.0	0.0
670300	Worked human hair, wool or animal hair, for wig making	224		***27.0***	0.0		0.1	***1.1***		***3.7***
710391	Rubies, sapphires and emeralds worked but not set	257		***5.2***	0.0	0.0		***2.6***	0.1	0.0
630900	Worn clothing and other worn articles	266	0.6	***1.5***	***2.2***	0.0	0.2	0.2	0.0	0.1
710399	Precious & semi-precious stones, nes, worked, not set	304	0.8	***4.7***	0.1	0.0		***6.2***	0.0	0.1
960200	Worked vegetable, mineral carving material, articles	707	0.3	***5.0***	***7.5***	0.0	0.0	0.0		0.0
360500	Matches	799	0.0	***14.1***	***67.5***	0.0		0.1		0.2
940429	Mattresses, stuffed, spring interior, etc.	987	0.1	***1.4***	0.1	0.0	***3.2***	0.0	0.0	0.2
950662	Inflatable balls	1,379	0.0	***1.5***	***81.2***	0.0	0.0	0.5		0.1
950669	Balls nes	1,453	0.0	***3.7***	***21.9***	0.0	0.0	0.0	0.0	0.0
711411	Silver wares, silver ware plated with precious metal	1,613	***1.1***	***4.6***	***6.9***	0.0				***2.4***
420321	Leather, composition sports gloves, mittens and mitts	1,766	0.1	***2.2***	***133.0***	0.0	0.0			
631010	Used or new rags textile material, sorted	2,385	***3.9***	***1.8***	***5.5***	0.0	0.2		0.2	***1.0***
960190	Animal carving material, articles, nes	2,426	0.0	***5.0***	***9.2***	0.0	0.0	0.0		0.0
631090	Used or new rags textile material, not sorted	2,589	0.2	***1.2***	***35.2***	0.0	0.0	***1.3***	***2.3***	***1.9***
960310	Brooms/brushes of vegetable material	2,783	0.1	0.8	0.6	0.0	0.9	***16.2***		***88.0***
960860	Refills for ball point pens	3,000		***1.4***	0.0	0.0	***14.9***			
960850	Sets of articles of mixed types of pens/pencils	3,190	***10.7***	0.0		0.0	***5.3***			
920992	Parts and accessories for string musical instruments	3,252	***2.1***	***1.1***	0.5	0.0		0.0		
Wood, pulp, paper, paper products										
Forest Products (02)										
130232	Mucilages & thickeners derived from locust beans & seeds or guar seed	15	0.2	***67.7***	***23.8***	0.0	0.0			
130190	Natural gums, resins, gum-resins and balsam, except Arabic gum	460	***160.2***	***16.1***	0.6	0.2	0.3	***11.9***		***14.9***
140490	Vegetable products nes	1,046	***14.7***	***2.4***	***3.3***	0.0	0.2	0.2	0.3	0.4
130211	Opium sap	1,751	***1.4***	***36.4***						
130212	Liquorice extract	4,371	***5.9***	0.1	0.4	0.6	0.4	***55.3***	***53.9***	***7.1***

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
Wood Processing (20-22)										
482020	School, etc., exercise books	872	0.0	***5.2***	0.1	0.0	***1.2***			
482090	Office supplies nes, of paper, book covers, blotters	2,478	***1.1***	***1.1***	0.1	0.0	0.3	0.1		
Food products										
Agricultural and Fishery Products (01+05)										
520100	Cotton, not carded or combed	8	***73.9***	***10.9***	***8.5***	0.9	***10.7***	***68.4***	***15.2***	***96.8***
120220	Ground-nuts shelled, whether or not broken, not roasted or otherwise cooked	75	0.8	***18.4***	0.0	0.0	0.2	***7.6***		***7.1***
120740	Sesame seeds, whether or not broken	101	***45.5***	***14.6***	***7.6***	0.0		0.4	0.0	***1.1***
70310	Onions and shallots, fresh or chilled	107	***85.3***	***9.2***	***4.8***	0.4	***16.6***	***90.9***	0.1	0.9
71320	Chickpeas, dried, shelled	154	***2.7***	***14.4***	0.0	0.2	0.0	0.9		0.9
100110	Durum wheat	175		***1.5***	***10.1***	1.0			0.0	***2.4***
70200	Tomatoes, fresh or chilled	282	***4.7***	0.4	0.4	0.0	***2.0***	0.2	0.2	***11.5***
80450	Guavas, mangoes and mangosteen, fresh or dried	299	0.0	***6.7***	***14.2***					
80610	Grapes, fresh	308	***33.4***	1.0	0.0	0.0	***2.0***	***1.6***	0.2	***26.8***
121190	Plants & pts of plants(incl seed & fruit) used in pharm, perf, insect e	322	***86.5***	***4.9***	***3.5***	0.8	***2.8***	***2.8***	***3.8***	***11.4***
90930	Cumin seeds	330	***48.7***	***44.1***	***7.7***	0.0		0.1	0.0	0.0
91030	Turmeric (curcuma)	410	0.6	***56.0***	***3.8***					0.1
70190	Potatoes, fresh or chilled except seed	464	***28.7***	0.5	***15.6***	0.0	***26.4***	0.1	0.0	0.0
91099	Spices nes	481	0.7	***12.1***	***10.2***	0.1	0.0	0.3	0.0	0.1
70990	Vegetables, fresh or chilled nes	500	0.4	***1.5***	***6.0***	0.0	***2.3***	0.1	0.0	***22.9***
80810	Apples, fresh	560	***14.9***	0.1	0.0	0.0	***9.0***	0.1	0.1	***1.1***
81090	Fruits, fresh nes	566	***18.4***	0.6	0.9	0.0	***3.3***	***3.9***	0.0	***24.5***
71310	Peas dried, shelled	582	***2.3***	0.0	***1.1***	0.3	0.0	0.1		0.1
240110	Tobacco, unmanufactured, not stemmed or stripped	594	***1.9***	***2.1***	***1.9***	0.3	***46.8***	***3.0***		***17.9***
100610	Rice in the husk (paddy or rough)	634	***1.3***	***2.9***	0.7	0.0	0.1	0.3		0.0
40900	Honey, natural	750	0.0	***2.3***	***1.8***	0.0	***5.0***	0.4		0.3
70320	Garlic, fresh or chilled	934	0.0	0.3	0.1	0.0	***3.5***	0.5	0.0	***1.5***
71333	Kidney beans and white pea beans dried shelled	998	0.9	0.0		0.0	***225.6***	***5.4***		***8.1***
80232	Walnuts, fresh or dried, shelled	1,034	***4.8***	***2.3***	0.1	0.1	***42.0***	***28.5***		***18.4***
90920	Coriander seeds	1,096	***4.4***	***19.9***	0.8	0.1	0.0	0.0		0.1
91091	Mixtures of spices	1,129	***1.1***	***7.0***	***51.0***	0.0	0.0	0.1		0.1
71390	Leguminous vegetables dried, shelled	1,143	***29.1***	0.3	0.8	0.0		0.3		***4.4***

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
100820	Millet	1,206	***11.6***	***12.9***	0.2	0.2	0.4			0.0
120999	Seeds, fruit and spores for sowing, nes	1,419	***48.7***	***2.2***	0.5	0.0	0.2	***7.1***		0.0
30624	Crabs, not frozen	1,422	0.1	***2.4***	***10.6***					
80910	Apricots, fresh	1,452	***129.5***	0.0	0.4	0.0	***126.8***	***23.9***	0.1	***178.6***
120799	oil seeds and oleaginous fruits, nes, whether or not broken	1,459	***34.5***	***2.1***	***1.3***	0.4	0.1	0.5		0.0
30219	Salmonidae, not trout or salmon, fresh or chilled whole	1,476		***7.2***	***6.6***					
80930	Peaches, nectarines, fresh	1,498	0.1	0.0	0.1	0.0	***11.7***	0.1		***27.3***
70700	Cucumbers and gherkins, fresh or chilled	1,623	0.0	0.0	0.0	0.1	***4.0***	0.2	0.2	***17.3***
90950	Fennel seeds, juniper berries	1,708	***2.9***	***35.7***	***21.8***					0.1
80940	Plums, sloes, fresh	1,760	0.4	0.0	0.1	0.0	***21.6***	***7.4***		***50.9***
80410	Dates, fresh or dried	1,796	***36.9***	0.2	***50.6***	0.1	0.0	0.2	0.0	0.0
80920	Cherries, fresh	1,829	0.2	0.0	0.0	0.0	***24.9***	***4.5***		***44.2***
70490	Edible brassicas nes, fresh or chilled	1,845	0.0	0.1	0.1	0.2	***17.7***	***3.0***	0.1	***31.7***
71339	Beans dried, shelled, nes	1,853	***258.1***	0.1	0.3	0.0	***3.5***	***3.4***		***17.0***
70690	Beetroot, salsify, celeriac, radishes etc. fresh, chilled	1,944	***1.9***	0.1	0.2	0.0	***4.2***	***10.0***	0.3	***64.1***
10290	Bovine animals, live, except pure-bred breeding	2,034	***3.2***	0.0	0.7	0.0	***3.8***	***1.6***		0.0
80590	Citrus fruits, fresh or dried, nes	2,038	0.0	***1.9***	***113.8***	0.0	***1.2***		0.0	
120210	Ground-nuts in shell not roasted or otherwise cooked	2,064	***2.3***	***1.2***	0.8	0.1	0.1	***24.4***		***18.9***
80820	Pears and quinces, fresh	2,072	0.2	0.0	0.1	0.0	***7.6***	0.1		***2.0***
70610	Carrots and turnips, fresh or chilled	2,145	***2.0***	0.0	0.0	0.0	***51.2***	***10.7***	0.0	***12.5***
10420	Goats, live	2,369	0.2	***2.6***	***1.8***	0.0	***9.4***			
410390	Raw hide/skins except bovine/equine/sheep/goat/reptile	2,410	***9.5***	0.1	0.1	0.1	***5.7***	***3.5***	***2.1***	0.0
90910	Anise or badian seeds	2,417	***345.8***	***4.5***	***5.1***		0.7	***1.6***		0.0
60220	Trees, edible fruit or nut, shrubs and bushes	2,418	0.1	0.0	0.0	0.0	***1.6***			***5.4***
120921	Seeds, lucerne (alfalfa), for sowing	2,642	***13.2***	1.0	***2.9***	0.1	***11.5***			0.1
70930	Aubergines(egg-plants), fresh or chilled	2,820	0.0	0.0	0.0	0.0	***1.9***	0.0	0.2	***19.5***
120760	Safflower seeds, whether or not broken	2,902		***25.1***		***61.5***				
60240	Roses	3,160		0.9	0.1	0.3	***1.6***			***27.0***
10600	Animals, live, except farm animals	3,320	***2.0***	0.0	0.7	0.0	0.6	***1.2***	0.0	***6.8***
71331	Urd, mung, black or green gram beans dried shelled	3,603	***85.7***	0.1	0.2	0.0	0.4	***2.7***	0.1	***34.8***
90940	Caraway seeds	3,629	***199.9***	***3.6***	***10.0***		***19.4***	***2.3***		0.9
121299	Vegetable products nes used primarily for human consumption	3,712	***69.6***	0.1	0.1	0.0	0.3	***13.1***		***3.2***
80231	Walnuts in shell, fresh or dried	3,918	***1.9***	0.0	0.2	0.0	***7.7***	***3.8***		***13.2***
70890	Legumes except peas & beans, fresh or chilled	4,049	0.7	0.3	***6.6***	0.1				***1.1***

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
70390	Leeks & other alliaceous vegetables, fresh or chilled	4,118	0.1	0.0	0.4	0.0	*1.1*		0.1	*5.7*
530110	Flax fiber, raw or retted	4,223		*2.9*		*2.7*				
510220	Coarse animal hair, not carded or combed	4,267	*830.5*	0.6	*4.9*	0.6	*5.5*	*51.8*	*93.4*	*116.7*
121010	Hop cones, not ground, powdered or pelleted	4,374	*28.3*	0.0	*9.2*					
71332	Beans, small red (Adzuki) dried, shelled	4,389	*4.8*	0.0			*4.4*	*2.8*		*21.8*
510210	Fine animal hair, not carded or combed	4,411	*150.3*	0.0	0.6	0.0	*1.5*	0.0	0.3	
500100	Silk-worm cocoons suitable for reeling	4,592	*67.2*	0.3	*7.1*	0.5		*101.4*	*26.9*	*62.8*
121110	Liquorice roots used primly in pharm, perf, insecticide, fungicide/sim	4,680	*53.4*							*203.1*
Food Processing (15-16)										
100630	Rice, semi-milled or wholly milled	7	0.2	*21.2*	*75.9*	0.2	0.3	1.0	0.0	0.0
30613	Shrimps and prawns, frozen	20	0.0	*7.9*	*1.9*			0.1	0.0	
170199	Refined sugar, in solid form, nes	31	0.1	*4.4*	*10.5*	0.1	0.0	0.4		0.0
110100	Wheat or meslin flour	52	0.0	*1.2*	*36.3*	*34.0*	0.1	*17.9*	0.2	*1.9*
30379	Fish nes, frozen, whole	103	0.2	*4.4*	*1.8*	0.2		0.0		0.6
230640	Rape/colza seed oil-cake & other solid residues, whether/not ground/pell	180		*6.5*	*3.5*	0.5			0.5	0.4
151620	Veg fats & oils & fractions hydrogenated, inter/re-esterified, etc., ref	182	*1.7*	*1.3*	*29.4*	0.1	0.0	0.0		*1.1*
40210	Milk powder < 1.5% fat	187	0.3	*1.3*	0.2	0.0	*4.9*	0.1	0.0	0.0
30749	Cuttle fish, squid, frozen, dried, salted or in brine	191	*2.6*	*5.7*	0.2					
100640	Rice, broken	277		*5.4*	*71.0*	0.6	0.1			0.0
240399	Tobacco extracts and essences	389	*3.7*	*6.7*	0.5	0.0	0.1			0.0
220710	Un-denatured ethyl alcohol of an alcohol strength by volume of 80% volume/high	479	0.0	*1.1*	*14.8*	0.0				
90230	Tea, black (fermented or partly) in packages < 3 kg	491	*4.2*	*2.9*	*1.0*	0.3	*3.7*	0.0		0.2
200110	Cucumbers and gherkins, prepared or preserved by vinegar or acetic ac	509	0.1	*11.4*	0.0	0.1	*1.4*	*2.8*		*7.5*
200799	Jams, fruit jellies, fruit/nut purée & paste, Prepared, sugared, sweet	531	0.0	*2.7*	0.7	0.0	*1.2*	0.9		*3.3*
230690	Vegetable oil-cake and other solid residues nes	579		*17.7*	*3.9*	*2.2*				0.0
30490	Fish meat & mince, except liver, roe & fillets, froze	617		*2.2*	*1.5*	0.0		*2.1*		
220210	Waters incl mineral & aerated, contain sugar o sweeting matter or flavor	674	0.1	0.0	*1.1*	0.7	*4.4*	0.1	0.0	0.2

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
40120	Milk not concentrated nor sweetened 1-6% fat	696	0.0	0.1	***4.6***	0.2	***15.7***			
71220	Onions, dried, not further prepared	711	0.4	***12.7***	***7.1***	0.0	0.0	***1.1***		***3.8***
170230	Maple sugar and maple syrup	725	0.8	***1.5***	***4.8***	0.1	0.5			0.0
40390	Buttermilk, curdled milk, cream, kephir, etc.	776	0.0	0.0	***4.4***	0.1	***10.4***			0.1
30374	Mackerel, frozen, whole	792	***3.6***	***1.7***	***1.7***	0.0				
20629	Bovine edible offal, frozen except livers and tongues	836	0.4	***2.3***	***2.0***		0.0			0.0
160420	Fish prepared or preserved, except whole or in pieces	901		***1.5***	***5.5***	0.0				
110812	Maize (corn) starch	929	0.0	***3.4***	***4.6***	0.1				
170310	Cane molasses	933		***4.3***	***17.6***					***1.0***
200190	Veg, fruit, nut & edible parts of plants nes, prep/preserved by vinegar	988	0.0	***2.0***	***2.8***	0.0	0.1	0.2		***1.6***
20421	Sheep carcasses and half carcasses, fresh or chilled	1,090	***9.0***	***11.3***	***67.8***	0.7	***45.0***			
71140	Cucumbers and gherkins provisionally preserved	1,146		***24.2***			***1.1***			
140420	Cotton linters	1,163		***12.0***	***5.6***	***2.1***	0.1	***5.1***	***96.1***	***121.1***
80620	Grapes, dried	1,215	***446.9***	1.0	0.0	0.0	0.9	***9.0***		***37.3***
410210	Sheep or lamb skins, raw, wool on, except Persian etc.	1,265	***57.1***	0.0	0.2	0.1	***7.9***	***1.0***	***1.5***	0.1
170410	Chewing gum containing sugar, except medicinal	1,274	0.0	0.5	***17.0***	0.0	0.0	0.1		***3.5***
81340	Fruits, dried nes	1,370	***29.8***	***1.9***	***40.3***	0.2	***12.2***	***48.2***		***30.2***
200980	Fruit & veg juice nes (excluding mx) un-ferment un-spirited	1,384	0.5	0.2	***2.6***	0.0	0.1	***2.3***		***1.5***
81350	Mixtures of edible nuts, dried and preserved fruits	1,576	***72.2***	0.1	0.9	***2.2***	***3.1***	***718.3***		***119.5***
90210	Tea, green (unfermented) in packages < 3 kg	1,593	0.0	***1.4***	0.2	0.1	***3.1***	0.0	0.0	0.1
110630	Flour, meal, powder of fruit/nut, citrus or melon pee	1,809	***2.1***	***5.3***	0.0	0.1		0.1		0.3
151221	Cotton-seed oil crude, whether or not gossypol has been removed	1,837				***248.2***	0.0	***2.6***	***76.5***	
30333	Sole, frozen, whole	1,895		***12.3***	***3.4***					
30371	Sardines, brisling, sprats, frozen, whole	1,960		***1.2***	0.3			***18.9***		
110313	Maize (corn) groats or meal	1,980	***2.1***	***1.7***	0.5	0.0				
150890	Ground-nut oil and its fractions refined but not chemically modified	2,001	***2.0***	***8.8***	0.1					0.7
71230	Mushrooms and truffles, dried, not further prepared	2,003		***1.4***	***3.2***	0.0	***1.8***	0.0		0.0
81310	Apricots, dried	2,015	***346.8***	0.0	***1.8***	***1.3***	***4.4***	***584.9***	0.0	***35.7***
110290	Cereal flour except wheat, meslin, rye, maize, rice	2,054	0.0	***1.8***	***4.3***	0.1			0.0	
30329	Salmonidae, nes, frozen, whole	2,067		***6.4***	***70.7***	0.0				

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
151550	Sesame oil & its fractions whether/not refined, but not chemically mod	2,275	*5.3*	*3.5*	0.0		0.2			0.1
230500	Ground-nut oil-cake & other solid residues, whether or not ground	2,311		*12.4*	*1.7*					
152200	Degrease & residues from fatty substances or animal or vegetable waxes	2,330		0.4		0.4			*5.9*	*1.1*
110610	Flour or meal of dried legumes	2,371	*19.1*	*11.8*	*4.3*					
30339	Flatfish except halibut, plaice or sole, frozen, whole	2,456		*1.1*	*200.4*	0.0				
410121	Bovine hides, whole, fresh or wet-salted	2,493	*7.6*	0.0	0.1	0.1	*3.1*	*4.8*	*1.0*	0.0
110319	Cereal groats or meal except wheat, maize, rice, oats	2,542		0.2	*4.0*	*3.9*	*13.4*	0.1		
230610	Cotton seed oil-cake & other solid residues, whether or not ground	2,566		*3.6*	*5.9*	*14.9*			*164.6*	
71190	Vegetables nes and mixtures provisionally preserved	2,580	0.0	0.9	*1.1*	0.1	*20.0*		0.1	*25.7*
30376	Eels, frozen, whole	2,864		*7.9*	*2.7*					
170112	Raw sugar, beet	2,928	0.3	0.3	*5.3*	0.0	*1.2*	0.0		
81320	Prunes, dried	3,050	*8.1*	0.1	0.0	0.2	*2.0*	*55.9*		*18.3*
200510	Homogenized vegetables prep/preserved, by vinegar/acetic acid	3,095		*2.4*	0.1	0.0	*2.3*			0.4
510119	Greasy wool (other than shorn) not carded or combed	3,116	*2.5*	0.1	*1.9*	0.4	*13.1*	*2.2*	*2.2*	0.2
410221	Sheep or lamb skins, pickled, without wool	3,227	*9.6*	0.0			0.8	*4.7*	0.3	
410110	Bovine skins, whole, raw	3,329	*7.8*	0.2	0.0	0.3	*15.4*	*10.2*	*2.2*	
200950	Tomato juice unfermented & not spirited, whether or not sugared or sweetened	3,340		0.0	0.1	0.3	0.7	*11.1*		*1.7*
20680	Sheep, goat, ass, mule, hinnies offal, fresh or chilled	3,453		*1.1*	*170.5*					
81290	Fruits and nuts, provisionally preserved nes	3,550	*5.7*	*1.4*	0.0	0.0	0.1	*2.9*		
151229	Cotton-seed and its fractions refined but not chemically modified	3,569		0.1	0.1	*1.9*		*2.1*	*8.0*	
20441	Sheep carcasses and half carcasses, frozen	3,630		0.7	0.1	*1.1*	*14.2*			
170390	Molasses nes	3,638		0.1	0.6	*1.8*	*12.6*			
410229	Sheep or lamb skins, raw, except pickled, no wool	3,696	*35.7*	0.1	0.0	0.0	*183.4*	*36.4*		
110220	Maize (corn) flour	3,951	*44.8*	0.2	*2.2*		0.0	*1.2*	0.0	
81330	Apples, dried	4,070	*4.3*	0.0	0.0	0.2	*12.5*	*60.4*		*4.2*
200850	Apricots nes, o/w prep o presvd whether or not sugared, sweetened	4,083	*1.1*	0.0	0.2	0.0	*1.1*	*3.3*		*4.3*
30510	Flours, meals & pellets of fish for human consumption	4,086		*1.4*	*98.4*					

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
240290	Cigars, cheroots, cigarillos and cigarettes, tobacco substitutes	4,104		0.3	*1.1*		*1.1*			
410130	Bovine hides, raw, nes	4,195	0.6	0.1	0.0	0.0	*1.1*	*1.3*	*1.0*	0.4
81210	Cherries provisionally preserved	4,532		0.0	0.1	0.0	*12.8*	*5.1*		
Textiles and textile products (17-18)										
610910	T-shirts, singlet and other vests, of cotton, knit	19	0.0	*4.2*	*5.9*	0.0	0.1	0.0	0.2	*7.3*
520523	Cotton yarn >85% single combed 232-192 dtex, not retail	46		*41.4*	*27.2*	0.1		*16.4*	*3.5*	*41.3*
630260	Toilet or kitchen linen, of cotton terry toweling	65	0.1	*7.6*	*81.0*	0.0	0.5	0.0	*5.1*	*1.9*
540710	Woven hi-ten filament, nylon, polyamide or polyester	70	0.0	*26.1*	*1.0*	0.0	0.3	0.2		0.0
630419	Bedspreads, textile material, nes, not knit or crochet	79	0.4	*94.3*	*46.7*	0.0	0.6	0.0	0.0	0.1
630492	Furnishing articles nes, of cotton, not knit, crochet	85	*1.0*	*58.3*	*7.5*	0.0		0.0	0.1	0.0
520524	Cotton yarn >85% single combed 192-125 dtex, not ret.	86	*7.4*	*28.5*	*17.2*	0.1		*7.4*	*1.3*	*33.1*
420310	Articles of apparel of leather or composition leather	99	0.0	*8.8*	*57.1*	0.1	0.0	0.0	0.0	0.0
620342	Men's, boys trousers & shorts, of cotton, not knit	105	0.0	*1.2*	*15.6*	0.0	0.1	*7.5*	0.5	0.1
611120	Babies garments, accessories of cotton, knit	113	0.0	*4.5*	*2.2*	0.0	0.1	0.0	0.0	*3.6*
610990	T-shirts, singlet etc., of material nes, knit	117	0.5	*2.6*	*3.1*	0.0	0.0	0.1	0.0	0.1
621490	Shawls, scarves, etc., of material nes, not knit	121	0.1	*40.3*	*7.7*	0.0	0.1	0.0		0.0
620640	Women's, girls blouses, shirts, manmade fiber, not knit	141	0.0	*4.5*	0.0	0.0	*33.1*	*1.5*	0.0	0.0
610510	Men's, boys shirts, of cotton, knit	151	0.0	*3.5*	*30.0*	0.0	0.1	0.0	0.0	*1.7*
620443	Women's, girls dresses, synthetic fibers, not knit	162	0.0	*3.7*	0.1	0.0	*27.1*	0.0	0.0	0.0
520512	Cotton yarn >85% single uncombed 714-232 dtex, not ret	168	0.0	*6.3*	*194.8*	0.1	*1.5*	*17.9*	*61.7*	*114.5*
570500	Carpets and textile floor coverings, nes	176	*1.7*	*16.3*	0.0	0.0	0.1	0.0	0.0	0.2
520522	Cotton yarn >85% single combed 714-232 dtex, not retail	177		*15.4*	*82.7*	0.0		*7.4*	*2.4*	*41.2*
551511	Woven fabric polyester + viscose rayon, nes	179		*16.4*	0.6	0.1	*2.4*	0.3		
630790	Made up articles (textile) nes, textile dress pattern	201	0.0	*1.8*	*1.7*	0.0	0.7	0.0	0.0	0.0
630539	Sacks & bags, packing, of other manmade yarn	208	0.0	*7.9*	*5.0*	0.0	0.2	0.1		0.0
570110	Carpets of wool or fine animal hair, knotted	209	*189.6*	*19.6*	*83.9*	0.0	0.0	0.0	0.5	0.1
610520	Men's, boys shirts, of manmade fibers, knit	226	0.0	*8.3*	*5.7*	0.0	0.1	0.1	0.0	0.0
630231	Bed linen, of cotton, nes	238	0.0	*3.9*	*106.8*	0.0	*1.2*	0.0	*5.5*	0.0
520511	Cotton yarn >85% single uncombed >714 dtex, not retail	255		*14.3*	*112.0*	0.0			*19.1*	*9.5*
420329	Leather, composition gloves & mittens except sports	264	0.0	*7.5*	*49.9*	0.0	0.4	0.0		
520942	Denim cotton >85% >200g/m2	265		*4.4*	*75.8*	0.0	0.0	0.2	*9.6*	
610610	Women's, girls blouses & shirts, of cotton, knit	270	0.0	*3.9*	*5.9*	0.0	0.2	0.0	0.0	*1.2*
520514	Cotton yarn >85% single uncombed 192-125 dtex, not ret	280	0.8	*20.7*	*17.6*	0.1	0.0	*6.4*	0.6	*159.0*
610831	Women's, girls nightdress or pajamas, of cotton, knit	290	0.0	*6.9*	*4.5*	0.0	0.7	0.0	0.1	*13.3*

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
540752	Woven fabric >85% textured polyester, dyed, nes	295		4.1	2.0	0.0	0.2		0.0	
570310	Carpets of wool or fine animal hair, tufted	297	2.6	18.4	0.0	0.0	0.1	0.0	0.0	0.0
940490	Articles of bedding nes	306	0.0	1.3	6.2	0.0	0.9	0.0	0.0	0.0
620452	Women's, girls skirts, of cotton, not knit	311	0.0	5.8	8.4	0.0	0.2	0.3	0.2	0.1
520811	Plain weave cotton, >85% <100 g/m2, unbleached	320		20.3	62.9		0.0	7.8	0.0	11.7
550951	Yarn of polyester & artificial staple fibers, not retail	324	1.9	18.6	1.2		0.0			
550953	Yarn of polyester & cotton, not retail, nes	329		14.1	15.6		0.0		2.0	0.9
611420	Garments nes, of cotton, knit	333	0.0	6.8	3.2	0.0	0.0	0.0	0.0	0.1
621142	Women's, girls garments nes, of cotton, not knit	340	0.0	7.0	3.0	0.0	0.0	4.6	0.5	0.0
520852	Plain weave cotton, >85% 100-200g/m2, printed	345	0.2	10.4	27.8	0.0			0.8	2.7
610711	Men's, boys underpants or briefs, of cotton, knit	347	0.0	3.0	5.3	0.0	2.9	0.0	0.0	5.3
520521	Cotton yarn >85% single combed >714dtex, not retail	354		23.3	8.0				2.5	4.5
621143	Women's, girls garments nes, manmade fibers, not knit	356	0.0	3.5	0.3	0.0	1.4	0.0	0.0	0.0
620920	Babies garments, accessories of cotton, not knit	366	0.0	4.6	1.6	0.0	0.3	0.2	0.0	0.1
630510	Sacks & bags, packing, of jute or other fibers	393	0.2	25.6	16.5		0.2			
570242	Carpets of manmade yarn, woven pile, made up, nes	404	0.0	1.3	0.1	0.0	2.1	1.6	0.0	27.6
540772	Woven fabric >85% synthetic filament, dyed, nes	406	0.0	3.5	2.3	0.0	0.1	0.0	0.0	0.0
610821	Women's, girls briefs or panties, of cotton, knit	421	0.0	2.8	3.3	0.0	1.0	0.0	0.0	3.8
600292	Knit or crochet fabric of cotton, nes	428	0.0	1.8	4.1	0.0		0.9	1.1	7.1
610462	Women's, girls trousers & shorts, of cotton, knit	438	0.0	1.3	5.4	0.0	0.0	0.0	0.1	2.7
520851	Plain weave cotton, >85% <100 g/m2, printed	444		26.1	102.5		0.0		0.1	4.6
551512	Woven fabric polyester + manmade filament, nes	447		13.9	0.2	0.0	1.3	0.0		0.0
621430	Shawls, scarves, etc., synthetic fibers, not knit	448	0.0	5.8	1.2	0.0	0.1	0.0		0.0
570190	Carpets of materials nes, knotted	466	11.4	25.3	3.9	0.0	0.0	0.0	0.0	1.7
520513	Cotton yarn >85% single uncombed 232-192 dtex, not ret	470		13.9	76.6	0.0	3.8	9.2	19.1	261.2
551011	Yarn >85% artificial staple fibers, single, not retail	473		6.4	1.4	0.0				
610721	Men's, boys nightshirts or pajamas, of cotton, knit	497	0.1	10.1	5.1	0.0	0.2	0.0	0.1	3.1
620349	Men's, boys trousers & shorts, material nes, not knit	511	0.0	7.1	65.3	0.0	0.1	0.1	0.0	0.0
610442	Women's, girls dresses, of cotton, knit	522	0.0	2.8	0.7	0.0	0.2	0.2	0.0	2.5
630710	Floor & dish cloths, dusters, etc., textile material	524	0.0	3.6	119.4	0.0	0.0	0.0		0.1
610342	Men's, boys trousers & shorts, of cotton, knit	539	0.1	3.0	16.3	0.0	0.1	0.1	0.2	11.0
531010	Woven fabric of jute/bast fibers, unbleached/bleached	550		41.0	2.1	0.0	12.3			
630391	Curtains drapes blinds valances, cotton, not knit	570	0.2	9.0	41.9	0.0	0.0	0.0		0.0
630221	Bed linen, of cotton, printed, not knit	575	0.0	1.9	9.1	0.0	0.7	0.1	4.2	1.6

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
620319	Men's, boys suits, of material nes, not knit	614	0.1	***14.4***	***21.4***	0.0	***2.1***	0.0	0.1	0.2
520831	Plain weave cotton, >85% <100 g/m2, dyed	615		***13.3***	***72.8***	0.0	0.1	0.2		0.1
620413	Women's, girls suits, synthetic fibers, not knit	619	0.0	***18.8***	***3.1***	0.0	***54.1***			1.0
540754	Woven fabric >85% textured polyester, printed, nes	637	0.1	***7.5***	***1.8***			0.4		0.0
620343	Men's, boys trousers shorts, synthetic fiber, not knit	648	0.0	0.8	***2.7***	0.0	***12.0***	0.1	0.0	0.0
570231	Carpets of wool or hair, woven pile, not made up, nes	650	***1.6***	***18.6***	1.0	0.0	0.2	0.0		0.1
620590	Men's, boys shirts, of material nes, not knit	654	0.0	***6.1***	***3.2***	0.0	0.2	0.0	0.0	0.1
620449	Women's, girls dresses, of material nes, not knit	661	0.0	***2.2***	0.5	0.0	***1.0***	0.0	0.0	0.0
620412	Women's, girls suits, of cotton, not knit	668	0.0	***42.4***	***57.2***	0.0	***1.3***		0.0	0.1
620419	Women's, girls suits, of material nes, not knit	682	0.1	***19.4***	***13.7***	0.0	***1.1***		0.0	
551219	Woven fabric >85% polyester staple fibers, nes	722	0.2	***1.2***	***7.7***	0.0	***6.9***		0.0	0.0
630210	Bed linen, of textile knit or crochet materials	729	0.0	***4.6***	***353.8***	0.0	0.0	0.0	0.0	0.2
620453	Women's, girls skirts, synthetic fibers, not knit	760	0.0	***2.7***	0.1	0.0	***39.0***	0.0	0.0	0.0
420330	Belts and bandoliers of leather or composition leather	764	0.0	***1.6***	***1.3***	0.0	0.0	0.0	0.0	0.0
630130	Blankets (non-electric) and travelling rugs, of cotton	773	0.3	***6.2***	***22.8***	0.0	0.1		0.3	0.0
620690	Women's, girls blouses & shirts, material nes, not knit	781	0.0	***3.8***	***2.7***	0.0	***3.0***	0.0	0.0	0.0
610590	Men's, boys shirts, of materials nes, knit	785	0.0	***16.8***	***594.3***	0.0	0.0	0.1	0.0	0.1
621132	Men's, boys garments nes, of cotton, not knit	789	***1.0***	***3.8***	***6.6***	0.0	0.1	***9.5***	0.0	0.6
520932	Twill weave cotton, >85% >200g/m2, dyed	806	0.2	***4.1***	***95.2***				0.0	0.2
610423	Women's, girls ensembles, synthetic fibers, knit	817		***4.4***	***1.1***	0.0	0.4	0.1		
620530	Men's, boys shirts, of manmade fibers, not knit	821	0.0	***2.2***	0.6	0.0	***5.0***	0.0	0.0	0.0
611490	Garments nes, of materials nes, knit	829	0.4	***5.5***	***12.7***	0.0	0.5	0.1		0.0
520821	Plain weave cotton, >85% <100 g/m2, bleached	854		***14.0***	***88.4***	0.0	0.4	***4.4***	0.0	***6.6***
620821	Women's, girls nightdress, pajamas, of cotton, not knit	873	0.0	***6.6***	***5.5***	0.0	0.0	0.0	0.1	0.0
520832	Plain weave cotton, >85% 100-200g/m2, dyed	881		***3.8***	***15.7***	0.0		0.2	0.2	1.0
620469	Women's, girls trousers, shorts, material nes, not knit	885	0.0	***1.3***	***11.5***	0.0	0.2	0.0	0.0	0.0
611190	Babies garments, accessories of material nes, knit	905	0.0	***17.9***	***25.8***	0.0	0.7	***5.7***	0.0	
530720	Yarn of jute, textile bast fiber nes, multiple, cable	912	***1.8***	***12.7***	0.0	0.0				
520812	Plain weave cotton, >85% 100-200g/m2, unbleached	915		***2.1***	***75.4***	***1.7***	***5.1***	***23.6***	***40.3***	***36.1***
630190	Blankets (except electric) & travel rugs, material ne	922	0.7	***9.5***	***18.5***	0.0	0.4	0.2	0.0	0.0
510529	Wool tops & other combed wool, except combed fragment	952	0.1	***1.9***	0.0		0.7	***2.3***		
520544	Cotton yarn >85% multiple combed 192-125 dtex, not ret	972		***9.0***	***34.3***			***20.7***		0.6
521213	Woven cotton fabric, > 200g/m2, dyed, nes	981		***12.9***	***44.5***	0.0	***3.3***	0.7		
620332	Men's, boys jackets & blazers, of cotton, not knit	985	0.0	***2.4***	***7.0***	0.0	0.1	0.0	0.0	0.0

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
630499	Furnishing goods nes, material nes, not knit, crochet	1,019	0.2	***8.7***	***17.8***	0.0	0.0	0.0		0.0
621133	Men's, boys garments nes, of manmade fibers, not knit	1,022	0.1	***1.1***	0.8	0.0	***1.2***	0.0	0.0	0.0
611090	Pullovers, cardigans etc. of material nes knit	1,023	0.0	***1.0***	***21.0***	0.0	0.3	0.0	0.0	0.0
620463	Women's, girls trousers, shorts, synth fibers, not knit	1,032	0.0	0.5	***3.1***	0.0	***25.7***	0.0	0.0	0.0
620432	Women's, girls jackets & blazers, of cotton, not knit	1,049	0.0	***1.6***	***2.5***	0.0	0.3	0.0	0.0	0.0
610323	Men's, boys ensembles, synthetic fibers, knit	1,063		***19.1***	***5.9***	0.0	***2.7***			
520532	Cotton yarn >85% multiple uncombed 714-232 dtex, not ret	1,068		***7.1***	***370.8***	0.1	***2.2***	***31.0***	0.3	***141.0***
611593	Hosiery nes, synthetic fibers, knit	1,081	0.0	0.1	***1.8***	0.0	***1.2***	0.0	0.0	0.1
630299	Toilet or kitchen linen, of material nes	1,083		***23.4***	***143.2***	0.0	0.2	0.0		0.0
610690	Women's, girls blouses & shirts, of material nes, knit	1,088	0.0	***6.1***	***51.1***	0.0	0.4	0.0	0.0	0.1
630399	Curtains drapes blinds valances, material nes, woven	1,105	0.1	***6.9***	***70.1***	0.0	***1.1***	0.0		0.0
611592	Hosiery nes, of cotton, knit	1,106	0.0	0.1	***12.5***	0.0	***12.6***	0.1	0.1	***2.6***
500790	Woven fabric of silk, nes	1,121		***8.7***	***1.0***	0.0	0.6		0.0	0.1
621710	Clothing accessories nes, textile material, not knit	1,130	0.1	***1.5***	***1.6***	0.0	0.1	0.1	0.0	0.0
540751	Woven fabric >85% textured polyester unbl/bleached, ne	1,131		***3.3***	***1.6***	0.0		0.9		
521019	Woven cotton nes <85% +manmade fiber <200g, unbleached	1,132		***1.5***	***74.1***				0.0	0.0
610422	Women's, girls ensembles, of cotton, knit	1,134	0.1	***13.5***	***13.8***	0.0	0.1	0.0	0.0	***12.5***
520911	Plain weave cotton, >85% >200g/m2, unbleached	1,140		***6.4***	***260.7***	0.1		1.0	***2.0***	***16.9***
630291	Toilet or kitchen linen, of cotton, nes	1,155	0.0	***3.2***	***15.7***	0.0	0.2		0.2	0.1
610449	Women's, girls dresses, of material nes, knit	1,207	0.0	***4.8***	***4.4***	0.0	0.2	0.2	0.0	
521215	Woven cotton fabric, > 200g/m2, printed, nes	1,210		***34.3***	***313.8***					
620339	Men's, boys jackets & blazers, material nes, not knit	1,225	0.0	***3.7***	***32.5***	0.0	0.0	0.0	0.1	0.0
620422	Women's, girls ensembles, of cotton, not knit	1,235	0.2	***16.3***	***35.9***	0.0	***1.4***	***3.3***	0.0	0.2
540774	Woven fabric >85% synthetic filament, printed, nes	1,237		***22.8***	***34.5***		0.2			***1.6***
620333	Men's, boys jackets, blazers, synthetic fiber, not knit	1,240	0.0	***1.2***	***4.2***	0.0	0.1	0.0	0.0	0.0
620990	Babies garments, accessories of material nes, not knit	1,250	0.1	***5.1***	***2.7***	0.0	0.5	0.7		0.0
521142	Denim cotton nes, <85% +manmade fiber, >200g/m2	1,254		***2.1***	***48.5***				0.1	
560121	Wadding, products, of cotton, except sanitary article	1,277	0.0	***2.6***	***4.7***	0.0	0.1	0.1	***2.5***	***31.2***
611599	Hosiery nes, of materials nes, knit	1,278	0.0	***4.4***	***65.2***	0.0	***25.8***	0.0	0.3	0.0
551519	Woven fabric polyester staple fibers, nes	1,288	0.0	***2.8***	0.0	0.0	***1.2***	0.3		0.0
570232	Carpets of manmade yarn, woven pile, not made up, nes	1,316	***1.8***	***8.4***	0.5	0.0		0.4		0.0
540782	Woven fabric synthetic filament <85% +cotton, dyed ne	1,319		***5.5***	***1.3***	0.1			0.0	
611710	Shawls, scarves, veils etc., textile material, knit	1,330	0.3	***1.2***	***8.1***	0.0	0.1	0.0		***1.7***
621149	Women's, girls garments nes, material nes, not knit	1,344	0.0	***2.4***	***5.8***	0.0	0.1	0.0	0.0	0.0

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
520931	Plain weave cotton, >85% >200g/m2, dyed	1,347	0.0	***4.8***	***10.4***		0.0	0.0	0.0	***4.4***
620459	Women's, girls skirts, of material nes, not knit	1,351	0.0	***2.1***	***6.1***	0.0	0.7	0.0	0.0	0.0
610333	Men's, boys jackets & blazers, synthetic fibers, knit	1,382		***1.1***	***9.5***	0.0	0.1			0.1
610332	Men's, boys jackets & blazers, cotton, knit	1,401	0.0	***4.6***	***82.8***	0.0	0.2		0.0	0.4
630251	Table linen, of cotton, not knit	1,408	0.4	***2.5***	***17.5***	0.0	0.0		0.0	0.3
620891	Women's, girls panties, bathrobes etc., cotton, not knit	1,414	0.2	***2.8***	***7.6***	0.1	***4.1***	0.0	0.7	0.5
620461	Women's, girls trousers, shorts, wool or hair, not knit	1,421	0.0	***4.2***	***6.4***	0.0	0.1	0.0	0.0	0.0
551329	Woven fabric>85% synthetic nes + cotton, <170g/m2 dye	1,432		***5.9***	***8.2***					
630222	Bed linen, of manmade fibers, printed, not knit	1,438	0.0	***1.6***	***7.6***	0.0	0.2	0.0	0.1	0.0
610432	Women's, girls jackets & blazers, of cotton, knit	1,440		***2.3***	***9.9***	0.0	0.1	0.0	0.0	0.4
540792	Woven fabric synthetic filament, dyed, nes	1,442		***3.9***	0.2	0.0	***2.9***			0.0
570241	Carpets of wool or hair, woven pile, made up, nes	1,443	***6.2***	***6.2***	0.1	0.0	0.2		0.0	0.1
610469	Women's, girls trousers & shorts, material nes, knit	1,445	0.1	***2.2***	***21.6***	0.0	0.0	0.0	0.0	0.1
520859	Woven cotton nes, >85% <200g/m2, printed	1,479	0.0	***2.3***	***14.7***	0.1	0.1		0.1	0.0
520822	Plain weave cotton, >85% 100-200g/m2, bleached	1,484		***3.9***	***28.3***	0.0		***2.4***	0.4	***3.4***
520533	Cotton yarn >85% multiple uncombed 232-192 dtex, not ret	1,495		***16.4***	***65.9***	0.0		***36.6***		***78.4***
630520	Sacks & bags, packing, of cotton	1,507	***2.8***	***14.7***	***75.5***	0.0	0.2	0.0	0.0	***4.3***
610349	Men's, boys trousers & shorts, of material nes, knit	1,518	0.0	***6.0***	***259.4***	0.0	***2.0***	0.9		
630239	Bed linen, of material nes, nes	1,527	0.0	***5.6***	***105.9***	0.0	0.0	0.1	0.0	0.0
570299	Carpets of yarn nes, woven, made up, nes	1,546	1.0	***3.1***	***1.7***	0.0		0.0	0.0	0.0
551229	Woven fabric >85% acrylic staple fibers, nes	1,557	0.6	***4.2***	***2.8***		0.2			
610319	Men's, boys suits, of materials nes, knit	1,563	0.1	***10.6***	***31.7***	0.0	0.1			0.1
620312	Men's, boys suits, synthetic fibers, not knit	1,594		***1.3***	***2.2***	0.0	***29.1***	0.0		***1.1***
620822	Women/girl nightdress, pajama, manmade fiber, not knit	1,606		***4.2***	***3.4***	0.0	***1.5***	0.0		0.1
520829	Woven cotton nes, >85% <200g/m2, bleached	1,608		***3.9***	***31.7***	0.0		0.1	0.5	***6.5***
570210	Handmade rugs including Kelem, Schumacks, Karamanie, etc.	1,611	***90.4***	***8.3***	***4.4***	0.0	0.5		0.3	0.2
540793	Woven fabric synthetic filament, yarn dyed, nes	1,614		***1.6***	0.1	0.0	***3.8***			
630493	Furnishing articles nes, synth fiber, not knit, crochet	1,617	0.0	***1.5***	0.4	0.0	***1.9***	0.0		0.0
520543	Cotton yarn >85% multiple combed 232-192 dtex, not ret	1,620		***9.6***	***24.3***	0.0			0.0	***4.0***
610719	Men's, boys underpants or briefs, material nes, knit	1,632	0.3	***9.5***	***36.5***	0.1	***14.6***	1.0		0.5
610419	Women's, girls suits, of material nes, knit	1,640	***2.4***	***12.4***	***30.3***	0.0	0.2			***1.9***
550952	Yarn of polyester & wool or hair, not retail, nes	1,654		***13.2***	***1.1***				0.1	
610339	Men's, boys jackets & blazers, material nes, knit	1,691	***2.2***	***9.5***	***799.8***	0.0	0.6	***1.1***		
551030	Yarn of artificial staple fibers & cotton, not retail	1,692		***10.2***	***7.9***					

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
620423	Women's, girls ensembles, synthetic fibers, not knit	1,710	0.1	***4.0***	***1.9***	0.0	***6.9***	0.5	0.0	
520912	Twill weave cotton, >85% >200g/m2, unbleached	1,715		***2.8***	***182.6***			***4.1***	0.2	***53.6***
611519	Panty hose etc. of materials nes, knit	1,743	0.0	1.0	0.1	0.1	***12.4***		0.1	***1.1***
610429	Women's, girls ensembles, of material nes, knit	1,744	0.0	***7.3***	***8.2***	***1.1***	0.2	0.1		
520819	Woven cotton nes, >85% <200g/m2, unbleached	1,748		0.8	***65.3***	0.1	0.0	0.3	***2.4***	***2.4***
520534	Cotton yarn >85% multiple uncombed 192-125 dtex, not ret	1,773		***11.7***	***87.8***		***7.4***	***23.9***		***21.3***
610452	Women's, girls skirts, of cotton, knit	1,780	0.0	***2.3***	***2.4***	0.0	0.3	0.0	0.0	***2.6***
540784	Woven fabric synthetic filament, <85% +cotton, printed	1,802	0.0	***14.3***	***1.7***				0.0	
520542	Cotton yarn >85% multiple combed 714-232 dtex, not ret	1,817		***1.9***	***19.8***			***3.5***	0.3	***2.7***
610839	Women's, girls nightdress, pajamas, material nes, knit	1,823		***15.2***	***45.0***	0.0	0.2			
550959	Yarn of polyester staple fibers, not retail, nes	1,826	***1.1***	***4.5***	1.0	0.0				
620322	Men's, boys ensembles, of cotton, not knit	1,836	0.4	***4.6***	***323.7***	0.3	***2.8***	***17.4***	0.1	***14.9***
621112	Women's, girls swimwear, not knit	1,840	0.0	***4.7***	***7.4***	0.0	0.3			
620439	Women's, girls jackets & blazers, material nes, not knit	1,856	0.0	0.9	***2.3***	0.0	***2.7***	0.0	0.0	0.0
611693	Gloves, mittens or mitts, nes, synthetic fibers, knit	1,857	0.0	0.5	***3.7***	0.1	***1.7***			0.1
630229	Bed linen, of material nes, printed, not knit	1,875	0.3	***10.9***	***172.1***	0.0	***13.2***	0.1	0.1	0.3
610819	Women's, girls slips or petticoats, material nes knit	1,878	0.1	***20.3***	***13.1***	0.0	0.0			0.2
620329	Men's, boys ensembles, of material nes, not knit	1,899	0.0	***2.8***	***40.1***	0.1	0.0	0.0		0.5
620791	Men's, boys dressing gowns, etc. cotton, not knit	1,946		***3.0***	***64.8***	0.0	0.1	0.1	***1.9***	***2.2***
550969	Yarn of acrylic staple fibers, not retail, nes	1,953		***2.0***	***1.0***	0.0				
521059	Woven cotton nes, <85% +manmade fiber, <200g/m2 print	1,968	***10.0***	0.1	***51.6***		0.0			
610322	Men's, boys ensembles, of cotton, knit	1,977		***7.6***	***25.9***	0.0	0.7	***1.0***	0.0	***14.0***
520531	Cotton yarn >85% multiple uncombed >714 dtex, not ret	1,989		***5.9***	***261.2***				0.5	***3.0***
620199	Men's, boys anoraks etc., of material nes, not knit	1,997	0.1	0.6	***2.6***	0.7	***4.0***	0.0	0.1	0.1
610329	Men's, boys ensembles, of material nes, knit	2,004	0.0	***13.5***	***47.6***	***1.7***	***1.2***	0.4		
610439	Women's, girls jackets & blazers, material nes, knit	2,012	0.0	***2.6***	***45.2***	0.0	***6.5***	0.0		0.0
560500	Metallized yarn	2,014	***8.4***	***2.1***	0.3	0.0				
420340	Clothing accessories nes, of leather or composition	2,045	0.3	***4.0***	***12.6***	0.0	0.0		0.0	
611610	Gloves impregnated or coated with plastic, rubber, knit	2,076	0.0	0.2	***8.9***	0.0	***3.9***			***3.1***
570249	Carpets of yarn nes, woven pile, made up, nes	2,090	0.1	***2.6***	0.3	0.0	0.9		0.0	***20.3***
620323	Men's, boys ensembles, synthetic fibers, not knit	2,092	0.0	***2.4***	***4.3***	0.0	***9.6***	***1.3***	0.0	***1.2***
630240	Table linen, of textile knit or crochet materials	2,116	0.1	***22.2***	***69.9***			0.3		***2.3***
551411	Woven plain >85% polyester cotton, >170g/m2 unbl/blch	2,125		***10.2***	***93.5***	0.0				
520623	Cotton yarn <85% single combed 232-192 dtex, not retail	2,149		***1.6***	***2.2***	0.1				

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
520411	Cotton sewing thread >85% cotton, not retail	2,150	0.0	***9.0***	***46.9***				0.4	
620892	Women/girl panties bathrobe etc. manmade fiber not knit	2,152	0.3	***1.9***	***1.7***	0.0	***35.9***	0.0		0.1
520919	Woven cotton nes, >85% >200g/m2, unbleached, nes	2,168		***1.5***	***78.4***	0.5			***12.0***	1.0
500390	Silk waste, carded or combed	2,178		***12.1***	0.9			***22.5***	***5.3***	***38.5***
540781	Woven fabric synthetic filament, <85% +cotton, nes	2,188		***7.1***	***2.6***	0.1	***2.0***			
520535	Cotton yarn >85% multiple uncombed <125 dtex, not ret	2,198		***8.0***	***18.9***				***11.7***	***9.6***
610829	Women's, girls briefs or panties, material nes, knit	2,215		***4.1***	***3.7***	0.0	0.4		0.0	0.1
551299	Woven fabric >85% synthetic staple fiber nes	2,244		0.8	***1.1***	0.0	***1.0***			
611692	Gloves, mittens or mitts, nes, of cotton, knit	2,246		0.8	***82.5***	0.0	***9.1***	0.0		***2.9***
520790	Cotton yarn (except sewing thread) <85% cotton, retail	2,258	***1.1***	***8.3***	***9.3***		0.1	0.5	0.9	0.0
621139	Men's, boys garments nes, of material nes, not knit	2,266	0.3	***1.8***	***16.8***	0.0	0.3	***1.9***		0.3
620721	Men's, boys nightshirts or pajamas, cotton, not knit	2,267	0.0	***2.4***	***5.9***	0.0		0.0	0.4	0.0
611212	Track suits, synthetic fibers, knit	2,271	0.0	0.2	***7.9***	0.0	***5.5***	0.2	0.0	
611211	Track suits, of cotton, knit	2,309		***1.5***	***19.3***	0.0	0.0	0.2	0.0	***4.0***
500500	Yarn spun from silk waste, not retail	2,315		***1.6***	0.0					***2.4***
600191	Pile knit or crochet fabric, of cotton, nes	2,316		***2.0***	0.1				0.0	***45.8***
520849	Woven cotton nes, >85% <200g/m2, yarn dyed	2,319		***1.1***	***1.4***		0.0		0.0	0.0
610413	Women's, girls suits, synthetic fibers, knit	2,328		***10.1***	***8.1***	0.1	***10.6***			0.0
630120	Blankets (non-electric) & travelling rug, wool	2,333	1.0	***3.0***	0.8	0.0	***3.1***	0.1	0.0	0.1
521223	Woven cotton fabric, > 200g/m2, dyed, nes	2,336		***4.6***	***187.4***	0.0			0.0	0.0
521031	Plain weave cotton, <85% +manmade fiber, <200g/m2 dye	2,355		***1.8***	***157.4***	0.0				
520833	Twill weave cotton, >85% <200g/m2, dyed	2,356		***2.1***	***10.4***	0.0				0.1
560729	Twine nes, cordage, ropes and cables, of sisal	2,359		***10.4***	***4.1***					
510540	Coarse animal hair, carded or combed	2,360	***394.9***	0.0			***145.5***	***86.3***		
560890	Knotted netting, nets, of natural materials	2,362		***3.5***	***12.7***	0.0	0.0			0.1
551323	Woven fabric nes>85% polyester + cotton,<170g/m2 dyed	2,387		***2.6***	***26.8***					
560790	Twine, cordage, ropes and cables, of other materials	2,395	0.1	***1.6***	***5.5***	0.0	0.1	0.1		***4.2***
520921	Plain weave cotton, >85% >200g/m2, bleached	2,400		***7.1***	***16.8***	0.0			0.0	0.7
551412	Woven twill >85% polyester cotton, >170g/m2 unbl/blch	2,401		***2.5***	***60.3***					
620429	Women's, girls ensembles, material nes, not knit	2,435	0.3	***1.9***	***1.6***	0.0	0.0		0.0	0.0
600121	Looped pile knit or crochet fabric, of cotton	2,441	0.9	***4.2***	0.7	0.0		***16.5***	0.1	***4.4***
520843	Twill weave cotton, >85% <200g/m2, yarn dyed	2,442		***2.7***	***1.2***			***3.5***		
521011	Plain weave cotton <85% +manmade fiber <200g unbleached	2,450		***1.1***	***288.4***					
610729	Men's, boys nightshirts or pajamas, material nes, knit	2,487		***29.6***	***125.1***	0.0		0.1		0.0

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
630619	Tarpaulins, awnings and sunblind, of material nes	2,491	***27.2***	***1.5***	***27.2***	0.0	***5.0***	0.3		0.6
520710	Cotton yarn (except sewing thread) >85% cotton, retail	2,511	0.0	***1.5***	***1.5***		0.3		0.2	0.4
620899	Women's, girls panties, bathrobes, etc., nes not knit	2,517	0.0	***2.0***	***5.2***	0.0	***1.2***		0.0	0.0
521211	Woven cotton fabric, > 200g/m2, unbleached, nes	2,531		***7.7***	***634.3***					
510610	Yarn of carded wool, >85% wool, not retail	2,533	***2.7***	0.8	0.0	0.0		***1.4***		
540834	Woven fabric of artificial filament, printed, nes	2,545		***3.6***		0.2		***1.4***		
551211	Woven fabric >85% polyester staple fiber unbl/bleached	2,561	0.0	***1.1***	***6.7***	0.0				
620829	Women's girls nightdress, pajama, material nes not knit	2,573	0.0	***3.9***	***10.1***	0.0	***2.0***	0.3	0.0	0.0
580190	Woven pile, chenille fabric of yarn nes, except terry	2,600	0.5	***1.8***	0.0	0.0	***16.9***			0.3
500710	Woven fabric of noil silk	2,609		***9.4***	***3.0***					0.1
551321	Woven plain >85% polyester + cotton, <170g/m2 dyed	2,610		0.5	***75.8***	0.0		***1.1***		0.1
611219	Track suits, of materials nes, knit	2,611	0.1	***2.1***	***34.8***	0.0	***1.1***	0.4		
551090	Yarn of artificial staple fibers, not retail, nes	2,613		***2.0***	***2.1***	0.0				
620819	Women's, girls slips etc., of material nes, not knit	2,627	0.0	***2.9***	***1.5***	0.0			0.1	0.0
520922	Twill weave cotton, >85% >200g/m2, bleached	2,635		***2.7***	***35.8***	0.0			0.3	0.0
521159	Woven cotton nes, <85% +manmade fiber, >200g, printed	2,641		***1.8***	***15.0***	0.0	***4.9***		0.0	0.0
650700	Parts for hats and headgear	2,643	***1.1***	***1.9***	0.1	0.0	0.0			
520841	Plain weave cotton, >85% <100 g/m2, yarn dyed	2,658		***2.6***	***20.3***	0.0				
620219	Women's, girls overcoats of material nes, not knit	2,672	0.0	0.5	***5.2***	0.0	***1.0***	0.0		0.0
551591	Woven fabric synthetic staple fiber with manmade, nes	2,689		***5.6***	0.0	0.7	***27.8***	0.0		
551349	Woven fabric>85% synth nes + cotton, <170g/m2 printed	2,720	0.1	***2.3***	***8.4***	0.0	0.5			
610891	Women's, girls bathrobe, dressing gowns, of knit cotton	2,732		0.6	***4.3***	0.0	0.9	0.0	0.0	***4.6***
630590	Sacks & bags, packing, of materials nes	2,736	0.2	***2.7***	***12.3***	0.0	0.1	0.0		
590110	Gum or amylaceous covered textiles for book covers et	2,740	***60.0***	***2.2***	0.3					
621320	Handkerchiefs, of cotton, not knit	2,744	0.0	***1.9***	0.6	0.0	***6.1***	0.0		0.7
520420	Cotton sewing thread, retail	2,745		***4.5***	***9.4***	0.0	0.2			0.5
650699	Headgear nes, of other materials	2,763	0.1	0.3	***1.6***	0.0	***4.5***	0.2		0.0
520813	Twill weave cotton, >85% <200g/m2, unbleached	2,782		***1.5***	***328.6***					***49.9***
551110	Yarn >85% synthetic staple fibers, retail, not sewing	2,804	0.0	0.9	***1.1***	0.0	0.1	***1.0***		***1.3***
610120	Men's, boys overcoats, etc., of cotton, knit	2,816	0.0	0.2	***3.9***	0.0	0.1	0.0	0.1	***1.8***
611699	Gloves, mittens or mitts, nes, material nes knit	2,839	***2.9***	***2.0***	***115.7***	0.3	0.1			0.0
610459	Women's, girls skirts, of material nes, knit	2,840	***1.9***	1.0	***1.2***	0.1	0.2	0.0	0.0	0.0
520541	Cotton yarn >85% multiple combed >714 dtex, not retail	2,843		***10.4***	***4.1***				***1.5***	***45.6***
570239	Carpets of yarn nes, woven pile, not made up, nes	2,868	***1.2***	***7.3***	0.0	0.0				0.0

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
560221	Felt not needleloom, wool/hair, not impregnated/coated	2,876		***4.8***	0.0	0.1	***3.3***			***1.4***
630319	Curtains drapes blinds valances, material nes, knit	2,884	0.0	***3.5***	***168.0***	0.1	0.0			
521212	Woven cotton fabric, > 200g/m2, bleached, nes	2,896		***5.6***	***273.0***					
510310	Coils of wool or of fine animal hair	2,910		***3.5***	***3.2***	0.2	***2.1***			
520624	Cotton yarn <85% single combed 192-125 dtex, not retail	2,915		***1.9***	***6.1***					
610791	Men's, boys bathrobes, dressing gowns etc. cotton, knit	2,918	0.1	***1.7***	***15.9***	0.0	***7.9***	0.0	0.1	***19.0***
610190	Men's, boys overcoats, etc., of material nes, knit	2,926	0.0	0.9	***29.2***	0.0	***15.0***		0.1	
590800	Textile wicks, gas mantles	2,968		***5.7***	***1.6***	0.0				
620620	Women's, girls blouses & shirts, wool or hair, not knit	2,985		***5.3***	0.7	0.0	***13.4***			
520622	Cotton yarn <85% single combed 714-232 dtex, not retail	2,997		***1.4***	***18.5***	0.0			***1.6***	
520929	Woven cotton nes, >85% >200g/m2, bleached, nes	3,002	0.0	***1.1***	***17.6***	0.0			0.0	0.3
620799	Men's, boys dressing gowns, material nes, not knit	3,061	0.0	***1.8***	***114.1***	0.0	0.3		0.0	0.0
520611	Cotton yarn <85% single uncombed >714dtex, not retail	3,074		***1.1***	***25.0***					0.9
580219	Terry toweling etc. of cotton nes, width > 30cm	3,113	0.0	***1.6***	***36.1***	0.1			***11.2***	***4.7***
620719	Men's, boys underpants, briefs, material nes, not knit	3,114	0.0	***1.9***	***1.3***		***4.9***	0.0		
521111	Plain weave cotton, <85% +manmade fiber, >200g/m2 unb	3,124		***3.9***	***58.2***					
550630	Staple fibers of acrylic, mod acrylic, carded or combed	3,133		***1.3***	0.0					***2.2***
610290	Women's, girls overcoats, etc., material nes, knit	3,135		***1.1***	***15.1***	0.1	***1.9***	***1.3***	0.1	
540744	Woven fabric >85% nylon, polyamide, printed, nes	3,137		***1.6***	***4.9***					0.0
540771	Woven fabric >85% synthetic filament, nes	3,147		***1.3***	***16.7***			0.0		
620811	Women's, girls slips etc., of manmade fibers, not knit	3,171		***5.5***	***4.4***	0.0				
580900	Woven fabric incorporating metal threads, nes	3,180		***4.2***	0.1	0.2	***39.3***			
521131	Plain weave cotton, <85% +manmade fiber, >200g, dyed	3,192		***1.8***	***9.0***					
610811	Women's, girls slips or petticoats, manmade fiber knit	3,195		***1.4***	***1.4***	0.0	0.0	0.0		0.0
590190	Tracing cloth, painting canvas, stiffened textile nes	3,200	***24.3***	0.1	***1.9***	0.0				
630259	Table linen, of material nes, not knit	3,221	0.6	***1.5***	***41.2***	0.0	0.0			0.0
560129	Wadding, products, material nes, not sanitary article	3,239		***1.5***	***41.7***	0.0	0.0			0.0
521214	Woven cotton fabric, < 200g/m2, yarns mixed colors	3,322		***2.1***	***1.5***		0.6	***3.7***		0.1
520951	Plain weave cotton, >85% >200g/m2, printed	3,323	***4.9***	***1.4***	***21.1***	0.2			0.6	
600220	Knit, crochet textile fabric, of a width < 30 cm, nes	3,334		0.5	0.8	0.0	***1.3***	***3.8***		
621390	Handkerchiefs, of material nes, not knit	3,353	0.0	***1.6***	0.9	0.1	***10.5***	***4.6***		0.1
521151	Plain weave cotton , <85% +manmade fiber, >200g, prin	3,365		***7.3***	***85.1***					
521225	Woven cotton fabric, > 200g/m2, printed, nes	3,373		***2.5***	***84.1***	0.0	0.3	0.3	0.1	0.8
620722	Men's/boys nightshirts, pajama, manmade fiber, not knit	3,404	***1.3***	***2.5***	0.9	0.0	0.4	0.0		

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
521051	Plain weave cotton, <85% +manmade fiber, <200g print	3,409		1.5	112.0	0.0				
521029	Woven cotton nes, <85% +manmade fiber, <200g bleached	3,417		1.7	75.4					
620119	Men's, boys overcoats of material nes, not knit	3,422	0.0	0.4	7.5	0.0	2.6		0.2	0.0
580390	Gauze, except cotton, > 30 cm wide	3,455		1.6	4.3	0.0		3.3		
580430	Hand-made lace, in the piece, in strips or in motifs	3,464		8.8	47.9					
630411	Bedspreads, textile material, nes, knit or crochet	3,472	1.0	3.5	20.5	0.0	0.4			0.2
570291	Carpets of wool or fine hair, woven, made up, nes	3,505	4.4	1.7	0.0	0.0	0.3	0.3		0.0
531090	Woven fabric of jute/bast fiber, not unbleached/bleached	3,516		4.2	65.0	0.0				
520823	Twill weave cotton, >85% <200g/m2, bleached	3,562		2.8	28.3					0.3
521224	Woven cotton fabric, > 200g/m2, yarns mixed colors	3,563		2.3	3.0		6.7			0.0
580126	Chenille cotton fabric, width > 30 cm	3,564		3.5	1.7					
520941	Plain weave cotton, >85% >200g/m2, yarn dyed	3,583	1.0	1.2	0.8		1.4		4.2	
610461	Women's, girls trousers & shorts, of wool hair, knit	3,584		1.9	1.0	0.0	3.3		0.1	
520515	Cotton yarn >85% single uncombed <125 dtex, not retail	3,602		1.5	22.8				29.5	
611249	Women's, girls swimwear, of material nes, knit	3,613	6.8	1.6	4.4	0.0	0.2			
500200	Raw silk (not thrown)	3,615	13.4	0.1	0.0			9.5	2.5	36.4
430219	Tanned, dressed whole furs except lamb/mink/rabbit/har	3,633	2.5	0.0	0.3	0.0	0.9	0.2		4.6
510129	Degreased wool nes, not carded, combed or carbonized	3,641	12.3	0.3	13.9	2.5	8.9		2.6	0.6
551439	Woven fabric>85% synth nes + cotton,>170g/m2 yarn dye	3,683	3.1	1.0	1.2	0.1	2.2			
610899	Women's, girls bathrobe, dressing gowns, nes, knit	3,699	0.0	1.3	23.5	0.0	0.7		0.0	
550992	Yarn of other synth staple fibers + cotton not retail	3,700		1.9	1.6					
521221	Woven cotton fabric, > 200g/m2, unbleached, nes	3,708		1.3	117.7	0.3				
510510	Carded wool	3,716	11.1	0.1	7.4	6.9				
521021	Plain weave cotton <85% +manmade fiber, <200g bleached	3,717		1.1	738.4	0.0				
611691	Gloves, mittens or mitts, nes, of wool or hair, knit	3,763	0.1	0.1	0.2	0.8	47.0	9.3		
551130	Yarn of artificial fibers except sewing thread, retail	3,768		2.9	16.9	0.0	2.1			0.1
551642	Woven fabric <85% artificial staple cotton, dyed	3,774		1.5	8.5					
611591	Hosiery nes, of wool or fine animal hair, knit	3,804	0.3	0.2	0.0	0.0	29.5	5.2	0.0	0.1
520300	Cotton, carded or combed	3,807	3.0	0.2	45.3	8.7	0.9	13.0	1.4	8.4
521112	Twill weave cotton, <85% +manmade fiber, >200g/m2 unb	3,809		1.5	80.6		0.1			
520952	Twill weave cotton, >85% >200g/m2, printed	3,827		1.1	31.7				0.3	
580220	Terry toweling etc., other than cotton, width > 30 cm	3,833		2.1	23.1	0.3	0.0		0.3	
600242	Warp knit fabric of cotton, nes	3,834		0.2	3.6				5.6	32.3
630691	Camping goods nes, of cotton	3,842		2.7	5.2	0.0				

HS 6-digit	Description	Ranking	RCAs Intra- and Inter-Regional Imports							
			AF	IN	PK	KZ	KG	TA	TK	UZ
520613	Cotton yarn <85% single uncombed 232-192 dtex, not ret	3,850		1.3	24.0	0.1				0.1
521222	Woven cotton fabric, > 200g/m2, bleached, nes	3,900		8.7	119.9	0.2				
510121	Degreased shorn wool, not carded, combed or carbonize	3,922	0.3		0.6	0.3	1.6	0.6	7.7	8.5
520614	Cotton yarn <85% single uncombed 192-125 dtex, not ret	3,924		2.0	9.2	0.8				
580500	Hand-woven and needle-worked tapestries, kit sets	4,010	2.6	1.8	0.1	0.0				1.8
500600	Silk yarn retail, silk worm gut	4,048		2.9		0.0				20.0
520621	Cotton yarn <85% single combed >714 dtex, not retail	4,053		1.1	1.8					
520419	Cotton sewing thread, <85% cotton, not retail	4,099	1.3	0.2	17.3	0.0				
620729	Men's, boys nightshirt, pajamas, material nes, not knit	4,107		1.1	114.1	0.2	0.1			
520645	Cotton yarn <85% multiple combed <125 dtex, not retail	4,185		2.1	4.9				6.0	
611239	Men's, boys swimwear, of material nes, knit	4,204		1.2	2.9	0.0				
520625	Cotton yarn <85% single combed <125 dtex, not retail	4,232		2.1	7.6					
551291	Woven fabric >85% synth staple fiber nes unbl/bleached	4,318		0.1	2.4			12.3		
580640	Fabric having warp, no weft, assembled using adhesive	4,321		0.1	8.1			1.4		0.0
520631	Cotton yarn <85% multiple uncombed >714, not ret., ne	4,347		0.0	1.2			8.0		
520633	Cotton yarn <85% multiple uncombed 232-192 dtex, not ret	4,442		1.2	56.8					
520634	Cotton yarn <85% multiple uncombed 192-125 dtex, not ret	4,467		1.9	44.3	11.2				
510521	Combed wool in fragments	4,471		0.1	0.1	10.0	0.0			17.4
580211	Terry toweling etc. of cotton, not narrow fabric, unb	4,492		0.2	10.7	2.0			205.4	
Leather and Footwear Products (19)										
410439	Bovine and equine leather, nes	108	0.2	7.8	13.4	0.0	0.4	0.0		0.1
410620	Goat or kid skin leather, nes	183	0.4	15.9	69.1	0.0	0.1			0.0
640320	Footwear, soles/uppers leather, strap instep & big to	495	0.0	36.8	35.4	0.0	0.0	68.4	0.1	5.8
420100	Saddlery and harness, of any material	517	0.1	5.4	3.6	0.0	0.0		0.0	0.0
410520	Sheep or lamb skin leather, nes	525	0.1	5.3	26.2	0.0	0.0	0.4		0.1
640319	Sports footwear, except ski, uppers of leather	561	0.0	3.0	1.8	0.0	0.0	0.2	0.0	0.0
420500	Articles of leather and composition leather, nes	853	0.2	1.8	1.8	0.0	0.0	0.0	0.0	0.0
410519	Sheep or lamb skin leather, tanned or retanned, nes	1,542	14.9	0.0	0.2	1.6	19.2	10.5	0.6	18.3
420229	Handbags, of vulcanized fiber or paperboard	1,750	0.0	1.0	1.6	0.1	0.6	0.0	0.0	
640199	Waterproof footwear(Wellington) no toe cap, nes	1,942	0.0	0.5	1.9	0.0	0.3	0.0	0.0	37.1
410790	Leather, of animals nes	2,109		2.2	107.3	0.0	0.0			1.0
410619	Goat or kid skin leather, tanned or retanned, nes	2,634	9.2	0.1	0.3	0.1	2.9	8.5	1.4	17.1
410429	Bovine and equine leather, tanned or retanned, nes	2,805	2.6	0.0	0.2	1.3	5.2	15.7	0.3	6.0

Table A.62: Gravity Model Variable Descriptions and Sources

Variable Name	Label	Unit	Detailed Description	Data Source
X	Exports, current US$	US$ million	Value of bilateral export	IMF DOTS: http://www.imfstatistics.org/dot/
Y_i	GDP of reporter (million), current US$	US$ million	GDP of reporter country	WDI: World Development Indicator
Y_j	GDP of partner (million), current US$	US$ million	GDP of partner country	WDI: World Development Indicator
D	Bilateral distance	km	Distance between trading partners	CEPII: http://www.cepii.fr
R	Real bilateral exchange rate (2000=100)	2000=100	Real bilateral exchange rate index. See Ch. for definition	Statistical Appendix of this report
C	bilateral trade costs	Percent	Bilateral trade costs computed by Inverse Gravity Framework	http://data.worldbank.org/data-catalog/trade-costs-dataset
W	Time to export (days)	Days	Time necessary to comply with all procedures required to export goods.	www.doingbusiness.org
D_1	Two countries are contiguous	Binary	Binary variable. Value of 1 if two countries contiguous and "0" otherwise	CEPII: http://www.cepii.fr and http://artnet.unescap.org/databases.html
D_2	Two countries share official language	Binary	Binary variable. Value of 1 if two countries share official language; 0 otherwise	CEPII: http://www.cepii.fr and http://artnet.unescap.org/databases.html
D_3	Two countries share common language based on the fact that at least 9% of each of the country speaks	Binary	Binary variable. Value of 1 if two countries share ethno-common language; 0 otherwise	CEPII: http://www.cepii.fr and http://artnet.unescap.org/databases.html
D_4	Two countries have ever had a colonial link	Binary	Binary variable. Value of 1 if two countries have had a colonial link; 0 otherwise	CEPII: http://www.cepii.fr and http://artnet.unescap.org/databases.html
D_5	Two countries have had a common colonizer after 1945	Binary	Binary variable. Value of 1 if two countries have had a common colonizer; 0 otherwise	CEPII: http://www.cepii.fr and http://artnet.unescap.org/databases.html

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