

Bazaars and Trade Integration in CAREC Countries<sup>•</sup>

Report prepared by the World Bank

May 13, 2009



*Snapshot of the Dordoy bazaar in Kyrgyz Republic taken in August 2008: on the way to a modern shopping mall?*

---

<sup>•</sup> This report was prepared by a team headed by Saumya Mitra and consisting of Bartłomiej Kaminski (principal investigator) and Matin Kholmatov (economist). The team is grateful for comments from Motoo Konishi and Kazi Matin (World Bank) and Sena Eken and Ana-Lucia Coronel (IMF). The Bank acknowledges with gratitude the generous support of the Multi-Donor Trust Fund for Trade and Development and of the Swiss government to the conduct of this study.

## Contents

|  |    |
|--|----|
| Summary.....   | 3  |
| Introduction.....  | 6  |
| 1. Bazaars in surveys: salient features and impact on local economies .....  | 8  |
| A. Nodes of concentric networks: types of surveyed bazaars .....   | 8  |
| B. Employment and income effects of surveyed bazaars.....  | 12 |
| C. Bazaars and marketing opportunities: positive welfare effects.....  | 28 |
| D. Why bazaars have become such an important logistic channel.....   | 29 |
| E. Conclusions .....   | 31 |
| 2. Foreign trade intermediated by bazaar as evidenced in mirror trade statistics and surveys .....   | 15 |
| A. Sources of bazaars' supplies and their foreign sales .....  | 15 |
| B. Mirror trade gaps and shuttle-bazaar trading .....  | 18 |
| C. Imports of bazaar goods: their dynamics, origins and significance .....   | 21 |
| D. Variation in bazaar imports into CA countries: bazaars as re-export platforms.....  | 24 |
| E. Concluding comment .....  | 26 |
| 3. Conclusions and policy implications.....  | 32 |
| References.....  | 34 |
| Annex I: <a href="#">1.Bazaar intermediated trade: methodological issues</a> .....   | 35 |
| A. <a href="#">Estimates of 'bazaar' foreign trade using mirror trade statistics</a> .....   | 35 |
| B. <a href="#">Bazaar Surveys: sample and method</a> .....   | 38 |
| C. <a href="#">Concluding observation</a> .....  | 40 |
| Annex II: Methodology of estimates of sales turnover at bazaars .....  | 35 |
| Annex III: Statistical Tables .....  | 44 |
| <b>Tables</b>  |    |
| Table 1: Bazaars surveyed in Kazakhstan, Kyrgyzstan and Tajikistan according to their type .....   | 38 |
| Table 2: Sales and cost estimates per sales outlet and total at the Barakholka bazaar (monthly in US dollars).....   | 39 |
| Table 3: Selected characteristics of surveyed bazaars .....  | 10 |
| Table 4: Estimates of annualized revenues and expenditures of bazaars' and sales outlets' owners and fees paid in surveyed bazaars in 2008 (in million of US dollars)..... | 13 |
| Table 5: Mirror imports into Kyrgyzstan of textiles and clothing and their share in total mirror imports of Central Asia.....  | 29 |
| Table 6: Total annual sales and the share of imports and foreign sales in total sales of surveyed bazaars .....  | 16 |

---

|  |    |
|--|----|
| Table 7: Major imports intermediated through bazaars: bazaar goods in 2006 (in million of US dollars and percent)..... | 19 |
| Table 8: Bazaar goods in imports of Central Asian economies in 2003-06 (in millions of US dollars and in percent)..... | 23 |
| Table 9: Major suppliers of “bazaar goods” to CA countries in 2006 (in million of US dollars and percent).....         | 23 |
| Table 10: Unique features of ‘bazaar’ imports into Central Asia in 2006.....   | 24 |

## Summary

As a part of the agenda for trade policy work for CAREC countries, the World Bank has prepared papers on border trade<sup>1</sup> and on deepening cross-border cooperation across a wide range of development activities<sup>2</sup> in the recent past. This paper studies the role of bazaars in central Asia in promoting trade and raising economic welfare of populations. It has been prepared in light of a request made by CAREC representatives at ministerial and officials' level meetings in 2008.

This paper – based on survey work as well as an examination of trade statistics – is the first to have studied the economic and trade effects of bazaars in central Asia in a detailed way. It presents a wealth of information and statistics relating to critical income-generating activities and seeks to uncover the vital role played by bazaars in supporting economic growth. The analysis conducted in this work is of policy interest: rather than treating bazaars as unorganized and undesirable features of a modern market economy, national authorities should foster the development of bazaars in view of the growth, employment-generation and poverty-fighting characteristics of the operations of bazaars. Indeed, without well-functioning bazaars, the cost of trade would be considerably greater, the prices of goods higher and availability more restricted, trade volumes considerably lower, and the powerful welfare-raising effects from re-exports (in which bazaars play a critical role) as well as trade itself would be greatly muted. The populations would be much the poorer.

This report presents the results of statistical analysis of foreign trade intermediated in Central Asia by bazaars and findings of surveys of a sample of bazaars, carried out in summer of 2008, in three Central Asian CAREC countries—Kazakhstan, Kyrgyzstan, and Tajikistan. Its major findings can be summarized as follows:

**First, regional hub-bazaars<sup>3</sup>, with a cross borders' reach, as well as nation-wide<sup>4</sup> bazaars are in fact large business associations with infrastructure facilitating both domestic and international trade.** They can be thought of as equivalent of shopping complexes or malls (that house a large variety of retail shops) in developed countries together with warehousing capacities servicing regional and international clients. Their rapid expansion over the last decade can be explained by two major advantages offered by bazaars over other venues of trade. First, building a bazaar is a much cheaper option than building a mall while offering the same opportunity of bringing together wide groups of buyers and sellers. Second, thanks to concentration of traders and intermediation of bazaar administration, relations with state authorities are more predictable and predatory impulses weakened. Moreover, another important factor is tradition: bazaars existed in Central Asia even under the Soviet central planning. Proliferation of bazaars with quite sophisticated logistics infrastructure shows that entrepreneurial skills in Central Asia are very highly developed.

**Second, bazaars in Central Asia play major role in regional and national chains of production and distribution** with national networks strongly integrated and overlapping across at least three CA (Central Asian) countries—Kazakhstan, Kyrgyz Republic, and Tajikistan. Bazaars provide a logistics channel parallel to a standard one, through which, on the one hand, products imported from outside four CAREC Central Asian economies—Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan—are distributed and, on the other hand, products produced locally in

<sup>1</sup> *Cross-Border Trade within CAREC, 2007 and Afghanistan's Trade with CAREC Neighbours, 2008.*

<sup>2</sup> *Deepening Integration in Border Regions within CAREC, 2009*

<sup>3</sup> Bazaars that service an entire region and reach across national frontiers and are fed by direct supplies (such as imports) and by smaller bazaars.

<sup>4</sup> Bazaars that typically serve one country or a part of it.

four CAREC CA economies are traded. Formal trade relies heavily on railways; bazaar trade on trucks. Trade going through the bazaar logistic channels is huge probably around \$10 billion<sup>5</sup> a year, including trade in locally-made products that account for about a quarter of this trade.<sup>6</sup>

**Third, bazaars make a large contribution towards forging economic ties amongst CAREC countries.** Bazaars are involved in re-export activities, with Kyrgyz bazaars as the major actor in re-exports, and with other CA countries as well as Russia being final destinations. They have recently emerged as a main conduit of China's exports to Central Asia. "Bazaar-type" products,<sup>7</sup> which amounted to \$7.4 billion in 2006 and \$9.9 billion in 2007, accounted for one fifth of total imports of the four CA countries during this period. Thanks to geography and better logistic performance than in neighboring countries, Kyrgyzstan has become a regional hub for re-exports of bazaar-type products mainly to Kazakhstan and Uzbekistan. But the real edge over other Central Asian economies has come from two sources: special 'almost duty-free regime' on bazaar imports<sup>8</sup>; and the regulations governing bazaar trading that are more liberal than in formal CA economies.

While bazaars' surveys point to considerable trade in goods produced in four CA economies including among other construction materials, agricultural products, chemicals, miscellaneous manufactures, clothing, it is very difficult to give a precise estimate of this trade. But it appears that around 25 percent of goods traded in surveyed bazaars were either domestic or 'made in other CA economies,' which would put this amount in the range of \$2.5-3.5 billion a year.

**Fourth, bazaars contribute to poverty alleviation** through offering cheap products to consumers and creating employment opportunities extending well beyond bazaars themselves. Employment effects are not limited to those directly employed at bazaars but also extend to a whole array of services needed to transport products and people in and out of bazaars as well as to local producers selling their products at bazaars. Large bazaars are the main source of employment in some local communities. Bazaars create also significant employment opportunities for women that otherwise would be unemployed. Between 70 and 80 percent of vendors in surveyed bazaars are women. Women are also highly visible in shuttle trading accounting for around half of shuttle traders across surveyed bazaars. Using a conservative approach, we estimate that the aggregate annual value of wages (\$500 million), taxes and other fees (around \$350 million) collected by government, and lease (around \$700 million including lease-equivalents, i.e., income that an owner of a stall would have had he or she leased a stall to another trader) across surveyed was around \$1.5 billion in 2008.

**Fifth, bazaars are also a source of very significant positive externalities.** First, they create opportunities for development of logistic and marketing skills easily transferable to activities in modern networks of production and distribution. Second, domestic producers have a chance to introduce their products to potential domestic and foreign customers without incurring costs of marketing. Bazaars' role in creating marketing opportunities for producers going beyond local and domestic markets is of particular importance as the cost of marketing abroad are particularly high. Potential buyers come to producers instead of them going abroad. The presence of Kyrgyz clothing

---

<sup>5</sup> All references to dollars in this paper relate to the US dollar.

<sup>6</sup> Locally-made products typically included foods, feeds, construction materials, agricultural products, chemicals, miscellaneous manufactures, and clothing. Bazaar products not imported from neighboring countries, excluding China, would include miscellaneous manufactures, clothing and fabrics, footwear, electronics, etc. See Annex Table 3 for their list in Standards International Trade Classification.

<sup>7</sup> Typically, construction materials, agricultural products, chemicals, miscellaneous manufactures, clothing.

<sup>8</sup> Bazaar-related imports which are largely transported by trucks can be subject to duties based on weight, which confers a significant advantage over payments based on the formal trade and tax regime. For example, in Kyrgyzstan, Regulation 976 (2004) permits such charges based on weight.

across surveyed bazaars illustrates this point. Furthermore, it shows that almost ‘duty-free’ competition from Chinese clothing has not destroyed Kyrgyz apparel industries. To the contrary, it has led to its impressive expansion in a highly competitive international environment thanks to bazaar intermediated trade.

**These findings have important public policy implications.** First, considering significant welfare gains, the governments should resist temptation of imposing extra **regulatory and fiscal burdens** on bazaars. For many people earning their living thanks to bazaar-related activities, the only alternative is unemployment. Clearly regulations on grounds of safety, consumer protection, are justified, but has to be carefully designed and enforcement closely monitored to ensure that such public policy actions do not constrain legitimate bazaar activities, nor do they become sources for mis-governance. These are highly relevant dangers in the current central Asian context.

Second, considering positive externalities associated with bazaars, i.e., opportunities to market locally developed products; the priority should be attached to the removal of **factors constraining supply** response to these opportunities. Permits for the operations of bazaars should be granted with ease, consistent with the law. Connections with utility services and the provision of infrastructure services such as roads would be worthwhile investments, typically yielding high rates of return.

Third, the authorities should seek to improve **business climate** and reduce the cost of doing business in order to build on the positive externalities of bazaars. This applies to inspections, harassment of traders, rules as to movement of individuals or vehicles and so forth.

Finally, the authorities of all three CA countries should consider **lowering MFN tariff rates** on bazaar products, mainly, clothing and footwear. Although these are not fully implemented thanks to customs regulations governing their imports, high tariffs are highly distortionary and conducive to bribe extraction. Low MFN tariff rates on consumer goods including clothing and footwear would increase government revenue without putting local industries in jeopardy. As the case of Kyrgyzstan demonstrates, competition from ‘almost duty-free’ imports has not destroyed clothing industries. To the contrary, it has created conditions conducive to the development of local capacities that are internationally competitive.

The big topical question that is worthy of further investigation is **the impact of global recession** on activities in bazaar channel. There are reasons to believe that its impact may be limited, although one cannot predict it for sure. There were no signs of slowdown in summer of 2008. This comes as no surprise as the world financial spilled over to real spheres of world economies in the last quarter of the last year. According to Dordoi traders in Kyrgyzstan, consulted late in January this year, trading activities were roughly on a par with those in January 2007. The fall in purchasing power of Kazakh consumers, if the price of oil does not rebound any time soon, may suppress demand on bazaar products, albeit it is not sure. The fall in incomes may drive many recently affluent consumers back to bazaars. Uzbekistan’s demand for bazaar imports is also difficult to predict as the fall in commodity prices has not affected gold, whose price has continued moving up. Will it offset losses in foreign exchange earnings from other commodities?

## Introduction

This paper – based on survey work as well as an examination of trade statistics – is the first to have studied **the economic and trade effects of bazaars in central Asia** in a detailed way. It presents a wealth of information and statistics relating to critical income-generating activities and seeks to uncover the vital role played by bazaars in supporting economic growth. The analysis conducted in this work is of policy interest: rather than treating bazaars as unorganized and undesirable features of a modern market economy, national authorities should foster the development of bazaars in view of the growth, employment-generation and poverty-fighting characteristics of the operations of bazaars. Indeed, without well-functioning bazaars, the cost of trade would be considerably greater, the prices of goods higher and availability more restricted, trade volumes considerably lower, and the powerful welfare-raising effects from re-exports (in which bazaars play a critical role) as well as trade itself would be greatly muted. The populations would be much the poorer.

Foreign trade of Central Asian economies may be characterized as occurring through **three distinct channels**: formal or standard trade, large-bazaar trade, and cross-border trade. While these channels of foreign trade flows can be observed in a number of developing countries, relatively large cross-border trade and significant trade flows intermediated by bazaars appear to be a unique feature of CA (Central Asian) CAREC countries. Whereas formal or standard trade can be easily captured in foreign trade statistics, trade flowing through two other channels goes often unreported. Bazaars complement a standard or formal channel of foreign trade, which is mainly based on railroads as a mode of transportation, and including such bulk products as oil and gas or metals trade, or trade flows in equipment goods or machinery. Bazaars provide logistics to a significant portion of trade amongst four CA CAREC economies and imports of consumer products from outside four CA CAREC economies. These logistics channel uses mainly trucks as the major mode of transport and has both warehousing capacities and marketplaces. The objective of this study is to estimate foreign trade intermediated by bazaars.

**Bazaars appear to play very important role in this trade** especially amongst Central Asian former Soviet republics, and between them, on the one hand, and China and some non-CAREC economies (Iran, Russia and Turkey), on the other hand.<sup>9</sup> Available evidence from an earlier World Bank study *Cross-border Trade among CAREC* points to a bazaar as a major conduit of this trade (WB 2007). In fact, bazaars support this trade and their forcible closing or relocation has tended to encourage smuggling and depress cross-border trading. Another World Bank study shows empirically the role of Kyrgyz bazaars in redistributing imported products, mainly from China, across Central Asia and southern parts of Russia (see Kaminski 2008).

**Region-wide hub bazaars are complex trading and logistics centers based on multiplicity of private entrepreneurs linked through elaborate division of labor.** In popular perception, bazaars are an icon of the past that has no central place in a modern economy based on anonymous transactions. But this is a wrong perception: bazaars in Central Asia have undergone an evolution over the last twenty years turning them into a critical underpinning of a market economy. In fact, large hub-bazaars seem to meet at least some, if not all, of five key requisites of effective markets as

---

<sup>9</sup> Bazaar, believed to have originated in Persia, is defined as a permanent merchandising area or a marketplace where goods and services are sold. The word derives from the Persian word *bāzār*, meaning "the place of prices." The use of the term is widespread in Central Asia and has become part of the colloquial speech in countries around the globe.

elucidated in economic literature. These are succinctly described by MacMillan (2002, p. 222) who notes: “For a market to function well, you must be able to trust most of the people most of the time; you must be secure from having your property expropriated; information about what is available where at what quality must flow smoothly; any side effects on third parties must be curtailed; and competition must be at work.” While trust among trading partners rests more on the informal device of reputation gained in repetitive transactions than on the rule of law, property rights are at least informally protected and both information and goods flow smoothly. There are no significant impediments to starting and running a sales outlet. The latter also serve in some cases as an equivalent of a ‘factory outlet’ providing a channel for marketing locally produced goods.

Bazaars of Central Asia are unique not only because of their sheer numbers and their dominance in distribution of goods over other logistics channels but also due to their diversity in terms of size, **specialization and geographical reach**. While, except for Kyrgyzstan, there is no readily available statistical information about their share in total retail trade of other countries, there is strong ‘pedestrian’ evidence indicating that most people, especially from lower income groups, do their shopping in bazaars. Moreover, our estimates based on trade statistics and supported by findings from surveys of bazaars conducted in 2008 indicate that imports mediated through bazaars account for up to one fifth of total world exports to four CA countries—Kyrgyzstan, Kazakhstan, Tajikistan, and Uzbekistan.

Their expansion over the last decade of the bazaar logistics channel can be explained by two major **“agglomeration” advantages** offered by bazaars over other venues of trade. First, it is more in line with the achieved level of economic development. Building bazaar infrastructure does not require such large investment expenditure as its modern equivalent: a shopping mall. Bazaar, which already has had a long tradition revived during the last decades of Soviet central planning, is a much cheaper option offering the same opportunity of bringing together wide groups of buyers and sellers. Second, thanks to concentration of traders and intermediation of bazaar administration, the relationship between private businesses and state administration is more stable and predictable. A shop owner is alone in dealing with state authorities whereas an owner of a container is part of a group that together with the bazaar administration having a stake in bazaar expansion has a much stronger bargaining power and resources to deal with predatory impulses of the state administration. In other words, bazaar traders are better shielded from caprices of local officials.

Their size ranges from small designated areas serving as a meeting place, often only during some seasons of the year, between producers and wholesalers, to very large stationary bazaars, which could be more accurately described as ‘malls,’ run by professional administration and supplying a whole range of public services. Some of them are highly diversified selling all kinds of consumer goods including durables. Others solely bring together sellers and buyers of construction materials or automobiles. Some engage in wholesale trade feeding products to bazaars located not only within a country’s boundaries but beyond. They bring together local and foreign residents serving as a conduit for foreign trade operations. Some trade almost exclusively in domestic products, others sell imported products.

This study assesses the role of bazaars in foreign trade of CAREC states except for Afghanistan, Azerbaijan, China, and Mongolia. The reasons for not including these countries vary from one country to another: trade with China through bazaars is mainly one-way with China having emerged as a major source of goods traded in bazaars of Central Asia but not the other way around. Afghanistan remains a marginal participant in intra-CAREC trade, whereas Mongolia trades within CAREC almost exclusively with China. Azerbaijan, despite the fact that its Baku International Airport bazaar is a hub for Caucasian bazaar trading, is not included for the reasons of geography: it

borders no CAREC-member state. While the analysis based on foreign trade statistics also includes Uzbekistan, no survey has been conducted there simply because Uzbekistan declined to participate in this study.

Despite highly visible presence of bazaars in the business landscape of CA, there has been not a single comprehensive assessment of their role in business activities in these countries. The study seeks to fill the gap by estimating sales turnovers as well as foreign trade flows intermediated by bazaars. Both aspects are intertwined as the results of the latter provide benchmarks for the latter and vice versa.

The remainder of this report is organized as follows: Section 1 provides birds' eye-view of networks of bazaars: their structure and weight in local economies as well as their involvement in domestic and foreign trade activities. Section 2 provides estimates of trade mediated by bazaars based on both mirror, i.e., CA's trading partners' trade statistics and national statistics of Kazakhstan and Kyrgyzstan. Section 3 presents conclusions and outlines policy implications of empirical findings.

### 1. Bazaars in surveys: salient features and impact on local economies

**Surveys provide strong empirical support to depicting bazaars as operating in a multitude of concentric networks.** Huge diversity in terms of size, geographical reach, goods traded, and governance characterize bazaars. Taking into account their size and geographical reach, bazaars can be divided into three groups: international hub bazaars; nation-wide or regional bazaars; and city/local bazaars together with cross-border trading bazaars. The first two can be regarded as nodes of concentric networks encompassing Central Asia. Survey has included all international hub- and nation-wide or regional bazaars operating in Kazakhstan, Kyrgyzstan, and Tajikistan together with a sample of city/local bazaars varying in size and sales turnover.

#### A. Characteristics of bazaars

The networks of bazaars link together international bazaars, nation-wide or regional bazaars and city/local bazaars together with cross-border trading bazaars in overlapping concentric circles encompassing the whole of Central Asia: they penetrate regions, and small local communities. Their **sources of supply** are diverse ranging from domestic products supplied directly by their producers to local bazaars and then shipped to other bazaars to imported products. The latter often flow through small border bazaars fed by cross-border trade or directly to international hub- or region-wide bazaars from where they are further distributed either to final consumers or traders carrying them to other bazaars including international hub-bazaars.<sup>10</sup>

**Hub-functions** overlap across distinguished categories of bazaars, as the networks have no clearly delineated origin- or end-points in terms of products flowing through them. **City bazaars** are not necessarily at the end of a distribution chain supplying final consumers. An interesting feature suggesting that there is no hierarchy implicit in the taxonomy of bazaars in terms of product flows is a relatively high share of wholesales in total sales of some city bazaars. The presence of wholesale indicates either the use of products for further processing or for resale at a different location. The latter suggest that shuttle traders move them to other locations. It seems most of these purchases go

---

<sup>10</sup> Bazaars located at a border area stand out in one important respect: they are also the sites where significant cross-border trade takes place. For instance, sellers at a bazaar in Jarkent (a small town in Kazakhstan about 20 miles from a BCP with China in Khorgas) purchase their products from several sources: directly from wholesalers in Urumqi, capital of Xinjiang Uygur Autonomous Region, and Khorgas, across the border, wholesalers at the Almaty "Barakholka" bazaar, and from local producers and residents engaged in daily supplying activities of mostly agricultural products from China (based on interviews conducted at the Jarkent bazaar in June 2007)

to smaller bazaars or shops located in the same city. Furthermore, international hub-bazaars may be at the end of a distribution channel as indicated by quite significant retail sales in all of them.

**International hub bazaars** (Table 1) are the source of supplies also to bazaars located in other CA countries as well as in Russia. While other bazaars, especially those that are a conduit for cross-border trade, supply foreign clients, international hub bazaars have a wider geographical reach and are also much larger. Shuttle traders link them with a wide array of other bazaars including other international hub bazaars. Their number is limited: two in Kyrgyz Republic (Dordoi and Karasuu), one in Kazakhstan (Barakholka), and one in Tajikistan (Korvon). Their main mode of operation is wholesale with sales running easily in hundreds of millions of US dollars monthly. They offer a wide range of products acting often as re-export platforms as well as venues for exports of domestic products. These are “city-within-the-city” type bazaars with large infrastructure including facilities for supplying such services as public transport, hotels, saunas, canteens, warehouses, bus terminals. In addition to local customers, traders from smaller bazaars located both within a state’s boundaries as well as abroad shop there.

**Nation-wide bazaars** feed of the big hubs, although not exclusively. They tend to be smaller in size than international hub bazaars although they often also have rather developed network and infrastructure. However, they mainly target a large part of one country. Bazaars covered in surveys included two in Kazakhstan, one in Almaty and another in Astana, one in Bishkek in Kyrgyzstan, and two in Tajikistan, one in Dushanbe and another in Uran-tube (see Table 1 above). Some of these bazaars are universal offering products ranging from automotive components, electrical equipment, sanitary, construction materials, paints, household goods to clothing and agricultural products. Others specialize in a group of products: for instance, Madina in Bishkek specializes in fabrics and locally made clothing. While they mainly serve local population, they also act as a source of supply for wholesalers and traders servicing local bazaars. Some of them are either direct imports from China, Turkey, Uzbekistan, and Iran. Others re-export products from international bazaars.

Sources of supplies of an international bazaar at Karasuu provide a good illustration of **linkages crossing international and city bazaars**. According to information obtained from owners of warehouses in Karasuu,<sup>11</sup> around ten percent of goods are brought from Dordoi and Madina, both located in Bishkek. Jeans (local production and products made in China), children's clothes (imports from China), men's suits (local production and China), shirts, women's clothes (local production and the PRC), soap detergents, food products, flour and flour products, dairy products, confectionery, tobacco and others come from Dordoi. Supplies from “Madina” are limited to textiles. Because of high transportation costs, supplies of fabrics remain low. Only a small fraction of products traded in Karasuu are consumed locally; around 90 percent are further moved to Uzbekistan and Tajikistan.

**Local stationary bazaars**, usually located in urban areas, target a local population. Stationary bazaars are mainly retail. Larger cross-border bazaars would also fall in this category. The items traded are foods, acquired either locally or at nation-wide bazaars, and consumer products. Their major sources of supply are local producers and nation-wide hubs. City stationary bazaars, covered by a survey conducted for this study, included three bazaars in Kazakhstan (Almaty and Astana) and two bazaars in Tajikistan (Dushanbe and Khujand). Three of them specialize solely in food products, whereas two are universal.

Bazaars belonging to different categories vary significantly, as shown in Table 1, although within each category there is also some variation depending on the dimension taken into account.

---

<sup>11</sup> They are not only the owners of goods, but also of containers, they also sell, lease out the sale outlets, sell the goods to small-scale entrepreneurs. Their main business operation is wholesale to traders from other bazaars.

**Table 1: Selected characteristics of surveyed bazaars**

|                             | Total number of sales outlets | Total breakeven sales (monthly) | Total estimated sales (monthly) | Share of wholesale in total sales (in percent) | Employment (in '000) | Share in local employment (in percent) |
|-----------------------------|-------------------------------|---------------------------------|---------------------------------|--|----------------------|--|
|                             |                               | (in million of US dollars)      |                                 |  |                      |  |
| <b>International</b>        |                               |                                 |                                 |  |                      |  |
| Barakholka (Almaty)         | 15,450                        | 176                             | 211                             | 60   | 39.9                 | 5.1                                    |
| Dordoi (Bishkek)            | 40,300                        | 301                             | 331                             | 80   | 54.6                 | 7.8                                    |
| Karasuu (Osh)               | 10,200                        | 58                              | 94                              | 80   | 16.3                 | 3.0                                    |
| Korvon (Dushanbe)           | 5,430                         | 5                               | 19                              | 30   | 14.1                 | 7.1                                    |
| Average                     | 17,845                        | 135                             | 164                             | 63   | 31.2                 | 5.7                                    |
| <b>Countrywide/regional</b> |                               |                                 |                                 |  |                      |  |
| Altyn Orda (Almaty)         | 3,181                         | 7.7                             | 14.3                            | 70   | 8.2                  | 1.3                                    |
| Istravshan (Ura-tube)       | 2,500                         | 4.2                             | 9.4                             | 40   | 7.0                  | 8.7                                    |
| Madina (Bishkek)            | 1,030                         | 2.9                             | 24.2                            | 80   | 1.8                  | 0.4                                    |
| Shanghai (Astana)           | 3,127                         | 9.4                             | 22.9                            | 25   | 4.8                  | 1.7                                    |
| Sultoni-Kabir (Dushanbe)    | 1,327                         | 2.6                             | 13.2                            | 30   | 0.1                  | 0.1                                    |
| Average                     | 2,233                         | 5.4                             | 16.8                            | 49   | 4.4                  | 2.4                                    |
| <b>City/local</b>           |                               |                                 |                                 |  |                      |  |
| Artem (Astana)              | 1,750                         | 12.3                            | 15.1                            | 10   | 2.6                  | 0.9                                    |
| Karkara (Almaty)            | 624                           | 3.1                             | 4.4                             | 0  | 0.9                  | 0.2                                    |
| Panjshanbe_A (Khujand)      | 1,300                         | 1.6                             | 2.6                             | 80   | 2.9                  | 2.9                                    |
| Sahovat_A (Dushanbe)        | 700                           | 0.8                             | 1.2                             | 30   | 1.1                  | 0.5                                    |
| Sary-Arka_A (Almaty)        | 282                           | 1.2                             | 2.2                             | 0  | 0.4                  | 0.1                                    |
| Average                     | 931                           | 3.8                             | 5.1                             | 24   | 1.6                  | 0.9                                    |
| <b>GRAND TOTAL</b>          | <b>87,201</b>                 | <b>585.1</b>                    | <b>764.3</b>                    | <b>69.0</b>                                    | <b>154.6</b>         | <b>.....</b>                           |

Note: "A" denotes agricultural bazaars.

**Dordoi** towers above them all on all counts. Its total number of sales outlets is two and half times larger than the second largest international bazaar at Barakholka while its estimated sales are 57 percent larger. It has more sales outlets than the total for other international hub-bazaars; excluding Barakhlovka, its total estimated sales are 49 percent larger than the total for all other surveyed

bazaars; and its employment is only 9 percent lower than the total for other bazaars excluding Barakhlovka. Korvon is the smallest among international hub-bazaars.

Bazaars belonging to other categories are more homogenous, albeit with a caveat. Except for the Artem marketplace in Astana and Panjshanbe in Khujand, other city bazaars have significantly lower direct employment and a number of sales outlets.

**The differences in the size of surveyed bazaars are readily visible with strong demarcation lines amongst them.** As can be seen from data presented in Table 1, the average values of each characteristic for each category are ways apart. They dramatically fall as one move down the hierarchical ladder. They are larger for international bazaars than for countrywide bazaars, which, in turn, are larger than those for city bazaars, albeit there are some exceptions. For instance, the average employment for international bazaars ranging between 14 and 55 thousand people is almost eight times higher than that for regional bazaars, which in turn is more than two times larger on average than an average employment in city/local bazaars. Similarly large differences are in other discussed dimensions of identified categories of bazaars, albeit there is some variation.

Overall, bazaars located in Kazakhstan and Kyrgyzstan are larger than in Tajikistan; even for those falling into 'higher' layers of bazaars' hierarchy. For instance, estimated monthly trade turnovers of a city bazaar Shanghai in Astana and Madina in Bishkek, both of around \$24 million monthly, are 20 percent higher than that of an international bazaar Korvon in Dushanbe. These deviations can be explained by much higher levels of GDP per capita in Kazakhstan than in other CA economies. Local demand for fabrics of buoyant, export-oriented, Kyrgyz garments industry in and around Bishkek explains high sales by the Madina bazaar, whereas both Dordoi and Karasuu heavily depend on sales to foreign clients.

International hub-bazaars as well as some regional and city bazaars are complex business operations with often significant presence of foreign capital. Their annual trade turnover runs in millions of US dollars with the largest registering sales in hundreds of millions of US dollars. Some of them consist of loosely knitted smaller bazaars with different ownerships and operating procedures. Barkahlovka, for instance, has 28 adjacent bazaars often sharing common infrastructure and warehousing facilities in nearby areas. Karasuu bazaar is a complex of two bazaars: the Turateli bazaar, owned by the state, and the much larger privately owned Karasuu bazaar. Dordoi is now split into five autonomously privately owned areas. But whatever physical differences might be, they all have warehousing capacities turning them into large logistic distribution centers offering a wide variety of products.

**Forms of ownership, foreign presence and trading practices** vary across surveyed bazaars. Some bazaars characterize huge dispersion in ownership of sales outlets with almost each outlet owned by a different individual, although signs of concentration have been observed, for instance, in the Karasuu bazaar. State ownership of bazaar is quite pervasive in Tajikistan, whereas in Kazakhstan all bazaars are private.<sup>12</sup> In Kyrgyzstan, most bazaars have been privatized: among surveyed bazaars, there, the only exception is a relatively small part of the Karasuu complex, the Turatali market.<sup>13</sup>

<sup>12</sup> All bazaars in Kazakhstan are private, with the land owned by the state and leased to private operators of bazaars for several decades. In return, they pay the land tax at rates ten times higher than for other types of activity.

<sup>13</sup> The Karasuu bazaar, built between 1984 and 1987 and expanded in 2000-05, was owned fully by a state-owned company "Turatali bazaars" until the privatization of 2000-05. The company still owns the area accounting for 28 percent of the total territory of the Karasuu complex.

**Lease of a sales outlet** is a dominant mode in selected bazaars whereas full ownership dominates in other bazaars with no clear pattern. Chinese as well as nationals from neighboring Central Asian countries have been visible in a number of surveyed bazaars. In Tajik bazaars, most big wholesalers are the citizens of China. Similarly, a large number of warehouses in Karasuu owned by Kyrgyz citizens are leased to nationals of China (about 70 percent) and Uzbekistan from Tashkent (15 percent). The remaining warehouses are run by Kyrgyz citizens (15 percent). Interestingly, those who run warehouses hire traders on a commission basis. Thus, they make arrangements for imports and assume risk associated with their sales. Among commissioned sellers around half are people with double citizenship, Kyrgyz and Uzbek, and approximately 10 percent are citizens of the People's Republic of China. Furthermore, the Medina bazaar, major distributor of fabrics imported from China, is in fact an enterprise owned jointly by Kyrgyz and Chinese entrepreneurs.

### *B. Employment and income effects of surveyed bazaars*

**Bazaars are the major source of employment in a number of communities across CA.** Except for the Karasuu bazaar near Osh, although the share may be misleading as the total employment refers to the whole oblast,<sup>14</sup> the share of employment by international bazaars in total employment in respective regions exceeds five percent. It is particularly high for Dordoi (8 percent) in Bishkek and Korvon (7 percent) in Dushanbe. As for other bazaars, Istravshan bazaar in Ura-tube stands out with the share of almost nine percent. The numbers are more impressive if one takes totals for bazaars surveyed in a given region: for the Bishkek located bazaar it goes up to 8.1 percent, for Dushanbe it is 7.7 percent; for Almaty 6.6 percent; and Astana it is 2.7 percent (Table 1).

But **the employment effect goes beyond a mere number of people employed at a bazaar**, i.e., owners, traders, administrative staff, and providers of services supplied within the bazaar. Bazaars also induce indirect employment. This includes not only those employed in freight and transportation services but also traders servicing other bazaars as well as suppliers of products traded in a bazaar including storage facilities located outside the physical boundaries of a bazaar. While it would be difficult to give an estimate of the number of people making their living through shuttle trading, producing goods marketed at bazaars and other activities supporting the bazaar, there are reasons to believe that numbers involved are quite high. Note first a relatively high level of wholesale sales in bazaar turnover indicating re-sales or further processing. This share ranges for international bazaars between 30 percent (Korvon, Dushanbe) and 80 percent (Dordoi, Bishkek, and Karasuu, Osh). The share of wholesale in total sales is also high for some bazaars falling into other two categories: 70 percent in Altyn Odra bazaar and 80 percent in Medina bazaar (regional) and 80 percent in sales of a city bazaar Panjshanbe in Khujand.

In all, **wholesale accounts for almost 70 percent of total sales of surveyed bazaars.** During peak months of bazaar activities, around \$500 million worth of products are sold monthly not for final consumption but for either further processing or re-sales in other bazaars. Assuming that wholesale purchases generate a modest margin of five percent, this would amount to an extra income during peak months in the summer of around \$6 million for customers of surveyed bazaars in Kazakhstan, \$16 million for those in Kyrgyzstan, and \$5 million for those in Tajikistan. Job-

<sup>14</sup> If the total population of Karasuu (around 50 thousand) alone is taken as a benchmark, than employment in the Karasuu bazaar would amount to 30 percent of the population. According to the regional administration and the statistical agency, trading activities give employment to around 80 percent of the population at working age in Karasuu city.

**Table 2: Estimates of annualized revenues and expenditures of bazaars' and sales outlets' owners and fees paid in surveyed bazaars in 2008 (in million of US dollars)**

| <b>International</b>            | Total fixed cost | labor related outlays | lease or lease equivalent | official bazaar fees | informal bazaar fees |
|---------------------------------|------------------|-----------------------|---------------------------|----------------------|----------------------|
| Barakholka (Almaty)             | 314.7            | 57.0                  | 66.5                      | 49.8                 | 141.4                |
| Dordoi (Bishkek)                | 855.7            | 252.6                 | 540.4                     | 62.7                 | 0.0                  |
| Karasuu (Osh)                   | 123.9            | 44.4                  | 35.2                      | 31.7                 | 44.3                 |
| Korvon (Dushanbe)               | 20.6             | 7.3                   | 3.9                       | 1.9                  | 7.5                  |
| <b>Countrywide/regional</b>     |                  |                       |                           |                      |                      |
| Altyn Orda (Almaty)             | 29.5             | 19.3                  | 5.8                       | 4.4                  | 0.0                  |
| Istravshan (Ura-tube)           | 4.0              | 2.7                   | 0.3                       | 1.0                  | 0.0                  |
| Madina (Bishkek)                | 7.4              | 3.4                   | 2.0                       | 1.3                  | 0.6                  |
| Shanghai (Astana)               | 31.5             | 23.7                  | 7.6                       | 0.2                  | 0.0                  |
| Sultoni-Kabir (Dushanbe)        | 5.2              | 1.8                   | 0.3                       | 0.9                  | 2.1                  |
| <b>City/local</b>               |                  |                       |                           |                      |                      |
| Artem (Astana)                  | 54.2             | 16.8                  | 21.7                      | 15.8                 | 0.0                  |
| Karkara (Almaty)                | 10.1             | 4.7                   | 5.4                       | 0.0                  | 0.0                  |
| Panjshanbe_A (Khujand)          | 3.2              | 1.7                   | 1.2                       | 0.3                  | 0.0                  |
| Sahovat_A (Dushanbe)            | 0.9              | 0.4                   | 0.4                       | 0.2                  | 0.0                  |
| Sary-Arka_A (Almaty)            | 2.6              | 1.4                   | 0.6                       | 0.6                  | 0.0                  |
| <b>GRAND TOTAL: of which in</b> | 1,463            | 437                   | 691                       | 171                  | 196                  |
| Kazakhstan                      | 442              | 123                   | 107                       | 71                   | 141                  |
| Kyrgyzstan                      | 987              | 300                   | 578                       | 96                   | 45                   |
| Tajikistan                      | 34               | 14                    | 6                         | 4                    | 10                   |

**Note:** Monthly to annual values have been converted by multiplying monthly estimates by nine and for agricultural bazaars by six rather than 12, simply because surveys took place during peak summer months. For non-agricultural bazaars, we derived from the following scheme derived from interviews with traders: three peak months; six months of fair sales around 25 percent below the peak level; and three slump months at around 50 percent of the peak level. For agricultural bazaars: three peak months followed by another six at 50 percent of the peak levels.

equivalents of these extra earnings can be calculated using average wages of people employed in surveyed bazaars: for Kazakhstan (average wage of \$350) total aggregate extra income is an equivalent of extra 17 thousand jobs; for Kyrgyzstan (average wage of \$190), this is an equivalent of 84 thousand; and in Tajikistan, \$5 million could employ around 143 thousand people at a wage of \$120 per month. Hence, one bazaar job in Kazakhstan would create one third of a job outside; in Kyrgyzstan, it would add 1.2 jobs; and in Tajikistan 1.6 jobs. An important caveat is that the surveys took place in peak summer months (for a conversion to annual data, see note to Table 2 above).

Second, **bus terminals, a trademark of several international-hub bazaars, create significant employment opportunities in large bazaars.** For instance, more than two hundred 40-seat motor coaches provide regular daily services to customers visiting Barkholka, site to 28 independently-run bazaars in Almaty, and 250 buses to those going to Dordoï. Sixty 40-seat buses service daily the Karassuu bazaar complex. A large number of trucks loaded with goods departing daily from these locations suggest large purchases by visitors for re-sale in other bazaars.

Third, different Kazakh sources put total employment created directly and indirectly by Barakholka activities at around 250,000 or five-times more than aggregate employment at sales outlets and bazaar administration. The Statistic Agency of the Republic of Kazakhstan estimates that there are 337,000 self-employed in Almaty Region with a large portion of them involved in businesses in that are in some ways related with the Barakholka complex.

Finally, **bazaars create significant employment opportunities for women.** Between 70 and 80 percent of vendors in surveyed bazaars are women. Women are also highly visible in shuttle trading accounting for around half of shuttle traders across surveyed bazaars. They dominate in trade in vegetables, dairy products, eggs and curtains and kitchenware.

**Bazaars generate significant revenues to owners of bazaars and sales outlets.** Collected information allow making very rough estimates of incomes of traders, owners of sales outlets, and local governments per year (for the conversion rules to annual values, see the note to Table 2). These estimates can be derived from data collected in surveys used to estimate a total fixed cost of running a sales outlet.<sup>15</sup> The major components of total fixed cost include all payments made to the bazaar administration and other state fiscal authorities, wages paid to vendors or alternatively, if an outlet is run by an owner, wage earned by a vendor working in a similar business, and a lease or its equivalent, if an outlet is not rented or leased, and informal payments to local state authorities. Table 2 tabulates total fixed costs aggregated per bazaar: they represent simultaneously incomes of people employed (labor related in Table 2), owners (lease or lease equivalent in Table 2), and payments made to local administration.

While we do not have information relevant for estimating flows of collected **tax revenues** by local and central governments, tax codes appear to be complex and rates levied upon bazaars quite high with the exception of Kyrgyzstan. Kyrgyzstan has the simplest bazaar tax regime whereas Tajikistan the most complex offering meaningful opportunities for rent seeking by tax administration. Bazaar owners in Kyrgyzstan pay VAT (12%) and income tax (4%), whereas outlet owners and leasers a fee of around US\$65 per month depending on the location of a bazaar. Bazaar owners in Kazakhstan pay the following taxes: VAT (13%), corporate income tax (30%), social tax (13%), social security (10%), property tax (1%), land tax (rate depends on the location), and environment and transport taxes. Leasers, outlet owners or vendors pay a fee set at two percent of estimated sales. Bazaar owners in Tajikistan pay the following taxes: VAT (20%), income tax (13%), wage bill fund tax (25%), profit tax (25%), sales tax (3%), road fund tax (2%), property tax (calculated at 4 percent of a minimum wage), and land use fee (\$507 per square meter). Leasers and outlet owners pay a market fee of up to \$27 a month.

In all, total payments associated with the fixed cost of running sales outlets in surveyed bazaars across CA amount to almost \$1.5 billion a year with two thirds going to owners of sales outlets and

---

<sup>15</sup> The survey's questionnaire sought to incorporate all questions needed to extract information on cost components independent of the value of sales. Information is reliable, except for informal payments, as neither traders nor administrators have incentive to distort or conceal it. Moreover, it is publicly available.

people employed there. Another one third, either through official or unofficial channels, goes to local administration. The amounts involved are quite significant when set against GDP of these countries, especially in the case of Kyrgyzstan. Total payments (fixed cost) of surveyed bazaars amounted to around one percent of Kazakhstan's and Tajikistan's GDP and staggering 33 percent of Kyrgyzstan's GDP. **Labor-related income**, the most relevant for poverty reduction, accounts on average for between 30 percent of total fixed cost for both Kazakhstan and Kyrgyzstan and 41 percent for Tajikistan. Note that these estimates do not include revenues from bazaars' induced activities resulting in significant employment and, therefore, income effects.

**The composition of revenue or total fixed cost varies both within and between the identified categories of bazaars.** An important factor contributing to the variation are informal bazaar fees. Contrary to expectations, they are not paid everywhere. In fact, except for Dordoi, traders pay them in other international bazaars but do not pay them in city/local bazaars. Informal payments take place in both state-owned bazaars, e.g., Sultoni-Kabir in Dushanbe or Turatali market, which is part of the Karasuu bazaar, and privately-held markets. Owners of sales outlets have relatively highest revenues exceeding 50 percent of total fixed cost at Dordoi (Kyrgyzstan) and Karkara (Kazakhstan).

## 2. Foreign trade intermediated by bazaar as evidenced in mirror trade statistics and surveys

In spite of the time lag between the last year for which foreign trade statistics were available and the year when survey were conducted, the results complement each other. While the use of mirror trade statistics raises a number of difficult methodological issues including the quality of trade reporting (see Annex 1), they do not undermine this analysis. China's trade statistics have met fully quality checks against foreign trade statistics of European Union, Japan, and USA, i.e., mirror trade gaps were negative and in line with expected values of insurance and freight of respective imports (see Kaminski 2008). Since China is one of the most important trading partners of CA CAREC economies, an overall level of accuracy can be deemed as fully satisfactory.

### A. Sources of bazaars' supplies and their foreign sales

Surveys offer insights as to goods traded, their origins, and destination of sales intermediated by bazaars. First, **sources of bazaars' supplies** vary depending on a bazaar's specialization: those specializing in agricultural products tend to trade mainly in domestic produce, albeit with a caveat. Leaving aside local agricultural production, the presence of imports appears to be positively correlated with the degree of processing of sold products. This seems to provide an explanation as to why the share of imports in trade of two agricultural, city bazaars in Dushanbe and Khujand in Tajikistan is around 25 percent whereas this share in trade of Sary-Arka in Almaty is around 80 percent (Table 3).

Second, the **origin of goods traded** also depends on geographical location of a bazaar. For instance, products from Iran are traded in Tajik bazaars, while Iran was not identified in surveys of bazaars in Kazakhstan and Kyrgyzstan as a significant supplier. Surveys of bazaar also identify other bazaars as source of supplies: Kazakh bazaars obtain products from Dordoi in Kyrgyzstan and Tajik bazaars from Dordoi as well as Barkakholka in Almaty. These are both locally produced products as well as imports.

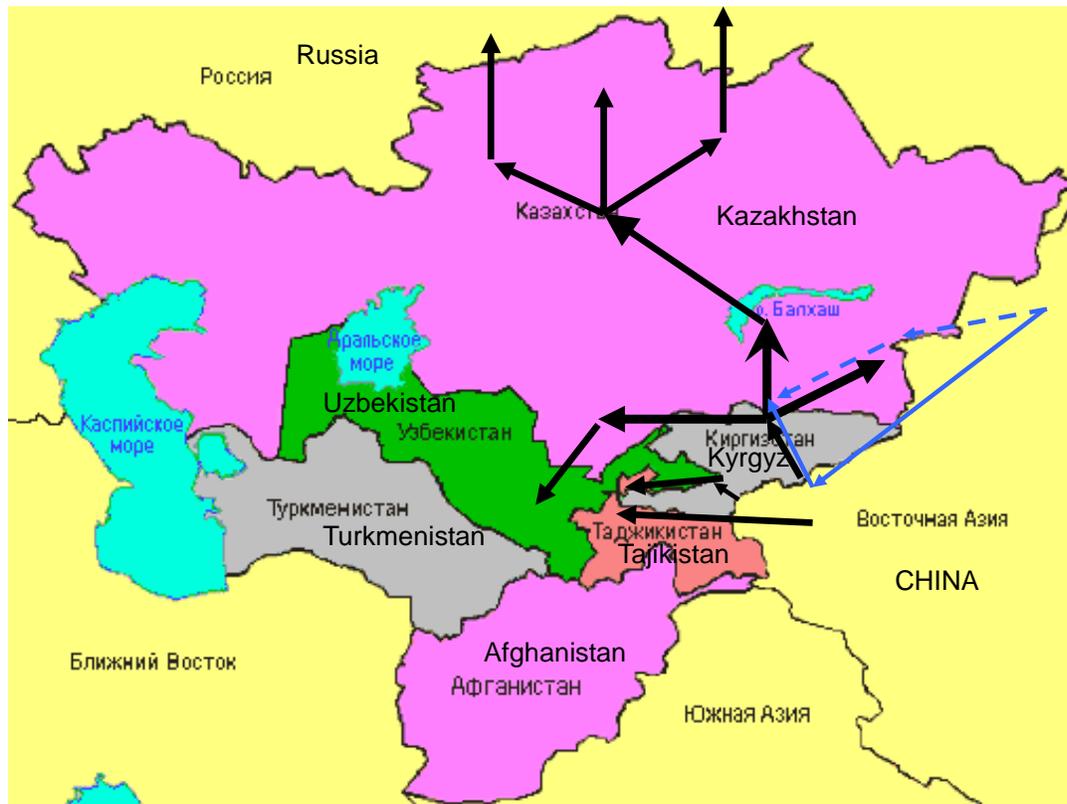
**Table 3: Total annual sales and the share of imports and foreign sales in total sales of surveyed bazaars**

|                              | Annual sales      | Share of imports | Share of foreign sales | Foreign sales |
|------------------------------|-------------------|------------------|------------------------|---------------|
| <b>International</b>         | (in US\$ million) | (in percent)     |                        | (in US\$ mln) |
| Barakholka (Almaty)          | 1,742             | 80               | 4                      | 70            |
| Dordoi (Bishkek)             | 2,842             | 85               | 75                     | 2,131         |
| Karasuu (Osh)                | 684               | 90               | 85                     | 581           |
| Korvon (Dushanbe)            | 106               | 93               | 2                      | 2             |
| <b>Countrywide/regional</b>  |                   |                  |                        |               |
| Altyn Orda (Almaty)          | 99                | 80               | 0                      | 0             |
| Istravshan (Ura-tube)        | 61                | 90               | 0                      | 0             |
| Madina (Bishkek)             | 122               | 90               | 10                     | 12            |
| Shanghai (Astana)            | 146               | 80               | 3                      | 4             |
| Sultoni-Kabir (Dushanbe)     | 71                | 90               | 0                      | 0             |
| <b>City/local</b>            |                   |                  |                        |               |
| Artem (Astana)               | 123               | 95               | 6                      | 7             |
| Karkara (Almaty)             | 34                | 100              | 0                      | 0             |
| Panjshambe_A (Khujand)       | 13                | 25               | 25                     | 3             |
| Sahovat_A (Dushanbe)         | 6                 | 25               | 0                      | 0             |
| Sary-Arka_A (Almaty)         | 10                | 80               | 0                      | 0             |
| <b>GRAND TOTAL: of which</b> | 6,058             |                  | 47                     | 2,818         |
| Kazakhstan                   | 2,154             | ....             | 4                      | 81            |
| Kyrgyzstan                   | 3,647             | ....             | 75                     | 2,725         |
| Tajikistan                   | 256               | ....             | 4                      | 10            |

Third, the **geographical direction of imports** varies depending on products involved. Clothing and agricultural products often come from neighboring CA countries. Agricultural products and garments often come from neighboring countries. For instance, garments sold in Kazakh and Tajik bazaars are “made in Kyrgyzstan,” flour traded in Kyrgyzstan and Tajikistan come from Kazakhstan, building materials in Tajik bazaars come mostly from Uzbekistan, Kazakhstan, and Kyrgyzstan as well as from Dubai, Russia, and China. Such goods as sugar, macaroni and tea originate in China, Iran and Russia. Turkey is the source for a large bulk of leather goods sold at bazaars.

Fourth, the differences notwithstanding, surveys unambiguously identify **China as a major supplier** of bazaar goods with Kyrgyz bazaars accounting for a very significant portion of these imports. In some bazaars, especially in Kyrgyzstan, Chinese products account for almost all foreign goods that are traded. They enter Central Asia either directly to individual countries or enter through Kyrgyzstan and then move to other destinations in both Central Asia and southern Russia (see map).

Map 1: Two channels of flows of imports of bazaar goods from China into Central Asia



Finally, sources of supply, quality and prices of **goods imported from China** by traders from Dordoi and Karasuu differ significantly. First, they originate in different parts of China and enter Kyrgyzstan through different border crossing points and two different routes. Chinese imports into Karasuu originate mainly in Kashgar, China, and enter Kyrgyzstan through the border crossing point with China in Erkeshtam. They are then delivered to storage facilities in different parts of Karasuu and surrounding villages. Imports are mainly such consumer goods as footwear, garment and knitwear, furs, leather products, carpets, electrical appliances, bicycles, household appliances. Second, imports intermediated through Dordoi come from southern China (Guangzhou, Shenzhen, etc.), Beijing and Urumqi through the Torugart border crossing point. Imported products into Dordoi are, according to interviews, more expensive and of higher quality than those going through Karasuu. This is explained by significantly higher standards of living in northern parts of Kyrgyzstan and Kazakhstan than in the Ferghana Valley region in the south.

**Bazaars offer opportunities for marketing both imported and domestically produced goods.**

Imports originate not only outside of CA economies but also in neighboring CA countries with agricultural products, miscellaneous manufactures including Kyrgyz garments (as corroborated also by mirror foreign trade statistics—see Annex 1), construction materials and chemicals mainly from Uzbekistan accounting for the bulk of these supplies to bazaars. For many agricultural producers, they ensure a vital link to consumers in remotely located domestic markets.

**Two Kyrgyz international hub-bazaars, Dordoi and Karasuu, are the major nodes connecting networks of bazaars across Central Asia.** Their aggregate share in total foreign sales of surveyed bazaars is 96 percent. Although foreign sales account for almost half of total sales of surveyed bazaars (Table 3 above), most of them serve domestic markets accounting for 96 percent of total sales of bazaars in both Kazakhstan and Tajikistan. Estimated purchases by non-residents account for a large portion of only two surveyed bazaars: Dordoi and Karasuu, located at Kyrgyzstan's border with Kazakhstan and Uzbekistan, respectively, contributing to 75 percent and 85 percent of their total sales. Including Madina, around three quarters of surveyed Kyrgyz bazaars' total sales are to foreigners; in other words, only 25 percent of goods sold in these bazaars are consumed locally as compared with 96 percent of aggregate sales of surveyed bazaars in Kazakhstan, Kyrgyzstan and Tajikistan sold to local consumers. The share of foreign sales of two other international hubs—Barakholka and Kovron—of four and two percent, respectively, is miniscule and lower than that share in sales of a surveyed country-wide bazaar—Madina in Kyrgyzstan—and one local bazaar, Panjshanbe, in Khujand, Tajikistan.

Although the surveys cannot provide detailed information on **geographical patterns of foreign sales** of surveyed bazaars, they allow identifying general directions. The Dordoi bazaar reaches bazaars across Kazakhstan, Tajikistan, Uzbekistan, and southern parts of Russia. Dordoi has been identified as a source of supply by respondents from other surveyed international hub-bazaars as well as large city bazaars. In contrast to Dordoi's relative diversification in terms of directions of foreign sales, Karasuu's survival critically hinges on sales to Uzbekistan. Its geographic profile is highly concentrated with target audience is Uzbekistan taking around 65-75 percent of all sales. Tajik traders account for 10-15 percent with the balance going to Kyrgyzstan's southern regions (Osh, Jalalabad, and Batken).

As for **other cross-border linkages**, the volumes of foreign trade are low in comparison to two Kyrgyz hubs but also wind up in other CA countries and Russia. Foreign customers of the Barakholka bazaar, purchasing around \$70 million worth of goods, come from Russia, Uzbekistan, and Tajikistan. Residents of Kyrgyzstan are reported to be major buyers in the Panjshanbe and traders from Kazakhstan reportedly account for the bulk of foreign sales of fabrics and garments of the Madina bazaar. Note that garments are locally produced, whereas fabrics are imported from China.

### ***B. Mirror trade gaps and shuttle-bazaar trading***

An estimate, derived from surveys of bazaars, putting total exports intermediated by bazaars at around \$2.8 billion in 2008, cannot be directly assessed against foreign trade statistics for three reasons: First, some flows are not registered by border authorities for a variety of reasons ranging from regulations allowing for duty-free movement to smuggling. Second, a full set of foreign trade statistics of countries reporting to the UN COMTRADE database are available with a considerable time lag exceeding often one year.<sup>16</sup> Last but not least, two CA states—Tajikistan and Uzbekistan—do not publish detailed foreign trade statistics. Neither do they report them to the UN.

This has four consequences for this analysis. First, instead of using national statistics, we have to rely on trade data of CA economies' trading partners (mirror foreign trade statistics) in order to identify unreported imports into CA countries. Second, since intra-CA trade, at least in the triangle: Kazakhstan—Kyrgyzstan—Tajikistan, is duty-free and, furthermore, we do not have foreign trade statistics for all CA economies, the focus will be solely on foreign trade flows originating outside four CA CAREC economies. Third, we use trade data for 2006, as no full set of foreign trade data

<sup>16</sup> As of May 2009, no full set of trade data in SITC Rev 2 was available for 2007.

was available for 2007 when we conducted this analysis in August 2008 (see WB 2008). Finally, we can identify unreported imports across various product categories only for Kazakhstan and

**Table 4: Major imports intermediated through bazaars: bazaar goods in 2006**  
(in million of US dollars and percent)

| SIT C                     | Product group                                  | Aggregate mirror trade gaps (KZK + KGZ) | CA Imports | Share in total bazaar imports | Imports of KZK and KGZ | Share of KZK and KGZ in CA imports |
|---------------------------|--|---|------------|-------------------------------|------------------------|------------------------------------|
| 845                       | Outer garments and other articles              | 1,004                                   | 1,048      | 14.1                          | 1,025                  | 98                                 |
| 851                       | Footwear                                       | 820                                     | 897        | 12.0                          | 865                    | 96                                 |
| 821                       | Furniture and parts thereof                    | 302                                     | 627        | 8.4                           | 556                    | 98                                 |
| 893                       | Articles, n.e.s., of plastics                  | 280                                     | 592        | 8.0                           | 583                    | 93                                 |
| 846                       | Under garments, knitted or crocheted           | 545                                     | 564        | 7.6                           | 323                    | 97                                 |
| 842                       | Outer garments, men's, of textile fabrics      | 280                                     | 341        | 4.6                           | 526                    | 89                                 |
| 658                       | Made-up articles of textile materials          | 282                                     | 331        | 4.4                           | 310                    | 91                                 |
| 653                       | Fabrics, woven, of man-made fibres             | 249                                     | 317        | 4.3                           | 282                    | 89                                 |
| 847                       | Clothing accessories of textile fabrics        | 240                                     | 250        | 3.4                           | 245                    | 98                                 |
| 843                       | Outer garments, women's, of textile fabrics    | 101                                     | 122        | 1.6                           | 106                    | 82                                 |
| 655                       | Knitted or crocheted fabrics                   | 84                                      | 110        | 1.5                           | 182                    | 94                                 |
| 831                       | Travel goods, handbags, brief-cases            | 75                                      | 88         | 1.2                           | 72                     | 96                                 |
| 761                       | Television receivers                           | 70                                      | 129        | 1.7                           | 85                     | 97                                 |
| 812                       | Sanitary, plumbing, heating, lighting          | 66                                      | 194        | 2.6                           | 117                    | 95                                 |
| 659                       | Floor coverings, etc.                          | 65                                      | 133        | 1.8                           | 87                     | 78                                 |
| 848                       | Articles of apparel & clothing accessories     | 60                                      | 75         | 1.0                           | 72                     | 90                                 |
| 894                       | Baby carriages, toys, games and sporting goods | 43                                      | 100        | 1.3                           | 97                     | 72                                 |
| 899                       | Other miscellaneous manufactured articles      | 39                                      | 80         | 1.1                           | 92                     | 92                                 |
| 895                       | Office and stationery supplies.                | 32                                      | 46         | 0.6                           | 44                     | 96                                 |
| <b>TOTAL ABOVE</b>        |  | 4,636                                   | 6,045      | 81.2                          | 5,668                  | 94                                 |
| <b>TOTAL BAZAAR GOODS</b> |  | 4,684                                   | 7,059      | 100                           | 6,501                  | 92                                 |

Notes: KZK stands for Kazakhstan; and KGZ for Kyrgyzstan.

Source: Own calculations based on world's and Kazakhstan's and Kyrgyzstan's reporting to the UN COMTRADE database.

Kyrgyzstan: since the other two do not disclose data, all imports go unreported. Since these two countries accounted for 92 percent of total CA mirror imports of bazaar goods in 2006, this has a negligible impact on the analysis (Table 4).

Goods imported from outside four CA CAREC countries and intermediated by bazaars are not reported in imports statistics of Kazakhstan and Kyrgyzstan because of a foreign trade regime friendly towards shuttle-trading (especially in the latter) and, in some cases, because of smuggling. For this reason alone, bazaar-type products have positive trade gaps, i.e., the value of exports reported by their trading partners exceeds that of imports disclosed in their national statistics. Goods with significant positive trade gaps overlap with those observed in trade in surveyed bazaars.

Mirror foreign trade statistics also confirm the results of surveys pointing, on the one hand, to two Kyrgyz international hub-bazaars as major suppliers of other bazaars in the region in goods originating outside the four-CA CAREC economies and, on the other hand, Uzbekistan as one of the major consumers of these goods. **Mirror trade statistics show 'excessive' imports of Kyrgyzstan** that cannot be possibly explained by income levels or peculiarities of Kyrgyz consumers' tastes. They also show **Uzbek imports well below the levels of other CA economies** that cannot be explained by Uzbekistan's manufacturing of these products.

Although Kyrgyzstan “over-imports” and Uzbekistan “under-imports” bazaar goods, the movement of products across CA bazaars is not limited to these two countries. Goods flow in all directions including Kazakhstan and Tajikistan with bazaars in both of them providing a platform for further re-exports to bazaars in southern Russia and Uzbekistan. They originate, however, mostly, albeit not exclusively, in Kyrgyzstan.

Mirror trade gaps, the differences between exports (as reported by trading partners) and imports (as reported by Kazakhstan and Kyrgyzstan), point to very significant levels of shuttle-bazaar, i.e., unreported, imports into both Kazakhstan and Kyrgyzstan. Positive mirror trade gaps coalesce around goods that are standard items in bazaar trading. These goods, listed in Annex Table 3, are thereafter referred to as bazaar goods. As can be seen from data in Table 4, the largest positive mirror trade gaps, calculated jointly for Kazakhstan and Kyrgyzstan, were for outer garments and footwear, which accounted together for around one-quarter of total mirror imports of bazaar goods into CA.

**Imported products intermediated through bazaars tend to be under-reported in official trade statistics of Kyrgyzstan and Kazakhstan for legitimate reasons.** Both countries have in place customs procedures that have been friendly to shuttle-trading. In Kyrgyzstan—as of January 2005—some imported items are subject to border charges based on weight rendering their value irrelevant.<sup>17</sup> In Kazakhstan, cargo whose weight does not exceed 50 kilograms and value not exceed US\$1,000 can be brought without paying any border charges. As for large shuttle trade, shipments of agricultural products up to 10 tons and shipments of industrial products up to 2 tons and the value not exceeding US\$10,000 are subject to a simplified customs procedure with a flat rate of 17 percent (14 percent VAT and 3 percent customs fee) ad valorem.<sup>18</sup> These shipments are rarely properly recorded by the customs. While there are many reasons for the existence of positive trade gaps, the

<sup>17</sup> Resolution #976 of the Government of Kyrgyzstan, dated December 31, 2004.

<sup>18</sup> Resolution # 217 of the Government of Kazakhstan, dated March, 9 2005, “On several questions concerning import of goods for individuals into Kazakhstan customs territory.”

existence of special procedures facilitating shuttle-trade, as it is the case in both Kazakhstan and Kyrgyzstan, is one of them. Although unreported, this trade is largely legal.

**Unreported imports** (positive trade gaps) seem to **move through the bazaar logistics channels** providing a bottom line **estimate of the value of non-CA imports traded at bazaars**. They amounted to \$4.6 billion in 2006: Kyrgyz bazaars absorbed US\$1.8 billion and bazaar goods worth \$2.8 billion entered Kazakhstan. According to preliminary estimates of these imports in 2007, the value of Kazakhstan's unreported imports increased to \$3.8 billion and Kyrgyzstan's to \$3 billion.

Although both countries have had positive mirror trade gaps indicating underreporting with Kazakhstan's statistics having failed to capture an equivalent of at least two percent of the total value of imports and Kyrgyzstan's around half of their total imports in 2006,<sup>19</sup> bazaar goods have been almost exclusively responsible for underreporting of total imports. Excluding bazaar goods, Kazakhstan's statistics appear to record properly imports that have been also recorded by statistics of exporters, whereas the gap for Kyrgyzstan remains negative, albeit at a drastically lower level (see Annex Table 2).

**Statistical analysis suggests that a very large portion of bazaar goods imported into Kazakhstan moved through "shuttle-trading" channel and was distributed through bazaars.** Only 8 percent of bazaar imports into Kazakhstan had negative mirror trade gaps, i.e., remaining 92 percent or US\$3 billion worth of bazaar goods were not recorded in 2006.<sup>20</sup> One might argue that most of them were distributed nationwide with some small portion—as the Barhlovka bazaar survey indicates—going abroad.

**Positive mirror trade gaps or unreported imports are high for all bazaar goods.** Most of imports of bazaar goods seem to be intermediated through bazaars and carried out within shuttle-trade facilitating procedures in place in Kazakhstan and Kyrgyzstan. These imports have come largely unreported with only less than 26 percent of bazaar imports into CA in 2006 reported in foreign trade statistics of Kazakhstan and Kyrgyzstan. The remaining three-fourths appear to have met the requirements of these procedures and have been brought by small traders operating out of bazaars. Interviews conducted with traders show that most of them make arrangements for their own supplies abroad mainly in China, Turkey, Iran, and Dubai.

### *C. Imports of bazaar goods: their dynamics, origins and significance*

**Unreported shuttle trade into Kazakhstan and Kyrgyzstan alone, as we do not have data for other Central Asian countries, has been quite sizable.** Its value grew from \$2.1 billion in 2004 to \$3.4 billion in 2005 and \$4.8 billion in 2006, and, according to preliminary estimates, to \$6.2 billion in 2007.<sup>21</sup> It amounted to 11 percent of total mirror imports of Central Asia in 2004 and 14 percent in both 2005 and 2006.

<sup>19</sup> Kazakhstan's one has been much smaller and falling, whereas Kyrgyzstan's the other way around. Kazakhstan's mirror trade gap fell from almost US\$1 billion in 2004 to US\$0.5 billion in 2006 indicating a very significant in the scope of reporting, whereas that of Kyrgyzstan increased from to US\$0.5 billion to around US\$2 billion in this period (Annex Table 2). Note that the value of mirror imports does not include c.i.f. By the same token, the value of underreported imports is higher.

<sup>20</sup> These included: special textile fabrics and related (657); textile fabrics, woven, other than cotton (654); glassware (665); pottery (666); nails (694); manufactures of base metal (699); radio-broadcast receivers (762); musical instruments (898). The value of official imports of US\$ 500,000 accounted for 17 percent of the total and that of mirror imports amounted to US\$ 400,000 or 8 percent of total mirror imports of bazaar goods.

<sup>21</sup> As of April 2009, no full set of trade data in SITC Rec 2 was available from the UN COMTRADE database.

**Imports of bazaar products** have expanded faster than of other imported products in 2003-06. The LSG (least square growth) rate for bazaar goods was 37 percent as compared to 32 percent for total imports: in consequence, their share grew from 20 percent in 2003 to 22 percent in 2006. Put differently, world CA-destined exports of other products grew over the same period from \$10 billion to \$26 billion, whereas the value of 'bazaar' exports increased three-fold from \$2.5 billion to \$7.4 billion or one-fifth of total mirror imports of CA economies in 2006 (Table 5).

**Table 5: Bazaar goods in imports of Central Asian economies in 2003-06  
(in millions of US dollars and in percent)**

|  | 2003   | 2004   | 2005   | 2006   | LSG<br>2003-<br>07 |
|--|--------|--------|--------|--------|--------------------|
| Total imports of CA-4                  | 12,710 | 18,683 | 24,503 | 33,374 | 31.7               |
| share of bazaar goods in total imports | 19.7   | 19.1   | 22.1   | 22.3   | 5.2                |
| Total imports of bazaar goods          | 2,499  | 3,571  | 5,411  | 7,447  | 36.9               |

Source: Based on world reporting to the UN COMTRADE database.

Another feature of bazaar goods imports into CA is **the dominance of China**. China exported bazaar goods worth around \$5 billion in 2007 accounting for 70 percent of CA total mirror imports of bazaar goods. While Turkish and Iranian imports appear in survey of bazaars, their exports are relatively low: Turkey reported exports of bazaar goods to the tune of \$255 million and Iran of \$104 million both in 2006 (Table 6). Together, they accounted for less than 5 percent of total ‘bazaar’ imports in 2006, although in Tajikistan and Uzbekistan their aggregate share was 18 percent and 20 percent, respectively.

**Table 6: Major suppliers of “bazaar goods” to CA countries in 2006  
(in million of US dollars and percent)**

|                    | China             |                 | Turkey            |                 | Iran              |                 | Total<br>(US\$<br>million) | ROW<br>(share in<br>%) |
|--------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|----------------------------|------------------------|
|                    | (US\$<br>million) | (share<br>in %) | (US\$<br>million) | (share<br>in %) | (US\$<br>million) | (share<br>in %) |                            |                        |
| Kazakhstan         | 3,170             | 65.1            | 152               | 3.1             | 28                | 0.6             | 4,867                      | 31.2                   |
| Kyrgyz<br>Republic | 1,799             | 90.5            | 43                | 2.1             | 25                | 1.2             | 1,989                      | 6.2                    |
| Tajikistan         | 164               | 60.4            | 20                | 7.5             | 28                | 10.3            | 271                        | 21.9                   |
| Uzbekistan         | 78                | 24.4            | 40                | 12.3            | 24                | 7.5             | 321                        | 55.8                   |
| Total CA           | 5,212             | 70.0            | 255               | 3.4             | 104               | 1.4             | 7,448                      | 25.2                   |

Source: Based on world reporting to the UN COMTRADE database.

**The economic significance of this trade is much larger than mirror statistics might suggest.** Their total value of \$7 billion, amounting to around 10 percent of aggregate CA GDP in 2006, does not take into account the cost of bringing these products to their final destinations in Central Asia and their sales to final customers. A practical implication is that the value of mirror imports, which denotes the value at the point of origin of a shipment (sale price), should be increased by an equivalent of the cost of freight and insurance (cif) needed to bring a product to a hub-bazaar. This would raise the cost of imports by at least, say, five percent ad valorem or \$350 million. But as it was pointed out earlier, bazaar services do not come free—a trader has to recover the cost of purchase as well as that associated with running business. Structured interviews conducted with traders suggest that they get their return when the difference between the selling price and the cost of bringing a product to a stall amounts at least to 20 percent. Even assuming that all clients of hub-bazaars purchase imported products this would increase an overall weight of this trade to the total of around \$8.5 billion or around \$160 per head across four CA CAREC countries in 2006.

Considering that: (a) these are bottom line estimates not encompassing all goods traded in bazaars; (b) hub-bazaars supply other bazaars with traders incurring costs and profits; and (c) bazaars sell not

only products imported from outside CA but also imported from other CA economies and produced domestically; we may conclude that bazaar networks contribute well over 10 percent to value added generated region wide.

How does the estimate of the value of mirror imports intermediated by bazaars compare with an estimate derived from bazaars' surveys? An upfront answer to this question is that our estimates are conservative (not surprisingly as they are based on break-even sales) as total value of mirror imports of bazaar goods in 2006 exceeds by \$1.5 billion the value of total estimated sales of surveyed bazaars totaling around \$6 billion. Considering that the latter cover a wider range of products (both imported and "made in CA" goods) and include value added to imported products, i.e., cif (cost of insurance and freight) together with marketing costs and sales margins), the reverse should be the case, even though our surveys have not covered all major bazaars not only in three CA countries but also not a single one in Uzbekistan. Furthermore, CA economies experienced strong economic growth in 2007-08 and the US dollar had depreciated, excluding the last quarter of 2008, against three-CA currencies over this period, and some not reported mirror imports might have gone through other channels, i.e., directly to retail stores.

#### *D. Variation in bazaar imports into CA countries: bazaars as re-export platforms*

A very large variation in the share of 'bazaar' goods in total mirror imports points to **significant re-export activities intermediated through bazaars**. Mirror imports into CA countries reveal significant differences in propensity to import 'bazaar goods' across CA countries that cannot be fully explained by differences in respective productive structures, levels of GDP per capita or consumer tastes. The most eye-catching is the difference imports of these goods by Kyrgyzstan and Uzbekistan. The differences between the shares of bazaar goods in respective imports and between their levels on a per capita basis are simply staggering: 55 percent versus 8 percent, and US\$386 versus US\$12 (Table 7).

**Table 7: Unique features of 'bazaar' imports into Central Asia in 2006**

|  | <b>Kazakhstan</b> | <b>Kyrgyzstan</b> | <b>Tajikistan</b> | <b>Uzbekistan</b> |
|--|-------------------|-------------------|-------------------|-------------------|
| Share of 'bazaar goods' in total imports (in %)      | 20.1              | 54.7              | 18.3              | 7.8               |
| Share of a country in CA 'bazaar' imports (in %)     | 65.3              | 26.7              | 3.6               | 4.3               |
| Imports of 'bazaar' goods per capita (in US dollars) | 318.0             | 385.8             | 40.4              | 12.1              |
| Imports of 'bazaar' goods in % of GNI                | 6.3               | 65.4              | 8.8               | 1.7               |
| Share of a country in total CA imports (in %)        | 72.4              | 10.9              | 4.4               | 12.3              |
| Share of a country in total 'non-bazaar' CA imports  | 74.4              | 6.4               | 4.7               | 14.6              |
| <i>Memorandum:</i> Imports in % of GNI Atlas method  | 31.2              | 119.6             | 48.1              | 21.1              |

Source: Own calculations based on world reporting to the UN COMTRADE database and World Bank's World Development Indicators database.

Kyrgyzstan clearly 'over-imports,' as it cannot afford to consume all bazaar goods that it imports. The value of Kyrgyz total mirror imports of \$3.6 billion in 2006, of which bazaar products

accounted for 55 percent, was 20 percent higher than its GNI (Gross National Income, World Bank Atlas method) and expenditures on imports of bazaar goods amounted to 65 percent of GNI, which alone would make it unlikely that all imports could be consumed at home. Given similarities between Kyrgyzstan and Tajikistan in terms of population (5.2 million versus 6.7 million) and GNI (around US\$ 3 billion each), the difference of 23 percentage points in the share of bazaar imports and of \$345 in the value of these imports per capita cannot be explained by Tajiks' 'hostility' to consumption of imported consumer goods. Consider that in 2006, Tajik consumers spent an equivalent of 9 percent of their GNI on purchases of these imports, which is above the level in Kazakhstan and far above that in Uzbekistan. This would indicate that Tajikistan's bazaar imports are probably in line with the purchasing power of its population, whereas those of other CA countries, Kyrgyzstan's and Uzbekistan's in particular, are not.

While **Kyrgyz bazaars** serve clearly as major re-export platforms, an interesting question is the size of demand that is unmet in other CA economies by mirror imports. Since **bazaar imports of Tajikistan** appear to be in line with their purchasing power and sales to foreigners of its major bazaar Korvon are relatively small, for illustrative purpose, one can get an estimate of the scope for re-export activities assuming that other CA countries spend the same portion of their respective GNIs on bazaar goods imported from outside CA as Tajikistan does. Under this scenario, Kazakhstan would have to increase its imports by \$1.9 billion and Uzbekistan by \$1.4 billion. On the other hand, Kyrgyzstan would have to slash its imports by \$1.7 billion from \$2 billion to \$270 million. As compared to Tajik mirror bazaar imports per capita of \$40, imports per capita of other countries would appear to reflect differences in GNI and population. Their values under the 'Tajik-equivalency' scenario would be then as follows: Kazakhstan—\$445 rather than \$318; Kyrgyzstan—\$52 rather than \$386; and Uzbekistan—\$64 rather than \$12. They seem to reflect better the actual levels of domestic consumption of these products than implied in directions of exports reported by CA trading partners.

Although one may speculate as to the levels of real consumption across CA, the data clearly suggest that Kyrgyz bazaars are heavily engaged in re-export activities and their major destinations are Kazakh and Uzbek markets. Kyrgyz "surplus" under the above "Tajik-equivalency" scenario of \$1.7 billion would fall short of meeting the implied combined 'deficit' in bazaar goods of Kazakhstan and Uzbekistan of \$3.3 billion in 2006.

The results of bazaar surveys point in the same direction. They suggest that these estimates may not be necessarily far off the actual levels. Foreign sales of Kyrgyz bazaars in 2008 were estimated at around \$2.7 billion with around \$400 million as going directly to Uzbekistan through Karasuu bazaar.

An examination of disaggregated mirror imports into CA sheds some extra light on **the extent of re-export activities and their directions**. "Excessive" imports relative to those of other CA countries, as captured by the values of ISI (import specialization index) exceeding unity,<sup>22</sup> are abundantly present in Kyrgyzstan's import basket. As can be seen from data tabulated in Annex Table 3, Kyrgyzstan has the largest number of three-digit SITC products with ISI exceeding unity: out of 41 product items, 30 had ISI above unity. Kazakhstan with 14 items was a distant second,

<sup>22</sup> ISI is defined as the ratio of a share of a country in imports of a product "j" into Central Asia to its share in total imports of consumption goods into Central Asia. The rationale is simple: higher relative imports, i.e., the value of ISI above unity, may suggest four possibilities: (a) other countries produce a particular product and do not have resort to imports; (b) a country may have production capacities using a product for further processing; (c) consumers may be more prosperous or have a special taste for a product; and (d) a product is re-exported.

followed by Tajikistan with 12, and Uzbekistan nine three-digit SITC products above unity. Kyrgyzstan's imports per capita were also the largest in CA for 16 three-digit SITC product groups. Except for two products in Tajikistan's imports—tulle, lace, embroidery (SITC 656) and floor coverings (SITC 659)—and two in Uzbek imports—pearls and precious stones (SITC 667) and textile yarn (SITC 651), no other products in other CA imports posted the value of ISI exceeding three. As for Kyrgyz imports, there were 11 items with the value exceeding three: four product groups had ISI values exceeding five indicating huge share of Kyrgyzstan in total CA imports of these products.

While a large portion of products imported into Kyrgyzstan are re-exported through bazaars, it is rather unlikely that bazaar products—with their values of ISI exceeding unity—imported from outside CA into Uzbekistan would wind up in bazaars of other CA countries. Uzbekistan displays unusual imports patterns in products that either can be used for further processing (all SITC 65 items) or are unlikely candidates (e.g., TV receivers) for re-exports considering its protectionist foreign trade regime.<sup>23</sup> Kazakhstan's "import specialization" pattern can be explained by its sudden surge in GNI per capita thanks to oil exports: its GNI per head of \$5,060 in 2007 was nine times higher than that of Kyrgyzstan, eleven times higher than of Tajikistan, and seven times higher than in Uzbekistan. Rapid increase in standards of living explains the values of ISI indices above unity for such items as cement, manufactures of base metals, sanitary equipment, electronics, and works of arts.

According to mirror trade analysis, bazaars in Tajikistan would also seem to serve as platforms of re-exports, although for a relatively narrow group of products, e.g., glass products. Two products catch attention: floor coverings (659) and glassware (665). Using Kyrgyz imports per capita as a benchmark, glass products are probably a likelier candidate: Tajik imports per capita of these products were significantly higher than Kyrgyzstan's. The value of imports of floor coverings was \$22.5 million and \$21.7 million accounting for 17 percent and 21 percent of mirror imports of these products, respectively, into CA in 2006. Some portion of these imports might have been re-exports intermediated by the surveyed Korvon bazaar in Dushanbe. We may only speculate as to the size of these re-exports.

### *E. Concluding comment*

Imports through the bazaar-hub channel have been huge. In all, the value of these imports, as reported in mirror statistics, was above US\$7 billion in 2006. Products of textile and clothing together with footwear towered over other imported goods traded in bazaars accounting for 60 percent of all "bazaar products" imported into Central Asia. Most of these imports (92 percent of the total in 2006) went through Kazakhstan and Kyrgyzstan and most of them were unreported indicating a 'shuttle' mode of entry. Unreported shuttle imports into Kazakhstan and Kyrgyzstan alone, as we do not have data for other Central Asian countries, amounted to US\$4.8 billion in 2006 or almost two-thirds of all 'bazaar goods' mirror imports into CA. As for textile and clothing products and footwear, this proportion was significantly higher: around 80 percent of their total imports were not reported in national statistics.

Geographical pattern of 'bazaar goods' imports, however, differs widely from that displayed by 'non-bazaar' goods in one important respect: it is highly skewed towards Kyrgyzstan at the expense of Uzbekistan. The shares of Kyrgyzstan and Uzbekistan in non-bazaar imports into CA were 6.3 percent and 14.4 percent, respectively, whereas their shares in imports of 'bazaar goods' were 28

---

<sup>23</sup> For a comparative assessment of trade barriers in Central Asia, see [ADB: 2006].

percent and 4.5 percent. The aggregate share of Kazakhstan and Kyrgyzstan in total CA non-bazaar imports was 80 percent as compared with 92 percent for bazaar goods. Uzbekistan appears to be a likely destination of many ‘bazaar goods’ imported originally into other bordering CA economies, although not of all of them. Its import patterns reveal a strong ‘anti-bazaar goods’ bias especially insofar as final consumption goods are concerned. It also does not seem that domestic demand for ‘bazaar goods’ is fully met by domestic products and the cost of official imports is rather to be high. Given a significant income gap between Kazakhstan and other CA countries, Kazakhstan may be on the receiving end of imported products intermediated by bazaars in Kyrgyzstan and Tajikistan.

Kyrgyzstan has emerged as a major re-export platform or source of supply of bazaar goods to bazaars in other CA countries, albeit with a caveat: its import specialization indicates a large presence of imports that may be used domestically for further processing rather than final consumption. Kyrgyz traders appear to have had acquired competitive edge over their counterparts in other CA countries in their ability to procure goods from most cost-efficient sources and identify demand for them. Kyrgyz bazaars attract traders from all CA countries. According to our estimate, around \$1.6—2.0 billion worth of ‘bazaar goods’ imports brought into Kyrgyzstan in 2006 were either sold to foreign traders or domestic producers of clothing. By the same token, a very large portion of imported goods sold in bazaar across Central Asia ‘touched’ Kyrgyzstan. The geography of regular transportation links out of the bazaar-hub in Dordoi points to significant flows of goods to Kazakhstan and Tajikistan.<sup>24</sup> Some of imported products are consumed there or further ‘migrate’ to Uzbekistan or southern Russia through intermediation of bazaars.

Third, bazaars in Kazakhstan and Tajikistan sell imported products mainly to domestic consumers but, as surveys indicate; they also serve as a conduit for further re-exports often originating in Kyrgyzstan. According to the 2008 survey of bazaars, total foreign sales of surveyed Kazakh bazaars were around \$100 million and those of Tajik bazaars amounted to around \$5 million.

First, our estimates are limited only to CA imports originating outside Central Asia. By the same token, they do not include intra-CAA trade in locally produced goods that are sold at bazaars. Neither do they include local trade in locally produced goods. The inclusion of both would significantly raise their weight in CA economies.

Second, products covered by an empirical analysis had to meet quite demanding criteria that excluded many imported products observable at bazaars. These criteria included: consumption-use; ease of transport; shuttle-trade prone, i.e., positive mirror trade gaps (as revealed in Kazakhstan’s and Kyrgyzstan’s imports juxtaposed against world exports or mirror imports); and their observed presence in bazaars. In consequence, some products traded in bazaars across Central Asia were not covered further depressing bazaars’ participation in mediating foreign trade flows.

Despite these omissions, shuttle large-bazaar-destined (hub) imports accounted on average for more than one-fifth of total aggregate Central Asia’s mirror imports. While this share was at the level of the CA average for Kazakhstan and Tajikistan, this share stood wide apart for Kyrgyzstan at 55 percent and Uzbekistan at 8 percent. While this clearly suggests a larger welfare contribution of bazaars to the Kyrgyz economy, this should not imply irrelevance of bazaars in the Uzbek economy. Considering that the value of external imports of bazaar goods of \$7.4 billion in 2006 does not include value added by various service providers in supply/logistics distribution chain across Central Asia, their aggregate impact on economic welfare is not negligible. Assuming the total of 40 percent

---

<sup>24</sup> Surveys of traders in bazaars in Dushanbe, Tajikistan, and Almaty, Kazakhstan, identify Kyrgyzstan as origin of many products traded there.

ad valorem (including the cost of bringing goods to CA) in mark-ups, this would generate direct income of around \$3 billion in value added in 2006 or \$56 per head.

The above estimate also understates the role of bazaars in areas that are difficult to quantify; yet of significant importance. Since the shuttle large-bazaar-destined (hub) trade is mainly intra-CAREC trade; its main supplier is China with its products distributed through a network of bazaars throughout Central Asian former Soviet republics and southern parts of Russia, they contribute to the development of commercial ties among firms and individuals of CAREC countries often producing new business endeavors.

### 3. Welfare effects

#### *A. Bazaars and marketing opportunities: positive welfare effects*

Welfare-effects associated with bazaars derive also from **two positive externalities**: First, there are also gains associated with **skills development**: finding a supplier and then a buyer requires a vast array of various skills associated with predicting demand and marketing, obtaining intimate knowledge of conditions in a country of supply, etc. These skills are easily transferable to activities in modern networks of production and distribution.

Second, domestic producers have a chance to introduce their products to potential domestic and foreign customers without incurring costs of **marketing**. Bazaars' role in creating marketing opportunities for producers going beyond local and domestic markets is of particular importance as the cost of marketing abroad are particularly high. Potential buyers come to producers instead of them going abroad.

Surveys of bazaars conducted in Tajikistan have shown their role in **linking producers not only of agricultural products but also of construction materials**. They have demonstrated in detail how bazaars offer producers the direct links to buyers, both wholesalers and retailers, and how agricultural products (potatoes, cucumbers, eggs, fruits, cattle, meat products) move to wholesale bazaars and then are distributed to city bazaars, mostly retail. They have also shown how price gaps are cut down in the process. Similar pattern has been also observed in the case of construction materials.

The case of **garments industry** in Kyrgyzstan (Table 8), whose products are a standard feature of bazaars across Central Asia as well as in some parts of Russia, offers a particularly poignant example of unique opportunities offered by international hub bazaars. While the official data appear to significantly play down the real success story of clothing industries in Kyrgyzstan and their contribution to exports growth, both the results of surveys and mirror trade statistics identify garments as a great success story. Clothing 'Made in Kyrgyzstan' have been spotted in bazaars not only across Central Asia but also in some bazaars in Russia. Interviews with traders in Barakholka and Shanghai in Almaty and Astana, respectively, in Korvon in Dushanbe identified Kyrgyz garments originating mainly in Dordoï, Bishkek, among major clothing items traded there.

According to interviews with traders from Madina, Bishkek,, one of the major wholesale outlets in Kyrgyzstan for fabrics imported from China, their customers are local producers of garments. Madina is also a source of supplies for Karasuu, albeit with a caveat: these are mainly garments produced in facilities within the Madina bazaar, while supplies of Madina's prime product, fabrics, is limited due to high transportation costs.

Mirror foreign trade statistics (see Section 3 of this report) provide indirect evidence that indeed clothing have become an international specialization of Kyrgyzstan. The amounts of mirror imports relative to imports of other product traded in bazaars point to a surprisingly high propensity to trading these goods at the expense of other bazaar goods that can be only explained by the use of imported fabrics for production of garments that, in turn, are exported through intermediation of bazaars. The values of ISI for fabrics of man-made fibres (SITC 653) and knitted or crocheted fabrics (SITC 655) of 6.0 and 6.7, respectively, indicate the levels of specialization within CA well above those achieved for other products (Annex Table 3). Kyrgyzstan took 75 percent of all mirror imports of knitted fabrics into four-CA countries and 65 percent of fabrics of man-made fibres.

It seems rather implausible that Kyrgyzstan would re-export such massive amounts of imported fabrics and clothing accessories while serving as more modest platform for re-exports of garments. As can be seen from data tabulated in Table 5, Kyrgyzstan share in total mirror imports of four-CA CAREC economies of garments was well below its share in imports of ‘inputs’ to their production. Considering that transport costs for fabrics are higher than for garments and border charges on imports of fabrics tend to be significantly lower than for finished products, huge levels of Kyrgyz imports can be explained by the demand of local garments industries.

**Table 8: Mirror imports into Kyrgyzstan of textiles and clothing and their share in total mirror imports of Central Asia**

|   | 2003                                      | 2004 | 2005 | 2006 |
|---|---|------|------|------|
|   | Mirror imports (in million of US dollars) |      |      |      |
| Fabrics and clothing accessories (653,655, 847) | 100                                       | 182  | 271  | 452  |
| Outer garments and under garments (842-846)     | 56  | 196  | 207  | 679  |
|   | Share of Kyrgyzstan in total CA imports   |      |      |      |
| Fabrics and clothing accessories (653,655, 847) | 54%                                       | 70%  | 58%  | 67%  |
| Outer garments and under garments (842-846)     | 9%  | 17%  | 16%  | 31%  |

Source: Own calculations based on world reporting to the UN COMTRADE database.

While some fabrics and clothing accessories may be re-exported to other CA countries, most are used as an input for exported clothing. Since we do not have any reliable data, one can only speculate as to their amounts. But these could be significant. For illustrative purpose, assume that 50 percent of mirror imports of fabrics were used as inputs and those fabrics contribute 80 percent to the total cost of clothing. With total mirror imports of US\$288 million in 2006, one half, or US\$144, would generate the value of exports of 25 percent higher, that is, around US\$180 million. The value of these exports officially reported was US\$48 million in 2006 or 27 percent of the value of bazaar-intermediated exports. This appears to be a very conservative estimate of value-added created by the clothing production circuit in Kyrgyzstan.

### ***B. Why bazaars have become such an important logistic channel in Central Asia***

Bazaars of Central Asia are unique among many other economies at a similar level of economic development in terms of their dominance over other logistics channels. According to data compiled

by the Kyrgyz National Statistical Committee, the retail trade turnover in bazaars was four times larger than that of retail stores in 2005. Considering a rapid growth in trade turnover of bazaars, one may suspect that this gap might have increased. Although there appears to be no readily available statistical information about their share in total retail trade of other countries, there is strong ‘pedestrian’ evidence indicating that a very large proportion of people, especially from lower income groups, do their shopping in bazaars. Both surveys and estimates derived from foreign trade statistics (see Section 3) corroborate this impression: in both Kazakhstan and Tajikistan annual trade turnovers of surveyed bazaars run in billions and hundreds of millions of dollars. Our estimates based on trade statistics and supported by findings from surveys of bazaars conducted in 2008 indicate that imports mediated through bazaars account for at least one fifth of total world exports to four CA countries—Kyrgyzstan, Kazakhstan, Tajikistan, and Uzbekistan. While their edge over standard logistic channel in other CA economies may not be as pronounced as in Kyrgyzstan, it seems to be considerable for a variety of reasons.

Bazaars anywhere outside of medium to highly developed countries have a **strong comparative advantage** vis-à-vis other channels of trade. As the experience of other countries, this edge gradually disappears at a higher level of economic development when the quality of business climate improves and resources become available to establish shopping malls and modern warehousing capacities. Consumers then will have less time to spend on shopping and will be less sensitive to price differentials in favor of bazaars. Although some bazaars are clearly moving towards shopping malls, as a picture of one of Dordoy’s vast halls reproduced on the cover of this report illustrates, bazaars still remain a very attractive alternative to shopping malls as well as retail small shops.

**Large bazaars combining functions of a shopping mall and hub warehouses** have evolved from agricultural bazaars revived during the last decades of a collapsing Soviet central planning. With the transition towards market economies, some of them have grown drastically expanding in size and in basket of goods offered for sale. Bazaars are a much cheaper option in terms of construction costs than a shopping mall offering similar opportunity of bringing together wide groups of buyers and sellers with access to nearby warehouses and offering services supporting commercial exchanges. Survey fully confirms these observations: Large hub bazaars have their transportation network; they have internet outlets and exchange bureaus; and they are surrounded by warehouses run independently of traders with their owners assuming risks of storing the right mix of products. Such bazaars as Barakhlovka, Dordoi or Karasuu have warehouses in nearby areas and many traders have ‘two-storey’ containers that use the upper part for storing needed supplies.

Bazaars have **lower fixed cost of doing business** than retail stores. Therefore, prices of the same goods purchased at retail are considerably higher than those available at bazaars. For instance, interviews in bazaars in Dushanbe indicate that price gaps between ‘retail’ bazaars and local retail shops are around 15-20 percent for non-food goods and for agricultural produce they range between 15 and 50 percent.

An important advantage of stall owners and traders in bazaars over shop owners elsewhere is that the former are better shielded from **predatory impulses of state administration**. The former are alone whereas the latter have the benefit of being parts of a group. Thanks to concentration of traders and intermediation of bazaar administration, the relationship between private businesses and state administration is more stable and predictable. Bazaar administration has a strong stake in assuring favorable business conditions at bazaars. It is also better positioned to deal with local administration: it has resources and yields political influence. Concentration of revenue flowing through bazaar administration also makes local administration more sensitive to assist the bazaar administration in making a bazaar competitive as they have a stake in revenue-generation. This

centralization of dealings does not completely eliminate informal payments but at least it is a better alternative to decentralized bribe taking. A shop owner is alone in dealing with state authorities whereas an owner of a container is part of a group that together with the bazaar administration having a stake in bazaar expansion has a much stronger bargaining power and resources to deal with predatory impulses of the state administration. In other words, bazaar traders are better shielded from caprices of local officials than their equivalents in retail.

**Local administration in surveyed bazaars** appears to impose lesser ‘hassle burden’ of doing business than in other sectors of the economy. Except for traders in Tajikistan, traders in other surveyed countries did not complain about unpredictability or unfairness of inspections and multitude of various charges. Whereas we do have hard data, business climate in Tajik bazaar is reportedly better than for most retail shop owners.

**Kyrgyz regime is by far the most bazaar-friendly amongst surveyed countries.** The total tax burden of around 16 percent of estimated income from sales is the lowest in Kyrgyzstan whereas the highest of almost 80 percent in Tajikistan as compared to around 60 percent in Kazakhstan: the above does not include fixed charges.

### ***C. Conclusions***

Surveys of bazaars provide strong empirical evidence to the following observations:

- Bazaars in Central Asia are one of the most important components of national production and distribution systems with not only local but also region-wide international reach.
- The coverage in terms of products traded is huge and not only limited to consumer products or imports, although the latter account for the bulk of traded goods. Contrary to popular perception, imported products include also those produced in other CA countries.
- Two bazaars in Kyrgyzstan—Dordoi and Karasuu—account for 96 percent of “inter-bazaar” trade, estimated at around \$2.8 billion in 2008, linking together networks in individual CA countries, regions and cities. But smaller bazaars are also linked across borders;
- Despite tentative nature of estimates of annual sales turnover of surveyed bazaars, they, nonetheless, indicate huge amounts of trade intermediated by bazaars. Two largest bazaars in CA—Dordoi and Barakhlovka—are estimated have sales of around or above \$2 billion, while other five of surveyed bazaars have estimated sales above \$100 million.
- Bazaars create jobs on a very significant scale. The employment effects include not only people directly employed there but also providers of services as well as local suppliers for whom the bazaar offers often the only venue for marketing their products.
- Although bazaars vary widely in terms of governance, services provided and infrastructure, they increasingly operate on principles underlying modern market systems, i.e., anonymous transactions and trust built upon repetitive interaction.

### Conclusions and policy implications

The above analysis provides empirical support to the conclusion that **bazaars are a vital, if not the most important, component of supply and distribution chains** in surveyed CA countries with not only local or nation-wide but also region-wide international reach. Despite tentative nature of estimates of annual sales turnover of surveyed bazaars, they, nonetheless, indicate huge amounts of trade intermediated by bazaars. Two largest bazaars in CA—Dordoi and Barakhlovka—are estimated have sales of around or above US\$2 billion, while other five of surveyed bazaars have estimated sales above US\$100 million a year. Two bazaars in Kyrgyzstan—Dordoi and Karasuu—account for 96 percent of “inter-bazaar” trade, estimated at around US\$2.8 billion in 2008, linking together networks in individual CA countries, regions and cities. But smaller bazaars are also linked across borders. For the reasons discussed earlier, these are very cautious, conservative estimates. The same message comes from preliminary estimates of unreported imports bazaar imports into Kazakhstan and Kyrgyzstan—these amounted to almost \$7 billion in 2007—suggesting that the actual value of trade intermediated through bazaar channel might be higher.

**Bazaars generate multiple positive externalities** including, among others, the following: domestic traders gain marketing experiences in intermediating between seller and buyer; domestic producers have an easy access to foreign customers; and bazaars create demand for a whole array of supporting services and thus generate employment and reduce poverty.

**Bazaars perform critical functions in both domestic and international dimensions**, although the two—especially in lights of close unfettered links within the triangle: Kazakhstan, Kyrgyzstan, and Tajikistan—have become more difficult to split. The bulk of domestic wholesale and retail trade passes through the bazaar networks. They also play a vital role in foreign trade. Although bazaars vary widely in terms of governance, services provided and infrastructure, they increasingly operate on principles underlying modern market systems, i.e., anonymous transactions and trust built upon repetitive interaction.

**Bazaars offer unique opportunities for producers not only to market their products locally but also internationally.** These should not be underrated, as finding a consumer is tough locally and much more demanding internationally. It takes a lot of time and resources to market a product abroad. Many bazaars, not unlike participation in international fairs, offer export opportunities without the necessity of incurring extra marketing costs. Kyrgyz producers of apparel have seized this opportunity: one suspects they are not the only ones.

**Bazaars not only provide producers with marketing opportunities but they are also source of cheap products that would otherwise be unaffordable to poor.** The price gaps between goods sold at city stores and bazaars are huge: without access to bazaars many people would be denied their consumption.

**Bazaars create jobs on a very significant scale.** The employment effects include not only people directly employed there but also providers of services as well as local suppliers for whom the bazaar offers often the only venue for marketing their products. Direct employment in surveyed international hub bazaars contributes on average six percent to total employment in respective regions of their location.

**The coverage in terms of products traded is huge and not only limited to consumer products or imports, although the latter account for the bulk of traded goods.** Bazaars supply not only consumer goods at prices significantly lower than in other outlets but are also an important source

of construction materials and other industrial inputs used for further processing. Contrary to popular perception, imported products include also those produced in other CA countries.

While the data limitations do not allow for a precise estimate of the value of intra-CA CAREC trade, the results of surveys and foreign trade analysis point to **the importance of bazaars as a transmission channel facilitating this trade**. Large hub-bazaars offer **marketing opportunities** to domestic producers that would otherwise be either not available or very expensive to tap: selling abroad usually requires investment of substantial resources, whereas foreign traders come to bazaars and domestic producers have easy access to them at little cost to domestic producers. Bazaars intermediate significant commercial exchanges in both locally produced goods as well as imports. Surveys point to a large number of products produced locally ranging from agricultural produce to various industrial and construction materials that are traded across bazaars. Thanks to bazaars, garments industry has become an important export sector of the Kyrgyz economy.

**The policy implications are straightforward.** The first set of them boils down to the dictum: *Don't disparage bazaars!* Large presence of imports in bazaar trading should not be regarded as a curse but rather as an indication of growing dependence of CA economies on the world economy. Products traded in bazaar reflect domestic production capabilities, which are wanting in terms of production of consumer goods and overall level of industrialization. It is not surprising that—excluding farm bazaars—imports from outside four-CA CAREC account for more than half of surveyed bazaars' sales. Bazaars assure relatively easy access to them. Instead of trying to curb the expansion of bazaars, as allegedly inferior form of market organization that has no place in modern market economy, the governments should facilitate their functioning through reducing regulatory and tax burden levied on traders. This burden is by far the lowest in Kyrgyzstan, whereas taxes and other regulatory requirements appear to be particularly demanding and creating opportunities for corruption in Tajikistan and, to lesser extent, in Kazakhstan.

The second set of policy implications is around business climate and cost of doing business in other sectors of the economy. Its point of departure should be an examination of factors hindering the supply response of local businesses to opportunities offered by bazaars. For this purpose, one should carefully examine how Kyrgyz producers of clothing have been able to tap these opportunities despite, or perhaps thanks to, ferocious competition from China. Can these conditions be reproduced elsewhere?

Last but not least, CAREC governments should pay attention to fiscal measures including charges on foreign trade operations implemented by their neighbors. The borders are leaky and bazaar traders are able to exploit skillfully any price gaps created by government policies. Uzbekistan's heavy hand in regulating the economy and foreign trade results in smuggling and higher prices for users of imports. Kazakhstan's border charges exceeding those levied by Kyrgyz authorities simply lead to redirection of Chinese imports: instead of going directly to Kazakhstan they go to Kyrgyzstan where they are reloaded to continue their journey to destinations in Kazakhstan. Hence, government revenue could be increased through lowering charges and tariffs and thus expanding tax base.

## References

- [ADB 2006] *Central Asia: Increasing Gains from Trade through Regional Cooperation in Trade Policy, Transport, and Customs Transit*, Asian Development Bank, 2006.
- Kaminski, Bartłomiej. 2008. *How Kyrgyzstan has seized Opportunities offered by Central Asia's Economic Recovery*, background paper for Country Economic Memorandum: Kyrgyz Republic, World Bank, available at [http://siteresources.worldbank.org/INTKYRGYZ/Resources/2\\_Bart\\_Eng.pdf](http://siteresources.worldbank.org/INTKYRGYZ/Resources/2_Bart_Eng.pdf)
- McMillan, John. 2002. *Reinventing the Bazaar. A Natural History of Markets*. WW Norton, New York.
- Raballand, G. and Kaminski, B. 2008. 'La Déferlante Economique Chinoise en Asie centrale', *Monde Chinois*, 11.
- Rozanski, Jerzy and Alexander Yeats (1994). 'On the (in) accuracy of economic observations: An assessment of trends in the reliability of international trade statistics', *Journal of Development Economics*, 44(1), pp.103-130.
- [WB 2008] *Bazaars and Trade Integration of CAREC Countries in Mirror Trade Statistics*, mimeo, The World Bank, Washington D.C. August.
- [WB 2007] *Cross-Border Trade within the Central Asia Regional Economic Cooperation*, Interim Report, World Bank, Washington D.C., August.
- Zarubin, G. and B. Kaminski. 1995. "The Limits of Mirror Statistics of Foreign Trade" in M. Belkindas and O. Ivanova, eds., *Foreign Trade Statistics in the USSR and Successor States, Studies of Economies in Transition 18*, The World Bank, Washington DC.

### Annex 1: Bazaar intermediated trade: methodological issues

In order to assess the role of bazaars in local economies and intermediating foreign trade, we use independently two methods: one based on foreign trade statistics; and another on semi-structured interviews. Foreign trade statistics (hereafter referred to as mirror statistics), that is, exports recorded by CA's trading partners, provide the point of departure for estimating 'bazaar' imports. Surveys, conducted in Kyrgyzstan, Kazakhstan and Tajikistan in summer of 2008, have been designed not only to collect information on foreign trade flows but also to provide an initial assessment of the role bazaars in their respective local economies. Surveys, given their limited scope because of time and budget constraints, provide information on sales turnover and major products traded, including their origins that is used as benchmarks for mirror foreign trade analysis. They also shed some light on internal flows of imported products through network of bazaar.

#### A. Estimates of 'bazaar' foreign trade using mirror trade statistics

Foreign trade statistics fall well short of capturing values and composition of goods flowing through bazaars. They are also incomplete, as some shipments across border are not recorded, for a variety of often perfectly legal reasons, by border authorities of an importing country and customs authorities of an exporting country. Central Asian countries do not levy customs duties on their respective imports and some of them have customs regulations friendly towards shuttle trading thus further reducing incentives to record these flows. In consequence, there is some portion of foreign trade flows through 'bazaar-hub' channel that goes unreported in statistics of an importing country but they may be reported in exports statistics in a country of their origin.

Available foreign trade statistics make possible to assess the scope of underreporting through comparing exports (mirror imports) into a country with imports of these products as reported by an importing country. The value of mirror imports exceeding the value of official imports, hereafter referred to as *positive mirror trade gap*, provides the first indication of the size of unreported imports (see Box 1).

As noted earlier, Kazakhstan and Kyrgyzstan are the only countries among CAREC CA economies publishing foreign trade data at the level of detail that would make possible a thorough analysis of trade flows. Since, however, other major trading partners of CA, including China, report to the UN COMTRADE database, this provides one with a base to examine trade flows through hub-bazaar transmission channel. It is not possible, however, to capture intra-CAREC CA trade flows going through the bazaar channel. Even if some of them are reported in foreign trade statistics of Kazakhstan and Kyrgyzstan, it would be impossible to distinguish between standard and bazaar channels and cast them against external data. The same caveat may apply to imports from outside CA: namely, there are many products, e.g., construction materials, cement, and furniture that may go either through bazaar or standard channel.

The rationale for reliance on mirror trade statistics is straightforward: exports statistics of trading partners provide the primary source of information about imports that have gone unreported in national official imports statistics. The *positive trade gaps* equal the difference between the value of exports into a country (mirror imports) and imports reported by this country for SITC product categories. Under ideal conditions, the trade gaps should be negative, simply because imports include cost of freight and insurance (cif), whereas exports do not as they are registered as free on board (fob). It follows that mirror imports would equal official imports only if the cost of transport and insurance were zero. Since they are not, unreported imports are larger than the positive trade gap by an estimated cif.

**Box 1: Why foreign trade statistics do not record all trade and, if they do, why are there discrepancies? What do they say about the quality of trade statistics?**

The ratio (or the difference between) of mirror imports to imports, defined as a mirror trade gap, provides information about the quality of foreign trade statistics in a country insofar as data on mirror imports come from countries with reliable and efficient customs statistics. In trade among OECD countries, there are two features of the relationship between mirror and official imports' values: first, the value of official imports is significantly higher than the value of reported exports (mirror imports) to this country, i.e., the mirror trade gap is negative; and second, the size of the discrepancy between the value official imports and respective mirror imports is determined by the cost of freight and insurance, which is included in official imports (cif base) and not taken into account in exports or mirror imports that are free on board (fob). The value of mirror imports would roughly be equal to each other only if the cost of transportation was zero. In other words, ideally, the ratio should be below unity and mirror trade gap should be negative.

Even if all flows of goods crossing the border were recorded by border authorities of a country of origin (exports) and a country of destination (imports), the corresponding values will diverge. Leaving aside a standard convention of expressing the value of exports as fob (free on board) and that of imports including the cost of insurance and freight (cif) and assuming that both sides duly record trade flows, the discrepancies may stem from:

- a. the differences in exchange rates and the dates of converting the values into US dollars (or euros);
- b. border authorities of a destination country changing the classification of products used by an exporter;
- c. border authorities of a destination country changing the value of a shipment as specified in an invoice.

Whatever the reasons for discrepancies, the bottom line is that if two countries adhere to the convention of imputing cif to imports and recording the fob values of exports, the value of imports should exceed the value of exports. If this is not the case, this suggests that importing country has not captured in its statistics all entering flows of goods.

Border authorities (customs) of both importing and exporting countries do not capture all movements of goods across border for both legal and illegal reasons. The latter involve both smuggling and border authorities letting shipments go through border crossing points unrecorded in exchange for bribes, whereas the former usually relate to customs regulations allowing individuals for carrying into a country pre-determined quantities of products without customs duties.

Exports are also often not recorded by authorities of countries of their origins simply because quantities involved may be too small. Since they rarely entail any border charges, the customs do not have any incentive to challenge the classification or valuation of a shipment for exports.

**Sources:** Rozanski and Yates (1994) and Zarubin and Kaminski (1995).

Although trade gaps can be calculated only for two of four CAREC CA economies, as among CA countries only Kyrgyzstan and Kazakhstan provide detailed statistics to the United Nations, mirror imports by other CA countries relative to their respective populations and GDP per capita offer a good point of departure for assessing the scope of 'bazaar' imports and re-exports of Kyrgyzstan and Kazakhstan. The procedure developed to estimate mirror 'bazaar' imports and re-exports consists of three steps. The objective of the first step is to identify bazaar products. We use two criteria:

- First, we identify consumer goods on the basis of standard classification of products by ‘end-use’ used in trade analyses, referred to as “other consumer goods.”<sup>25</sup> Since this group contains products that are either too difficult to transport for shuttle traders (e.g., cement, chemical products) or are rarely encountered at hub-bazaars, we amend this classification in two ways: by excluding all chemical products (SITC 5) and including electronic products such as television receivers, sound recorders, radio-receivers, DVD equipment. There are 41 three-digit SITC product groups meeting this criterion (see Annex Table 3).
- Second, trade gaps (discrepancies between Kazakh and Kyrgyz foreign trade statistics, on the one hand, and the same statistics data reported by their trading partners, on the other hand) for three-digit SITC items should be positive. Because of friendly customs procedures, these products tend to be underreported in importers’ statistics while reported as exports in countries of origin, albeit with a caveat; as mentioned earlier, small shipments may fail to show up in both statistics.

Products meeting these two criteria are referred to as ‘bazaar’ goods, as they are likely to be intermediated by bazaars.

The objective of the second step is to address the question whether ‘bazaar’ products originating outside CA are consumed in countries to which they are officially exported or re-exported from one to another CA country with bazaars serving as re-exports platforms. Products that are likely candidates for re-exports can be identified as meeting one condition: their mirror imports into a CA country as compared to those into other Central Asian economies reveal unusual proclivity to consume that cannot be explained by their production activities or special distinct tastes. Specialization in imports can be captured by a modified index of revealed comparative advantage (RCA). We alter the RCA index in two respects: first, it is applied to imports rather than exports; and, second, as it seeks to capture regional rather than world specialization, it is applied to Central Asia’s mirror imports of ‘bazaar’ goods. Because of the latter, it is reminiscent of export specialization index. In this analysis, the import specialization index (ISI) is the ratio of the share of a given product in Kyrgyzstan’s total imports to the share of that same product in the Central Asia’s total imports. If the value of ISI for a product is above unity, than a country has a revealed “import” comparative advantage, or specializes in imports of this particular product.

The logic behind applying an export specialization version of RCA to imports can be summarized as follows: relatively large imports indicate either the use of a product for further processing pointing a country’s participation in the division of labor based on product fragmentation but only insofar as these are production inputs. Otherwise, that is in the case of final consumption products, firms and individuals from a country likely engage in re-export activities. This leads to a further cut in the scope of products relevant for this analysis.

The last step is to address the question of the direction of re-exports. In the absence of detailed national trade statistics for Tajikistan and Uzbekistan, mirror trade statistics can be of help only in one respect. The levels of mirror imports of ‘bazaar’ goods relative to population and the GDP allow identifying countries with consumption of these products below the average for Central Asia. These countries are the likely destinations of re-exports.

---

<sup>25</sup> “Other Consumer Goods,” as defined in a standard end-use taxonomy used in trade analyses, include SITC: 5+6+8+9-68.

### ***B. Bazaar Surveys: sample and method***

Surveys, conducted in summer of 2008, were carried out in bazaars in three Central Asian CAREC member states—Kazakhstan, Kyrgyzstan, and Tajikistan.<sup>26</sup> Their objective was to gain better understanding of functions performed in those economies, their mode of governance and assess broadly the scope of trade intermediated by bazaars. They were not designed with a sole purpose of generating estimates of re-export activities intermediated by bazaars, although they offer some insights into how to achieve this goal.

The following two criteria were used to identify bazaars to be covered by surveys. First, the sample should include the largest bazaars in each CA country. These bazaars act as hubs feeding not only local population with products but also other bazaars located often across borders.<sup>27</sup> Second, the sample should include at least one bazaar representing major category of bazaars. Since bazaars form a hierarchical hub-spokes concentric networks in terms of supply links and a clientele served by them that is reminiscent of a ‘hub-spokes’ pattern with some hubs reaching throughout Central Asia and local stationary bazaars extending to mini-local communities, we have distinguished three categories of bazaars: (i) big international hub-type bazaars; (ii) country-wide hub bazaars; and (iii) local stationary bazaars including those in the cities. We have excluded cross-border bazaars, simply because they were examined in our earlier study (WB 2007).

In all, fourteen bazaars were surveyed: six in Kazakhstan; three in Kyrgyzstan; and five in Tajikistan. International bazaars happen to be also the largest bazaars in three respective countries. The reason that we have surveyed two bazaars in Kyrgyzstan is that both of them are large and serve as re-exports platform to bazaars in neighboring CA countries and southern parts of Russian Federation. Other large bazaars in Kazakhstan and Tajikistan do not have an international reach; they have a countrywide range. Table 1 provides the list of bazaars surveyed according to the above categories.

**Table 9: Bazaars surveyed in Kazakhstan, Kyrgyzstan and Tajikistan according to their type**

|                           |                                       |  |  |                                       |  |
|---------------------------|---------------------------------------|--|--|---------------------------------------|--|
| <b>international</b>      | Barakholka<br>(Almaty,<br>Kazakhstan) | Dordoi<br>(Bishkek,<br>Kyrgyzstan<br>) | Karasuu<br>(Osh,<br>Kyrgyzsta<br>n)          | Korvon<br>(Dushanbe,<br>Tajikistan)   |  |
| <b>Countrywide/region</b> | Altyn Orda<br>(Almaty,<br>Kazakhstan) | Istravshan<br>(Uratube,<br>Tajikistan) | Madina<br>(Bishkek,<br>Kyrgyzsta<br>n)       | Shanghai<br>(Astana,<br>Kazakhstan)   | Sultoni-<br>Kabir<br>(Dushanbe,<br>Tajikistan) |
| <b>City/local</b>         | Artem<br>(Astana,<br>Kazakhstan)      | Karkara<br>(Almaty,<br>Kazakhsta<br>n) | Panjshanb<br>e_A<br>(Khujand,<br>Tajikistan) | Sahovat_A<br>(Dushanbe<br>Tajikistan) | Sary-<br>Arka_A<br>(Almaty,<br>Kazakhstan)     |

Note: \_A stands for bazaar trading almost exclusively in agricultural products

<sup>26</sup> The government of Uzbekistan, which is a CAREC member, has declined to participate in this project. Hence, no surveys have been conducted there.

<sup>27</sup> They form a hierarchical hub-spokes network in terms of supply links and a clientele served by them that is reminiscent of a ‘hub-spokes’ pattern with some hubs reaching throughout Central Asia and ad hoc stall type bazaars extending to mini-local communities.

In order to get a better hold over functioning of bazaars, these specializing in agricultural products have also been included in the sample.

In each bazaar, representatives of bazaar administration (if there was one) and traders were interviewed using an interactive semi-structured format. Since the sample of interviewed traders was small because of time and funding limits, an effort was made to include representatives of different groups of traders depending upon type of a sales outlet (stand, container, and shop) and specialization (shoes, clothing, etc.). On top of that, the teams have collected general information about a surveyed bazaar including among others the number of sales outlets and people working in them, warehousing capacities, logistics (transportation and bus terminal), kind of auxiliary services available at a bazaar, and forms of ownership and governance.

Major information sought included those allowing to generate rough estimates of sales, sources of supply (local products versus imports including their origins), retail versus wholesale sales, and destination of sales, i.e., local versus foreign.

**Table 10: Sales and cost estimates per sales outlet and total at the Barakholka bazaar (monthly in US dollars)**

|  | shop   | container | stand | Total or weighted average |
|--|--------|-----------|-------|---------------------------|
| Fixed cost (total)   | 4,629  | 2,200     | 617   | 2,263                     |
| Rent/lease of a sales outlet   | 1,200  | 450       | 200   | 478                       |
| Market fee and other fixed charges including taxes                                       | 679    | 350       | 117   | 358                       |
| Other informal payments  | 2,000  | 1,000     | 100   | 1,017                     |
| Wage bill (salary multiplied by employment)  | 750    | 400       | 200   | 410                       |
| monthly salary   | 300    | 200       | 200   |                           |
| number of employed   | 3      | 2         | 1     |                           |
| Sales (20% above minimum)  | 28,724 | 13,260    | 3,401 | 45,385                    |
| Minimum value of sales to stay in business   | 23,937 | 11,050    | 2,834 | 11,391                    |
| Total variable cost at a break-even point  | 19,308 | 8,850     | 2,217 | 9,128                     |
| Implied sales margin (sales price above purchase price in %)                             | 24%    | 25%       | 28%   | 25%                       |
| <b>Memorandum: (total monthly)</b>   |        |           |       |                           |
| Number of sales outlets  | 774    | 14,103    | 573   | 15,450                    |
| Total employment   | 1,935  | 28,206    | 573   | 30,714                    |
| Total value of sales intermediated through bazaars based on minimum sales (in US\$ '000) | 18,527 | 155,838   | 1,624 | 175,989                   |
| Total value of sales intermediated through bazaars based on actual sales (in US\$ '000)  | 22,233 | 187,006   | 1,949 | 211,187                   |
| Total value of sales at net profit rate of 5 percent                                     | 21,149 | 178,072   | 1,862 | 201,083                   |
| Fixed cost in % of breakeven sales   | 19.3%  | 19.9%     | 21.8% | 19.9%                     |

|                                   |       |        |       |        |
|-----------------------------------|-------|--------|-------|--------|
| Actual sales over breakeven sales | 0.20  | 0.20   | 0.20  | 2.98   |
| Profit rate for actual sales      | 13.4% | 13.3%  | 13.0% | 13.4%  |
| Total fixed cost (in '000)        | 3,583 | 31,027 | 354   | 34,963 |
| of which labor                    | 581   | 5,641  | 115   | 6,336  |
| Bazaar fees                       | 2,074 | 19,039 | 124   | 6,336  |
| of which informal payments        | 1,548 | 14,103 | 57    | 15,708 |
| Lease or lease equivalent         | 929   | 6,346  | 115   | 7,390  |

Note: Weighted average calculated using the shares of the type of sales outlets in totals whenever appropriate.

Given difficulties involved in obtaining directly information about revenues from sales, the emphasis in interviews was on obtaining relatively easy to check data indispensable to estimate total fixed cost of running each type of a sales outlet including fixed informal payments, if such payments occur, bazaar fees, taxes, electricity, etc. The idea underlying this approach was to reproduce a breakeven point of sales, i.e., the level of sales that a trader regards as a minimum to cover fixed and variable costs. For an explanation of the method applied to generate estimates of sales turnover, the above contains calculations based on obtained information for the Barakholka bazaar: identical calculations were done for all other surveyed bazaars.

In order to identify the direction of goods sold in international and countrywide bazaars, in addition to questioning traders, we have sought to obtain schedules of buses going in and out of terminals located near at bazaars. Together with information about size of vehicles carrying passenger and the extent of wholesale, this has provided some estimates about flows of goods in and out of bazaars.

### ***C. Concluding observation***

While the combination of mirror foreign trade analysis and bazaar surveys provides an important mutual quality check, the accuracy of both estimates would always leave much to be desired. First, estimates of re-exports do not have a high degree of precision. As a study examining trade statistics across the world has convincingly shown (Rozanski and Yeats 1994), foreign trade statistics are not reliable in general, no matter whether they come from highly developed or developing countries with weak statistical capacities. Yet, the knowledge of approximate size of economic activity associated with imports and re-exports is critical to making informed and sound economic policy decisions. Considering significant employment and poverty reducing effects of bazaar trading in CA, this is an important point.

Second, the greatest challenge of estimating the value of flows of goods intermediated by bazaars through surveys is not only tapping the knowledge of traders but also figuring out which portions of a sample can be grouped together. But even the former poses significant problems, as traders, fearful of tax authorities, may deliberately distort and conceal information. Furthermore, some important parts of their knowledge cannot be easily articulated: they know a deal when they see one, but they cannot verbalize their thinking.

Three pieces of information are critical to the accuracy of estimates derived from surveying traders: total fixed cost; the level of breakeven sales;<sup>28</sup> and the value of product sold for consumption outside of a country. The total fixed cost is relatively easy to trace except for its informal part. An important

<sup>28</sup> The level of breakeven sales is not only the amount needed to pay workers and bazaar fees. This is also the level that allows owners of sales outlets to stay in business, i.e., anything below would force them to draw on savings in order to keep their business from going bankrupt.

potential downside to avoid is to make sure to include the value of a lease even if a trader owns a sales outlet. The objective is to include all costs that are independent of the level of sales.

An estimate of the value of product sold for consumption outside of a country can be derived from answers of traders split into 'relatively homogenous' samples. However, one point should be borne in mind: if the survey covers only one or two international hub-type, then sales intermediated by other bazaars, especially cross-border trading bazaars, or conducted by residents going abroad will not be captured.

## Annex II: Methodology of estimates of sales turnover at bazaars

There are three critical issues determining the quality of estimates of sales intermediated through bazaars: (a) identification of all components constituting the total average fixed cost of a sales outlet; (b) obtaining an estimate of minimum sales covering basic expenditures; and (c) dividing the sample of surveyed traders into homogenous sub-samples in terms of size and product specialization.

One set of estimates of the total value of sales at a bazaar is based on answers to a question about the minimum value of revenue meeting all expenditures, i.e., assuring survival of an enterprise without generating profits. Total minimum sales can be obtained by multiplying the number of sales outlets by respective estimates of a minimum income. This set of estimates may be regarded as a lower bound of total bazaar sales.

The minimum or breakeven value of sales indispensable to stay in business means an income generated to meet the fixed cost of running a stall, i.e., independent of the value of sales, and variable costs. The major components of total fixed cost include all payments made to the bazaar administration and other state fiscal authorities, wages paid to vendors or alternatively, if an outlet is run by an owner, wage earned by a vendor working in a similar business, and a lease or its equivalent, if an outlet is not rented or leased, and informal payments. The survey's questionnaire sought to incorporate all questions needed to extract information on cost components independent of the value of sales.

The formula to calculate the breakeven value of sales ( $S_{min}$ ) assumes that total revenue is equal to total cost including both total variable ( $VC_b$ ) and fixed costs (FC) or  $S_{min} = FC + VC_b$ . It follows that the total variable cost for sales equals the difference between the breakeven value of sales and total fixed cost or  $VC_b = S_{min} - FC$ .<sup>29</sup> We can calculate the unit variable cost by dividing both sides of the above identity by minimum sales, which equals  $1 - FC/S_{min}$ . The unit variable cost captures the contribution margin of fixed cost to profit, hereafter denoted as 'cm,' determined by the difference between revenue (the difference between revenue from sales and cost of purchase of these products) and fixed costs.

Knowing minimum or breakeven sales and total fixed cost, we can also determine the level of a sales margin, i.e., the difference between the price of purchase and sold goods. Assuming that the cost of purchase including delivery to a sales outlet is the only variable cost incurred by a trader, the sales margin equals the ratio of total variable cost to minimum or breakeven sales. Since we know total fixed costs and minimum sales, the value of purchased goods, i.e., total variable costs can be easily calculated: they are equal to the difference between minimum sales and total fixed cost. The ratio of total variable costs to minimum sales is a sales margin.<sup>30</sup>

The breakeven revenue from sales indicates that a sales outlet will not make any profit until it generates revenue covering total fixed costs. The increase in sales over this level will generate marginal profit equal to the contribution margin of fixed cost, i.e.,  $1 - FC/S_{min}$ .

<sup>29</sup> While there are clearly some variable costs associated with transportation and storing of purchased products, the main variable cost of running a commercial operation is price paid for traded products.

<sup>30</sup> One may indirectly test the validity of this result by tracing price gaps between wholesale and retail.

Hence, in order to estimate an actual value of sales one would have to know an average rate of profit, i.e., the ratio of revenue to total fixed and variable cost. Profit rate can be calculated from the following formula:

$$p = (r*cm)/(1 + r)$$

.....  
1

where: p—profit rate; r—difference in percent between actual sales and the breakeven value of sales); cm—contribution margin of total fixed cost equal to equals  $1-FC/S_{min}$  (FC—fixed cost) and  $S_{min}$ —minimum value of sales.

But the problem is that we have one equation with two unknowns. The solution is to calculate rates of profits for various values of the increase in sales over minimum sales.

One may reverse the procedure treating profit as an independent variable and calculate corresponding levels of sales using the equation 2 above derived by solving equation 1 for p, which yields the following

$$r = -p/(p - cm)$$

.....  
..... 2

Since “p” has to be lower than “cm,” simply because fixed costs have to be covered no matter the level of sales, the value of r is positive insofar as “p” is positive.

## Annex III: Statistical Tables

Annex Table 2.1: List of “bazaar-traded” goods in SITC (Standard International Trade Classification). Rev 2

| Bazaar goods |   |     |   |
|--------------|---|-----|---|
| 611          | Leather                                   | 821 | Furniture and parts thereof                 |
| 651          | Textile yarn                              | 831 | Travel goods, handbags, brief-cases, p      |
| 652          | Cotton fabrics, woven                     | 842 | Outer garments, men's, of textile fabrics   |
| 653          | Fabrics, woven, of man-made fibres        | 843 | Outer garments, women's, of textile fabrics |
| 654          | Textile fabrics, woven, other than cotton | 844 | Under garments of textile fabrics           |
| 655          | Knitted or crocheted fabrics              | 845 | Outer garments and other articles           |
| 656          | Tulle, lace, embroidery, ribbons,& other  | 846 | Under garments, knitted or crocheted        |
| 657          | Special textile fabrics and related       | 847 | Clothing accessories of textile fabrics     |
| 658          | Made-up articles                          | 848 | Articles of apparel & clothing accessories  |
| 659          | Floor coverings, etc.                     | 851 | Footwear                                    |
| 665          | Glassware                                 | 881 | Photographic apparatus and equipment        |
| 666          | Pottery                                   | 882 | Photographic & cinematographic supp         |
| 667          | Pearls, precious& semi-precious stones    | 884 | Optical goods, n.e.s.                       |
| 694          | Nails, screws, nuts, bolts, etc. of iron  | 885 | Watches and clocks                          |
| 696          | Cutlery                                   | 893 | Articles of materials described in          |
| 697          | Household equipment of base metal         | 894 | Baby carriages, toys, games and sport       |
| 699          | Manufactures of base metal, n.e.s.        | 895 | Office and stationery supplies, n.e.s.      |
| 761          | Television receivers                      | 896 | Works of art, collectors pieces & an        |
| 762          | Radio-broadcast receivers                 | 898 | Musical instruments, parts and accessories  |
| 763          | Gramophones, dictating ,sound recorders   | 899 | Other miscellaneous manufactured articles   |
| 812          | Sanitary, plumbing, heating, lighting     |     |   |

**Annex Table 2.2: Mirror trade gaps in total trade of Kazakhstan and Kyrgyzstan in 2004-06 (in million of US dollars and percent)**

|                        | Mirror trade gap (ratio)                       |      |                    | Mirror trade gap (in US\$ millions) |        |        |
|------------------------|--|------|--------------------|-------------------------------------|--------|--------|
|                        | 2004   | 2005 | 2006               | 2004                                | 2005   | 2006   |
|                        |  |      | <b>total trade</b> |                                     |        |        |
| <b>Kazakhstan</b>      | 1.07   | 1.05 | 1.02               | 926                                 | 884    | 491    |
| <b>Kyrgyz Republic</b> | 1.48   | 1.75 | 2.12               | 450                                 | 835    | 1,920  |
|                        | <b>trade in goods (excluding bazaar goods)</b> |      |                    |                                     |        |        |
| <b>Kazakhstan</b>      | 0.94   | 0.89 | 0.89               | -672                                | -1,744 | -2,449 |
| <b>Kyrgyz Republic</b> | 0.92   | 1.03 | 1.04               | -65                                 | 26     | 71     |
|                        | <b>trade in bazaar goods</b>                   |      |                    |                                     |        |        |
| <b>Kazakhstan</b>      | 2.56   | 2.85 | 2.53               | 1,598                               | 2,628  | 2,939  |
| <b>Kyrgyz Republic</b> | 6.87   | 9.62 | 14.26              | 515                                 | 808    | 1,850  |

Source: Own calculations based on world and Kazakhstan's and Kyrgyzstan's reporting to the UN COMTRADE database.

Annex Table 2.3: Values of ISI and 'bazaar' imports per capita of CA economies in 2006

| SIT<br>C | Product Name                                   | Values of ISI<br>Indices |         |         |         | Imports per capita (US<br>dollars) |         |         |         |
|----------|--|--------------------------|---------|---------|---------|------------------------------------|---------|---------|---------|
|          |  | KA<br>Z                  | KG<br>Z | TJ<br>K | UZ<br>B | KA<br>Z                            | KG<br>Z | TJ<br>K | UZ<br>B |
| 651      | Textile yarn                                   | 0.3                      | 1.7     | 1.1     | 4.5     | 1.1                                | 2.0     | 0.4     | 1.1     |
| 652      | Cotton fabrics, woven                          | 1.0                      | 1.8     | 0.9     | 0.1     | 1.1                                | 0.9     | 0.1     | 0.0     |
| 653      | Fabrics, woven, of man-made<br>fibres          | 0.3                      | 6.0     | 1.7     | 0.3     | 4.9                                | 40.2    | 3.6     | 0.4     |
| 654      | Textiles, fabrics, woven other than<br>cotton  | 0.9                      | 1.4     | 0.5     | 1.2     | 0.4                                | 0.3     | 0.0     | 0.1     |
| 655      | Knitted or crocheted fabrics                   | 0.1                      | 6.7     | 0.2     | 1.7     | 0.4                                | 15.7    | 0.2     | 0.9     |
| 656      | Tulle, lace, embroidery, ribbons,&<br>others   | 0.2                      | 4.0     | 3.5     | 2.1     | 0.2                                | 1.3     | 0.4     | 0.2     |
| 657      | Special textile fabrics                        | 0.9                      | 1.5     | 0.9     | 0.9     | 2.8                                | 2.0     | 0.4     | 0.3     |
| 658      | Made-up articles of textile materials          | 0.9                      | 3.3     | 0.3     | 0.1     | 13.3                               | 23.2    | 0.6     | 0.2     |
| 659      | Floor coverings, etc.                          | 0.7                      | 1.8     | 3.8     | 0.9     | 4.6                                | 5.0     | 3.4     | 0.5     |
| 665      | Glassware                                      | 0.8                      | 1.1     | 4.8     | 0.6     | 4.0                                | 2.5     | 3.2     | 0.3     |
| 666      | Pottery  | 0.5                      | 4.0     | 2.8     | 0.7     | 0.7                                | 2.5     | 0.6     | 0.1     |
| 667      | Pearls, precious& semi-precious<br>stones      | 0.9                      | 0.1     | 0.0     | 3.0     | 0.3                                | 0.0     | 0.0     | 0.1     |
| 694      | Nails, screws, nuts, bolts etc. of<br>iron     | 1.0                      | 1.0     | 1.1     | 0.7     | 3.3                                | 1.4     | 0.5     | 0.2     |
| 696      | Cutlery  | 0.7                      | 3.1     | 0.8     | 0.8     | 1.4                                | 2.6     | 0.2     | 0.1     |
| 697      | Household equipment of base<br>metal           | 1.1                      | 0.6     | 0.9     | 0.6     | 5.5                                | 1.2     | 0.6     | 0.3     |
| 699      | Manufactures of base metal, n.e.s.             | 1.1                      | 1.0     | 0.6     | 0.8     | 14.3                               | 6.3     | 1.2     | 1.0     |
| 761      | Television receivers                           | 0.9                      | 1.7     | 0.6     | 1.2     | 5.4                                | 4.7     | 0.5     | 0.7     |
| 762      | Radio-broadcast receivers                      | 0.9                      | 0.2     | 0.1     | 2.8     | 0.7                                | 0.1     | 0.0     | 0.2     |
| 763      | Gramophones, dictating, sound<br>recorders     | 1.3                      | 0.1     | 0.3     | 0.3     | 2.5                                | 0.1     | 0.1     | 0.1     |
| 812      | Sanitary, plumbing, heating,<br>lighting       | 1.2                      | 0.6     | 0.4     | 0.4     | 11.0                               | 2.5     | 0.5     | 0.3     |
| 821      | Furniture and parts thereof                    | 1.2                      | 0.8     | 0.6     | 0.4     | 34.8                               | 10.0    | 2.5     | 1.0     |
| 831      | Travel goods, handbags, brief-cases            | 0.9                      | 3.3     | 0.3     | 0.2     | 3.5                                | 6.1     | 0.2     | 0.1     |
| 842      | Outer garments, men's, of textile<br>fabrics   | 0.9                      | 2.1     | 1.5     | 0.2     | 15.2                               | 15.0    | 3.3     | 0.4     |
| 843      | Outer garments, women's, of<br>textile fabrics | 0.9                      | 2.5     | 0.2     | 0.3     | 5.4                                | 6.5     | 0.1     | 0.2     |
| 844      | Under garments of textile fabrics              | 0.4                      | 6.0     | 0.4     | 0.2     | 0.3                                | 2.2     | 0.0     | 0.0     |
| 845      | Outer garments and other articles              | 0.8                      | 3.5     | 0.3     | 0.1     | 41.2                               | 76.7    | 2.1     | 0.3     |
| 846      | Under garments, knitted or<br>crocheted        | 1.0                      | 2.6     | 0.3     | 0.0     | 25.8                               | 31.3    | 1.1     | 0.0     |
| 847      | Clothing accessories of textile<br>fabrics     | 0.5                      | 6.0     | 0.4     | 0.0     | 5.3                                | 31.7    | 0.7     | 0.0     |
| 848      | Articles of apparel & clothing<br>accessories  | 0.9                      | 3.0     | 0.2     | 0.2     | 3.1                                | 4.8     | 0.1     | 0.1     |

|     |  |            |            |            |            |             |             |     |     |
|-----|--|------------|------------|------------|------------|-------------|-------------|-----|-----|
| 851 | Footwear                                       | 0.9        | <b>3.0</b> | 0.4        | 0.1        | 37.1        | <b>57.6</b> | 2.5 | 0.6 |
| 881 | Photographic apparatus and equipment           | <b>1.2</b> | 0.3        | 0.4        | 0.6        | <b>0.4</b>  | 0.0         | 0.0 | 0.0 |
| 882 | Photographic & cinematographic supplies        | 1.0        | <b>1.2</b> | 0.8        | <b>1.2</b> | <b>0.6</b>  | 0.3         | 0.1 | 0.1 |
| 884 | Optical goods, n.e.s.                          | <b>1.2</b> | 0.4        | <b>1.3</b> | 0.5        | <b>1.4</b>  | 0.2         | 0.2 | 0.1 |
| 885 | Watches and clocks                             | 1.0        | 0.5        | 0.9        | <b>1.7</b> | <b>1.6</b>  | 0.4         | 0.2 | 0.3 |
| 893 | Articles, n.e.s., of plastics                  | <b>1.0</b> | <b>1.3</b> | <b>1.4</b> | 0.4        | <b>29.1</b> | 15.7        | 5.3 | 1.1 |
| 894 | Baby carriages, toys, games and sporting goods | 1.0        | <b>1.9</b> | 0.7        | 0.4        | 4.7         | 4.0         | 0.5 | 0.2 |
| 895 | Office and stationery supplies.                | 1.0        | <b>2.2</b> | 0.4        | 0.2        | <b>2.2</b>  | 2.1         | 0.1 | 0.0 |
| 896 | Works of art, collectors pieces                | <b>1.3</b> | 0.4        | 0.1        | 0.3        | <b>0.1</b>  | 0.0         | 0.0 | 0.0 |
| 898 | Musical instruments, parts and accessories     | 1.0        | <b>1.1</b> | 0.6        | 0.8        | <b>2.7</b>  | 1.2         | 0.2 | 0.2 |
| 899 | Other miscellaneous manufactured articles      | 0.9        | <b>2.2</b> | 1.4        | 0.3        | 3.4         | <b>3.7</b>  | 0.7 | 0.1 |

Source: Own calculations based on world reporting to the UN COMTRADE database.