

Report No. 32603-TJ

Tajikistan Trade Diagnostic Study

December 13, 2005

Poverty Reduction and Economic Management Unit
Europe and Central Asia Region



Document of the World Bank

CURRENCY AND EQUIVALENT UNITS

(as of November 2, 2005)

Currency Unit	=	Tajikistan Somoni (TJS)
US\$1	=	TJS 3.1876
1 TJS	=	US\$0.3137

WEIGHTS AND MEASURES

Metric System

ABBREVIATIONS

ADB	Asian Development Bank	MoE	Ministry of Economy
BEEPS	Business Environment and Enterprise Performance Survey	MIT	Ministry of Industry and Trade
CIS	Commonwealth of Independent States	MW	Megawatt
DAAD	German Academic Exchange Service	OECD	Organization for Economic Cooperation and Development
EBRD	European Bank for Reconstruction and Development	PPII	Post-privatization Investment Initiative
EU	European Union	PRSP	Poverty Reduction Strategy Paper
EURASEC	Eurasian Economic Community	<i>p</i>	Electricity price
FDI	Foreign Direct Investment	p.a.	per annum
FIAS	Foreign Investment Advisory Service	<i>r</i>	Rail transport cost
GBAO	Gorno Badakhshan	RRS	Rayons of Republican Subordination
GDP	Gross Domestic Product	SAC2	Structural Adjustment Credit 2
GTZ	Association for Technological Cooperation (German)	SECO	Swiss State Secretariat for Economic Affairs
HIPC	Heavily Indebted Poor Countries	SME	Small and Medium Enterprises
IAS	International Accounting Standards	SPC	State Privatization Committee
ICA	Investment Climate Assessment	TBT	WTO Agreement on Technical Barriers to Trade
IFC	International Finance Corporation	TWh	Tetrawatt-Hours
IFI	International financial organizations	TADAZ	Tajik Aluminum Plant
ISO	International Standardization Organization	TRIPS	Trade Related Aspects of Intellectual Property Rights
ITC	International Trade Center	TSA	Tajikistan State Airlines
IT	Information Technology	UCGS	Universal Cotton Grade Standards
KR	Kyrgyz Republic	USAID	United States Agency for International Development
kWh	Kilowatt-Hours	UNITAR	United Nations Institute for Training and Research
LDC	Least Developed Country	VAT	Value Added Tax
LTD	Limited	WPS	Working Paper Series
MFA	Multi-fiber Agreement	WTO	World Trade Organization
MIGA	Multilateral Investment Guarantee Agency		

Vice President	:	Shigeo Katsu
Country Director	:	Dennis de Tray
Sector Director	:	Cheryl W. Gray
Sector Manager	:	Samuel Otoo
Task Leader	:	Jakob von Weizsacker

ACKNOWLEDGEMENTS

This Trade Diagnostic Study for Tajikistan is part of a series of Trade Diagnostic Studies that have been prepared for the countries of the ECA region. It is based on the findings of several missions that visited Tajikistan between March 2004 and November 2004 and background papers prepared by a number of consultants. Many elements of the study have already entered the policy dialogue between the Bank and the Government of Tajikistan. This report is intended to facilitate further progress in this dialogue and to allow broader dissemination within the country and donor community.

The principal authors of the report are Jakob von Weizsaecker (Team Leader), Jariya Hoffman, Andriy Storozhuk and Utkir Umarov. Background papers were prepared by Lauri Ojala, Alexander Kitain (Transport and Logistics), Bernard Touboul, Gerard McLinden (Customs), Charles Schlumberger (Air Transport), Evgeny Polyakov (Trade Regime), Matthias Lücke (WTO), Utkir Umarov (Aluminium, Cotton, Migrant Workers), Wolf Iro, Sudhee Sen Gupta, and Bruce Courtney (FDI and Growth Prospects). The report was proofed and produced by Marinette Guevara.

The team wishes to thank the Government of Tajikistan for very constructive discussions during and after the various missions, as well as comments provided on the final draft of the report. The team is particularly grateful for the inputs provided by Faizullo Kholboboev, State Adviser to the President on Economic Policy, Nematjon Buriev, Head of Department for Economic Reforms and Investment (Presidential Administration), Hakim Soliev, Minister of Economy and Trade, Maruf Saifiev, Deputy Minister of Economy and Trade, Isroil Makhmudov, Deputy Minister of Economy and Trade, Gulomjon Boboev, Minister of State Revenues and Duties, Sirojiddin Aslov, First Deputy Minister of Foreign Affairs, Tohir Akhmedov, Head of Consular Department (Ministry of Foreign Affairs), Abdurahim Kahharov, First Deputy Minister of the Interior, Tohir Normatov, Head of Operations, Ministry of Interior Headquarters, Zokir Vazirov, Minister of Labour and Social Protection of Population, Anvar Boboev, Head of State Migration Service (Ministry of Labour and Social Protection of Population), Jurabek Nurmakhmadov, Minister of Energy, Abdurahim Ashurov, First Deputy Minister of Transport, Opokhon Kataev, Deputy Chairman of Consumers' Union, Sharif Saidov, Chairman of Chamber of Commerce and Industry, Davlatali Hotamov, Director of Tajik State Standard Agency, Makhmadzoi Sohibov, Chairman of the Commodity Exchange, Firuz Khamroev, Head of Department of Civil Aviation, Amonullo Hukumov, Chairman of Tajik Railways, Sadridin Sharipov, Director of TADAZ, Mirzo Anvarov, Director General of State Unitary Aviation Enterprise, and their staff.

The generous financial support for this study by the Swiss State Secretariat for Economic Affairs (seco) is gratefully acknowledged. The team is also grateful for helpful comments and guidance from the peer reviewers, Elena Ianchovichina, Faezeh Foroutan, Philip Schuler, Harry Broadman, and Clinton Shiells (IMF); Dennis de Tray, Cevdet Denizer and Lilia Burunciuc; Jean-Francois Arvis, Raghuvveer Sharma, and T.V. Sampath. Finally, the report benefited enormously from the active participation and advice of Samuel Otoo.

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	i
KEY RECOMMENDATIONS OF THE TRADE DIAGNOSTIC STUDY	v
1. SETTING THE STAGE.....	1
Introduction	1
Macroeconomic Developments.....	4
Sources of Growth.....	6
Growth and Poverty	7
External Vulnerability.....	10
Trade Policy, Regional Trade Agreements, and Trade Integration.....	11
Other Formal Trade Barriers	11
Regional Trade Agreements.....	12
WTO Accession	14
2. DOMESTIC AND EXTERNAL TRADE FACILITATION AND TRANSPORT .	17
A. DOMESTIC TRADE REGIME AND TRANSPORT.....	17
Domestic Market Fragmentation.....	17
Addressing Domestic Road Transport Costs	18
Developing Domestic Road Network	21
Improving the Business Climate	22
Liberalizing the Internal Visa Regime	24
B. EXTERNAL TRADE REGIME AND TRANSPORT	25
Reducing Border-Related Trade Costs.....	26
Reducing International Transport Costs.....	32
3. KEY SOURCES OF FOREIGN EXCHANGE EARNINGS: ELECTRICITY, ALUMINUM, COTTON FIBER AND MIGRANT WORKERS	41
A. ELECTRICITY AND ALUMINUM	41
Enhancing Efficient Use of Existing Electricity Generation Capacity	41
Developing New Hydropower Projects.....	45
Optimizing the Electricity-Aluminum Nexus	48
B. COTTON FIBER.....	50
Barriers to Growth and Efficiency in the Cotton Sector	51
Strengthening the Government’s Cotton Sector Reform Strategy	55
Modeling the Alternative Development Scenarios of the Cotton Sector	56
C. MIGRANT WORKERS AND REMITTANCES	58
Profile of Labor Migration from Tajikistan	58
Reducing Costs of Labor Migration.....	60
Enhancing the Role of the Financial Sector in Facilitating Labor Migration	62
4. OPPORTUNITIES FOR FDI-DRIVEN GROWTH.....	65
A. INCENTIVE FRAMEWORK FOR ATTRACTING FOREIGN DIRECT INVESTMENT	65
B. TEXTILES: A CASE STUDY	74
C. OPPORTUNITIES FOR FDI-DRIVEN GROWTH IN THE MEDIUM-TERM	81
The Communications Sector as a Potential Source of Medium-Term Growth.....	83
Other Sectors with Medium-Term Growth Opportunities	87
Recommendations for Utilizing Growth Opportunities	88

Tables

Table 1.1: Selected CIS Countries: Relative Unit Labor Cost, 2002.....	3
Table 1.2: GDP Composition.....	6
Table 1.3: Imports and their Origins.....	9
Table 1.4: Trade in Services.....	10
Table 2.1: Tajikistan's Regions ranked by GDP, Population and Retail Turnover.....	17
Table 2.2: Regional Price Levels and Regional Price Disparity in Tajikistan.....	18
Table 2.3: Cost of Cargo Transport between Dushanbe and Khujand.....	19
Table 2.4: Border-Related Revenues in Tajikistan.....	27
Table 2.5: Roundtrip Airline Ticket Prices from Moscow to Dushanbe.....	35
Table 2.6: Official Fees for Trucks Traveling between Uzbekistan and Tajikistan.....	39
Table 3.1: Cost Recovery Electricity Prices in Central Asia, 2003.....	42
Table 3.2 Estimated Future Generation Costs for Power Projects in Central Asia.....	46
Table 3.3: Risks and Cost Recovery Price of the Sangtuda Hydroelectric Power Plant... 47	
Table 3.4: Estimated Efficiency and Equity Implications of Alternative Cotton Sector Development Scenarios.....	56
Table 3.5: Income Statement of a Typical Seasonal Migrant Worker from Tajikistan to Russia.....	60
Table 4.1: Steps Taken in a Best Practice Marketing Process.....	69
Table 4.2: Schedule of Co-payments.....	74

Figures

Figure 1.1: Annual Changes in Total Factor Productivity in Aggregate Output, Agriculture and Industry.....	2
Figure 1.2: Tajikistan: Key Macroeconomic Indicators.....	4
Figure 1.3: Dynamics of the Tajik Somoni Exchange Rates.....	5
Figure 1.4: Gross Fixed Investment and FDI.....	7
Figure 1.5: Trade Volume And World Price of Aluminum.....	8
Figure 1.6: Tajikistan's Export and Import Composition.....	8
Figure 2.1: Bribes at Internal Checkpoints.....	19
Figure 2.2: Major Road Projects under Construction.....	22
Figure 2.3: Most Pressing Problems for Entrepreneurs in Tajikistan.....	23
Figure 2.4: Top Three Problems of Traders in Tajikistan:.....	26
Figure 2.5: Dushanbe-Moscow Road Transport Cost.....	40
Figure 3.1: Stylized Welfare Analysis of the Tajik Electricity Market.....	43
Figure 3.2: Average Cotton Yields in Tajikistan, 1985-2003.....	51
Figure 3.3: Destination Countries and Occupation of Migrants.....	59
Figure 3.4: Stylized Cash Flow Profile of a Seasonal Migrant and His Family.....	63
Figure 4.1: Direct Foreign Investment, 1998-2003.....	66
Figure 4.2: Foreign Direct Investment by Industry Sector, 1998-2003.....	66
Figure 4.3: Negative Correlation of Foreign Direct Investment and Corruption.....	67
Figure 4.4: Privatization Process Flowchart.....	68
Figure 4.5: Production Process Textile Industry.....	76
Figure 4.6: Matrix for the Assessment of Medium and Long-Term Opportunities.....	83

Boxes

Box 3.1: Economic Implications of Remittances.....	59
Box 4.1: Self-made Spare Parts for Obsolete Machinery	77
Box 4.2:Tajikistan in Global Cotton Production, 2002.....	78

EXECUTIVE SUMMARY

Introduction

1. **Tajikistan's setting as difficult as it gets for trade. The country is small and remote, with around 6.5 million inhabitants and a GDP per capita of US\$ 310.** A significant part of the problem relates to its landlocked location and mountainous terrain, but there are other issues, in particular the many neighbors with significant domestic tensions like Afghanistan, Pakistan, Iran, and lately also Uzbekistan and the Kyrgyz Republic. Despite the difficult trade environment, Tajikistan's trade openness is high—exports plus imports amount to 120 percent of GDP—and the external sector has contributed significantly to the strong economic performance achieved since the end of the civil war in 1997. Real GDP has increased by almost 60 percent over the past five years, broad macro-stability has been achieved and the poverty rate fell by 18 percentage points between 1999 and 2003.

2. These achievements notwithstanding, Tajikistan remains the poorest country in the Commonwealth of Independent States (CIS). Physical and human capital is still not used efficiently. It remains well above the level that is needed to produce the present GDP per capita of US\$ 310 per capita and also far above the level that can be sustained with the present GDP per capita. In the next 15 years, the ratio of capital stock and the GDP per capita in Tajikistan will increasingly normalize one way or another. This race between capital stock decline and GDP growth makes a huge range of economic outcomes in principle available for Tajikistan. In one extreme, GDP will only grow slowly and the capital stock will continue to plunge due to low investment, leading to a GDP per capita of perhaps US\$ 450 in 2020. In another extreme, GDP will continue to grow almost at the present pace, with investment levels sufficient to reverse the decline in physical and human capital, potentially leading to a GDP per capita of US\$ 900 by 2020.

3. This study examines how improvements in the internal and external trade regimes, and the transport and trade facilitation systems can contribute to sustain rapid growth and attract foreign investment to win the race against the capital stock decline. Key recommendations are presented in a simple matrix format at the end of this summary for a quick overview. Some of the recommendations are already under implementation as part of the Policy Based Credit currently under preparation. The findings of the trade study have also led to Government interest in additional analytical work in selected areas (e.g., remittances and air transportation) that is currently ongoing.

Overview

4. **Formal tariff barriers in Tajikistan are low, and the tariff barriers faced by Tajikistan's main exports are also relatively low.** There is a strong correspondence

between the main sources of foreign exchange and the country's factor endowments, which indicates that economic incentives are broadly well-aligned. The remittances generated by migrant workers correspond to the cheap and relatively educated workforce; the massive exports of energy intensive aluminum correspond to the substantial hydropower endowment; and cotton exports correspond to the endowment of fertile irrigated farm land. Therefore, as highlighted in *Chapter 1*, Tajikistan's formal trade policy challenge consists chiefly in the preservation of low external barriers in the WTO accession process, together with concessions in that process that will enhance Tajikistan's market economy and increase investor confidence. In a regional trade policy context, the major policy challenge for Tajikistan is to maintain its good relationship with Russia while developing new markets in the region, to the South and East in particular. The relationship with Russia is critical not least for security reasons and to assure the continued access of Tajik migrant workers to the Russian labor market. Good relations with other CIS countries, Uzbekistan in particular, are also needed to assure a better transit regime. And China, Pakistan, India, Afghanistan, and Iran are set to become increasingly important regional trading partners for Tajikistan beyond the CIS.

5. **However, the most pressing trade issues for Tajikistan are informal barriers.** Domestically, trade is made difficult by high mountain ranges separating the main economic centers of the country, the crumbling of the Soviet legacy infrastructure, and poor governance resulting in red tape and corruption. These domestic trade and transport issues are discussed in the first section of *Chapter 2*. The report finds that as much as 20 percent of the costs of domestic truck transport are due to informal payments at checkpoints. It is encouraging that in response to this finding, the Government has already issued a decree to reduce the number of traffic police by half. Other problems identified include the poor prioritization of road investments, with 3 large projects being pursued in parallel instead of sequentially. This is delaying by several years the opening of a viable alternative to transit via Uzbekistan.

6. **Being landlocked is an enormous economic disadvantage.** Outside prosperous Europe, there are 25 resource poor landlocked country in the world, three of which have a GDP per capita between US\$ 2000 and US\$ 1000. The other 22 have a GDP per capita below US\$ 1000. The major transit route for Tajik trade runs through Uzbekistan. Unfortunately, informal payments for road transport in Uzbekistan are even worse than in Tajikistan. Tajikistan's potentially attractive trade access to the South depends, beyond positive developments in Afghanistan, on two other difficult countries: Pakistan and Iran. The formidable Pamir mountain range separates Tajikistan from China. Both dynamic Shanghai and prosperous Frankfurt are about 4800km from Dushanbe, as the crow flies... While some of the political problems in the neighborhood of Tajikistan seem intractable, the study shows in the second part of *Chapter 2* that Tajikistan could make significant progress by addressing a number of practical issues in the domains of customs, border crossings, standards, and related bureaucracies.

7. **Improved air, rail, and road transport are critical for better trade access to and from Tajikistan.** This is the subject of the latter half of *Chapter 2*. While Tajik Rail remains the workhorse for trade in goods, its utter lack of transparency, its low imputed productivity, and the harmful rail tariff war are unmistakable signs that the Government

needs to start with serious rail reforms. Air transport suffers from lack of competition as a result of the integrated state company for air transport controlling the airline, the airports, and air traffic control. Consequently, migrant workers pay an estimated 20 to 35 percent more for their tickets to Moscow than they should. The flawed price regulation of Tajik Air by the anti-monopoly commission makes matters worse, leading to widespread rationing of tickets and informal payments to sales agents. In international road transport, Uzbekistan remains the bottleneck. Both Tajikistan and Uzbekistan could greatly benefit from closer cooperation in several areas and the two countries and their external partners are urged in this direction.

8. **Reducing the economic distance to world markets is a necessary condition for sustained rapid growth and poverty reduction in Tajikistan.** While the general measures to achieve this through improved transport and trade facilitation are discussed in *Chapter 2*, sector specific problems in the most important foreign exchange earners are looked at in *Chapter 3*: (a) cotton, (b) aluminum and electricity, and (c) remittances from Tajik migrant workers mostly in Russia. The analysis in *Chapter 3* shows in detail how the corresponding factor endowments are utilized far below their potential in those sectors.

9. **Exports of aluminum, electricity and cotton account for over 80 percent of exports.** Since the scope for electricity export is limited for political as well as technical reasons, Tajikistan instead has found a way to implicitly export electricity through the very energy intensive production of aluminium. In that sense, both aluminium and electricity exports amount, in effect, to the export of electricity. This electricity is overwhelmingly generated at the Nurek dam, probably the highest large dam in the world.

10. **The study estimates that the Nurek gift, the hydro-rent generated at the Nurek dam, should amount to over US\$ 200 million per year.** Unfortunately, only a fraction of this goes to the budget due to far too low domestic electricity prices and an underdeveloped electricity export market. This causes very serious distortions, depriving the budget of funds that are badly needed in the education and health sectors for the 40 percent of the population who are below 15 years of age, and to reduce other more distortionary sources of revenue. The low electricity prices also deprive the local electricity company of the funds needed to keep the system running. The present inability to sell and in particular export electricity at prices of 2 cents per kWh endangers the new hydropower project for which the Government is presently trying to find funding. In sum, export driven reforms of the use of the Nurek gift are urgently needed.

11. **In cotton, a US\$ 100 million export growth potential is identified.** Technically, this could be achieved through greater yields and better ginning outturns. This in turn will require improved ownership and governance structures of cotton farms. Also, the input, financing, and output markets need to become more competitive, and the commodity exchange needs to be reformed. In parallel, the looming farm debt problem needs to be addressed. The mechanism proposed by the Government to resolve the farm debt problem is an important step in the right direction but still contains some serious flaws.

12. **Foreign exchange is also earned on a massive scale through remittances¹.** Visa free access to the Russian labor market is the lifeline for the Tajik economy. About every third working age male citizen of Tajikistan is estimated to engage in some form of migrant labor, and Russia is the destination for more than 80 percent of them. The remittances thus generated are estimated at more than 20 percent of GDP and play a critical role in lifting families out of poverty. Also, these remittances act as a stabilizer for the foreign account since they are positively impacted by high oil prices that lift wages in Russia whereas the direct impact of higher oil prices on Tajikistan are worsened terms of trade as an oil importer. With regards to remittances, *Chapter 3* recommends on the one hand to develop an integration strategy of close cooperation with Russia and careful public diplomacy to maintain visa free access to the Russian labor market. On the other hand, it recommends for Tajikistan to diversify to other host countries for its migrant workers, for example to the Gulf States.

13. **Beyond the current big ticket export earners, there are other sectors with considerable export growth potential.** *Chapter 4* looks at some of these, identifying basic heuristic criteria for promising export sectors for the future. In particular, these should be labor but not transport intensive, and global demand for them should be growing. Possible candidates include textiles, IT related communicable services, non-cotton agricultural products like nuts, fruits, and herbs, and, to some extent, tourism. While it would be dangerous to pick winners in the strict sense of the word, the study argues that a good notion of where promising sectors might develop is essential for the Government to plan ahead and allocate its resources and management attention efficiently.

14. **Foreign direct investment has potential to be an important driver of growth in several sectors.** *Chapter 4* shows that FDI levels unfortunately remain very low in Tajikistan. In particular, it is remarkable how little FDI the ongoing privatization process has been able to attract to date. This is probably due to an inherent anti-FDI bias due to lack of transparency and a poor business environment that is especially difficult to navigate for foreigners. At the same time, many of the domestically privatized assets cannot be exploited properly due to lack of funds and expertise. To help solve this, the creation of a post-privatization matchmaking agency is proposed. More importantly, some of the more serious flaws of the privatization process will need to be fixed before the privatization of the largest enterprises of the country commences.

¹ Foreign exchange is also earned illegally with a significant transit volume of opium and heroin from Afghanistan destined for consumer markets in the CIS and beyond. The grave risks to public health and political stability of this source of foreign exchange is evident.

KEY RECOMMENDATIONS OF THE TRADE DIAGNOSTIC STUDY

<i>Recommendations</i>	<i>Rationale</i>
Trade Policy	
<i>Short Term</i>	
Set up permanent mission at WTO in Geneva	Precondition for effective negotiation at this stage
Strengthen in-house capacity of WTO unit in Ministry of Economy and Trade (more staff, intensified training)	Precondition for effective negotiation at this stage
Commission assessment of service sector issues to prepare negotiations on service offer	Original service offer appears overly restrictive. Tajikistan stands to benefit substantially by opening up service markets
<i>Medium Term</i>	
Seek recognition as Least Developed Country by the UN.	LDC status implies special and differentiated WTO treatment
Pursue effective transit regime and low external tariffs as priority within regional free trade agreements.	Low external tariffs and a smooth transit regime are priorities for Tajikistan's economy.
Domestic Trade Regime	
<i>Short Term</i>	
Reduce the number of road checkpoints and tariff police staff, and introduce related anti-corruption measures	Informal payments at checkpoints amount to 20 percent of total transport cost
Develop a comprehensive and prioritized road investment plan with donor assistance	Present prioritization measure appears inadequate and too many road projects are pursued in parallel.
Revise the Law on Licensing to reduce licensing coverage and simplify implementation	Heavy burden on SMEs. Target for reduction of the number of licenses: 50 percent.
Increase the use of the Black Book for mandatory inspection registration	Inspections remain a serious problem; Black Book is presently used

<i>Recommendations</i>	<i>Rationale</i>
to near full coverage	by only about 50 percent of businesses
Adopt the new billing liberalizing the internal visa regime	The current internal visa regime is excessive as recognized by the Government.
<i>Medium Term</i>	
Systematically monitor trade bottlenecks through analysis of improved regional price statistics	Regional price statistics help monitor bottlenecks in internal trade
Mobilize the assets of the large and nominally private consumer cooperative Tajikmatlubot	Tajikmatlubot not included in the 2004-7 privatization strategy since nominally private
Commission analysis on how to cope with investment peaks during vintage capital renewal	Present capital markets unlikely to be able to cope with such investment peaks
Trade Facilitation	
<i>Short Term</i>	
Streamline the top management structure of the customs service	Top management structure confusing at present
Commission user-oriented manuals for exporters and importers, covering relevant trade legislation and processes	International experience shows that corruption decreases as private sector agents become better informed about the formal rules
Increase opening hours of key border crossing posts to 24 hours a day	Border crossing posts only open for 10 hours at present
Routinely accept foreign conformity certificates	There are numerous complaints that this is presently not the case in practice
Simplify trade related regulation on standards, health, and safety	Gap between written standards and control capacity to be closed by downgrading requirements and upgrading control capacity
<i>Medium Term</i>	
Create HR department for customs service and integrate training into career planning	Unclear careers paths and poor training undermine professional incentives and effectiveness
Upgrade the infrastructure and operations of the border crossing points with a view to introducing a “single window” border crossing approach	Many crossing points even lack basics like electricity, duplicative inspections by different agencies, major delays for trucks
Focus upgrades of lab capacity on key areas of health and safety concerns	At present the responsible agencies are spreading themselves too thinly.

<i>Recommendations</i>	<i>Rationale</i>
International Transport	
<i>Short Term</i>	
Adopt master plan for air transport including separation of Tajik Air into airline, airports, and air traffic control to increase competition	Cheap air transport critical for migrant workers, international quality airline critical for FDI. Tajik Air delivers neither.
Provide liberal access to foreign airlines	Barriers to access significantly restrict competition
Improve price regulation of the airline industry by the Anti-Monopoly Commission	Crude regulatory mechanisms lead to ticket rationing and excessive landing and passenger fees for foreign airlines
Prepare IAS audit of Tajik Rail	Blatant lack of transparency in major state owned enterprise, IAS audit has been planned for many years already.
Introduce visa at airport without invitation for visitors from OECD and similar countries	Low risk and simple to implement, offering both economic and reputation gains.
<i>Medium Term</i>	
Review the viability of non-essential airports	It is unclear how many airports beyond Dushanbe, Khujand, Khorog, and possibly Kulyab a small country like Tajikistan needs.
Accelerate development of corporate plan for Tajik Rail with donor assistance	Inefficient state within a state (black box)
Negotiate resolution of railway tariff dispute with Uzbekistan	Present railway tariff dispute net gain for Tajik Rail but net loss for Tajikistan.
Review and improve regulatory framework for Tajik Rail	Inefficient state within a stage (black box)
Create incentives for Tajik Rail or more agile intermediaries to develop small-parcel freight service	Poor service availability for cargo shipments below one wagon/one full container.
Develop business plan for improved passenger transport to Russia (onboard security, transit visa Uzbekistan etc)	Passenger transport to Russia by rail should be viable alternative to air transport for migrant workers
Attempt to improve the road transit regime with Uzbekistan	Better cooperation would benefit both Uzbekistan and Tajikistan, but Tajikistan probably more...
Cotton	
<i>Short Term</i>	
Strengthen the independence of the planned Independent Commission to	Influence by major stakeholders in the inefficient status quo needs to

<i>Recommendations</i>	<i>Rationale</i>
manage farm debt resolution	be limited.
Reform the Commodity Exchange in line with WTO requirements	“State trading” of commodity exchange obstacle to WTO accession, also responsible for distortions in cotton sector.
Improve ownership and governance of cotton farms, not least through allocation of individual land use certificates	Serious efficiency and equity problems due to current governance/ownership structures.
<i>Medium Term</i>	
Introduce Universal Cotton Grade Standards (UCGS)	Market value of crop might increase by as much as US\$ 10m through implementation of UCGS
Strengthen competition in input, financing, and output markets for cotton production not least by requesting substantial intl. assistance to that effect.	Local monopolies at the root of US\$ 100m per year efficiency loss and the related cotton farm debt problem.
Electricity & Aluminum	
<i>Short Term</i>	
Adopt plan to significantly increase electricity prices in 2005-2007	Planned substantial increases in the long run need to be underpinned by shorter term increases
Review social protection mechanism for electricity price increases	Use of funds for improved general social services such as education and health may in certain conditions be preferable to imperfectly executed targeted subsidies.
Routinely request independent outside advice on international hydropower and aluminum contracts	Outside advisors help to level playing field in negotiations to secure net benefits for the country and help to pre-empt allegations of corruption.
Improve transparency and accountability of TADAZ including regular IAS audits and improved oversight structures	Alleged massive fraud by previous management unfortunately proves the point; history must not be allowed to repeat itself.
Hire an international forensic accountant to investigate the alleged accounting fraud by previous TADAZ management and dealing with foreign trading partners	In view of the sums at stake this is a natural step set to help recuperation of funds and persecution.
<i>Medium Term</i>	
Increase electricity price to eliminate QFD and mobilize Nurek gift	Serious distortions due to inefficiently low electricity prices and poor electricity export regime

<i>Recommendations</i>	<i>Rationale</i>
Develop the regional electricity market with Nurek excess capacity	Better and increased export of Nurek electricity will make Nurek gift available to the fiscal authorities and provide proof of concept for export driven hydro projects.
Separate the Nurek-Baipaza cascade (and possibly other hydro generation) from Barki Tajik to improve transparency and stop cross-subsidization	Stop massive cross-subsidization within Barki Tajik and make money available to the fiscal authorities.
Equalize the implicit electricity export price through TADAZ with the explicit energy export price	Aluminium production in Tajikistan is indirect electricity export. Direct and indirect exports should be priced the same so as to maximize returns.
Restructure and potentially privatize TADAZ to achieve higher implicit electricity export price	Aim to increase the contribution of TADAZ to the budget
Labor Migration	
<i>Short Term</i>	
Systematically review and improve quality of government services (education, matching, consular, insurance) for migrant workers in Russia	Internal structures of State Migration Service and coordination with other services largely ineffective
Start major foreign language initiative (Russian, English, Arabic) not only in schools but through media (TV, radio) to improve foreign employability	Youth in Tajikistan is losing Russian language fast, English/Arabic will open new labor markets.
<i>Medium Term</i>	
Develop multi-level strategy for migration to Russia (best practice working level relations, low intensity but systematic public diplomacy effort etc.)	Misunderstandings with Russian authorities frequent, status of Tajik migrants in Russia low, undermining visa free access in the long run
Explore diversification of labor migration to other host countries, e.g. Gulf states	Diversification could reduce risk exposure to Russian labour market.
Use financial service for migrant workers as driver for financial sector in Tajikistan	US\$ 400m remittances inflow should provide critical mass to develop financial services.

<i>Recommendations</i>	<i>Rationale</i>
Future Opportunities & FDI <i>Short Term</i>	
Develop action plan for the removal bottlenecks that impede the development of the textile sector in Tajikistan	Good potential for textiles due to domestic cotton production, cheap labor & electricity, textile culture in the north. Proof of concept by incumbents.
Institute dual ombudsman system as complaint channel for business	Dual ombudsman system with government and donor funded ombudsman working together circumvents classic problems.
Improve privatization process to make it more FDI friendly	Strong home bias so far due to lack of transparency etc.
Create a post-privatization matchmaking initiative for domestic assets and foreign capital	Attempt to repair the damage of privatizing too few assets to foreign buyers with appropriate funds and expertise.
<i>Medium Term</i>	
Develop a longer term strategy for communicables (IT based services)	Significant longer term potential due to extremely low wages for higher skilled, but better foreign language education (Russian, English) critical.
Mobilize growth potential in non-cotton agriculture (fruits, nuts, herbs etc.)	Completion of farm privatization, introduction of new varieties. Food processing, and market research will be critical.
Systematically assess the opportunities in tourism	Potential for niche markets, e.g. mountain tourism and tourism from culturally restrictive Iran

SETTING THE STAGE

Introduction

1.1 **First time visitors to Tajikistan tend to be puzzled.** Before they arrive, they read about a GDP of US\$ 310 in the statistics. And when they get there, they see much higher levels of physical infrastructure and meet a much better educated population than they would expect in a US\$ 310 per capita country. Part of the explanation is of course that the official statistics do not fully capture the informal economy. Part of the explanation is also that the Soviet specification of the physical and human capital stock meant that parts of it became obsolete as prices were liberalized. But even if these issues are taken into account, it is clear that other countries achieve levels of GDP similar to Tajikistan's with much lower levels of human and physical capital. In other words, Tajikistan at present does not put its relatively high level of physical and human capital to anywhere near efficient use. This is perhaps most strikingly illustrated by the fact that possibly as much as 30 percent of the male working age population decide to put their human capital to use abroad by engaging in migrant labor, predominantly in Russia.

1.2 **The high endowment with capital was inherited from Soviet times when Tajikistan was heavily subsidized from Moscow.** And the present GDP is far from sufficient to sustain the present capital stock. Over the past 15 years, the capital stock of Tajikistan has already declined quite noticeably. While the vast majority of children still go to school, educational attainment has dropped dramatically and the infrastructure is deteriorating rapidly.

1.3 **Resolving the inefficient use of Tajikistan's legacy capital stock is a race against the clock.** The anomaly of Tajikistan's high capital stock to GDP ratio will resolve itself by 2020 one way or another. In one extreme, the capital stock would simply continue to be used inefficiently. GDP would only grow slowly, with a population growth-adjusted annual GDP growth of below 3 percent on average, and so would investment. As a result, the capital stock would continue to shrink and by 2020 Tajikistan would find itself in the typical situation of a least developed country with a GDP per capita of perhaps US\$ 450 and a capital stock that essentially corresponds to that. In the other extreme, Tajikistan would eliminate the major inefficiencies and population-adjusted GDP would continue to grow at over 7 percent per year, with GDP per capita reaching over US\$ 900 by 2020. Corresponding increases in private and public sector investments would halt the decline in capital stock and then reverse the decline². Ultimately, this race against the clock will determine the fate of the next generation of Tajikistan, the 40 percent of the Tajik population below 15 years of age.

1.4 **Which ingredients are needed to put to work the capital stock of Tajikistan efficiently?** Key factors are: (i) basic stability and rule of law; (ii) reasonably efficient public services and institutions; (iii) a good business environment for private sector

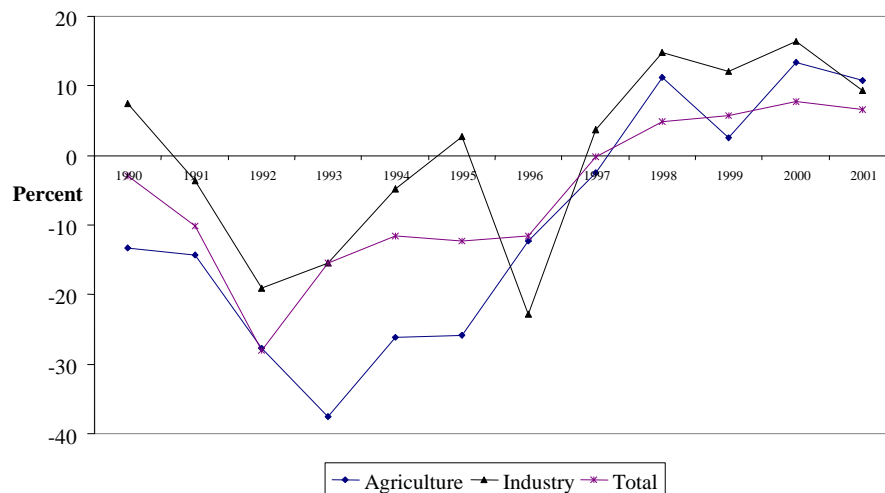
² Of course, halting the decline in capital stock cannot mean the accurate reconstruction of the capital stock as it was in Soviet times. Instead, public investment needs to be carefully scrutinized to put it to its most efficient use and the share of private sector investment needs to increase substantially.

activity; and (iv) access to foreign markets. During Soviet times, the poor business environment for the private sector and the massive distortions in the state sector were the key constraints. Private sector activity was generally discouraged. When Tajikistan became independent, market access was reduced as the Soviet Union disintegrated. Also, the quality of public services and institutions suffered. With independence, many Russian and other non-Tajik experts were lost and suddenly what had previously been backwater regional Soviet administrations had to assume the role of top level administrations in an independent state. With the arrival of the civil conflict, the last key ingredient for efficiency, basic stability and rule of law, also went as the country plunged into chaos, and the economy with it.

1.5 As the country emerged from civil war, the most pressing political and also economic concern was to restore order and the basic rule of law. The Government of Tajikistan under President Rakhmonov mastered this challenge and relatively swiftly consolidated its power, restoring the authority of the state and the basic rule of law.

1.6 While consolidation of power was the Government’s top priority, it also undertook a number of first generation reforms that had been delayed by the civil war. The restoration of basic order and the first generation reforms that included the privatization of small enterprises and non-cotton farm land had a huge growth impact, with the economy rebounding by almost 60 percent in the last 5 years. This rapid growth and macro-stabilization were mutually enforcing. As can be seen in Figure 1.1, both economic decline and the more recent rebound were indeed to an important extent driven by changes in total factor productivity.

Figure 0.1: Annual Changes in Total Factor Productivity in Aggregate Output, Agriculture and Industry



1.7 However, despite this recent growth experience, Tajikistan’s stock of human and physical capital remains grossly underutilized³. To sustain growth, the

³ Dealing with the methodological difficulties of accurately measuring the capital stock in a transition economy is beyond the scope of this study. Assessing the potential value of an underutilized building, an underutilized road, or an underutilized physics PhD in the Tajik environment beyond their present use will

Government needs to switch from power consolidation to economic reform mode since much of the economic gain from greater political stability and more centralized authority has already materialized. Increasingly, the binding constraints to growth are poor public services and institutions, the poor business climate and very large economic distance to foreign markets. The Government increasingly recognizes these challenges, and needs to intensify the pace and thoroughness of its structural reforms.

1.8 Low unit labor cost and low productivity point to the significant potential for reducing the distance to foreign markets and improving the domestic business climate. While the numbers in Table 1.1 need to be treated with caution, they suggest that Tajikistan's unit labor cost are rather competitive despite the low productivity because wages are extremely low. In equilibrium, such low unit labor costs are the direct consequence of barriers to trade as they prevent the convergence of factor prices. Low productivity in turn can to an important extent be ascribed to the high cost of doing business in Tajikistan.

Table 0.1: Selected CIS Countries: Relative Unit Labor Cost, 2002

	Armenia	Georgia	Moldova	Kyr. R.	Kazakh.	Russia	Tajik.
Average nominal monthly wage (US\$)	46.1	47.2	44.1	40.3	130.3	140.8	10.3
Relative nominal US\$ monthly wages (KR=1)	1.1	1.2	1.1	1.0	3.2	3.5	0.3
Relative Labor Productivity (KR=1)	2.0	2.0	1.2	1.0	10.5	5.7	0.7
Relative Unit Labor Cost (KR=1)	0.6	0.6	0.9	1.0	0.3	0.6	0.4
Real average monthly wage (index 1995=100)	252.1	366.3	123.6	151.8	161.4	154.5	77.8

Note: The selected CIS countries in this table are either potential competitors for Tajikistan in growing Russian and Kazakh markets and/or are markets for Tajikistan products.

Source: The World Bank, Kyrgyz Republic : An Integrated Strategy for Growth and Trade, 2004.

1.9 The primary objective of this Trade Diagnostic Study is to inform the Government on how to improve access to and reduce the economic distance from foreign markets. This in practice also requires improved institutional capacity and a better business climate as these issues are all interrelated. Three challenges make the trade agenda for Tajikistan particularly daunting: (i) the remote, landlocked, and mountainous geographic position is as difficult as it gets; (ii) the regional political setting is challenging; and (iii) institutions are weak and plagued by corruption. The latter two disadvantages exacerbate the geographic distance to foreign markets. As a result, Tajikistan has one of the largest economic distances to foreign markets in the world despite its low formal tariff barriers, as discussed in Chapter 2.

1.10 This excessive economic distance to foreign markets severely affects Tajikistan's terms of trade. The high cost of accessing foreign markets is in effect subtracted from export prices and the correspondingly high cost of reaching Tajikistan is added to import prices. Furthermore, the cost of doing business domestically is high, and there are some blatant inefficiencies in key sectors as discussed in Chapter 3. But improvements in the economic distance to foreign markets and the domestic business

necessarily involve bold and heroic assumptions. For the purpose of the present study, we are relying on the IMF's March 2005 Board paper for quantitative estimates and Figure 1.1.

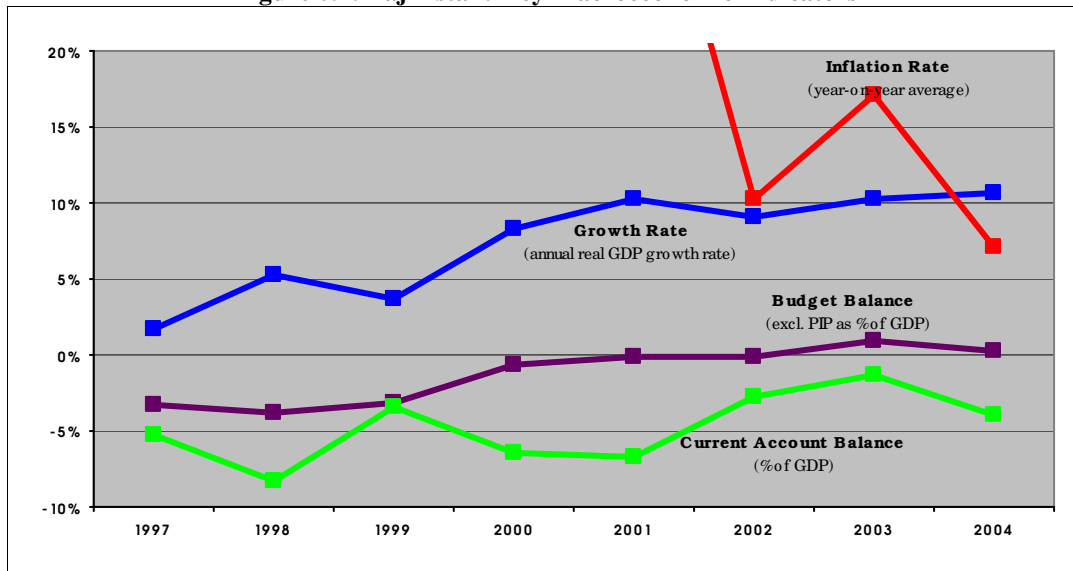
climate will not only help to improve efficiency in the current key sectors. It will also open up new opportunities in sectors such as textiles and food processing that could grow quickly, in particular if sufficient levels of FDI are attracted as explained in Chapter 4.

1.11 This trade diagnostic study identifies major trade-related inefficiencies and suggests remedies. Statically, the elimination of the sum of the inefficiencies identified in this study may amount to as much as 20 percent. Roughly 4 percent of GDP might come from reduced logistics costs, perhaps 5 percent of GDP from efficiency gains in the cotton sector, possibly 6 percent from gains in the electricity/aluminum sector, and up to 5 percent from increased textile production. Dynamically, larger gains are possible. But before entering the details of the analysis, this first chapter sets the stage by providing background on Tajikistan’s recent economic developments, its trade performance, and its trade policy.

Macroeconomic Developments

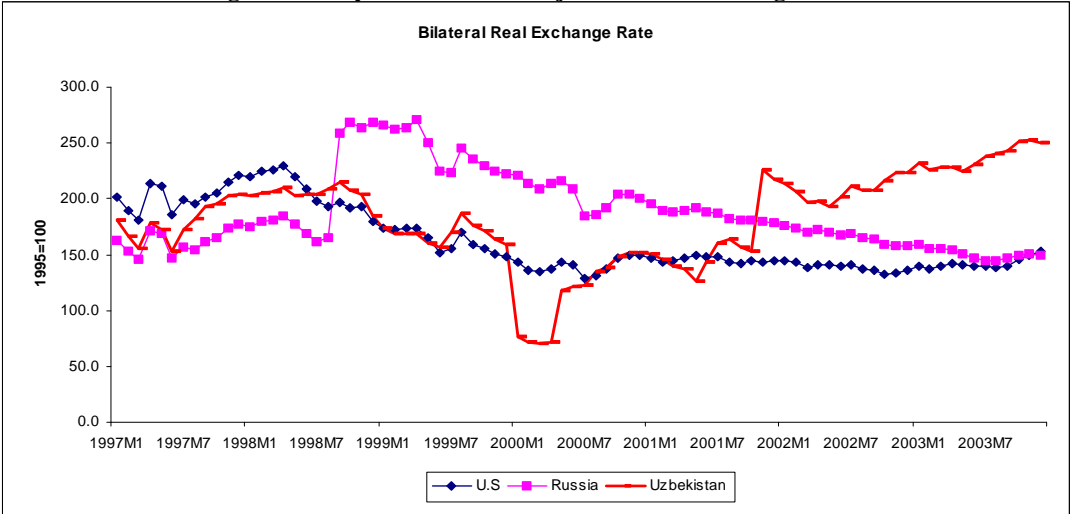
1.12 While Tajikistan remains the poorest CIS country, its macroeconomic situation looks solid. Tajikistan was a late reformer among the CIS countries due to the civil war. As a result, the transition decline in Tajikistan was particularly long and steep. However, after the formal peace agreement in 1997, growth started to pick up and during the last five years annual GDP growth has averaged 10 percent. GDP now stands at just over US\$ 2 billion. Fiscal performance has improved due to spending restraint and increased tax collection.

Figure 0.2: Tajikistan: Key Macroeconomic Indicators



1.13 Prudent fiscal and monetary policies have brought down inflation, stabilized the exchange rate and progressively restored public confidence in the local currency. The external position has generally improved, reflecting an increase in exports of cotton and aluminum and a significant increase in inflows of workers’ remittances.

Figure 0.3: Dynamics of the Tajik Somoni Exchange Rates



Sources of Growth

1.16 As discussed in the introduction, the increase in total factor productivity has been a major source of growth in the past few years. This had already been predicted in the last Country Economic Memorandum. While all sectors have experienced growth, the sector shares of agriculture and industry have declined while the share of the remainder--services and construction in particular--has increased. The

below average growth in agriculture and industry is at least in part a reflection of the fact that effective privatization of cotton farms and medium and large state enterprises has lagged behind. Productivity increases in properly privatized non-cotton agriculture was rapid while productivity remains low in the cotton sector. The industrial sector is presently dominated by the state owned aluminum smelter TADAZ whose export performance depends on world market aluminum prices. Not surprisingly, there is some correlation between the world market prices of aluminum and cotton (that together account for roughly 75 percent of exports) and GDP growth.

Table 0.2: GDP Composition
(Percent of Total)

	2000	2001	2002	2003	2004
Agriculture	27.0	26.5	26.3	25.2	21.6
Industry	23.9	22.7	22.1	20.9	19.6
Others	49.1	50.8	51.6	53.9	58.8
Total	100.0	100.0	100.0	100.0	100.0

Source: Tajikistan - State Statistic Committee.

1.17 Robust growth in services and construction was supported by dynamic increases in workers' remittances that fueled domestic demand. By 2004, remittances transferred through the banking system had reached the equivalent of 20 percent of GDP in addition to the substantial remittances in cash and kind that are difficult to measure. Perhaps as much as 30 percent of the male working age population engages in some form of migration labor, with Russia being the main destination due to visa free access and a booming economy there.

1.18 Increases in total factor productivity will continue to be a major source of future growth, provided the Government moves ahead with the necessary reforms. Remittances will also continue to contribute to growth, provided that access to Russia remains visa free. Significant further productivity increases in agriculture are also possible, provided land privatization on the basis of individual land use certificates continues and the inefficiencies in the cotton sector are tackled. The ongoing privatization of medium and large companies will help to mobilize physical assets that are now not efficiently used. Donor funded public investment will also contribute to growth. Due to reduced debt levels and improving institutional capacity of the public sector to efficiently manage public investment, it is projected that donor financing of public investment can increase to 4.5 percent of GDP, compared to below 3 percent in 2003. Increased hydropower and aluminum production could also contribute significantly to growth. However, contracts with foreign partners will need to be scrutinized closely to assure substantial net benefits for Tajikistan of such arrangements while limiting the risks.

1.19 Sustained growth will also require substantial investment. However, according to the official statistics, investment steadily declined from 17.7 percent in 1997

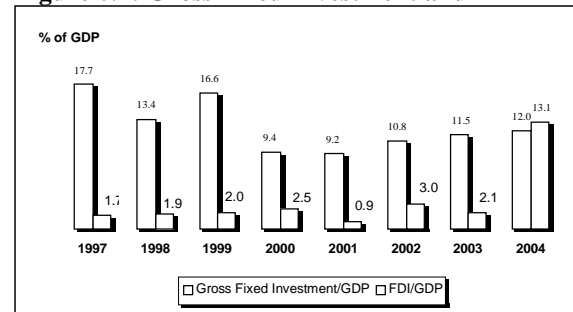
to about 12 percent of GDP in 2004⁴. Although the level of public investment is close to the international average of 5 percent of GDP, its allocation often appears ad hoc, lacking proper prioritization. Better prioritization of large public investment projects in the infrastructure and energy sectors will be needed.

1.20 Foreign direct investment in Tajikistan is among the lowest in the CIS.

The average annual FDI level during 2000–2003 was 2 percent of GDP, significantly lower than the 3 percent average in the CIS. In 2004, FDI rose to 13 percent of GDP, but this is a statistical artefact introduced by the massive debt for asset swap with Russia. The low levels of FDI can to an important extent

be explained in terms of Tajikistan’s unfavorable location, the poor business climate, and the inability of local counterparts to put up adequate local co-financing. There are about 250 firms with foreign investment and the estimated stock of FDI stood at about US\$225 million in 2002 (19 percent of GDP). About 80 percent of total FDI stock is due to a very limited number of enterprises in the textiles and gold mining sector. Joint stock companies in the textile sector include Giavoni⁵ (American-Tajik joint venture), Kabool Tajik Textile⁶ (Korean –Tajik joint venture), a Vietnamese silk factory in Khujand, and the recently established SATN⁷ (American-Tajik). In the mining sector, there are foreign investments in the gold mines at Zarafshan and Darvoz.

Figure 0.4: Gross Fixed Investment and FDI



Growth and Poverty

1.21 **The 2003 Poverty Assessment found that Tajikistan’s economic growth has been pro-poor⁸.** High growth rates have reduced the poverty rate by 18 percentage points from 82 percent in 1999 to 64 percent in 2003. The poverty rate dropped most in the remote mountainous oblast of GBAO and in the agricultural areas of RRS and Khatlon. Regional inequality among oblasts has fallen as the poorest regions registered the most poverty reduction. The poverty reduction pattern was more or less the same in urban and rural areas, possibly slightly more “pro-poor” in rural than in urban areas. At the same time, inequality of consumption expenditures measured by the Gini coefficient rose slightly from 0.33 in 1999 to 0.36 in 2003, notably in Dushanbe and Khatlon and in urban areas more generally.

1.22 **Peace, economic stabilization and reform, and migration and remittances have contributed to this pro-poor growth.** Peace provided the stability that allowed

⁴ The quality of savings and investment data collected by the state statistical agency is poor. Tajikistan does not prepare a full set of annual national accounts that includes data on income generation and distribution, capital accumulation and consumption and international transaction accounts.

⁵ Giovanni produces cotton trousers, cotton shirts and denim trousers for the European market and is almost fully integrated. However, they do not own a ginnery although plans have been existent for a while.

⁶ Kabool Tajik Textile is so far producing fabric only which it mostly sells to a global market.

⁷ SATN opened in March 2004. The factory plans to eventually employ about 900 people.

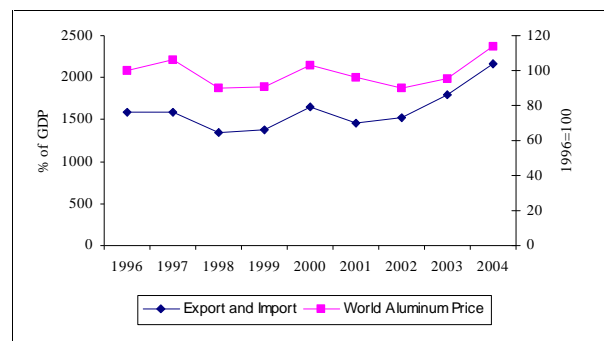
⁸ By the commonly used definition of the World Bank, growth is pro-poor if poor people benefit in absolute terms.

small-scale commercial activities to expand and/or re-emerge. Macroeconomic stabilization has provided a more stable environment for private investment, and agricultural reform in the non-cotton sector has enabled farmers to diversify production and increase productivity. Poverty, however, could have fallen more if the pace of reform in key sectors had been faster. Slow reform in the cotton sector has kept a large proportion of the rural population in poverty. Migration has increased inflows of workers' remittances, thus providing safety net income to poor households. Income from employment does not keep the families out of poverty as it accounted for less than half of total household income, while gifts and other sources of income are more important.

Trade Performance

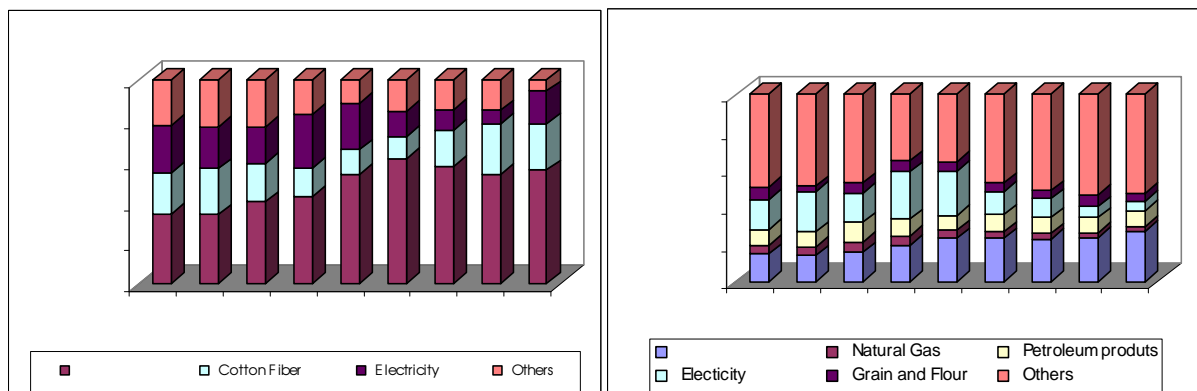
1.23 Despite the difficult geographic location, Tajikistan has the highest degree of trade openness among low income CIS countries. Compared to what would be expected in a gravity model, Tajikistan consistently overtrades. Paradoxically, this can to some extent be explained by a trade failure. Tajikistan finds it difficult to export its hydropower directly due to underdeveloped regional electricity markets and strained relations with Uzbekistan. The production and the export of energy intensive aluminum, together with the related alumina imports, is responsible for much of Tajikistan's trade. But what this activity ultimately amounts to in economic terms is a roundabout way of implicitly exporting electricity, thereby circumventing the difficulties of exporting electricity directly.

Figure 0.5: Trade Volume And World Price of Aluminum



But what this activity ultimately amounts to in economic terms is a roundabout way of implicitly exporting electricity, thereby circumventing the difficulties of exporting electricity directly.

Figure 0.6: Tajikistan's Export and Import Composition



1.24 Merchandise exports and imports are concentrated in a few primary products. Exports are dominated by aluminum and cotton, accounting for more than 75 percent of total export earnings. While exports of electricity are also significant, net

exports tend to be small since much of the electricity trade with Uzbekistan is of a seasonal nature where Tajikistan exports excess hydroelectricity in summer and in return imports electricity from Uzbekistan in winter. Imports consist mainly of alumina and energy (electricity, natural gas, petroleum and petroleum products), accounting for about 50 percent of total imports. The remainder of imports includes consumer goods, grain, and flour, and capital goods.

1.25 Key trading partners for aluminum and cotton outside the CIS are the EU, Turkey and Iran. About 80 percent of cotton was exported to the EU markets, and the remainder directed to Russia and other non-CIS markets, including Iran. Most of the aluminum was exported to non-CIS markets, in particular the Netherlands and Turkey. Exports of electricity are concentrated in the CIS, especially Uzbekistan. The principal market for non-cotton and non-aluminum exports (for example, plant and food products and transport equipment) continues to be Russia. However, it should be noted that for near homogenous commodities like aluminum and cotton, the analytical value of a country of destination analysis is limited. Due to their low level of specificity, the country of destination can change radically from one year to the next on account of minor changes in, for example, transport costs or sourcing strategies of buyers without noticeable impacts on the exporter.⁹

1.26 The origins of imports are concentrated among the CIS. Alumina imports from non-CIS markets have recently declined to 51 percent in 2003, while imports from the CIS (Azerbaijan and Ukraine) have increased. Most energy imports are based on inter-governmental agreements for petroleum products, natural gas, and electricity with CIS partners. Natural gas is imported mainly from Uzbekistan, petroleum products from Uzbekistan, Turkmenistan, and Kazakhstan, and electricity comes mostly from Uzbekistan. The origins of non-alumina, non-energy imports are also concentrated in the CIS (Kazakhstan and Ukraine), and the origin of much of capital imports (transport equipment and machinery) is still Russia. It is worth mentioning here that grain imports have declined during 2000-2003 as an increase in domestic production of grains (especially wheat) has led to a reduction of imports and food aid.

Table 0.3: Imports and their Origins

(Percent)

Country of Origins	1997	1998	1999	2000	2001	2002	2003
Alumina	100	100	100	100	100	100	100
CIS	0	1	35	79	56	54	49
of which: Azerbaijan	0	0	6	31	17	13	24
Ukraine	0	0	24	36	26	35	17
Non-CIS	100	99	65	21	44	46	51
Natural Gas	100	100	100	100	100	100	100
CIS	100	100	100	100	100	100	100
Uzbekistan	100	99	100	100	100	100	100
Petroleum Products	100	100	100	100	100	100	100
CIS	95	96	98	99	100	99	69
Uzbekistan	39	61	61	44	26	26	35
Kazakhstan	21	6	5	9	9	6	21
Turkmenistan	32	24	21	30	53	45	0
Other	4	4	12	16	12	22	13
Non-CIS	5	4	2	1	0	1	31
Electricity	100	100	100	100	100	100	100
CIS	100	100	100	100	100	100	100
Turkmenistan	5	9	0	10	16	12	0
Uzbekistan	94	91	98	86	82	86	95
Kyrgyzstan	1	0	2	4	2	1	5
Grain	100	100	100	100	100	100	100
CIS	100	98	99	100	100	100	100
of which: Kazakhstan	95	95	98	100	97	98	97
Hour	100	100	100	100	100	100	100
CIS	97	100	100	100	99	100	100
of which: Kazakhstan	69	72	82	86	66	92	88
Russia	0	21	17	10	27	6	4

Source: SSA

⁹ The quality of the trade data will need to be further improved as there remain significant discrepancies compared to the mirror statistics.

1.27 The deficit of trade in services (transportation, travel, communication, construction, insurance and financial services) has increased during 2002-2004 mostly due to an increased deficit in transport services. Although communication services (postal, telecommunication, and courier) have registered a surplus since 2000 onwards, it is still relatively small. Tourism, insurance and financial services remain insignificant.

Table 0.4: Trade in Services (millions of US\$)

	1998		1999		2000		2001		2002		2003		2004	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
Services	59.6	40.9	52.3	40.9	62.6	57.2	62.2	69.9	69.0	104.9	88.5	139.0	131.8	199
Transportation	54.5	20.6	47.7	16.8	54.0	30.0	44.1	37.7	45.6	73.7	45.3	122.4	51	153.3
Travel	1.7	1.6	1.5	1.6	0.9	1.1	1.3	2.2	1.6	1.7	1.5	2.1	1.4	3.3
Communication services	2.0	1.4	1.6	1.7	3.1	1.8	4.2	3.4	6.6	2.5	10.4	3.7	12.4	4.5
Others *	1.4	17.3	1.6	20.8	4.6	24.3	12.7	26.6	15.2	27.0	27.7	10.8	67	37.9

* Include construction services, insurance, financial services, processing services and technical assistance.
Source: National Bank of Tajikistan

External Vulnerability

1.28 Tajikistan depends on a limited number of large foreign exchange earners. Around 90 percent of foreign exchange earnings are made up of remittances, aluminum exports and cotton exports. At this stage, the introduction of a visa regime for travel to Russia, the main destination of migrant workers from Tajikistan, is unlikely. However, if visa restrictions were to be introduced by Russia, this could have devastating effects on the flow of remittances. A sharp economic decline in Russia, for example through a reduction in oil prices, would also reduce remittances flows. However, this would to some extent be mitigated by reduced import prices for petroleum products. This inverse relationship between remittances from Russia and the oil price limits Tajikistan's exposure to oil price shocks in either direction.

1.29 Foreign exchange earnings from aluminum and cotton are vulnerable to adverse commodity price shocks. The exposure to the aluminum price is particularly large, although somewhat reduced by the fact that the price of imported alumina tends to be positively correlated with the aluminum price. Another risk for the production of aluminum are supply and logistics chain disruptions. For example, if the railway link through Uzbekistan were temporarily disrupted, this would have a large negative impact on Tajikistan. Similarly, disruptions in the electricity supply, for example through a landslide at the hydropower stations, could disrupt aluminum production. Cotton production in turn can vary significantly from year to year as a function of the weather conditions. Overall, all three major foreign exchange earners are subject to a number of risks that in sum represent significant external vulnerability.

1.30 A decline in the world prices of cotton by 10 percent would lower annual export receipts by 1.2 percent of GDP, leading to a 0.2 percent of GDP decline in tax receipts. Similarly, a 10 percent decline in the average aluminum price would cut export receipts by 2.7 percent of GDP, and fiscal revenues derived directly from aluminum processing (customs duties, sales taxes and dividends from TADAZ) would fall by 0.2 percent of GDP¹⁰. In addition, such declines in commodity prices could have

¹⁰ IMF, Third Review Under the Three-year Arrangement Under the PRGF. July 8, 2004.

spillover effects on the rest of the economy. Reductions in the barriers to trade will likely lead to a diversification of exports and therefore a reduction in the exposure to specific commodity prices. At the same time, better market structures will allow individual agents to better hedge themselves against certain risks. For example, cotton farms would substantially benefit from access to hedging instruments.

Trade Policy, Regional Trade Agreements, and Trade Integration

1.31 Tajikistan's official trade regime is relatively liberal with low tariffs and few quantitative restrictions. Since 2003, there are seven ad valorem tariff rates between 0 and 15 percent, with an average tariff burden of around 7 percent. Forty-five least developed countries are exempt from these import tariffs altogether. Tajikistan has also signed free trade agreements with seven CIS countries as discussed further below. The 2003 tariff schedule currently in place is a deterioration compared to the 2002 schedule that featured a unified tariff schedule of five percent for the vast majority of goods, with just a few exceptions that were subject to the reduced two percent tariff or zero tariff. Quantitative restrictions are mainly limited to quotas on the import of alcohol and tobacco products and there are no tariff quotas in effect. Safeguard and anti-dumping measures are envisaged by law in a manner generally compatible with WTO principles but have never been applied. Conversely, Tajikistan faces little tariff barriers for its key exports into foreign markets, aluminum and cotton in particular. The relatively minor role that tariff barriers play for Tajikistan's imports and exports justifies the emphasis on trade facilitation and behind-the-border issues in the present study.

Other Formal Trade Barriers

1.32 Non-tariff barriers include the usual provisions for compliance certification for food, safety, and security reasons. However, the system of product standards is excessive for a country like Tajikistan. The very comprehensive system of mandatory standards dating back to the Soviet Union has been largely retained. But as a very poor and small country, Tajikistan is unable to properly administer the complex and demanding standards system that requires well equipped laboratories, highly qualified staff, and effective enforcement capacity. Although the present system of standards is applicable indiscriminately to domestic and foreign producers, the concern might be raised that the present system fails the WTO requirement of being "least trade restrictive". Against this background, it is recommended that Tajikistan replaces its vast mandatory standards system by a more compact and simple system of mandatory technical regulations for potentially dangerous products while making other standards voluntary. It is also recommended that Tajikistan commences to routinely accept the conformity certificates of its major trading partners not only in theory but also in practice. Specifically, certificates of conformity with a wide range of national and international standards and regulations (e.g., EU, US, and Japan) should be accepted as equivalent to a certificate of conformity with Tajik regulations.

1.33 While there are no formal export taxes in Tajikistan, the sales taxes on the two main export commodities aluminum and cotton are de facto export taxes. The sales tax on aluminum can to some extent be rationalized by interpreting it as supplement

to the otherwise very low electricity price offered to the aluminum smelter TADAZ, where the size of this price supplement varies with the world market price of aluminum. In fact, electricity price contracts with aluminum smelters that condition on world market prices of aluminum are not unusual. The cotton sales tax in turn can be interpreted as a world market price and output dependent contribution of the cotton sector to irrigation that is otherwise provided at below cost prices to farms. Hence, if and when the system of sales taxes on aluminum and cotton were to be reformed, care would need to be taken not to widen the quasi-fiscal deficits of the aluminum and cotton sector in doing so.

1.34 Anther significant export restriction is the mandatory sale of a variety of goods, including all major exports, through the Tajik Commodity Exchange. The list of these goods includes cotton, aluminum, precious and semi-precious stones, ores and metals, and a variety of other products. It is likely that the present arrangements constitute state trading and are as such not compatible with WTO rules. Also, in practice the present rules of the Commodity Exchange lead to important distortions. For example, the Commodity Exchange denies farmers the possibility hedge themselves against future price fluctuations. Also, the administrative cotton price formula discriminates against the domestic textile industry. Further, the Commodity Exchange helps to administer the excessive pre-payment requirement of 100 percent for all major exports¹¹. Overall, it is clear that the Commodity Exchange will need to be reformed, see Chapter 3 for more detail.

1.35 Documentary requirements are extensive and impose a noticeable burden on trade. Documentation requirements may include the certificate of origin, quality certificate, quarantine certificate for agricultural products, veterinary certificate on animal products, banking confirmation and advance payment on the specified list of goods, bank guarantee, confirmation on payment of the sales tax of cotton and aluminum, insurance policy, and government authorization of the exports/impost of relatively large variety of products. The Government should consider simplifying the documentation requirements, minimizing the number of mandatory documents. Due to Tajikistan's weak administrative capacity, excessive documentation requirements encourage rent seeking among Government officials.

Regional Trade Agreements

1.36 Tajikistan is a member of two overlapping regional trade groupings: the CIS and EURASEC. The CIS (Commonwealth of Independent States) was set up in 1991 and is comprised of all former Soviet Republics with the exception of the Baltic States. The main CIS agreement was the Agreement on the Establishment of the Free Trade Area, signed by all CIS countries in 1994, except Turkmenistan. However, it proved ineffectual and has never been ratified. EURASEC (Eurasian Economic Community) was set up in 1997 comprising Russia, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan. Armenia, Moldova, and Ukraine enjoy observer status. Both CIS and

¹¹ These include cotton and processed goods, primary aluminum and goods, ores, concentrates and residues of precious metals, fermented tobacco, hides and leather, fertilizers, geranium oil, natural honey, herbs, and snake venom.

EURASEC have, in principle, established overlapping free trade zones. However, in practice they have proven relatively ineffective and instead a web of bilateral free trade agreements among CIS members has emerged. Tajikistan signed seven bilateral free trade agreements: with Russia and Armenia in 1994, with the Kyrgyz Republic and Uzbekistan in 1996, with Belarus in 1998, and with Ukraine in 2001.

1.37 These bilateral trade agreements under the CIS umbrella are all rather similar. They stipulate duty free trade in all goods, while allowing potential exemptions to be specified in associated protocols of exemptions. The agreements also allow free transit of goods through the signatory territories. Exempted products are subject to the most favored nation tariff rates, and these exceptions can be non-symmetric, i.e. each partner in the same trade dyad can exclude different products. The agreements also allow for contingent protection: temporary protection, anti-dumping measures, and safeguard measures. While the laws on anti-dumping and safeguards are generally WTO-compatible, the problem is that little recourse is provided to the targeted country in case of disagreement.

1.38 Overall, the evidence seems to suggest that the CIS free trade area generates substantial intra-bloc trade. Freinkman, Polyakov, and Revenco (2004) illustrate this in their gravity model, although some question remains to what extent the intra-bloc trade is due to the common history of the CIS rather than the effectiveness of the free trade agreements. One serious flaw of the CIS free trade agreements is their lack of permanency. Exported oriented entrepreneurs face significant uncertainties since their product might suddenly be included in an exemption protocol. The weak mechanism of dispute resolution with regards to potential contingency measures has similarly discouraging effects.

1.39 A number of CIS, EURASEC, and bilateral agreements on transit freedom have been largely ineffective and failed to bring about free transit in the region. The principle of transit freedom is upheld in the above-mentioned free trade agreements as well as in topical agreements such as the Agreement on Transit through Territories of CIS members (1997), Agreement on Common Transport Policies in the CIS (1997), the Agreement on Transport Tariffs in the CIS (1997), Agreement on Road Transport Union of EURASEC (1998, not ratified by Kazakhstan), and Agreement on Common Railway Tariffs in EURASEC (2002). Unfortunately for Tajikistan, these agreements are political statements rather than dependable arrangements in their current form. From Tajikistan's remote and landlocked perspective, almost any agreement that promises to improve transit through Uzbekistan and beyond is likely to be worthwhile. Even a customs union with somewhat elevated external tariffs might theoretically be beneficial for Tajikistan if free transit through Uzbekistan could thereby be assured.

1.40 EURASEC envisions the creation of a customs union among its members. However, it is unclear whether this is a realistic goal in the medium terms since the many previous attempts to establish a Customs Union among all or some CIS members have failed. In particular, a Customs Union incorporating Russia, Belarus, Kazakhstan, and Kyrgyzstan was formally established in 1995, and Tajikistan joined in 1999. However, the members failed to harmonize their import tariffs and customs regimes, and the Union

today only exists on paper. Despite these failures, it remains the case that an operating customs union could bring substantial benefits if set up properly and if it were to maintain a low enough common external tariffs. However, it seems likely that such attempts will only materialize once the ongoing WTO accession processes have come to a conclusion.

WTO Accession

1.41 Tajikistan applied to join the WTO in May 2001 and submitted its Memorandum on Trade-Related Policies in February 2003. Since then, the Government has answered several rounds of questions on the contents of the memorandum from working party members. Furthermore, required supplementary information was submitted in early 2004, along with initial offers on goods and services. Following the first Working Party meeting in March 2004, negotiations are now entering a crucial stage when Tajikistan will need to agree with its trading partners on its maximum allowed ("bound") levels of protection.

1.42 WTO accession is set to significantly benefit Tajikistan in the medium term but WTO accession will not suddenly improve market access abroad for Tajikistan's exports. The reason is that WTO members already treat their imports from Tajikistan the same way as imports from WTO member countries. However, as a WTO member, Tajikistan will have access to the WTO's dispute settlement mechanism which will make it easier to confront discriminatory trade practices by WTO members. Rather than negotiate bilaterally with larger and more powerful countries, Tajikistan will be able to bring disputes before a neutral panel that takes its decisions solely according to WTO rules. Furthermore, Tajikistan will participate in global trade negotiations and may join forces with other developing countries to push for changes that would be particularly beneficial for poor countries.

1.43 In the near term, the main benefit of WTO accession is probably that it requires Tajikistan to commit to and undertake extensive market oriented legal and regulatory reforms. These reforms will promote Tajikistan's transition to a full market economy and improve investor confidence. Perhaps most prominently, there is the question of the commitment on services. In its initial offer, the Government has taken a very cautious approach, seeking to leave in place far-reaching restrictions for insurance and telecommunications and not making any commitments at all on banking and air transport. It is recommended that the Government request the preparation of sectoral reviews to assess the likely costs and benefits of a more accommodating stance in those areas. For example, the benefits of increased competition in banking and insurance are likely to be substantial. President Rakhmonov subscribed to this argument at a press conference on June 16th 2005 when he announced plans to lift all restrictions on activities of foreign banks. This plan should be reflected in the commitment on services.

1.44 Furthermore, WTO accession will enable the Government of Tajikistan to better resist demands from special interest groups for trade privileges. All over the world, narrow special interest groups are trying to obtain trade privileges that benefit them but hurt consumers and other less well organized groups. Tajikistan's trading

partners in its WTO Accession Working Party are likely to insist that, upon joining the WTO, Tajikistan commit to fairly low maximum levels for its import tariffs (tariff bindings). This international obligation will make it easier for the Government to resist pressure for higher import tariffs that would serve special interests but hurt the economy as a whole. Resisting protectionist pressures will be especially important with respect to the common external import tariff of the Eurasian Economic Community (EAEC). Many goods that might be protected by high import tariffs are not produced in Tajikistan. Therefore, Tajikistan would suffer substantial losses if the common external tariff were highly protectionist - Tajik consumers and firms would pay higher prices and producers in other EAEC member countries would benefit. However, all EAEC members are currently negotiating the terms of their accession to the WTO; incumbent WTO members are very likely to insist that they commit to fairly low maximum levels for their import tariffs. These commitments by each EAEC member will ultimately determine the structure of the EAEC common external tariff.

1.45 Is there a downside to WTO accession? Clearly, some WTO rules (for example, the Customs Valuation Agreement) are quite complex and more suited to high-income countries with well-equipped customs services than for Tajikistan where many border posts suffer frequent electricity outages and computers are scarce. Hence, WTO accession invariably represents a major administrative and legislative effort and therefore a short term cost. So far, the WTO accession process in Tajikistan has worked remarkably well, judging by the rapid pace at which required documentation has been submitted to the WTO. This has been due largely to the hard work by a small number of dedicated government officials and extensive donor support especially by the UNITAR project (financed by SECO) and by various USAID projects. However, negotiations are now entering a phase in which delicate policy decisions need to be taken especially in areas where donor interests and the best interests of Tajikistan may not always be fully aligned. For example, intellectual property protection in line with TRIPS and other relevant WTO documents such as the Doha Declaration tends to be a substantial burden on countries like Tajikistan. Typical donor countries, however, benefit from stringed intellectual property protection and like to press for commitments beyond the minimum WTO requirements. Therefore, on such matters it would be better for Tajikistan to have its own analytical capacity to judge the advantages and disadvantages of certain proposals for themselves.

1.46 It is now paramount that the Government effectively takes charge of the overall accession process. A significant increase in the number of specialist staff in the Ministry of Economy and Trade will be required, and further training opportunities in international trade policy should be requested from donors. Also, it will be essential for Tajikistan to establish a Geneva mission to be able to negotiate on WTO accession effectively. The Government should continue to work closely with donors to achieve these capacity enhancements.

1.47 In the context of WTO accession and membership, Tajikistan might also consider to apply to be recognized as a Least Developed Country (LDC) by the UN General Assembly. From a trade perspective this would be attractive as it would secure Tajikistan special and differential treatment under the WTO agreements and provide

access to increased technical assistance. There are three main criteria for LDC. Tajikistan easily qualifies the first two: the per-capita income and the economic vulnerability criteria. However, because the provision of education, health, and social services during the Soviet period was much better than in countries with comparably low income, Tajikistan's Human Assets Index is still above the relevant threshold. With the next triennial review of the list of LDCs coming up in 2006 and a provision in the latest (2003) report that the status of Eurasian transition economies should be reconsidered, it may be worthwhile for the Government to push for a more flexible interpretation of the human assets criterion. Given Tajikistan's landlocked and post-conflict status, difficult natural conditions, and overall economic vulnerability, it would seem to be possible to make an economically sound case for inclusion in the list.

Recommendations

1.48 Short Term

- Set up permanent mission at the WTO in Geneva
- Strengthen the capacity at the WTO unit in the Ministry of Economy and Trade
- Commission assessment of service sector issues to prepare negotiations on service offer

1.49 Medium Term

- Seek recognition as Least Developed Country by the UN.
- Pursue effective transit regime and low external tariffs as priority within regional free trade agreements.

DOMESTIC AND EXTERNAL TRADE FACILITATION AND TRANSPORT

This chapter looks at logistical and bureaucratic barriers to Tajikistan’s domestic and international trade. While import tariffs and official non-tariff barriers in Tajikistan are low as described in the previous chapter, customs, visa, border crossing, transport and transit difficulties all present major obstacles to trade. The chapter first discusses domestic trade and transport issues and then turns to the difficulties directly related to Tajikistan’s external trade and international transport.

A. DOMESTIC TRADE REGIME AND TRANSPORT

Domestic Market Fragmentation

Tajikistan’s domestic market is small. With a population of around 6.5 million, Tajikistan had GDP of just over US\$2 billion at the end of 2004 and GDP per capita of around US\$310. To put this into perspective, in the EU and the US, a company with US\$2 billion turnover would be considered a medium-size enterprise. Even if the internal market were functioning well, Tajikistan would need to sustain high levels of external trade in order to benefit from economies of scale and specialization. Administratively, Tajikistan is subdivided into five regions – Dushanbe City, the capital, the Rayons of Republican Subordination (RRS) around it, Sughd Province in the north separated by mountains from the rest of the country, Khatlon Province in the south, and mountainous and sparsely populated Gorno Badakhshan (GBAO) in the east. Thanks to Sughd’s advantageous location in the Ferghana valley, it serves as an entry point for a large share of Tajikistan’s imports. This makes Sughd the main commercial center of the country, together with the capital, Dushanbe. These trading hubs are characterized by retail shares significantly in excess of GDP shares (see Table 2.1).

Table 0.1: Tajikistan’s Regions ranked by GDP, Population and Retail Turnover (2003)

Region	GDP		Population		Retail trade turnover	
	Million US\$	% of total	million people	% of total	million US\$	% of total
Sughd	341	28%	2.1	30%	124	38%
Khatlon	308	25%	2.2	35%	42	13%
RRS	294	24%	1.6	22%	49	15%
Dushanbe	236	20%	0.6	9%	110	34%
GBAO	30	2%	0.2	3%	3	1%
Total:	1,553	100%	6.7	100%	328	100%

Source: State Statistics Committee

Mountainous terrain and other trade barriers divide Tajikistan’s already small domestic market into even smaller sub-markets. For seven months each year the Anzob pass linking the Sughd Province to the south of the country is closed, significantly disrupting domestic trade. The domestic railway network is not well developed and automobile transport is the main mode of domestic travel and freight shipment.

However, roads are in a poor condition and snow and mud slides close important roads in winter. Road access to GBAO and the mountainous eastern part of RRS – Rasht – is particularly difficult. Numerous checkpoints, restrictions to internal movements of citizens in the form of an internal visa regime, and other factors related to the poor general business climate and low trust among transacting parties also contribute to market fragmentation.

The fragmentation of the domestic market is reflected in large price differences between regions. In summer 30 key traded goods on average cost 27 percent more in GBAO than in Dushanbe and in winter the price gap rises to 46 percent (see Table 2.2).¹² The average price disparity between Dushanbe and GBAO is even higher. This implies that while on average goods are more expensive in GBAO, there are some goods that are more expensive in Dushanbe and thus arbitrage opportunities exist in both directions. Similarly, in Sughd in summer, when transport between the north and south of the country is by road through the Anzob pass, the average price of the 30 key traded goods is 18 percent (or around US\$70 per ton) lower than in Dushanbe. When the pass becomes impassable because of snow, and trade between the north and the south of the country has to transit through Uzbekistan either by rail or road, the average price difference between Sughd and Dushanbe increases to 31 percent. As explained below, simple arbitrage implies that the total cost of trade between the regions is greater than – or equal to – the price difference.¹³

Table 0.2: Regional Price Levels and Regional Price Disparity in Tajikistan

	Summer		Winter	
	Average Prices (Dushanbe = 100)*	Average Price Disparity**	Average Prices (Dushanbe = 100)*	Average Price Disparity**
Sughd Region	82	23	69	31
Gissar Zone	99	13	96	15
Dushanbe City	100	0	100	0
Kurgan Tube	105	13	102	16
Kulyab Zone	109	18	110	24
Rasht Zone	122	35	130	43
GBAO (Khorog)	127	46	146	65

* The average price level was calculated using an unweighted average of prices of 30 key traded goods.

** The price disparity was calculated as an unweighted average of the absolute value of the percentage price deviations compared to Dushanbe.

Data source: Summer data – Tajik Living Standards Survey, August 2003; winter data – State Statistics Agency.

Addressing Domestic Road Transport Costs

Transportation costs explain an important part of the price differences between regions. For example, Table 2.3 shows the cost of transport per ton between Khujand and Dushanbe. In summer, truck transport via the Anzob pass is available at a relatively

¹² For the purpose of the arbitrage analysis, an unweighted average of prices is used since no inter-regional trade weights are available.

¹³ In a more sophisticated analysis differences in retail costs, for example as a result of higher real estate prices in urban areas, would also have to be taken into account. However, casual evidence in Tajikistan suggests that differences in retail costs are not the primary price drivers.

attractive price of US\$13 per ton for the 340 kilometer trip, or just under 4 cents per ton-kilometer. In winter, trucks instead need to take a long detour via Uzbekistan, costing US\$67 per ton for the 930 kilometer trip, or over 7 cents per ton-kilometer. By comparison, rail transport through Uzbekistan costs between US\$25 and US\$35 per ton, or about 3 cents per ton-kilometer. However, rail transport typically involves additional informal payments to the railway officials, longer transport times, and other inconveniences.

While transport cost are responsible for part of the observed price differences, other transaction costs also play an important role. Cross country transport in Tajikistan still entails major risks. This could be directly related to the truck driver stealing part of the cargo. Or officials may threaten to confiscate the cargo due to lack of documentation unless informal payments are made for its release. If the transaction involves another merchant at the destination, there is a counterpart risk due to the fact that delivery and payment often cannot be organized simultaneously which is a major obstacle in a low trust environment. Because of many factors beyond the influence of the arbitrageur, it is also often difficult to predict how long the entire transaction will take. If it takes long, there is a substantial risk that the observed price difference has already disappeared by the time the goods are delivered in the other destination, so there is a market prices risk. As will be discussed in the section below on cross border transport, the other transaction costs become even more significant in cross border trade.

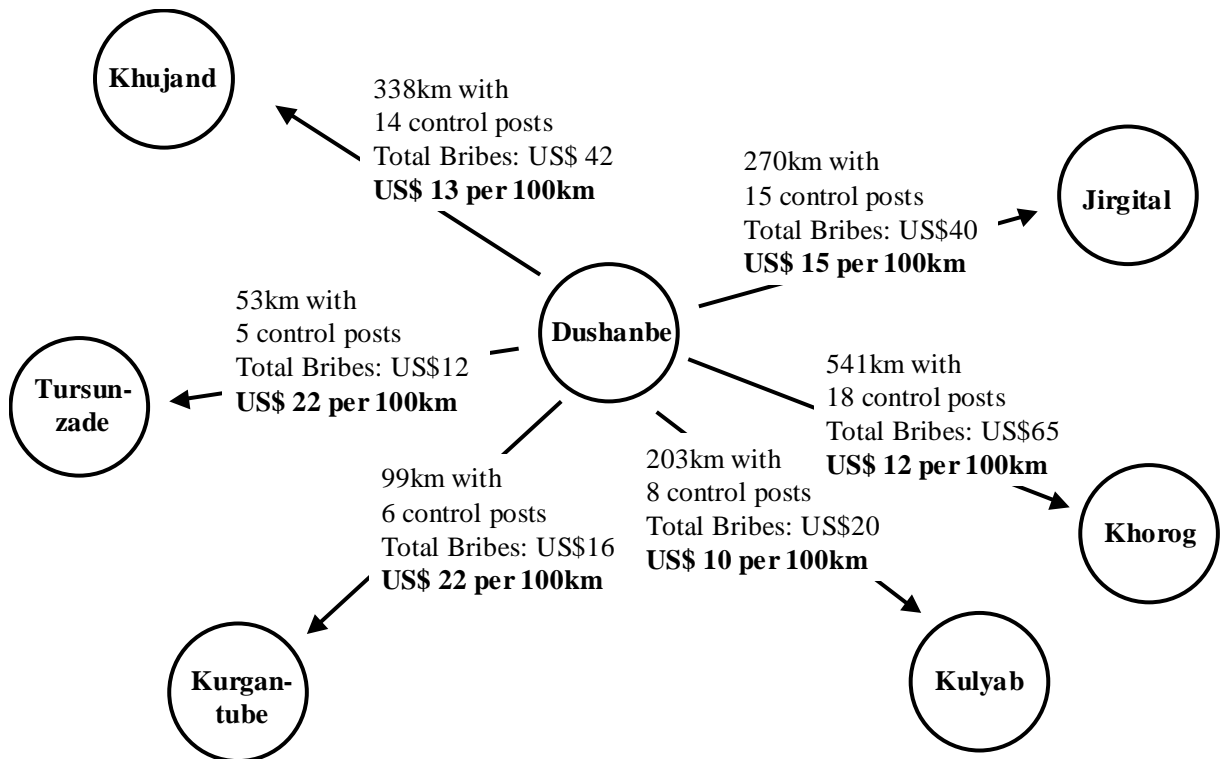
Table 0.3: Cost of Cargo Transport between Dushanbe and Khujand

Alternative Routes between Dushanbe and Khujand	Truck via Anzob without snow	Truck via Anzob with some snow	Truck via Uzbekistan	Rail via Uzbekistan
Distance (km):	340	340	930	989
Time on average (hours)	16	27	48	71
Cost per ton, US\$/ton	13	23	67	25-35

Source: Survey of truckers, Tajik Rail

High informal payments extracted by the police at internal checkpoints are a major contributor to transport costs. For example, on the 340 kilometer trip between Dushanbe and Khujand, there are reportedly 14 checkpoints. According to a survey of truckers commissioned by the World Bank, each of these checkpoints will, on average, ask for an informal payment of approximately US\$ 3. In effect, these informal payments act like a tax on road transport of around 20 percent. The situation is similar on other major domestic truck routes (Figure 2.1). The informal payments at internal checkpoints may amount to as much as US\$ 15 million dollars, or 1% percent of GDP annually, which would be more than 4 times the amount that the Government officially collects in license and patent payments from truckers and comparable to the US\$ 19 million consolidated budget expenditures that the government spent on roads and communication in 2003. To effectively address the problem of this informal road tax, a reduction in the number of internal border posts and related police staff combined with anti-corruption measures should be considered

Figure 0.1: Bribes at Internal Checkpoints



Source: Survey of truckers

Substantial cuts in fixed internal checkpoints could reduce transportation costs without compromising the security¹⁴. Kazakhstan already took the decision to dismantle many internal checkpoints, reportedly after the Kazakh Minister of the Interior had covertly undertaken a trip by truck as a co-driver and saw the inconvenience that internal checkpoints cause with his own eyes. The experience in other Central Asian countries suggests that the reduction in fixed police control point should be accompanied by the reduction in police staff numbers to prevent the reappearance of the problem in the form of excessive numbers of mobile checkpoints. The introduction of an effective anonymous complaints channel might help to further reduce corruption at the remaining control posts. Reducing police corruption is not only important to reduce transport costs. It is also critical for security. By definition, police controls are unlikely to be effective if they are known to be corrupt.

While competition in road haul is working, Tajikistan will have to confront the renewal of the truck fleet in the medium term. Tariffs for road freight have been deregulated and competition is strong. At 4 cents per ton-kilometer, transport prices cover the operating but not the capital costs of the trucks. These comparatively low prices suggest that the existing old Soviet truck fleet is being run down efficiently. As old trucks are eventually retired, overcapacity is reduced. Eventually, as full capacity utilization is reached, prices will need to pick up quickly to reach full cost recovery levels and induce new investment. However, very soon the necessary truck renewal rate may become so

¹⁴ The findings of the survey of truckers were presented to the Government in November 2004. To its credit, the Government took the matter seriously and in February 2005 the President signed a decree ordering a substantial reduction in the number of traffic police.

high that investment requirements dwarf revenues and the cash flow of the sector becomes highly negative.

This problem of negative cash flow during capacity renewal is in fact a more general problem that the Tajik economy may be faced with in many areas. It will therefore be important to develop the financial sector further to cope with this challenge. Foreign investors with deep pockets could also help to overcome this challenge. And in the case of trucks, the investment needs could be reduced by importing used trucks instead of buying new ones, thereby reducing the investment peak. It is recommended that a separate study be commissioned to examine the looming challenge of capital stock renewal in the various sectors of the economy.

Developing Domestic Road Network

To increase accessibility of remote parts of the country, to create alternative export routes and to reduce seasonal transport disruptions, the government is promoting three major road projects with an estimated total cost of US\$ 760 million.

- The rehabilitation of a road from Dushanbe via Kulyab to Gorno Badakhshan and on to the Chinese border (route (a) in Figure 2.2) would cost an estimated US\$290 million. Improved road conditions on this route would help to better integrate the GBAO region with a population of around 200 thousand into the Tajik economy. It would also improve the access to China.
- The rehabilitation of a road from Dushanbe to the Rasht valley and on the Kyrgyz border (route (b) in Figure 2.2) would cost an estimated US\$110 million. This road would help better integrate 430 thousand people in the Rasht Valley into the Tajik economy and provide access to Kyrgyzstan and further to China.
- Finally, the rehabilitation of the route between Dushanbe and Khujand plus the construction of the Anzob and Sharkhristan tunnels to make this route passable in winter would cost an estimated US\$360 million. The Anzob tunnel is already under construction. The year-round link between the two major economic centers of Tajikistan Khujand in the north and the capital Dushanbe would have substantial benefits by reducing the cost of transport and the seasonality of transport costs. However, even under optimistic assumptions, it may take 20 years of successful operation for the cumulative benefits to exceed the considerable construction costs.

Given the high costs of the three major road projects, the Government needs to prioritize them. With investment costs of the projects adding up to around 40 percent of GDP, it clearly is not feasible for Tajikistan to complete all of them in the foreseeable future. Furthermore, upgrading the whole road system from poor to good condition would require an estimated additional investment of 80 percent of GDP. It is therefore recommended that the Government rationalize its planning, investment and donor fundraising activities in the road sector to better prioritize and sequence construction and rehabilitation. The road to the Kyrgyz border via Garm supported by the ADB seems to

lend itself more readily for rapid completion and therefore could be selected as a priority. In addition, domestic benefits of this route may be greater since the population in the Garm valley is larger than in Gorno Badakhshan.

In addition, the potential of the main road to Afghanistan, via Nyzhni Pyanzh, needs to be developed. The road opens up attractive routes to Iran and Pakistan. Critical for the usability of this route will be the stabilization process in Afghanistan. The United States has pledged to build a bridge across the Amu Darya river to replace the ferry to prepare for the time when traffic starts to pick up. Realistically, however, it may take another 5 years before this transit route starts to flourish due to continued internal problems in Afghanistan. But once this route becomes truly operational, it is likely to have a profound impact on Tajikistan’s trade and its economy.

Figure 0.2: Major Road Projects under Construction



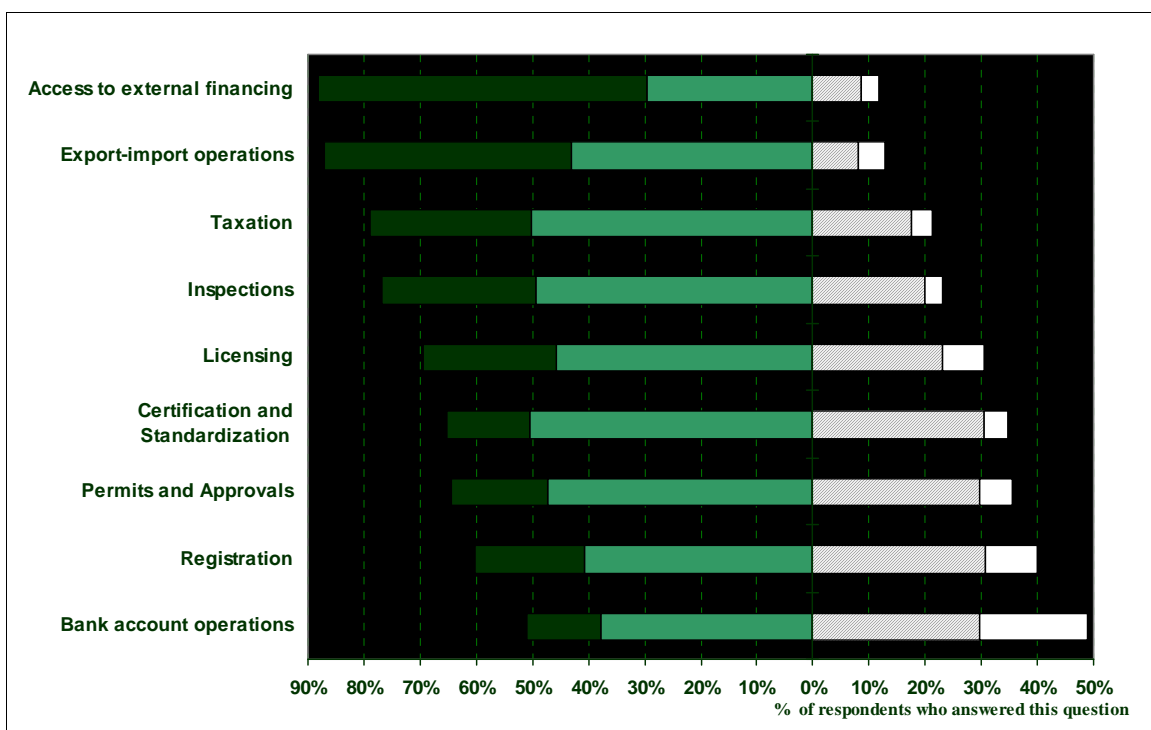
Source: Ministry of Transport

Improving the Business Climate

The poor business climate in Tajikistan imposes heavy transaction costs on domestic trade. Surveys show that firms regard the present practice of licensing, permits and

approvals, registration, certification and standardization, and related inspections and informal payments as major obstacles to doing business (Figure 2.3). Other problems in these areas include access to credit and bank account operations, taxation, and specific problems related to imports and exports such as excessive documentation requirements. In addition, there is the problem of the unpredictability of the business climate, which can change dramatically, for example, if the support and protection from a senior government official is lost. The World Bank Group is currently carrying out other analytical work focusing on the business climate in Tajikistan explicitly, such as the ongoing Investment Climate Assessment, and also work under the IFC SME support project, and the FIAS/MIGA trade promotion initiative (funded by Swiss SECO). However, some preliminary recommendations are provided below.

Figure 0.3: Most Pressing Problems for Entrepreneurs in Tajikistan



Source: IFC SME survey 2004

The business climate in Tajikistan suffers from an uneven playing field created among businesses, the unpredictability of the business environment and a lack of transparency. In many ways, the exception has become the rule in Tajikistan and there is not one business climate but every business has its own business micro-climate including special arrangements with government officials and other relevant groups. The nature and the terms of these arrangements depend, among other things, on the size of the business, the line of business, the location of the business, and the protection that the owners enjoys from powerful friends or relatives. These arrangements also tend to be unstable, resulting in major risks for longer term investment projects. Hence, Tajikistan finds it very difficult to attract investment, particularly foreign investment.

The licensing regime needs to be streamlined. In particular, the number of activities that are subject to licensing needs to be rationalized and reduced. Preliminary analysis

shows that a target of a 50 percent reduction in activities subject to licensing would be both reasonable and achievable. The principle of administrative cost recovery for license fees should be introduced for the large majority of licenses.¹⁵ Today, licensing fees in Tajikistan are often excessive, generating discretionary revenues for the responsible ministry and even the general budget.

The inspection regime needs to be streamlined. An important step to that effect has been undertaken with the introduction of the Black Book scheme, a book where tax, health, and fire inspectors, etc. are legally obliged to register their visit, making it easier to track and limit inspections. Today, about half of all businesses have a Black Book but it should be possible to achieve near total coverage within the next 12 months. In parallel, an awareness campaign regarding the legal rights of businesses should be launched to reduce the scope for corruption. The Ministry of State Revenues and Duties has recently agreed to take the lead on this matter.

The substantial assets of Tajikmatlubot, the former Soviet Consumer Cooperative, should be mobilized for private sector use. Over 60 percent of all bazaars, including some of the largest outside Dushanbe, belong to Tajikmatlubot. It also owns substantial prime real estate that does not appear to be adequately managed. Legally, Tajikmatlubot is owned by an estimated 0.5 million shareholders, many of whom are probably not even aware of this. In practice, it appears to be controlled by a management that is more accountable to Government than to shareholders. Divestiture options for the substantial assets of Tajikmatlubot should be actively explored. While retail trade in Tajikistan is already reasonably competitive, divestiture of Tajikmatlubot could give it a further boost.

Liberalizing the Internal Visa Regime

All of Tajikistan's border rayons with Afghanistan are currently subject to an internal visa regime. These areas account for more than 30% of the country's territory. Travelers to these areas require a special visa for their visit, whether they are citizens of Tajikistan or not. These special visas are reportedly not straightforward to obtain. This system was inherited from Soviet times when the primary objective of the visa regime was to prevent Soviet citizens from leaving the Soviet Union.

Clearly, it would be in the best interests of the economic development of the border regions with Afghanistan to abolish the heavy-handed system of internal visas. Instead, lighter and more targeted border protection measures that focus on today's security concerns, in particular the fight against drug smuggling and terrorism, are called for. In the context of the hand-over of the border protection from Russian troops to Tajikistan, the Government has very recently drafted a new bill that would abolish the internal visa regime for citizens of Tajikistan and reduce the area of the country where foreigners would still require a visa, to a border strip of 25 kilometers from the border with Afghanistan. This would be a welcome development.

Recommendations

¹⁵ Exceptions to this rule are licenses used to allocate scarce resources, for example frequency bands for mobile operators.

Short Term:

- Reduce the number of road checkpoints and traffic police staff
- Introduce anti-corruption measures and controls to reduce road police corruption
- Develop a comprehensive and prioritized road investment plan with donor assistance.
- Revise the Law on Licensing to reduce licensing coverage and simplify implementation
- Spread the use of the Black Book to near full coverage to better control inspections
- Adopt the new bill liberalizing the internal visa regime.

Medium Term:

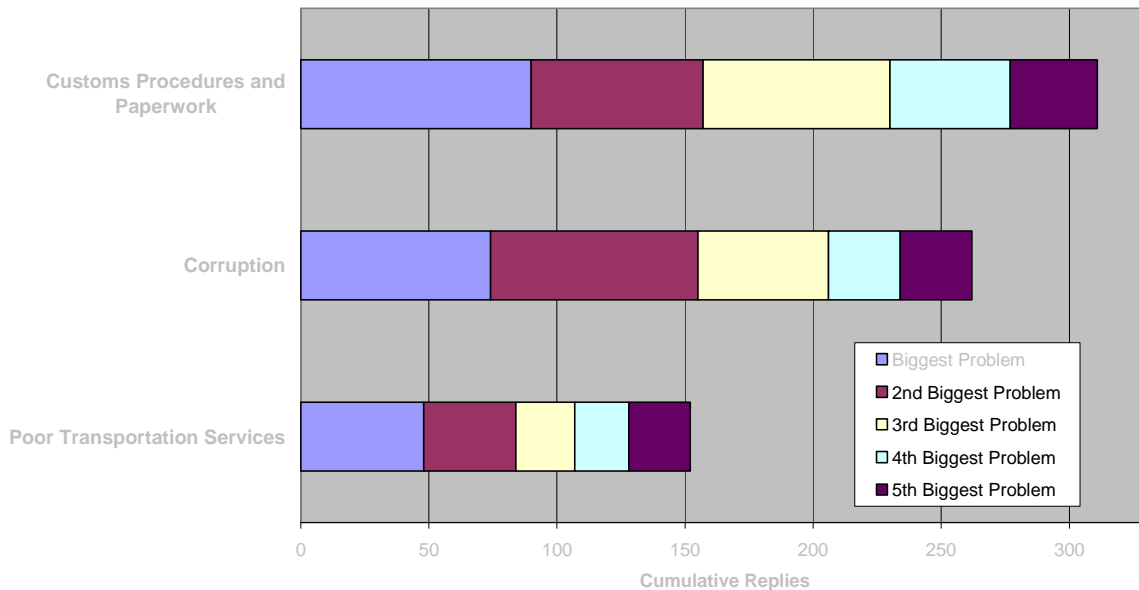
- Systematically monitor trade bottlenecks through analysis of improved regional price statistics
- Commission an analysis on how to cope with investment peaks during capital stock renewal in various sectors.
- Mobilize the substantial physical assets of Tajikmatlubot for private sector use
- Develop a time-bound action plan to abolish the internal visa regime.

B. EXTERNAL TRADE REGIME AND TRANSPORT

Tajikistan's total logistical costs are among the highest in the world. They are estimated at 27 percent of GDP, compared to 10 to 16 percent in the EU member countries. Part of Tajikistan's high logistical costs is a consequence of its remoteness. However, we estimate that implementation of improved trade facilitation policies, especially in customs, more competitive transport markets, and more efficient logistical services and transportation could lead to annual savings in logistical costs of more than 5 percent of GDP. The indirect positive effects of such savings are likely to be even greater than the direct savings.

A substantial reduction in logistical costs will require both improved domestic policies and improved regional cooperation. Currently, border delays typically add 2 to 3 days to total transit time. Bringing this time down to the official Government target of 3 hours would save an estimated US\$10 million per year in waiting time alone. More efficient operations and increased competition in road and air service could lower the annual transport costs by a further estimated 20 percent, or US\$22 million per year. By streamlining documentation requirements and customs processing, logistical costs of importers and exporters could potentially be reduced by an additional estimated US\$30 million per year. Further very significant savings would be possible once transit through Uzbekistan improves and transit through Afghanistan becomes possible and safe. A survey of traders commissioned by the World Bank confirmed that the top three problems for traders in Tajikistan are (i) burdensome customs procedures and paperwork; (ii) corruption; and (iii) poor transport services (Figure 2.4). These are the areas that the Government should focus on.

**Figure 0.4: Top Three Problems of Traders in Tajikistan:
Customs, Corruption, Transportation**



Source: Survey of 331 importers and exporters commissioned by the World Bank

Reducing Border-Related Trade Costs

Complicated border crossing procedures and widespread corruption are the two main problems for importers and exporters in Tajikistan. For example, customs clearance in Tajikistan takes anything from 3 to 28 days and customs processing appears to be less efficient than in any other Central Asia country. More than 60 administrative steps are typically required to process import shipments and 40 such steps are typically required for export, often involving different agencies with little information sharing between them. As a result, the process is cumbersome, leading to higher costs and widespread corruption.

Strengthening the Customs Service

As part of a broader civil service reform, the Customs Service needs to be improved. Along with the rest of the Tajik civil service, the Customs Service suffers from poor human resources management, very low salaries, inadequate operational effectiveness, and a high level of corruption¹⁶.

Improvements in the Customs Service can potentially have a positive net fiscal effect. In 2003, 47 percent of Tajikistan's total tax revenues were collected from cross border trade, the lion share of which is due to surging VAT revenues on imports (Table 2.4). Without corruption, revenues might have been 15 percent higher or more. At the same time, with improved procedures and reduced corruption the effective burden of collected taxes on businesses and consumers could have been lower. Small and medium enterprises would especially benefit from reduced complexity and corruption.

¹⁶ Key recommendations for civil service reform were already detailed in a recent Public Expenditure and Institutional Review prepared by the World Bank.

Table 0.4: Border-Related Revenues in Tajikistan

		2000	2001	2002	2003
Tariff Revenues	(US\$ mn.)	15	19	21	24
Excise Revenues	(US\$ mn.)	4	6	9	14
VAT on imports	(US\$ mn.)	9	22	40	61
Total Border Related Revenues	(US\$ mn.)	28	47	70	99
	% GDP	3	4	6	7
	% Total Rev.	22	32	39	47

Source: Ministry of Finance of the Republic of Tajikistan

The top management structure of the Customs Service will need to be reviewed. Since 2002, the Customs Service operates under the Customs Administration Department of the Ministry of State Revenues and Duties. The department is headed by a Deputy Minister. The regional offices of the Customs Service, however, also report directly to the Minister of State Revenues and Duties. The rationale behind this arrangement is to assure tight and direct supervision of revenue generation. However, as a result of this dual reporting structure, business strategy and changes to procedures are reportedly not always communicated and applied uniformly throughout the organization. Therefore, the current reporting structures should be reviewed and streamlined.

An anti-corruption strategy for the Customs Service needs to be developed. The World Customs Organization's Revised Arusha Declaration on integrity in customs could provide a sound basis for this. A code of conduct and program for public integrity will need to be elaborated. The creation of an ethics and integrity department would be helpful. It is essential to amend processes to reduce opportunities for corruption and to improve internal controls and supervision. A reduction in discretionary decision making and increased automation of processes through IT would be desirable. Improved complaints channels would add credibility to efforts aimed at reducing corruption and red tape. Incentives against corruption can and need to be strengthened by linking wage increases with the implementation of better procedures and controls.

Human resource management will need to be improved. Recruitment and promotions will need to become more transparent and systematic to attract and retain capable staff. Training needs to become an integral part of business and career planning. Institutionally, the creation of a separate human resources department would make sense.

Dialogue with the private sector and increased transparency are very important. The dialogue and partnership with the business community needs to be deepened. Business, transport and customs broker associations will only be able to represent client interests effectively if they develop into strong, broad-based, and independent organizations. In this context, releasing the Trucker Association from its present administrative ties with the Ministry of Transport would be desirable. Such a professional and independent organization could then be invited to participate, for example, in meetings of the interagency Border Security Committee. The dissemination of laws and regulations needs to be substantially improved. The posting of legislation on the customs website is a welcome start. But access to relevant rules and regulations,

especially for secondary legislation and executive orders, remains a problem. User oriented commentaries to relevant legislation and processes need to be developed.

Processes and practices of customs valuation and revenue collection need to be improved. Due to non-transparent rules and practices, there is continued confusion between country of origin and country of provenance. This can be an important problem since the preferential zero percent duty rate is applied to imports from a large number of countries. To avoid some of these difficulties, future preferential tariff agreements need to place greater emphasis on determination of the country of origin. Under-valuation of imports appears to be another serious issue that needs to be addressed¹⁷. No effective post-customs controls to verify correct pricing seem to exist. Data entry and statistical evaluation are still carried out manually. Internal checks, anti-money laundering and contraband control efforts are insufficient. Against this background of widespread irregularities it is disturbing to find that fines amount to only 0.1 percent of revenues.

Risk-based controls need to be introduced. One might initially think that there is no difference between inspecting 10 percent of the cargo of every customer and inspecting 100 percent of the cargo of 10 percent of the customers. However, in practice the latter is preferable because it allows better targeting of inspection efforts. High risk customers can and should be inspected with a higher probability than low risk customers. Risk-based controls also help to control corruption by reducing the number of interactions with customers and making it easier to detect irregularities through internal controls such as follow-up inspections. Despite the merits of risk based inspections, they should not be regarded as immune to manipulation. For example, in a corrupt environment the system of picking loads for inspection could be rigged. A solid IT implementation of the customer risk analysis for customs and other controls could help to reduce such vulnerabilities but are unlikely to eliminate them completely.

The Customs Code and related secondary regulations need to be further modernized. The new Customs Code, which became effective in January 2005, was modeled on the new Russian customs code in many areas. However, for a small country with limited administrative capacity like Tajikistan, it is overly complex. It also includes many procedural details that would be better left to administrative regulations. The customs terms and definitions used in the new Code are problematic since most of the terms are not defined in the Revised Kyoto Convention. It is recommended to review the Customs Code to assure its compliance with WTO requirements and conformity with the best practice recommendations of the Revised Kyoto Convention. Among others, the sections regarding customs valuation, intellectual property provisions, and user fees appear to require revisions.

Recommendations

Short Term:

- Review the top management structure of the Customs Service

¹⁷ At the same time, problematic minimum price lists continue to be used.

- Create a human resources department and integrate training into career planning
- Assure independence of the Trucker Association by severing administrative ties with Ministry of Transport
- Assure independence of the Chamber of Commerce by severing administrative ties with Ministry of Economy and Trade
- Commission user-oriented manuals for exporters and importers, covering relevant foreign trade legislation and processes.

Medium Term:

- Develop and implement an anti-corruption strategy for the Customs Service
- Reform customs valuation and introduce risk based controls
- Adopt revisions to the Customs Code.
- Conduct detailed functional review of the Customs Service with a view to overhauling its organizational and pay structures.

Streamlining Other Trade-Related Agencies

The interactions between the many different agencies present at the border crossing point need to be streamlined and automated. The government agencies present at the border crossing point currently include the border guards, the Road Police, the Customs Service, the Drug Control Agency, and the Quarantine Services. Other institutions such as the Tax Administration, the Ministry of Justice, Tajik Standard, and the Ministry of Agriculture, also feature in the exports and/or imports clearance process. The policies and procedures of these different actors are not properly harmonized, which is a major cause for red tape, delays and corruption. Therefore, the streamlining of interactions between the different agencies should be a high priority, not least to prevent the ongoing ADB-funded Customs Modernization Project, which chiefly finances IT infrastructure, from freezing the current inefficient system. Moving forward, one possibility might be to task the Committee for Border Crossing Security, which includes the Ministry of State Revenues and Duties, the Ministry of Transport, the Ministry of the Interior, the Ministry of Economy and Trade, and the International Airports, to come up with a suitable proposal for streamlined interagency cooperation while strengthening appeals procedures.

Border-crossing points need to be improved. Currently, even major border crossings are still not electrified. The basic improvements required include better road access, electrification of crossing points, replacement of current mobile shelters with adequate buildings at major border crossings, and installation of basic IT infrastructure. Also, opening hours at key crossings need to be increased from currently 10 hours a day to 24 hours. Upgrading of physical infrastructure should be combined with the introduction of joint procedures and controls of the relevant agencies. Presently, one physical inspection takes place at the passport control stop in search for, among others, drugs and weapons. A second physical inspection takes place at the customs control stop. This might then be followed by a veterinary control. Replacing this series of inspections by a single window approach with a joint inspection and data sharing would be a significant improvement by reducing red tape, delays and opportunities for corruption. Ultimately, one should of

course aim for joint border crossing controls, where Tajik and, say, Uzbek border guards carry out inspections together and only once.

Standards, health and safety regulations need to be simplified while the enforcement capacity of the respective government agencies has to be strengthened. Traders consider certification requirements a major barrier to trade. There also appears to be a serious gap between the strictness and number of certification requirements on paper and the implementation capacity of TajikStandard, the Quarantine Department, and the Epidemiological Service. Salaries are very low and staff lack training. Laboratories are underdeveloped and in practice may often not be technically capable to deliver dependable sanitary and epidemiological tests in significant numbers. Realistically, the gap needs to be closed at both ends. Implementation capacity of the relevant services and their labs needs to be strengthened while requirements need to be reduced and focused on areas with serious health and safety concerns. In addition, it is recommended that the relevant authorities explore the possibility of fully and unilaterally recognizing certificates by OECD countries and regional trading partners.

A strategy for the evolution of Tajik standards needs to be developed. For Tajikistan, the independent development and maintenance of a system of national standards is unrealistic and undesirable. Replicating the evolution of Russian standards and slowly moving towards compatibility with ISO (International Standardization Organization) and EU standards appears to be the most viable option. However, as a poor country, Tajikistan needs care not to adopt too strict mandatory standards that would prove wasteful and overly expensive. In those areas where certificates continue to be issued, fees should not be set above cost recovery levels. Currently, certain Government agencies set fees at excessive levels.

Other trade-related regulations and requirements need to be reviewed systematically. For example, currency restrictions are a major burden for smaller traders. Customs dedicate a significant effort to comparing the money declared at exit and value of goods purchased abroad. Substantially increasing the currency limit from around US\$2,000 currently could significantly reduce hassle and paperwork for smaller businesses. Also, the reimbursement of VAT at export need to be strengthened. One possibility might be to pilot cash reimbursement for small businesses, closely monitoring the effect this might have on VAT fraud. Furthermore, the bureaucratically and financially demanding system of the “passport of a deal” that is to ensure the full payment of all taxes and fees before a cross-border transaction actually takes place may be more restrictive than desirable, especially for smaller businesses. There are other specific areas of concern that would merit a systematic review of the processes involved.

Recommendations

Short Term:

- Streamline the interactions between different border agencies to assure that ADB’s Customs IT project implements efficient processes
- Increase opening hours of key border crossing posts from 10 hours to 24 hours a day

- Develop a stage-by-stage plan for the improvement of border crossing points
- Review the options for simplification of standards, health, and safety requirements
- Reduce mandatory certification requirements, routinely accepting foreign certificates and standards.

Medium Term:

- Upgrade border-crossing infrastructure and introduce a “single window” border-crossing approach
- Focus upgrades of laboratory capacity on key areas of health and safety concerns.

Simplifying the External Visa Regime

Despite some recent steps to simplify the external visa regime, regulations on access to Tajikistan for visitors from outside the CIS could still be improved. In October 2003 and in May 2005 the Tajik authorities adopted resolutions simplifying visa procedures for citizens of the EU, North America and some Asian countries.¹⁸ However, a further simplification of the visa regime, together with the more competitive passenger air transport options and attraction of a hotel of international standard to Dushanbe, could make it easier for Tajikistan to attract foreign traders, investors, specialists, and well-heeled tourists – people who are important for the development of Tajikistan. While there is traditionally a desire to achieve simplified visa travel on a reciprocal basis, the government of Tajikistan should recognize that visa-free access to the US or the EU for citizens of Tajikistan is unlikely in the short-to-medium term. In the meantime, Tajikistan will be better off to take unilateral steps to open up more to foreign visitors and potential investors. Unilateral visa exemption or simplification of the visa regime (such as issuance of visa at the border) are actually fairly common. Japan, for example, unilaterally allows Australian citizens visa-free entry while Japanese citizens continue to require a visa when they visit Australia. Vietnam unilaterally grants Japanese and Korean citizens visa free access.

A strategy for the reform of the current visa regime in Tajikistan needs to be adopted and implemented. Core elements of a new visa strategy towards foreign visitors to Tajikistan could be:

- The unilateral introduction of visa free travel for citizens of a large number of non-CIS countries. Countries should be included in the list if (a) increased visitor numbers from these countries are likely to benefit the economy; (b) their citizens are unlikely to be a burden or a security threat during their visit; and (c) a reciprocal agreement of visa free travel is unlikely within the next

¹⁸ The simplification involved streamlining of documentary requirements and visa issuance procedures for citizens of 38 countries. Under the new procedures, citizens of those countries will be issued visas of up to one month within three business days. Foreign investors with projects in Tajikistan can also receive lower-cost long-term visas. Discounts for group visas were also introduced.

decade. It seems likely that most if not all OECD countries would satisfy these criteria, and many more.

- The review of the letter of invitation requirement for a second category of countries that are sufficiently rich that their citizens are unlikely to become a burden in Tajikistan. The progressive relaxation of obligatory registration requirements with the Ministry of Interior on arrival should also be considered for some categories of travelers.
- The strengthening and improved collaboration and information sharing between consular, border, police and security agencies for improved effectiveness in controlling those foreigners who are a potential security threat. Technical assistance in this area should continue to be sought, not least in the context of fighting international terrorism and drug smuggling.
- Finally, make efforts to improve relations with Uzbekistan to achieve the reintroduction of visa free travel to Uzbekistan for citizens of Tajikistan.

Reducing International Transport Costs

International Rail Transport

Rail transport is the workhorse of Tajikistan's foreign trade. About 95 percent of total external trade tonnage and an estimated 50 percent of seasonal workers travel to Russia by rail. The ports of Poti in Georgia and Tallinn in Estonia are the main destinations for Tajik aluminum, the main export commodity both by value and weight. The Port of Riga in Latvia is an important destination for Tajik cotton. Recently Tajikistan began transporting containers by rail even to China (via Uzbekistan and Kazakhstan) with some 30 to 40 containers shipped per month. During winter when the Anzob road pass linking northern and the southern Tajikistan is closed, rail transit through Uzbekistan provides the main connection between the north and the south for passengers and cargo.

The productivity of the Tajik railways is comparatively low and continues to decline. The railways' labor productivity in Tajikistan in 2002 was around 190 traffic units (ton kilometers plus passenger kilometers) per employee compared to an average of almost 600 in the other Central Asian republics. Between 1995 and 2002 Tajik Rail's labor productivity declined by 60 percent, due to a halving of traffic units and an employment increase by 20 percent. By comparison, in the other Central Asian republics, total traffic units stayed roughly constant while employment declined by around one third on average. While the decrease in traffic units for Tajik Rail is in large part exogenous, resulting from a decline in Uzbekistan's transit traffic through Sughd to the Ferghana Valley, the increase in employment seems an anomaly, even taking into account the very low cost of labor in Tajikistan.

Tajik Rail has seen little reform since independence and its operations are very non-transparent but likely requires substantial investment for rehabilitation and

modernization. The completion of the corporate plan for Tajik Rail, which originally was to be agreed with the ADB by June 2003, has now been postponed to December 2005. According to official numbers, Tajik Rail had a profit of US\$3.9 million in 2003 on a total turnover of US\$54 million. However, until an IAS audit of Tajik Rail has been completed, it is difficult to further interpret these numbers. Tajikistan's railway infrastructure has likely deteriorated since Soviet times and investment for this infrastructure will therefore need to be envisioned in a properly costed and prioritized investment plan. Given the importance of a functioning railway transport for Tajikistan's international trade, it is desirable to conduct audits and reviews that would give key policy makers and international donors a better sense of the true state of Tajik Rail and the most pressing investments and reforms it requires.

A recent railway tariff dispute with Uzbekistan may be costing Tajikistan over US\$ 13m per year in net rail cargo payments. In late 2002, the CIS and Estonia rail tariff conference agreed to no longer levy VAT on rail transit. For both Tajikistan and Uzbekistan this could have effectively meant a 20 percent transit tariff reduction. Instead, Tajik Rail opted to increase its transit tariff for key cargo to keep the total transit cost for Uzbek shipments to the eastern Ferghana valley at the old level. Uzbek Rail immediately retaliated and the issue has not been resolved since. While this has benefited both Tajik Rail which collects extra US\$3.5 million from Uzbek transit traffic per year, and Uzbek Rail which collects extra US\$17 million per year from Tajik transit traffic (US\$8 million from TADAZ alone), as a country Tajikistan incurs a direct net loss of US\$14 million per year. This dispute must be addressed urgently as the interests of the railway company should not be put before the interests of the country. A similar rail tariff dispute between Turkmenistan and Uzbekistan was resolved some time ago. In order to limit the financial stress on Tajik Rail in the event of a transit tariff decrease, one of the options might be to address in parallel the issue of the substantial debt that Tajik Gas owes to Tajik Rail.

The comparatively high price for the transport of smaller-volume shipments by rail is a cause for concern. While Tajikistan's large-volume rail freight rate is only slightly higher (slightly over \$10 per ton) than on average for other CIS countries, small-volume rail freight is nearly US\$100 per ton higher than for other CIS countries, putting smaller exporters in Tajikistan at a serious disadvantage. The high mark-up for small shipments from Tajikistan should be affected little by distance, if at all, since pure distance costs are already included in the basic large-volume freight rate. The factors that drive up the mark-up likely include high handling costs of small shipments, and disproportionate customs processing and border crossing costs for freight forwarders of such shipments. In addition, however, it probably indicates that the state-run Tajik Rail has been neglecting to develop small-volume consolidated shipments. It would be worthwhile to encourage Tajik Rail to take another look at this market or to invite more agile private intermediaries to enter.

International railway passenger transportation suffers from poor service quality and harassment of passengers. The aging rolling stock is in part responsible for the poor service, in particular poor sanitary conditions of trains, overcrowding, and low train frequency. Some of these problems will hopefully ease as some 150 new or refurbished passenger cars are scheduled to enter service during 2004. This may even allow to re-

establish direct service to Moscow as currently trains from Dushanbe to Russia are only running to Astrakhan. Reportedly, passengers are also regularly harassed on the trains and forced to pay substantial bribes, particularly to border guards and customs officials in transit countries. Partly this is due to repeated attempts by railway passengers traveling from Tajikistan to use trains for drug smuggling. Theft by fellow passengers is also reported to be a major concern. Non-transparent ticket sales are also hurting both passengers and the profitability of Tajik Rail. As a result of these problems, a large proportion of seasonal workers now prefers to use the nominally more expensive but less hazardous air service between Tajikistan and their work destinations in Russia.

Recommendations

Short Term:

- Prepare IAS audit of Tajik Rail
- Accelerate development of a corporate plan for Tajik Rail with donor assistance
- Negotiate a resolution of the railway tariff dispute with Uzbekistan
- Develop a business plan for the re-establishment of passenger service to Moscow
- Develop action plan for improved passenger on-board security, especially while in transit through Uzbekistan

Medium Term:

- Review and improve the regulatory framework for Tajik Rail
- Commence corporate reforms of Tajik Rail
- Carefully cost and prioritize major railway investment needs
- Create incentives for Tajik Rail or more agile private intermediaries to develop small-volume freight services.
- Implement action plan for improved passenger on-board security

International Air Transport

Tajikistan's air transport sector is dominated by Tajikistan State Airlines (TSA). TSA inherited numerous Soviet-built aircraft, all support services (maintenance, simulator and training systems), the airport infrastructure of the country, and the air traffic control services and installation. Currently TSA has a fleet of 31 Russian build fixed wing aircraft and helicopters. However, the utilization of these aircraft is comparatively very low and the fleet is rapidly aging. In addition, the Russian build aircraft have significantly high fuel consumption and, given rising fuel cost, their replacement by Western-built aircraft is under preparation. TSA has around 3000 staff, of which, according to estimates, 2100 are assigned to the air carrier and the rest to airports, sales, marketing, etc. Adjusted to the estimated required aircraft number, the staff level appears to be at least twice as high as necessary.

The TSA-transported passenger volume has reached an estimated 500 thousand passengers annually and the company reports that it operates with an overall profit. Its main customer base are migrant Tajik workers, who travel to Moscow and other parts of Russia. TSA also has a network of international routes, governed by 17 air service agreements with other nations.

With a virtual monopoly on Tajikistan’s domestic and international air transportation, TSA charges higher prices than other airlines in the region. On the busy route between Moscow and Dushanbe, TSA flies at least 14 times a week and Domodedovo Airlines flies token 3 times.¹⁹ As a result, travel to Dushanbe is between 20 and 35 percent more expensive per mile than to comparable destinations in the region (see Table 2.5). Some of the other destinations also continue to be served by Soviet aircraft, suggesting that TSA’s high costs are not due only to the obsolete fleet of aircraft.

Table 0.5: Roundtrip Airline Ticket Prices from Moscow to Dushanbe and Comparable Destinations

Destination (from Moscow)	Round-trip Ticket (in US\$)	Round-trip Distance (in miles)	Cost per mile (in US\$)
Almaty	378	3,870	4.9
Bishkek	396	3,700	5.4
Dushanbe*	496	3,730	6.6
Novosibirsk	364	3,488	5.2
Tashkent	365	3,484	5.2

* US\$496 is the price for CIS citizens. Non-CIS citizens pay US\$591. Flights to other cities above do not have this distinction.

Source: Olympia Travel in Moscow; Great Circle Mapper (<http://gc.kls2.com>)

The virtual lack of competition on the Moscow route leads to higher ticket prices and taxes Tajik migrant workers. A survey commissioned by the World Bank shows that a typical migrant worker staying in Russia for 9 months per year sends or takes home around US\$1350 per year. If the price of an airplane ticket for travel between Tajikistan and Russia is US\$100 higher because of the lack of competition, Tajik Air essentially imposes a tax of around 7 percent on migrant workers' net income. The rent generated by Tajik Air due to lack of competition on the Moscow route alone is estimated at US\$6 million. On top of this, migrant workers carry substantial costs as a result of poor availability of tickets, which leads, among others, to informal payments to ticket agents on top of the official sales price of the ticket (see below). More generous granting of landing rights to other airlines both on paper and in practice would increase benefits to passengers.

Inflexible pricing by TSA and flawed price regulation by the anti-monopoly authorities result in periodic ticket shortages and substantial welfare losses. The Anti-Monopoly Commission imposes on TSA uniform ticket prices based on average cost plus a mark-up. As a result, TSA is not allowed to pursue standard price differentiation as a function of the remaining number of seats or time remaining. This leads to ticket rationing combined with corruption at the ticket counter when demand is

¹⁹ This arrangement appears to be the direct consequence of an annex to the bilateral air transport agreement between Russia and Tajikistan that limits the number of Russian airlines allowed to fly on the route from Moscow to one and gives Tajikistan the right to choose which Russian airline may fly.

strong. When demand is weak, the load factor is inefficiently low in view of the low marginal cost of transport. More sophisticated price regulation could benefit passengers and at the same time increase the rents of the already profitable Tajikistan Airlines. The establishment of a solid regulatory framework coupled with greater competition will make eventual privatization of the carrier an option.

The lack of competition and poor regulation are exacerbated by the non-transparent dealings between the airline, airport and air traffic control. The indirect income for the airline from airport operations and air traffic control operations is estimated to stand at US\$7 million per year. Nevertheless, TSA appears to have accumulated high debts, likely due to the construction of an expensive new VIP terminal at Dushanbe Airport which TSA was forced to finance. Unless the airport is separated from the national airline, it is unlikely that the airports will deal in an even-handed manner with other airlines. For example, recent plans by Turkish Airlines to fly to Dushanbe appear have been shelved, reportedly due to unfavorable restrictions imposed by Tajikistan. The lack of access by at least one international carrier acceptable to the global business community is a burden to the Tajik economy, as witnessed, for example, by low levels of FDI. Experience elsewhere also suggests that inefficiencies in the state airline are likely to persist without the discipline of outside competition.

During the coming months the Government will need to decide how it intends to go about fleet renewal and structure the air transportation sector. While there are many complex issues at stake, the main task is twofold: (i) to assure competitively priced and readily available air service within the region and to Moscow, to serve predominantly the needs of price-sensitive Tajik migrant workers and regional business; and (ii) to attract the scheduled service of at least one foreign carrier of international reputation, linking Dushanbe to an international hub, serving the needs of international professionals and tourists. While the latter would without doubt hurt the revenues of Tajikistan Airlines in the short run, it will most likely benefit the economy overall by putting it on the map for important categories of foreign travelers. To improve the commercial viability of Tajikistan's airports, international scheduled service should be concentrated in Dushanbe and Khujand and the viability of non-essential airports and low frequency domestic routes should be reviewed.

Against this background, the proposed fleet renewal project by TSA should be adjusted to encourage reform of the sector. The present fleet renewal project, which is to be funded by EBRD, would help prepare TSA for the leasing of either Boeing or Airbus aircraft while at the same time preserving the low levels of competition in the market, to some extent based on the idea that less competition will mean higher profits for TSA and therefore guarantee a swift repayment of loans for fleet renewal. In particular, the credit conditions considered by TSA would not allow the Government to initiate the long overdue separation of airline, airports, and air traffic control without consent of EBRD. It is recommended that fleet renewal is either preceded by or goes hand in hand with air transport sector reforms designed to increase transparency and competition in the Tajik air transport sector.

Air cargo shipment is still in its infancy conducted mostly through belly airfreight, despite growing demand. Tajikistan has no dedicated cargo aircraft. An option to be

further explored could be to convert select Tajik Air passenger aircraft reaching the end of their life span into cargo aircraft that may then continue to fly for another 3 to 5 years on non-EU cargo routes. Freight forwarders also report that air cargo handling at the airports is also poor, and involves informal payments and frequent delays by one or two days in cargo release. While this may seem a minor problem, it is an instructive example since fixing innocent looking bottlenecks like these may be less visible but typically just as effective at decreasing logistical costs as millions of dollars in infrastructure investment.

Recommendations

Short Term:

- Abolish the privileged status of TSA as part of fleet renewal
- Improve price regulation of the airline industry by the Anti-Monopoly Committee
- Provide more liberal access to domestic airports to foreign airlines and concentrate service at Dushanbe and Khujand airports
- Improve air cargo handling at airports.

Medium Term:

- Separate airports and air traffic control from TSA
- Attract at least one foreign carrier of international reputation to fly to Tajikistan
- Modernize commercial operations and ticket sales of TSA
- Review the viability of non-essential airports
- Consider conversion of passenger aircraft into dedicated cargo aircraft.

International Road Transport

International road transport is particularly important for Tajikistan for smaller shipments on short and medium distances and for routes where no rail service is available. The development of international road transport would help Tajikistan diversify its highly concentrated trade routes. Improved road transport through neighboring Afghanistan, the Kyrgyz Republic, and China would also help to make Tajikistan less dependent on transit through Uzbekistan, thereby improving Tajikistan's bargaining positions in future transit negotiations with Uzbekistan. Currently, road transport only accounts for a tiny fraction of Tajikistan's international transport, less than 5 percent both in terms of weight and value. In part, this is due to the availability of relatively smooth and inexpensive rail transit through Uzbekistan that is used for bulk shipments of alumina, aluminum, and cotton. But to an important extent this is also due to artificially high costs of road haul. Truck transport to the Benelux takes 2 days longer and costs US\$50 more per ton (including informal payments) more from Khujand than from Tashkent although the two cities are only a 3 hour drive apart.

While in principle trucks and cars with Tajik number plates are allowed to enter Uzbekistan, in practice they rarely do. This is partly due to the visa requirement for both cars or trucks registered in Tajikistan and any passengers that want to enter Uzbekistan. Such visas are only issued by the Uzbek consulate in Dushanbe and only with relatively short validity periods. They are not issued at the border and there is no Uzbek consulate in northern Tajikistan despite the sizeable ethnically Uzbek population in northern Tajikistan. Similarly, Tajikistan has no consulate in Samarkand in Uzbekistan, despite the large ethnically Tajik population there. The few vehicles that do obtain all the necessarily papers would then be subjected to a very unpleasant search at the border. It is symptomatic that most World Bank travelers from Tashkent airport to Khujand prefer to travel by a UN car with diplomatic number plates, and still they may experience delays. Private transport services between Tashkent and Khujand cope with these automobile border-crossing difficulties by operating one car on each side of the border, and having the passenger cross the border by foot.

Trucks that travel between Uzbekistan and Tajikistan are overwhelmingly non-Tajik trucks and they still face high costs and many other barriers. The officials fees payable by Tajik trucks entering Uzbekistan and corresponding fees for Uzbek trucks entering Tajikistan are listed in Table 2.6. As discussed in the customs section above, border crossing procedures are very cumbersome. Reportedly, many trucks leave Tajikistan empty despite demand for truck transport because of the great hassle of having cargo searched for drugs. It is estimated that US\$40 million worth of transport capacity goes unutilized in this way.²⁰ There is no properly working transit system in place. While the relevant countries in the region have in principle joined the TIR system, it is poorly implemented and not always respected in transit countries. Furthermore there are only few trucks in the region that satisfy TIR technical requirements. An interim solution has been suggested by ADB through the creation of a less demanding TIR-2 system, but it is unclear whether this will take off. Another problem is that technical requirements for trucks are poorly coordinated in the region. For example, Kazakhstan has different rules on something as fundamental as axle loads than Uzbekistan and Tajikistan.

²⁰ Another reason why trucks leave empty is a genuine asymmetry in Tajikistan's trade: most foreign exchange is earned through exports and migration that do not require road transport. Aluminum and cotton are exported by railway, and seasonal labor requires passenger transport. Imports, however, are more diversified and more suited to truck transportation.

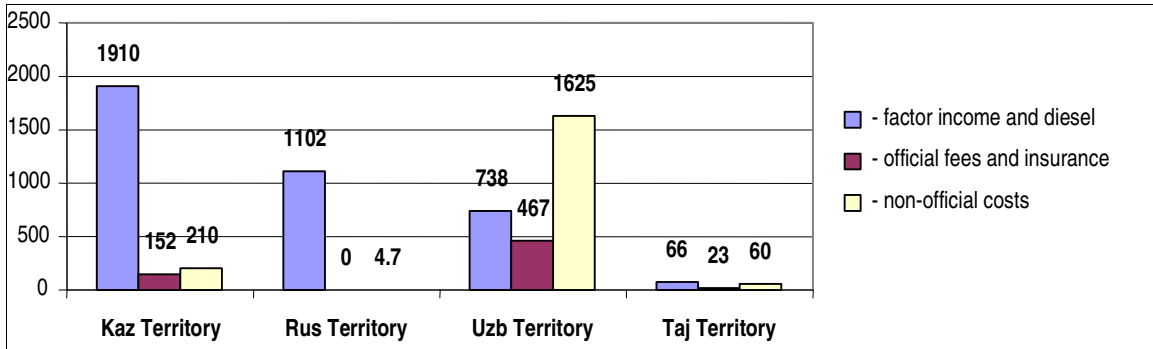
Table 0.6: Official Fees for Trucks Traveling between Uzbekistan and Tajikistan

	Treatment of Uzbek trucks in Tajikistan		Treatment of Tajik trucks in Uzbekistan	
	Fee	Applicability/comments	Fee	Applicability/comments
Entrance fee	\$130	Neither applied to empty trucks nor to transiting vehicles	\$130	All trucks
Ecology tax	\$8	Sanitation fee	\$10	As reported by truckers
Insurance	\$0	Insurance payment of \$12 was recently abolished	\$75	All trucks registered in Tajikistan
Transit fee	\$45	Transit fee is \$90 for a two way trip. All trucks have to pay <u>either</u> the entrance <u>or</u> the transit fee	\$90	The transit fee is one way and payable by trucks with a non-CIS destination. It is reportedly charged on top of the entrance fee.
Transit escort fee	\$252	200 Euro applicable only to Uzbek trucks transporting excise goods.	\$252	All trucks pay an equivalent of 200 EURO. All trucks registered in Tajikistan are subject to escort regime.
Escort to customs warehouse	\$35	As reported by the Association of Tajik Truck Carriers (ABBAT).	\$0	
Overstay penalty	\$50 per day	All foreign trucks should leave the country within 8 days or face the penalty.	\$50 per day	Reportedly, trucks are given only 3 for transit and face penalty charges for overstaying of up to \$110.
Total entrance	\$173	$\$130 + \$8 + \$35 = \173	\$215	$\$130 + \$10 + \$75 = \215
Total transit	\$53-305	Transit to all countries. \$53 if the good is not subject to excise duties. \$305 ($=\$252 + \$45 + \8) otherwise.	\$467-557	Transit to CIS countries \$467 ($= \$130 + \$10 + \$75 + \252). Transit to non-CIS \$557 ($= \$467 + \90).
Memo item: Customs fee²¹	0.15%	The fee is applied to the customs value of the load for both transited and imported goods.	0.2%	0.2% add valorem tax is applied to the customs value of imported goods. For transit goods the fee is 10 Euro for the first page and 5 Euros for every additional page of a customs declaration.

On top of that, there are very substantial non-official costs of road transit, notably in Uzbekistan. The trucker survey in spring 2004 commissioned by the World Bank found that unofficial transit payments in Uzbekistan are higher than the sum of official fees and the truck operation costs. Official and unofficial border crossing and transit payments in Uzbekistan constitute more than 30 percent of the total cost of road transportation from Dushanbe to Moscow (as shown in Figure 2.5). This is likely an indication how endemic corruption is in Uzbekistan, especially at customs and among the road police. This may also point to the weak bargaining position that Tajikistan has, giving the Uzbek government little incentive to deal with the problem.

²¹ Note that the add valorem customs processing fee contradicts WTO rules.

**Figure 0.5: Dushanbe-Moscow Road Transport Cost
(per truck in US\$)**



Source: The table is based on interviews with Tajik, Kazakh and Kyrgyz drivers as well as analysis of current regulation. Where cost elements varied systematically with nationality, the costs reported by Tajik drivers were used, which were typically somewhat higher than for, say, Kazakh drivers.

Recommendations

Medium Term

- Intensify bilateral dialogue with Uzbekistan to address the automobile transit issues and reduce costs
- Intensify regional dialogue to establish workable road transit regimes with other countries and reduce costs.

KEY SOURCES OF FOREIGN EXCHANGE EARNINGS: ELECTRICITY, ALUMINUM, COTTON FIBER AND MIGRANT WORKERS

3.1 This chapter looks at the key sources of foreign exchange earnings in Tajikistan – electricity, aluminum production, cotton, and workers’ transfers, which account for the bulk of percent of Tajikistan’s current account inflows. The chapter analyzes constraints to their further growth, and provides recommendations on how to address these constraints.

A. ELECTRICITY AND ALUMINUM²²

3.2 **As a mountainous country at the headwaters of Central Asia’s greatest river system, Tajikistan has a strong comparative advantage in hydropower generation.** Tajikistan currently produces 16TWh of electricity per year, of which around 99 percent is hydroelectric power. The overwhelming majority of this hydropower is generated by the Nurek hydropower plant. Tajikistan also produces significantly more electricity than consumed for purely domestic purposes. Although the electricity trade balance shows net imports of around 1 TWh to 1.5 TWh a year, Tajikistan implicitly exports 4 to 5 TWh per year through the energy intensive production and export of aluminum. Thus, if the production of aluminum is taken into account, Tajikistan’s electricity exports already amount to 20 to 25 percent of domestic electricity production. At present less than 10 percent of Tajikistan’s hydropower potential is being utilized, however, and a number of new hydropower projects are being considered. Therefore, this section will first look at possible efficiency gains from using the existing generation capacity, then it will look at the issue of implicit exports through aluminum, and finally the economic rationale of the key new hydropower projects will be considered.

Enhancing Efficient Use of Existing Electricity Generation Capacity

3.3 **Some 90 percent of all of Tajikistan’s electricity is currently generated at the Nurek hydropower plant.** Built in the 1970s, the Nurek dam is said to be the highest dam in the world with structural height of 300 meters. Together with the associated Nurek-Baipaza hydropower cascade, it has a generation capacity of around 15 TWh per year. The lifespan of a dam like Nurek is only limited by siltation. Of the 300 meters of dam height, roughly 50 meters has been lost during the last 25 years. While it is unclear whether there are viable silt removal options, even without silt removal the Nurek will be able to operate for at least another 30 years, remaining a major contributor to Tajikistan’s energy balance.

3.4 **A key advantage of the hydroelectric power produced by Nurek is its low economic cost.** Since the investment cost for Nurek was financed during the Soviet

²² The electricity sub-section of this chapter is largely based on the World Bank’s Energy Studies on Tajikistan and Central Asia by Raghuveer Sharma and his team, and the aluminum sub-section is based on a detailed model developed by Utkirdjan Umarov.

times and is sunk, the effective cost of generation at Nurek today is as low as 0.3 cents per kWh. This compares very favorably to the roughly 2 cents per kWh generation cost that could be achieved at the possible new hydropower plant at Sangtuda (see sub-section New Hydropower Projects – Sangtuda and Rogun) and wholesale export price of 2 cents per kWh currently paid for Tajik electricity by Afghanistan. The Nurek is thus a huge and very valuable gift for Tajikistan. If electricity was priced wholesale in Tajikistan at the export parity price or at the expected generation cost at the proposed Sangtuda hydropower plant, the Nurek would bring in over US\$200 million in profits annually — an amount equal to 10 percent of GDP in 2004.

3.5 Even though generation costs are low, electricity prices in Tajikistan are still well below cost recovery levels. While the generation cost at the Nurek is only 0.3 cents per kWh, it is estimated that transmission and distribution costs bring the cost-recovery electricity price at the retail level to 2.1 cents per kWh. However, the average domestic retail price of electricity in Tajikistan in 2003 was just 0.5 cents, or 24% of the cost recovery price, resulting in a quasi-fiscal deficit in the energy sector of around 12 percent of GDP. The cost recovery in the electricity sector in Tajikistan compares very unfavorably to the neighboring countries (Table 3.1). The low electricity prices also lead to asset deterioration, particularly of transformers, and to increased demand for electricity, particularly from households. In wintertime, these factors, together with the seasonal peak in electricity demand and Nurek generation declines (see paragraph 3.14), leads to frequent power shortages.

Table 0.1: Cost Recovery Electricity Prices in Central Asia, 2003

	Kyrgyz Rep.	Tajikistan	Uzbekistan	Kazakhstan
Average price (Cents/kWh)	1.4	0.5	2.2	2.6
Cost recovery price at the retail level (Cents/kWh)	2.3	2.1	3.5	2.8
Current tariff as percent of cost recovery price	61%	24%	61%	94%

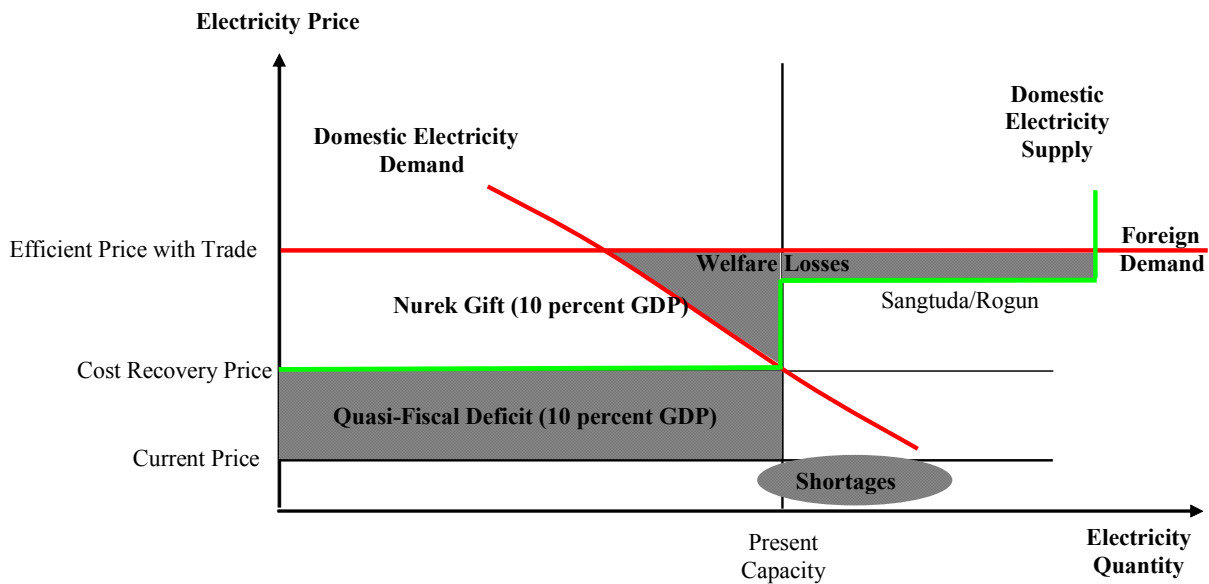
Source: Regional Export Potential Study for Central Asia, the World Bank, 2004

3.6 The main challenge in the energy sector is thus to address the electricity pricing distortions. The first step should be gradually closing the quasi-fiscal deficit through electricity price increases, with measures taken in parallel to improve collection rates and reduce transmission losses. The price increases will provide resources for the state-owned electricity monopoly, Barki Tajik, to maintain electricity generation and transmission facilities, and will help reduce the demand for electricity, encourage electricity savings, which will help reduce the current electricity shortages. In the long term, raising electricity prices to the export parity level – 2 cents per kWh wholesale and 3.8 cents retail (taking into account 1.8 cent per kWh transmission and distribution costs) would be most economically efficient.

3.7 Raising electricity prices to the export parity level could result in substantial additional revenues for the state budget as well as welfare gains for Tajikistan and countries importing its inexpensive electricity. Figure 3.1 demonstrates this potential. Currently, with electricity prices in Tajikistan well below the already low cost recovery level, incentives for electricity savings are so small that domestic electricity demand at

times exceeds the large installed generation capacity. Increases in electricity prices to the cost recovery level can help reduce excess electricity demand and provide resources for proper maintenance of generation and transmission facilities. However, only further increases to the export parity level (equivalent to a movement along the demand and supply curves up to the “Efficient Price with Trade” line in Figure 3.1) would ensure the economic viability of the new planned hydropower projects (Sangtuda and Rogun), which do not benefit from sunk past investments and thus have substantially higher cost-recovery prices compared to the Nurek. The electricity price increases to the export parity level together with the expansion of Tajikistan’s generation capacity will eliminate substantial welfare losses (denoted in Figure 3.1 by the area above Tajikistan’s electricity supply and demand curves but below the export parity price (“Efficient Price with Trade”)) from unexploited electricity export opportunities and underutilization of the hydropower potential. Tajikistan’s neighbors would similarly benefit – from lower electricity prices. The additional revenues of the Nurek hydropower plant as a result of the electricity price increases to the export parity represent the “Nurek Gift,” in other words a pure hydropower rent that could be transferred to the budget, and spent on poverty alleviation, human capital building and investment in critical infrastructure.

Figure 0.1: Stylized Welfare Analysis of the Tajik Electricity Market



3.8 **At the same time, the social implications of the energy price increases need to be addressed.** Whether this is best done through a lifeline tariff or targeted cash benefits continues to be debated by experts. Lifeline tariffs are easier to administer but imply substantial economic distortions. Cash benefits are more difficult to administer but are, in principle, less distortionary. In any event, both poverty reduction and economic efficiency would be served by using increased budget revenues to provide cash benefits to the poor, irrespective of whether they even have reliable access to electricity, rather than using the low prices to broadly subsidize electricity.

3.9 Export markets for electricity will also need to be developed. With the electricity price increases, domestic demand for electricity will decline, freeing up substantial volumes of electricity for export. Based on the assumption that the price elasticity of electricity consumption is -0.3, it is estimated that an increase of the retail price of electricity from the current levels to the 3.8 cents per kWh export parity could reduce domestic electricity consumption – and increase potential exports – by some 40 percent. However, transmission lines to countries like Pakistan, Afghanistan, Iran, Russia, and China still need to be either built or improved to handle such volumes, and electricity exports arrangements would have to be prepared. Currently, Tajikistan exports electricity explicitly on a very limited scale – to Afghanistan for 2 cents per kWh and to Uzbekistan on barter terms, with Uzbekistan supplying electricity to the Northern Tajikistan, separated from the rest of the country by mountains, and Tajikistan compensating it from abundant hydropower resources in the South. There are also increasing electricity exports to Russia and other countries in the region.

3.10 With the increase in the energy sector earnings, transparency in their use will be essential and an appropriate governance mechanism for the Nurek-Baipaza would need to be determined. Vested interests in the energy and aluminum sector would prefer a nontransparent allocation mechanism for the increased earnings within the energy sector to a more transparent one where profits that would be generated by the Nurek could then be transferred to the state budget. The full separation of the Nurek-Baipaza cascade (and possibly other hydro-generation capacity) from the rest of the energy sector should therefore be undertaken. In the longer run, suitable anti-monopoly regulation to prevent monopolistic pricing would also need to be introduced²³ and the regulatory capacity of the anti-monopoly commission would need to be strengthened accordingly. The anti-monopoly commission would also have to effectively regulate high voltage transmission lines to allow the Nurek-Baipaza a choice between the export of electricity, the sale of electricity to TADAZ or possibly other aluminum smelters, and the sale of electricity to Barki Tajik. An eventual privatization of the Nurek-Baipaza company could be undertaken in the longer run. However, the enormous value of the asset (in excess of Tajikistan's GDP) would make privatization an unprecedented challenge. And due to the low complexity of the commercial and technical management of the asset, the operational efficiency gains through privatization may be limited for the time being. Therefore, privatization should not be rushed.

²³ In the medium-term the domestic price regulation might not be that critical since the domestic monopoly price might well be below the export price.

Recommendations

3.11 Short Term:

- Validate and refine cost and cost recovery estimates for the electricity system with help from international consultants.
- Adopt a schedule for substantial domestic electricity price increases and implement the first round of increases during 2005.
- Review and strengthen social protection mechanisms for the vulnerable which should be allocated additional funds from the future profits of Nurek-Baipaza accompanied by substantial electricity price increases.
- Request funding from IFIs for a consultant to prepare an action plan for the full legal separation of Nurek-Baipaza from Barki Tajik and the necessary corresponding changes in the legal framework and regulatory oversight.

3.12 Medium Term:

- Fully separate the Nurek-Baipaza cascade from Barki Tajik with the objective to increase the energy sector transparency and increase state budget revenues.
- Vigorously pursue the development of export options for Tajik electricity.
- Develop and adopt a longer term strategy for the future of the Tajik energy sector.
- Develop regulatory capacity at the Anti-Monopoly Commission or an alternative independent regulator.

Developing New Hydropower Projects

3.13 Among a number of possible new hydropower projects in Tajikistan, the Sangtuda and Rogun hydroelectric power plants are the most actively pursued. With only 10 percent of Tajikistan's hydropower potential reportedly utilized, Tajikistan has a variety of hydropower investment options. The Government is actively discussing plans for the construction of the Sangtuda and the Rogun I and II hydroelectric power plants, which would add 2.7 TWh and 14 TWh to the annual electricity generation capacity, respectively. The Sangtuda is also among the most attractive new projects in the region with an estimated average economic cost of 2 cents per kWh. Only the Talimardjan I thermal power project in Uzbekistan which is almost completed would be cheaper in terms of the generation cost per kWh (see Table 3.2).

3.14 Construction of the Rogun hydropower plant could also smooth seasonality in Tajikistan's electricity output. The water flows of the Vaksh river, where the Nurek-Baipaza cascade is located, are strongly seasonal. Most of the Vaksh river's annual flow of 20 billion cubic meters is in summer. Since the Nurek's storage capacity is limited to around half of this annual flow, the Nurek's electricity production also peaks in summer, and this seasonality is further exacerbated by water release obligations for agricultural purposes. As a result, while in summer Tajikistan is a net exporter of electricity, it actually has to import some electricity in winter. As a downstream station,

the Sangtuda would closely mirror the seasonal generation profile of the Nurek. The Rogun, by contrast, involves the construction of a dam upstream from the Nurek dam. In coordination with the Nurek, the Rogun reservoir of 13 billion cubic meters would allow for substantial flexibility in water storage and release, significantly reducing forced seasonality of power production in Tajikistan.

Table 0.2 Estimated Future Generation Costs for Power Projects in Central Asia

No.	Country	Supply Option	Capacity in MW	Economic cost/kWh in Cents	Financial cost/kWh in Cents	Rank
1	Uzbekistan	Talimardjan Thermal Power Project I	800	1.68	1.75	1
2		Talimardjan Thermal Power Project II	2,400	2.76	2.92	5
3	The Kyrgyz Republic	Bishkek II Thermal Power Project	400	2.55	2.67	3
4		Kambarata Hydropower Project I	1,900	7.17	8.54	9
5		Kambarata Hydropower Project II	360	3.72	3.95	7
6	Tajikistan	Sangtuda Hydropower Project	670	1.97	2.44	2
7		Rogun Hydropower Project Phase I	1,200	2.46	2.91	4
8		Rogun Hydropower Project Phases I and II	3,600	2.83	3.24	6
9	Kazakhstan	New Ekibastuz Thermal Power Project	1,000	4.54	5.05	8

Source: Regional Export Potential Study for Central Asia, the World Bank, 2004

3.15 The costs of the Sangtuda and Rogun projects, however, are beyond the borrowing capacity of the Government of Tajikistan. Investments needed for the completion of the Sangtuda and Rogun hydroelectric power plants are estimated at US\$400 million and US\$2.1 billion, respectively. The estimated investment cost of the Rogun plant is actually larger than Tajikistan's current GDP. To implement the projects, outside investors for these projects would clearly need to be attracted. In recent months, there were some encouraging news. The realization of the Sangtuda project has become significantly more likely as a result of the debt deal with Russia and an understanding with Iran to also take an equity stake. In addition, the intent of the Rusal aluminum concern to develop a project of jointly building Rogun and a new aluminum smelter in Kulyab has been reported. However, at this stage there is no guarantee that these indications of intent will lead to the desired investments. Whether the investments will materialize will depend on the expected risks and benefits for investors.

3.16 The viability of the Sangtuda and Rogun projects depend critically on improving the investment climate in Tajikistan and increasing domestic prices of electricity. As an example, Table 3.3 shows the results of modeling the Sangtuda's cost recovery price depending on the internal rate of return of the project, which reflects project risks as perceived by investors, and the investment payback period. The time horizon for Sangtuda investors is assumed to lie between 20 and 30 years, and the required internal rates of return in real terms may lie anywhere between 7.5 percent for a low risk investment to 15 percent for a higher risk investment. Such parameters are well within the range of industry standards. As can be seen, whereas in a high risk environment, the cost recovery price that investors in the Sangtuda project would be

asking for could be as high as 2.7 cents per kWh, in a low risk environment like Canada the cost recovery price could be 1.3 cents per kWh. A clear message follows from this: the viability of Sangtuda – and in a similar manner Rogun – depends critically on the strengthening of economic and political stability in Tajikistan and improvement of business climate, which would reduce perceived risks of the projects. The modeled cost recovery prices of electricity from the Sangtuda, regardless of the riskiness of the project and payback period, are also well above the current prices of electricity in Tajikistan. This underlines the importance of raising domestic electricity prices to cost recovery and ultimately export parity level discussed above (paragraphs 3.6 and 3.7).

Table 0.3: Risks and Cost Recovery Price of the Sangtuda Hydroelectric Power Plant

		Required Internal Rate of Return			
		7.5%	10%	12.5%	15%
Time	20 years	1.7 c/kWh	2.0 c/kWh	2.3 c/kWh	2.7 c/kWh
Horizon	30 years	1.3 c/kWh	1.7 c/kWh	2.1 c/kWh	2.5 c/kWh

Source: Staff estimates based on Export Potential Study for Central Asia, the World Bank, 2004.

3.17 Expanded export markets and market access guarantees for Tajikistan’s electricity will also be essential for the viability of the new projects. To make the Sangtuda and Rogun projects viable, the power export options for Tajikistan would have to be developed substantially, either in the form of an improved regional export market or, possibly, through increased aluminum production, with a wholesale price of at least 2 cents per kWh. Otherwise, the planned Sangtuda and Rogun projects could quickly lead to financial disaster. Ideally, Tajikistan should obtain guarantees from electricity importing countries to buy the electricity at the Tajik border, eliminating the substantial transmission risk for Tajikistan. Also, in order to align incentives better it would make sense to try to persuade major transit countries like Uzbekistan to take a stake in the planned investments.

Recommendations

3.18 Short Term:

- Recognize risk as the key cost driver for the new hydropower projects by developing and adopting a broad based strategy in concert with donor partners to reduce the investment risk for long term hydropower projects.
- Request funding from IFIs for international experts to advise the Tajik government on the design of suitable corporate structures and risk allocations for the planned hydropower projects.

3.19 Medium Term:

- Continue to pursue a pro-poor development strategy to provide the necessary long-term political stability to reduce the risk premium for large scale hydropower projects.

Optimizing the Electricity-Aluminum Nexus

3.20 The electricity and aluminum sectors in Tajikistan are closely linked. The electrolytic process to produce aluminum is very energy intensive, requiring as much as 15,000 kWh of electricity per ton of aluminum produced.²⁴ Tajikistan Aluminum Plant (TADAZ), a state-owned aluminum giant built during Soviet times in conjunction with the Nurek dam, produces and exports annually over 300 thousand tons of aluminum, consuming 4 to 5 TWh of electricity. TADAZ is Tajikistan's largest exporter earning US\$430 million and accounting for 54 percent of total merchandise exports. It is also the largest importer, bringing in mainly alumina (accounting for 27 percent of Tajikistan's merchandise imports in 2003) but also other inputs such as coke, pitch and, during wintertime, electricity. Since most of the inputs are imported, TADAZ basically adds value through the domestic electricity input. Essentially the energy-intensive aluminum production is the principal means of implicitly exporting electricity. TADAZ is in fact Tajikistan's single largest electricity consumer accounting for about one-third of total domestic consumption. The financial health of Barki Tajik critically depends on how much TADAZ pays for electricity,²⁵ and the financial health of TADAZ critically depends on how much Barki Tajik charges for electricity.

3.21 The main cost drivers in the aluminum production are electricity prices, transport costs for inputs (primarily alumina) and outputs (aluminum), and labor costs. A competitive benchmark smelter in a high energy cost, high labor cost, low transport cost setting would tend to have the key costs per ton of aluminum produced of around US\$650, including electricity costs of US\$450, transport costs of US\$80, and labor costs US\$120. Because of Tajikistan's remote location, however, TADAZ is estimated to have transport costs of US\$360 per ton of aluminum produced. This includes bringing alumina and other inputs to Tajikistan, and transporting aluminum to the world market (assuming shipment to a Baltic port). On the other hand, labor costs in Tajikistan are very low – only US\$40 per ton of aluminum, according to the 2002 TADAZ audit. This leaves room for electricity costs of up to US\$250 per ton of aluminum (= US\$ 650-360-40), or around 1.7 cents per kWh.²⁶

3.22 The price TADAZ currently pays for electricity is well below the optimal level. At present TADAZ buys electricity from Barki Tajik at an estimated 0.75 cents per kWh. As opposed to most of the other domestic electricity consumption, this price is already above cost recovery, given that the Nurek's generation cost is just 0.3 cents per kWh and TADAZ is essentially a wholesale electricity consumer, which incurs only high voltage transmission costs from the Nurek of 0.1 to 0.2 kWh but no retail distribution costs. Tajikistan also levies an ad valorem aluminum tax on TADAZ output. This tax, which is directly transferred to the budget, can be interpreted as a component of the electricity price that varies with the world market price of aluminum. Taking this and other taxes into account, the effective price paid by TADAZ for electricity rises to an estimated 1.1 cents per kWh, which is still below the estimated optimal price of

²⁴ Slightly less in more modern plants.

²⁵ In the past, TADAZ accumulated substantial electricity arrears with Barki Tajik. While these arrears have been greatly reduced in recent years, full and timely payment by TADAZ remains a serious issue.

²⁶ More if the aluminum price is high, less if it is low.

electricity for TADAZ of around 1.7 cents per kWh derived above. The objective of the government's electricity pricing policy for TADAZ should thus be to gradually raise the implicit electricity export price of TADAZ to the estimated optimal level, but ultimately – to the parity price of explicit electricity export.

3.23 Resolving transport cost disputes and negotiating transport cost reductions for the aluminum sector should be another priority. The profitability of aluminum production is very sensitive to changes in rail transportation costs. The rail transport costs for the production of one ton of aluminum at TADAZ can be approximately written as $3.5r$, where r is the rail transport cost of one ton of cargo between a Baltic port and TADAZ and the factor of 3.5 stands for the 3.5 tons that need to be moved per ton of aluminum produced: 2 tons of alumina and 0.5 tons of coke to TADAZ, 1 ton of aluminum from TADAZ. At the same time, given that to produce one ton of aluminum 15,000 kWh of electricity is consumed, the cost of electricity needed for one ton of aluminum can be written in terms of the electricity price in cents per kWh – p – as $15,000p$. Thus, for TADAZ, an increase of the electricity price by 1 cent per kWh would be equivalent to the increase in railway transport cost by as much as 43 dollars per ton.²⁷ This underscores the importance for TADAZ of resolving the railway tariff dispute described in Chapter 2 (see paragraph 2.49).

3.24 Governance, transparency and accountability arrangements at TADAZ must be urgently strengthened to avoid profit diversion from TADAZ. At first glance, the financial situation of TADAZ does not look good. TADAZ's profitability has been poor for years. An independent audit of TADAZ showed an economic loss of US\$12 million in 2002. However, there are some indications that a privately held trading company, Ansol, which for many years had a very close trading relationship with TADAZ handling input supplies and exports aluminum output, may have made substantial profits from the business relationship with TADAZ. Since the relevant documentation has not been available, only very tentative estimates of any potential transfer of profits from TADAZ to Ansol potentially via over-invoicing of inputs such as alumina and sales commissions for aluminum can be made. However, these tentative "guesstimates" suggest that Ansol may have made up to US\$ 40 million in profits from its business relationship with TADAZ, perhaps US\$ 30 million through the possible over-invoicing of inputs such as alumina and perhaps US\$ 10 million in sales commissions.

3.25 Such concerns with the business dealings of TADAZ are supported by recent events. The long standing director of TADAZ fled the country in early 2005 after allegations that he might have defrauded TADAZ by perhaps as much as US\$100 million. To avoid theft and profit diversion, the Government should make the regular and timely completion of IAS audits for TADAZ a top priority and also hire an international forensic consultant to investigate the past financial dealings of TADAZ.

²⁷ From $3.5r = 15000p$ it follows that $r/p = 3.5/15,000 \approx \text{US}\43 .

Recommendations

3.26 Short Term:

- Hire an internationally recognized forensic accountant.
- Commission and publish regular IAS audits for TADAZ.
- Continue to improve transparency and governance of TADAZ, in line with the action plan that was adopted under SAC2.
- Address the existing transport cost disputes with transit countries and launch negotiations on transport cost reductions for the aluminum **sector**.

3.27 Medium Term:

- Restructure and potentially privatize TADAZ to achieve a higher break even implicit electricity export price through increased operational efficiency and reduced profit leakage to trading partners.

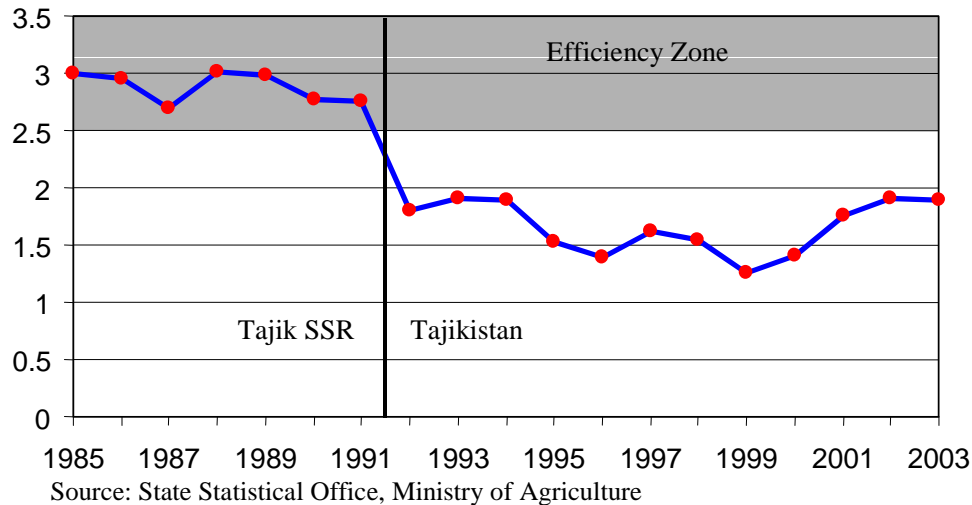
B. COTTON FIBER²⁸

3.28 **Cotton is the most important cash crop in Tajikistan.** Tajikistan is well suited for the production of cotton with its dry and sunny climate combined with the abundance of water for irrigation. Cotton exports in 2003 amounted to 11 percent of total exports, the third most important export behind aluminum and electricity. The cotton sector saw substantial declines in output and yields during the 1990s, with the absolute low yield in 1999 as a result of a drought. Since then the area under cotton has steadily increased as have yields. In 2003, cotton was grown on around 285 thousand hectares, or around 45 percent of total farmland, and the average yield reached 1.89 tons of raw cotton per hectare. Cotton producers continue being buffeted by price swings in the world market for cotton fiber, often exceeding 20 percent during a year. The low world market prices of cotton fiber, especially during 2001-02 when they were at the lowest level in more than 10 years, and more recently in late 2004 have hit hard earnings of cotton growers in Tajikistan.

3.29 **Despite recent growth in yields, Tajikistan still has substantial growth potential in the cotton sector.** As Figure 3.2 illustrates, before independence cotton yields fluctuated between 2.5 and 3 tons per hectare whereas after independence, cotton yields generally were between 1.5 and 2 tons per hectare. A drop in yields during the 1990s was the result of the collapse of the old agricultural system, loss of financial support from Moscow as well as the civil war. Natural factors such as the 1999 drought also played a part. The fact that despite several years of growth, cotton yields are still well below their pre-independence levels suggests that the current organization for the cotton sector is highly inefficient. The cotton sector appears to be locked in a low level equilibrium.

²⁸ The financial model of the cotton sector for this section was developed by Utkir Umarov. The section also relies heavily on the recent Poverty and Social Impact Analysis on Cotton Farm Privatization by Shabih Ali Mohib, the World Bank, 2004.

**Figure 0.2: Average Cotton Yields in Tajikistan, 1985-2003
(in tons per hectare)**



Barriers to Growth and Efficiency in the Cotton Sector

3.30 Growth and efficiency of the cotton sector are constrained by the existing ownership and organizational structures in the agricultural sector, non-competitive input and credit supply, and marketing rigidities. The problems include: 1) the poor organizational structure of farms that results in flawed incentives for both farm management and farm workers; 2) continued state intervention in production decisions; 3) cartelized credit provision for the yearly investment cycle and non-competitive markets for fertilizers and seeds; 4) an inefficient ginning system due to lack of competition and frequent electricity shortages; 5) administrative barriers to exports such as export registration requirements and price setting mechanisms; 6) deteriorating irrigation system. These issues are considered in more detail in turn below.

The ownership and governance of farms need to be improved.

3.31 While all land is owned by the state in Tajikistan, the state privatizes farms by issuing issues land use rights to farm members. These land use rights are inheritable but cannot easily be transferred to non-family members. As a result, land use rights cannot be readily used as collateral or sold. On the one hand, this prevents land from potentially being accumulated by the powerful few. On the other hand, however, the restricted ownership transfer of land use rights restricts access to credit by the poor.

3.32 The issuance of land use certificates by the Government is ongoing. Cotton farms were comparatively slow to be privatized, as witnessed by the fact that the large majority of the remaining state-owned farmland consists of large cotton farms. Those collective cotton farms that have been privatized were privatized in one of two ways.

3.33 One method was piloted with the privatization of 8 cotton farms under the World Bank-supported Farm Privatization Support Project. In those farms, individual land use certificates were issued to individual farm workers. As a result, smaller family farms

emerged with an average size of 15 hectares that have a free choice of crop. This approach can clearly have a major impact on reducing poverty as it allocates family plots to large numbers of farm workers and scaling up of this approach clearly is desirable.

3.34 The second method of privatization is predominantly used for cotton land and more closely mirrors the old state structures. For privatization, the collective farm is split into dekhan farms the size of individual brigades of the former collective farms. The workers of these dekhan farms are then collectively allocated the land use rights. Typically, the head of the old brigade is then put forward by local government as candidate for the position of farm manager of the new dekhan farm. Normally, the candidate is then confirmed by show of hands by farm workers. The new dekhan farm managers in turn get together to establish a dekhan farm association, typically electing the old chairman of the collective farm as chairman of the association.

3.35 Thus, the state farm restructuring into private ownership may often have relatively little effect in practice. The accountability of farm management to the new worker owners remains weak, and procurement and other financial decisions often continue to be made in the same manner as before. Individual ownership is not properly defined in the sense that farm workers who quit their dekhan farm generally receive no compensation for their share in the collective farm. The weak alignment of incentives easily leads to situations where farm managers collude with local investors to the disadvantage of the owner workers. The owner workers have little incentive to work harder and better than during communist times because it remains unclear that their work effort translates into personal benefits.

State interventions in agricultural production decisions must be eliminated.

3.36 The choices of cotton farms are constrained by the local government (*Hukomat*) which impose cotton production targets on farms. While in principle these targets passed down from central government to local governments in present day Tajikistan really should be forecasts only, they are used as Soviet style compulsory production plans by local governments – possibly with the tacit support of at least parts of the central government. The compulsory cotton targets can provide coercive incentives for farms to grow certain crops even when profit incentives for farms are lacking and growing alternative crops would be more profitable. Any mandatory production targets should be unequivocally abolished at all levels of the government.

More competition needs to be brought into the provision of credit and inputs to farmers.

3.37 The annual working capital that farms require per hectare has been estimated at somewhere between US\$380 and US\$580. Since cotton farms have hardly any working capital, they are obliged to borrow substantial sums each year for their operation. However, there is little competition in this credit market. The most important supply of credit for Tajikistan's cotton industry is organized by the Swiss cotton trading house Paul Reinhardt that provides credit to so called "local investors."

3.38 These local investors are not necessarily cotton specialists but tend to be powerful local businessmen who have the political and family connections to get things done in Tajikistan's difficult business environment. While some of the credit by Paul Reinhardt is provided to investors directly, most of it is channeled through the local Kredit Invest, which was formerly part of AgroInvest Bank. Kredit Invest in turn finances the local investors. A local investor typically has exclusive control over a well defined geographic area where he would typically also own the local gins. In his own geographic area, an investor would provide credit to cotton farms in the form of inputs in kind. The investor group Somoni XXI in particular appears to have expanded its sphere of influence in recent years.

3.39 Credits are usually provided to farms by local investors not in cash but in kind as fertilizers, seeds, and other inputs such as fuel. In practice, the provision of inputs in kind has serious disadvantages for farms. In effect, it carries over the cartel from the credit market into the input market, thus making both more difficult to contest. Potential market entrants would have to enter both markets at the same time, because there is little use competing in the market for inputs if there are no independent credit providers and conversely it would be of little use to compete in the market for credit only if there are no independent input traders. Reportedly, local investors use their position of power to overbill for inputs and to deliver inputs of inferior quality. Also, there are many instances where inputs are delivered late. These are important causes for low cotton yields.

3.40 Moreover, cotton farms are accumulating large debts, assuring a long term grip of investors on farms. As a result, an increasing number of farms are technically bankrupt and therefore totally dependent on their creditors. Many investors may have used the provision of credits on unfavorable terms to build up farm debt to assure their future control as a financier, and possibly view it as an intermediary step towards full ownership of the cotton farms if and when large private land holdings become politically acceptable.

Cotton ginning must be also made more competitive.

3.41 With around 40 gins countrywide, competition should in principle be possible and it was hoped that the privatization of the Tajik gins would result in strong competition between them and would increase their efficiency and quality. However, in practice competition between gins is very limited. While it might be legally permissible to move raw cotton between gin, in practice the mobility of seed cotton is restricted. The main reason is that local governments and local investors have no interest in having cotton leave their area of influence before it is ginned as it would reduce their control and their revenues. The lack of competition between gins has allowed many very poor gins to survive to date. While in countries with well-organized cotton sectors average ginning season lasts around 90 days, in Tajikistan a ginning season lasts for up to 200 days. The process is also prolonged by frequent power outages during the ginning season, which includes late fall and winter. In addition to the interests costs of such a prolonged ginning period, the prolonged storage of raw cotton in less than ideal storage conditions leads to substantial quality degradation, just as does the ginning in technically inferior

gins. As a result, the average ginning outturns are just around 28 percent, well below 32 percent observed even in neighboring Uzbekistan.

Cotton fiber export procedures and pricing need to be streamlined.

3.42 According to legislation, all cotton exports from Tajikistan must take place through the Tajik Universal Goods and Raw Material Exchange. No trades take place at the exchange, however. The export price of cotton at the exchange is set administratively as a function of the cotton market price at the Liverpool exchange and the cotton quality according to the CIS classification system, and the Exchange simply performs a contract registration function. Since exporters are not allowed to fix the price for the cotton they buy before the date of dispatch, the additional side effect of this pricing mechanism is that contracts for cotton between investors and cotton farms in Tajikistan burden farms with the entire market price risk.

3.43 Two justifications for this system of administrative prices are sometimes given. First, the administrative price is said to be necessary to enforce the export sales tax on cotton of 10 percent. Without the administrative price, it is feared that tax evasion as result of untruthful billing below the true market price would become a problem. However, if this were the concern, it would suffice to use the current formula of the Exchange as the tax basis for the 10 percent export tax for cotton fiber instead of the unnecessarily restrictive administrative fixing of the actual transaction price. The second argument in favor of the administrative price fixing is that the administrative price protects farms from being forced by local investors or exporters into selling their cotton below market price. However, since only the output price is protected in this way, local investors simply use their power instead to overcharge inputs. This rent extraction method on the input side has distortionary effects (such as reduced input usage) that hurt production efficiency.

3.44 The reform of the Commodity Exchange should be complemented by the introduction of the Universal Cotton Grade Standards (UCGS), the US standard which by now has become the leading international cotton standard. As recent study by ADB has estimated that proper grading of cotton to this standard could add another US\$10 million to the value of Tajikistan's annual crop. Other very substantial bureaucratic barriers have also to be overcome in cotton exports. Especially cumbersome appears to be the requirement to obtain permits for the export of cotton from the Customs Department, the Ministry of Agriculture, and the Commodity Exchange. These and other restrictions would need to be reviewed in order to strengthen the competition among cotton traders which would benefit producers in Tajikistan.

Irrigation must move further towards cost recovery.

3.45 The extensive irrigation infrastructure that Tajikistan inherited from Soviet times is ageing rapidly, affecting the availability of the key input water. Since irrigation services are priced far below cost recovery levels, funds are lacking to maintain the system. The poor state of the irrigation infrastructure combined with inferior irrigation techniques on farms also contributes to low yield levels.

Strengthening the Government's Cotton Sector Reform Strategy

3.46 **In early 2005 the Government finalized its cotton sector reform strategy, with the first part of the strategy proposing immediate measures to resolve the farm debt problem.** These measures include allowing the use of land use certificates and future harvests as a collateral, establishing a detailed inventory of debt-related information broken down to the farm level, negotiating with foreign creditors terms of debt restructuring and burden sharing, appointment where necessary of temporary management to severely indebted farms for the duration of debt repayment, enhancing bankruptcy legislation, putting in place arrangements to protect farmers' rights and prevent asset stripping, ensuring transparency of the debt farm debt resolution process.

3.47 **The proposed measures to deal with the farm debt problem would help bring greater efficiency to the cotton sector but are likely to move it towards concentrated land ownership in the hands of powerful intermediaries, the so-called "latifundista model."** The composition and governance of the debt resolution commission that would be charged with examining farm debt on a case-by-case basis is not defined in the strategy. The terms under which creditors could appoint temporary outside management for cotton farms remain unclear. And the proposal to allow the use of land use certificates as collateral would likely be used by investors to repossess the indebted cotton farms. This would pave the way for the large scale introduction of the latifundista model of the agricultural sector over time.

3.48 **The Government needs to be clear about the ultimate structure of the agricultural sector it is seeking and adjust the farm debt resolution strategy accordingly.** If the bias of the strategy towards a latifundista model is accidental, it would be recommended to greatly strengthen the parts of the strategy related to the debt resolution commission. To avoid conflicts of interest, and in the interest of social sustainability, it should ideally be funded and staffed by international experts, with strong decision making powers to endorse debt reduction and rescheduling measures. If instead the move towards a latifundista model is intentional, the process might be made more transparent and efficient by making it more explicit. For example, collective farms with debt burden above a certain threshold could be sold by public auction free of any debt, and the proceeds be used to pay off the old creditors after their credit claims have been endorsed by impartial experts. However, from the perspective of poverty reduction, the pursuit of the latifundista model would likely be a disaster that may also threaten political stability.

3.49 **The cotton sector reform strategy also proposes appropriate measures for the sustained development of the sector but the Government's commitment to implementing these broader cotton sector reforms is uncertain.** The strategy proposes, among others: (i) to accelerate land reform, (ii) to create alternative sources of financing for agriculture, (iii) to strengthen the legal framework for cotton farming, (iv) to abandon the practice of cotton production targets, and (v) to create the necessary framework for strengthened competition in inputs markets. The proposed measures generally address the barriers to growth and efficiency of the cotton sector identified above. The only omission in the strategy is the badly needed reform of the Commodity

Exchange to liberalize the trade in raw cotton and cotton fiber, and to enable futures contracts that move risks from the relatively risk adverse to the more risk neutral parties. However, the main question regarding these broader cotton sector reforms is how committed the Government is to follow through on them. Recent experience suggests that some structures of the Government do not feel that further efforts in support of land reform are a priority at this stage.

Modeling the Alternative Development Scenarios of the Cotton Sector

3.50 Tajikistan’s cotton sector is at a crossroads and can follow three broad development scenarios – “status quo,” “latifundista” or “worker owner.” If the current agricultural policies are unchanged, the cotton sector will follow the “status quo” scenario, under which the inadequate production incentives, non-competitive input and credit supply, inefficient ginning and export barriers, together with farm debt overhang and profit appropriation by powerful intermediaries and farm managers, will result in continuing low cotton yields and low ginning outturns. The “worker owner” scenario assumes that the Government’s cotton reform strategy is strengthened as recommended above and is fully implemented, leading to the effective broad-based land ownership by farm workers and competitive input and output markets. As a result, production will be more efficient and the economic profits will accrue to worker owners, providing them with good work incentives. Under the “latifundista” scenario, which would likely take place if the farm debt issue is resolved but broader sectoral reforms lag, the powerful intermediaries would officially obtain land ownership. Cotton production in this case will become efficient, benefiting from economies of scale and better access to credit and inputs. However, profits would continue to accrue to the powerful few.

Table 0.4: Estimated Efficiency and Equity Implications of Alternative Cotton Sector Development Scenarios (in million US\$)

	Worker Owner	Status Quo	Latifundista
TOTAL INCOME	329	211	329
o/w Profits + Taxes	221	134	221
Intermediaries’+ Farm Managers’ Income	59	142	240
o/w Factor Income	59	39	59
o/w Profits	--	103	181
Farm Worker’s Income	204	26	33
o/w Factor Income	33	26	33
o/w Profits	171	--	--
Other Inputs	16	12	16
Taxes	50	31	40

Source: Staff estimates based on the official 2003 data

3.51 Due to the inefficiencies and inequities of the current status quo in the cotton sector, the economy incurs net losses of close to US\$90 million annually. Assuming that both under the “latifundista” and “worker owner” scenarios, average raw cotton yields increase from 1.89 tons per hectare currently to 2.5 tons per hectare, the lower bound of cotton yields during the late pre-independence period (see Figure 3.2), and the ginning outturn increases from the current 27.7 percent to 32.9 percent, total cotton sector income would increase by more than 50 percent from current US\$210 million to almost

US\$330 million (see Table 3.4). While the increased output would require additional labor, capital, and farming inputs such as fertilizers and seeds, it is estimated that around US\$90 million would be due to increased economic profits and additional tax revenues, a pure welfare gain for Tajikistan's economy.

3.52 Equity implications of the “latifundista” and “owner worker” scenarios differ starkly, with the “owner worker” scenario clearly preferable from a poverty reduction point of view. Under the “latifundista” scenario, the powerful interests that already control the cotton sector today could increase their profits by around US\$80 million annually to around US\$180 million while rural workers would benefit little if at all. Conversely, under the “worker owner” scenario, workers could increase their economic profits from cotton to around US\$170 million annually from close to zero today. On a net present value basis evaluated at a 10 percent real interest rate, this is equivalent to a US\$1.7 billion resource shift in favor of rural workers. At the same time, the powerful interests that control the cotton sector today would lose their estimated current annual profit of around US\$100 million, equivalent to US\$1 billion in net present value terms. These huge stakes help to explain why the situation of the cotton sector in Tajikistan is still in limbo. For farm workers and international donors, the prospect of a US\$1.7 billion resource shift to the rural poor is an extremely attractive vision that people do not want to see diluted. And for the powerful cotton interests, the stakes are also extremely high. The challenge is to find a workable compromise between the “worker owner” scenario that is greatly preferable from an equity perspective and the “latifundista” scenario which would appear unattractive in view of the potential popular discontent but for political economy reasons cannot be ignored.

3.53 Maintaining the status quo in the cotton sector is not a viable option in the longer run. The cotton sector currently greatly benefits from irrigation below cost recovery levels. This is not sustainable and, as was mentioned above, irrigation infrastructure already suffers from significant underinvestment as a result. For simplicity, the necessary future price increases for irrigation have not been taken into account in the simulations above and, if they were, the overall profits of the sector would be significantly smaller and, according to some experts, even negative for the status quo. The main implication of this, however, is that the status quo is not only inefficient but also unsustainable, which raises further the urgency of reform of the cotton sector.

Recommendations

3.54 Short Term:

- Revise the proposed cotton sector strategy to:
 - (i) better define the role and status of the debt resolution commission,
 - (ii) make the rules governing the transition of overly indebted cotton farms to large private farms more explicit, and
 - (iii) provide for the reform of the Commodity Exchange.
- Organize public discussions on the proposed cotton sector strategy with the relevant stakeholders and international experts to explore the implications of

the proposed measures in greater detail and to identify areas where the proposed strategy would need to be revised.

- Request substantial international assistance for the agricultural sector to ensure the implementation of the proposed strategy, including balancing the political economy and the equity aspects of the cotton sector reform.

3.55 Medium Term:

- Implement the revised cotton sector strategy according to a time-bound action plan, closely monitoring the impact on efficiency and equity.

C. MIGRANT WORKERS AND REMITTANCES²⁹

3.56 Remittances from migrant workers are a major source of foreign exchange for Tajikistan. Remittances to Tajikistan transmitted through the banking system alone are estimated at around US\$400 million, or 20 percent of GDP, in 2004. Total remittances, including non-bank transfers in cash and in kind transfers, are substantially higher, tentatively estimated at more than 30 percent of GDP. According to a survey commissioned by the World Bank, only one-third of the funds are actually transferred through the banking system, implying that remittances may amount to as much as US\$1.2 billion, or 60 percent of GDP. While this latter estimate would be on the high side, it is still likely that Tajikistan's dependence on remittances is currently among the highest in the world and substantially higher than in some other migrant-dependent countries like Albania, Jordan, Lesotho, and Moldova. Remittances are an important boon to Tajikistan's economy (see Box 3.1).

Profile of Labor Migration from Tajikistan

3.57 Up to one third of Tajikistan's male labor force is working abroad occasionally, seasonally, or permanently. It is estimated that Tajikistan supplies annually around 300 thousand seasonal migrant workers. Most of migrants from Tajikistan are men (85 percent). Their families are left behind to benefit from a lower cost of living back in Tajikistan and the support of their extended families. If one includes migrant workers that work and live abroad on a more permanent basis, those that are now in Tajikistan but have previously worked abroad, as well as shuttle traders, the number of migrant workers in this wider sense probably exceeds 600 thousand. While the brain drain was a major factor immediately after independence and during the civil war, when a large number of high skilled Russians, Germans, Jews, Uzbeks, and others left the country, today temporary migrants from Tajikistan represent primarily "brawn drain" and are employed in construction and other physically demanding jobs.

²⁹ This section is based on a survey by Sharq commissioned for this study and analytical work by Utkir Umarov. The section also draws on "Labour Migration from Tajikistan," International Organization for Migration, 2003.

Box 0.1: Economic Implications of Remittances

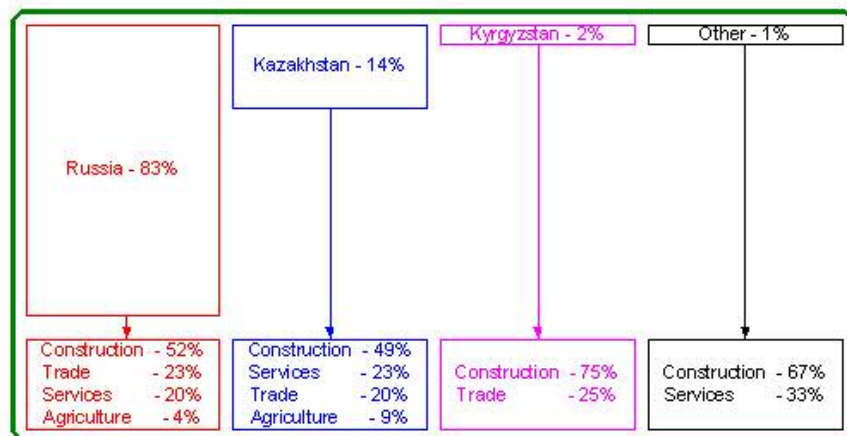
Numerous empirical studies have demonstrated that remittances have a strong effect on reducing poverty. Families that receive remittances benefit from a direct income effect. However, there is also an indirect positive effect since domestic wages tend to rise when emigration reduces labor market supply pressures. As an additional source of foreign exchange inflows, remittances also help strengthen the real exchange rate and purchasing power of the population. At times, however, the link between migration, remittances and measured poverty is ambiguous. For example, an improvement in the domestic business climate may accelerate economic growth and improve somewhat domestic salaries, leading some domestic workers at the margin not to migrate outside of the country in search of work. While the overall welfare of this marginal group of potential migrants and their families would improve, their monetary income could fall. This paradox needs to be kept in mind when living standards assessments are undertaken in economies dependent on migrant labor.

Remittances also play an important stabilizing role in a migrant-based economy as they tend to be less volatile than many other sources of foreign exchange. As a matter of fact, in some countries, remittances work as automatic stabilizers. In particular, some studies show that oil-poor countries such as Tajikistan supplying migrants to oil-rich countries such as Russia may be partly protected from oil price shocks as migrants' remittances tend to increase at the same time. However, remittances are very vulnerable to legal and administrative changes in host countries that might significantly and adversely affect the access and status of migrant workers.

Sources: Adams, R., and J. Page, "The Impact of International Migration and Remittances on Poverty," Policy Research Working Paper #3179, the World Bank, December 2003; Ratha, D., "Workers' Remittances: An Important and Stable Source of External Development Finance", in World Bank, Global Development Finance. Striving for Stability in Development Finance, Washington D.C., 2003.

3.58 Russia is the destination of choice for the overwhelming majority of labor migrants from Tajikistan. It is estimated that more than 80 percent of migrant workers from Tajikistan go to work in Russia (Figure 3.3). The five main attractions of Russia for Tajikistan's migrant workers are: (i) visa free access; (ii) attractive pay; (iii) affordable transport links; (iv) a common language; and (v) an established Tajik support network. A typical length of a migrant worker's stay in Russia is around 9 months, after which around 3 months are spent back home. Migrants typically arrive in Russia in spring when the construction season starts and return to their families back in Tajikistan in late autumn to spend time with their families when job opportunities in Russian decline during wintertime.

Figure 0.3: Destination Countries and Occupation of Migrants



Source: Sharq Survey, 2004

3.59 **A typical seasonal labor migrant from Tajikistan to Russia is able to transmit close to half of his gross earnings to the family back home.** In 2004, the World Bank commissioned a survey of 250 migrant workers. While sampling for the survey has some methodological issues, the survey data allows to construct an income statement of a typical migrant worker from Tajikistan spending around 9 months of the year in Russia (see Table 3.5). The monthly pay for migrant workers from Tajikistan in Russia, according to the survey, is around US\$300. Taking costs like transport, subsistence abroad and informal payments into account, the migrant worker's net earnings which he would be able to send back home to the family are close to US\$150 per month.

Reducing Costs of Labor Migration

3.60 **The Government can promote seasonal labor migration by implementing reforms that target the direct financial cost of migration.** A key reform that would reduce financial costs of migration is the improvement of transport links – primarily air and rail transport, which are the predominant means of transportation for migrants to Russia, – and lowering of transportation costs. As the section on aviation has shown, there is significant potential to lower the cost of air transport to Russia. Similarly, improvements to passenger rail transport should feature prominently on the Government agenda despite the fact that this is to a great extent outside the control of the Tajik Government and in the hands of transit countries like Uzbekistan.

3.61 **The large gap between net earnings of seasonal labor migrants from Tajikistan abroad and domestic incomes, however, indicates the existence of high non-financial costs of migration.** At the margin, a typical Tajik worker and his family makes a decision between the breadwinner staying in Tajikistan and contributing a salary of US\$20 per month to the family income or engaging in seasonal labor in Russia to contribute US\$150 per month in remittances to the family income. If only the wage differential mattered, many more workers would migrate to Russia to realize the net income gain of US\$130 per month. Thus, for the many workers who stay in Tajikistan despite the pecuniary attraction of working in Russia, there must be non-pecuniary disadvantages of working in Russia worth more than US\$130 per month to potential migrants.

Table 0.5: Income Statement of a Typical Seasonal Migrant Worker from Tajikistan to Russia (in US\$)

	Per season	Per month
GROSS EARNINGS:	2,700	300
Fixed expenses:	410	
Transportation	330	
Border (Informal)	30	
Other	50	
Variable expenses	945	105
Food	540	60
Accommodation	225	25
Police	135	15
Others	45	5
POTENTIAL ANNUAL REMITTANCES:	1,345	150

Source: Sharq Survey, 2004

3.62 The non-financial costs reflect both risks and uncertainties of work in a foreign country as well as possible suboptimal intra-family decision making. The risks abroad include: (i) occupational risks in the physically demanding and sometimes dangerous jobs that migrants have to do abroad; (ii) risks to personal safety due to exposure to criminal or xenophobic groups during life at the fringes of the host country's society – this risk is especially acute for those young Tajik who did not learn to speak Russian; (iii) risks due to little protection from the whims of employers and police harassment; and (iv) emotional and social consequences of longer term geographical separation. Poor intra-family decision-making processes may also hold back migration. For example, a potential migrant worker who would be prepared to go abroad to improve the lot of his nuclear family may decide not to do so in the presence of a powerful extended family that might redistribute his remittances against his wishes away from his nuclear family while he is away.

3.63 Migrant workers from Tajikistan are already demonstrating a great deal of ingenuity in addressing the migration risks but systematic Government efforts to reduce the non-financial costs of migration could lead to significant welfare improvements. For example, interviews with migrants and a recent study by the International Organization for Migration show that migrant workers economize on accommodation expenses by traveling and working in organized groups, and form ethnic networks that provide social insurance and personal safety. Certain groups even arrange to take a medical doctor with them from Tajikistan to ensure professional medical treatment without having to worry about access to the Russian health system. However, the Government also needs to take steps to reduce the non-financial costs of migration by pursuing further agreements with Russia on the legal status of migrant workers from Tajikistan, providing sustained high-quality Russian language education at schools, improving insurance mechanisms and repatriation services in an emergency for migrant workers, expanding consular coverage in the difference regions of Russia, carrying out information campaigns to raising public awareness of legal requirements for migration and support services available, and facilitating improved matching of Tajik job seekers with Russian employers.

3.64 Migration may reduce the popular pressure for broader structural reform. While the easy access for Tajik migrant workers to Russia helps to reduce poverty in Tajikistan, it also reduces the incentives for structural reforms. In a small migrant-supplying economy, structural reforms that affect either the demand or supply of labor will change the quantity of migrants but will have little impact on the effective domestic wage level. Therefore, financial benefits of reform for the population are dampened, just as are the costs of the absence of reforms. Hence, the political pressures to reform in a small migration economy are reduced. On the other hand, however, political resistance to painful reforms that might, in principle, have adverse consequences for parts of the population is also reduced since migration acts to some extent like a social safety net for those households who lose out.

3.65 Migration can help a country that is relatively slow to reform to perform surprisingly well, as the experience of Tajikistan demonstrates. However, this makes

the country vulnerable to increases in barriers to – or costs of – migration. For example, Tajikistan’s economy would suffer a serious shock if access to the Russian labor market were to become more restricted. The three strategies to prepare for such an eventuality that could be pursued jointly should be (i) domestic structural reforms; (ii) the diversification of migration to a wider set of destination countries; and (iii) measures that decrease the likelihood of adverse changes in the key host countries. An example of the last might be the pursuit of well thought-through public diplomacy that educates Russians about the significant welfare gains that a rapidly ageing and highly educated Russian population draws from the influx of a supplemental workforce from Tajikistan.

Recommendations

3.66 Short Term:

- Systematically review government services for migrant workers in Russia and develop action plan coordinated by State Migration Service under the Ministry of Labor.
- Research the basic skills relevant for migrant workers in Russia, including language skills, basic medical skills, commercial skills, and construction skills and develop action plan on how to improve relevant skills for the current generation of school leavers.
- Review Tajik Air fleet renewal plans to assess their potential to reduce ticket prices for migrant workers through (i) a lower cost structure of Tajik Air, and (ii) opening of the markets to competition (see also Chapter 2 for additional recommendations on reforming air transport in Tajikistan).

3.67 Medium Term:

- Develop Multi-Level Strategy for Migration to Russia, including best practice working level relations, low intensity but systematic public diplomacy, Russian language initiative etc., building on existing efforts to improve the legal status of migrant workers in Russia.
- Identify other potential key markets for labor migrants (e.g., the Gulf states and Iran) and develop strategy to develop a critical mass of Tajik migration workers in, say, two addition destinations, for example Dubai and Teheran.
- Improve the understanding of how intra-family relations and growth affect migration and poverty in Tajikistan.
- Draft and adopt air transport and rail transport strategies and corresponding action plans that take the strategic importance of cheap and reliable air and rail transport for migrant workers into account (see also Chapter 2).

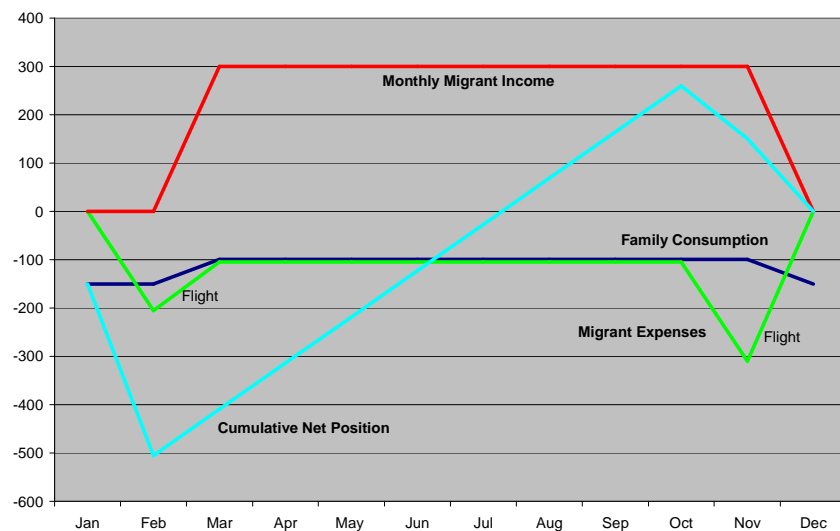
Enhancing the Role of the Financial Sector in Facilitating Labor Migration

3.68 **The development of the financial sector can help a remittance-dependent economy in a number of important ways.** First, a developed financial sector can transfer remittances at low cost from migrant worker to dependents at home. Second, a

developed financial sector can help credit constrained potential migrant workers and smooth consumption of families over the annual income cycle of the seasonal worker and over individual risks. Third, the financial sector can accumulate migrants' savings and channel them into investment.

3.69 The transfer of remittances from labor migrants via the banking system is already inexpensive and smooth, but trust in the financial sector in Tajikistan is still very low. The effective 30 percent tax on remittances which had previously constrained remittances was abolished in 2001 following advice from the World Bank. This led to a sharp increase in bank transfers from abroad – from less than US\$20 million in 2000 to more than US\$400 million in 2004. Today, the cost of transferring money from Russia to Tajikistan in the amounts typical for migrant workers is estimated at between 1 and 3 percent of the amount transferred, comparing favorably with Western Union transfers from the US to Mexico. However, according to the survey commissioned by the World Bank, only 30 percent of remittances are transferred through the banking system and most recipients immediately take their remittances out of the Bank, reflecting low trust in banks.

Figure 0.4: Stylized Cash Flow Profile of a Seasonal Migrant and His Family



3.70 The banking sector needs to be strengthened to play a role in smoothing consumption for seasonal workers and their families. Figure 3.4 shows a stylized seasonal earnings and consumption pattern of a Tajik migrant worker in Russia and his family. The marked seasonality in the figure is also supported empirically by monthly remittance data from Tajikistan's commercial banks. While no longitudinal data is available, the cross sectional data suggest that a 40 percent income shock for a migrant in a given year is not uncommon. For migrants and their families, it would be desirable to smooth consumption, possibly by borrowing from commercial banks. However, without a bank account and regular payments, access to formal credits by migrants is restricted and the availability of micro-credit remains relatively limited and expensive. For consumption smoothing credits, people instead tend to rely on their extended family and neighborhood networks. A developed banking sector would likely be more efficient in

smoothing consumption than informal networks, however. Financial instruments to deliver credit to the household clients, either through overdraft facilities or credit cards, should therefore be promoted by the monetary authorities.

3.71 Commercial banks may also play an important role in promoting temporary migration by providing them with pre-financing. There continue to be many people in Tajikistan who would like to engage in seasonal labor in Russia but are unable to put up the initial investment sum, including the airline ticket and the initial living expenditures for the job search in Russia. It might be worth considering targeted micro-credit schemes for these people. Such a micro-finance initiative could have particularly strong poverty reduction effects.

3.72 Increasing migrants' savings in the domestic banking system and channeling the savings into productive lending are key to promoting longer-term development. Currently remittances are immediately withdrawn from commercial banks to be spent mostly on consumption, personal debt repayment, ceremonies or to be kept as savings held at home. With the establishment of trust in the banking system, however, deposits would start to increase first seasonally and then year round, expanding commercial banks' lending envelope. As a result, larger credit volumes for investment projects would become more readily available. They could help to fund private sector investments that the country badly needs. The entry of foreign financial institutions could also help overcome the problem of low trust in the financial sector. For example, Russian banks could play an important role, by initially opening bank accounts for migrants in Russia and later, if the same bank also starts operating in Tajikistan, migrant workers may eventually prefer to increasingly shift funds to their accounts with Tajik banks. However, for these opportunities to fully materialize the general business climate that today remains plagued by red tape and corruption would have to improve significantly. The World Bank is currently providing analytical support to the Government in formulating policies to enhance development impact of remittances.

Recommendations

3.73 Short Term:

- Conduct in-depth analysis of why even today, according to surveys, only 30 percent of funds are transferred through the banking system.

3.74 Medium Term:

- Attract more foreign financial institutions to enter the Tajik market to improve the trust in the banking system.
- Create incentives for commercial banks to develop consumption-smoothing financial instruments.
- Develop micro-finance initiative targeted at potential seasonal workers to help them fund their initial expenses (ticket, etc.) for the trip to Russia.

OPPORTUNITIES FOR FDI-DRIVEN GROWTH

4.1 This chapter analyzes how to make Tajikistan more attractive for foreign direct investment (FDI) and investigates FDI-driven growth possibilities in specific industrial sectors. The chapter first focuses on the overall incentive regime for FDI, including the role of privatization. This is followed by a case study of the textile industry. The chapter then describes an analytical framework for exploring other, more medium-term, opportunities for FDI-driven growth, which is illustrated with an application to several sectors where Tajikistan appears to have a comparative advantage.

A. INCENTIVE FRAMEWORK FOR ATTRACTING FOREIGN DIRECT INVESTMENT

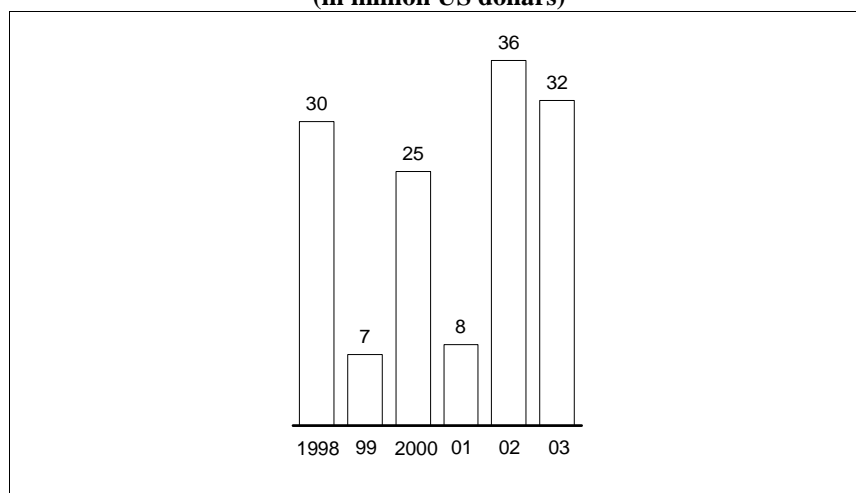
4.2 **An adverse business climate is probably the most important constraint to attracting FDI to Tajikistan.** Recent reviews of the business climate in Tajikistan paint a rather gloomy picture, with Tajikistan performing badly and below most comparator countries in many indicators (exports, foreign ownership, access to bank credits, training, supply of energy, number of inspections).³⁰ A favorable business climate cannot be created overnight. Thus, even though a number of laws designed to improve various aspects of the business climate are in the process of being prepared (most notably the microfinance law which recently passed the lower chamber of Parliament), attracting FDI to Tajikistan is likely to continue to be a serious challenge in the medium-term.³¹ The cumulative flow of FDI to Tajikistan has not yet reached a critical threshold where the attraction of new investment becomes a sort of self-propelling activity.

4.3 **The flow of FDI to Tajikistan's has been very low and erratic over the last few years** (see Figure 4.1). The main reason for the volatility is that the total annual flow is on such a low level that a single investment can considerably skew the picture as a whole. For example, in 1998 71 percent of the total flow of FDI was accounted for by one English investment into a mining company.

³⁰ For instance, the business climate surveys of the IFC and WB/EBRD BEEPS surveys.

³¹ A number of existing laws and regulations contribute to the poor business climate. For instance the regulation of the Council of Ministers of the Republic of Tajikistan No. 647 (December 31, 1993) obliges business partners of potential joint ventures to first submit all necessary documents to Ministry of Industry and Trade for consideration. This certainly has a deterring effect on possible business partners from abroad.

**Figure 0.1: Direct Foreign Investment, 1998-2003
(in million US dollars)**



4.4 There has also not been a steady flow into any specific sector except the service sector broadly defined and, to a lesser extent, the chemical and pharmaceutical sector (see Figure 4.2). One notable and worrying trend is the steadily decreasing number of joint ventures, from 278 in 1997 to 101 in 2002.

**Figure 0.2: Foreign Direct Investment by Industrial Sector, 1998-2003
(in percent)**

Sector	1998	2000	2001	2002	2003
• Chemical*	0	0	7	8	33
• Agriculture	3	0	0	0	30
• Service	5	6	5	7	18
• Textile	0	29	1	3	11
• Mining	71	24	73	30	5
• Trade	11	8	10	19	3
• Food processing	8	33	0	17	0
• Construction	0	0	0	16	0
• Others	2	0	4	16	0
Σ	100	100	100	100	100

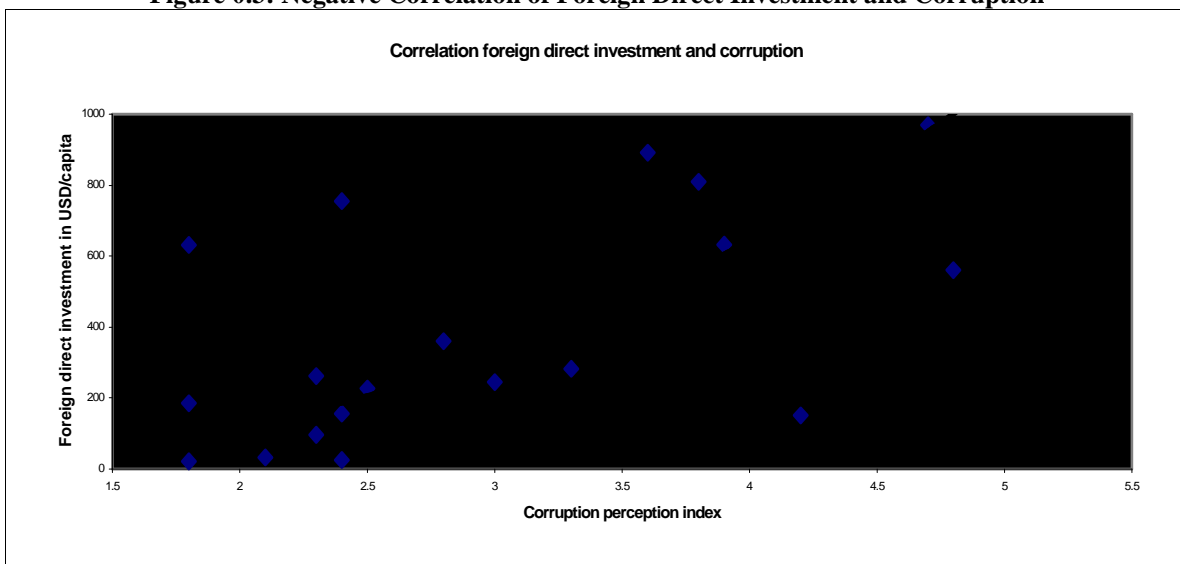
* Incl. pharmaceutical
Source: National Bank Tajikistan, National Bureau of Statistics

4.5 Tajikistan compares unfavorably to all the other Central Asian states in attracting FDI. This can in part be explained by particularly adverse economic preconditions and geographic location. However, the principle reason why most foreign investors bypass Tajikistan is a particularly adverse business climate. The level of corruption is an important part of the business climate. In the graph below the degree of corruption is mapped against the net FDI per capita of a set of transition countries. As Figure 4.3 shows, there is a clear negative correlation between the degree of corruption of

a country and their success in attracting FDI. Countries with high levels of corruption and therefore a low ranking in the corruption perception index like Tajikistan have been unsuccessful at attracting FDI. The exceptions to this rule are countries with extraordinary natural resources such as Azerbaijan and Kazakhstan. Tajikistan is at the bottom of the graph both in terms of FDI per capita and in terms of corruption (with an FDI/capita of 21 USD corruption perception index of 1.8 out of 10).³²

4.6 Privatization in Tajikistan has not proven a successful means to attract foreign investment into the country due to a number of reasons elaborated below. It is vital that these mistakes not be repeated in the upcoming rounds of new privatizations, and Tajikistan should follow the roadmap sketched out in cooperation with the World Bank and other donors with respect to some of the biggest companies to be privatized.

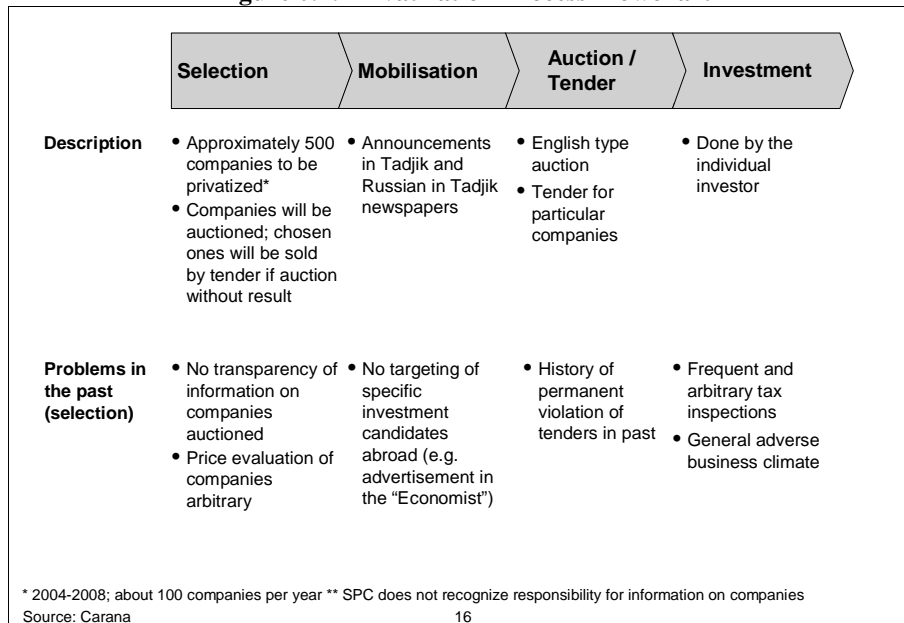
Figure 0.3: Negative Correlation of Foreign Direct Investment and Corruption



4.7 At the end of 2003 only 9 out of 507 privatized medium-sized and large companies attracted a foreign investor, and the net investment was only US\$12.3 million. The companies sold belonged to the cotton sector (5), the textile sector (2), the transportation sector (1) and the food processing sector (1). The foreign investment came from Switzerland (61 percent), United States (28 percent), Cyprus (8 percent), Russia (2 percent) and Germany (1 percent).

³² The corruption perception index of Transparency International relates to perceptions of the degree of corruption as seen by business people, academics and risk analysts, and ranges between 10 (highly clean) and 0 (highly corrupt). The highest values of FDI/capita among transition countries are actually not on the graph. They are found in the Czech Republic (US\$2,997 per capita), Slovak Republic (US\$1,681 per capita), Estonia (US\$1,646 per capita) and Slovenia (US\$1,175 per capita). All of these countries have relatively low levels of corruption (corruption perception index between 3.9 and 5.9).

Figure 0.4: Privatization Process Flowchart



4.8 **The low level of foreign investment generated through privatization is not surprising since the privatization process has deterred rather than attracted foreign investors.** Figure 4.4 above summarizes the past privatization process and some of its shortcomings. Two areas in particular stand out: (i) the lack of *marketing* (or the lack of mobilization of investors prior to the privatizations); and (ii) the lack of *transparency* in the actual running of the auctions.

4.9 **The marketing efforts were not aimed at any particular target groups.** Little effort seems to have been made in advance to identify which investors might realistically have been interested in the enterprises on offer. The authorities did not identify and target potential investors in a systematic and structured manner. They did not seek the support of marketing specialists of an international organization. Table 4.1 below gives an indication of some of the steps that should be taken in a best practice marketing process.

4.10 **The target group of potential investors should be selected as specifically as possible.** The more specific a target group for a particular group of companies to be privatized the easier it will be to offer them a specific value proposition.

4.11 **The other practice of Tajikistan’s past privatization process which deterred foreign investors was the lack of transparency in the operation of the tenders and auctions.** The few foreign investors potentially interested in some of the companies were often muscled out of the bidding. In fact the tender in the past lacked transparency to such an extent that some of the outcomes cannot be explained within the framework of the current law.

Table 0.1: Steps Taken in a Best Practice Marketing Process

<u>Activity</u>	<u>Objective / Background</u>
Review all companies to be privatized and put together a realistic assessment of their present assets. ³³	Transparency necessary basis for potential investor.
Categorize the companies on offer according to industrial sectors, then according to functions of the sector's value chain.	Premise for addressing potential investors more specifically.
Provide data for market size (domestic, Central-Asian, Russian) of the specific sectors to illustrate conditions for access to market.	First key driver for investors: access to market.
Provide specific information on the educational situation (universities, institutes, number of graduates per annum) to illustrate conditions for access to qualified people.	Second key driver for investors: access to qualified people at low costs.
Make all results available online.	Standard means to make relevant information readily available to a broad target group.
Think of potential investors in terms of complementarities, vertical or horizontal integration etc.	Premise for targeting potential investors more specifically.
Carry out sector-based survey of which company is already engaged in neighboring countries of Central Asia.	Company with experience in region more likely to risk new investment.
Set up list of all potential investors to be targeted by different means (see below).	Basis for target group specific promotion.
Set up sector-specific list of possible channels of promotion (e.g. international business associations, web sites, journals, fairs etc.).	Sector-specific promotion avoids scattering loss. ³⁴
Prepare channel-specific and target group specific value proposition for privatization.	Message to be conveyed depends on target groups and channels. ³⁵
Prioritize marketing measures to be taken	Avoids trap of fruitless dispersion of energy.

4.12 **In the wake of this flawed privatization process, privatized companies in general are in a poor state.** They have had little success in opening new export markets. They have little access to credit. Investment needs are large. Many privatized companies continue to rely on antiquated machinery, usually dating from Soviet times. New production lines, such as packaging suitable for export to European countries, need to be established. Given their predicament, the need for strategic investors to step in and provide investment, raw materials and working capital is now greater than ever. One

³³ At present the State Privatization Committee officially declares not to be responsible for the correctness of the information on the companies to be privatized.

³⁴ As opposed to random advertising, e.g. in the Economist.

³⁵ As an example a company already engaged in Central Asia need not be told of the specific difficulties of doing business in the region as well as of the possibilities to overcome those.

possible way forward at this point would be to establish a post-privatization support agency. This recommendation will be discussed below.

4.13 In fact, **a number of reforms are needed to improve business conditions in Tajikistan and to attract more foreign direct investment.** The remainder of this section discusses such reforms including: (i) the establishment of a clearing institution for small and medium enterprises (SMEs); (ii) the assignment to the Ministry of Economy of responsibility for FDI in partnership with an international business association; and (iii) the establishment of a post-privatization support agency.

4.14 **In a corrupt climate like that of Tajikistan, companies need a clearing institution to turn to in case of administrative harassment.** A *two-tiered approach* is suggested here in recognition of different degrees of access to the Government and financial ability to sustain legal proceeding for SMEs and big companies with foreign investment.

4.15 **The clearing institution should consist of a State ombudsman and a private ombudsman.** The State ombudsman should be elected by Parliament with a two-thirds majority to help ensure that he will not be subject to any particular interest group. If Parliament cannot agree on a State ombudsman with a two-thirds majority in two consecutive rounds the candidate should be elected with a simple majority. The private ombudsman should be selected and financed by an international organization. Both ombudsmen should be trained lawyers and have intimate knowledge of the legal framework. The dual ombudsmanship would serve both to forestall corruption in the clearing institution itself and signal that corruption in the country can only be fought in a joint effort of the state and the private sector. The ombudsmen should work together on all cases.

4.16 **The clearing institution should be promoted to its clientele through a variety of channels including ministries, business associations, newspapers and others.** Any enterprise in Tajikistan must know that in case of presumed institutional harassment they can turn to the clearing institution. The proposal is that the ombudsmen would act in a complementary way with existing administrative and legal proceedings. The ombudsmen would not replace the existing legal framework. The ombudsmen would, however, point to shortcomings within the existing system in order for it to be reviewed. In short, the ombudsmen would not have executive power, but would draw attention to a supposed violation of rights. They would do so by taking note of the presumed harassment at hand and by reporting to the implicated authority. A key feature of their work would be the follow-up: each case would have to be “finalised” in the sense that the ombudsmen would obtain testimony from the incriminated authority in written form. Again, however, they would not have executive power of enforcement. The result – whether or not an official statement has been obtained – would be recorded and passed on to superiors within the incriminated institution and to the Ministry of Justice. In addition, the ombudsmen would give legal advice to the companies, but under no circumstances would they become partial, (for instance they would not engage actively in any court case). The ombudsmen would derive their power from their documentary function. Twice a year they should consolidate the cases in order to report to Parliament. This report would be statistical and

general (e.g. the number of complaints per industry sector, per region, per type of inspection). Particularly blatant examples could also be highlighted in a sanitized way.

4.17 There is one other aspect to institutional corruption that should be taken into consideration. Institutional corruption derives its force from referring to specific legislation which lend themselves particularly well to being exploited in a corruptive way. Other laws may be altogether superfluous or may have even been created with a particular corruptive possibility in mind. To help address such institutional corruption the ombudsmen should in addition to their semi annual consolidated report to Parliament also submit a “simplification proposal” once a year. This proposal would contain suggestions for particular legislation to be either simplified or annulled in order to remove some of the legal basis for cases of institutional harassment.

4.18 The Government should specifically assign responsibility to the Ministry of Economy (MOE) for attracting FDI. The MOE should also maintain regular contact with investors already in Tajikistan. This could take the form of a consultative council with representatives of major foreign invested companies. It should be emphasized that this proposal is temporary in nature. It is designed to bridge the present unfavorable situation in Tajikistan when FDI consists mainly of single investments. Once a critical mass of FDI has been reached the tenure of this proposal would cease.

4.19 Large companies, international financial institutions, and legal and auditory firms operating in Tajikistan should be encouraged to form an international business association. This association would represent the common interests of its members in Government policymaking, legal drafting, tax reform, and good governance. It would also be a partner for the MOE in its efforts to attract FDI and improve the business climate. Similar organization have already been established successfully in other Central Asian countries such as. Kyrgyzstan. The initiative for this association should essentially come from the private sector. Nevertheless, the Government could further any such attempts by assigning the MOE with responsibilities described above. The MOE should hold regular consultations a consultative council of the international business association.

4.20 A strategy is required to support the post-privatization process. This strategy should help Tajik companies to locate potential foreign investors. In other countries, such assistance is often provided by intermediaries such as business brokers, investments banks, trading companies, and even private individuals. It is unlikely that many Tajik companies could afford such services. On the other hand, there may be foreign companies willing to expand and to invest in Tajikistan but they are not acquainted with potential Tajik business partners and relevant business opportunities. Again, intermediaries could offer the necessary service if they had appropriate incentives.

4.21 The proposed Post-privatization Investment Initiative (PPII) would help privatized enterprises in their search for investment by locating a suitable middleman and providing a significant portion of the fees for the intermediation services through an intermediation grant. In view of the difficult business environment in Tajikistan that can also affect the success of donor funded initiatives, the following paragraphs provide the

safeguards and mechanism that the PPII should use in some detail. A formal application for such a grant would have to be established. To ensure that interested enterprises would have a stake in this process, they would be required to contribute a portion of the fee themselves. The PPII would promote its grant scheme amongst Tajik enterprises and potential intermediary service providers. The grant scheme would give the service providers an incentive to seek business opportunities with Tajik enterprises in need of such services. The grant should be disbursed after the elapse of a vesting period in order to prevent misuse.

4.22 The PPII should be an independent donor funded non-profit organization. It should not report to any State organization. However, it should have the explicit support of the Government. The PPII should maintain regular communication with the MOE, the MIT as well as the State Privatization Committee (SPC) where its services may be promoted. Nevertheless there should not be any reporting relationship between the agency and these Government institutions. It should be a lean organization staffed with Western consultants and carefully selected local professionals. It should be funded by a donor, providing a strictly limited sum of money. If and when the PPII proves successful, more donor resources could be attracted. However, the initiative should be viewed as strictly time bound, designed for the immediate aftermath of the ongoing privatization process.

4.23 In most cases the intermediary service provider would be asked by an enterprise (through the PPII) to search for an appropriate investor. Once the retainer fee has been paid (by the enterprise with the considerable help of the PPII) the intermediary would begin the search. In other cases the PPII might also be approached by investors who seeking potential suitable Tajik enterprises for a given business opportunity. In general, the intermediation service would include not only the search for appropriate strategic investment partners but also assistance in properly presenting Tajik investment opportunities. As most Tajik enterprises are not familiar with professional marketing, this aspect is very important for the success of the deal. The presentation would involve the preparation of a project proposal or an offering document which articulates a clear business orientation. The investor is not a donor. Once a potential partner has been identified, he would be brought together with the enterprise and kept together until the deal is consummated. Thus the services of the intermediaries would also include assistance in the negotiation and contract process as well as keeping the deal together from the due diligence process to closing and subsequent follow up during the implementation phase. Typical foreign investment in this context might include involvement of strategic partners in contract manufacturing, technology transfer, fixed capital investment or plant completion and buy-outs. Each of these types of investments may call for a different type of intermediary. Thus one of the functions of the PPII would be to carefully select not only the enterprises applying for the grant scheme but also the intermediaries themselves.

4.24 The proposed PPII would have five separate functions.

- a. **Administration:** The PPII would process applications for the intermediation grants,³⁶ review and approve the contracts between the enterprise and the intermediary, and process the payments when the fee claims are submitted. The PPII would also administer a roster of selected intermediaries, listed by sector and other specialization. One of the functions of the PPII in this regard would be to continually contact and maintain dialogue with the intermediaries as well as with users of such intermediaries in order to monitor the process and safeguard the quality of the intermediation services offered.³⁷ Thus it will be necessary to install a feedback process. In the case of negative experiences the intermediary would forfeit the right to appear on the roster.
- b. **Promotion:** The PPII would need to adopt a proactive role in creating awareness for its scheme among Tajik enterprises as well as amongst intermediaries. This should be done through business associations in Tajikistan and its neighboring countries, foreign trade agencies, industry fairs, local and national newspapers, and other channels. Again, the target group is twofold – enterprises in need of intermediation as well as potential intermediaries themselves. As to the prospective intermediaries the PPII would canvass them on its roster and induce them to likewise promote their intermediation services to prospective clients.
- c. **Supervision:** The PPII would maintain set contracts to assist the enterprises in dealing with the intermediary.³⁸ In approving the grant, the PPII would take into consideration the validity, arms length nature, vesting period and other aspects of the contract. All parties should be aware that the PPII would bear no responsibility for the actual transaction. Once the contract is approved and accepted, performance under the contract would be the concern and the responsibility solely of the parties to the contract. However, the PPII would monitor the proceedings and results in order to be able to decide whether a particular intermediary will remain on the roster in future.
- d. **Disbursement:** The PPII would administer the disbursement of the grant to the intermediary. A number of prior conditions would have to be fulfilled. The enterprise would present proof of payment of the retainer to the intermediary. It would then be reimbursed according to the schedule outlined below. A vesting period of 6 months would have to elapse before payment of the performance-based part of the intermediary's fee. The enterprise would present a full account

³⁶ Eligibility criteria for access to PPSA grants would need to be worked out thoroughly. Applicants would have to be Tajik enterprise which was fully private or fully privatized. A realistic business plan or expansion strategy would be required. The enterprise would be required to contribute some portion of the retainer fee.

³⁷ A Tajik enterprise would also be free to access the PPSA if it located its own intermediary as long as it could demonstrate that its relationship with this intermediary was at arms length. For example, the intermediary should not be an employee or officer or shareholder of the enterprise or any relative of any of these groups. Also none of the above mentioned groups should have a beneficial interest in the intermediary.

³⁸ The enterprise would ultimately responsible for writing its own contract and the PPSA would not reject any contract as long as it met the PPSA's policy guidelines.

of the utilization of the investment up to that time. The privatization of the enterprise would have to have been completed.

- e. **Evaluation:** To avoid corruption and fraud, there would be a clear obligation to utmost transparency on the part of all parties involved (enterprise, intermediary, investor, PPII). In addition to the vesting period described above, the cases of successful intermediation would be reviewed each year for three subsequent years. This would help ensure that an enduring investment actually took place. This practice would also serve as a continuous review of the PPII's operations.

4.25 The co-payment by the PPII will depend on the size of the investment brokered. A ceiling could tentatively be defined at US\$65,000. The co-payment rate would decrease with the level of the fee to help ensure that the number of enterprises supported would be spread out evenly. However, the type of co-payment would be subjected to a review after the first year and subject to adjustment. An initial possible schedule for co-payment is illustrated in Table 4.2.

Table 0.2: Schedule of Co-payments

	Level of Fee	Co-payment rate of PPII	Net amount of co-payment by PPII	Net amount of fee to intermediary
Up to	\$20,000	75%	\$15,000	\$20,000
Next	\$50,000	50%	\$40,000	\$70,000
Next	\$100,000	25%	\$65,000	\$170,000

4.26 The transactions are likely to involve intermediation fees of around 3-5 percent of the transaction value. If the average co-payment rate were about 50 percent with a closing rate of also about 50 percent, a US\$2 million aggregate intervention in the form of subsidies towards intermediation fees could result in a net inflow of US\$40 million in various forms of FDI. This would double the FDI from 2003 levels.

4.27 An institution such as the proposed PPII ultimately has the objective to put itself out of business. The risks of the participants involved and the international donor providing the funding can be contained. In a best case scenario, the fund would be depleted so quickly that it would have to be replenished within two or three years after inception. If successful, it will be comparatively easier to entice other donors to become involved. In a worst case scenario, few cases of successful intermediation would take place. In order to minimize the loss of retention money, the PPII should initially limit its coverage to not more than two or three intermediation projects at a time.

B. TEXTILES: A CASE STUDY

4.28 Production of cotton fabrics and clothes was an active industry in Tajikistan prior to the Civil War but has since suffered from a significant downturn. Such production is now slowly picking up again (see Box 4.1). However, the bulk of Tajik cotton is exported in an unprocessed form. In 2002 only 142,600 tons of ginned cotton fiber was extracted out of about 516,000 tons of raw cotton. Only a small amount was

ultimately processed to fabric in the country. Recently, the Government of Tajikistan announced a plan to increase the amount of cotton processed in the country from 18,000 tons in 2005 to 65,000 tons p.a. by the year 2015.³⁹

4.29 Indeed, given the high transportation costs associated with Tajikistan's remote geographic setting **there are substantial economic reasons for fostering the vertical integration of the textile industry in Tajikistan and increasing the amount of cotton processed to fabric in the country.** Tajikistan is rich in cotton which will be exported one way or the other. However, exporting it after various processing steps lowers the costs of transportation, as the voluminous cotton shrinks in size during fabric formation and even more in the production of ready made garments thus lowering the costs of transport considerably.⁴⁰

4.30 Furthermore, **an increased processing depth would also imply a higher content of extremely cheap labor in Tajikistan's exports and higher tax revenue for the Government.** According to an estimation of the Ministry of Industry 1 ton of ginned cotton generates tax revenue of about US\$135. The same ton of cotton, if processed into finished goods in the country, generates about US\$600.

4.31 Finally, **developments in the global marketplace make changes in Tajikistan's textile sector inevitable.** Almost 70 percent of manufactured exports by small, low-income land-locked countries are textiles and garments.⁴¹ The expiration of the multi fiber agreement (MFA) at the start of 2005 has led to an intensely competitive market marked by China's growing dominance. Experts concur that countries with a high degree of vertical integration are more likely to withstand this competition.⁴²

4.32 **Tajikistan thus would likely benefit from the development of a textile industry that covers all the steps in the production process.** In fact, Tajikistan is likely to be more competitive in the textile industry than in other equally labor intensive industries. The reason for this is again the costs of transportation. For most other industries the base materials have to be imported into Tajikistan, thereby substantially increasing costs of transportation and negating the competitive advantage to be gained from cheap costs of labor.

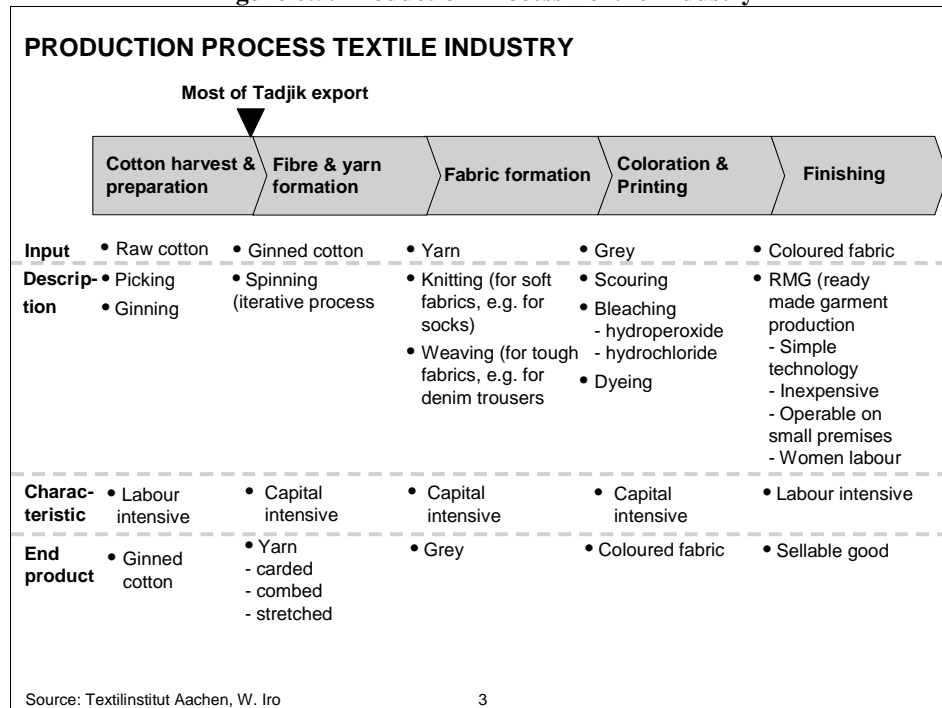
³⁹ *The program for economic development of the Republic of Tajikistan up to the year 2015*, p., 51: "The industry sector faces the task to increase the volume of processed cotton fibre into a finished product to 18,000 tons p.a. by 2005, to 50,600 tons by 2010, and to 65,000 tons by 2015."

⁴⁰ A quick calculation illustrates this: Transport of cotton to the Riga by rail costs about US\$4,000 per wagon of 40 tons or US\$0.1 per kilogram of ginned cotton. However, these costs are reduced by about 25 percent or US\$0.025 if the cotton is processed into woven fabric prior to its transportation. If we assume 1 kilogram of cotton to be used per textile unit and the share of cotton in the production cost in total to be around 50 percent, the overall reduction of the costs of production per textile unit would be 1 percent.

⁴¹ Ng, F. and A. Yeats. Export profiles of small landlocked countries: a case study focusing on their implications for Lesotho. World Bank, WPS 3085. 2003.

⁴² For example the ITC report *Trade Promotion in Central Asia: Tajikistan – Preliminary Assessment of National Export Potential*, 2003, page 52: "...countries with a vertically integrated light industry (production of cotton fibre, yarn, fabrics and clothes) will remain on the scene, to the detriment of countries, essentially active in pure assembly, which based their comparative advantage on quota allocations."

Figure 0.5: Production Process Textile Industry



4.33 **The textile value chain can be broken down into five independent steps culminating in the production of ready made garments** (see Figure 4.5 above).⁴³ The process starts with the labor intensive harvesting of raw cotton and ends with the equally labor intensive finishing of the ready made garments (cutting, sowing). In between there are several capital intensive processing steps that include the treatment of the raw cotton (ginning, spinning) as well as the production of fabric (weaving or knitting) and the coloration (and the printing) of the fabric.

4.34 **There are only a handful of spinning mills, weaving and knitting factories in the country.** Most of them grapple with a number of distinct problems, the most important ones being an obsolete, ill-maintained machinery coupled with difficult access to capital, irregular energy provision and a lack of marketing know-how (see Box 4.1).

4.35 There are some international investors in Tajikistan, mostly in the area of Khujand. Giavoni, an American-Tajik joint venture, came to Tajikistan 10 years ago. The company recently opened a third factory in Khujand. Giavoni produces cotton trousers, cotton shirts and denim trousers for the European market and is almost fully integrated. It employs about 3,500 people.

⁴³ K. Mainuddin, *The Case of the Garment Industry of Dhaka, Bangladesh*, 2000. The finishing of the ready made garments can be done in small independent sewing shops. In Bangladesh for instance, one of the leading countries of garment production, more than 50 percent of firms in the textile industry employ less than 300 workers.

Box 4.1: Self-made Spare Parts for Obsolete Machinery

In Resandai Kurgantepa, a privately owned spinning mill in Kurgan Tube employing 1,000 workers, a number of pressing problems are illustrative. While the company's processing capacity is around 20,000 tons of cotton fiber p.a., the actual volume of processed fiber is closer to 4,000 tons due to chronic problems with antiquated machinery. The equipment is mostly from Russia and Uzbekistan and is of an early 1980's vintage. In 1989 the company did buy new German combing machinery. However, the quality of the input from the non-German machinery is too poor to be fed into the German combine. In one production unit only 10 of 60 machines were in working condition. Spare parts are difficult to obtain as some of the suppliers have since gone out of business or are no longer producing the old machines. The company has hence resorted to assembling the most important spare parts themselves. However, qualified personnel is difficult to find and the key technical staff responsible for spare parts left for Russia several years ago. The spun cotton is almost exclusively exported to Russia. The company lacks proper packaging and has resorted to weaving cotton fabric and wrapping up the spun cotton in it. In addition to this from October to March the company can only work about 3 months out of 6 months since electricity is frequently switched off. In order to prevent the loss of qualified people the company pays its workforce half of the average salary of 70 somoni per month when the work cannot be done due to a power cut off.

4.36 Another company, Kabool Tajik Textile is a joint venture with the South Korean Kabool LTD. This company also came to Tajikistan about 10 years ago. Kabool Tajik Textile produces only fabric (colored and non-colored) and sells to a global market. Other examples of textile industry in Tajikistan are a Vietnamese silk factory and SATN, a recently established Tajik-American joint venture.⁴⁴

4.37 **The preconditions for a textile cluster are favorable in Tajikistan** given its large production of cotton, a cheap work force, and a sufficiently sizeable industry with a clear geographic focus around the area of Khujand. Despite these factors, a number of obstacles to sustainable growth in this industry remain.

4.38 **The price for cotton – both for export and domestic sale – is bound to the Uzbek quotation which in its turn is determined by the Liverpool price index.** The Liverpool quotation determines a set price for a bale of medium cotton daily by taking the five cheapest cotton provinces and adding freight and insurances. The local cotton producers are not allowed to sell their product below the Uzbek quotation in either the export market or to local producers. This restriction eliminates the competitive advantage of local textile producers to lower costs of transportation. Tajikistan's competitors do not face such restriction. For example, in Uzbekistan the price for domestically processed cotton is 15 percent lower than the export price. In addition, Uzbek textile producers are granted a 60 days vesting period before having to pay for the cotton. Another ill-considered regulation in Tajikistan with regard to the cotton price is the 10 percent tax on the sale of ginned cotton to domestic textile companies which is levied independently of the usual VAT.

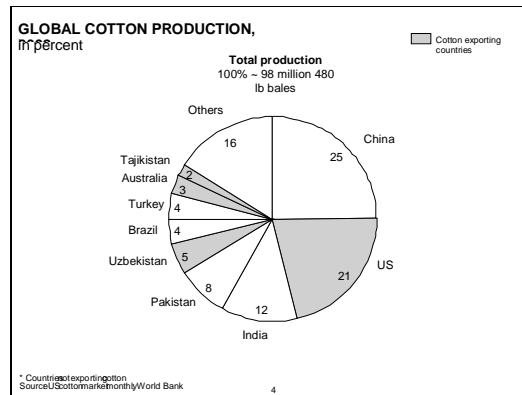
4.39 **Another obstacle to growth in Tajikistan's textile industry is the lack of hedging instruments which results in short-term contracts between cotton producers and garment producers.** Most such contracts in Tajikistan are currently

⁴⁴ SATN opened in March 2004. The factory will employ about 900 people producing 800,000 units of ready made garment.

limited to three months. If the cotton price for domestic sale were liberalized, potential foreign investors would find Tajikistan a more attractive country to locate their garment production and local cotton producers would have the opportunity to hedge and enter longer term contracts.

Box 4.2: Tajikistan in Global Cotton Production, 2002

The total production of cotton worldwide in 2002 was 98 million 480 lb bales. China produced 25% of this global production while India and Pakistan also have sizeable cotton industries. However, these countries mainly produce for their domestic garment industry and even import some raw material. The main cotton exporting country is America which makes up about 20% of the world's production. Tajikistan produces about 2% of the world's cotton production.



4.40 **A number of base materials for textile production are imported by integrated textile companies in Tajikistan.** These materials include “accessories” such as metal buttons, zippers, buckles, and acids used for coloration. Such materials make up for 15-20 percent of total production costs. Recently the import tariff for accessories was raised from 5 percent to 15 percent. This measure effectively means an increase in the costs of production by about 2 percent and thus poses a serious threat to profitable garment production in Tajikistan. International experience clearly demonstrates that rather than increasing the costs of production the Government should endeavor to contain costs. For example, the Government of Bangladesh has taken a number of measures over the past 30 years to support its textile industry which has grown to such an extent that it makes up two thirds of the country's exports. One such measure in Bangladesh was the creation of bonded warehouse facilities which allow export-oriented factories to import their raw materials duty free.

4.41 **The low cost of labor in Tajikistan is attractive to potential foreign investors, but much needs to be done to raise the low level of worker productivity in Tajikistan.** Tajik productivity in the garment industry is only 45 percent of Chinese value added per worker and compares even less favorably to Poland and India. While the general level of education in Tajikistan is still relatively high, teaching in the textile institutes is done on out-dated machinery. As a result, much retraining on the job is required. Teaching also lacks a business and management orientation. In order to compensate for this situation, the Giavoni company now plans to establish a new textile institute in Khudzand that would operate in close cooperation with the local business

school as well as the various textile companies in the region. This institute would mainly train candidates for managerial functions. The benefits of such an institute could create positive spill-over effects if future graduates eventually open new textile companies.

4.42 One of the factors behind Tajikistan's low productivity levels is the lack of stable provision of energy. A recent World Bank study (BEEPS) shows that Tajikistan has the highest frequency of power outage among a group of comparator countries including Moldova, Kyrgyzstan and Uzbekistan.⁴⁵ In some factories, production is simply stalled for half of the winter months. Also, light variances in power can cause weaving machinery to produce irregular fabrics.

4.43 There are a number of administrative obligations that hamper garment production in the country in general as well as in the region of Khujand. Textile companies have to comply with a dual system of certification both from local authorities as well as the usual export certification. Textile companies are subjected to numerous inspections including visitations on the grounds of work safety, environmental issues, fire hazards, etc., often several times a year. There are also hindrances specific to Khujand, including attempts to influence management decisions concerning the hiring of workers and blatant forms of intervention such as obliging private companies to purchase cotton from specific regional suppliers. These interventions are cumbersome and since they originate from Government institutions they do not leave the companies an authority to turn to.

4.44 Another important aspect of attracting FDI involves providing the right information to the right people. Currently, this is left to chance.⁴⁶ Tajikistan does not proactively market investment opportunities to potential candidates. Tajikistan could target textile companies with a comparatively low brand strength and a relatively high emphasis on operational excellence. Such companies should be approached with a properly prepared value proposition as these companies are more cost-sensitive and lay less stress on premium quality.

4.45 At present there is no business association for the textile industry in Tajikistan. This is a serious disadvantage if the industry is to developed further. A textile business association would create one industrial interface vis-à-vis the authorities. There is a quarterly meeting of the Ministry of Industry and Trade (MIT) with managers in the textile industry where developments are monitored and the companies are informed about latest legislative changes. But a business association could ensure a steady flow of information in both directions. Moreover, there are many areas where textile companies could benefit from each other such as business cooperation (e.g. cooperation in procurement or transport), managerial training (new marketing strategies, a common Tajik gateway etc.), and issues regarding the quality of the work force, technology.

⁴⁵ BEEPS, 2002. The average number of days with power outage in the year 2001 was 38.2 for Tajikistan, 26.7 for Kyrgyzstan and 21.8 for Uzbekistan. Both Russia (5.6) and Kazakhstan (4.5) have little problems in this respect.

⁴⁶ The ICA report describes an investor obtaining and writing to eight different government addresses with respect to his request and not receiving a single answer in response by any of them. *ICA report*, page 30.

Recommendations for Government action to promote the textile industry

4.46 **The Government should adopt an integrated sector-based approach addressing the specific hurdles of the textile sector.** The goal should be to process more fabric in the country rather than relying on the export of raw cotton. This strategy has been acknowledged in the recent economic program up to the year 2015. The following recommendations are geared towards this end.

4.47 *Liberalize the domestic price for cotton.* One effective way of supporting domestic textile processing is to liberalize the domestic price for cotton. Foreign textile companies interested in opening up production in the region could then count on cheap labor *and* lower costs of production in Tajikistan. This will also make textile business in Tajikistan more attractive with respect to neighboring countries such as Uzbekistan. Liberalizing the price for domestic use of cotton is in fact a win-win move: cotton farmers would still be able to choose between a higher export price versus longer standing contracts with local textile producers.

4.48 *Comprehensively review tax policy in the textile industry.* The Government should seek cooperation with an international organization to comprehensively review the taxation in the textile industry. The following two recommendations give examples of such measures.

4.49 *Review the tax levied on the sale of cotton for the domestic market.* The sale of cotton is presently taxed by 10 percent. This applies both to the export of cotton and sale on the domestic market. While this may create important revenue for the Government, it is not conducive to the Government's own target of raising cotton processing substantially by 2015 as it increases costs of textile production in the country. The tax on the sale of cotton for the domestic market should be reconsidered as part of a comprehensive tax review for the textile industry.⁴⁷

4.50 *Redesign the tariff policy on input materials for the garment industry.* As a minimum measure the import duty on garment accessories should be reverted to the previous level of 5 percent as the recent increase clearly puts the profitability of the garment manufacturers at risk and may prevent new operations from coming to Tajikistan. In fact, the Government should consider allowing goods used in textile processing to be imported tax-free in bonded warehouses in the region of Khujand. Again, this should be made part of the comprehensive tax review.

4.51 *Reduce unreasonable bureaucratic obligations for textile export.* The MIT in cooperation with representatives from the textile industry should review all existing bureaucratic obligations in a systematic manner and make remedial suggestions to the Ministry of Justice. Such a review could be initiated during the quarterly meetings with the textile companies. Once a business association for the textile industry has been

⁴⁷ The new Tax Code already envisions some benefits for domestic consumers of cotton fiber in this regard.

created (see recommendation below) the review should be carried out in close cooperation with this association.⁴⁸

4.52 *Establish a private-public task force for education in the textile sector.* The present demand for qualified workers cannot be satisfied by the existing institutes. The Government should seek a private-public partnership in the establishment of a new textile institute in Khujand. For example the Government could offer a state-owned building in exchange for the private sector providing the organization of the institute. More generally, a private-public task force should be set up to identify specific areas of cooperation (and to monitor implementation). For instance, foreign joint ventures in the textile industry could provide modern equipment to the textile institute in Dushanbe so that the students are trained on up-to-date technology.

4.53 *Support the creation of business association in the textile industry.* In principle the initiative for a business association should come from the private sector. However, such an initiative is not likely to be taken by large foreign invested companies. Small and medium companies may not be aware of the specific gains that a business association could provide them. The Government could encourage small and medium textile enterprises to form an association and support steps that are taken in this direction, for instance by providing the companies with specific examples of similar activities in the textile sectors of other countries.

4.54 *Fundamentally reform the energy sector.* Part of the reason why energy provision is insufficient in Tajikistan, especially in the winter months, is that the energy provider, Barki Tajik, is run by the Ministry of Energy. This practice goes against internationally accepted public management standards that prohibit a regulatory body from involvement in profit-making business in the same sector. The tariff system, too, is in need of a general review in order to enable companies that are interested in safeguarding stable energy provision to be able to do so for an extra price. Both problems are reviewed in Chapter 3, above.

4.55 *Create a clearing institution for administrative harassment.* The government should establish a clearing institution for cases of undue administrative interference. FIAS-MIGA, in partnership with Swiss SECO, is currently assisting the Government with this issue.

C. OPPORTUNITIES FOR FDI-DRIVEN GROWTH IN THE MEDIUM-TERM

4.56 **The Tajik economy faces a number of risks and uncertainties.** The case study of the textile sector noted that the Tajik textile sector now faces a fully liberalized global market and, therefore, intense competition from world leaders such as China. Another cornerstone of Tajik economy is the aluminum industry. It is not clear whether or not this industry will remain competitive once it is no longer subsidized by cheap energy.

⁴⁸ There is no reason why textile factories which operate in Tajikistan but export their goods to the European Union and other countries should be made to obtain a domestic quality certification as they are currently obliged to do, since their international customers will take care of the quality control anyway.

With these uncertainties in mind, this section examines other potential FDI growth opportunities in Tajikistan.

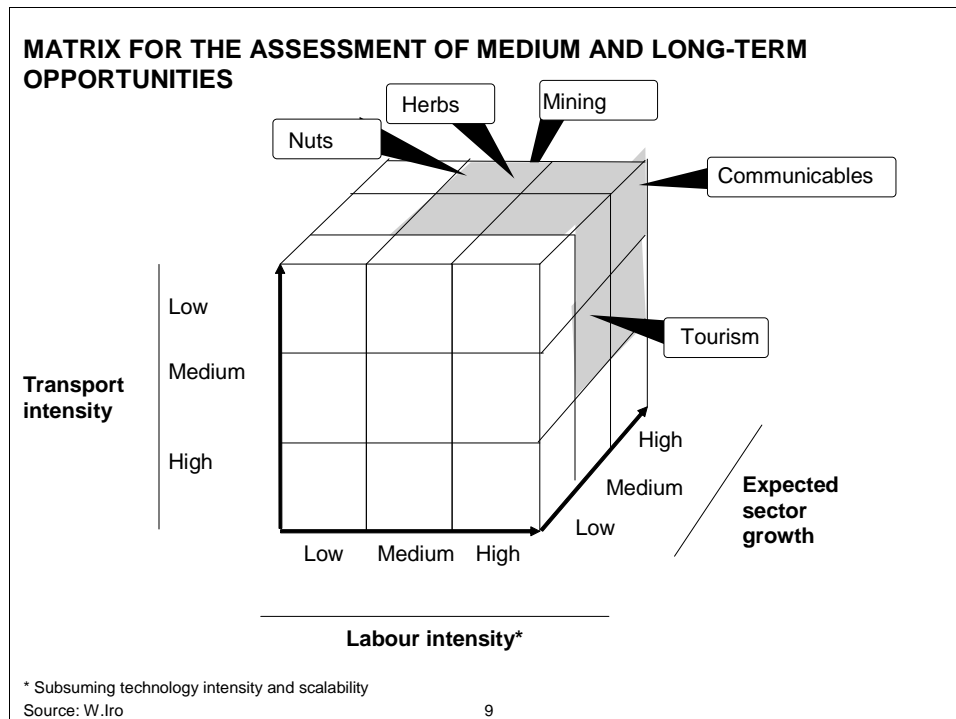
4.57 The following criteria should be kept in mind when considering which new industrial sectors might attract foreign investment in Tajikistan:

- a. *Exportability of product.* Given that Tajikistan has a small domestic market of 6 million inhabitants, potential foreign investors are likely to focus on exports.
- b. *Expected global growth of sector.* Trade promotion should focus on industrial sectors where the general global prospects are promising.⁴⁹
- c. *Degree of competition in the sector.* Generally, it is less difficult to enter a niche market than a highly competitive or consolidated one.
- d. *Degree of initial investment and scalability.* Relatively low fixed costs make it more attractive for foreign investors and donors to invest at a development stage. Moderate fixed costs also ease entry into a market and make it easier to grow at a gradual pace.
- e. *Labor intensity.* The low cost of labor for both educated and uneducated workforce is one of the strongest attractions for potential foreign investors. However, this advantage could be offset by high costs of transportation.
- f. *Transport intensity.* Tajikistan's geographic setting, its landlocked position, and mountainous terrain are not attractive to potential foreign investors. In addition, the local infrastructure is poorly developed and air cargo possibilities have not been developed.
- g. *Technology intensity.* While the educational level in Tajikistan is significantly above that of other developing countries, this relative advantage is increasingly under threat. This could discourage potential investment in highly advanced machinery.
- h. *Other specific advantages and disadvantages of industry.* Other factors important for potential investors are communication infrastructure needed for just-in-time delivery and language skills.

4.58 The three criteria elaborated above which seem to be the most critical from the perspective of potential foreign investors in Tajikistan would be: (i) the expected growth of the sector; (ii) the degree of labor intensity; (iii) and the degree of transportation intensity. The matrix below in Figure 4.6 attempts to map potential sectors and their suitability against these criteria.

⁴⁹ This is emphasized in the recent ITC study although this study confines itself to the 40 most common export products of Tajikistan ITC: *Tajikistan. Preliminary Assessment of National Export Potential*, 2003, page 22 ff.

Figure 0.6: Matrix for the Assessment of Medium and Long-Term Opportunities



4.59 **The highlighted areas of the cube mark sectors which involve low transportation costs, high labor intensity and high expected global market growth.** Presumably these are the areas which might represent propitious future growth sectors. Of course, this matrix is meant to be illustrative, and does not represent an exercise in “picking winners”. Rather, the objective is to shed further light on some of the specific generic issues that most likely impact possibilities for FDI in Tajikistan.

4.60 **Given the Government’s limited management attention and resources, greater awareness of future areas of growth will help to allocate investments in business climate improvements more efficiently.** As a general rule, the efforts to improve the business climate should of course continue to be broad based to mobilize the overall potential for SME driven growth. However, there are likely to be numerous sector specific constraints that may often be complementary to the extent that the sector specific business climate cannot be much better than the weakest institutional link along the value creation chain. This in turn would call for integrated sector specific strategies. The illustrative chart indicates five possible growth sectors which may lend themselves to medium-term development: (i) nuts; (ii) natural herbs for medicinal purposes; (iii) mining of precious metals; (iv) tourism; and (v) communications.

The Communications Sector as a Potential Source of Medium-Term Growth

4.61 **The communications sector is perhaps the sector best suited for development in Tajikistan with respect to low transportation intensity, high labor intensity, and high expected global growth rates.** The services in this sector include call centers,

translation work and information technology (IT). Despite the cooling phase that IT market has undergone since 2001 the global market for IT is still enormous. In 2003 global market volume in the IT sector is estimated at around US\$1.2 trillion.

4.62 The global IT industry is increasingly dominated by the outsourcing of activities from Western companies in all industrial sectors. The trend is now towards outsourcing entire business processes and functional areas. The market for this form of outsourcing is widely expected to continue to grow rapidly. India has been particularly successful among developing countries in a number of areas of the IT sector. India is now the world's leading offshore destination for IT services. Clearly, this success is the result of a long process. While India has a number of important advantages which Tajikistan cannot replicate, most notably the size of its population and the frequency of English as a second native tongue among educated Indians, a number of other countries have also successfully developed their IT sectors.

4.63 Armenia is a recent successful example. Following average annual growth of more than 20 percent since 1999, software and IT companies now account for about 2 percent of Armenia's GDP – a proportion comparable to that of India. Productivity levels in this sector are much higher than average productivity levels in Armenia's economy.⁵⁰ About 3,500 workers are employed in about 280 Armenian IT companies. Another 1,500 IT specialist work outside these companies, so about 5,000 workers are employed in the sector.⁵¹ In many respects Armenia is a good comparator to Tajikistan. Both CIS countries have had to grapple with a radical change of the economic system after a civil war. Both are landlocked (though the distance to the next port is much smaller in Armenia). The size of the domestic market in both countries is very small (Armenia's population is about half of Tajikistan's). Both countries have an educated workforce and low cost of labor.⁵² However, there are also some important differences between Armenia and Tajikistan. Armenia has an extremely successful and well-connected Diaspora of 5 million people in North America and Europe which have proved ready to invest in their country of origin. Furthermore, Armenia was one of the centers of Soviet research in information technology prior to 1990. Though, after the breakup of the Soviet Union many IT specialists left.⁵³

4.64 The IT industry in Tajikistan is largely undeveloped. There are few IT or telecommunication companies. The total number of internet users in Dushanbe is estimated to be around 32,000 though this figure is rather unreliable. Other cities with access to internet are Khujand, Kulyab, Isfara, Istravshan and Khorog. The Government claims that it is now possible to have internet access in all cities with a population of more than 25,000 people.

⁵⁰ A. Andonian, "Armenia's software industry", in: *McKinsey Quarterly*, 2004, 1.

⁵¹ Website of the Ministry of Trade and Economic Development in Armenia (www.minted.am)

⁵² An Armenian software and IT services specialist earns \$2,400 to \$6,000 a year, a quarter of the average salary such a worker receives in India who in his turn earns about 20 percent of an average Western programmer.

⁵³ Another example of a fast growing IT industry among CIS countries is Ukraine. Starting from a small base, growth rates have averaged more than 30 percent annually Market Visio: *Ukrainian IT Services and Products Export Market Research 2003*, page 10.

4.65 **To create a basis for the development of an IT sector in Tajikistan major efforts will need to be made in infrastructure and in education.** While Tajikistan is not in a position to offer advanced programming services there are other activities in the IT sector that could be carried out by a Tajik workforce in the short-run such as basic web administration services and research. Other examples could include spam filter checks (a service provided to big companies which filter spam emails manually to ensure customer mail is not erroneously sorted out by the system). Eventually, Tajik IT services could expand to more sophisticated areas such as the design of dynamic data base structures, of server configurations and server security, module programming for large systems, as well as the handling of business processes. Some of the abovementioned activities could be done with a passive knowledge of the English language, but most services (including all support services with an active interface with the customer) require a fluent command of English.

4.66 **One competitive advantage of Tajikistan is the widespread near-native command of the Russian language.** In combination with the low costs of labor this could make Tajikistan competitive in call centers services focused on Russia. There were about 250 call centers in Russia in 2002 and a number which is forecast to double by 2005.⁵⁴ Further research would need to be done to make a more robust business case. Russian language skills also lend themselves to the development of translation services. Much interpreting and translation work is not physically bound and could thus in principle be carried out in Tajikistan. One example would be the translation of technical manuals.

4.67 **Other communication services include web research and visual arts.** Web research is an advanced service requiring a very high command of the English language. Nonetheless this work is extremely labor intensive and calls for a high level of education.

4.68 **The development of a functioning communications sector in Tajikistan would require an accelerated development of language skills especially in English and Russian.** Already, those with a command of English are much sought after in the Tajik labor market, but many leave the country to seek higher salaries abroad. As a result, Tajikistan has a severe shortage of qualified English teachers. One possible cost-effective way of exposing Tajik children to English would be to broadcast regular television programs in English. In order for this to become feasible two conditions have to be fulfilled. English broadcasting material must be available at little cost and this material must be attractive for young people to watch. In fact, preliminary discussions have been carried out with the British embassy in Dushanbe to approach English television networks to provide TV programs at little or no costs. To target young viewers the focus should be on animation films and features on pop music as well as soaps for young teenagers. Likewise English language films could be broadcast on television in the original language.

⁵⁴ For this and the following information comp. Aga Khan Fund for Economic Development *Contact Center Services. A Preliminary Business Plan*, page 11 ff.

4.69 **In Tajikistan IT hardware is very expensive relative to the average salary.** Thus, many administrative and educational institutions still have to have electronic equipment. The Government should prioritize ministries and institutions of higher education in the allocation of such equipment as these are in most urgent need of computers.⁵⁵ In order to provide a sufficiently large number of students with computer access a university computer center with 50 to 80 could be established at a relatively low cost.⁵⁶

4.70 **Notwithstanding the small number of internet users in Tajikistan there are computer literate entrepreneurs striving to do business in the communications sector.** However, the entry barriers are high since establishing a business in this sector requires a considerable initial investment in computer hardware. One way to reduce these costs would be to establish an IT-incubator. The IT incubator would be a physical center where infrastructure would be provided for small companies who would pay for rent and services. The building could be provided by the Government while the infrastructure could be provided by an international organization. The companies using the facilities would cover the IT services, i.e. the provision of internet connection.

4.71 Companies would apply to a selection committee to enter the IT-incubator for a strictly limited period of time (about 2 years as a rule with a possible extension of 1 additional year). The companies would apply with a fully prepared business plan and should be ready to start business as soon as it moves into the incubator. In order to forestall corruption, the selection committee should be chosen from a pool of possible members the day before a selection actually takes place. The pool of members could be staffed by: (i) representatives from the private sector; (ii) resident employees of international institutions experienced in the assessment of business plans; (iii) representatives from the Ministry for Communication and the Ministry of Economy; and (iv) investors and micro-lending companies already working in Tajikistan. The presence of the latter would have the advantage of simultaneously making the selection for the incubator a presentation of potential candidates for investment. The selection should take place at regular intervals of about 3 months (though it will clearly depend on the degree of utilization of the incubator). The international organization running the project would be responsible for the equipment and the administration of the incubator.

⁵⁵ In fact, the global IT industry is developing at such a rapid pace that computers in many Western countries are regarded outdated once they are 2 to 3 years old. The European Community has introduced a guideline on electronic waste that will be implemented by member states by autumn 2004. Essentially, this guideline puts the onus of waste management onto hardware producers who will be responsible for taking the old electronic equipment back from the customers. As dismantling them in an environmentally friendly way involves very costly operations, hardware producers are frequently open to donating them to developing countries. A cross-ministry working group could be established in Tajikistan to administer distribution of donated hardware to ministries and the university with eligibility for distribution dependent on the fulfilment of a set of criteria that should include the availability within the recipient institution of at least one computer network specialist for every 10 computers in order to safeguard their professional administration.

⁵⁶ A similar project at Kabul university was carried out with the help of the German Academic Exchange Service (DAAD) and the Association for technological cooperation (GTZ) amounted to approximately 100.000 USD. The university centre should be administrated by qualified local IT specialists.

4.72 The provision of stable energy is still a serious problem in Tajikistan which affects many industries including the communications sector. Tajikistan will have no chance to become an outsourcing destination if real-time communication with the customer as well as just-in-time delivery of IT services is not possible due to electricity failure.

Other Sectors with Medium-Term Growth Opportunities

4.73 **The agricultural sector is a promising sector for development.** The expected rise in productivity due to privatization is likely to result in increased competitiveness and exports. There are several ways in which this sector can be further strengthened.

4.74 **First, there seems to be considerable scope for increasing food processing in Tajikistan.** One example would be fruit juice. While it makes sense to sell ready made juice for the domestic market, the same might not be true for export since the cost of transportation is likely to be too high. However, Tajikistan might be competitive in exporting juice concentrate.

4.75 **Second, there seems to be scope for intensifying the cultivation of products like nuts and herbs.** Tajikistan's climate is very conducive to nuts of any kind, especially in the central region and in close vicinity to the mountains. However, few nuts are actually exported. Many nut trees were destroyed during the war. Also, Tajikistan has not grown some of the most valuable nuts, such as pecan and pine. The domestic pistachios are of inferior quality to those of Iran and other countries. This could be remedied since it is feasible to replace domestic pistachios by a superior sort without cutting down the trees. Herbs are another neglected product. They generally have low transport costs with regard to their value. The market for alternative medicine has grown steadily recently, especially in America, the European countries and China.⁵⁷ Research on herbs grown in Tajikistan was undertaken in Soviet times but has not been properly pursued since. In order to exploit this possibility a thorough assessment of all existing herb species is a prerequisite.

4.76 **A third option is organic farming.** While a substantial amount of fertilizers and pesticides is used in cotton farming, fortunately the same is not true for Tajik fruit orchards. The organic market is particularly interesting for export because of its fast growth and the high margins.⁵⁸ However, in order to become eligible to the international organic market a number of rather strict production conditions must be met and certified. This is usually done by independent auditors accepted by the international community. It would therefore be a sensible approach to start a pilot, with the assistance of an international organization, focusing on one particular produce such as apricots. Useful

⁵⁷ Accurate data for global consumption is difficult to obtain. However, data from America may give a comparative idea of the size and trend. Total herbs sold in the mass-market outlets (grocery stores, pharmacies, and mass merchandiser retail stores) was about US\$442 million in 1997. This is a dramatic 80 percent increase over total herbal sales in 1996. www.herbalgram.org

⁵⁸ The global market in 2002 was estimated to be around US\$23 billion with growth rates between 5-15 percent. Comp. H. Willer, M. Yussefi: *The World of Organic Agriculture. Statistics and Emerging Trends*, 2004.

comparator countries include Azerbaijan where 0.2 percent of total agricultural land is under organic management. Another is the Ukraine where 0.6 percent of total agricultural land is under organic management.⁵⁹

4.77 Tourism is an another sector with potential for medium-term growth. Tajikistan can boast of idyllic nature largely undiscovered on by foreign tourists. Given the state of infrastructure, adventure tourism will for some time remain the prime opportunity in tourism. The number of tourist visiting Tajikistan is very small, hovering at around 3,000 people per annum. If this number could be raised by an additional 7,000 people staying and spending about 1,000 USD per head⁶⁰ this alone would generate revenues of US\$7 million. For this, however, forceful marketing is necessary. Professional support for this could possibly come from an international organization, as it has been the case in Kyrgyzstan.

4.78 Finally, the mining is a sector with potential medium-term growth. Tajikistan's major deposits include silver and gold. There may be scope for processing some of it in the country.⁶¹ Foreign investors have taken an active interest in the deposits in Zarafshan and Darvoz. However, the still unresolved question of debts has to be settled first.

Recommendations for Utilizing the Medium and Long-Term Growth Opportunities

4.79 Make the development of the communications sector one of the priorities of the economic agenda and assign specific responsibilities for its development. In the economic reform program to 2015, communications and the IT industry are only mentioned in general terms.⁶² In order for the communications sector to develop to a point where it can make a substantial contribution to GDP within the next decade a number of steps should be taken. First, communications should be put prominently on the government's economic agenda. Second, a clear action plan with accompanying milestones should be designed. This plan should be done in a workgroup comprised of both the Ministry for Communication and the Ministry of Industry and Trade.

4.80 Ensure the daily transmission of popular English language programs both for television and radio. The Government should make efforts to reach an agreement with a English speaking television network for broadcast material to be provided on a daily basis in the English language. Care should be taken that these programs are attractive for the younger generation.

4.81 Agree on a one-time project to provide ministries and the university with sponsored computers. The Government should approach potential donors of computer

⁵⁹ M. Willer, S. Yussefi: *ibid.*

⁶⁰ Assuming a daily expenditure of US\$50 and an average stay of 2 weeks.

⁶¹ World Bank: *Tajikistan. Country Economic Memorandum*, 1994, chapter 8.

⁶² *Economic Development Program for the Republic of Tajikistan up to 2015*, pages 59-60. The program only vaguely talks about raising the number of internet users by 11.6 times up to 2015 but does not elaborate a strategy to develop the IT industry.

hardware systematically. An inter-ministerial working group should be formed and the distribution and application criteria should be stipulated.

4.82 *Reach decision on the creation of an IT-incubator.* The incubator involves the strategic decision of whether or not Tajikistan wants to develop the IT sector. If so, a working group for IT should seek cooperation with an international organization to design the project.

4.83 *Seek international support for the development of tourism in Tajikistan.* Again, there clearly is potential for the development of adventure tourism in Tajikistan. However, the Government should seek the cooperation of an international organization to be develop a professional advertising campaign.

4.84 *Carry out in-depth analysis of other medium-term growth opportunities.* An in-depth analyses of other growth opportunities is necessary in order to define the specific steps to take with respect to their development. For this the government should assign clear responsibilities within the relevant Ministries and seek the cooperation of international organizations. This applies in particular to food processing and farming alternatives, mining and tourism.