

**United Nations Conference on Trade and Development**

# **INVESTMENT GUIDE TO THE SILK ROAD**



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## PREFACE

The *Investment Guide to the Silk Road* is an integral part of UNCTAD's work in the Silk Road region, which comprises the States of Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and the Western Chinese provinces. The first phase of the project was part of the UNDP-UNWTO-UNCTAD Silk Road Initiative. The publication was jointly prepared with UNDP China in 2006 and was updated by UNCTAD in 2009, and includes an abstract from an UNCTAD report on an investment promotion strategy for the tourism sector of China's Silk Road Provinces and Autonomous Regions. The publication benefited from a workshop with Central Asian delegations organized by the UNDP offices in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, under the leadership of UNDP China and UNCTAD, as well as inputs received during fact-finding missions and the first Silk Road Investment Forum organized by UNDP, UNCTAD and the United Nations World Tourism Organization (UNWTO) in Xian, China, from 6 to 9 June 2006.

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It is hoped that the information presented in this publication will help raise awareness about the Silk Road as an investment destination, hence contribute to increased investment flows in the region.

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## EXECUTIVE SUMMARY

The new Silk Road region<sup>1</sup> is emerging from decades of centrally planned economies that were closed to foreign investment, and the current business environment does not meet international best practices in many respects. Despite an overall opening of the economies to international investment, the business/investment legal and regulatory frameworks of the Silk Road countries are still evolving, public institutions are still adjusting to their new roles of providing services and good governance, and certain types of human resource skills such as modern management can be in short supply.

Nonetheless, the Silk Road region may be one of the world's most potentially lucrative untapped investment locations. It has an abundance of natural resources such as petroleum, natural gas, hydropower and minerals. It also excels at producing agricultural goods such as cotton, fruits and vegetables, meat and animal hides, and seed oils. The famed cities and attractions along the Silk Road make for an intriguing tourism destination. In addition, the Silk Road countries have an educated workforce.

This *Investment Guide to the Silk Road* is intended to give readers comprehensive introductory information about the investment climate and opportunities in the Silk Road region, but its primary goal is to encourage potential investors to explore in more detail their own ideas for possible regional investment projects.

### Why invest in the Silk Road?

The Silk Road region covers a vast land area of approximately 5.9 million square kilometres and has a population of approximately 145 million people. It represents a combined economy of around \$312.3 billion, with an average gross domestic product (GDP) per capita of \$2,151. While these are not staggering numbers in terms of market development potential, what will attract most investors is what the Silk Road region can offer the rest of the world.

Central Asia and Western China's geographic isolation has been considered a major obstacle in their effort to develop new markets and attract foreign investment. However, this seemingly disadvantaged geographic situation can potentially be turned into a favourable one if the Silk Road countries work together to lower the barriers and costs of moving goods and people across the region through formal cooperation programmes. Once progress is made in intraregional movements of resources, goods, and people across the Silk Road, the region can maximize its central position to exploit trade and investment opportunities with South Asia, East Asia, West Asia and Europe.

The Silk Road is one of Asia's most dynamic economic growth areas. With abundant natural resources such as oil and natural gas, progress in the transition from command to market-based economies, and growing intraregional and interregional linkages, the Silk Road appears headed towards restoring its former prosperity. Annual GDP growth rates in the four Central Asian countries and the four Chinese provinces have often been in the double-digit range during the past few years - benefiting from China's rapid economic growth of the past decades.

### Intraregional trade

Despite China doubling its imports to and exports from the other Silk Road countries between 1999 and 2003, Silk Road trade comprises less than half of 1 per cent of China's total trade. This suggests the enormous untapped potential for trading among China and the other Silk Road countries. As a region, the Silk Road countries have a small amount of intraregional trade compared to their total worldwide trade. Intraregional imports for the Silk Road countries in 2005 amounted to 1.29 per cent of their total imports, but excluding

<sup>1</sup> This investment guide treats the Silk Road as the region encompassing the Western Chinese provinces, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.

China, the four Central Asian countries' intraregional imports were 11.67 per cent of their total imports.

The Silk Road countries do not have common multilateral free trade arrangements, but they have several bilateral trade agreements with each other that are gradually developing into an integrated regional trade network.

## Foreign investment

Attracting foreign investment is a high priority in all parts of the Silk Road region. The governments have all revised policies and laws over the past several years to improve investment climates and open their economies to foreign investors. The Silk Road attracted \$5.5 billion in foreign direct investment (FDI) in 2004 and \$11.1 billion<sup>2</sup> in 2007. In 2008 and 2009, there has been a sharp decline in global FDI which has impacted FDI in the Silk Road region.

The Central Asian countries have made progress with numerous legal reforms since the early 1990s, such as new commercial legislation, but the implementation and enforcement of the legal and regulatory frameworks and the governing institutions upholding them have not always kept pace. Bureaucratic red tape for businesses has been reduced, and continues to be addressed through regional trade facilitation programmes, bilateral agreements and unilateral simplification of procedures, but obstacles and delays are still common and increase transaction costs for firms. Gradual improvements are being made in areas such as investor protection and corporate governance standards, and in company, securities and bankruptcy laws.

## Opportunities for investors

The Silk Road, during its peak period of development centuries ago, was one of the greatest supply chains in history. It linked China to Central Asia and beyond, and promoted business, trade, technology and entrepreneurship throughout the region.

The present Silk Road region offers a similar potential to modern business. China is the world's largest or second largest consumer of numerous minerals and the world's second largest oil consumer, offering significant potential markets to suppliers in Central Asia. On the logistics front, closer linkages between China and Central Asia could be the lead to a renewal of Central Asia as a transit territory, taking advantage of Chinese regional policies to stimulate growth in the western parts of the country. The development of the transportation and distribution systems linking China and Central Asia offers tremendous potential for firms involved both in the hard and soft aspects of infrastructure development.

Investors are encouraged to "think regionally" about the Silk Road region in particular due to its unique layout of integrated infrastructure (from the Soviet Union era). The absence of a free trade agreement, a common investment area, and harmonized policies in the Silk Road region should not prohibit investors from taking a regional perspective on potential business opportunities. Resources, particularly natural resources and various types of labour, are dispersed unevenly throughout the Silk Road region. This creates opportunities for developing production chains across two or more of the countries, potentially tying into broader regional and global supply chains. Markets for resources such as oil and gas are frequently located outside the region and will require investments in more than one country to reach the desired destinations.

In terms of specific sectors, the Silk Road region has the potential to become one of the world's unique tourism destinations, and the distribution of interrelated tourism resources across the five countries makes it ideal for cross-border or regional investment opportunities. All of the Silk Road countries have prioritized tourism for attracting foreign investment. At present, the Silk Road's greatest tourism potential lies in developing cultural and historical attractions and ecotourism. The region contains some of the most scenic landscapes in Asia, and makes for excellent nature and other outdoor tourism activities. Diverse landscapes

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<sup>2</sup> Does not include the four Chinese Silk Road provinces.

featuring mountains, glaciers, caves, lakes, rivers, hot springs and steppes can be found throughout the region.

The Silk Road region also has the potential to become a significant supplier of the world's energy needs. Kazakhstan and Uzbekistan are among the world's leading countries in terms of their oil reserves (Kazakhstan) and natural gas (both countries). Kyrgyzstan and Tajikistan have vast hydropower potential that has barely been tapped. The Xinjiang Uygur Autonomous Region has the largest reserves of oil, natural gas, and coal in China.

The Silk Road's location between East Asia and Europe should entice investors from all economic sectors, in particular transportation and logistics. Shipping cargo by sea between East Asia and Europe remains the cheapest and preferred method, but as the land transport infrastructure in Central Asia improves, it could provide a viable alternative for moving goods and passengers across the Eurasian continent. The railways hold the most promise for eventually competing with shipping on long-distance haulage, and some of the Silk Road countries are gradually privatizing at least parts of their rail systems. Another potential opportunity is the shortage of multi-modal transportation hubs that link key infrastructure networks across the region. Addressing this gap will be vital to the Silk Road's future competitiveness and will likely determine if the Eurasian "land-bridge" becomes a viable alternative to transporting goods and people between East Asia and Europe.

Specialty agriculture and processing will fill niches in world markets. Parts of the Silk Road region contain highly fertile grounds suitable for growing cash crops and specialty crops. Although land cannot be owned by foreign investors, all of the countries provide for land use rights and leasing. More importantly, the Silk Road countries can provide the skilled agriculture labour and high-quality, inexpensive raw materials. What is needed from foreign investors is capital, modern management and marketing practices, and new technology for processing and packaging agriculture goods.

Mining is also one of the Silk Road's most attractive sectors. The Silk Road countries hold some of the world's largest shares of several minerals, such as gold, coal, chromium and manganese. In order to take full advantage of these assets, the governments have updated their respective mining laws over the years to attract greater levels of investment. Also, privatization continues to progress in mining, and the region's governments are making more use of joint ventures with foreign partners.

### **The future could be the past**

Given all the potential in the modern-day Silk Road region, its future could be as bright and prosperous as it was during the golden years of the ancient Silk Road. Central Asia and western China have opportunities to attract the attention of prospective investors from all over the world, and the Governments are moving forward steadily, providing appropriate legal and regulatory frameworks necessary for the business sector to flourish. The Silk Road may yet again serve as the interface mechanism between East and West, where goods, knowledge and technology flow back and forth to raise civilization to new heights.

However, the ongoing global economic crisis is likely to significantly impact the economies along the Silk Road, hopefully not as badly as the developments around 900 A.D. after the fall of the Tang dynasty, or following the break up of the Soviet Union nearly two decades ago. This time around, it is hoped that the fundamental strengths of the region, combined with recent progress in introducing business friendly policies and legal frameworks, will cushion the Silk Road from the worst effects of the global crisis and result in only a temporary setback in trade, foreign investment, and economic growth.



# I. INTRODUCING THE SILK ROAD

The term “Silk Road” is tied to images of traders from long ago selling their goods on the backs of camels through enchanted cities separated by inhospitable deserts. While the romanticism of the Silk Road has been replaced by the hard realities that many of its current inhabitants face, the Silk Road is gradually being “reconstructed” to offer a number of potential business opportunities.

## A. The history of the Silk Road<sup>3</sup>

The German Baron Ferdinand von Richthofen coined the term “Silk Road” in the 1870s to describe what was, at its peak, one of the most important and dynamic centres of economic activity in the world, and the greatest trade route linking East to West. It was more than just a single route; rather, it was a river of connections stretching from south to north, and from East Asia to as far West as Europe, Egypt and other countries in Africa.

A recent analyst of the Silk Road notes:

The Silk Road of the past meant connections and challenges but also safe long distance travelling. It meant religious interaction (from Buddhism to Islam, Zoroastrianism and Christianity) – for instance, it was during the times of the Silk Road that the first Jewish communities were established in China – as well as cultural exchange. The Silk Road meant *understanding*, despite a multitude of languages, and perhaps very different political points of view. It meant reaching out and successfully embracing something *different* to what was available at home.<sup>4</sup>

Early activities along the Silk Road are generally believed by Chinese scholars to have started during the Chinese Han dynasty (206 B.C.–A.D. 220), stimulated by the mission to the West of the Chinese ambassador Zhang Qian that set off from Chang’an (present day Xi’an) in 138 B.C. and finally reached Kashgar and Ferghana. Interested in the “heavenly” Ferghana horses, Han emperors sought actively to develop political relations with the western kingdoms of the Silk Road. These forays to the West eventually led to strong interest in the silk products of China in the Roman Empire of the period before the start of the new millennium. The merchant populations along the Silk Road – the Sogdians, the Parthians, the Indians, the Kushans and others – were quick to take advantage of the business potential and became middlemen in a trade that soon extended far beyond just silk into gold, other precious metals, furs, textiles, ivory and much more. It was the Sogdian merchants, however, who became the premier traders along the Silk Road, based in their main cities of Samarkand, Balkh and Chanh.

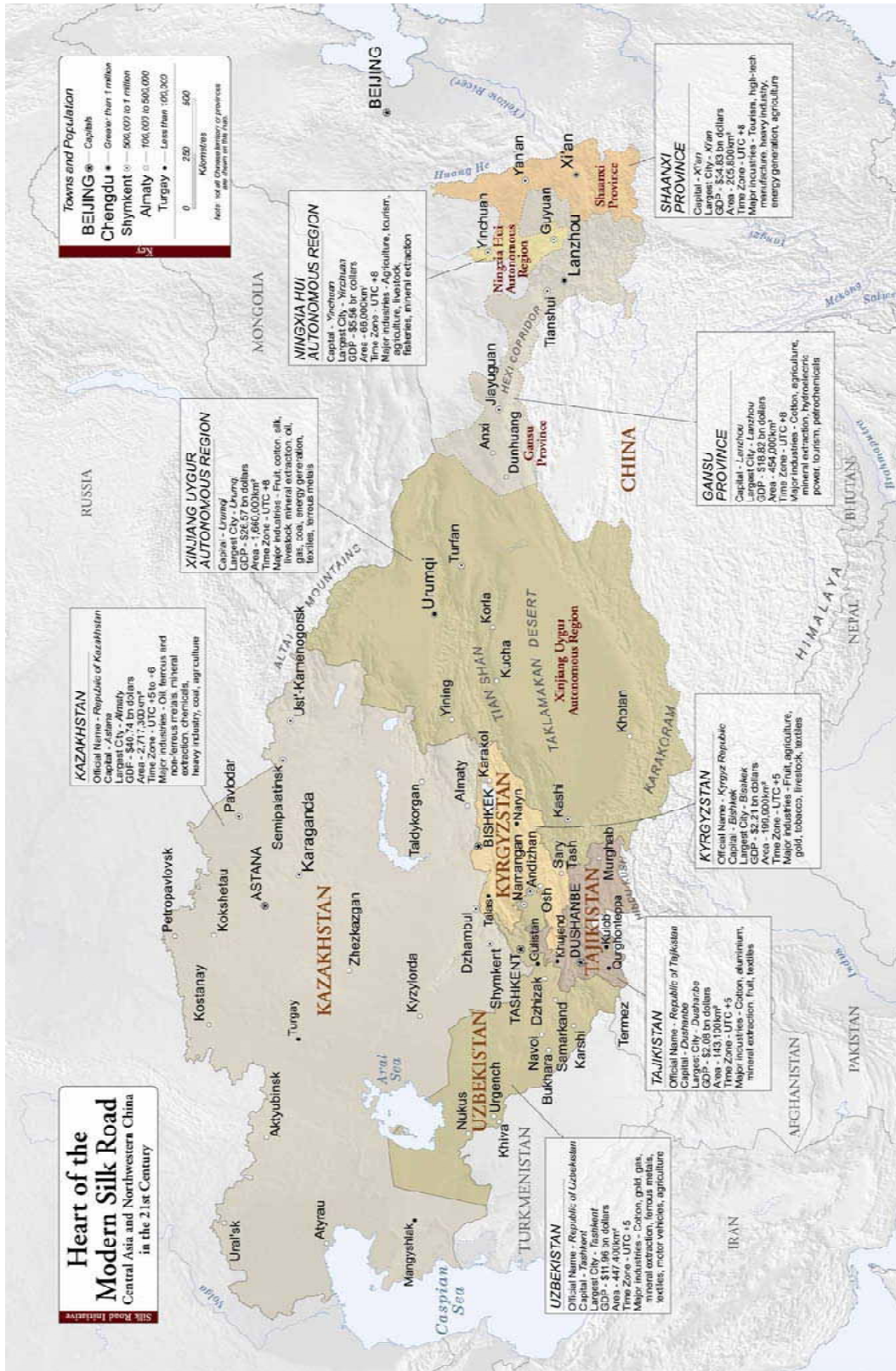
The Silk Road flourished and arguably reached its zenith during the time of the Chinese Tang dynasty (618–907). Chang’an served as the starting point and final destination for travellers along the Silk Road, and contained numerous religions and more than 5,000 foreigners. Caravans converged on Chang’an from all over the world, bringing exotic goods to China and taking Chinese products back through the extensive network of oases that

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<sup>3</sup> For more extensive information of the history of the Silk Road, please see: Boulnois L (2004), *Silk Road: Monks and Warriors & Merchants on the Silk Road*, Odyssey Books and Guides, Hong Kong; and Bonavia J (2004), *The Silk Road: From Xi’an to Kashgar*, Revised by Baumer C, Odyssey Books and Guides, Hong Kong, This section draws from these books.

<sup>4</sup> Wojciech H (2006), *Why is the Silk Road so Important?*, Silk Road Initiative Newsletter, April ([www.silkroad.undp.org.cn](http://www.silkroad.undp.org.cn)).

Figure 1. The modern Silk Road as presented at the first Silk Road Investment Forum, 2006



Source: UNCTAD and UNDP China.

Figure 2. The ancient Silk Road



Source: UNCTAD and UNDP China.

sprung up along the Silk Road and around the Taklaman Desert. Kashgar served as the focal point through which these caravans journeyed to Central Asia and on to the West.

**Figure 3. A modern-day Silk Road caravan lacquerware box from an artist in Tashkent, Uzbekistan**



Source: UNCTAD and UNDP China

During the prosperous periods of the Silk Road, there is no doubt that trade stimulated high levels of economic development and spurred scientific and technological exchange, particularly from East to West. Glassmaking travelled from Europe to China in the fifth century and silk-making secrets were learned in Europe. Iron casting, in particular, well-known in China by Roman times, travelled west along the Silk Road. Religious beliefs also spread rapidly in both directions along the Silk Road – for example, Buddhism from East to West, and Manichaeism and Nestorianism from West to East. The open exchange of ideas, cultures and art created vibrancy in economic, social and cultural affairs along the Silk Road unparalleled anywhere in the world at the time.

It was after the fall of the Tang dynasty in 907 A.D. that a number of factors began to erode the importance and dynamism of the Silk Road. Political instability in China led to economic decline and lower abilities to bring luxurious products into the country, and eventually the Ming dynasty (1368–1644) effectively closed China to the outside world. New forms of transport such as shipping emerged that were cheaper than land caravans. Other countries had already mastered the cultivation and production of silk. In addition, Islam had begun to spread from the West throughout the Taklaman region.

By the 15th and 16th centuries, the Silk Road had entered a period of much lower economic activity that would last effectively until the present day.

The ethnic, religious and cultural diversity and richness of the Silk Road of both the past and the present constitutes one of the enduring attractions of the region.<sup>5</sup> The Chinese provinces of the Silk Road presently include numerous nationalities; (a) Gansu with 54 nationalities; (b) Ningxia Hui Autonomous Region with 35 different ethnic groups; (c) Shaanxi with Hui, Manchu and Mongolian minorities; and (d) Xinjiang Uygur Autonomous Region with over 40 ethnic groups, including Uygurs, Han, Hui, Manchu, Kazaks, Xibe, Russians, Tatars and Mongols. The Central Asian countries boast similar mixes of ethnic groups dominated by Uzbeks, Kyrgyz, Tajiks, Kazakhs, Tatars, Uygurs, Koreans and Russians.

The challenge of the region is to translate the history, evolution and former strengths of the ancient Silk Road into business opportunities for the present. It is hoped that the process of rejuvenating the economies of the Silk Road as they emerge from centuries of relatively poor economic performance is only just beginning. The prominence of the entrepreneurial and merchant classes among the diverse ethnic groups of the region during the heyday of the Silk Road, and their ability to act as intermediaries in one of the world's greatest trading environments, indicates the business potential of the region.

## B. The present-day Silk Road

### 1. Political and economic developments since 1991

The political and economic landscape of the modern Silk Road was transformed dramatically in 1991 with the break-up of the Soviet Union. In a short period, the various republics that made up the Soviet Union became independent, and many of them were not fully prepared for all that new statehood entailed. Under the Soviet Union, the Central Asian republics were integrated into the Soviet economic system, with specialized production and trading of unique resources often allocated to the various republics. However, the break-up of the Soviet Union left all of the newly independent Central Asian countries landlocked, with small markets, jigsaw puzzle-like borders, and far from major external markets. In addition, the newly independent countries had fledgling governing institutions and policies to administer their territories. Not surprisingly, the Central Asian countries initially suffered severe economic contractions as they made their transition following independence. Trade within Central Asia collapsed after the break-up of the Soviet Union, because trade links were broken and transit was impeded by new border restrictions. Because of the new border restrictions and political turmoil in the region, intraregional trade declined almost 50 per cent between 1992 and 2002.<sup>6</sup>

The new political landscape ushered in a new economic approach, as the Central Asian countries embarked on more market-oriented economic policies. The Central Asian countries are now at different stages of development in the transition to a market economy and privatization of state-owned enterprises (SOEs), but as a whole, the region is gradually moving towards more integrated and liberalized economies.

Meanwhile, across the 3,300-kilometre border that Kazakhstan, Kyrgyzstan and Tajikistan share with China's Xinjiang Uygur Autonomous Region, China's overall economy has begun a period of expansion that is the fastest in history and continues to this day. However, China's development has been uneven, with the central and western provinces growing much more slowly than the eastern coastal provinces, due to preferential policies for the coastal areas concerning domestic and overseas investment and the use of land.

The preferential policies for the east coast began in 1978 and lasted through the mid-1990s, and then the Government of China turned more of its attention to the west. In the Ninth Five-Year Plan (1996–2000), the Chinese Government adopted six policy measures

<sup>5</sup> For a description of the life and times of the Silk Road in the 250-year period following A.D. 730 through the eyes of merchants, soldiers, horsemen, princesses, courtesans, nuns and others, see Whitfield S (1999), *Life Along the Silk Road*, University of California Press.

<sup>6</sup> ADB, *Building Partnerships for Development: Regional Cooperation Strategy and Programme 2004-2006*, Manila, 2004.



to promote the development of the central and western regions. In 1999, it launched the western development strategy, which prioritized (a) the construction of infrastructure facilities, environmental protection and ecological conservation; (b) development of industries corresponding to local conditions (e.g. exploitation of energy and mineral resources, specialty tourism, specialized farm products and others); (c) development of science, technology and education to improve the quality of the labour force; and (d) deepening reforms and opening up the business environment. Part of China's ongoing western development policy is to encourage greater participation of non-State sectors in the economy, including foreign investors. The current western policies are intended to create a favourable development environment by deepening economic reforms and opening up to the outside world.

## 2. The expected impact of the global economic crisis

Global GDP is forecast to fall by 1.7 percent in 2009, the first global output decline on record.<sup>7</sup> This fall in GDP is expected to be accompanied by a dramatic drop in volumes of world trade in goods and services by 6.1 percent in 2009, with a much greater fall in trade volumes of manufactured products. Growth in the developing world is expected to decline from 5.8 percent in 2008 to 2.1 percent in 2009. Developing countries have been significantly hit in their domestic economies by the financial crisis. Starting with financial services, the shock waves have affected many other industries, ranging from extractive industries and manufacturing to infrastructure services. The reversal of capital flows, declines in stock markets, and deterioration in financing conditions have combined to halt investment growth in the developing countries and investment has in fact declined in many developing countries.

Along the Silk Road, China and Uzbekistan alone continue to show high economic growth in 2009, although China's 6.5 percent estimated growth in 2009 represents a 2.5 percent decline over the 9.0 percent growth in 2008. The World Bank expects growth in developing Europe and Central Asia (ECA) to enter negative territory in 2009 with an expected 2 percent contraction of GDP in 2009, a dramatic change from the 4.2 percent growth in 2008. Financial stress is highest among the Central and Eastern European countries which relied heavily on foreign capital to support domestic lending, with oil exporters – such as Kazakhstan – being under increasing financial strain, especially with the Russian ruble facing difficulties.

According to the Asian Development Bank (ADB),<sup>8</sup> which is more optimistic than the World Bank, the crisis has hit export-dependent developing countries the hardest. Growth in East Asia declined from 9.1% in 2007 to 6.6% in 2008 and is forecast to decline dramatically to 3.6% in 2009 (see Figure 4). This is despite the relatively strong performance of China. Most Central Asian countries have been seriously affected by falling prices for their major commodity exports and by the accompanying economic slowdown in the Russian Federation, their main trade and financial partner. The subregion's<sup>9</sup> growth declined from 11.6% in 2007 to 5.7% in 2008, and will likely be only 3.9% in 2009.

The global crisis struck developing Asia most forcefully through the collapse in trade and in business and consumer confidence. As import demand dropped in the advanced economies and the Russian Federation, and recessions set in, export growth has dropped dramatically in Central Asia since the early part of 2008. Dropping commodity prices have adversely affected exporting developing economies in the region. The downturn also has hit farmers in food-exporting countries, and government revenues in oil-exporting developing countries, such as Kazakhstan.

In the area of foreign direct investment (FDI), the sharp decline in global FDI in 2008 by about 14.5 percent, to an estimated \$1.66 trillion, marks the end of a four year growth cycle which peaked in 2007 with total FDI flows of \$1.94 trillion.<sup>10</sup> The impact of the global economic crisis on FDI has been progressive, with limited effects in 2007, growing impacts

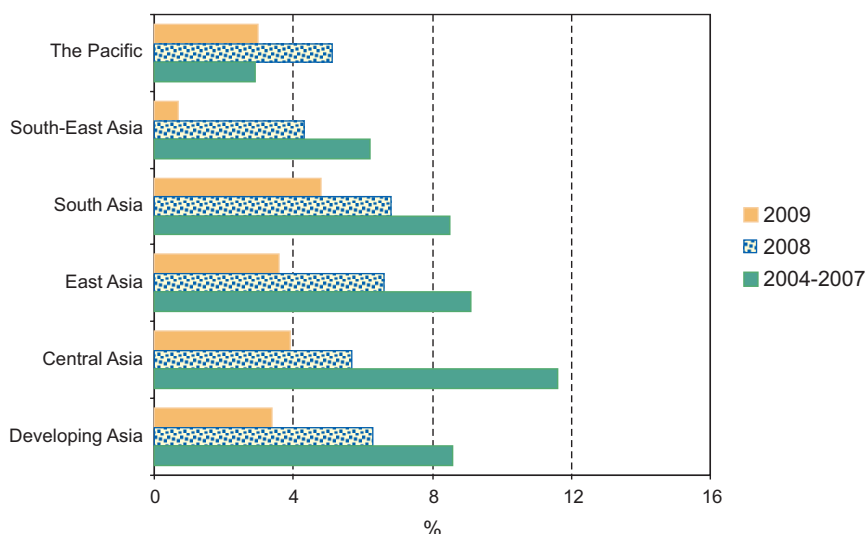
<sup>7</sup> World Bank, *Global Economic Prospects 2009 - Forecast Update*, March 30, 2009.

<sup>8</sup> Asian Development Bank, *The Global Economic Crisis - Challenges for Developing Asia and ADB's Response*, April 2009.

<sup>9</sup> ADB's Central Asian sub-region corresponds closely to the Central Asian Silk Road economies.

<sup>10</sup> UNCTAD (2009), *Assessing the impact of the current financial and economic crisis on global FDI flows*, April 2009.

**Figure 4. GDP Growth Rates and Forecasts of Developing Asia**



Source: ADB 2009, ADB staff estimates.

in 2008, and much more severe effects in the first quarter of 2009. UNCTAD expects that, for developing and transition economies, the worst is yet to come, as the most significant impact of the global financial crisis on FDI inflows is expected for 2009. The Asian Development Bank confirmed the generally negative trend of FDI in the Asia region: “the region is also experiencing a precipitous drop in foreign direct investment, which has deprived it of both finances and new technology”.<sup>11</sup> The ADB analysis also shows that funding for infrastructure projects is on the decline and remittances, which are important for certain Central Asian economies, are drying up.

UNCTAD<sup>12</sup> reports that, in developing and transition economies, FDI inflows remained quite strong until the end of 2008. Based on preliminary data for the first quarter of 2009 on cross-border M&A, FDI fell in all three groups of economies: developed countries, developing countries and transition economies (South-East Europe and the CIS). While overall FDI flows in developed and transition economies fell slowly over 2008 and the first quarter of 2009, in developing countries a dramatic fall was observed only in the first quarter of 2009. For example, China showed a 26 per cent decline in FDI inflows during the first two months of 2009 over the same period of 2008.

Despite the generally negative news, there still remain a number of factors that may explain why foreign investors might remain committed to FDI, even in the midst of the crisis.<sup>13</sup> Certain of these factors could indicate areas where Silk Road economies could focus attention, in addition to the specific measures recommended for IPAs (see box 1):

- Financial crises and tough economic periods also offer opportunities to buy assets at discounted prices and take advantage of large-scale consolidations in some industries.
- International companies still appear committed to increasing their level of internationalization in the medium term, an indicator for a future upturn in FDI flows.
- New FDI source countries have emerged, especially from the South, and multinationals from these countries will remain active investors. In particular, China’s outward FDI will continue its upward trend.
- A number of fast-growing niches in various industries continue to offer opportunities, even in the face of the crisis.

<sup>11</sup> ADB, 2009.

<sup>12</sup> UNCTAD (2009), *Assessing the impact of the current financial and economic crisis on global FDI flows*, April 2009.

<sup>13</sup> UNCTAD (2009), *ibid.*

**Box 1.****How could Silk Road Investment Promotion Agencies (IPAs) deal with the crisis?**

As the global economic crisis leads to tougher competition for investment projects, IPAs and similar institutions along the Silk Road must carefully reassess their current strategies and activities in light of the new situation. They should consider:

- (a) Looking to their established investor communities and take measures when possible to reduce the impact of the crisis. Investment retention through *aftercare* services could soften the blow of the economic slowdown, help companies adjust to new realities, take advantage of investment opportunities when they arise, and prepare for the economic recovery.
- (b) Identifying and *targeting investors* based on sector prospects and investment motives. Not all investors and industries are equally affected by the crisis, and in addition, many TNCs are restructuring to cut costs and improve efficiency in response to the downturn. This could create investment opportunities, especially in locations with good infrastructure and a relatively qualified and affordable workforce.
- (c) Strengthening their role in improving the business climate through *policy advocacy*. Such efforts should address problems that investors face due to the crisis, but also aim to strengthen the long-term competitiveness of locations through improved infrastructure, regulatory and administrative reforms, better education and further regional integration.
- (d) Increasing internal *efficiency* by directing resources to areas where they make the most difference, by upgrading staff skills, and by regular evaluations of promotional activities.

Source: UNCTAD.

*Turning crisis into opportunity.* The global situation appears to be having its greatest negative impact on the Silk Road in the year 2009. The Chinese economy is expected to bounce back to 7.5 percent growth in 2010 and most of the Silk Road Central Asian economies are expected to show increases in economic growth in 2010. Meanwhile, there exist significant opportunities for governments to push ahead with needed economic and business reforms; indeed it appears that the Central Asian economies have been relatively progressive with their financial, monetary and fiscal responses to the crisis.<sup>14</sup> These reforms in response to the crisis, combined with the ongoing policy reforms and fundamental business opportunities in the Silk Road countries, indicate that the resilience and underlying strengths will carry the region through the present crisis and to future prosperity.

### 3. Market size and access

The Silk Road covers a vast land area of approximately 5.9 million square kilometres. With a total population of approximately 145 million people, its population density averages 41 people per square kilometre. The GDP per capita in 2007 varied widely in the region, ranging from a low of \$550 in Tajikistan to a high of \$6,773 in Kazakhstan. The average GDP per capita for the Silk Road in 2007 was \$2,151, as shown in Table 1.

Central Asia and western China's geographic isolation has been considered a major stumbling block in their quest to extend communications, develop new markets and attract foreign investment. The Silk Road's landlocked position and harsh terrain has not helped to facilitate modern trade and investment. Uzbekistan, for instance, is one of the world's only two double-landlocked countries. Urumqi, the capital of China's Xinjiang Uygur Autonomous Region, is the world's largest city furthest from a seaport. As a result, transport costs tend to be high into and out of the Silk Road because of crossing multiple land borders; shipping goods by sea is not a direct option.

However, this seemingly disadvantaged geographic situation can potentially be turned into a favourable one if the Silk Road countries work together to lower the barriers and costs

<sup>14</sup> See ADB, Table 1, 2009.

of moving goods and people across the region through formal cooperation programmes. Once progress can be made in intraregional movements of resources, goods and people, the Silk Road can maximize its central position to exploit trade and investment opportunities with South Asia, East Asia, West Asia and Europe.

**Table 1. Silk Road – land area, population and GDP per capita**

	Total land area (1,000 sq. km.)	Population 2007 (millions)	GDP per capita 2007 (current US\$)
<b>Silk Road</b>	5,893.4	145.2	2,151
Kazakhstan	2,724.9 <sup>a</sup>	15.5 <sup>a</sup>	6,773 <sup>a</sup>
Kyrgyzstan	199.9 <sup>a</sup>	5.2 <sup>a</sup>	715 <sup>a</sup>
Tajikistan	142.6 <sup>a</sup>	6.7 <sup>a</sup>	550 <sup>a</sup>
Uzbekistan	447.4 <sup>a</sup>	26.9 <sup>a</sup>	830 <sup>a</sup>
Gansu Prov.	454.4 <sup>b</sup>	26.3 <sup>c</sup>	1,510 <sup>d</sup>
Ningxia A.R.	62.8 <sup>b</sup>	6.1 <sup>d</sup>	2,204 <sup>d</sup>
Shaanxi Prov.	205.6 <sup>b</sup>	37.5 <sup>d</sup>	2,132 <sup>d</sup>
Xinjiang Uygur	1,655.80 <sup>b</sup>	21.0 <sup>d</sup>	2,460 <sup>d</sup>

*Sources:*

<sup>a</sup> World Bank Development Indicators Online (<http://web.worldbank.org>)

<sup>b</sup> China facts and figures, 2006 (<http://www.china.org.cn/english/features/china/203735.htm>)

<sup>c</sup> ([http://www.chinadaily.com.cn/government/2009-01/20/content\\_7563518.htm](http://www.chinadaily.com.cn/government/2009-01/20/content_7563518.htm)) (year not indicated)

<sup>d</sup> ([http://www.starmass.com/china\\_review](http://www.starmass.com/china_review) (converted rate of 1 Chinese yuan = US\$0.146301))

## II. THE SILK ROAD BUSINESS OPERATING ENVIRONMENT

### A. Basic economic environment

#### 1. Economic performance

The Silk Road is one of Asia's most dynamic economic growth areas.<sup>15</sup> In the East Asian region, the rapid growth is achieved by China's overall economy. With abundant natural resources such as oil and natural gas, progress in the transition from command to market-based economies, and growing intraregional and interregional linkages, the Silk Road appears to be headed towards restoring its former prosperity. Annual GDP growth rates in the four Central Asian countries and the four Chinese provinces have often been in the double-digit range during the past few years for which data are available. The four Chinese Silk Road provinces have caught the wave of eastern China's tremendous economic growth of the past decades. The slower GDP growth rates in Uzbekistan earlier in the decade registered strong improvements, to 7.3 per cent in 2006 and 9.5 per cent in 2007. Only Kyrgyzstan had a negative GDP growth rate in 2005, due to a political upheaval; nevertheless, the GDP growth rate in 2006 and 2007 was 3.1 per cent and 8.2 per cent respectively.

**Table 2. Annual GDP growth rates**  
(%)

Country/province	2003	2004	2005	2006	2007
Kazakhstan	9.3	9.4	9.7	10.7	8.9
Kyrgyzstan	7.0	7.1	-0.2	3.1	8.2
Tajikistan	10.2	10.6	6.7	7.0	7.8
Uzbekistan	4.2	7.7	7.0	7.3	9.5
Gansu <sup>a</sup>	10.1 <sup>b</sup>	11.0	11.7	11.4 <sup>d</sup>	..
Ningxia Hui <sup>a</sup>	..	11.0	10.3	12.7 <sup>e</sup>	..
Shaanxi <sup>a</sup>	..	12.9	12.6	..	14.6 <sup>e</sup>
Xinjiang Uyqur <sup>a</sup>	..	11.1	10.5 <sup>c</sup>	11.0 <sup>e</sup>	12.2 <sup>e</sup>

Sources: World Bank World Development Indicators Online (<http://web.worldbank.org/>)

<sup>a</sup> [www.china.org.cn](http://www.china.org.cn).

<sup>b</sup> [www.gansu.gov.cn](http://www.gansu.gov.cn).

<sup>c</sup> Chinese Government's official web portal. Estimated. ([http://english.gov.ch/2005-12/25/content\\_136679.htm](http://english.gov.ch/2005-12/25/content_136679.htm)).

<sup>d</sup> (<http://news.alibaba.com/article/detail/business-in-china/100085649-1-province-introduction-china%253A-gansu.html>)

<sup>e</sup> (<http://www.hktdc.com/info/mi/a/mp/en/1X003IRR/1/Market-Profiles/NINGXIA-HUI-AUTONOMOUS-REGION.htm>)

The Silk Road represents a combined economy of around \$312.3 billion. Although this is somewhat small in comparison to China's total economy of \$3,205.5 billion GDP (2007), it still represents a substantial opportunity for investors to tap into a young, newly emerging and growing market with unique sets of resources. Individually, the economies of the Silk Road are not considered large by Asian standards, as seen in Table 3, and this is one major reason why a regional perspective is expected to provide greater benefits to investors than a country-by-country approach.

Similar to the GDP levels across the Silk Road economies, the per capita GDP varies widely, as mentioned earlier. Notably, Xinjiang's per capita GDP of \$2,460 in 2007 was not far behind China's national GDP per capita of \$2,705.<sup>16</sup>

<sup>15</sup> See section B.1 above for some caveats on the impacts on the Silk Road of the global economic crisis.

<sup>16</sup> [www.starmass.com/china](http://www.starmass.com/china).

## 2. Structure of economies

The Central Asian economies are based largely on services, with that sector accounting for 43–55 per cent of GDP in all four countries (see Figure 5). The agricultural sector is still substantial at around 32 per cent of GDP in Kyrgyzstan and 22–24 per cent in Tajikistan and Uzbekistan, but Kazakhstan's figure of around 6 per cent shows the different economic structures in the region.

The sectoral compositions of the four Chinese Silk Road provinces' economies are remarkably similar, despite variations in their sizes and core industries. Figure 6 shows that primary industries account for 17–21 per cent of provincial GDP; secondary industries in the four provinces range from 43–45 per cent; and the tertiary industries from 35–39 per cent.

**Table 3. GDP and GDP per capita of the Silk Road economies in 2007**

Country/province	GDP (\$ billion)	GDP \$ per capita
Kazakhstan	104.85 <sup>a</sup>	6,773 <sup>a</sup>
Kyrgyzstan	3.74 <sup>a</sup>	715 <sup>a</sup>
Tajikistan	3.71 <sup>a</sup>	550 <sup>a</sup>
Uzbekistan	22.31 <sup>a</sup>	830 <sup>a</sup>
Gansu	33.31 <sup>b</sup>	1,510 <sup>c</sup>
Ningxia Hui	13.01 <sup>b</sup>	2,204 <sup>c</sup>
Shaanxi	79.9 <sup>b</sup>	2,132 <sup>c</sup>
Xinjiang Uygur	51.49 <sup>b</sup>	2,460 <sup>c</sup>
<b>Silk Road</b>	<b>312.32</b>	<b>2,151</b>

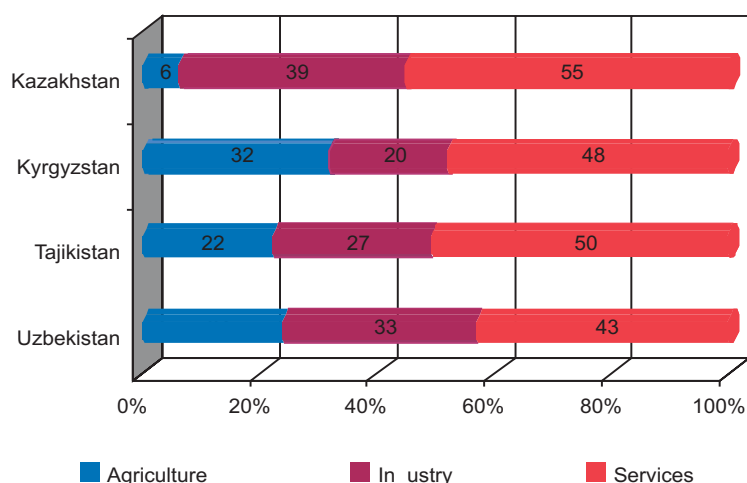
*Sources:*

<sup>a</sup> World Bank Development Indicators Online (<http://web.worldbank.org/>)

<sup>b</sup> <http://www.hktdc.com/info> (converted rate of 1 Chinese yuan = US\$0.146301)

<sup>c</sup> <http://www.starmass.com> (converted rate of 1 Chinese yuan = US\$0.146301)

**Figure 5. Structure of output (% of GDP) of the Silk Road economies in 2007**



*Source:* Based on data from ADB, *Key Indicators 2008*.

*Note:* Kyrgyz Republic data is for 2006.

## 3. Trade

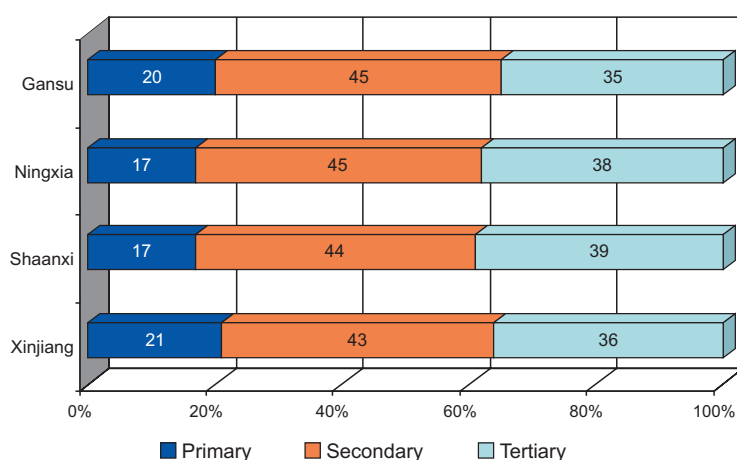
Trade was the foundation of the historical Silk Road and it is still important to the region. However, modern boundaries have complicated the flow of goods across the Silk Road because of the border customs inspections, tariffs, trade documentation, vehicle inspections, visas and other requirements. Many of these issues are being addressed by the World Trade Organization (WTO) to facilitate global trade, but of the Silk Road countries, only Kyrgyzstan (1998) and China (2001) are currently members of WTO. Kazakhstan, Tajikistan and Uzbekistan hold "observer" status at the WTO.

Table 4 shows the value of Silk Road countries' imports and exports from within the region and the ratio of each country's Silk Road imports/exports as a percentage of its total imports/exports. One notable finding from the table is that, despite China doubling its imports to/exports from the other Silk Road countries between 1999 and 2003, Silk Road trade is still less than half of 1 per cent of China's total trade. This suggests that China and the other Silk Road countries have not even begun to tap their enormous potential for intraregional trade. It also indicates that the Silk Road countries must overcome existing barriers to trade in the region. It is important to note that about 80 per cent of China's trade with the Silk Road is carried out solely with Kazakhstan.

As for the Central Asian countries and their levels of intra-Silk Road trade, the composition of intraregional trade as a percentage of total imports and exports rose gradually between 1999 and 2005.

As a region, the Silk Road countries have a small amount of intraregional trade compared to their total worldwide trade. Based on data from Table 4 above, intraregional exports of the five countries in 2005 were only 1.1 per cent of their total global exports. However, this

**Figure 6. GDP composition of Chinese Silk Road provinces, 2000**



Source: Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

Note: Primary industries here refers to agriculture, forestry, fisheries and animal husbandry.

figure was understated because of China's huge volume of exports, with only a small portion of it going to the other four Silk Road countries. Excluding China, intraregional exports for the four Central Asian countries were 11.67 per cent of total trade. Intraregional imports for the Silk Road countries in 2005 amounted to 1.29 per cent of their total imports, but excluding China, the four Central Asian countries' intraregional imports were 19.65 per cent of their total imports.

To put this into a comparative perspective of how intraregional trade within the Silk Road stacks up against various formalized regional cooperation

**Table 4. Trade within the Silk Road (millions US\$) and as percentage of total trade, 1999–2005**

	1999	2000	2001	2002	2003	2004	2005
<b>China</b>							
Exports to Silk Road (a)	626	755	461	858	1 979	2 948	5 151
Total exports (b)	220 964	279 561	299 409	365 395	485 003	655 827	836 888
Ratio (a)/(b)	0.3	0.3	0.2	0.2	0.4	0.4	0.6
Imports from Silk Road (a)	695	966	1 016	1 444	2 008	2 431	3 151
Total imports (b)	190 323	250 688	271 325	328 013	448 924	606 543	712 090
Ratio (a)/(b)	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>Kazakhstan</b>							
Exports to Silk Road (a)	645	919	958	1 279	2 023	2 527	3 276
Total exports (b)	7 164	10 420	10 231	11 624	14 990	22 537	30 589
Ratio (a)/(b)	9	9	9	11	13	11	11
Imports from Silk Road (a)	202	257	288	435	676	2 513	4 256
Total imports (b)	6 768	8 852	10 436	11 404	13 135	18 767	25 492
Ratio (a)/(b)	3	3	3	4	5	13	17
<b>Kyrgyzstan</b>							
Exports to Silk Road (a)	126	174	113	116	116	204	231
Total exports (b)	527	573	560	636	726	941	953
Ratio (a)/(b)	24	30	20	18	16	22	24
Imports from Silk Road (a)	164	171	199	247	286	766	1 176
Total imports (b)	712	652	565	696	806	1 134	1 420
Ratio (a)/(b)	23	26	35	35	35	68	83
<b>Tajikistan</b>							
Exports to Silk Road (a)	191	110	92	82	75	95	127
Total exports (b)	698	804	714	768	827	1 211	1 246
Ratio (a)/(b)	27	14	13	11	9	8	10
Imports from Silk Road (a)	353	287	246	217	256	360	455
Total imports (b)	714	846	842	928	1 040	1 451	1 683
Ratio (a)/(b)	49	34	29	23	25	25	27
<b>Uzbekistan</b>							
Exports to Silk Road (a)	377	312	278	279	420	779	839
Total exports (b)	3 099	3 383	3 201	2 985	3 775	4 837	5 529
Ratio (a)/(b)	12	9	9	9	11	16	15
Imports from Silk Road (a)	353	396	370	337	405	468	555
Total imports (b)	3 144	2 962	3 152	2 843	3 096	3 949	4 186
Ratio (a)/(b)	11	13	12	12	13	12	13

Sources: UNCTAD calculations, based on International Monetary Fund (IMF), Direction of Trade Statistics, 1997 and 2006; and World Bank, World Development Indicators Online (for 2004–2005 China includes Hong Kong, China).

arrangements that have some form of a free trade agreement amongst the members, Table 5 displays the results of intraregional trade in the European Union (EU), the North American Free Trade Agreement (NAFTA), the Association of South-East Asian Nations (ASEAN) and others.

**Table 5. Comparison of regional arrangements in intraregional trade**

	Percentage of global exports that are intraregional exports			Percentage of global exports that are intraregional imports		
	1995	2000	2005	1995	2000	2005
EU (25)	..	67.5	66.8	..	64.1	64.6
NAFTA (3)	46.0	55.6	55.8	37.7	39.6	34.5
ASEAN (10)	25.5	24.0	24.9	18.8	23.5	24.3
MERCOSUR (4)	20.5	21.0	12.9	18.1	19.7	19.7
ANDEAN (5)	8.6	7.7	8.7	6.7	8.8	10.2
<b>Central Asia (4)</b>	..	..	<b>11.67</b>	..	..	<b>19.65</b>
<b>Silk Road (5)</b>	..	..	<b>1.10</b>	..	..	<b>1.29</b>

Sources: World Trade Organization, International Trade Statistics 2006, except for Central Asia and Silk Road rows, Central Asia and Silk Road figures calculated from Table 4 above.

Note: The number in parentheses ( ) indicates the number of countries involved.

Breaking down major trading partners by country/province also reveals that there is still scope for expanded intraregional trade, as many of the top five trade partners are rather distant countries (see Table 6 - Table 10). However, as the hard and soft infrastructure resources are gradually put into place, intraregional trade should expand significantly in the near future.

**Table 6. Kazakhstan's top merchandise trade partners, 2007**

Country	% of total export value	Country	% of total import value
EU (27)	45.2	Russian Federation	38.3
Switzerland	17.6	EU (25)	26.9
Russian Federation	9.8	China	8.1
China	9.4	United States	4.7
Iran, Islamic Rep. of	5.4	Ukraine	4.1

Source: World Trade Organization online database, *Country profiles section* (stat.wto.org)

**Table 7. Kyrgyzstan's top merchandise trade partners, 2007**

Country	% of total export value	Country	% of total import value
Russian Federation	20.7	Russian Federation	40.5
Switzerland	19.9	China	14.7
Kazakhstan	18.0	Kazakhstan	12.9
Afghanistan	10.4	EU(27)	9.4
Uzbekistan	7.6	Uzbekistan	5.0

Source: World Trade Organization online database, *Country profiles section* (stat.wto.org)

**Table 8. Tajikistan's top merchandise trade partners, 2007**

Country	% of total export value	Country	% of total import value
Russian Federation	37.4	Uzbekistan	28.8
EU (27)	35.3	Russian Federation	16.2
Uzbekistan	14.1	Ukraine	13.1
Switzerland	10.4	Kazakhstan	12.8
Kazakhstan	0.8	EU (27)	12.8

Source: World Trade Organization online database, *Country profiles section* (stat.wto.org)

**Table 9. Uzbekistan's top merchandise trade partners, 2008**

Country	% of total export value	Country	% of total import value
Russian Federation	17.1	Russian Federation	26.5
Switzerland	8.9	Korea, Rep. of	12.9
Ukraine	8.4	Kazakhstan	9.4
Turkey	4.6	China	7.8
Iran, Islamic Rep. of	4.6	Ukraine	5.8

Source: State Committee on Statistics of Uzbekistan (Uzbekistan's top merchandise trade partners were not included in the WTO statistical database.)



**Table 10. Major trade partners of the Chinese Silk Road provinces, 2000**

Province	Top export markets	Top import markets
Gansu	Hong Kong (China), Macao (China), Japan and Western Europe	United States, Japan and Australia
Ningxia Hui	Hong Kong (China), Japan and France	Hong Kong (China), United States and Taiwan Province of China
Shaanxi	European Union, Hong Kong (China) and Japan	Hong Kong (China), Japan and Australia
Xinjiang Uygur	Hong Kong, Kazakhstan and Japan	Hong Kong (China), Kazakhstan and Kyrgyzstan

Source: Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

Note: The source does not explicitly rank the markets sequentially in terms of the leading market.

#### 4. Trade arrangements

The Silk Road countries do not have a regional free trade agreement, but they have several bilateral trade agreements (BTAs) with each other that is gradually developing into a trade network for the region. The Commonwealth of Independent States (CIS), which includes the Central Asian countries, have signed or implemented several BTAs with each other, and China is vigorously pursuing BTAs as well.

Table 11 shows the BTAs between the CIS countries as of mid-2004. Another important set of trade arrangements is the 10-year Partnership and Cooperation Agreements (PCAs) that most CIS members have with the EU. Under these agreements, most-favoured nation (MFN) status is given to one another with respect to tariffs and other measures, such as elimination of quantitative restrictions. These agreements serve as important gateways for Silk Road goods further abroad on the Eurasian continent.

**Table 11. Bilateral trade agreements between CIS members**

	Arm	Aze	Bel	Geo	Kaz	Kyr	Mol	Rus	Taj	Tur	Ukr	Uzb
Armenia				applied		applied	applied	applied	applied		applied	
Azerbaijan				applied			applied	signed			signed	
Belarus							applied	applied			signed	
Georgia	applied	applied			applied		signed	applied		applied	applied	signed
Kazakhstan				applied		applied	applied	signed	signed		signed	
Kyrgyzstan	applied				applied		applied	applied			applied	applied
Republic of Moldova	applied	applied	applied	signed	applied	applied		applied		applied	applied	applied
Russian Federation	applied	signed	applied	applied	signed	applied	applied		signed	signed	signed	signed
Tajikistan	applied				signed			signed				
Turkmenistan				applied			applied	signed			signed	
Ukraine	applied	signed	signed	applied	signed	applied	applied	signed		signed		
Uzbekistan				signed		applied	applied	signed				

Source: Trade and Investment Division, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), *Experiences with Regionalism and Bilateralism in Asia and the Pacific with Focus on Central Asia*, paper for the International Conference on Strengthening Regional Cooperation for Managing Globalization, Moscow, September 2005.

Original source: TACIS (2001), updated by the United Nations Economic Commission for Europe (UNECE) secretariat.

The Economic Cooperation Organization (ECO) also has a trade agreement, the ECO Trade Agreement (ECOTA), which has had limited results to date but does offer potential trade opportunities for the Central Asian countries beyond the CIS, including the markets of the Islamic Republic of Iran, Pakistan and Turkey, all of which are all members of ECO.

China has a partial bilateral trade agreement with Thailand, and it signed a free trade agreement with ASEAN to establish free trade with the original six ASEAN members by 2010 and the remaining members by 2015. These may serve as models for the Central Asian Silk Road countries. China concluded BTAs with Pakistan and Chile, and is currently negotiating BTAs with several other countries.

## 5. Legal and regulatory framework for business

The Central Asian countries have made progress with numerous legal reforms since the early 1990s, such as new commercial legislation, but the implementation and enforcement of the legal and regulatory frameworks and the governing institutions upholding them have not always kept pace. Bureaucratic red tape for businesses has been reduced and continues to be addressed through regional trade facilitation programmes, bilateral agreements and unilateral simplification of procedures, but obstacles and delays are still common and increase transaction costs for firms. Gradual improvements are being made in areas such as investor protection and corporate governance standards, and in company, securities and bankruptcy laws, but as a whole Central Asia does not measure up to the standards of the new members of the European Union or the Baltic States.

The Chinese Silk Road provinces are also making adjustments in response to the new economic realities in the global marketplace. Presently, their business legal and regulatory frameworks, along with the local government institutions implementing them, are not as ready for the requirements of international business as are China's eastern provinces. The Silk Road provincial and autonomous regional Governments are introducing local economic policies and regulations that are in line with national economic reforms, Beijing's "Great Western Development Strategy" (2000), its "Go West" campaign, and other western development plans and policies.

One of the key problems in much of the Silk Road is the implementation and enforcement of laws. The judicial systems in the region are not all independent from the executive branch, are often inconsistent in their application and interpretation of laws, and some do not operate in a transparent manner. An additional problem in certain countries is that laws and regulations are not openly published, and thus people and businesses are often not aware of their rights and responsibilities.<sup>17</sup>

The investment climate and laws are discussed in further detail in the next section. It is important for potential investors to bear in mind that the business legal and regulatory frameworks in the Silk Road are rather young and have not fully broken away from the legacy of the past. Gaps exist in legislation, changes will occur in the legal and regulatory frameworks, gray areas persist in interpreting laws and regulations, and all of this is part of the Silk Road's re-emergence into the modern world economy.

## B. The investment climate along the Silk Road

### 1. The legal framework for investment

The Silk Road countries have enacted various laws and decrees pertaining to investment in general and, in some cases, foreign investment in particular. In several of the Silk Road countries, the body of law related to investment is still evolving, and legislative and regulatory changes occur occasionally in response to changing circumstances and attempts to create more favourable investment conditions.

The key investment-related laws in China are "Law of the People's Republic of China on Chinese - Foreign Equity Joint Ventures," "Law of the People's Republic of China on Chinese - Foreign Contractual Joint Ventures," "Law of the People's Republic of China on Chinese - Foreign Cooperative Joint Ventures," and "Law of the People's Republic of China on Wholly Foreign-Owned Enterprises". However, there are several other laws and provisions on taxation, liquidation and other matters exclusively for foreign enterprises. Foreign investors can establish joint-equity ventures, contractual ventures and wholly foreign-owned enterprises. China provides various tax incentives and concessions to investors, depending on the total amount invested, technical output, potential for export, types of technology and other determinants. Investors face some restrictions with foreign currency exchange in China. Current account items do not require prior approval of the State Administration

<sup>17</sup> Embassy of the United States of America, Dushanbe, Tajikistan, Tajikistan's Investment Climate Report, October, 2003 (<http://usembassy.state.gov/dushanbe>).

## Box 2.

## Doing Business Report by the World Bank, 2009

The following information is extracted from the World Bank's recently published "Doing Business Report, 2009" which provides a quantitative measure of regulations for starting a business, dealing with construction permits, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contract and closing a business, as they apply to domestic small and medium-size enterprises. The ease of doing business index ranks 181 economies (1st rank being the best). A copy can be obtained at:

[http://www.doingbusiness.org/Documents/FullReport/2009/DB\\_2009\\_English.pdf](http://www.doingbusiness.org/Documents/FullReport/2009/DB_2009_English.pdf)

It should be noted that Kyrgyzstan's recent reform efforts in certain areas received high marks in the guide.

KAZAKHSTAN	
Ease of doing business (rank)	70
Starting a business (rank)	78
Procedures (number)	8
Time (days)	21
Cost (% of income per capita)	5.2
Minimum capital (% of income per capita)	15.9
Protecting investors (rank)	53
KYRGYZSTAN	
Ease of doing business (rank)	68
Starting a business (rank)	31
Procedures (number)	4
Time (days)	15
Cost (% of income per capita)	7.4
Minimum capital (% of income per capita)	0.4
Protecting investors (rank)	11
UZBEKISTAN	
Ease of doing business (rank)	138
Starting a business (rank)	70
Procedures (number)	7
Time (days)	15
Cost (% of income per capita)	10.3
Minimum capital (% of income per capita)	17.7
Protecting investors (rank)	113
TAJIKISTAN	
Ease of doing business (rank)	159
Starting a business (rank)	168
Procedures (number)	13
Time (days)	49
Cost (% of income per capita)	27.6
Minimum capital (% of income per capita)	216.8
Protecting investors (rank)	150
CHINA	
Ease of doing business (rank)	83
Starting a business (rank)	151
Procedures (number)	14
Time (days)	40
Cost (% of income per capita)	8.4
Minimum capital (% of income per capita)	158.1
Protecting investors (rank)	88

of Foreign Exchange (SAFE), whereas capital account items do. Also, foreign enterprises receiving foreign currency from payments for exports must sell the currency to authorized banks and can retain only a pre-authorized amount of foreign currency.<sup>18</sup>

Kazakhstan's constitution protects private property and the freedom of entrepreneurship. The main investment legislation is the "Law on Investments", enacted on 8 January 2003. The law confers equal treatment and rights to foreign and domestic investors. It guarantees legal protection for investors, guarantees investors the right to use their income at their discretion, provides rights for compensation at full market value in case of nationalization, and sets out procedures and conditions for granting investment preferences. The current law does not specify any minimal size of investment. It also covers issues pertaining to small and medium enterprises investing in priority sectors. Investors can use their profits (after tax and compulsory payments) at their own discretion and open foreign currency accounts in Kazakh banks. Dispute settlements are expected to be handled by negotiation, and the Inter-Departmental Commission to Consider Applications by Foreign Investors is one existing mechanism. Other avenues include invoking international treaties and Kazakhstan legislative acts in Kazakhstan courts. The law excludes investment matters, which are subject to other laws of Kazakhstan. Investment in gas and oil sectors in the banking and insurance industries are controlled by the respective industry-specific laws. In 2005, an independent assessment confirmed the conformity of Kazakhstan's investment legislation to the WTO Agreement on Trade Related Investment Measures (TRIMs) norms. Kazakhstan is a member of the International Monetary Fund (IMF), but due to the currency crises in the mid-to-late 1990s, some currency exchange restrictions remain in place. These relate mainly to using authorized banks and emergency powers of the President or National Bank of Kazakhstan to tighten exchange controls.

Kyrgyzstan's "Law on Investments" of 2003 contains the main principles of the country's investment policy and governs the relationship between investors and State authorities. Investors are guaranteed the right to compensation if the Government must seize assets. The law also provides for equal treatment of domestic and foreign investors. Several forms of enterprises are permitted in Kyrgyzstan: individual entrepreneurship, partnership, limited partnership, limited liability company, company with additional responsibility, joint-stock company, representative office and branch office. Foreign investors may operate as wholly foreign-owned enterprises or enter into partnerships. Under the Law on Investments, investors can opt to use international arbitration procedures for disputes with the State instead of using internal procedures. For disputes with a businessperson, judicial bodies including an arbitration court are used. Kyrgyzstan has a completely convertible currency, and there are no restrictions on transfer of foreign currency to or from abroad. Foreign currency can be bought and sold without restrictions.

In Tajikistan, the current law on foreign investment ("Law Concerning Foreign Investments") allows for 100 per cent foreign ownership in a company except for certain strategic SOEs. Two other important pieces of legislation are the "Law on Joint-Stock Companies" and the "Law Concerning Limited Liability Companies". Joint-stock companies (i.e. mix of State-owned and private) are given certain tax breaks that completely private companies do not receive. Tajikistan offers various incentives to investors for establishing new production companies, and one privilege that can be granted is a profit tax holiday of two to five years. Foreign investors setting up in special economic zones (SEZs) can qualify for reduced tax rates, reduced fees on land and natural resources, a special customs regime, and easier entry and exit procedures for foreign citizens.<sup>19</sup> Foreigners are not permitted to own land in Tajikistan. The "Law Concerning Foreign Investments" defines the conditions in which the State can expropriate property and provide compensation. However, there have been no recent cases of expropriation in Tajikistan.<sup>20</sup> Currency is convertible, but some restrictions apply on exporting currency.

Uzbekistan has several laws applying to foreign investment. These include the "Law on Foreign Investments" (April 1998), the "Law on Investment Activity" (December 1998), the

<sup>18</sup> PricewaterhouseCoopers, *The People's Republic of China: Tax Facts and Figures*, 2004.

<sup>19</sup> PricewaterhouseCoopers, *Doing Business in Tajikistan 2005* (www.pwc.com).

<sup>20</sup> Ibid.

“Law on Guarantees and Measures for Protection of Foreign Investors’ Rights” (April 1998), and the “Law on Protection of the Foreign Investors’ Rights on the Securities Market” (August 2001). A foreign-invested enterprise in Uzbekistan is defined as one in which the foreign capital constitutes at least 30 per cent of the shares or charter funds of the enterprise. Foreign investors can select from a wide variety of structures to set up their businesses, including limited liability societies, joint-stock societies, partnerships, subsidiaries, branches and representative offices. Wholly foreign-owned enterprises are permitted in Uzbekistan. The foreign investment laws do not permit the State to confiscate investors’ property unless compensation is given. The Uzbek currency became convertible in 2003, but several restrictions remain in place. For instance, all enterprises except small enterprises are required to convert 50 per cent of their hard currency revenue into Uzbek soum at designated banks. Also, foreigners may repatriate hard currency up to the amount that they declared upon their arrival or that which was withdrawn in United States dollars from an Uzbek bank account.<sup>21</sup> Moreover, non-resident legal entities can transfer abroad income received from investments.

**Table 12. Highlights of investment frameworks in the Silk Road**

	China	Kazakhstan <sup>a</sup>	Kyrgyzstan	Tajikistan	Uzbekistan
Allows 100% foreign ownership	Yes	Yes	Yes	Yes, except in certain SOEs	Yes
Minimum investment for foreign enterprise	\$30,000 up to approximately \$250,000, depending on the sector and type of organizational form	None	None	None	\$150,000 (\$75,000 in Karakalpakstan and Khorezm)
Minimum shareholding required for foreign investor in partnership with local	25% in joint ventures if tax incentives desired	None	None, except for joint-stock company (50%)	None	30%
Tax holiday (in years)	2-year exemption and 3-year reduction by half in western region	Up to 10 for corporate income tax, up to 5 for property tax and land tax	None	Up to 5	Up to 3
Foreign ownership of land	No	Yes	No	No	Limited

<sup>a</sup> According to “Law on Investments”, 8 January 2003; *Land Code of RK*, 20 June 2003 and amendments.

## 2. Investment treaties

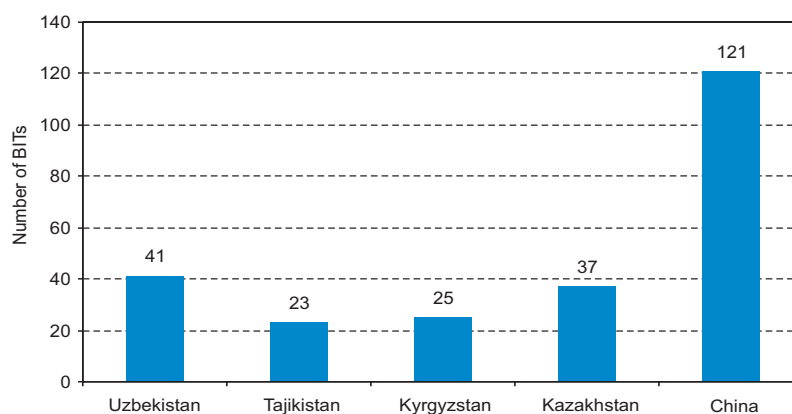
The Silk Road countries have pursued investment agreements with other countries in order to facilitate greater levels of foreign investment. There are two regional level investment agreements involving the Central Asian countries. First is the “Agreement on Promotion and Protection of Investment” for members of the Economic Cooperation Organization (ECO). This agreement aims to avoid conflicting national investment policies of ECO member States by presenting the ECO region as a single market. The second regional agreement is the 2004 Trade and Investment Framework Agreement (TIFA) between the United States and five Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. TIFA established a United States-Central Asia Council on Trade and Investment that focuses on several issues, including intellectual property, labour, environmental issues and enhancing the participation of small and medium-sized enterprises in trade and investment. The council also aims to identify and remove impediments to trade and investment between the United States and the Central Asian member countries.

At the bilateral level, each Silk Road country has concluded several bilateral investment treaties (BITs).<sup>22</sup> The number of agreements in figure 7 represents how many have been signed. Most, but not all, of the agreements are in effect, except for those involving Tajikistan (10 of 23 were signed but not effective as of mid-2008).

<sup>21</sup> PricewaterhouseCoopers, *Uzbekistan: A Business and Investment Guide*, July 2005.

<sup>22</sup> To see the full list of BITs concluded by the Silk Road and all other countries, see UNCTAD’s website at [www.unctad.org/Templates/Page.asp?intItemID=2344&lang=1](http://www.unctad.org/Templates/Page.asp?intItemID=2344&lang=1).

Figure 7. BITs concluded by Silk Road countries (as of June, 2008)



Source: UNCTAD, *International Investment Agreements database*, UNCTAD website (<http://www.unctad.org/Templates/Page.asp?intltemID=2344&lang=1>)

Table 13. BITs among Silk Road countries (as of June, 2008)

	China	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan
China		Effective 1994	Effective 1995	Effective 1994	Effective 1994
Kazakhstan	Effective 1994		Signed 1999/ not effective		Effective 1997
Kyrgyzstan	Effective 1995	Signed 1999/ not effective		Signed in 2000, but not effective	Effective 1997
Tajikistan	Effective 1994		Signed 2000/ not effective		
Uzbekistan	Effective 1994	Effective 1997	Effective 1997		

Source: UNCTAD, *International Investment Agreements database*, UNCTAD website

As illustrated in Table 13, most of the Silk Road countries finalized BITs with each other. Clearly, the Silk Road countries will need to complete all the possible country pairings with BITs and ensure all of the BITs are put into effect if the region wants to ensure the maximum flow of intraregional investment.

### 3. Double taxation agreements

Kazakhstan has withholding tax rates treaties with 35 countries, including the other four Silk Road countries. The treaties offer lower withholding rates on dividends, interest and royalties. Kyrgyzstan signed 19 double tax treaties with other countries. The other four Silk Road countries are included in Kyrgyzstan's list of treaties. Uzbekistan has signed 43 double tax treaties so far, but Tajikistan is the only Silk Road country with which Uzbekistan has not entered into an agreement. Similar to Kazakhstan, Uzbekistan's double tax treaties offer favourable tax rates on dividends, interest and royalties. China signed treaties on taxation with Kazakhstan, Kyrgyzstan and Uzbekistan.

### 4. Foreign investment

Attracting foreign investment is a high priority in all parts of the Silk Road. The Governments have all revised policies and laws over the past several years to improve investment climates and open their economies to foreign investors, although selected sectors are still restricted in some of the Silk Road countries.

Table 14 shows the amounts of FDI inflows into the Silk Road economies between 2002 and 2007.<sup>23</sup> The Silk Road has an abundance of natural resources, and currently this is the most attractive feature for investors. Kazakhstan has been the most successful among

<sup>23</sup> See Section B.1 for an analysis of the likely impacts of the global financial crisis on foreign direct investment along the Silk Road.

the Silk Road economies at attracting foreign investment, due in large part to its extensive reserves of oil and natural gas.

**Table 14. FDI inflows into the Silk Road**  
(in million \$)

Country/province	2002	2003	2004	2005	2006	2007
Kazakhstan <sup>a</sup>	2,590	2,092	4,157	1,971	6,224	10,259
Kyrgyzstan <sup>a</sup>	5	46	175	43	182	208
Tajikistan <sup>a</sup>	36	14	272	54	339	401
Uzbekistan <sup>a</sup>	65	70	187	88	195	262
Gansu	61 <sup>b</sup>	23 <sup>b</sup>	35 <sup>d</sup>	..	..	..
Ningxia Hui	22 <sup>b</sup>	17 <sup>b</sup>	130 <sup>d</sup>	..	..	..
Shaanxi	360 <sup>b</sup>	332 <sup>b</sup>	527 <sup>c</sup>	..	..	..
Xinjiang Uygur	19 <sup>b</sup>	15 <sup>b</sup>	46 <sup>d</sup>	..	..	..
Total	3,158	2,609	5,529	2,156 <sup>e</sup>	6,940 <sup>e</sup>	11,130 <sup>e</sup>

*Sources:*

<sup>a</sup> UNCTAD WIR (2008).

<sup>b</sup> Invest in China website ([www.fdi.gov.cn](http://www.fdi.gov.cn)).

<sup>c</sup> Provided by China's Investment Promotion Agency of the Ministry of Commerce.

<sup>d</sup> China's official gateway website (<http://www.china.org.cn/english/>).

<sup>e</sup> Does not include the four Chinese Silk Road provinces.

The Silk Road overall attracted \$5,5 billion of FDI in 2004 and \$11 billion<sup>24</sup> in 2007. Although these figures are comparatively low, they are an improvement over 2000, when the region captured \$1.77 billion of FDI for a per capita inflow of only \$12.94. For comparative purposes, China's per capita FDI inflow was \$32.29 in 2000, \$55.50 in 2005, and \$62.87 in 2007. In the Russian Federation, the figures were \$18.55 per capita in 2000, \$102.02 in 2005, and \$366.39 in 2007. Driven largely by FDI into Kazakhstan, FDI into the Central Asian Silk Road countries jumped to almost \$7 billion in 2006 and just over \$11 billion in 2007.

The origin of FDI in the Silk Road economies varies greatly,<sup>25</sup> but it is useful to provide an indication of the kinds of companies that are investing along the Silk Road. In Kazakhstan, FDI has been dominated by investors from developed countries – specifically the United States (trade and finance), the United Kingdom, the Netherlands (in mining and finance) and Canada (mining). Russian Federation, Chinese, Bulgarian, and Turkish investors have also been active in recent years, especially as the oil and gas sector has expanded greatly. In Uzbekistan, the largest multinationals were from Turkey (finance), the Russian Federation (trade and industry), and United Kingdom (agro-industry). Lastly, in Kyrgyzstan with much smaller investors, there have been investments by Canadian firms (in mining and petroleum), by a German firm (in agro-industry), and Turkish and Russian firms (in finance).

## 5. Key investment sectors

The Silk Road is by no means a homogenous investment destination. There is as much diversity in sector opportunities across the individual economies as there is in the ethnic populations, but there are also extensive prospects for combining factors of production across the Silk Road for regional investment opportunities in selected sectors (see chapter 3). The region's rich natural resources have attracted a great deal of the foreign investment to date for extracting and processing these resources. At the same time, light industries (mostly related to processing), trade and retail, energy and real estate have also brought in foreign investors.

In Kazakhstan, the sectors attracting the most investment between 1993 and 2003 were mining; processing industries; and real estate, leasing and services. Today, in pursuit of the Industrial Development and Innovation Strategy for 2003–2015, the following clusters were identified as priorities for investment:<sup>26</sup>

<sup>24</sup> Does not include the four Chinese Silk Road provinces.

<sup>25</sup> Sourced from UNCTAD's FDI in brief databases on Kazakhstan, Kyrgyzstan, and Uzbekistan, with information largely from 2002.

<sup>26</sup> Kazinvest website ([www.kazinvest.kz](http://www.kazinvest.kz)).

- Metallurgy;
- Oil and gas machinery;
- Agriculture and food processing;
- Construction materials;
- Construction;
- Textiles;
- Tourism; and
- Transport and logistics.

Most of Kyrgyzstan's FDI has gone into the food processing industry, mining, trade and retail, and the financial and real estate sector. The current priority sectors for investment are energy (electric power), mining, agriculture, and recreational and tourist complexes.<sup>27</sup>

Tajikistan has attracted most of its FDI in hydropower and mining (particularly aluminium and its processing). Tajikistan's Government does not have a policy of prioritizing sectors for investment; instead, it encourages foreign investment in all areas of the economy.

The leading sectors for FDI in Uzbekistan are the mining, tobacco, automotive, oil and gas sectors.<sup>28</sup> The Uzbekistan Government has a broader focus in mind for FDI and has therefore prioritized the following sectors:<sup>29</sup>

- Light industries, including silk;
- Construction materials production;
- Automobile industry;
- Agriculture processing;
- Chemical industry;
- Exploration of mineral deposits;
- Tourism; and
- Electrotechnical industry.

The Gansu Provincial Government has been targeting more high technology sectors for foreign investment since the release of its list of priority sectors and products in December 2004. The list contains essentially all higher-end technology rather than natural resource extraction or processing sectors. Even the shortlist of forestry and plant items is based on bioengineering. Among the sectors and subsectors on the targeted list are:<sup>30</sup>

- Electronic information;
- Photomechanical and photoelectrical integration;
- Biological engineering and advanced medical technology;
- High-property compound materials;
- New energy resources and energy-saving technology; and
- Earth science and space technology.

The Government of Ningxia Hui Autonomous Region has not explicitly specified any priority sectors for foreign investment. The 2004 policies on foreign investment (Decree No. 61) do, however, make reference to "advantageous industries" and "enterprises encouraged by the State" that may be given certain tax advantages or other indirect incentives.

Shaanxi Province has been successful at attracting FDI in manufacturing, real estate, and hotels and restaurants. The priority industries for foreign investment in Shaanxi are infrastructure, chemicals, pharmaceuticals, metallurgy, machinery, electronics, light industry, foodstuff and building materials.<sup>31</sup>

<sup>27</sup> Ministry of Industry, Trade, and Tourism of Kyrgyzstan, *Investment Opportunities of Kyrgyzstan*, 2005.

<sup>28</sup> Kakharov J (2005), *Uzbekistan: New Realities for US Business*, Business Information Service for the Newly Independent States' presentation, 2005 (<http://www.bisnis.doc.gov/bisnis/bisdoc/Uzbekistan%20Presentation%202005.ppt>).

<sup>29</sup> Ministry of Foreign Economic Relations, Investments and Trade and the Chamber of Commerce and Industry of Uzbekistan (2006), *Investment Climate of the Republic of Uzbekistan and Projects to be Jointly Implemented with Foreign Investors* (CD-ROM), February.

<sup>30</sup> For the full list of sectors and product items, see ([http://www.gansu.gov.cn/en/West\\_Detail.asp?ID=189](http://www.gansu.gov.cn/en/West_Detail.asp?ID=189)).

<sup>31</sup> (<http://www.china.org.cn/e-xibu/2JI/3JI/shanxi/shanxi-ban.htm>).



Xinjiang Uygur Autonomous Region has an extensive list of priority sectors for foreign investment.<sup>32</sup> Among these are:

- Agriculture, forestry and animal husbandry (downstream processing);
- Water conservancy and environmental pollution treatment technology;
- Communications;
- Light industry products and local special foodstuffs;
- Petroleum chemical engineering, fine chemical engineering and agricultural chemical engineering;
- Non-ferrous metals and minerals;
- Construction materials and energy-saving materials;
- Genetic engineering;
- Information technology; and
- Tourism.

## 6. Special economic zones (SEZs)

SEZs are often used to attract investment by offering favourable conditions and special privileges not found in other parts of the country. Governments in transitional economies frequently establish SEZs to introduce liberalized economic and investment policies on a limited scale before attempting to implement them nationwide. This allows the Governments to introduce policy changes in a more predictable and controlled manner because of the experience they gain from SEZs.

The Silk Road economies have established SEZs rather sparingly, although the Chinese provinces tend to develop more of them than the Central Asian countries. Xinjiang has in place border economic cooperation zones at Yining, Buole and Tacheng, all of which are along the border with Kazakhstan. High-tech development zones in the Chinese Silk Road provinces are located at the following locations:

- Xinjiang: Urumqi;
- Gansu: Lanzhou; and
- Shaanxi: Xi'an, Baoji, Yangling Agricultural Demonstration Area.

Economic and technological development zones are located in Shihezi and Urumqi (Xinjiang), Yinchuan (Ningxia), and Xi'an (Shaanxi).

Kazakhstan has a 1999 decree entitled "About special economical zones in the Republic of Kazakhstan" that enables the President to establish SEZs. Astana-New City received SEZ status for 2002–2007. This includes a free customs regime and tax privileges. Two other SEZs are located in Aktau (the Aktau Sea Port) and Almaty (Park of Information Technology).

Kazakhstan and China agreed in 2004 to establish a free border trade zone located between the Yili Kazak Autonomous Prefecture, Xinjiang and Almaty, Kazakhstan. In 2005, the free trade zone "Maikapchagai-Zimunai" in Eastern Kazakhstan oblast started operating. In 2006, the international cross-border trade centre "Khorgos" opened. These two initiatives catalyzed trade and economic activities between Kazakhstan and China.

In 2008, Kazakhstan and Uzbekistan announced discussions to build a new free border trade zone for the two countries.

Kyrgyzstan has set up four free economic zones (FEZs) at Bishkek, Naryn, Karakol and Maimak. FEZs are regulated by the "Law on Free Economic Zones" and the "Regulation on Free Economic Zones". Goods entering and traded within the zones are duty free within Kyrgyzstan. Enterprises located in the FEZs receive accelerated registration, various tax exemptions and simplified customs procedures. Export goods manufactured in the FEZs qualify for exemptions in customs charges, quotas and licensing.<sup>33</sup>

<sup>32</sup> See: Xinjiang A.R., *The Industry Catalogue Directing Foreign Investment Encouraged* (<http://www.xjftec.gov.cn:7001/xjfdi/portalpubsys/pubsyservlet?articleID=000000028000f29b57de21&subjectID=0000000c000f29c394817&topicID=>).

<sup>33</sup> Ministry of Industry, Trade and Tourism (2005), *Investment Opportunities of Kyrgyzstan* (Bishkek).

Uzbekistan's "Law on Free Economic Zones" (1996) allows for the Parliament (under recommendation of the Cabinet) to establish FEZs in the form of zones of free trade, free industrial, free scientific-technical and other types of zones. The FEZs can receive special customs and currency regimes, and entities operating in the FEZs can qualify for tax privileges. No FEZs have been established yet in Uzbekistan, but the Keles FEZ north-west of Tashkent (near Kazakhstan) is expected to be the first one opened. This FEZ is planned to be an open-joint stock corporation with majority control held by the private sector.<sup>34</sup>

In December 2008, Uzbekistan's President issued a decree to establish a Free Industrial Economic Zone in Navoi.

## C. Infrastructure

The infrastructure networks across the Silk Road are in a state of flux. The Central Asian countries previously had a unified infrastructure system under the Soviet Union, which for the most part well served its intended purposes, which were to move inputs around the specialized areas for processing and production, and eventually supply the Russian Federation with its necessary resources and goods. However, following independence, these infrastructure networks fell into disrepair, due largely to a lack of financing, and proved less strategically oriented for the new realities of establishing a globally competitive export economy. Thus, while a foundation for infrastructure networks already exists throughout much of Central Asia, the existing infrastructure is in need of rehabilitation, integration and expansion.

The infrastructure in the Chinese Silk Road provinces tends to be newer and more modern, but parts of the Chinese Silk Road, especially in Xinjiang, are extremely remote and still lacking adequate connections to infrastructure networks.

### 1. Roads and highways

One of the key highway networks across the Silk Road and throughout Asia is the Asian Highway, a project run by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) since 1959.<sup>35</sup> The Asian Highway is a regional network of major international roads crossing the entire continent. The Asian Highway has focused on maximizing the use of and upgrading existing highways in the 32 member countries and constructing new highways when necessary to complete linkages within the network.

Figure 8 to Figure 12 show the Silk Road countries' Asian Highway routes. Of the Silk Road countries, only China has a significant portion of its cross-country highway network still listed as "potential Asian Highway". China seemingly has a large gap in its Asian Highway routes between Xinjiang and the eastern provinces. As seen in Figure 8, for instance, route AH5 from Urumqi, Xinjiang to Shanghai is considered a potential Asian Highway Route. It should be noted that the highways are in place but do not constitute part of the Asian Highway network. The implications of this status are more on the soft infrastructure as opposed to the physical infrastructure, and this refers to the Asian Highway Agreement's provisions on highway numbering, sign posting, and common design standards. All of the other Silk Road countries have firm Asian Highway routes crossing most of the countries, but difficult terrain often constrains where highways have been constructed.

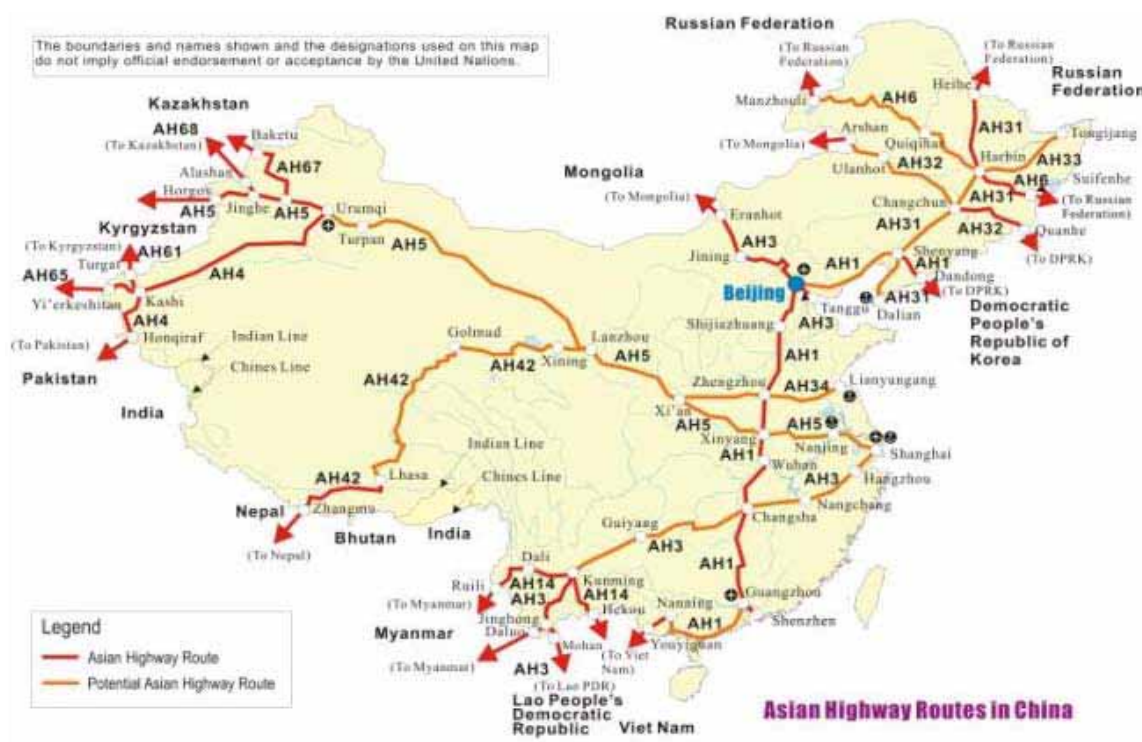
The maps show that many of the Silk Road borders have multiple points for Asian Highway crossings. Using Kazakhstan as an example, its Asian Highway network has extensive cross-border linkages with the Russian Federation and multiple connections with China and Uzbekistan. The other Silk Road countries typically have two Asian Highway border crossing points with each other. These multiple border crossing points present traders and transporters with a variety of options for moving goods within the region and to external markets.

With Central Asia's potential seen in part as a land bridge and transport corridor between China's prosperous east coast and Europe, much of the region's success will depend on the land transport infrastructure across the region, both in terms of the overall length and

<sup>34</sup> (<http://www.sogdiana.com/html/projects.html>).

<sup>35</sup> See: UNESCAP's website, the Asian Highway (<http://www.unescap.org/ttdw/index.asp>).

Figure 8. China's Asian Highway routes



Source: UNESCAP, *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM), 2004.

Figure 9. Kazakhstan's Asian Highway routes



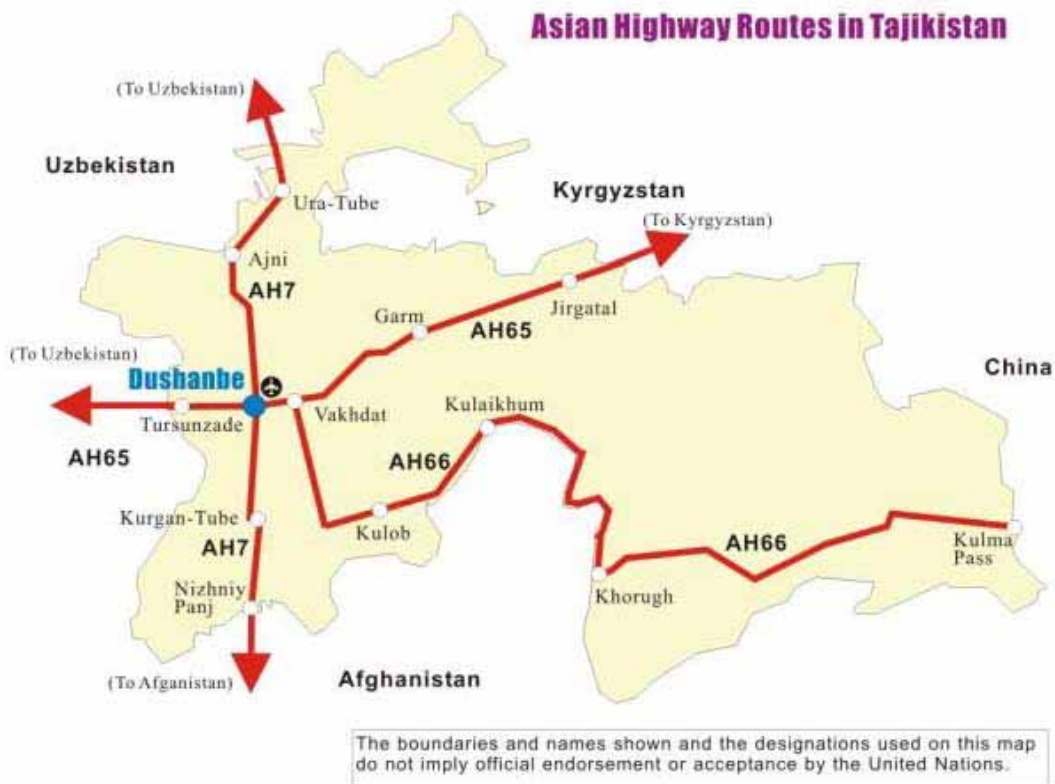
Source: UNESCAP, *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM), 2004.

Figure 10. The Kyrgyzstan's Asian Highway routes



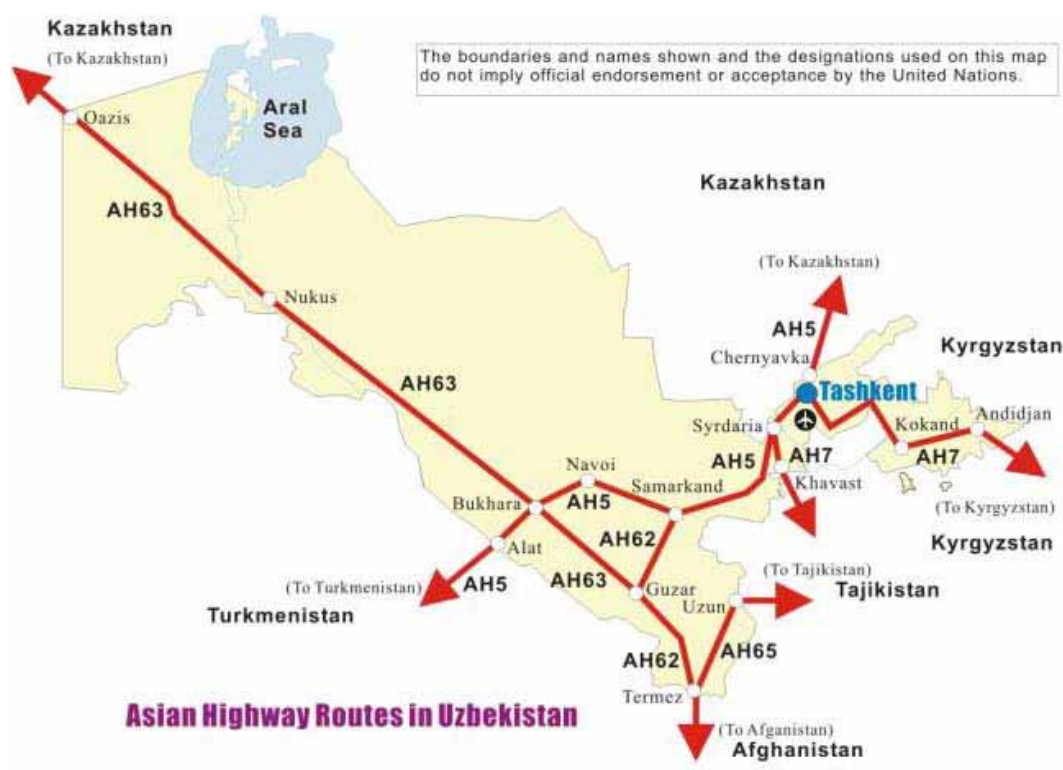
Source: UNESCAP, *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM), 2004.

Figure 11. Tajikistan's Asian Highway routes



Source: UNESCAP, *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM), 2004.

Figure 12. Uzbekistan's Asian Highway routes



Source: UNESCAP, *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM), 2004.

its quality. The Central Asian countries transport only a small amount of the total regional traffic by road as compared to rail, with only 20 per cent of imports into Central Asia coming by road and only 4 per cent of exports out of Central Asia going by road.<sup>36</sup> The relatively low use of roads for long-distance transport is a result of several factors, including (a) the lack of direct road connections to State capitals, production centres, and key markets in Central Asia; (b) differing regulations, policies and standards; and (c) inefficient border controls. However, the low use of roads also reflects the deteriorating conditions of the road infrastructure and the lack of finance to upgrade roads and further expand the networks. The actual lengths of the Asian Highway networks in each of the Silk Road countries are shown in Table 15, along with each country's total road length.

Table 15. Length of Asian Highway in Silk Road countries (2006)

	China	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan
Asian Highway route length (km)	26,181	12,856	1,695	1,925	2,966

Source: ([www.unescap.org/TTDW/common/tis/ah/status-atl.ep](http://www.unescap.org/TTDW/common/tis/ah/status-atl.ep))

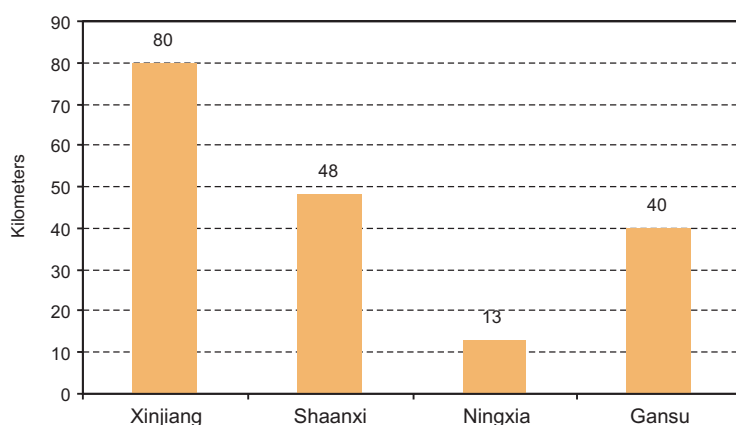
The Chinese Silk Road provinces have made excellent progress in road construction over the past decade and in linking more villages to main roads. The total lengths of roads in each Chinese Silk Road province are shown in Figure 13. The statistics for expanding the total length of roads in Xinjiang are especially impressive, from only 34,585 kilometres<sup>37</sup> of roads in 2000 to over 80,000 kilometres<sup>38</sup> in circa 2004. Yet there is still much road

<sup>36</sup> ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) member countries 2005–2007*, July.

<sup>37</sup> Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

<sup>38</sup> ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) member countries 2005–2007*, July.

**Figure 13. Lengths of roads in the Chinese Silk Road provinces**



Sources: Gansu ([www.gansu.gov.cn](http://www.gansu.gov.cn)); Ningxia: Xinhua News Agency, December 31, 2005, Ningxia Links up All Villages with Highways, (<http://www.china.org.cn/english/2005/Dec/153860.htm>); Shaanxi ([http://www.chinatrips.net/Shaanxi\\_speeds\\_up\\_road\\_construction\\_1936.htm](http://www.chinatrips.net/Shaanxi_speeds_up_road_construction_1936.htm)); Xinjiang: ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) member countries 2005–2007*, July.

Note: For Gansu, the figure is for 2004; Ningxia and Shaanxi figures are from 2005; and Xinjiang is from circa 2004.

**Table 16. Lengths of railways in the Silk Road**

Country/province/region	Kilometres
China	60,627 (2000-2003) <sup>a</sup>
Gansu	3,525 (2004) <sup>b</sup>
Ningxia	716 (2000) <sup>c</sup>
Shaanxi	3,500 (2005) <sup>d</sup>
Xinjiang	3,361 (2004) <sup>e</sup>
Kazakhstan	15,100 (2004) <sup>f</sup>
Kyrgyzstan	400 (2005) <sup>f</sup>
Tajikistan	950 (2004) <sup>f</sup>
Uzbekistan	4000 (2005) <sup>f</sup>

<sup>a</sup> World Bank, World Development Indicators (online edition), (<http://devdata.worldbank.org/wdi2005/Section5.htm>); Economic Cooperation Organization, (<http://www.ecosecretariat.org>)

<sup>b</sup> ([www.gansu.gov.cn](http://www.gansu.gov.cn)).

<sup>c</sup> Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

<sup>d</sup> ([www.chinatrips.net/Shaanxi\\_speeds\\_up\\_road\\_construction\\_1936.htm](http://www.chinatrips.net/Shaanxi_speeds_up_road_construction_1936.htm)).

<sup>e</sup> ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) member countries 2005–2007*, July.

<sup>f</sup> (<http://www.ecosecretariat.org>)

improvement to be done in Xinjiang and other parts of the Chinese Silk Road. Of Xinjiang's 80,000 kilometres of roads, the Asian Development Bank reports that only 428 kilometres are highways. Additionally, there are still vast expanses of territory, particularly in Xinjiang, that lack road infrastructure.

## 2. Railways

The railway network in the Central Asian countries is similar to the major road networks: it was designed principally with an orientation to Moscow. Another common feature is that the railways in Central Asia are badly in need of maintenance and upgrading, and plans to address this are considered long term because of the shortage of finance. However, some new lines have been constructed recently in

the region, particularly in Uzbekistan. Table 16 shows the lengths of rail systems in the Silk Road.

Railways are considered a top priority for infrastructure construction in western China because of the important contribution they make to economic development. The main foundation of the railway network in western China was formed between the 1950s and 1970s, and then further expanded during the 1980s and 1990s. One important difference in the rail infrastructure between China and the Central Asian countries is that China uses 1,435 mm gauge rails while Central Asia uses 1,520 mm. This results in break-of-gauge at cross-border linkages of the Silk Road rail systems linking Central Asia with China. Various techniques exist to overcome these discontinuities, but nonetheless they lead to interruptions in rail operations and additional stoppages and time delays to the movement of passengers and cargo.

The locomotive fleets and wagons in the Central Asian countries have been shrinking since the late 1990s, but those of China continue to grow.

## 3. Airports

The larger Central Asian Silk Road countries have several airports. Kazakhstan has 20 (12 international airports) and Uzbekistan has 24 (five international airports), which provide good coverage of the country by air routes. Kyrgyzstan has five airports (two international airports) and Tajikistan has only three airports (which are international), creating more dependence on land transport.

The main airports in western China include Xi'an (Shaanxi), Lanzhou (Gansu), and Urumqi (Xinjiang). Shaanxi's Xianyang Airport is the largest air hub in north-western China.

Xi'an is an important domestic air hub that bridges several cities from the western and central regions with the eastern region, and it has direct flights with Seoul, Republic of Korea, Bangkok, Thailand, Hong Kong and Tokyo, Japan. Urumqi has several domestic air routes in the north-western part of the country and with central and eastern China. In terms of international air routes, Urumqi has direct links with Moscow, Almaty, Bishkek, Tashkent and Islamabad. Xinjiang also has an airport at Kashi, near the border with Kyrgyzstan. Gansu is connected by air to over 35 cities in the country and with Hong Kong, China, Japan and Singapore.

#### 4. Transport of goods and people

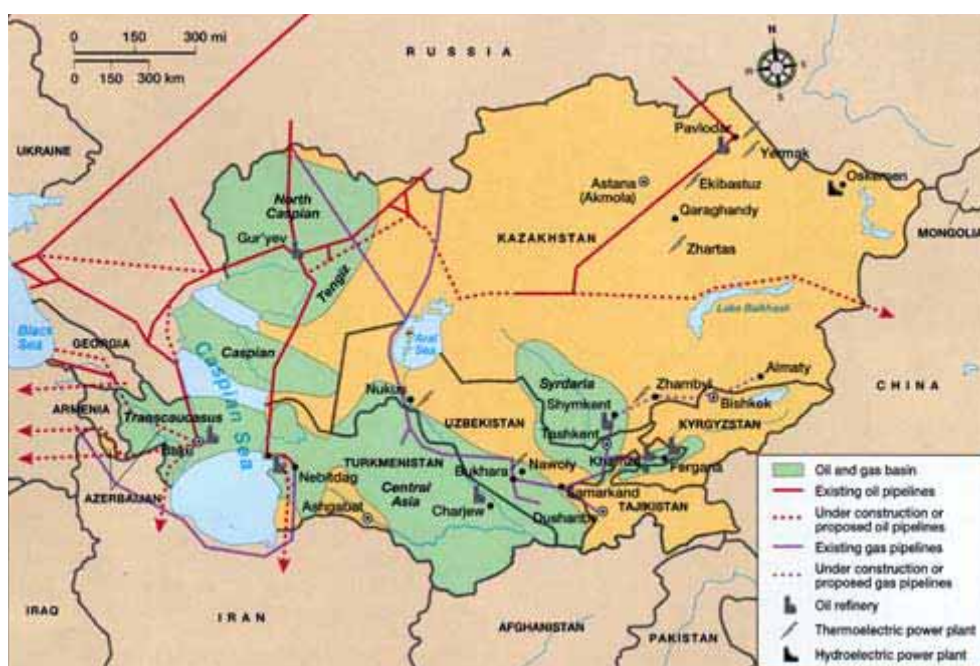
Shortages of physical infrastructure are not the only barrier to efficient transport in the Silk Road. The lack of unified regulations and policies, i.e. the “soft” side, is a major factor in moving goods and people across borders. Customs and inspections procedures, vehicle and product standards, and required documentation are not harmonized, and increase transport time and costs. Inefficient border procedures contribute to the relatively low levels of intraregional trade and, in some of the Silk Road countries, declining levels of cargo transportation by road, rail and/or air.

Rail freight tonnage in Central Asia increased for Central Asian republics in recent years but slightly declined for Uzbekistan.

#### 5. Energy

The oil and gas pipelines in Central Asia were primarily developed under the Soviet Union. Most of the pipelines in the Silk Road run through Kazakhstan, and with the exception of one recent addition, all of the oil pipelines in Kazakhstan connect with pipelines in the Russian Federation. Figure 14 shows the layout of oil and gas pipelines in Central Asia as of 2005, but the map shows the Kazakhstan-China oil pipeline as being under construction. Construction of the new international oil pipeline between Kazakhstan and China was completed in late 2005. In April, 2009, Kazakhstan and China announced a US\$10 billion oil for loan deal including a US\$5 billion loan from the Export-Import Bank of China.

Figure 14. Oil and gas pipelines in Central Asia.



Source: ([http://www.cnr.vt.edu/boyer/geog1014/TOPICS/124cent\\_as/c\\_asia.html](http://www.cnr.vt.edu/boyer/geog1014/TOPICS/124cent_as/c_asia.html))

The 1,000-km pipeline between Atasu in Kazakhstan and Alashankou in Xinjiang is the first Kazakhstan export oil pipeline that does not cross the Russian Federation. The pipeline became operational in July 2006.

The major gas pipelines in Central Asia originate in the southern part of the region and run northward through Kazakhstan and into the Russian Federation. Other routes run in a more west-easterly direction through Tajikistan and into Kyrgyzstan, and into south-eastern Kazakhstan.

Further east, China opened its West-East Gas Pipeline in January 2004. This 4,200-kilometre pipeline run by the State-owned Petro China cost \$24 billion to develop. The pipeline provides gas from the Tarim Basin in Xinjiang and the Changqing gas field in Shaanxi, and transports it to eastern China, ending in Shanghai. The West-East Gas Pipeline can deliver 12 billion cubic metres of natural gas per year. Currently, China is planning two additional gas pipelines, including a gas pipeline connecting the remote west of China with China's eastern cities, with an expected capacity of 20-30 billion cubic metres and which would source gas from Turkmenistan, Uzbekistan and Kazakhstan.<sup>39</sup>

The electric energy generation and transmission systems of Central Asia were developed under the Soviet Union as a regional grid. The energy transmission system brought together hydropower stations in Kyrgyzstan, Tajikistan, Kazakhstan and Uzbekistan with thermal power plants located next to coal mines and oil and gas fields in Turkmenistan, Kazakhstan and Uzbekistan. The transmission system in Central Asia under the Soviet Union stretched across vast territory to cover mines, towns and agricultural areas that required irrigation. In addition, an energy plant located in one republic was often designed to service parts of other republics. The result was "an irregular structure extending across several countries, partly as an interconnected grid, partly as an isolated power system or sub-system...".<sup>40</sup> Despite the break-up into several national systems, the electricity systems of Central Asia remain interdependent. The Central Asia Power System enables interchanges of power among the countries, with the dispatch centre located in Uzbekistan.

Energy transmission in Central Asia has a low load density and long distances between generation plants and load centres.<sup>41</sup> The Electricity Pool of Central Asia was formed in the 1980s and was completed in 1991 to form a power grid among southern Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The capacities of the energy systems in Central Asia are shown in Table 17. Xinjiang Uygur Autonomous Region has an installed generation capacity of 4,744 MW as of 2001/02, and its annual power generation is about 19.6 TWh.<sup>42</sup>

**Table 17. Capacities of Central Asia power systems 2002 (in MW)**

	Kyrgyzstan	Tajikistan	Uzbekistan	Kazakhstan	Total
Installed capacity hydro	2,950	4,059	1,250 <sup>a</sup>	2,000	10,719
Installed capacity thermal	763	346	11,138 <sup>a</sup>	16,240	27,219
Installed capacity total	3,713	4,405	12,358 <sup>a</sup>	18,240	37,938
Available capacity	3,100	3,428	7,800	13,840	25,068

Sources: World Bank (2004), Central Asia Regional Electricity Export Potential Study, December.

<sup>a</sup> UNDP Uzbekistan.

One of the main objectives in developing China's western region is to transfer the rich energy resources from the west to the coastal areas in the east that have a great demand for power. A set of hydropower transmission routes currently in use is known as the "West-to-East Power Transmission Project". Beijing, Tianjin, Shanghai, Jiangsu, Zhejiang, Shandong and Guangdong by themselves account for nearly half of the country's power consumption.

<sup>39</sup> Bloomberg, March 9, 2009.

<sup>40</sup> Asian Development Bank (2000), *Regional Economic Co-operation in Central Asia – Electric Energy*, December.

<sup>41</sup> Ibid.

<sup>42</sup> Data on other Chinese Silk Road provinces were not available.



## 6. Telecommunications

Kazakhstan has a relatively small population spread across a vast territory, which makes hard infrastructure such as telephone lines uneconomical.<sup>43</sup> The network had a 82.7 per cent digitalization rate as of 2007. Kazakhstan's telecommunications sector has nine international communication fixed-line operators and four mobile operators. As of 2007, Kazakhstan had 3.2 million fixed-line subscribers and 12.5 million mobile subscribers. The latter figure represents approximately 80 per cent of the total population. Internet users were 12.3 per 100 persons in 2007 (as compared to 59.2 per 100 persons in 2007 in Europe).

Kyrgyzstan modernized much of its telecommunications network in the late 1990s and early 2000s, including digitalization and fibre-optic lines.<sup>44</sup> Fixed-line telephone communications services are provided by one partly government-owned operator and two private operators. The mobile phone infrastructure has Global System for Mobile Communications (GSM), Code Division Multiple Access (CDMA) and other standards. Two firms provide mobile phone services. In 2007, 41 out of 100 persons in Kyrgyzstan were mobile subscribers (as compared to 117 subscriptions per 100 people in Europe) and 14.3 out of 100 persons were internet users.<sup>45</sup>

Tajikistan's attempts at installing a fixed line telephone system were hindered by the rugged terrain.<sup>46</sup> The previously obsolete analogue network was recently upgraded with digital equipment (now 93.5 per cent of the network equipment). Like many countries that had low penetration of fixed line telephones, Tajikistan has reduced its attention on fixed lines and is focusing more on advanced wireless technology. In 2005, Tajikistan began trials of 3G and Next Generation Networks. The number of mobile subscribers has increased to 1.5 million. In 2007, 35 out of 100 persons in Tajikistan were mobile subscribers. Seven operators are providing mobile services, four for GSM and three for CDMA. 7.2 out of 100 persons were internet users.<sup>47</sup>

Uzbekistan's telecommunication network is based on fibre-optic and radio-relay communication lines. The network contains 890 kilometres of fibre-optic lines. The country has more than 2,000 telephone exchanges, over 76.4 per cent of which are digital. Uzbektelecom, the national carrier, and four other digital network operators, provide fixed telephone services. There are five mobile communication providers.<sup>48</sup> In 2007, 22 out of 100 persons were mobile subscribers and 4.5 out of 100 persons were internet users.<sup>49</sup>

The western region of China expanded its telecommunications infrastructure and services in the 1990s, but the networks and services are not yet comparable to the more developed parts of the country. Telecommunications in the western provinces have considerable potential for expansion, and thus the Government declared that telecommunications infrastructure is a priority in the region.

Xinjiang's telecommunications network is considered well developed by the Asian Development Bank.<sup>50</sup> Its digital network connects Urumqi with all other parts of China. Gansu has become a major telecommunications hub in north-western China because of the national trunk optical cable lines of Xi'an-Lanzhou-Urumqi, Beijing-Hohhot-Yinchuan-Lanzhou, Lanzhou-Xining-Lahsa and Lanzhou-Chengdu. The province's mobile telecommunication network has one of the highest penetration rates among the western provinces and autonomous regions.<sup>51</sup> The number of fixed-line subscribers has reached 5.48 million and the number of mobile

<sup>43</sup> This paragraph on information from the Agency of the Republic of Kazakhstan for Information and Communication ([www.aic.gov.kz](http://www.aic.gov.kz)).

<sup>44</sup> This paragraph is based on Sulaimanova A., Information Communication Technologies Sector – Kyrgyz Republic, BISNIS, August 2003 ([www.bisnis.doc.gov/bisnis/bisdoc/0308KG\\_ICT\\_Report.htm](http://www.bisnis.doc.gov/bisnis/bisdoc/0308KG_ICT_Report.htm)).

<sup>45</sup> *World Bank Development Indicators Online* (<http://web.worldbank.org>)

<sup>46</sup> This paragraph is based on Rahmonberdiev J. and Christov C., *Tajikistan's Dynamic Telecommunications Market*, BISNIS, January 2006 ([www.bisnis.doc.gov/bisnis/bisdoc/0601TJTelecom.htm](http://www.bisnis.doc.gov/bisnis/bisdoc/0601TJTelecom.htm)).

<sup>47</sup> *World Bank Development Indicators Online* (<http://web.worldbank.org>)

<sup>48</sup> Information and Communication Agency of Uzbekistan (<http://www.aci.uz/ru/>)

<sup>49</sup> *World Bank Development Indicators Online* (<http://web.worldbank.org>)

<sup>50</sup> ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) Member Countries 2005–2007*, July.

<sup>51</sup> *Ibid.*

phone subscribers 4.08 million.<sup>52</sup> The number of fixed-line and mobile line subscribers as of the end 2005, were 8.593 million and 9.381 million for Shaanxi, and 1.389 million and 1.811 million for Ningxia respectively.<sup>53</sup>

## D. Human resources

The decision on where to invest is not based entirely on natural resources, government policies or infrastructure. Human resources are a critical determinant of investment, because accessing natural resources or receiving tax holidays means little if the workforce cannot transform the investment capital into profitable outputs.

### 1. Working age population

Individually, several of the economies of the Silk Road have small labour forces, but when viewed in a regional context, the Silk Road labour force has good potential. The Silk Road had 49 million people employed around 2004–2005. Gansu has the largest employed labour force, with over 13.9 million people, followed by Uzbekistan with 10.2 million people.

**Table 18. Labour and employment in the Silk Road**  
(in millions)

	Kazakhstan <sup>a</sup> (2006)	Kyrgyzstan <sup>a</sup> (2006)	Tajikistan (2006)	Uzbekistan <sup>a</sup> (2006)
Labour force	8.0	2.3	2.0	10.5
Employed	7.3	2.0	2.0	10.2
Agriculture	2.3	0.8	1.4	3.0
Industry	0.9	0.4	0.2	1.4
Other	4.0	0.9	0.4	5.9

	Gansu <sup>a</sup> (2005)	Ningxia <sup>a</sup> (2005)	Shaanxi <sup>a</sup> (2005)	Xinjiang <sup>a</sup> (2004)
Employed	13.9	3.0	3.3	7.4

Sources: ADB, *Key Indicators 2006*.

<sup>a</sup> ([www.china.org.cn](http://www.china.org.cn)).

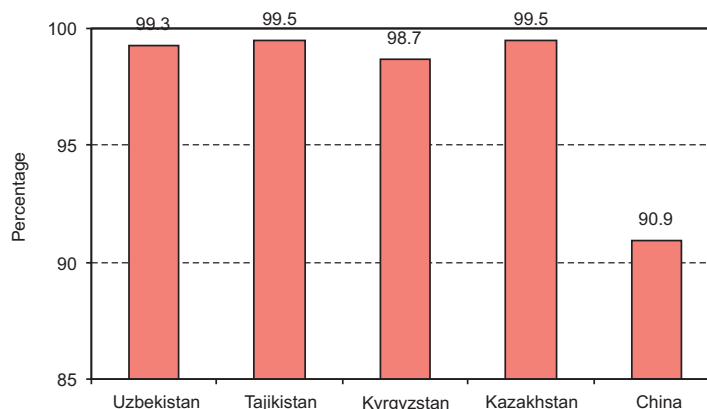
### 2. Education levels

Education is a critical determinant of a population's productivity and capacity for innovation. The populations in the Silk Road have attained high levels of basic education, and in some of the Chinese Silk Road provinces, the percentages of higher education graduates in scientific and technological fields surpass national averages.

Literacy in the region is around 99 per cent in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, while China trails behind with 90.9 per cent literacy (see Figure 15). The region's literacy achievement has been aided by reasonably high primary and secondary school enrolment ratios, which are part of the Soviet Union's legacy (see Table 19 and Figure 15).

Central Asian countries experienced setbacks in their enrolment ratios during the 1990s because of the socio-economic upheavals in the region, and secondary education enrolments were particularly affected. Fortunately, enrolments are on the rise again. Even through the difficult transition years, the educational systems of the Central Asian countries did well at retaining students. In 2001, most of the countries had 95 per cent or higher survival rates to the last grade of primary education.<sup>54</sup> The high

**Figure 15. Literacy rates among people over age 15, male and female, 2000 (%)**



Source: UNESCO, Institute for Statistics ([http://www.uis.unesco.org/profiles/selectCountry\\_en.aspx](http://www.uis.unesco.org/profiles/selectCountry_en.aspx)).

<sup>52</sup> ([www.gansu.gov.cn](http://www.gansu.gov.cn)).

<sup>53</sup> *Ibid.*

<sup>54</sup> UNESCO, EFA Global Monitoring Report 2005: Regional Overview: Central Asia, UNESCO web site ([www.unesco.org](http://www.unesco.org)).

participation rates of Central Asian children in school results in an average of 11 years of education per child compared to around eight years in South Asia and West Asia.<sup>55</sup>

**Table 19. School enrolment ratios in Central Asia and China (%)**

	Gross enrolment ratio, primary school, both sexes*,**	Net enrolment ratio, primary school, both sexes***	Gross enrolment ratio, secondary school, both sexes*	Net enrolment ratio, secondary school, both sexes*	Gross enrolment ratio, tertiary education, both sexes*
China	113	94.6 (2001)	74	..	20
Kazakhstan	109	90.3	99	92	53
Kyrgyzstan	98	84.5	86	80	41
Tajikistan	101	97.2	82	80	17
Uzbekistan	99 (2002)	..	95 (2002)	..	15 (2002)

Sources: UNESCO, *Institute for Statistics* ([http://www.uis.unesco.org/profiles/selectCountry\\_en.aspx](http://www.uis.unesco.org/profiles/selectCountry_en.aspx)); UNESCO, *EFA Global Monitoring Report 2005: Regional Overview: Central Asia*.

\* 2005 unless otherwise indicated.

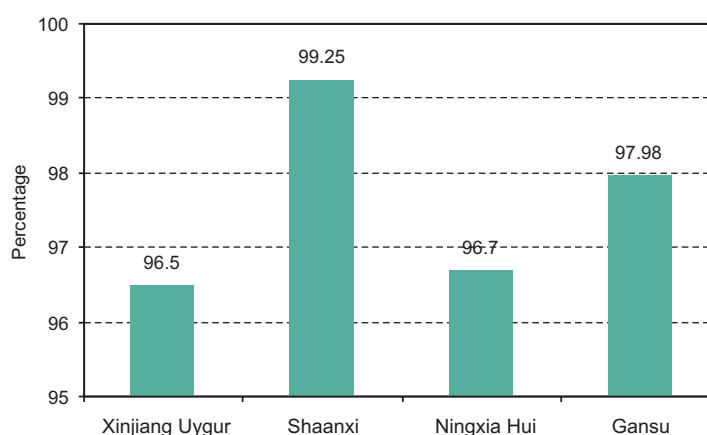
\*\* Using the UNESCO definition of Gross enrolment ratio (GER)

\*\*\* 2006 unless otherwise indicated.

In China, a national policy exists for a mandatory nine-year education. Current educational reforms aim to foster innovation capabilities and improve practical competence for students. The educational system emphasizes mathematics and sciences, and teachers have strong subject training in the fields they teach. However, China's education system has a clear quality gap between urban and rural areas, with the rural areas lagging behind. Furthermore, some of the Chinese Silk Road provinces have not reached the national average in key educational indicators such as enrolment and completion rates. Distance to schools and poverty are the key factors behind lower enrolment and higher dropout rates in western China.<sup>56</sup> The enrolment rates for the Chinese Silk Road provinces in 2000 are presented in Figure 16.

Some of the Chinese Silk Road provinces excel in higher education. In 2000, Xinjiang and Shaanxi had ratios of college graduates per population of 5.1 per cent and 4.1 per cent, respectively, which were higher than the nation's average as a whole.<sup>57</sup> Shaanxi is one of China's leading provinces for scientific and technological (S&T) professionals. It accounts for 7.2 per cent of China's total S&T professionals, and has 20 S&T professionals per 10,000 people compared to the national average of 8.1 per 10,000.<sup>58</sup>

**Figure 16. School-age children enrolment rates in Chinese Silk Road provinces, 2000**



Source: Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

### 3. Health indicators

A population's overall health is another important determinant of its productivity. Life expectancy along the Silk Road ranges from 59 to 72 years for men and 68 to 75 for women. Chinese men and women tend to have considerably longer life spans than those in Central Asia (see Table 20). Statistics also show that children in China are far less likely to die under the age of five compared to children in Central Asia, as seen in the child mortality figures in Table 20.

<sup>55</sup> UNESCO, *EFA Global Monitoring Report 2005: Regional Overview: Central Asia*, UNESCO web site ([www.unesco.org](http://www.unesco.org)).

<sup>56</sup> World Bank (2003), *China: Basic Education in Western Areas Project*, Project Appraisal Document, September.

<sup>57</sup> Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

<sup>58</sup> Ibid.

**Table 20. Life expectancy and child mortality in the Silk Road, 2007**

Country	Life expectancy at birth (years)		Probability of dying under 5 years of age (per 1,000 live births)
	Males	Females	Both sexes
China	72	75	22
Kazakhstan	59	70	32
Kyrgyzstan	63	69	38
Tajikistan	66	68	67
Uzbekistan	65	71	41

Source: WHO's Core Health Indicators ([www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)).

Health expenditures in the Silk Road are relatively low compared to all of Europe and Central Asia. The Silk Road's total health expenditures as a percentage of GDP are shown in Table 22, but none of the countries' expenditures reaches the average of the European Region, which was 8.4 per cent of GDP in 2006.<sup>60</sup> South-East Asia, on the other hand, averaged 4.0 per cent in 2006.

#### 4. Labour costs

Information on salaries per month by various sectors in Kazakhstan and Tajikistan, and monthly income per person employed in Uzbekistan, as displayed in Tables 23 and 24 respectively.

**Table 23. Salaries per month by sector in Kazakhstan and Tajikistan (in US\$)**

Sector	Kazakhstan (2006)	Tajikistan (2005)
Industry	314.2	59.63
Agriculture	112.7	12.57
Transport	369.1	56.66
Communications	369.1	84.01
Construction	360.3	68.23
Trade	251.9	20.97
Health care and social services	135.8	12.82
Education	153.0	23.65
Banking	598.4	108.84
Municipality and administration	264.2	41.02

Sources: Agency on Statistics of RK, Statistical Yearbook of Kazakhstan 2006, information on exchange rate – National Bank of Kazakhstan, ([www.nationalbank.kz](http://www.nationalbank.kz)); UNDP Tajikistan.

China's longer life expectancies and much lower child mortality rate have been accomplished with a physician-to-population ratio of 1.5 to three times lower than in Central Asia, as shown in Table 21. The Central Asia countries have between 20 and 40 doctors per 10,000 people. The average number of physicians per 10,000 people for the European region is 32.<sup>59</sup>

**Table 21. Physician density in the Silk Road – 2007**

Country	Physicians/10,000 people
China	14
Kazakhstan	39
Kyrgyzstan	24
Tajikistan	20
Uzbekistan	27

Source: WHO's Core Health Indicators ([www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)).

**Table 22. Total health expenditures as a percentage of GDP, 2007**

Country	% of GDP
China	4.6
Kazakhstan	3.6
Kyrgyzstan	6.4
Tajikistan	5.0
Uzbekistan	4.7

Source: WHO's Core Health Indicators ([www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)).

**Table 24. Monthly income per person employed in Uzbekistan, ranked by regions (2005)**

Region	Monthly income per person employed, in UZS	Monthly income per person employed, in US\$
Tashkent city	205 218.0	174
Navoi region	98 893.6	84
Tashkent region	75 392.5	64
Andijan region	70 751.6	60
Kashkadarya region	68 362.0	58
Surkhandarya region	67 771.5	57
Bukhara region	66 134.2	56
Fergana region	63 898.9	54
Namangan region	63 279.0	54
Jisakh region	61 177.9	52
Khorezm region	60 023.0	51
Sirdarya region	58 491.0	50
Samarkand region	57 055.3	48
Karakalpakstan Republic	51 617.0	44
<b>Average for the country</b>	<b>81 645.6</b>	<b>69</b>

Note: Estimation on the basis of data supplied by the State Statistics Committee; end of year USD/UZS exchange rate for 2005: 1,180 UZS.

<sup>59</sup> Based on statistics from WHO's Core Health Indicators ([www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)).

<sup>60</sup> Based on data from WHO's Core Health Indicators ([www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)).

## E. Financial sector and taxation

Financial markets in the Central Asian countries remain in their infancy and thus provide far fewer services other than banking. Although all of the banking sectors still have a great deal of participation from the Government, the banking sectors in Uzbekistan and Tajikistan are more government-controlled than those in Kazakhstan and Kyrgyzstan. Demand for credit and other forms of finance tend to exceed the available supply in most Central Asian countries, but Kazakhstan's financial services are more developed than the others. Most companies of any size in Central Asia rely on reinvested earnings for any significant investment activities.<sup>61</sup>

### 1. Types and numbers of financial institutions

Kazakhstan had 33 commercial banks in May 2007, 14 of which had foreign capital.<sup>62</sup> It is essentially a private sector banking industry, as the privatization of State-owned banks is mostly completed.<sup>63</sup> Foreign banks face restrictions in that the aggregate charter capital of all banks with foreign capital must not exceed 50 per cent of the aggregate charter capital of all banks in Kazakhstan.<sup>64</sup> Other restrictions apply as well.

In addition to banks, Kazakhstan has 40 insurance firms. Stricter legislation has led to a decline in the number of insurance firms since the late 1990s, but at the same time strengthened the sector.

The banking sector in Kyrgyzstan has 20 commercial banks (as of the end of 2006), and 15 of them have foreign participation.<sup>65</sup> Only three of the commercial banks are government-owned. Several companies also provide insurance services.

Tajikistan has a small banking sector totalling nine banks, and all but one has been privatized. In spite of privatization, the Government retains a minority share in the banks, and their services are mainly for the cotton industry and State-owned enterprises.

Uzbekistan has 28 banks, three of which are State-owned. The five largest banks (including two State banks) account for 85 per cent of bank assets and 80 per cent of bank capitalization. Two of the State banks are being privatized.

The banking sector in China has been under reform since the 1990s. The Government owns directly or indirectly nearly all of the important banks. Four large State-owned banks dominate China's banking sector, but their primary focus has been on serving the needs of large State-owned enterprises. As of the end of 2004, these four banks accounted for 60 per cent of the banking system's assets.<sup>66</sup> The second-tier government-owned commercial banks also largely serve SOEs. Consumers and the private sectors' demands for capital are currently not being satisfied, but this situation may be about to change. Under China's WTO agreement, the banking sector was opened to participation by foreign banks at the end of 2006.<sup>67</sup>

The financial sector in China's western provinces is far less developed than in the eastern part of the country and is in need of more and stronger financial institutions. Xi'an City Commercial Bank is the largest bank in western China.

<sup>61</sup> ADB (2004), *Private Sector Assessment: Central Asian Republics*, Unpublished paper, March.

<sup>62</sup> Agency of the Republic of Kazakhstan, on regulation and supervision of financial market and financial institutions.

<sup>63</sup> Almaty, Discussions at the Asia-Pacific Business Forum 2007, Kazakhstan, May 18, 2007 <http://unctad.org/templates/webflyer.asp?docid=8450&intItemID=3549&lang=1&print=1>.

<sup>64</sup> PricewaterhouseCoopers (2005), *Uzbekistan: A Business and Investment Guide*, July (www.pwc.com).

<sup>65</sup> Bank of Kyrgyzstan ([http://www.nbkr.kg/umnl/tendency2006\\_2.pdf](http://www.nbkr.kg/umnl/tendency2006_2.pdf)) (in Russian).

<sup>66</sup> Podpiera R (2006), *Progress in China's banking sector reform: has bank behavior changed?*, IMF Working Paper WP/06/71, March.

<sup>67</sup> China Journal, *Foreign bank regulation revised to fully open-up banking sector*, April 2007.

## 2. Capital markets

The securities markets in Central Asia have received assistance from international financial institutions, which has enabled their young markets to have relatively sophisticated electronic trading systems and central depository systems, except in Tajikistan.<sup>68</sup> Uzbekistan in particular operates an electronic over-the-counter trading system for small investors. Securities markets in Central Asia have served primarily as a means for privatization of SOEs. In addition, short-term government bonds tend to be the main product compared to equity and corporate bonds.

Stock market capitalization throughout Central Asia is low, and not all of the markets are active.

The Kazakhstan Stock Exchange (KASE) was initially set up to focus on foreign investors and blue-chip stocks, but the exchange was subsequently re-focused towards domestic institutional investors. Currently, there are 90 companies listed on the KASE.<sup>69</sup> The corporate bond market in Kazakhstan is young but growing, and this demonstrates the increasing sophistication of the country's financial services.

Kyrgyzstan has a small stock exchange (Kyrgyz Stock Exchange) with eight companies.<sup>70</sup> A few small investment funds are operating with stock exchange securities.

Uzbekistan's Tashkent Republican Stock Exchange started in 1994. As of 2006, it had eight listed companies, all of which were banks, and about 600 other companies not listed but usually traded.<sup>71</sup>

Tajikistan established a securities market, but it is not operational yet.

Capital markets are not established in China's western provinces. Its two securities markets are located in the eastern part of the country.

## 3. Taxes

The tax systems throughout the Silk Road are complicated and often contain scope for interpretation by individual tax officials. Some of the basic business tax rates are presented below in Table 25, but for further details and updates, prospective investors are advised to consult with and obtain business and tax-related publications from major international tax and accounting firms, some of which have offices in all five Silk Road countries.

China's current tax system has taken shape since economic reforms began in 1978. The latest wave of reforms occurred in 1994, when the commercial tax system was fully reformed to suit the socialist market economy.<sup>72</sup> China's tax administration system has standard business taxes applied across the country, but China also has local taxes that investors will need to inquire about. The types and rates can vary according to locality.

Kazakhstan introduced its new tax code in January 2002, and amendments have been made each year since its implementation.

In Kyrgyzstan, the tax code went into effect in June 1996 and was amended most recently in 2005. The tax system contains national and local taxes.

Tajikistan launched its "New Tax Code" in January 2005.

Uzbekistan's current tax code has been changed and simplified, and came into effect in 2007. It has numerous tax exemptions for foreign investors.

<sup>68</sup> *Summary Record from the Sixth Conference on the Financial Sector Development in the Central Asian Countries, Azerbaijan and Mongolia*, Istanbul, Turkey, April 29–30, 2004 ([http://www.oecd.org/document/39/0,2340,fr\\_2649\\_34849\\_15342375\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/39/0,2340,fr_2649_34849_15342375_1_1_1_1,00.html)).

<sup>69</sup> See its website at ([www.kase.kz](http://www.kase.kz)).

<sup>70</sup> See: ([www.kse.kg](http://www.kse.kg)).

<sup>71</sup> See the website at ([www.uzse.uz](http://www.uzse.uz)).

<sup>72</sup> Nanjing Local Taxation Bureau ([http://njds.nj.gov.cn/en\\_site/LawsAR/ChineseTS/2599.html](http://njds.nj.gov.cn/en_site/LawsAR/ChineseTS/2599.html)).

Table 25. Selected business tax rates in the Silk Road countries

Country	Value added tax	Corporate income	Profit	Land	Property
Kazakhstan	14%	30% except in SEZs	15%	Variable, depending on type of property. 0.48 up to 5,790 tenge per unit.	1% of annual average value of objects of taxation
Kyrgyzstan	20%	..	20%	Variable	0.95% except for houses and apartments for residences, which are 0.35%
Tajikistan	20%	..	25%	Variable	Abolished in 2005 and replaced with tax on immovable property (includes buildings)
Uzbekistan	20%	..	10%	2,000–120,000 Uzbek soum per irrigated hectare	3.5% for legal entities
China	17%	33% (15% in special economic development zones)	..	0.5 to 7.5 CNY per square metre	1.2% on original value of buildings and houses or 12% on rental value

Sources: PricewaterhouseCoopers publications, *Tax and legal alert, Republic of Kazakhstan*, Issue No 3, January 29, 2007; *Doing Business Guide in Kazakhstan 2005*; *The People's Republic of China: Tax Facts and Figures, 2004*; World Bank, *Doing business webpage (www.doingbusiness.org/ExploreTopics/PayingTax)*; Uzbekistan: *A Business and Investment Guide*, July 2005; and UNDP country teams.

## F. The Silk Road business community

### 1. Development of the business community

The modern Silk Road private sector is still young, and the increasing share of the private sector in the economies has occurred largely through government privatization. The pace and extent of privatization has varied across the region, with China, Kazakhstan and Kyrgyzstan proceeding the fastest and furthest with reforms. China's economic reforms began in 1978, but the substantial market reforms that allowed business to flourish did not occur until the mid-to-late 1980s in the eastern provinces and well into the 1990s for the western region. The Central Asian countries' privatization processes commenced after their independence in 1991.

Much of the privatization in the 1990s entailed mass privatization of small enterprises and opening opportunities for individual entrepreneurs in trade and services. Currently, privatization in the Silk Road is focusing more on the medium and large State-owned enterprises such as infrastructure and public utilities. However, progress in privatizing the medium to larger SOEs has been slower, owing to their higher levels of complexity. In particular, strategic SOEs such as those related to oil and gas and those with control over other key natural resources are still considered important sources of revenue to the Governments.

To give some examples of the private sector's development, in China's western provinces, there was a gradual decline in the State-owned sector from 1990 to 2000. While previously State-owned enterprises accounted for over 90 per cent of fixed asset investment, by 2000 the State-owned sector had declined to 57 per cent of total economic activity in the total western region.<sup>73</sup> In Uzbekistan, more than 84,000 State enterprises were privatized since 1991. Small business economic entities produced 42 per cent of GDP, providing 7,258,600 jobs in 2006.<sup>74</sup> Kyrgyzstan's private sector is comprised mainly of individual entrepreneurs. Back in 2003, nearly 80 per cent of the registered economic entities were made up of individuals.<sup>75</sup>

Private sector development is occurring slowly but steadily along the Silk Road. Table 26 shows some statistics on enterprise development in the four Central Asian Silk Road countries and compares them with other post-communist countries that have become members of the European Union. With the exception of Kazakhstan, the other three Central Asian countries are far behind the new EU members in the average number of enterprises per population, but

<sup>73</sup> Fengjun J and Jinkai Q (2003), *A Social and Economic Atlas of Western China*, China Intercontinental Press.

<sup>74</sup> State Committee on Statistics of Uzbekistan, *Basic economic and social indicators*, 2007.

<sup>75</sup> ADB (2004), *Private sector assessment: Central Asian republics*, Unpublished paper, March 2004.

it is important to bear in mind that Central Asia is relatively isolated and has not benefited from geographic proximity to industrialized countries.

**Table 26. Enterprise development in Central Asia**

Country	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan	EU-8* avg.
Total number of enterprises	226,908 <sup>a</sup> (2005)	22,670 (2001)	6,192 (2002)	382,900 <sup>b</sup> (2006)	340,577 (2002)
Enterprises per 1,000 people	15 <sup>a</sup> (2005)	5 (2001)	1 (2002)	14 (2006)	48 (2002)

*Sources:* UNDP Regional Bureau for Europe and the Commonwealth of Independent States, *Central Asia Human Development Report, Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*, Bratislava, 2005.

<sup>a</sup> Agency on Statistics of Kazakhstan, *Statistical Yearbook of Kazakhstan 2006-2005*.

<sup>b</sup> State Committee on Statistics of Uzbekistan, *Basic economic and social indicators, 2007*.

*Notes:* \* Post-communist new EU members.

The Silk Road private sector is most developed in agriculture, retail trade and services, according to the ADB's assessment of various economic sectors' growth rates, contributions to GDP and employment generation.<sup>76</sup> The private sector in these three sectors consists of a large number of small, often individual firms operating in the informal as opposed to the formal economy (See Box 3 for an illustration of a successful Kazakh company with a regional perspective).

### Box 3. "Raimbek Group" company

The "Raimbek Group" is one of the largest agricultural holdings in Kazakhstan, having embarked on an expansionary strategy beyond its home country.

The company was founded at the onset of Kazakhstan's independence. In 1998, it opened its first juice production line and now accounts almost 50 per cent of the economy's juice market. By 2000, it diversified its activities by opening of a new diary operation, "Raimbek Agro". In addition to strictly growing produce, the "Raimbek Group" processes and exports its products, particularly wheat and barley, from Kazakhstan to the Russian Federation and Europe.

In order to benefit from the Silk Road regional opportunity, the group invested in Xinjiang, Western China, by founding the Raimbek Food (Xinjiang) Co. Ltd. juice company in 2004. The latter focuses on supplying the local market.

The group possesses 60 shops in Kazakhstan, and is involved in distribution, construction, publishing and the woodworking industry. Recent projects within the last include investments with partners in the construction of a paper plant in the Russian Federation.

The majority of the group's products are produced according to ISO 9001:2000 quality management standards, with some of its subsidiaries being fully certified. In line with its regional vision, it was one of the first Kazakh private companies to become a member of the Grain and Feed Trade Association (GAFTA). "Raimbek Group" is a good illustration of the dynamism that can be found in the Silk Road private sector.

*Source:* Based on information provided by "Raimbek Group" Company.

The larger private sector investments tend to be in the extractive industries and governed by concession agreements.<sup>77</sup> Many medium and large firms in the Silk Road have a mix of public and private ownership.

<sup>76</sup> ADB, *Private Sector Assessment: Central Asian Republics*, Unpublished paper, March 2004.

<sup>77</sup> ADB, *Building Partnerships for Development: Regional Cooperation Strategy and Programme 2004-2006*, Manila, 2004.



## 2. Business associations

There are a number of business associations which may be helpful to foreign investors and companies doing business in the Silk Road region. Among aid agencies, the United States Agency for International Development (USAID) has been active in providing support to the institutional development of business associations in Central Asia, and possesses a strong network into all key associations.<sup>78</sup>

At the Central Asian level, the Central Asian and Russian Business Association (CARBA) – also called Business Congress, supported by the World Bank and USAID, brings together various business associations in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and the Russian Federation to deal with a range of issues of relevance to regional business.<sup>79</sup>

In China, in most provinces, the rapidly emerging non-State enterprise business community is represented by a range of associations, often involving an Industrial and Commercial Sector Coordinating Association (ICSCA – with a national body in Beijing) and a provincial or regional office of the China Federation of Trade and Commerce.

Lastly, it is important to mention recent business-related initiatives of the ADB and the United Nations covering all the countries and provinces and regions in the Silk Road. The ADB CAREC Business Development Forum aims to involve both domestic and foreign businesses and business associations more closely in the regional economic cooperation activities under CAREC, and offers valuable information to all investors on regional business opportunities along the Silk Road.<sup>80</sup> The United Nations' Silk Road Initiative has launched a series of Silk Road Investment Forums, highlighting regional opportunities and addressing challenges for attracting investment to the region (see Box 4).

### Box 4. The First Silk Road Investment Forum – Xi'an, China (June 2006)

The First Silk Road Investment Forum set an important milestone for regional cooperation between China, Kyrgyzstan, Kazakhstan, Uzbekistan and Tajikistan within the framework of UNDP's Silk Road Initiative. The forum brought together some 500 participants from the Silk Road and beyond, featuring ministerial delegations, multinationals, small businesses and major international organizations.

Under the motto "Future built on tradition", the forum secured political commitment to the strategically critical initiative of regional cooperation, with the aim to open up a vast landlocked region to trade and investment opportunities globally. The main sectors of focus included tourism, agro-business, transport, information technology and logistics, energy and mining.

It was agreed to hold an annual series of Silk Road Investment Forums, each year in a different country.

A full report on the Silk Road Investment Forum can be found at [www.silkroad.undp.cn.org](http://www.silkroad.undp.cn.org).

*Source:* UNCTAD.

<sup>78</sup> Contact details of the major Silk Road business associations are provided in the annex to this Guide. Only the major associations are listed.

<sup>79</sup> CARBA can be contacted through the Forum of Entrepreneurs of Kazakhstan.

<sup>80</sup> More information can be obtained from the CAREC Unit of the Asian Development Bank in Almaty, Kazakhstan.



### III. SILK ROAD INVESTMENT OPPORTUNITIES

#### A. The Silk Road investment opportunity

The Silk Road, during its peak period of development, was one of the greatest supply routes in history. It connected resources to markets both along its various tributaries and far beyond. It linked China to Central Asia and beyond, and promoted business, trade, technology and entrepreneurship throughout the region.

The present Silk Road offers a similar potential to modern business. China is the world's largest or second largest consumer of numerous minerals and the world's second largest oil consumer, offering significant potential markets to suppliers in Central Asia. On the logistics front, closer linkages between China and Central Asia could be the catalyst to a renewal of Central Asia as a transit territory, taking advantage of Chinese regional policies to stimulate growth in the western parts of the country (including the "Preferential Investment and Development Policy for Provinces along the Silk Road"). The development of the transportation and distribution systems linking Central Asia, China and other regions offers tremendous potential for firms involved both in the hard and soft aspects of infrastructure development and these areas will be the key focus of regional investment attraction efforts. In addition, the Shanghai Cooperation Organisation (SCO) is discussing possible support to free trade zones along the Silk Road.

Countries are responding to their own limitations and the pressures from regional and global forces by working more closely together in regional groupings. The forms of cooperation are becoming increasingly sophisticated and expanding to more countries and more issue areas. Several critical trends are shaping the context and creating incentives for regional cooperation. The major trends relate to globalization, economic liberalization, the search for new markets (see Box 5 below), international flows of investment, and political/security changes. In the Asia-Pacific region, regional cooperation has been driven primarily by global economic and business factors.<sup>81</sup>

##### Box 5. American investment in Kazakhstan with regional outlook

One of the areas where US investment has been prominent in Kazakhstan is in power generation. For example, Access Energo has majority interests in the Ekibastuz Thermal Station and the 380 MW Petropavlovsk Heat and Power Station and Regional Power Distribution Company, and has secured over 1 million customers. AES is another company active in Kazakhstan, and elsewhere in the Central Asian Silk Road. AES has invested more than \$150 million in Kazakhstan's power generation industry since 1996. In fact in that year, the company acquired Kazakhstan's largest power plant - coal-fired Ekibastuz GRES-1 - with a nominal production capacity of 4,000 MW. The regional market is one of AES' cornerstones in its operations and a major motivating factor for a long-term approach in this sector.

*Source:* US-Kazakhstan Business Association ([http://www.uskba.net/about\\_power.htm](http://www.uskba.net/about_power.htm)).

There is a multitude of reasons for regional cooperation. The justification and benefits can be broadly categorized as economic, peace and security, and social, but particular benefits may occur at different levels: global, regional, country, local, firm and individual. Nonetheless, the overall rationale for regional cooperation is that greater benefits can be obtained through

<sup>81</sup> The drivers of regional cooperation often differ substantially from region to region. One of the key drivers in the Central Asian republics is that the infrastructure system across the region was formerly unified under the Soviet Union, and hence regional cooperation is a better approach than individual national efforts to upgrade and maintain the infrastructure networks.

regional cooperation than would be possible through independent actions of countries. The potential for regional cooperation along the Silk Road is particularly attractive.

As noted earlier in section I(c), several regional arrangements are underway involving the Silk Road countries; yet there is not much concrete progress along the Silk Road to establish a free trade area (FTA), a common investment area, or other such formal arrangements that would integrate the economies. Fortunately, the absence of formal mechanisms such as an FTA does not inhibit regional cooperation among the countries. Bilateral and multilateral agreements for improving business environment policies (e.g. border inspections and energy trade), developing infrastructure and strengthening institutional capacity continue to enhance the business environment of the Silk Road.

Likewise, the absence of an FTA, common investment area and harmonized policies in the Silk Road should not prohibit investors from taking a regional perspective on potential business opportunities. As described in section II(b), much of the infrastructure in Central Asia was originally designed as regional networks and grids. Resources, particularly natural resources and various types of labour, are dispersed unevenly throughout the Silk Road. This creates opportunities for developing production chains across two or more of the countries, potentially tying into broader regional and global supply chains. Markets for resources such as oil and gas are frequently located outside of the region and will require investments in more than one country to reach the desired destinations.

Potential and existing investors will need to push to develop effective supply chains to enhance the Silk Road's competitiveness. These efforts will concentrate on bringing together capable firms with those that have potential to become good suppliers or form other parts of the supply chain. Larger firms that invest in supply chain development benefit by building relationships with local partners with the potential of meeting their needs and quality demands.

## B. Tourism

Tourism is one of the world's largest growth industries, and the Silk Road economies are just beginning to tap into it. International tourist arrivals are generally rising in the Silk Road as a whole, but the level of tourists is still low in some of the countries (see Table 27).

Revenues generated from international tourism have fluctuated in most Silk Road economies for which data are available between 2000 and 2005 (see Table 28). As a result, tourism comprises a very low percentage of total GDP in all five countries. In China, tourism accounts for over 1.3 per cent of GDP, in Kyrgyzstan, the figure was 3.1 per cent in 2004, and in Kazakhstan it was only 1.2 per cent in 2005.

**Table 27. International tourist arrivals in the Silk Road**  
('000)

Country	2000	2002	2003	2004	2005
China	31,229	36,803	32,970	41,761	46,809
Kazakhstan	1,471	2,832	2,410	3,073	4,365 <sup>a</sup>
Kyrgyzstan	59	140	342	398	315
Tajikistan	4	..	..	..	..
Uzbekistan	302	332	231	262	242 <sup>b</sup>

Sources: World Tourism Organization, *Tourism Market Trends, 2005 Edition* (<http://www.world-tourism.org/facts/wtb.html>).

<sup>a</sup> Ministry of Tourism and Sports of Kazakhstan, State Programme of Tourism Development in RK 2007-2011.

<sup>b</sup> UNDP Uzbekistan.

**Table 28. International tourism receipts in the Silk Road**  
(\$ million)

Country	2000	2002	2003	2004	2005
China	16,231	20,385	17,406	25,739	29,296
Gansu	55	..	..	44	59
Ningxia	3	..	..	..	216
Shaanxi	280	..	..	360	446
Xinjiang	95	..	..	91	..
Kazakhstan	356	622	564	706	685
Kyrgyzstan	15	36	48	76	..
Tajikistan	..	2	2	1	..
Uzbekistan	63	68	24	28	34 <sup>a</sup>

Sources: World Tourism Organization, *Tourism Market Trends, 2005 Edition*; Chinese provincial data in 2000 from Jin Fengjun and Qian Jinkai, *A Social and Economic Atlas of Western China*, China Intercontinental Press, 2003; Chinese provincial data ([www.china.org](http://www.china.org)), 2004; China's official gateway website - provincial data ([www.china.org.ch](http://www.china.org.ch)), 2005.

<sup>a</sup> UNDP Uzbekistan.

The Silk Road has the potential to become one of the world's unique tourism destinations, and the distribution of interrelated tourism sites across the five countries makes it ideal for cross-border or regional investment opportunities. All of the Silk Road countries have prioritized tourism for attracting foreign investment. At present, the Silk Road's greatest tourism potential lies in developing cultural and historical attractions and eco-tourism. The ancient Silk Road left a legacy of fascinating structures and monuments. Ancient mosques, other Islamic buildings, emperors' tombs and relics can be found throughout the region. For instance, Samarkand's Registan Square in Uzbekistan, an ensemble of three Madrassahs (Islamic colleges), is considered one of the greatest Islamic monuments in the world. Xi'an (Shaanxi) has the world famous terra cotta warriors. The Mogao Caves in Gansu Province were started in 366 A.D. and have 491 caves preserved with 2,400 sculptures and 45,000 square metres of mural paintings.

Kazakhstan has its State Programme on Restoration of the Historic Centres of the Silk Road, Preservation and Development of the Cultural Heritage of Turkic States, and Building an Infrastructure for Tourism. Phase 1 runs from 1998 to 2007 and focuses on restoring ancient towns and routes. Phase 2 runs from 2003 to 2012, covers 28 sites and includes road reconstruction. It is expected that 70 per cent of the financing for this programme will come from domestic and foreign investors.

The other high-potential regional tourism subsector is eco-tourism. The Silk Road contains some of the most scenic landscapes in Asia, and the low population density in much of the region leaves ample space for excellent nature and other outdoor tourism activities. Diverse landscapes featuring high mountains, glaciers, caves, lakes, rivers, hot springs and steppes can be found throughout the region. Kyrgyzstan is frequently referred to as the "Switzerland of Central Asia" because of its high mountain valleys that are suitable for mountain climbing, whitewater rafting and hiking. In addition, Lake Issyk-Kul, the second largest alpine lake in the world, and its surrounding area offer potential for a variety of recreational activities.

Tajikistan's National Park is one of the largest and most diverse parks in Central Asia. Shaanxi's Mount Huashan is one of five sacred mountains in China and draws large numbers of domestic tourists and others. Xinjiang and Gansu are among the top regions in China for nature reserves. Key natural attractions are mountains, glaciers and lakes (including Lake Bosten in Xinjiang, which is the largest freshwater lake in China), which are suitable for adventure tourism. The last example presented here is perhaps one of the most innovative tourism products developed in a desert: Shapotou in Ningxia is labelled as the "world's sand capital" because a vast sand dune was transformed into an amusement park-like atmosphere with tourists coming to slide down the dune.

The historical, cultural and natural attractions of the Silk Road are all in place, but the supporting infrastructure and tourism services are where the opportunities exist for prospective investors. Throughout much of the Silk Road, there is insufficient transport infrastructure, tourist and business class hotels, communications systems, resorts, camping and other facilities, and these shortages largely explain why the Silk Road tourism potential remains untapped.<sup>82</sup>

Many of the tourist facilities – such as hotels, resorts, spas, sanatoriums and camps – were built during the Soviet Union days, and these facilities need major renovations or replacement by new, modern construction. This is especially the case outside of capital cities. Affordable and well-run tourist class (medium-priced) hotels are needed throughout the region. Many of the newer hotels springing up tend to be geared for the business and luxury travellers, and combined with the high cost of airfares into Central Asia, the region is less competitive compared to South-East Asia and other popular destinations.

<sup>82</sup> Other obstacles include the visa requirements for most nationalities, limited air routes between cities in the region, and time-consuming border procedures.

### Box 6. The Tourism Sector of China's Silk Road Provinces & Autonomous Regions

Despite low-cost labour, western provinces are expected to be less attractive to manufacturing because of its lower industrial capacity, its inferior infrastructure and the fact that there is still abundant room for growth in eastern industrial clusters. The tourism and hospitality sector, on the other hand, benefits from the area's unique environmental, cultural and historical characteristics. The broadest and most marketable of these is the presence of the famous and often romanticized Silk Road. The provinces are rich in tourism resources, and the sector is thought to have great competitive advantages as an FDI destination. China is already a major and continually expanding international tourist destination with an exceptionally rich diversity of sites. The expectation of greatly increased flows of international tourist arrivals in China along with increasing internal demand makes the potential for an expanding tourism industry in western China exceptionally large.

The UN World Tourism Organization has forecast that world tourism arrivals will triple to 15 billion by 2020. Though the various countries each have their unique characteristics and natural environments, thus requiring individually tailored solutions, there are two main tourism themes along the Silk Road - cultural tourism and ecotourism.

Cultural tourism has grown by 15% worldwide every year for the past decade (UNWTO). Ecotourism emphasizes environmental and social sustainability through: conservation, community involvement, interpretation, education and environmental management.

In order to consolidate the region's overall competitiveness in the global tourism market, there are movements towards the creation of a 'Silk Road Multiple Entry Visa' for multi-destination travel along the old trade route. Other initiatives include the identification of selected cities as UN Silk Road Cities based on long-term plans to protect cultural assets, raise tourist standards and other related factors.

One of the biggest attractions of the Silk Road is its well-known name and students of history will recognize many city names along it. This identification supports investors in choosing to build and capture the increasing numbers of tourism arrivals, but there are many additional strengths of the Silk Road and each province has its own unique tourism attractions to offer:

In the **Shaanxi Province** first, Xi'an, its capital, has already a very sophisticated tourism industry, with many opportunities for hoteliers to develop new properties and tourism attraction operators to add new performance venues and restaurants. The city, which is one of the Four Great Ancient Capitals of China, is particularly famous for the Terracotta warriors it houses, but it also offers other great attractions such as the Goose Pagodas of the Tang Civilization, the Bell and Drum Towers and the Ming city walls, in addition with excellent museums. It also serves as a good base from which to explore many outlying attractions such as the Famen Temple or the Xingjiao Temple within a day's drive of the city.

Other excursions in the Shaanxi Province include Luoyang, home to the Baima temple, once thought to be the centre of the universe, as well as to the nearby famous Longmen caves, one of the China's three most famous ancient sculptural sites. Shaolin Si, where Kung Fu began, and the isolated Yan-an, where the Long March led Mao in 1937, are other examples of the many historic and cultural attractions the Shaanxi Province has to offer. An IPA can direct new investments to appropriate places in and around Xi'an to continue and expand the success of that destination.

The **Gansu Province** has a remarkable geography, including the Yellow River flowing through Lanzhou, the capital, and the mountains and deserts of the Hexi Corridor, which formed the main passageway of Silk Road caravans for over 1000 years. It has fascinating desert oasis, beautiful grasslands and the World Heritage Sites of Crescent Moon Lake and the singing Sand Dunes.

Gansu is also home to captivating historical sites such as the Mogao Caves at Dunhang or the country's largest reclining Buddha at Zhangye, and traces can be found of many different civilizations and cultures in the towns of Wuwei, Hezuo and others.

New roads have been build in an attempt to make the tourism attractions more accessible and most cross-country train services to China's west passes through the Hexi Corridor, bringing tourists to some of the more remote attractions in Gansu.

/...

**Box 6 – cont'd. The Tourism Sector of China's Silk Road Provinces & Autonomous Regions**

The **Xinjiang Uygur Autonomous Region** is a vast and extraordinary part of China. Sparsely populated, it is an isolated region composed largely of desert and grassland surrounded by some of the highest mountains in the world. Touring highlights include the Tian Shan Mountain pastures where Heaven Lake is located and where one can stay with Kazakhs in their Yurts, and the fascinating Silk Road oasis cities of Turpan and Kashgar. There are many other, smaller towns that were significant in the days of the Silk Road, and they could potentially be made into exciting tourism destinations in their own right, with proper investment and tourism development activities.

Finally the **Ningxia Hui Autonomous Region's** rural scenery provides great charm as the Yellow River passes through, creating a very green and hilly southern part of the province. The capital Yinchuan and, not far from it, Zhongwei and Shapotou are pleasant and interesting towns to visit. Ningxia has been promoting the desirability of investment there, with a trend towards ecotourism, rural and cultural tourism. The railway and highway infrastructures are considered to be good and the domestic flights in and out Ningxia province include a direct flight from Yinchuan to Hong Kong. Although new hotels and resorts have been built, there are currently not enough rooms in Yinchuan during the peak summer season, which indicates an opportunity for additional investment in this sector.

The geography of the Silk Road is extraordinary, with a vast territory that has existed in relative isolation. Relative to geographic beauty and natural history, this is a great asset. However, the remoteness of the region makes it difficult for tourists to reach. The transportation infrastructure that does exist is newer and more modern than in other Central Asian countries which host portions of the Silk Road, but parts of the region (especially in Xinjiang) are extremely remote and still lack good connections to transportation networks.

With the exception of Xi'an, the Silk Road Provinces' major destinations are in need of more hotel rooms, a higher standard of service, better quality hotels, better and more frequent air service, and increased and improved transportation infrastructure. Local service providers need greater marketing and better service training. Additional investment in infrastructure will attract additional investment in hotels and other tourism enterprises. In addition, better interpretive signage, greater foreign language capacity, higher quality tourism maps, and better markings for tourism routes and attractions on the roads are needed throughout the region.

*Source: UNCTAD, Investment Promotion Strategy for the Tourism Sector of China's Silk Road Provinces and Autonomous Regions.*

## C. Energy

The Silk Road has the potential to become a significant supplier of the world's energy needs. Kazakhstan and Uzbekistan are among the leading countries in the world in terms of their reserves of oil (Kazakhstan) and natural gas (both countries). Kyrgyzstan and Tajikistan harbour vast hydropower potential that has barely been tapped. Xinjiang has the largest reserves of oil, natural gas and coal in China.

The distribution of fossil fuel resources in the Silk Road is rather uneven. Kyrgyzstan and Tajikistan contain abundant hydropower potential but they have small reserves of commercially exploitable fossil fuels. Kazakhstan and Uzbekistan, on the other hand, have extensive reserves of oil, gas and coal.

### 1. Oil and gas

In Kazakhstan, proven onshore oil reserves are nearly 28 billion barrels, and some estimates of the probable reserves in the Kazakh part of the Caspian Sea reach 100 million barrels.<sup>83</sup> Xinjiang's oil reserves are estimated at 75 billion barrels, three times the proven reserves of the United States. Uzbekistan has an estimated 600 million barrels.

<sup>83</sup> Kadrzhanova A., Energy Sector Overview in Kazakhstan, Export USA ([www.buyusainfo.net/docs/x\\_5598441.pdf](http://www.buyusainfo.net/docs/x_5598441.pdf)).

For natural gas, Uzbekistan has proven reserves of 1.9 trillion cubic metres; Kazakhstan has 1.8 trillion cubic metres; and Xinjiang is believed to have over 8 trillion cubic metres, with 1.38 trillion cubic metres already verified.<sup>84</sup> Xinjiang's Tarim Basin alone has 400 billion cubic metres. Xinjiang's gas reserves in the Tarim, Junggar and Turpan-Hami basins account for one third of the country's total. Shaanxi Province is thought to have 1.7 trillion cubic metres.

Recent production and export figures for crude petroleum and natural gas are shown in Tables 29 to 32 for countries and provinces/autonomous regions where data are available.

**Table 29. Crude petroleum production**  
(in 1,000 metric tons)

	2001	2002	2003	2004	2005
Kazakhstan	36,060	42,068	45,376	50,672	51,258
Tajikistan	16	16	16	19	22

Source: ADB, *Key Indicators 2005 and 2007*.

**Table 31. Natural gas production**  
(in billion cubic metres)

	2001	2002	2003	2004	2005
Kazakhstan	12	14	17	22	25
Tajikistan	52	33	33	36	29
Uzbekistan	57,419	58,429	58,062	..	60,300

Source: ADB, *Key Indicators 2005 and 2007*.

**Table 30. Crude petroleum exports**  
(in 1,000 metric tons)

	2001	2002	2003	2004	2005
Kazakhstan	32,378	39,134	44,265	52,419 <sup>a</sup>	50,151
Tajikistan	3	5	5	7	6

Source: ADB, *Key Indicators 2005 and 2007*.

<sup>a</sup> Exports higher than production in 2004 likely explained by the imports of petroleum.

**Table 32. Natural gas exports**  
(in billion cubic metres)

	2001	2002	2003	2004	2005
Kazakhstan	6	10	11	17	15
Uzbekistan	7,030	4,615	7,471	..	12,400

Source: ADB, *Key Indicators 2005 and 2007*.

Coal is also abundant in the Silk Road. Kazakhstan has an estimated 64 billion tons of coal. Xinjiang holds nearly 2.2 trillion tons of coal, comprising 40 per cent of China's total, but current recoverable reserves are approximately 95 billion tons. Shaanxi Province ranks third in the country in coal, with an estimated 100 billion tons.

There are several types of opportunities for foreign investors in the oil and natural gas sectors in the Silk Road. Extraction, processing and transportation opportunities are possible, but these areas are often controlled by State-run oil companies. However, partnerships and concessions in these facets of the industry are becoming quite common in the region. One of the biggest needs in the oil and gas industry is replacing outdated equipment and technology. Among the opportunities related to this are:

- Drilling and production equipment, turbines and pumps, and other electrical equipment;
- Sulphur removal and disposal technologies;
- Petroleum software;
- Well stimulation and gas treatment packages;
- Environmental technologies; and
- Offshore production and operations in Kazakhstan, such as rig work, environmental technology and support infrastructure.

Seismological and prospecting works, and geological and exploration surveys of prospective oil and gas deposits, are top priorities in the Silk Road countries. Other services in high demand include:

- Engineering and construction;
- Detailed seismic surveying and deep drilling to discover hydrocarbon deposits;
- Joint exploration and development of new fields and deposits; and
- Financing.

<sup>84</sup> Fu Jing (2004), *East-West Gas Pipeline Wrapped Up*, China Daily, August 4 ([www.chinadaily.com.cn/english/doc/2004-08/04/content\\_357382.htm](http://www.chinadaily.com.cn/english/doc/2004-08/04/content_357382.htm)).



## 2. Power production and consumption

Between 1991 and 1998, the four Central Asian countries' power generation declined, falling particularly steeply in Kazakhstan, from over 80,000 GWh to around 50,000 GWh. Kazakhstan has slowly increased its power production since the new millennium, but the levels are still well below those of pre-independence. Tajikistan and Uzbekistan are also still producing electricity below their respective levels of 1991. Only Kyrgyzstan has increased production since independence. China's electricity production has skyrocketed since the 1990s to satisfy the ever-growing demand for energy. Between 1991 and 2005, the country's electricity production has risen over 365 per cent.

**Table 33. Electricity production**  
(in billion kilowatt hours)

	1991	2001	2002	2003	2004	2005
China	678.0	1,472.0	1,640	1,911.0	2,187.0	2,475
Kazakhstan	86.0	55.4	58.3	63.9	66.8	67.9 <sup>b</sup>
Kyrgyzstan	14.2	13.7	11.9	14.0	15.1	14.9
Tajikistan	17.6	14.4	15.3	16.5	16.5	17.1
Uzbekistan	54.2	48.0	49.4	48.18 <sup>a</sup>	49.63 <sup>a</sup>	47.7
<b>Silk Road Total</b>	<b>850.0</b>	<b>1,603.5</b>	<b>1,774.9</b>	<b>2,053.58</b>	<b>2,335.03</b>	<b>2,622.6</b>

Sources: ADB, *Key Indicators 2005 and 2007*.

<sup>a</sup> UNDP Uzbekistan.

<sup>b</sup> Agency on Statistics of Kazakhstan, *Statistical Yearbook of Kazakhstan 2006*.

Regional electricity trade also fell sharply following independence as each Central Asian country attempted to secure energy self-sufficiency. Between 1990 and 2000, regional electricity trade among the Central Asian countries declined approximately 70 per cent.<sup>85</sup> The lack of a suitable energy-trading framework is a major cause for low levels of cross-border energy trading.<sup>86</sup>

**Table 34. Electricity exports from the Silk Road**  
(in billion kilowatt hours)

	1991	2001	2002	2003	2004	2005
China	0.0	10.0	10.0	10.0	9.0	11
Kazakhstan	12.7	1.6	2.0	5.0	7.4	4.0
Kyrgyzstan	..	2.2	1.1	1.7	3.4	2.7
Tajikistan	5.4	4.0	3.9	4.6	4.5	4.3
Uzbekistan	18.1	13.0	..	..	..	..
<b>Silk Road Total</b>	<b>..</b>	<b>30.8</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

Sources: ADB, *Key Indicators 2005 and 2007*.

The Central Asian countries' consumption has the exception of Kyrgyzstan, while China's consumption has increased 220 per cent since 1991 (see Table 35).

The Central Asian countries are well electrified and there is little demand in the short-term for new rural electrification.<sup>87</sup> The Asian Development Bank predicts only 2 per cent annual growth of energy demand for Central Asia in the coming years. China, on the other hand, has a tremendous appetite for electricity as the second leading electricity consumer in the world despite shortfalls in supply.

The opportunities for investors in the power field are seen more in terms of reducing losses and rehabilitating existing generation capacity as opposed to building new generation

Electricity exports from Central Asia remain limited despite the high potential for exports from the region. Recent export figures are shown in Table 34. China's electricity production is barely keeping pace with consumption and rising demand leaves little for exports. The electricity generated in the Silk Road provinces leaves plenty of surplus, which is sent to China's eastern provinces.

Electricity consumption trends in the Silk Road are similar to those in production. It has dropped sharply since the early 1990s, with

**Table 35. Electricity consumption in the Silk Road**  
(in billion kilowatt hours)

	1991	2001	2002	2003	2004	2005
China	680.01	463.01	633.01	903.02	178.0	..
Kazakhstan	101.2	52.2	58.8	62.2	..	68.4
Kyrgyzstan	8.8	11.8	..	..	..	..
Tajikistan	19.1	15.7	16.1	16.5	16.8	17.3
Uzbekistan	71.9	48.5	49.3	48.0 <sup>a</sup>	49.2 <sup>a</sup>	..
<b>Silk Road Total</b>	<b>881.01</b>	<b>591.2</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

Sources: ADB, *Key Indicators 2005 and 2007*.

<sup>a</sup> UNDP Uzbekistan.

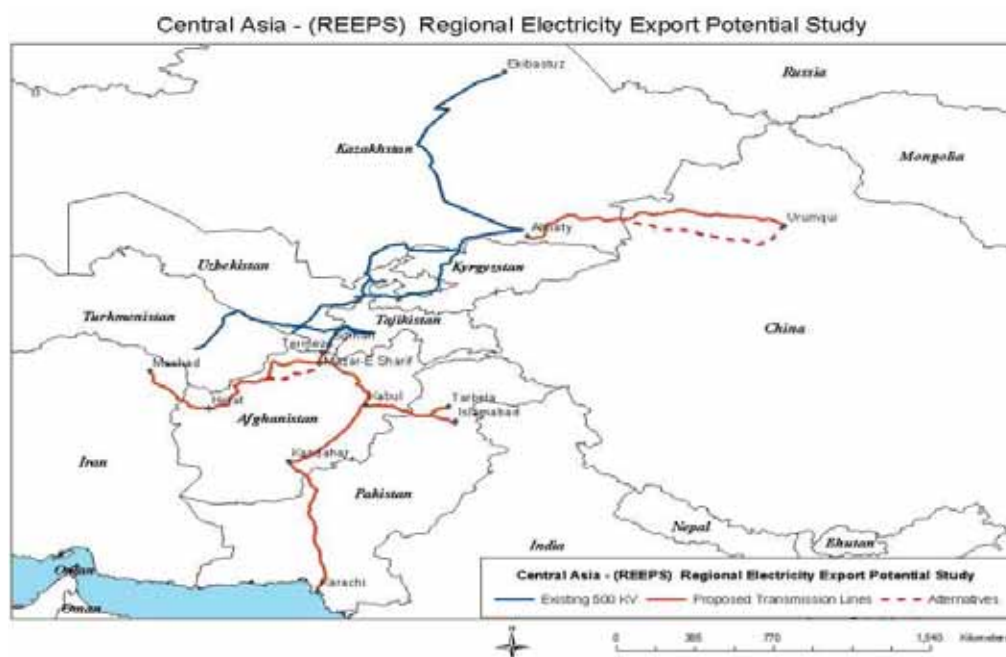
<sup>85</sup> UNDP Regional Bureau for Europe and the Commonwealth of Independent States (2005), *Central Asia Human Development Report, Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*, Bratislava.

<sup>86</sup> ADB (2004), *Regional cooperation strategy and programme for Central Asia Regional Economic Cooperation (CAREC) Member Countries 2005–2007*, July.

<sup>87</sup> Ibid.

plants. It has been argued that intraregional trade in electricity is necessary to meet the immediate and medium-term demand, because the countries' electricity transmissions systems are interconnected.<sup>88</sup> Exporting electricity from Central Asia has more long-term potential, because major new power generation projects in the region are expected to be viable only if access can be guaranteed to export markets outside the region.<sup>89</sup> Some of these possible routes outside the region are shown in Figure 17.

**Figure 17. Potential electricity export transmission links**



Source: World Bank, *Regional Electricity Export Potential Study (Appendix Volume)*, December 2004.

Energy generation and distribution in Central Asia are gradually being opened to the private sector.<sup>90</sup> Most of Kazakhstan's large generation plants are privatized and operated by private entities, and several distribution networks are run by private operators, with the goal being to privatize all distribution networks. Kyrgyzstan is privatizing all of its electricity distribution companies. Tajikistan has allowed a more limited role of the private sector by granting a concession in one autonomous oblast to a private operator. In Uzbekistan, four power plants accounting for half of the installed capacity are scheduled for privatization, along with four distribution companies.

Other potential investments could come in hydropower. Tajikistan and Kyrgyzstan have much hydropower potential, which could lessen dependence on fossil fuel electricity plants. Tajikistan is currently tapping only 10 per cent of its hydropower potential.

## D. Transportation and logistics

Shipping cargo by sea between East Asia and Europe remains the cheapest and preferred method, but as the land transport infrastructure in Central Asia improves, it could provide a viable alternative for moving goods and passengers across the Eurasian continent.

The railways hold the most promise for eventually competing with shipping on long-distance haulage, and some of the Silk Road countries are gradually privatizing at least parts of their rail systems. An important contribution to the ongoing development of the regional railway networks is UNESCAP's Trans-Asian Railway. This initiative started slowly in 1960,

<sup>88</sup> UNDP Regional Bureau for Europe and the Commonwealth of Independent States (2005), *Central Asia Human Development Report, Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*, Bratislava.

<sup>89</sup> Ibid.

<sup>90</sup> This paragraph based on World Bank, *Central Asia Regional Electricity Export Potential Study*, December 2004.

but the political and economic developments in Eastern Europe and Central Asian during the late 1980s and early 1990s enabled the concept of the Trans-Asian Railway to be revitalized. One of the rationales behind the Trans-Asian Railway is to assist landlocked countries on overcoming their disadvantages in importing and exporting goods. UNESCAP launched the Asian Land Transport Infrastructure Development project in 1992 to help countries identify rail routes that can be connected into an international network and simultaneously facilitate economic growth in peripheral areas. In November 2005, participating Governments finalized the Intergovernmental Agreement on the Trans-Asian Railway Network that will eventually make the network a reality.

Similar to the Asian Highway, the Trans-Asian Railway is not merely about connecting hard infrastructure. Part of the 2005 agreement contains technical principles for working towards the unhindered movement of 20-foot or larger ISO standard containers, the interoperability between railway lines and standards for container terminals.

This type of comprehensive approach to transportation (i.e. dealing with the hard and soft infrastructure) is occurring in other regional transport initiatives as well such as the Central Asia Regional Transport Sector Roadmap 2005–2010, which addresses a variety of critical issues currently hindering cross-border transport.

As discussed earlier, the road networks in the Silk Road are fairly adequate. Instead of constructing new roads, the biggest priority and an opportunity for investors is the upgrading of existing roads to meet future economic growth and activity.<sup>91</sup> Road conditions in much of the Silk Road have deteriorated over the years due to initial poor construction, a lack of maintenance, and heavy wear and tear from overloaded trucks. The Governments of the region have identified various road improvement projects, particularly for highways, but financing is in short supply. Below are some country priorities in the realization of those projects.

The road sector development of the Government of Kazakhstan is set out in the State Programme of Road Sector Development in the Republic of Kazakhstan in 2006–2012. The programme specifies certain priorities that follow:

- Reconstruction of main international transit corridors;
- Reconstruction and extensive repairs of 412 bridges and overpasses that do not meet the requirements for cargo and bulk transport;
- Year-round access of rural communities to road infrastructure;
- Construction and reconstruction of roads on bypasses of regional centres;
- Maintenance and rehabilitation of roads of regional and local significance;
- Reconstruction and extensive repair of certain sections of roads of local and regional importance providing access to historical, cultural and natural tourist sites of Kazakhstan, with a view to developing domestic and inbound tourism and cluster initiatives.

The transport sector strategy of the Government of Kazakhstan focuses on:

- Developing the institutional and regulatory framework for the competitive provision of transport services and transport infrastructure by private operators, while ensuring that the State retains for strategic reasons a controlling role in the sector; and
- Modernizing the sector, particularly through major investments in key infrastructure facilities.

A key priority in Uzbekistan's long-term infrastructure development is the road connection between Kungrad in the west and Andijan in the east. This projects links important centres within the country and is part of a longer route between Europe and China. In the medium term, the Government plans a cross-border project with Kazakhstan from Shymkent to Tashkent and the rehabilitation of the road between Tashkent to Dushanbe, including a new tunnel construction in Tajikistan with the support from the Islamic Republic of Iran. The government strategy in the transport sector focuses on:

- Step-by-step institutional reform and capacity-building for market-based transport management and operations;

<sup>91</sup> ADB, *Rebuilding the Silk Road, Encouraging Economic Cooperation in Central: The Role of the Asian Development Bank*, Manila.

- Rehabilitation, development and maintenance of the transport infrastructure;
- Development of east-west transport routes as part of Eurasian transport links and development of links with southern neighbouring countries; and
- Development of national transport infrastructure in line with the boundaries of the national territory, to avoid border crossings in domestic transport operations.<sup>92</sup>

The Government of Kyrgyzstan's transport sector policy objectives include:

- Better maintenance of transport infrastructure;
- Increased cost recovery from transport infrastructure users; and
- Privatizing transport operations and promoting competition among operators, while addressing safety and environmental concerns.

Along with Central Asian Governments, international financial institutions (IFIs), such as the Asian Development Bank, the European Bank for Reconstruction and Development, and the World Bank, are undertaking road initiatives, but there is plenty of scope for private sector participation in IFI-supported road projects and others.<sup>93</sup>

In another set of investment opportunities, a major void to fill in the Silk Road is the shortage of multi-modal transportation hubs that link key infrastructure networks across the region. Addressing this gap will be vital to the Silk Road's future competitiveness and will likely determine if the Eurasian "landbridge" becomes a viable alternative to transporting goods and people between East Asia and Europe.

Multi-modal transportation hubs enable cargo (and passengers) to conveniently and efficiently change from one form of transportation to another. Cargo carried on a truck, for instance, can quickly be placed on a train or vice versa at multi-modal hubs. Currently, very few of these hubs exist in the Silk Road, but they could significantly reduce transport distances and time.

## E. Agro-business

The region contains highly fertile grounds suitable for growing cash crops and specialty crops.

China's Silk Road provinces and regions are well suited for various types of agriculture and livestock rearing. Good farmland is located in the Guanzhong Plain (Shaanxi), Hetao Plain (partly in Ningxia), the Hexi Corridor (Gansu), the rim of the Tarim Basin and the northern slope of the Tianshan Mountains (both in Xinjiang). The Hexi Corridor and Hetao Plain are major grain producing regions in China. Xinjiang and Gansu have extensive grasslands that make them ideal for animal husbandry, particularly cattle and sheep.

Xinjiang is China's largest cotton producing area and accounts for one third of the country's total cotton output. Xinjiang is also the largest sugar beet growing region in China, making up 33 per cent of the national total, and it is a major melon-producing area as well. Shaanxi is also an important melon growing area.

In Kyrgyzstan,<sup>94</sup> the main agricultural products are grain (wheat and barley), vegetables (especially potatoes), cotton and tobacco. Vegetables, especially onions, are a major export of Kyrgyzstan. The country grows a large amount of potatoes, but only 1 per cent of the harvest is actually processed because of the lack of appropriate facilities. Fruits and nuts are another specialty, but the volumes processed are also low. The processing industry currently lacks the financial assets to process fruits and nuts in sufficient volumes. The subsector requires affordable mobile processing plants for drying, processing and packing. Sheep and goat breeding are the main types of animal husbandry in Kyrgyzstan. Significant amounts of the raw milk produced are exported to Kazakhstan instead of being processed in country because of the shortage of dairy processing facilities.

<sup>92</sup> (<http://web.worldbank.org>)

<sup>93</sup> Interested firms are encouraged to follow up on business opportunity announcements on ADB's website (<http://www.adb.org/Business/Opportunities/new.asp>) and for EBRD, see (<http://www.ebrd.com/oppo/index.htm>)

<sup>94</sup> This paragraph based on Sulaimanova A, *Overview of the Agricultural Industry in Kyrgyzstan*, United States Commercial Service ([www.bisnis.doc.gov](http://www.bisnis.doc.gov)).

In Tajikistan,<sup>95</sup> the main agricultural products are cotton, grain, silk, fruits, vegetables and tobacco. Tajikistan was a major producer of fruits and vegetables for the former Soviet Union. The main fruits and vegetables currently grown in Tajikistan include melons, watermelons, apples, apricots, grapes, pears, onions, tomatoes and lemons. In 2004, it was estimated that over 30 canning plants existed in Tajikistan, and all of them were privately owned.

Uzbekistan's<sup>96</sup> major agricultural crops are cotton and wheat, but these are still cultivated and sold under a government system. Aside from these crops and a few others, the agriculture sector is in private hands and performs generally well. Uzbekistan is one of the world's top 20 vegetable oil producers, and as of 2004, it was one of the top five tomato paste producers in the world. Uzbekistan's food processing and packaging industry holds the best opportunities for investors and represents one of the best prospects for exports.

Silk Road investment opportunities abound in agriculture. Prospective investors should not be deterred by the inability to purchase land. All of the countries provide for land use rights and leasing. More importantly, the Silk Road countries can provide the skilled agriculture labour and good-quality, inexpensive raw materials. What is needed from foreign investors is capital, modern management and marketing practices, and new technology for processing, storing and packaging agriculture goods.

One of the main investment opportunities in the Silk Road agriculture industry is providing modern equipment and technology to the various subsectors. Agricultural processing equipment in much of the Silk Road is outdated and inefficient, and this includes storage and packaging equipment. Excellent opportunities exist in dairy, fresh fruits and vegetables processing, cold storage facilities and transportation. Most farms in the region are unable to obtain sufficient financing to conduct these activities on their own. The various specialty items can be traded intraregionally and exported to markets further abroad.

## F. Mining

Mining is another lucrative sector in the Silk Road, with an extremely rich variety and size of reserves of metallic and non-metallic minerals. The Silk Road countries hold some of the world's largest shares of several minerals. In order to take full advantage of these assets, the Governments have updated their respective mining laws over the years to attract greater levels of investment. In addition, privatization continues to progress in mining, and the region's Governments are making more use of joint ventures with foreign partners.

Kazakhstan is endowed with coal, chromium, copper, zinc, lead, bauxite, manganese, chrome, gold, iron ore and titanium. The country holds one third of the world's chromium and manganese deposits and the eighth largest iron ore reserves.

Kyrgyzstan is most noted for its gold reserves. Approximately one third of its exports is comprised of gold. There are over 30 commercially significant or near significant gold deposits and hundreds more smaller deposits. Other key minerals include beryllium, tungsten, tin and coal.

Tajikistan holds over 70 types of deposits, including gold, silver, tungsten, coal, iron, lead, zinc, tin, antimony, mercury and other minerals. Over 400 industrial deposits have been identified for metallic and non-metallic minerals.

Uzbekistan's mining industry is particularly strong for gold, uranium and coal. The Tien Shan Gold Belt includes Uzbekistan's Muruntau deposit, which is the single largest gold deposit in the world. It is the world's ninth-largest gold producer and the fifth-largest producer of uranium; all of the latter production is exported. In addition to these minerals, Uzbekistan contains silver, zinc, wolfram, lead, sulphuric acid, feldspar, cadmium, molybdenum concentrate, kaolin and other precious metals.

<sup>95</sup> This paragraph based on Rahmonberdiev J. (2004), *Tajikistan: fruits and vegetables processing overview*, United States Commercial Service ([www.bisnis.doc.gov](http://www.bisnis.doc.gov)), November.

<sup>96</sup> This paragraph based on Recht L., et al. (2004), *Uzbekistan Country Commercial Guide*. United States Commercial Service ([www.bisnis.doc.gov](http://www.bisnis.doc.gov)), August.

The Chinese Silk Road provinces and autonomous regions contain a variety of minerals. Xinjiang has large deposits of coal, iron and copper. Gansu contains abundant non-ferrous metals. Processing industries for non-ferrous metals have been established in Baiyin, Jinchang (both in Gansu) and Qingtongxia (in Ningxia). Shaanxi has 58 varieties of minerals.

The major investment opportunities in the Silk Road mining sector include exploring for new deposits, extraction, processing and supplying modern mining equipment and technology. In addition, advanced environmental technology is greatly needed throughout the region. Additional opportunities exist in post-processing of base and precious metals.

## G. SWOT Analysis

A SWOT analysis of the region, presented below in Box 7, highlights a number of strengths such as the high level of education, strong cultural ties and usage of two major languages – Russian and Chinese. It also highlights the weaknesses such as inadequate quality of infrastructure and human resource constraints. There are a number of opportunities which should be a strong attraction for international investors and companies.

**Box 7. The Silk Road SWOT**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• High level of education;</li> <li>• Political stability;</li> <li>• Strong cultural ties among the Silk Road countries;</li> <li>• Well-known historical image as one of the world's first trading routes;</li> <li>• Predominance of two major languages – Russian and Chinese; and</li> <li>• Strong economic fundamentals.</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate quality of Infrastructure;</li> <li>• Business operation constraints;</li> <li>• Weak cross-border regulatory measures;</li> <li>• Deficits in top managerial know-how; and</li> <li>• Weak branding of the region.</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Large market of 145.2 million people and access to 2 billion living in the Greater Silk Road Region;</li> <li>• Abundance of natural resources;</li> <li>• The gold belt as well as other metal, non-metal minerals and precious stone resources;</li> <li>• Attractive tourism destination;</li> <li>• Energy potential in all areas;</li> <li>• Market-oriented reforms and privatization in the Silk Road economies;</li> <li>• Potential transport bridge between East and West; and</li> <li>• Potential Free Trade Area</li> </ul>	<ul style="list-style-type: none"> <li>• Governance issues and red tape;</li> <li>• Ambiguity in interpretation of laws; and</li> <li>• Difficulties obtaining work permit for foreign workers.</li> </ul>

## **IV. PRIVATE SECTOR PERCEPTIONS<sup>97</sup>**

The size of the combined market (more than 145.2 million people) is widely recognized by investors as one of the most attractive features of the region as an investment location. The diversity and richness of natural resources, together with the overall political stability, are additional strengths underlined by investors. Nonetheless, differences between Silk Road countries exist, in terms of both sector opportunities and general business climate.

Although progress in the business environment is often mentioned, there remain serious detriments to doing business in the region. Regulations concerning foreign workers, governance issues and infrastructure (in particular quality of roads) are among the top concerns for investors. In order to strengthen Silk Road countries' attractiveness for foreign investment, investors expect these issues to be addressed by the Silk Road Governments.

### **A. The political and economic climate**

In general, investors signalled that the Silk Road countries offered a stable environment, despite the developments in Kyrgyzstan in 2006 and early 2007. All the Governments were said, at least in principle, to have a receptive open attitude to the private sector and its concerns. For instance, some entrepreneurs mentioned special programmes aimed to help investors in Uzbekistan and Kazakhstan, some more effective than others in terms of actual implementation.

Steady growth between 7 and 10 per cent was appreciated by investors in all Central Asian countries, and this tendency is expected to continue. Forecasts for price stability are good for Kazakhstan, Uzbekistan and Kyrgyzstan, and these three countries should see their inflation rates decrease in the near future.

On the other hand, investors mentioned concerns about the tendencies towards more protectionism, including a nationalistic attitude towards some key sectors, such as mining.

### **B. Infrastructure**

As a whole, transport infrastructure has improved. Air transportation has much improved in the last few years. Despite the persistent deficit in direct flights between Silk Road destinations, airports are getting more reliable, and the quality of air transportation is seen as having improved over the years. The road network remains unsatisfactory, hampering many sectors with regional opportunities, such as agro-business and tourism. There is a significant need for efforts in rebuilding roads and improving transport and transit quality. Companies have identified transportation as a major constraint in doing business, after the provision and cost of electricity. However, the road quality in western China is considered better than in the Central Asian Silk Road countries as a whole.

Opinions on the telecommunication sector vary greatly, depending on the country. For example, the Kyrgyz telecommunication sector was evaluated more positively than is Kazakhstan's. An example of successful cooperation is the partnership by China's Huawei and ZTE and Central Asian cell phone infrastructure.

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<sup>97</sup> This chapter is based mainly on the responses of companies and business associations to an UNCTAD investor's survey on the investment climate in Central Asia and China. Surveys conducted by the World Bank in cooperation with its partners, were also consulted. Furthermore, it reflects discussions that were held during the first Silk Road Investment Forum in Xi'an in June 2006. The chapter should be regarded as merely indicative of investors' opinions about the region.

### **C. Human resources**

In general, investors, both foreign and domestic, are satisfied with the quality of the workforce and labour regulations in the Silk Road countries. However, some shortages in skilled workers were signalled in key sectors, such as the Kyrgyz mining sector, due to a brain drain of geologists.

Furthermore, the hiring of foreign personnel seems to be an issue of major concern in the region. There are obstacles in getting work permits for expatriates in all Central Asian countries, tightening the shortage of skilled employees, especially for managerial positions, which affects opportunities for knowledge and skills transfer to local employees.

### **D. Taxation**

The level of taxation is mostly seen as adequate in the Silk Road region. Problems are highlighted, though, in the transparency and return of VAT credits. The lack of professionalism of tax inspectors is seen as a problem, as well as the absence of double-taxation treaties with some countries. Bureaucracy and non-transparent regulatory procedures by regulatory authorities contribute to some uncertainties in the operations, although the time management spends in dealing with tax regulations in Central Asian countries is considered small.

### **E. Red tape and corruption**

Red tape and corruption are issues that investors in all Central Asian Silk Road countries have pointed to, especially in terms of getting operation licences. The most lucrative sectors are said to be affected, such as the extracting industry. Nevertheless, this has been recognized by the Silk Road Governments, which have taken steps to eradicate corruption – a clear sign for investors. For instance, in Tajikistan, the Agency for State Financial Control and Combating Corruption has recently been created to tackle the issue.

### **F. Other issues**

Clear and business-friendly regulations at the borders are among regional investors' major expectations. Slow border crossing times, difficulties in obtaining visas (in spite of some improvements) and the threats of arbitrary revocation of licences are also major concerns. However, one positive development, in addition to the projects mentioned earlier, is the border crossing pilot project between Kazakhstan and Kyrgyzstan.

### **G. Concluding remarks**

Overall, the Silk Road is seen by investors as attractive, but with much work remaining to capitalize on its full potential. Governance and quality of both "hard" and "soft" infrastructure are obstacles that should be addressed seriously by the Governments. Much work at the regional level should be done to address issues such as facilitation of border crossing to facilitate transit between countries, broaden the market for local and national companies and increase cross-border investment. Transport, tourism and agriculture are sectors that would greatly benefit from regional cooperation. Investors in the energy sector also see regional cooperation as very encouraging, as there are large reserves of energy resources spread along the Silk Road.

One major asset of the Central Asian Silk Road countries is their strategic position between the Russian Federation and China. This offers investors major alternatives for both export-oriented activities and integrated supply chains. Finally, investors feel that the Governments are missing the branding and marketing opportunities readily at hand to promote the region as an attractive investment destination.



# ANNEXES

## A. UNDP's Silk Road Regional Programme

The United Nations Development Programme's (UNDP) Silk Road Regional Programme<sup>98</sup> (SRRP) focuses on three areas: trade and transit, investment and tourism.

In trade, SRRP aims to promote favourable policymaking and legal environments for decision-making on trade and transit issues. It promotes dialogue on trade and transit, conducts policy analysis and regulatory assessments, and provides in-service training for officials. SRRP also promotes greater participation of the private sector in trade and transit promotion and public-private partnerships (PPPs). Additional activities take place in conjunction with the Shanghai Cooperation Organization's Business Council on capacity-building programmes.

In investment, SRRP works on ways to attract more foreign direct investment (FDI) into the region. Its main strategic partner in this component is UNCTAD. More specifically, SRRP encourages PPPs through the Silk Road Investment Forum – with the first forum having been successfully held in Xi'an in June 2006 – and helps identify particular investment projects that meet international standards. The programme organizes study tours and round table discussions, along with offering support to strengthen business associations.

In tourism, SRRP cooperates closely with UNWTO and seeks to enhance sustainable tourism and prepare national and local strategies. The focus is on developing value-added cultural tourism and eco-tourism. A key activity will be a detailed inventory, classification, and evaluation of tourism resources along the Silk Road. Additionally, SRRP focuses on developing and promoting Silk Road arts and crafts as a way of helping many artisans and entrepreneurs to earn greater incomes and retain cultural heritages. Another activity under SRRP includes the identification of selected cities as United Nations Silk Road Cities, based on long-term plans to protect cultural assets, raise tourist standards, and other related factors. SRRP organizes the Regional Silk Road Mayors' Forum to further deepen the linkages among key cities along the Silk Road. The first Mayor's Forum was held in October 2006 in Tashkent.

## B. Regional arrangements covering the Silk Road

The political and economic developments in Central Asia and China during the 1990s and early 2000s led to renewed interest in the possibility of restoring the ancient trade links of the Silk Road. Several multilateral institutions have established regional programmes with the intention of fostering greater linkages between the Silk Road countries and thereby promoting greater levels of prosperity. This section takes a brief look at the major regional cooperation arrangements currently underway.

### 1. CACO/EEC

The Central Asia Cooperation Organization (CACO) was formed in February 2002 and initially included Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. CACO was actually the successor to two previous subregional organizations, the Central Asia Economic Union (established in 1994 by Kazakhstan, Kyrgyzstan and Uzbekistan), which became the Central Asia Economic Community in 1998 with Tajikistan's membership.

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<sup>98</sup> For more information, see: ([www.silkroad.undp.org.cn](http://www.silkroad.undp.org.cn))

CACO originally intended to serve as a tool to create a subregional market in order to overcome members' relative isolation from world markets. Its objectives focused on cooperation in numerous areas, including politics, economics, transport and energy infrastructure, water and energy resources, agriculture, trade, science and technology, environment, tourism, drug trafficking, combating terrorism, and regional safety and stability.

CACO members have proposed a stage-by-stage approach to a regional free trade area (FTA) and have discussed the possibility of a common agricultural market. Some of the main achievements of CACO include improvements in tax harmonization among the member countries, the partial elimination of double taxation, and the creation of an Interstate Bank of Cooperation and Development.<sup>99</sup>

Recently, the Eurasian Economic Community (EEC) (previously known as the CIS Customs Union) merged and consolidated into CACO. The origins of EEC date to late 1994, when Kazakhstan signed a customs union treaty with the Russian Federation and Belarus. Eventually, Kyrgyzstan and Tajikistan joined the treaty, which led to a new treaty in 2000. Before its consolidation into CACO, EEC focused on free intra-community trade, developing a common market for labour and capital, common policies on migration, and broad policy harmonization. The new arrangement is still in the process of developing its aims and objectives.

## 2. CAREC

The Asian Development Bank (ADB) established the Central Asia Regional Economic Cooperation<sup>100</sup> (CAREC) programme in 1997. The cooperation programme involves Azerbaijan, China (namely Xinjiang), Kazakhstan, Kyrgyzstan, Mongolia (since 2002), Tajikistan and Uzbekistan. Afghanistan became a member in 2005, when the Russian Federation became an observer. CAREC is focused on financing infrastructure projects and improving the region's policy environment in the priority areas of transport, energy and trade. New sectors are presently under consideration, such as human resource development, tourism, agriculture and finance. In the energy sector, the CAREC programme aims to improve supplies of energy by rehabilitating and expanding generating and transmission facilities. Modernizing existing regional transmission networks and generation plants are emphasized, while new energy supply projects are being deferred. Also in the energy sector, CAREC is focusing on improving policies related to regional energy trade so that private investors will have greater opportunities to invest in energy exports outside of Central Asia.<sup>101</sup>

In the transport sector, CAREC seeks to develop an integrated and efficient multi-modal transport system for the region, including the reduction of transaction costs and facilitation of transit. Among the means of accomplishing these objectives are rehabilitating roads and railways, providing greater access to isolated areas, harmonizing and simplifying cross-border transport procedures, development of transport corridors, developing linkages with external markets and supporting policy and institutional reforms.

The third focal area of CAREC is trade facilitation. The objective is to increase trade and integration with key markets on the continent and further abroad. CAREC support for trade facilitation builds on earlier initiatives that include:

- Information technology for automated customs services and data exchanges;
- Risk management and post-clearance audit;
- Joint customs control and single-window practices; and
- Regional transit development.

The fourth area of CAREC is trade policy. WTO membership is a priority for all CAREC member countries. Other activities under this sector address barriers to border trade, including reducing delays and financial costs of goods entering and transiting a country.

<sup>99</sup> UNESCAP (2005), Trade and Investment Division, *Experiences with regionalism and bilateralism in Asia and the Pacific with focus on Central Asia*, Paper for the International Conference on Strengthening Regional Cooperation for Managing Globalization, Moscow, September.

<sup>100</sup> For more information, see: ([www.adb.org/CAREC/default.asp](http://www.adb.org/CAREC/default.asp)).

<sup>101</sup> Asian Development Bank (2004), *Building Partnerships for Development: Regional Cooperation Strategy and Programme 2004-2006*, Manila.

CAREC has also made major strides towards involving the regional business community in regional cooperation projects. A preparatory meeting for a Regional Business Round Table was held in November 2005 in Bishkek, which brought together more than 40 regional business leaders. This event was followed by the CAREC Business Development Forum and the Ministerial Conference on CAREC in October 2006 in Urumqi. The fundamental long-term purpose of these initiatives is to recognize, stimulate and support a greater role for the private sector in developing Central Asia, and in turn progressing towards overall regional economic integration.

An important contribution of CAREC is enhancing coordination among the various donor organizations – also known as “development partners” – active in the region, so that resources are used efficiently. Many development partners are active in Central Asia providing millions of dollars in technical assistance grants and concessional financing for capacity-building, institutional reform, infrastructure development and other priority needs. Six development partners have agreed to work under the CAREC “overall institutional framework” (OIF). The cooperating development partners are ADB, the European Bank for Reconstruction and Development, IMF, the Islamic Development Bank, UNDP and the World Bank. In addition, the Aga Khan Foundation and several bilateral donor agencies are key supporters of development initiatives in Central Asia. With so many partners active in the region, the potential for duplication is high, thereby requiring organizations to communicate and coordinate their activities and financing.

### 3. CIS

Following the independence of the Soviet republics, most of them became members of the Commonwealth of Independent States (CIS) in December 1991. Georgia joined the CIS in 1993, completing the membership of all former Soviet republics except for the Baltic States. The original purpose of the CIS was to coordinate foreign and economic policies of the members. One feature of the CIS is the free-market ruble zone.

In September 1993, the Heads of the CIS States signed an Agreement on the Creation of an Economic Union to form common economic space grounded on free movement of goods, services, labour and capital, to elaborate coordinated monetary, tax, price, customs and external economic policy.

In October 2000, the Eurasian Economic Community (EurAsEC) was established, with the functions of formation of common external customs boundaries between the member countries (Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan and Uzbekistan), elaboration of unified foreign economic policies, tariffs and prices and other components of the common market space. EurAsEC aims to facilitate effective development of the Common Economic Space by the Customs Union member-States, and coordination of integration processes into the world economy and world trade system.

### 4. ECO

The Economic Cooperation Organization<sup>102</sup> (ECO) began in 1985 with the Islamic Republic of Iran, Pakistan and Turkey to promote economic, technical, and cultural cooperation. Seven Central Asian countries, including Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, joined in 1992. ECO's priority sectors are energy, trade, transportation, agriculture and drug control. According to the ECO secretariat's website, the main objectives of ECO are:

- Sustainable economic development of member States;
- Progressive removal of trade barriers and promotion of intraregional trade;
- Greater role of the ECO region in the growth of world trade;
- Gradual integration of the economies of the MEMBER States in the world economy;
- Development of transport and communications infrastructure linking the MEMBER States with each other and with the outside world;

<sup>102</sup> For more information, see: ([www.ecosecretariat.org](http://www.ecosecretariat.org)).

- Economic liberalization and privatization;
- Mobilization and utilization of the ECO region's material resources;
- Effective utilization of the agricultural and industrial potentials of the ECO region;
- Regional cooperation for drug abuse control, ecological and environmental protection, and strengthening of historical and cultural ties among the peoples of the ECO region; and
- Mutually beneficial cooperation with regional and international organizations.<sup>103</sup>

In 2003, the member States signed the ECO Trade Agreement to reduce tariffs and eliminate non-tariff barriers to trade and exchange concessions, with the intention of boosting intraregional trade. Under the terms of the agreement, the member countries will reduce their tariffs for fellow signatories to a maximum of 15 per cent over eight years (15 years for Afghanistan). It also calls for no new "para-tariff" charges (referring to border charges and fees other than tariffs) in trade among the contracting parties without the approval of the Cooperation Council. It also calls for all para-tariff charges acting as import duties and customs duties on exports to be eliminated within two years of the agreement's implementation.

## 5. SCO

The Shanghai Cooperation Organization<sup>104</sup> (SCO) emerged from the Shanghai Five in 2001 and consists of China, the Russian Federation, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. SCO began as a forum for security issues, but has broadened its scope in recent years. The main purposes of SCO are to (a) strengthen mutual trust among members; (b) preserve regional peace and security; and (c) promote cooperation in fields such as political affairs, economy and trade, science-technology, culture and education. Besides security and politics, specific sectors for cooperation include energy, transportation, tourism and environmental protection.

In 2003, the SCO members declared their intentions to deepen their economic interactions and improve the environment for investment. Also at that time, the possibility of a free trade zone was mentioned for the future. Another important business-related development occurred in 2004 with the proposal and follow-up activities to form and hold the initial meetings of the SCO Business Council.

## 6. SPECA

In 1998, the United Nations Economic Commission for Europe (ECE) and the Economic and Social Commission for Asia and the Pacific (ESCAP) jointly initiated the United Nations Special Programme for the Economies of Central Asia<sup>105</sup> (SPECA) for Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Later, Azerbaijan, Turkmenistan and Afghanistan joined the programme. SPECA aims to strengthen subregional cooperation in Central Asia and facilitate its integration into the Asian and European economies.

SPECA focuses on transport and border crossing, energy production and distribution, water management, subregional cooperation on international gas and oil pipelines, attracting foreign direct investment, protection of the environment, and development of SMEs.

<sup>103</sup> Ibid.

<sup>104</sup> For more information, see: SCO's website ([www.sectsc.org](http://www.sectsc.org)).

<sup>105</sup> See: UNECE's SPECA web pages for more details ([www.unece.org/speca/](http://www.unece.org/speca/)).

## C. Useful contacts and sources of further Information

### 1. Kazakhstan

Agency On Communication Network  
47 Kabanbai Batyr St., Astana 010000  
Tel. (3272) 757-701  
Fax. (3272) 240-611  
www.aic.gov.kz

Agency of Statistics  
125 Abai St., Almaty  
Tel. (3272) 61-13-23  
Fax. (3272) 42-08-24  
www.stat.kz

Committee on Intellectual Property Rights  
48 Omarov St., Astana 010000  
Tel. (3172) 390-765

Custom Control Committee  
10 Beibetishili St, Astana 010000  
Tel. (3172) 227-303  
www.customs.kz

Foreign Investors' Council  
3rd floor, 62A Abay Ave., Almaty 050008  
Tel. (3272) 588-066  
Fax. (3272) 50 61 05  
www.fic.kz

OJSC National Company Kazakh Information Agency (Kazinform)  
32-A Zhambul St., Astana 010000  
Tel. (3172) 238-358  
www.inform.kz  
subs@inform.kz

JSC National Information Technologies  
71 Auezov St., Astana 010000  
Tel. (3172) 333-610  
Fax. (3172) 333-182  
www.nit.kz

Land Management Agency  
41 Zheltoksan St., Astana 010000  
Tel. (3172) 320-211  
Fax. (3172) 327-082

Ministry of Energy and Mineral Resources  
22 Kabanbai Batyr St., Astana 010000  
Tel. (3172) 976-801  
Fax. (3172) 976-943  
www.minenergo.kz

Ministry of Foreign Affairs  
35 Ave, Astana, 010000  
Tel.: (3172) 720-000  
Fax: (3172) 720-237  
www.mfa.kz

Agency for Control and Supervision of Financial Market and Institutions  
67 Aiteke bi, Almaty 050000  
Tel. (3272) 788024  
Fax. (3272) 725297  
www.afn.kz

Chamber of Commerce and Industry  
503, Business-Centre Nurly Tau, 5 Al-Farabi Ave., Almaty 050059  
Tel./fax. (3272) 777-050, 777-055, 777-005  
www.cci.kz

Committee on Protection of Competition  
14 Bokeihan St., Astana 010000  
Tel. (3172) 591-778

European Business Association of Kazakhstan (EUROBAK)  
1st floor, 146 (148) Zheltoksan St., Almaty 050000  
Tel. (3272) 672-512  
Fax. (3272) 509-276  
www.eurobak.kz

Investments Committee  
47 Kabanbai Batyra St., Astana, 010000  
Tel. (3172) 241-540

JSC National Company "KazMunaiGas"  
22 Kabanbay Batyr Ave., Astana 010000  
Tel. (3172) 976-101  
Fax. (3172) 976-000  
www.kazmunaygas.kz  
astana@kmg.kz

JSC Production Contract Corporation  
39/1 Moskovskaya St., Astana 010000  
Tel. (3172) 591-221  
Fax. (3172) 591-270  
www.foodcorp.kz  
mail@foodcorp.kz

Ministry of Agriculture  
49 Abai St., Astana 010000  
Tel.: (3172) 323-763  
Fax: (3172) 424-541  
www.minagri.kz

Ministry of Environmental Protection  
31 Pobeda St., Astana 010000  
Tel: (3172) 591-950  
Fax: (3172) 591-973  
www.nature.kz

Ministry of Industry and Trade  
47 Kabanbai Batyra St., Astana, 010000  
Tel. (3172) 299-000  
Fax. (3172) 240-084  
www.mit.kz

Agency for Regulation of Natural Monopolies  
14 Bokeihan St., Astana 010000  
Tel. (3172) 591-677  
Fax. (3172) 591-505  
www.regulator.kz

Committee of Industry Scientific and Technological Development  
47 Kabanbai Batyra St., Astana 010000  
Tel. (3172) 299-019

Committee on Regulation Commercial  
47 Kabanbai Batyra St., Astana 010000  
Tel. (3172) 299-034

Financial Control and State Procurement Committee  
33 Pobeda St., Astana 010000  
Tel. (3172) 717-171  
www.goszakup.kz

JSC International Airport Astana  
14 Airport, Astana 010014  
Tel. (3172) 774-222  
Fax. (3172) 777-952  
www.astanaairport.kz

JSC National Company Kazakhstan Temir Zholy  
98 Pobeda Ave., Astana 010000  
Tel. (3172) 934-400  
Fax. (3172) 935-836  
www.railways.kz

JSC State Pension Fund  
82 Auezov St., Almaty 050008  
Tel. (3272) 427-624  
Fax. (3272) 509-135  
www.gnpf.kz  
gnpf@gnpf.kz

Ministry of Employment and Social Security  
2 Manas St., Astana 010000  
Tel. (3172) 153-602  
Fax. (3172) 153-654  
www.enbek.kz

Ministry of Finance  
33 Pobeda St., Astana 010000  
Tel. (3172) 717-764  
Fax. (3172) 717-785  
www.minfin.kz

Ministry of Justice  
45 Pobeda St., Astana, 010000  
Tel. (3172) 391-213  
Fax. (3172) 325-444  
www.minjust.kz

Ministry of Transport and Communications  
47 Kabanbay Batyr St., Astana 010000  
Tel. (3172) 240-077  
Fax. (3172) 241-170  
[www.nit.kz/mtc/ru/](http://www.nit.kz/mtc/ru/)

OJSC Kazakhstan Electricity Grid Operating Company  
7 Bogenbai Batyra St., Astana 010000  
Tel. (3172) 317-537  
[www.kegoc.kz](http://www.kegoc.kz)

State Property and Privatization Committee  
33 Pobeda St., Astana 010000  
Tel.: (3172) 717-708

National Bank  
21 Microdistrict, Koktem-3, Almaty 050040  
Tel. (3272) 704-505  
Fax. (3272) 704-703  
[www.nationalbank.kz](http://www.nationalbank.kz)

OJSC Kazakhtelecom  
61 Abai Ave., Saryarka district, Astana 010000  
Tel. (3172) 587-555, 587-704  
Fax. (3172) 587-556  
[www.telecom.kz](http://www.telecom.kz)  
[telecom@telecom.kz](mailto:telecom@telecom.kz)

Tax Committee  
33 Pobeda St., Astana 010000  
Tel. (3172) 717-108  
[www.nalog.kz](http://www.nalog.kz)

OJSC Kazpost  
152 Bogenbai Batyr St. Almaty, 050012  
Tel. (3272) 590-619  
[www.kazpost.kz](http://www.kazpost.kz)

OJSC National Kazakhstan Engineering Company  
36 Auezova St., Astana 010000  
Tel. (3172) 214-465  
Fax. (3172) 333-517  
[www.ke.kz](http://www.ke.kz)  
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## 2. Kyrgyzstan

American Chamber of Commerce Sovetskaya 191, Hyatt Office 123, Bishkek  
Tel: (996-312) 680-907  
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Department of Investments Promotion  
Tel. (996-312) 662-034, 621-937  
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International Business Council Office 112, Hyatt Regency, 191 Sovetskaya St., Bishkek 720011  
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Chamber of Commerce and Industry 720001, Bishkek, ul. Kievskaja 107  
Tel. (996-312) 210-565  
Fax. (996-312) 210-575  
E-mail: [cci-kr@total.kg](mailto:cci-kr@total.kg)  
<http://www.ihk-kg.de>

Department of Regional Cooperation  
Tel. (996-312) 625-237, 661-778

Ministry of Economic Development Industry and Trade  
106 Chui Ave., Bishkek 720002

Department of Light and Local Industries  
Tel. (996-312) 620-537, 661-873

Division of External Economic Relations, Trade and work with WTO  
Tel. (996-312) 625-251, 620-583  
Fax: (996-312) 663-024  
E-mail: [vto@mvtg.gov.kg](mailto:vto@mvtg.gov.kg)

Ministry of Foreign Trade and Industry Chui pr., 106, Bishkek  
Tel. (996-312) 663-800  
Fax. (996-312) 663-498

## 3. Tajikistan

Agency for Standardization, Metrology, Certification and Trade Inspection (Tajikstandart) 734018, 42/2, Karabaeva St., Dushanbe  
Tel: (992-372) 336-467, 346-365  
Fax: (992-372) 341-933  
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Main Records Office at the Government of Tajikistan 734018, 38/1, Karabaeva St., Dushanbe  
Tel.: (992-372) 339-571, 336-352  
E-mail: [archive@mail.ru](mailto:archive@mail.ru)

Ministry of Culture 734025, 34, Rudaki Ave., Dushanbe  
Tel: (992-372) 210-305, 215-370  
Fax: (992-372) 215-307

Agency of Valuable Security and Foreign Investments at the Ministry of Finance 734025, 3, Academic Rajabovs St., Dushanbe  
Tel: (992-372) 217-125, 271-987  
Fax: (992-372) 272-930  
E-mail: [acb@tojikiston.com](mailto:acb@tojikiston.com)

Ministry of Agriculture 734025, 44, Rudaki Ave., Dushanbe  
Tel: (992-372) 211-596, 211-094

Ministry of Economy and Trade 734002, 37, Bohtar St., Dushanbe  
Tel: (992-372) 214-600, 273-434  
Fax: (992-372) 215-132  
E-mail: [minvo@tjinter.com](mailto:minvo@tjinter.com) [www.met.tj](http://www.met.tj)

Chamber of Commerce and Industry 734012, 21, Valamatzade St., Dushanbe  
Tel.: (992-372) 215-284, 217-743  
Fax: (992-372) 211-480  
E-mail: [chamber@tjiner.com](mailto:chamber@tjiner.com) <http://tpp.tojikiston.com/eng/>  
<http://www.tpp.tj/en/>

Ministry of Communication 734025, 57, Rudaki Ave., Dushanbe  
Tel.: (992-372) 212-284, 210-277  
Fax: (992-372) 212-953, 510-277  
E-mail: [micom@rs.tj](mailto:micom@rs.tj) [www.mincom.tj](http://www.mincom.tj)

Ministry of Education 734024, ул. 13-а, Nosirmuhammad St., Dushanbe  
Tel: (992-372) 214-605  
Fax: (992-372) 217-041  
E-mail: [malumot@netrt.org](mailto:malumot@netrt.org)

Ministry of Education of Tajikistan  
734025, 69, Shevchenko St.,  
Dushanbe  
Tel: (992-372) 211-835,  
210-673, 210-463  
Fax: (992-372) 217-525  
E-mail: vazir@tjinter.com  
Web: medinfo.tojikiston.com

Ministry of Foreign Affairs  
734051, 42, Rudaki Ave., Dushanbe  
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Fax: (992-372) 210-259  
E-mail: mfart@tajik.net  
www.mfa.tj

Ministry of Labour and Social Welfare  
734026, 5/2, Alisher Navoi St.,  
Dushanbe  
Tel: (992-372) 361-837  
Fax: (992-372) 351-818

National Association of Small and  
Medium Business  
734003, 10/1, Studencheskaya St.,  
Dushanbe  
Tel./Fax: (992-372) 247-856

State Agency of Antitrust Policy  
734012, 20, Rudaki Ave., Dushanbe  
Tel: (992-372) 215-349,  
214-512  
Fax: (992-372) 215-553, 217-128

State Committee for State Property  
734025, 44, Rudaki Ave., Dushanbe  
Tel: (992-372) 218-659  
Fax: (992-372) 217-550

Ministry of Energy  
734026, 64, Ismoil Somoni St.,  
Dushanbe  
Tel: (992-372) 358-766, 295-359  
Fax: (992-372) 358-692  
E-mail: energo@rs.tj

Ministry of Industry 734012, 22,  
Rudaki Ave., Dushanbe  
Tel: (992-372) 216-997  
Fax: (992-372) 218-281  
E-mail: minprom@netrt.org

Ministry of Revenue  
734025, 50, Bukhoro St., Dushanbe  
Tel: (992-372) 213-588  
Fax: (992-372) 216-069

National Patent Information Centre at  
the Ministry of Economy and Trade  
734042, PT, г. Dushanbe, ул. Айни,  
14-а.  
Tel: (992-372) 214760, 230900,  
214344  
Fax: (992-372) 217-154, 210-404  
E-mail: info@tjpat.org

State Committee for Construction  
and Architecture  
734025, 36, Khuseinzoda St.,  
Dushanbe  
Tel: (992-372) 218-853  
Fax: (992-372) 216-143  
E-mail: goskomstroy@tajik.net

State Committee on Statistics  
734025, 17, Bohtar St., Dushanbe  
Tel: (992-372) 232-553 Fax: (992-  
372) 214-375  
E-mail: stat@tojikiston.com  
www.stat.tj

Ministry of Finance  
734025, 3, Academic Rajabovs Ave.,  
Dushanbe  
Tel: (992-372) 216-410, 273-941  
Fax: (992-372) 213-329  
E-mail: min\_fin@tojikiston.com Web:  
www.minfin.tj

Ministry of Justice  
734024, 25, Rudaki Ave., Dushanbe  
Tel: (992-372) 210-082  
Fax: (992-372) 218-066

Ministry of Transport  
734042, 14, Ayni St., Dushanbe  
Tel: (992-372) 211-713  
Fax: (992-372) 212-003  
E-mail: mintrans@tajnet.com

National Space, Geodesic and  
Cartographic Agency "Tajikkainot"  
734033, 4/1, Abaya St., Dushanbe  
Tel: (992-372) 312-423,  
313-968  
Fax: (992-372) 311-364

State Committee on Nature Protection  
and Forestry  
734025, 12, Bohtar St., Dushanbe  
Tel: (992-372) 213-039,  
212-045  
Fax: (992-372) 211-839

Tajik Republican Council of Consumer  
Associations "Tajikmatlubot"  
734003, 137, Rudaki Ave., Dushanbe  
Tel: (992-372) 248-723,  
248-811  
Fax: (992-372) 210-944, 248-869

## 4. Uzbekistan

Asaka State Joint Stock Commercial  
Bank  
67 Nukus St., Tashkent  
Tel. (99871) 120-8183  
Fax. (99871) 120-8173  
www.asakabank.com

Ministry of Foreign Affairs  
9 Uzbekistan St.,  
Tashkent  
Tel. (99871) 133-6475  
Fax. (99871) 139-1517  
www.mfa.uz

State Committee of Uzbekistan on  
Demonopolization and Support of  
Competition and Entrepreneurship  
18a A. Navoi St.,  
Tashkent  
Tel. (99871) 139-1542  
Fax. (99871) 139-4670  
www.antimon.uz

Tashkent Stock Exchange  
10 Bukhoro St.,  
Tashkent  
Tel. (99871) 136-0740  
Fax. (99871) 133-3231  
www.uzse.com

Chamber of Commerce and Industry  
6 Bukhoro St., Tashkent  
Tel. (99871) 132-0901  
Fax. (99871) 132-0903  
E-mail: info@chamber.uz  
www.chamber.uz

Ministry of Foreign Economic  
Relations, Investments and Trade  
1 T. Shevchenko St., Tashkent  
Tel. (99871) 138-5000  
Fax. (99871) 138-5200  
www.mfer.uz

State Property Committee  
55 Uzbekistan St.,  
Tashkent  
Tel. (99871) 139-4446  
Fax. (99871) 139-1484  
www.gki.uz

Uzbekistan Commodity Exchange  
53 Uzbekistan St.,  
Tashkent  
Tel. (99871) 139-8377  
Fax. (99871) 139-8392  
www.uzex.com

Ministry of Economy  
45a Uzbekistan St., Tashkent  
Tel. (99871) 139-8084  
Fax. (99871) 139-8639  
www.mineconomy.uz

National Bank for Foreign Economic  
Activity  
101 A. Timur St.,  
Tashkent  
Tel. (99871) 137-5959  
Fax. (99871) 137-5969  
www.nbu.com

Statistics State Committee  
63 Buyuk Ipak St., Tashkent  
Tel. (99871) 267-0494  
Fax. (99871) 267-7816  
www.stat.uz

Uzbek Tourism National Company  
47 Khorezmskaya St., Tashkent  
Tel. (99871) 133-6414  
Fax. (99871) 136-7948  
www.uzbektourism.uz

“UZINFOINVEST” the Information  
Support & Foreign Investments  
Promotion Agency  
1, Taras Shevchenko St., Tashkent,  
100029 Uzbekistan  
Tel.: (99871) 1389100  
Fax: (99871) 1389200  
www.investuzbekistan.uz, www.  
uzinfoinvest.uz

## 5. Gansu Province, China

Baiyin Foreign Investment Bureau  
No.100 Renmin Road, Baiyin  
730900  
Tel: (0943) 824-8033  
Fax: (0943) 824-8030

Dingxi Foreign Investment Bureau  
No.54 Zhonghua Road, Dingxi  
743000  
Tel: (0932) 821-4924  
Fax: (0932) 821-3052

Gannan Foreign Investment Bureau  
Long Street, Hezuo, Gannan 747000  
Tel: (0941) 821-2067  
Fax: (0941) 821-2067

Gansu Branch of China International  
Trade Promotion Committee  
No.280 Xiaoshaomen, Lanzhou  
730030  
Tel: (0931) 883-0479  
Fax: (0931) 884-4197

Gansu Disputes Arbitrating Centre  
for Foreign-Funded Enterprises  
No.280 Xiaoshaomen, Lanzhou  
730030  
Tel: (0931) 883-0479  
Fax: (0931) 884-4197

Gansu Land Resources  
Management Bureau  
No.258 Hongxing Lane, Lanzhou  
730000  
Tel: (0931) 876-6628  
Fax: (0931) 862-3308

Gansu Price Bureau  
No.120 Gaolan Road, Lanzhou  
730030  
Tel: (0931) 841-6112  
Fax: (0931) 841-5538

Information Office of Gansu  
Provincial People's Government  
No.292 Eastern section of South  
Binhe Road, Lanzhou  
730000  
Tel: (0931) 881-0942  
Fax: (0931) 881-0942

Jiuquan Foreign Investment Bureau  
No. 6 Cangmen Road, Jiuquan  
73500  
Tel: (0937) 261-5972  
Fax: (0937) 261-2259

Department of Commerce of Gansu  
Province  
No.386 Dingxi Road, Lanzhou  
730000  
Tel: (0931) 861-9767  
Fax: (0931) 861-8083

Economic Committee of Gansu  
Province  
No.1 Central Square, Lanzhou  
730030  
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Fax: (0931) 846-2467

Gansu Administration for Industry &  
Commerce  
No.279 East Jinchang Road, Lanzhou  
730000  
Tel: (0931) 533-300  
Fax: (0931) 853-3001

Gansu Complaint & Treatment Centre  
for Foreign-funded Enterprises  
No.1 Central Square, Lanzhou 730030  
Tel: (0931) 848-0470  
Fax: (0931) 848-0470

Gansu Foreign Investment Office  
No.280 Xiaoshaomen, Lanzhou  
730030  
Tel: (0931) 887-3355  
Fax: (0931) 881-1567

Gansu Law Consulting Centre for  
Foreign-Funded Enterprises  
No.386 Dingxi Road, Lanzhou 730000  
Tel: (0931) 861-6321  
Fax: (0931) 861-8083

Gansu Quality & Technology  
Supervision Bureau  
No.441 Nanchang Road, Lanzhou  
730030  
Tel: (0931) 882-2476  
Fax: (0931) 882-8688

Jiayuguan Foreign Investment  
Bureau  
No.1 Esat Jianshe Road, Jiayuguan  
73510  
Tel: (0937) 622-4759  
Fax: (0937) 622-5307

Lanzhou Customs  
No.653 East Binhe Road, Lanzhou  
730030  
Tel: (0931) 883-4713  
Fax: (0931) 888-5768

Development and Reform  
Commission of Gansu Province  
No.1 Central Square, Lanzhou  
730030  
Tel: (0931) 848-9681  
Fax: (0931) 848-4190

Foreign Affairs Office of Gansu  
Provincial Government  
No.697 Nanchang Road, Lanzhou  
730000  
Tel: (0931) 872-0733  
Fax: (0931) 841-8834

Gansu Association of Foreign-Funded  
Enterprises  
No.386 Dingxi Road, Lanzhou  
730000  
Tel: (0931) 861-6321  
Fax: (0931) 861-8083

Gansu Construction Department  
No.1 Central Square, Lanzhou  
730030  
Tel: (0931) 846-7671  
Fax: (0931) 846-2689

Gansu Import & Export Inspection &  
Quarantine Bureau  
No.387 East Jiayuguan Road,  
Lanzhou 730020  
Tel: (0931) 866-6517  
Fax: (0931) 866-5274

Gansu Local Tax Bureau  
No.276 Xiaoshaomen, Lanzhou  
730030  
Tel: (0931) 883-5102  
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Gansu State Tax Bureau  
Huarui Building, Xikou, Lanzhou  
730030  
Tel: (0931) 853-3721  
Fax: (0931) 841-6862

Jinchang Foreign Investment Bureau  
No.26 Tianjin Road, Jinchang 737100  
Tel: (0935) 832-5191  
Fax: (0935) 821-2183

Lanzhou Economic & Technical  
Development Zone  
No.16 Anning District, Lanzhou  
730050  
Tel: (0931) 767-2965  
Fax: (0931) 767-2883



Lanzhou Foreign Investment Bureau  
No.75 Jinchang Road, Lanzhou  
730000

Tel: (0931) 877-2824  
Fax: (0931) 885-8105

Linxia Foreign Investment Bureau  
No. 47 Hongyuan Road, Linxia  
731100

Tel: (0930) 621-3901  
Fax: 0930) 621-2564

Qingyang Foreign Investment Bureau  
No.186 North Road, Xifeng,  
Qingyang 745000

Tel: (0934) 861-5479  
Fax: (0934) 861-2215

Zhangye Foreign Investment Bureau  
No.29 Nanhuan Road, Zhangye  
734000

Tel: (0936) 821-4627  
Fax: (0936) 821-4627

Lanzhou High & New Technology  
Industry Development Zone  
No.555 Zhangsutan, Lanzhou 730010

Tel: (0931) 855-1571  
Fax: (0931) 855-2497

Longnan Foreign Investment Bureau  
Wudu County, Longnan 746000

Tel: (0939) 821-2739  
Fax: (0939) 823-2052

Tianshui Foreign Investment Bureau  
No.34 West Minzhu Road, Tianshui  
74100

Tel: (0938) 822-9189  
Fax: 0938) 821-4707

Lanzhou Investment Service Office  
No.403 Jiuquan Road, Lanzhou  
730030

Tel: (0931) 460-0325  
Fax: (0931) 460-0131

Pingliang Foreign Investment Bureau  
No.141 Xidajie, Pingliang 744000

Tel: (0933) 821-3891  
Fax: (0933) 822-7743

Wuwei Foreign Investment Bureau  
No.14 Nanguanxi Road, Wuwei 73300

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Fax: (0935) 221-2975

## 6. Xinjiang Uygur Autonomous Region, China

Department of Foreign Trade and  
Economic Cooperation, Xinjiang,  
Foreign Economic Cooperation  
Division No.11 Tuanjie Road, Urumqi,  
Xinjiang, 830001  
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Fax: (86-991) 286-0255  
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Xinjiang Uygur Autonomous Regional  
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Foreign Investment Administration  
Office of Xinjiang People's  
Government, Foreign Investment  
Administration Department of Xinjiang  
Development Planning Commission  
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yangjx@xj.gov.cn

Xinjiang Autonomous Region  
Industrial and Commercial Sector  
Coordinating Association  
Tel: (86-991) 282-5084  
Fax: (86-991) 282-7583

## D. Major Investors along the Silk Road

### 1. Kazakhstan

Areva Group  
(France)

Chevron  
(United States)

Fraradex  
(Romania)

JGC  
(Japan)

Mittal Steel  
(Netherlands)

Repsol YPF  
(Spain)

Steinert Industries  
(Germany)

BVT  
(Turkey)

China National Petroleum (CNPC)  
(China)

Gazprom  
(Russian Federation)

Kyshtym Electrolytic Copper Plant (KMEZ)  
(Russian Federation)

Oriel Resources  
(United Kingdom)

Russian Aluminium (RusAl)  
(Russian Federation)

Tex Development  
(United Kingdom)

Carlsberg  
(Denmark)

Floodgate  
(Netherlands)

J&W Holding  
(Switzerland)

Lukoil  
(Russian Federation)

Pilkington  
(United Kingdom)

Saipem  
(Italy)

## 2. Kyrgyzstan

Cameco Gold (Canada)	Central Asia Gold (Australia)	Coca-Cola (United States)
Dacheng (China)	Demir Kyrgyz International Bank	Goong-I (China)
Hyatt Regency (United States)	Katel (United States)	Kumtor (Canada)
Kyrgyz Petroleum Company	Oxus Gold (United Kingdom)	Procter & Gamble (United States)
Reemtsma (Germany)	Royal Gold (United States)	Steinert Industries (United States)
Teviz Group (Portugal)	WimmBillDunn (Russia)	

## 3. Shaanxi Province, China

Brother Co. (Japan)	MEMC Corp. (United States)	Northern Electric Appliance Co. (Canada)
Philips Corp. (Netherlands)		

## 4. Tajikistan

Bazovy Element (Russian Federation)	Gazprom (Russia)	Giavoni (Italy)
Hindustan Machine Tools (India)	Russian Aluminium (RusAl) (Russian Federation)	

## 5. Uzbekistan

Bateman Group (South Africa)	Beitman Projects (Israel)	Bursel Textile Industry (Turkey)
Byrsel Textile (Turkey)	Chase Petroleum (Netherlands)	China International Trust & Investment (CITIC) (China)
China Petroleum and Chemical (Sinopec) (China)	ABN-AMRO (Netherlands)	Daewoo (Republic of Korea)
Exide (United States)	Lukoil (Russian Federation)	MBNS International (Czech Republic)
Metek Metal Technology (Israel)	Mobile TeleSystems (MTS) (Russian Federation)	Oxus Gold (United Kingdom)
Pex Projekt Export (Germany)	Sahinler Holding (Turkey)	ThyssenKrupp (Germany)
Vimakot (Hong Kong, China)	Zeromax (Switzerland)	VimpelCom (Beeline) (Russian Federation)
Gazprom (Russian Federation)	MAXAM Corp. S.A.U. (Spain)	Peresvet-Invest (Russian Federation)
Baltic Beverages Holding (Scotland/ Ireland)	Isuzu (Japan)	Baltika (Russian Federation)
Vimm-Bill-Dann (Russian Federation)	TeliaSonera (Sweden/Finland)	Korea Development Bank (Republic of Korea)
Fortis (Netherlands)	IC "Soglasie" (Russian Federation)	Eurocement-Group (Russia) Ecoimpex LLC (UK) United International Group (United Arab Emirates)
Energomash (Russian Federation)	Kaustic (Russian Federation)	R&D Express-Aussenhandels Gmbh (Germany)

## REFERENCES

### ADB publications:

- \_\_\_\_\_(2004). *Private sector assessment: Central Asian republics*. Unpublished paper, March.
- \_\_\_\_\_(2004). *Regional Cooperation Strategy and Programme for Central Asia Regional Economic Cooperation (CAREC) Member Countries 2005-2007*, July.
- \_\_\_\_\_(2000). *Regional Economic Cooperation in Central Asia – Electric Energy*, December.
- \_\_\_\_\_(2004). *Building Partnerships for Development: Regional Cooperation Strategy and Programme 2004–2006*, Manila.
- \_\_\_\_\_(2006). *Key Indicators 2006*.
- \_\_\_\_\_(No date). *Rebuilding the Silk Road, Encouraging Economic Cooperation in Central: The Role of the Asian Development Bank*, Manila.

### ADB websites:

- <http://www.adb.org/Business/Opportunities/new.asp>.
- [www.adb.org/CAREC/default.asp](http://www.adb.org/CAREC/default.asp).
- Agency of the Republic of Kazakhstan for Information and Communication website: [www.aic.gov.kz](http://www.aic.gov.kz).
- Agency of the Republic of Kazakhstan on regulation and supervision of financial market and financial institution (Агентство РК по регулированию и надзору финансового рынка и финансовых организаций). Press release # 80 (in Russian).
- Agency on Statistics of the Republic of Kazakhstan. *Statistical Yearbook of Kazakhstan 2006 and 2005*.
- Ciccone A and Alcalá F (no date). Trade and Productivity. *From Specialization versus Diversification: the Microeconomics of Regional Development and the Spatial Propagation of Macroeconomic Shocks in Europe*. <http://www.cepr.org/Research/Networks/IMRTN/Summary.htm>.
- Sulaimanova A (2003). *Information Communication Technologies Sector: Kyrgyzstan*. BISNIS ([www.bisnis.doc.gov/bisnis/bisdoc/0308KG\\_ICT\\_Report.htm](http://www.bisnis.doc.gov/bisnis/bisdoc/0308KG_ICT_Report.htm)), August.
- Sulaimanova A. *Overview of the Agricultural Industry in Kyrgyzstan*. United States Commercial Service ([www.bisnis.doc.gov](http://www.bisnis.doc.gov)).
- Asia Times website (<http://www.atimes.com/atimes/China/GL21Ad01.html>).
- Kadrzhanova A. *Energy Sector Overview in Kazakhstan*. Export USA ([www.buyusainfo.net/docs/x\\_5598441.pdf](http://www.buyusainfo.net/docs/x_5598441.pdf)).
- Bank of Kyrgyzstan website ([http://www.nbkr.kg/umnl/tendency2006\\_2.pdf](http://www.nbkr.kg/umnl/tendency2006_2.pdf)) (in Russian).
- BBC News website (<http://news.bbc.co.uk/1/low/world/asia-pacific/4530426.stm>).
- Bloomberg website ([www.bloomberg.com](http://www.bloomberg.com))
- China facts and figures 2006 website (<http://www.china.org.cn/english/features/china/203735.htm>).
- China Journal (2007). *Foreign bank regulation revised to fully open up banking sector*, April.
- China's official gateway website (<http://www.china.org.cn/english/>).
- Chinese Government's official web portal (<http://english.gov.cn/>).
- EBRD website (<http://www.ebrd.com/oppor/index.htm>).
- ECO website ([www.ecosecretariat.org](http://www.ecosecretariat.org)).
- Economic Cooperation Organization website (<http://www.ecosecretariat.org>).
- Dushanbe (2003). *Tajikistan's Investment Climate Report*. Embassy of the United States of America, Tajikistan, October. <http://usembassy.state.gov/dushanbe>
- Caneque F. C. (2003). *UNIDO: Promoting Business Linkages in the Automotive Component Sector of India*, December.
- Jing F. (2004). *East-West gas pipeline wrapped up*. China Daily, 4 August. [www.chinadaily.com.cn/english/doc/2004-08/04/content\\_357382.htm](http://www.chinadaily.com.cn/english/doc/2004-08/04/content_357382.htm).

- Gansu website ([http://www.gansu.gov.cn/en/West\\_Detail.asp?ID=189](http://www.gansu.gov.cn/en/West_Detail.asp?ID=189)).
- WHO website (<http://www3.who.int/whosis/country/indicators.cfm>).
- IMF, *Direction of Trade Statistics*, 1997 and 2006.
- Information and Communication Agency of Uzbekistan website (<http://www.aci.uz/ru/>).
- Invest in China website ([www.fdi.gov.cn](http://www.fdi.gov.cn)).
- Kakharov J (2005). *Uzbekistan: new realities for U.S. business*. Business Information Service for the Newly Independent States' presentation (<http://www.bisnis.doc.gov/bisnis/bisdod/Uzbekistan%20Presentation%202005.ppt>).
- Rahmonberdiev J and Christov C (2006). *Tajikistan's Dynamic Telecommunications Market*. BISNIS, January. [www.bisnis.doc.gov/bisnis/bisdod/0601TJTelecom.htm](http://www.bisnis.doc.gov/bisnis/bisdod/0601TJTelecom.htm).
- Rahmonberdiev J (2004). *Tajikistan: Fruits and Vegetables Processing Overview*. United States Commercial Service, November. [www.bisnis.doc.gov](http://www.bisnis.doc.gov).
- Fengjun J and Jinkai Q (2003). *A Social and Economic Atlas of Western China*. China Intercontinental Press.
- JSC National company, "Kazakhstan temir zholy" website ([www.railways.kz/strategy/restructuring/ltogiprogrammi.doc](http://www.railways.kz/strategy/restructuring/ltogiprogrammi.doc)).
- Bonavia J, revised by Baumer C (2004). *The Silk Road: From Xi'an to Kashgar*. Odyssey Books and Guides, Hong Kong.
- Kazinvest website ([www.kazinvest.kz](http://www.kazinvest.kz)).
- Recht R, et al. (2004). *Uzbekistan Country Commercial Guide*. United States Commercial Service website, August.
- Boulnois L (2004). *Silk Road: Monks and Warriors and Merchants on the Silk Road*. Odyssey Books and Guides, Hong Kong.
- Ministry of Foreign Economic Relations, Investments, and Trade and the Chamber of Commerce and Industry of Uzbekistan (2006). *Investment Climate of the Republic of Uzbekistan and Projects to be Jointly Implemented with Foreign Investors*. CD-ROM, February.
- Ministry of Industry, Trade, and Tourism of Kyrgyzstan (2005). *Investment Opportunities of Kyrgyzstan, 2005*.
- Ministry of Tourism and Sports of Kazakhstan. *State Programme of Tourism Development in RK 2007–2011*.
- Nanjing Local Taxation Bureau website ([http://njds.nj.gov.cn/en\\_site/LawsAR/ChineseTS/2599.html](http://njds.nj.gov.cn/en_site/LawsAR/ChineseTS/2599.html)).
- National Bank of Kazakhstan website ([www.nationalbank.kz](http://www.nationalbank.kz)).
- PricewaterhouseCoopers publications:
- Doing Business Guide in Kazakhstan, 2005;*
  - Doing Business Guide in Kyrgyzstan, 2005;*
  - Doing Business Guide in Tajikistan, 2005;*
  - Doing business webpage* ([www.doingbusiness.org/ExploreTopics/PayingTaxes](http://www.doingbusiness.org/ExploreTopics/PayingTaxes));
  - Tax and legal alert, Republic of Kazakhstan*. Issue No. 3, 29 January, 2007;
  - The People's Republic of China: Tax Facts and Figures, 2004;*
  - Uzbekistan: A Business and Investment Guide, July 2005*. [www.pwc.com](http://www.pwc.com).
- Republic of Kazakhstan (2003). *Land Code, 20 June and amendments*.
- Republic of Kazakhstan (2003). *Law on Investments*. 8 January.
- Podpiera R (2006). *Progress in China's Banking Sector Reform: Has Bank Behavior Changed?*. IMF Working Paper WP/06/71, March.
- Almeida R (no date). Local Characteristics and Growth in Portuguese Regions. *From Specialization versus Diversification: The Microeconomics of Regional Development and the Spatial Propagation of Macroeconomic Shocks in Europe*. <http://www.cepr.org/Research/Networks/IMRTN/Summary.htm>.
- SCO website ([www.sectesco.org](http://www.sectesco.org)).
- Shaanxi website ([http://www.chinatrips.net/Shaanxi\\_speeds\\_up\\_road\\_construction\\_1936.htm](http://www.chinatrips.net/Shaanxi_speeds_up_road_construction_1936.htm)).
- State Committee on Statistics of Uzbekistan website ([www.stat.uz](http://www.stat.uz)).
- State Committee on Statistics of Uzbekistan, *Basic economic and social indicators, 2007*.
- Summary Record from the Sixth Conference on the Financial Sector Development in the Central Asian Countries, Azerbaijan and Mongolia. Istanbul, Turkey, 29–30 April 2004. [http://www.oecd.org/document/39/0,2340,fr\\_2649\\_34849\\_15342375\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/39/0,2340,fr_2649_34849_15342375_1_1_1_1,00.html).

- Panitchpakdi S, Secretary-General of UNCTAD (2007). *Statement in Asia-Pacific Business Forum 2007*. Almaty, Kazakhstan, 18 May.
- Whitfield S (1999). *Life Along the Silk Road*. University of California Press, 1999.
- UNCTAD, *World Investment Report*, various issues.
- UNCTAD's websites:  
[www.unctad.org/Templates/Page.asp?intItemID=2344&lang=1](http://www.unctad.org/Templates/Page.asp?intItemID=2344&lang=1).  
<http://unctad.org/templates/webflyer.asp?docid=8450&intItemID=3549&lang=1&print=1>.
- UNCTAD and ICC. *An Investment Guide to the East African Community*, 2005.
- UNDP Regional Bureau for Europe and the Commonwealth of Independent States (2005). Central Asia Human Development Report. *Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*, Bratislava.
- UNECE's SPECA website ([www.unece.org/specal/](http://www.unece.org/specal/)).
- UNESCAP:  
----(2003). *Asian Highway Handbook*. New York, United Nations.  
----(2004). *Introduction to the Asian Highway and the Intergovernmental Agreement on the Asian Highway Network* (CD-ROM).  
Trade and Investment Division (2005). *Experiences with regionalism and bilateralism in Asia and the Pacific with focus on Central Asia*. Paper for the International Conference on Strengthening Regional Cooperation for Managing Globalization. Moscow, September.
- UNESCAP's website on the Asian Highway (<http://www.unescap.org/ttdw/index.asp>).
- UNESCO Institute for Statistics website ([http://www.uis.unesco.org/profiles/selectCountry\\_en.aspx](http://www.uis.unesco.org/profiles/selectCountry_en.aspx)).
- UNESCO. *EFA Global Monitoring Report 2005: Regional Overview, Central Asia*.
- UNCTAD, *Report on Tourism sector of China's Silk Road provinces & Autonomous Regions*.  
Website (<http://www.sogdiana.com/html/projects.html>).
- Website ([www.chamber.kz](http://www.chamber.kz)).
- Website ([www.kase.kz](http://www.kase.kz)).
- Website ([www.kse.kg](http://www.kse.kg)).
- Website ([www.uzse.uz](http://www.uzse.uz)).
- Website ([http://www.cnr.vt.edu/boyer/geog1014/TOPICS/124cent\\_as/c\\_asia.html](http://www.cnr.vt.edu/boyer/geog1014/TOPICS/124cent_as/c_asia.html)).
- Website ([www.chinatrips.net/Shaanxi\\_speeds\\_up\\_road\\_construction\\_1936.htm](http://www.chinatrips.net/Shaanxi_speeds_up_road_construction_1936.htm)).
- Website (<http://www.china.org.cn/e-xibu/2JI/3JI/shanxi/shanxi-ban.htm>).
- Website ([www.starmass.com](http://www.starmass.com)).
- Website ([www.chinaknowledge.com](http://www.chinaknowledge.com)).
- Website ([www.alibaba.com](http://www.alibaba.com)).
- WHO. *Core Health Indicators*. [www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm).
- Hubner W (2006). *Why is the Silk Road so Important?*. Silk Road Initiative Newsletter, April. [www.silkroad.undp.org.cn](http://www.silkroad.undp.org.cn).
- World Bank in cooperation with partners. *The investment climate surveys*:  
*Country profile Kazakhstan*, 2005;  
*Country profile Kyrgyzstan*, 2005;  
*Country profile Tajikistan*, 2005;  
*Country profile Uzbekistan*, 2005;  
*Country profile China*, 2003.
- World Bank:  
*Central Asia Regional Electricity Export Potential Study*, December 2004;  
*Regional Electricity Export Potential Study (Appendix Volume)*, December 2004;  
*World Development Indicators 2005* (online edition);  
<http://devdata.worldbank.org/wdi2005/Section5.htm>.
- World Bank website (<http://web.worldbank.org>)
- World Tourism Organization. *Tourism Market Trends*, 2005 Edition. <http://www.world-tourism.org/facts/wtb.html>.

World Trade Organization online database. *Country profiles section*. <http://stat.wto.org/CountryProfile/WSDBCountryPFReporter.aspx?Language=E>.

World Trade Organization. *International Trade Statistics*, 2006.

Xinhua News Agency (2005). *Ningxia links up all villages with highways*, December 31. <http://www.china.org.cn/english/2005/Dec/153860.htm>).