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Kyrgyz Republic
Fiscal Sustainability Study

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KYRGYZ REPUBLIC – FISCAL SUSTAINABILITY STUDY

CURRENCY AND EQUIVALENT UNITS

Currency Unit = Som
US$1 = 48.2 Som
(as of May 20, 2000)

WEIGHTS AND MEASURES

Metric System

ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
BVK	Bishkek Vodokanal
CIS	Commonwealth of Independent States
DEBRA	Debt Resolution Agency
EBRD	European Bank for Reconstruction and Development
ESAF	Enhanced Structural Adjustment Facility
EU-TACIS	European Union-Technical Assistance for Commonwealth of Independent States
FEZ	Free Economic Zones
FINSAC	Financial Sector Adjustment Credit
FSU	Former Soviet Union
GDP	Gross Domestic Product
GOK	Government of Kyrgyz Republic
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
KAFC	Kyrgyz Agricultural Finance Corporation
KAJ	Kyrgyzstan Aba Joldoru
KE	Kyrgyzenergo
KG	Kyrgyzgas
KHF	Know How Fund
KJKS	Kyrgyzzhilkomunsojuz
KPMS	Kyrgyz Poverty Monitoring Survey
KSRS	Kyrgyzselremstroy
KT	Kyrgyz Telecom
LIBOR	London Interbank Offered Rate
MAT	Minimum Assets Tax
MoF	Ministry of Finance
NBKR	National Bank of the Kyrgyz Republic
NCA	National Communications Agency
NICA	Non-Interest Current Account Balance
NPV	Net Present Value
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PAYG	Pay-As-You-Go
PFG	Project Finance and Guarantees
PIP	Public Investment Program
RDR	Required Deficit Reduction
SEA	State Energy Agency
SOE	State-Owned Enterprise
SOSAC	Social Sector Adjustment Credit
SPF	State Property Fund
STI	State Tax Inspectorate
USAID	United States Agency for International Development
USO	Universal Service Obligations
VAT	Value Added Tax
WTO	World Trade Organization

FISCAL YEAR

January 1 to December 31

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The analysis is based on data through early 1999. Major changes that have occurred since then and recommendations implemented have been reflected in the report.

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Executive Summary

The collapse of the FSU meant a huge adjustment was required for the Kyrgyz Republic

i. The contraction in the Kyrgyz Republic was among the worst experienced in the CIS after the break-up of the Soviet Union. Output fell by 50 percent between 1991 and 1995. The fiscal consequences were nothing short of disastrous. The output collapse triggered a loss of tax revenues equal to 7.5 percent of GDP, direct budgetary support from the Union was of course discontinued, and implicit energy subsidies came to an end abruptly. Thus, the collapse of the FSU meant a huge adjustment was required for the Kyrgyz Republic.

Kyrgyzstan has made major strides over the past few years in attaining macroeconomic stability and putting the economy on a growth path

ii. In spite of that inauspicious start, the Kyrgyz Republic has made major strides over the past few years in attaining macroeconomic stability and putting the economy back on a growth path. By 1996 the macroeconomic situation was brought under control and growth resumed: GDP grew by 7 percent in 1996, by an even more exuberant 9.9 percent in 1997 and was set to continue at a comparable pace in early 1998.

iii. The Government made significant fiscal adjustments over the years. It sharply reduced social expenditures and cut budgetary transfers to enterprises and agriculture. It was able to raise investment, although largely through foreign support. Over the period 1995-1997, the cash deficit went down from 17 to about 9 percent of GDP, a deficit that was financed mostly by concessional foreign borrowing. As a result of these developments and an increasingly firm monetary policy, exchange rate stability was restored and inflation was brought under control: it stood at 15 percent in 1997. But external debt has grown rapidly over the same period, and was not always used efficiently.

Just as the Kyrgyz economy was recovering, it was hit by a further major shock

iv. But underlying weaknesses began to emerge in 1998. The year started off buoyantly, perhaps too much so. On the external account, the improvement of 1997 was reversed from early 1998 onwards. The current account deficit in the first half of 1998 was almost 2.5 times as large as it was in the corresponding period in 1997. Only part of that deterioration can be traced to fiscal slippage; the deficit including arrears went up by 2 percent of GDP, much less than the renewed haemorrhage in the current account. The difference was mostly the result of a boom in private consumption in response to renewed optimism after two years of growth.

v. However, in the middle of 1998, the Kyrgyz Republic was hit by a series of disasters. First, an environmental disaster (a cyanide spill in Issy-kul lake, its key tourist attraction) and shortly thereafter massive floods. And in August 1998 the Russian crisis hit. Growth, buoyant until mid-1998, collapsed, the exchange rate depreciated sharply, inflation accelerated briefly in late 1998 and external imbalances widened further. Exports to the FSU fell significantly in the third and fourth quarters. Electricity exports for example fell by 4 percent of GDP over the year, which led to huge losses for the public electricity company, Kyrgyzenergo. Other public

companies, such as gas and airlines also did not increase prices, and so incurred ever larger losses, thus undermining fiscal consistency.

A three-fold strategy is proposed to deal with the current difficulties. First, renewed urgent efforts are needed to consolidate macroeconomic stability – most fundamentally, a significant fiscal adjustment is required

vi. Major as the fiscal adjustment has been so far, it is not sufficient. The actual fiscal deficit, which was over 11 percent of GDP (or almost 10 percent in real terms) including budgetary and social fund payment arrears in 1998, is far out of line with the requirements of stable debt-output ratios and reasonable inflation targets. Our estimations show that, at best, a real deficit of 4.6 percent of GDP can be financed under realistic macro targets. This means that **the deficit needs to be cut by at least 5.5 percent of GDP**. If the Government delays the adjustment necessary to restore fiscal consistency, the consequences are serious: either debt would grow explosively or inflation would ensue.

vii. Several factors could make the required adjustment even greater. *First*, if the cost of borrowing rises, the situation will become correspondingly more difficult. *Second*, a sustained real depreciation of the exchange rate will raise the fiscal adjustment burden by increasing the relative value of foreign debt obligations in terms of domestic tax revenues. Both the interest rate and the exchange rate will have a major impact because of Kyrgyzstan's high external debt-output ratio. Of course, while real exchange rate depreciation increases the burden of external debt, it improves the competitiveness of exports.

viii. There are three major factors underlying the unsustainable fiscal deficits: (a) the revenue effort is low – especially where it concerns revenue from the groups that have benefited most from the reforms implemented so far; (b) expenditure on infrastructure is high but inefficient; and (c) the debt burden seems unsustainable, both in relation to fiscal revenues and to exports.

ix. The fiscal adjustment and expenditure cuts will require trade-offs. In the long term, poverty reduction and fiscal adjustment are complementary, any seeming short-term conflicts notwithstanding. The single most important determinant of poverty is unemployment; in the long-term a stable fiscal framework is conducive to private investment which, in turn, is the only way to generate sustainable employment growth. However, in the short term the two goals may be at variance. Poverty reduction can certainly be helped by well-designed anti-poverty programs, which do cost money; but money is in short supply during fiscal adjustment operations. This short-term conflict can only be avoided or, at least, made less damaging if spending priorities are at least temporarily re-directed towards anti-poverty programs. These should be treated less harshly than other spending categories in determining how to achieve the fiscal adjustment that macro-analysis indicates is necessary. But social expenditures will need to be restructured to improve their effectiveness and targeted towards the really poor. A similar problem is raised by public investment. Long-term investment programs may mostly benefit future voters, many of whom may not yet vote today. Thus, a tendency to over-adjust investment expenditure and under-adjust current consumption is politically understandable even when it is not efficient from an economic point of view. Adjustment programs should, therefore, pay special attention to maintaining poverty and investment programs after every effort has been made to increase their efficiency.

Second, it is shown that it may be necessary to start considering some form of debt relief given the large debt burden and the need to preserve social expenditures

x. Fiscal retrenchment is unavoidable, but it is important to mitigate its recessionary impact as much as possible. Real expenditures in key areas (social, operations and maintenance) have already fallen sharply. Kyrgyzstan still has substantial development requirements for growth and therefore has to meet investment and basic social needs. And the favorable fiscal impact of some of the reforms may take some time.

xi. At the same time, Kyrgyzstan has a high debt burden at US$1.5 billion, or 96 percent of GDP at end-1998. The debt-output ratio has quadrupled in just the last five years. External current account imbalances of the order of 17 percent of GDP on average in the last four years explain to a large extent the increase in debt. Clearly, deficits of this magnitude, even if they are financed from concessional sources, cannot be maintained – fiscal adjustment is necessary.

xii. Debt indicators have also deteriorated sharply as a result of the regional financial crisis. The large real exchange rate depreciation that took place in the last quarter of 1998 and the first quarter of 1999 resulted in a huge capital loss on the external debt. Exports and growth have also suffered. And all this comes at a time when Kyrgyzstan actually faces high refinancing needs. The debt service burden is expected to surge substantially in 2000-2005, when practically all non-concessional debt (equivalent to 50 percent of the total) will need to be repaid and grace periods for concessional loans end.

xiii. Even before the regional financial crisis of 1998, the Kyrgyz Republic had only just begun its recovery process. The impact of the regional crisis has put the Kyrgyz Republic further back. Even at an optimistic 6 percent annual growth rate from 2000, the 1991 level of output will only be reached in the middle of the next decade. This means that debt service capacity will be higher after that time than it is now. Thus, there seems to be a case for debt rescheduling so as to shift more of the current debt service into the high growth era expected later in the decade.

xiv. But while rescheduling may ease the immediate liquidity problem, it will not be sufficient. There is a real risk of a debt trap: adjustment to the debt burden slows down growth as resources are diverted from investment to external debt service; but the resulting slowdown in economic growth lowers debt service capacity again and so on. There is thus a strong case for debt relief to reduce the debt burden to sustainable levels. This relief can come in different forms ranging from outright debt reduction to provision of new financing at highly concessional terms. In choosing between different approaches, consideration should be given to what extent the burden should be shared by all or just by some creditors. Concessional financing without direct debt relief lays the entire burden at the feet of the IFIs while direct debt relief can be structured such that other creditors too share the burden of adjustment. A particular problem is the Kyrgyz Republic's debt structure, with relatively little bilateral (26 percent) and commercial debt (24 percent), which makes traditional approaches to debt relief difficult to apply.

And third, decisive structural reforms are necessary to underpin the fiscal adjustment and increase the efficiency of resource use

xv. Even if there will be debt relief, it will certainly not be massive enough to obviate any

further need for fiscal adjustment. Lowering expenditures and increasing tax efforts is going to be necessary under all scenarios. Rationalization of expenditures will require structural reforms and changes in sector policies if the cuts are to be sustainable, key services maintained and enhanced, and adequate protection given to the poor and other vulnerable groups. Structural reforms are necessary to increase the efficiency of resource use and bring those groups that have gained most into the tax net, otherwise minimum consumption levels may remain out of reach for the rest. To achieve a sustainable fiscal adjustment, the Kyrgyz Republic will need to complete programs in pension reform, being supported by the SOSAC; reforms in education and health, for which a review is planned within the next year; and civil service reform, which is being supported by EU TACIS. In addition, it will need:

- to accelerate the transformation of the public infrastructure and utility companies, while moving to a more transparent and targeted system for providing basic services to the poor and

- improvements in the tax system.

This report focuses on the latter two areas of reforms.

A. Transformation of the Public Infrastructure and Utility Companies

Reform of the public infrastructure and utility companies is critical as these companies are a large and growing liability to the Government

xvi. Government borrowing for the companies' investments, either directly or guaranteed, is substantial. Moreover, direct and indirect subsidies to households are placing a strain on the Government budget, partly because these are so poorly targeted. But explicit Budget support to the infrastructure and utility companies, which was less than 5 percent of GDP in 1998, only partially reveals the extent of the liability to the Government. The utility companies have losses that are financed by: (a) banks and reflected as non-performing loans, or (b) suppliers in the form of non-payment or delayed payment, and (c) living off existing capital by failing to adequately maintain and replace the capital stock. All these losses will eventually have to be borne by the Government. Whether this is explicit or implicit does not change the end result: if the Government does not provide funds to replace assets or settle pending claims, then any future sale value from privatization will be correspondingly lower.

xvii. Even taking a rough conservative estimate of the companies' actual losses, the emerging scenario is one of an unsustainable financial situation. There are already signs that the public utilities are heading for a crisis. Kyrgyzenergo, the electricity and heat company, Kyrgyzgas, and Kyrgyz Airlines (KAJ) have all recorded increased losses in 1998, are illiquid and unable to pay suppliers fully or service their short-term debts to the budget and commercial banks. Payment arrears for imports of gas are resulting in periodic cuts in gas supply from Uzbekistan. Banks are in serious difficulties with a large non-performing loan portfolio as a result of financing Kyrgyzgas' losses and at least one bank was closed due to its large exposure to the company and its affiliates. KAJ was unable to meet a large payment to its leasing company for two new airbuses and had to renegotiate its contract.

The poor performance of the companies reflects the lack of cost-reflective tariffs, an extensive system of 'privileges' that give additional discounts to several categories of persons, and poor incentives to improve efficiency

xviii. Tariffs are below cost-recovery levels for all utility and infrastructure industries, and in many cases do not even cover operating costs, let alone financing costs. As a result, the implicit price subsidies on electricity, heating and gas are estimated to have been almost 9 percent of GDP in 1998 (see Chapter 5). Average unit prices in dollar terms have even declined over the past few years, as domestic prices have not been raised in line with inflation or exchange rate depreciation. More recently, the sharp depreciation in the exchange rate in late 1998 and March 1999 was not fully passed through to consumers, and the financial condition of Kyrgyzenergo and Kyrgyzgas, both of which import gas, became precarious.

xix. Besides being costly and unaffordable, the current system of price subsidies is neither efficient nor well-targeted in reaching the poor (see para xxv). Low tariffs create distorted incentives for both consumption and production. Very low electricity tariffs for both residential and industrial consumers has resulted in consumers substituting out of other fuels into electricity. This excessive demand has overloaded the system beyond capacity, with obvious severe adverse consequences for the quality of services and the profitability of Kyrgyzenergo.

xx. In addition to the tariff system not providing the right incentives for productive efficiency, managers do not have incentives to improve efficiency since they lack autonomy and accountability and do not face any competition. Inefficient operations of the companies result in considerable output lost in delivery. Closely related to operating inefficiencies is inadequate maintenance, which results in reduced capacity utilization and substantial additional investment simply to sustain existing levels of service.

Unless action is taken the companies will not be able to maintain or expand services

xxi. The degree of service coverage varies significantly across the utilities, with almost universal coverage of electricity, reasonable coverage of telecommunications, but much lower levels of access to water and sanitation services. Overall, the service coverage is reasonable in the regional context and much higher than average for countries of similar income in the case of electricity and telecom. However, the quality of service is poor and there are indications that it is deteriorating. Given the financial situation of utilities and continuing poor incentives, there is little prospect for improved services in the coming years. In fact, the opposite may be true. Maintaining the present system implies that producers will not be able to cover their costs and new investment will not be attracted. The Government cannot finance the large investment requirements through concessional foreign finance as there are limits to the amount of debt the government can accumulate.

The potential for cost reduction and conservation is high

xxii. Immediate action is needed to improve the financial situation of the companies by reducing their losses through improved metering, billing and collection, and technical and operational efficiency. Losses in transmission and distribution for electricity, heating and gas are enormous. Bringing such losses down to acceptable norms given other countries' experience could yield potential savings as high as 2.5 percent of GDP (see Chapter 5). In addition, there is

wasteful gas consumption as two-thirds of households are not metered and not based on unit prices. Kyrgyzgas estimated savings of up to 50 percent once meters were installed. There is also scope for improving labor productivity as indicators compared to other countries suggest. And finally, improved financial management should increase the rate of collections to billed sales.

Bringing in the private sector will help in improving productivity and this should be designed to ensure it brings in much needed resources for investment and know-how

xxiii. It is essential to reform the competition and regulatory frameworks of these sectors so as to increase efficiency, improve service and bring in new sources of finance, which will help relieve government budget constraints. This requires dismantling legal barriers to entry of new firms and, where necessary, restructuring the companies, horizontally or vertically, to ensure effective competition. Privatization can remove from public sector responsibility the need to undertake expensive modernization programs in areas such as telecommunications. In this way, it is possible to take "off the books" a significant amount of the current public investment program. Other private sector participation is also possible through concessions and similar arrangements.

But tariffs will also need to be raised to ensure the financial viability of the companies, attract the private sector and improve services

xxiv. It is clearly more efficient to set tariffs to reflect costs and rely on the price system to reflect demand. This will also reduce waste. The extreme poor can be protected through a well targeted social compensation scheme that helps them meet their utility bills while maintaining the right incentives for consumption and production. To attract private investors, new investment at least must be properly remunerated through the tariff regime.

The impact of raising tariffs will primarily fall on the non-poor, but it will also hurt the poor. For the poor some form of compensation is required

xxv. The non-poor benefit disproportionately from the subsidies as they have much greater access and consume more of the subsidized services (Chapter 6). Only 4-8 percent of the poor (barely 2-4 percent of the extreme poor) even have access to the subsidized public heating, gas and hot water services. Poor households rely much more on coal (prices of which have been liberalized) and wood as the predominant source of heating, hot water and cooking, although electricity has gained in usage because of its almost universal coverage and low price. Electricity is the only subsidized service to which the poor have the same access but since their consumption is less than the rich, the value of subsidies going to the rich is much greater.

xxvi. Increasing prices will hit the poor. Their expenditures on utilities are at present between 5-12 percent of their total expenditures. The impact of price increases is likely to raise this share considerably. Some form of compensation will be required. Various options are possible and need to be assessed in terms of incentives and administrative costs. In the short run, the Government may not be able to finance the costs of the compensation sufficiently through tax reform and savings from eliminating the present untargeted subsidies. A transparent cross-subsidy scheme may therefore be required in the interim which must be built in the design of the commitments made by the Government in compensation for service obligations to be requested

from private operators.

The Government has started to address these issues through a series of actions, which are a good start, but do not yet go far enough

xxvii. *Restructuring.* The Kyrgyz Republic has started addressing these issues through the development of restructuring plans involving de-nationalization and privatization of the major infrastructure and utility companies. The plans for telecommunications and electricity are the most advanced and have been approved by Parliament. Telecommunications is likely to be the first major utility privatization, with an initial sale of 35-40 percent of the shares to a strategic private investor. It is important that transparency is maintained during the process, especially since there are already concerns on this issue. The privatization of Kyrgyzenergo is also to start, with the privatization of at least one of the distribution companies in early 2001. It is important that the Action Plan for Financial Recovery of KE be implemented, the process of unbundling begin by enforcing the split of operational, accounting and management aspects, and that the privatization or other private sector participation of the other distribution companies be addressed.

xxviii. Progress has been slow in the other sectors although the Government has also recently approved plans for Kyrgyzgas and is considering plans for Kyrgyz Airlines (KAJ). These restructuring plans need to be reviewed against the objectives and in determining the appropriate new structure of the industry and the form of private sector participation, the implications for the financial viability of the organization should be assessed. An Action Plan also needs to be aggressively pursued for gas to curtail the substantial losses in the near term.

xxix. *Tariff, metering and disconnection policy.* Metering is vital so that a user-pays mentality can be established. This should cover all relevant sectors, starting with gas, and should not be restricted to end-user meters. As metering is introduced it is essential that the Government adopt a policy of disconnection, providing adequate guidelines. The lack of a policy is hampering the ability of the companies to raise their collection rates and consequently improve their financial position. As a final input to the determination of tariff policy, information on the willingness-to-pay and the ability-to-pay should be collected. This will then allow a social policy consistent with the tariff policy.

xxx. Privileges in the form of utility price discounts should be phased out and replaced by budgetary support for the few that may be retained. Discounts to pensioners should also be replaced by a more appropriate pension policy (such as a well-designed base pension).

xxxi. *Regulatory Reform.* Much has already been achieved in the Kyrgyz Republic through the establishment of the State Energy Agency (SEA) and the National Communications Agency (NCA). Both agencies enshrine many of the 'best practice' principles of regulatory design. There are, however, also many other features that raise concerns that should be addressed in the short term so that the successful longer-term development of the regulatory system is not called into doubt. These include the funding and strengthening of the SEA, the improved transparency of NCA operations, and some form of arbitration or complaint handling system for both sectors.

xxxii. Other sectors have yet to benefit from similar actions. This is especially important for water and transport where many of the regulatory functions are spread among a range of

government bodies at the municipal level and often without a clear set of guidelines or performance standards. This provides an opportunity to consider establishing multi-sector regulatory agencies, which many small and resource-constrained countries have done.

B. Improvements in the Tax System

Tax revenues have fallen sharply and the recent tax reforms notwithstanding there are still major problems with the tax system

xxxiii. Fiscal revenues have fallen sharply, as in other countries in transition, and the Kyrgyz Republic faces the task of establishing a modern tax system at the same time as it needs to increase revenues. Significant tax reforms in recent years have resulted in a Tax Code, which became effective July 1, 1996, that lays the basis for a value added tax (VAT), excises, a profits tax and a personal income tax. The Kyrgyz Republic also makes use of presumptive taxes, through a 'patent' system (monthly fee for traders, small craftsmen, and entrepreneurs) and a land tax, based on location and quality of land, that is levied in lieu of all other taxes on agriculture.

xxxiv. The recent reforms have not solved all problems with the tax system. *First*, tax revenues come predominantly from a few as yet un-restructured enterprises such as the infrastructure and utility companies. Bringing the private sector into the tax net and closing loopholes is essential if a vicious circle of lower revenues, higher taxes, more evasion and less revenue is to be avoided. *Second*, some taxes or taxpayers are covered by legislation other than the Tax Code, resulting in additional taxes and fees as well as exemptions.

Direct tax revenues are low and could be increased by eliminating tax exemptions for firms in Free Economic Zones, introducing a Minimum Assets Tax and strengthening presumptive taxes

xxxv. Direct tax revenues in particular have fallen to a low of 2.6 percent of GDP for the income and profits tax combined. Even if the land tax may be considered as a presumptive tax on agricultural income, the overall direct tax ratio is still only 3.5 percent of GDP. The Kyrgyz Republic's revenues from direct taxes could be higher by several percentage points of GDP. Since tax rates are in line with international practice, the low collection reflects the loopholes in the tax system, notably the tax exemptions through Free Economic Zones (FEZ), and weak compliance and administration.

xxxvi. The report presents three proposals to raise direct tax revenues. *First*, tax exemptions for firms in the FEZ should be eliminated. The main advantage of the FEZ lies in the lower regulatory burden imposed on the start-up and operation of business. Until regulatory burdens are reduced across the country, there may be an interim need for a FEZ, but the Tax Code should apply to all firms irrespective of their location. *Second*, a Minimum Assets Tax (MAT) should be considered as part of the profits tax. The tax, levied as a percentage of assets, would be creditable against the profits tax. It would be intended to offset business efforts to evade taxes by understating revenues and overstating costs. The minimum would also allow the business tax structure to operate as a benefits tax, since it would be levied on all businesses. *Third*, presumptive taxes should be strengthened and there should be greater reliance on the Land Tax.

Attempting to stimulate foreign investment through tax holidays is ineffective and results in revenue loss. Instead, firms will be more advantaged by more liberal loss carry-forward provisions

xxxvii. Proposals to attract foreign investment through the use of tax holidays and concessions are not advisable. With tax rates at international levels, foreign investment decisions will be mostly based on factors other than taxes such as macroeconomic and political stability, the availability and cost of labor, the quality of public infrastructure and access to markets. Moreover, because of the structure of many double taxation agreements, tax holidays may simply result in higher tax liabilities in the home country of any foreign investor in the Kyrgyz Republic. And because most projects will have start-up losses, firms would benefit more from more liberal loss carry-forward rules.

Rather than creating a new tax structure for small firms, improved and simplified administration of the profits tax is needed

xxxviii. Instead of introducing a separate tax for small businesses, as current proposals call for, it would be better to simplify and improve administration of the profits tax, which would benefit small businesses too. More detailed instructions need to be developed to provide taxpayers with guidance on preparing their returns and remitting the proper tax liability. Allowable expenses need to be specified clearly. Also, greater ease in filing returns is essential. To ease compliance and administrative burdens, estimated tax payments are now based on the previous year's activity (adjusted for inflation), rather than the previous month's actual activity.

Taxes and fees levied through various special legislative acts often impose heavy burdens on specific bases. In particular, the turnover taxes for the road and emergency funds should be eliminated and replaced by revenue-neutral sources

xxxix. Special gross receipts (turnover) taxes are earmarked for the emergency and road funds. These cascading taxes have the greatest impact on small firms, that are least able to avoid the taxes, and exporters as they raise the costs of selling in export markets. These taxes are not benefit charges since there is no linkage between their base and the earmarked purposes. The Government is committed to gradually eliminating these taxes and replacing them with alternative sources of revenue. The recent creation of a Road Fund provides an opportunity to replace the road tax. Fuel and automobile taxes are used for this purpose in most countries and would be appropriate, particularly since fuel tax rates are currently low. Effective administration of the fuel tax at customs is essential. Any broad based tax could replace the emergency tax, such as a slightly higher VAT rate or higher land taxes.

The numerous fees and local taxes should be carefully evaluated and the number reduced, to lessen the costs of compliance and administration

xl. Many ministries impose fees and charges that also are off-budget, with revenues frequently earmarked for operating costs. The use of numerous off-budget revenue sources increases the likelihood that government revenues are used inefficiently, and that revenue sources are collected in an inefficient, confusing way creating a 'nuisance' value to firms. Also, the limited revenues from the many local taxes suggests that the small taxes should be reviewed and eliminated unless they provide sufficient revenues relative to their collection costs.

The VAT should be fully on a destination basis and rebates must be given to exporters in compliance with the Tax Code

xli. The VAT is levied on a destination basis (rebated for exports and imposed on imports) with respect to all non-CIS countries and a few CIS countries. The VAT should be structured on a destination basis with respect to all countries. This will generate significant revenues, as the Kyrgyz Republic is a net importer from the origin based CIS countries, and result in a system that is easier for administration and compliance. The Government should also rebate VAT payments to exporters so as to make the VAT into a true efficient tax on consumption that leaves investment and production decisions undistorted.

Customs administration needs to be strengthened to tackle the problems that contraband creates in eroding the tax base and undermining confidence among importers whose prices are being undercut by contraband goods

xlii. There is a significant contraband problem in the Kyrgyz Republic. The most prevalent view is that the quantity of goods imported is being under-reported and the value under-declared. The under-reporting of quantity could be addressed by putting in place "flying squads" of specially trained and equipped officers to spot check shipments at Customs points of entry and at unmanned border crossings. To address the under-valuation issue, the Government could consider contracting the function of determining the customs value (by pre-shipment inspections) out to an internationally recognised company specializing in customs valuation. This would also help improve excise and VAT revenues.

Tax administration needs to be enhanced and adapted to the changing requirements of a market economy

xliii. Past collection practices, which relied on close links between enterprises and the tax authorities, have not yet adapted to the changing requirements of a market economy. This creates two kinds of problems. First, existing mechanisms are proving ineffective in collecting tax revenues. As the private sector grows and state enterprises are privatized or made more autonomous, the leverage that the tax authorities had under the previous system has weakened. Second, the intrusiveness of past practices results in high compliance costs and encourages tax avoidance and the growth of the unofficial economy. Tax administration needs to be improved with a view to reducing compliance costs, improving taxpayer services, increasing collection efficiency, and enhancing taxpayers' rights to appeal, prevent corruption and reduce harassment.

Conclusions

xliv. The Kyrgyz Republic was about to decisively restore growth and macroeconomic stability when a series of natural disasters and the regional crisis put it back severely. This report outlines a series of measures that should get the country back on track. Major fiscal adjustment will be necessary, but will be more socially acceptable if accompanied by a shifting out of and reduction in the burden of external debt service. But the country itself will also have to carry a significant part of the burden and will need to accelerate the process of structural reform to cement any macroeconomic advantages that the fiscal adjustment program and any debt relief that may come will bring. The report focuses on reforming public utilities and the tax system as areas where reform is most needed and would provide the fastest macroeconomic benefits.

PART I

FISCAL AND DEBT SUSTAINABILITY

CHAPTER 1

MACROECONOMIC DEVELOPMENTS IN THE KYRGYZ REPUBLIC: 1991-1998

1.1 Macroeconomic developments in the Kyrgyz Republic have been dominated for the past decade by events in Russia. First, of course the break up of the Soviet Union in 1991, and the impact of the subsequent price liberalization in Russia as of January 1992. The results were nothing short of cataclysmic, at least in the short run. And second, just as recovery seemed to take hold, the impact of the second collapse in Russia, the crisis of August 1998 and its aftermath.

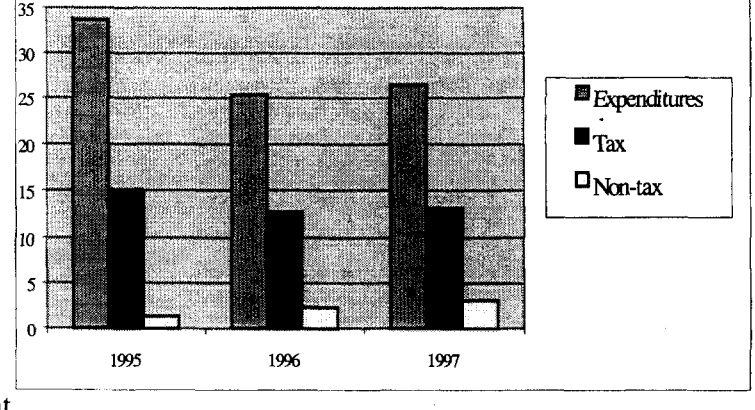
1.2 Kyrgyzstan's experience after the break up of the Soviet Union was much in line with that of other FSU countries. GDP fell by almost 50 percent between 1991 and 1995, comparable with what happened in Ukraine for example, and between two and three times as much as in most countries of Central Europe. The accompanying collapse in sources of public revenues was primarily due to the loss of budgetary transfers from Russia, which had reached 13 percent of GDP in 1991, in addition to the fall in tax revenues as in other transition countries. This triggered large deficits, most of which ended up being money financed for lack of any alternative. As a result, inflation exploded, much as happened in most other CIS countries.

Table 1.1: Key Indicators, 1991-1998

	1991	1992	1993	1994	1995	1996	1997	1998
GDP growth (% p.a.)	-2	-14	-16	-20	-5	7.1	9.9	1.8
Inflation (% CPI eop)	179	1259	767	96	32	35	15	18
Fiscal Balance (cash basis) % of GDP	5	-17	-14	-12	-17	-10	-9	-9
Current Account (% of GDP)	11	-6	-17	-11	-17	-24	-8	-22
Non-Interest Current Account (% GDP)	11	-6	-17	-11	-17	-21	-5	-18
Total External Debt/GDP (%)	--	--	32	39	51	64	81	96
Debt/Exports of Goods & Services (%)			85	118	167	196	203	252

1.3 But by 1996, the macroeconomic situation was turned around. GDP grew by 7 percent in 1996 and by an even more exuberant 9.9 percent in 1997 and was set to continue at a comparable pace in early 1998. While the resurgence of growth was partially due to the investment program for and coming on stream of the Kumtor gold mine, the recovery was broader than just mining: agriculture and services rebounded too. Excluding the gold mine, growth in 1997 was 5.3 percent.

Figure 1.1: Government Expenditures, Tax and Non-Tax Revenues as % of GDP (1995-1997)

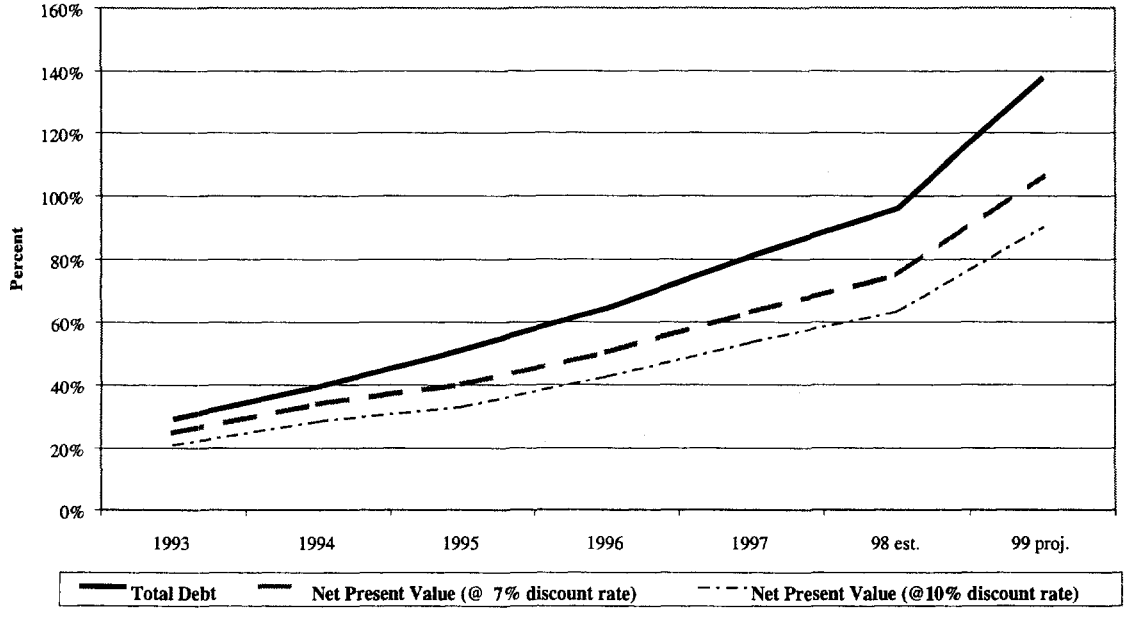


1.4 Kyrgyzstan did manage to get its fiscal house in some order at that time although growth itself did not contribute much to the modest restoration of fiscal control: tax revenues in fact declined as a share of GDP in 1996 and 1997 compared to 1995. But lower Government expenditure and higher non-tax revenues more than offset the failure to increase tax revenues, with significant deficit reductions as a result (see Figure 1.1). Over the period 1995-1997, the cash deficit went down from 17 to about 9 percent of GDP. As a result of these developments and an increasingly firm monetary policy, inflation was declining and fell to 15 percent per annum towards the end of 1997. This was largely in response to a monetary policy that mostly accommodated external inflows in 1997 but did not allow domestic deficits to become a source of inflation; credit to the Government was not a serious driver of money creation.

1.5 1997 also saw a substantial decline in external imbalance; the non-interest current account deficit declined from an average of around 17 percent of GDP to 5 percent in 1997 in response to the substantial decline in investment associated with the completion of the Kumtor mining project and the continued improvement of the fiscal accounts. In fact the capital account was in sufficient surplus to bring in an overall balance of payment surplus in 1997. As a result of the fiscal and external situation and the relatively tight monetary policies, stability was restored to the exchange rate. The value of the som stabilized at about 11 som to the dollar by the beginning of 1994, stayed there until late 1996 at which time a sharp depreciation took place, after which another year a half followed of relative stability at around 17-20 som per dollar. Although the difficult international situation and Kyrgyzstan's hemorrhaging external deficit started to put pressure on the som as early as March 1998, the Russian crisis accelerated the process and resulted in a depreciation of around 50 percent over the period September-December 1998.

1.6 But external debt numbers look threatening at the surface and not surprisingly so: four years of non-interest current account deficits of close to 17 percent of GDP on average leave

Figure 1.2: Nominal and Net Present Value of Debt, 1993-1999



their mark. The increase in debt, while less dramatic once its concessional nature is taken into account, is clearly worrisome, even at the growth rates of 1996 and 1997 (see Figure 1.2). The end of the Kumtor project, however, led to a 15 percentage points improvement in the non-interest current account in 1997, slowing down at least the rate of external debt accumulation. Of course a key issue is whether further concessional financing will be forthcoming to accommodate external current account imbalances of close to 10 percent of GDP; 8 percent of GDP was the trigger value at which both Mexico in 1994-95 and Thailand in 1997 succumbed to external crisis and closure of external capital market access.

1.7 The year 1998 started off buoyantly, but with some worrisome signs. Growth initially was strong, as were tax revenues. Thus, deficits seemed to consolidate at an annual deficit of around 10 percent of GDP, high but clearly lower than in the period leading up to 1996. But the tax buoyancy reflected mostly high receipts of indirect taxes, with direct taxes staying at unusually low levels (see Chapter 4). This may well be due to the establishment of several Free Economic Zones (FEZs), creating a big hole in the tax base.

1.8 On the external account, however, the improvement of 1997 seemed to be reversed in early 1998. The current account deficit in the first half of 1998 was at US$160 million, almost 2.5 times as big as it was in the corresponding period in 1997 (US$63 million). Only part of that deterioration can be traced to fiscal slippage; while the cash deficit stayed more or less at 1997 levels in comparison to GDP, arrears are estimated to have increased by about 2 percent of GDP, much less than the renewed hemorrhage in the current account. The buoyancy in indirect tax revenues points at increased consumption expenditure, possibly in response to renewed optimism after what at that time seemed a second year of high real output growth. This view is also corroborated by the composition of the increase in imports: over 60 percent of the increase in imports was due to consumption goods, which rose by 83 percent in dollar terms over the same period in 1997 (see Figure 1.3).

1.9 The good news came to an abrupt end in the middle of 1998. At the end of May, there was an environmental disaster (a cyanide spill in Issy-kul lake, a key tourist attraction) and shortly thereafter massive floods. And in August 1998, the Russian crisis hit. Kyrgyzstan's relatively isolated trade structure had largely shielded the country from the turmoil of the Asian crisis that burst into the open one year earlier, but Russia is too close for its crisis to pass without effect. Growth, buoyant until mid-1998, collapsed, inflation accelerated briefly in late 1998 (at monthly rates of 6.2 and 4.2 percent in November and December respectively) and external imbalances widened although less so than earlier in the year. Exports to the FSU fell sharply in the third and fourth quarters (see Figure 1.4). Electricity exports fell by 4 percent of GDP over the year, which meant huge losses for the public electricity company, Kyrgyzenergo, more so as export prices cross-subsidize domestic prices.[1] Other public companies, such as gas and airlines also did not increase prices, already below cost recovery and so had larger losses.

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[1] The setback in electricity exports was partly due to favorable hydrological conditions in the region (Uzbekistan and Kazakhstan import electricity from the Kyrgyz mainly for the release of water which is predominantly settled through barter for gas and coal respectively). Other factors are: (i) privatization of the electricity sector in Kazakhstan which has changed the power trade arrangements and substantially removed government's influence in trade arrangements; and (ii) increasing urge among these countries for self-sufficiency of energy.

Figure 1.3: Imports by Function 1997-1998

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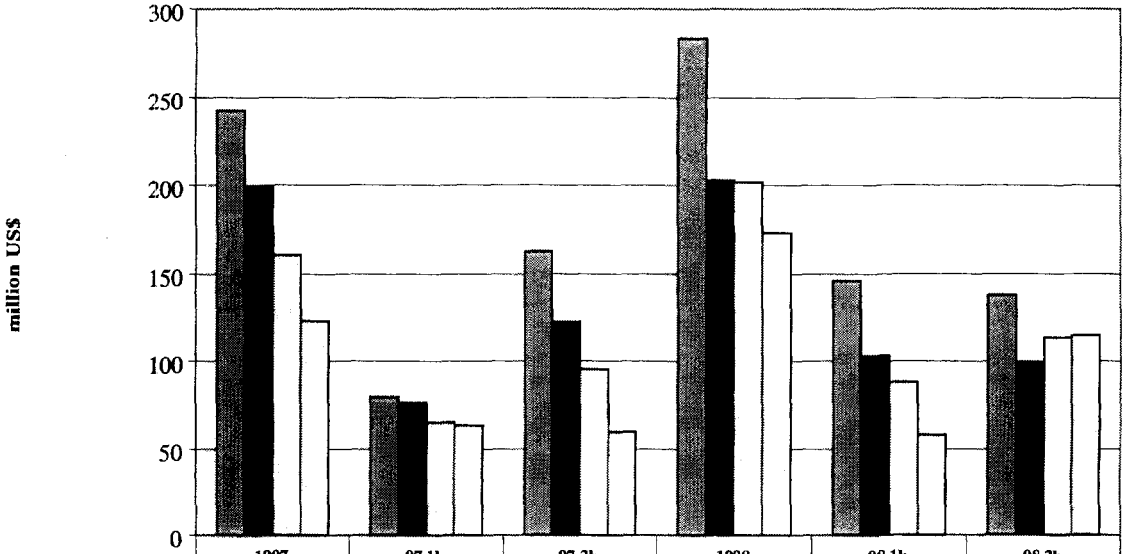
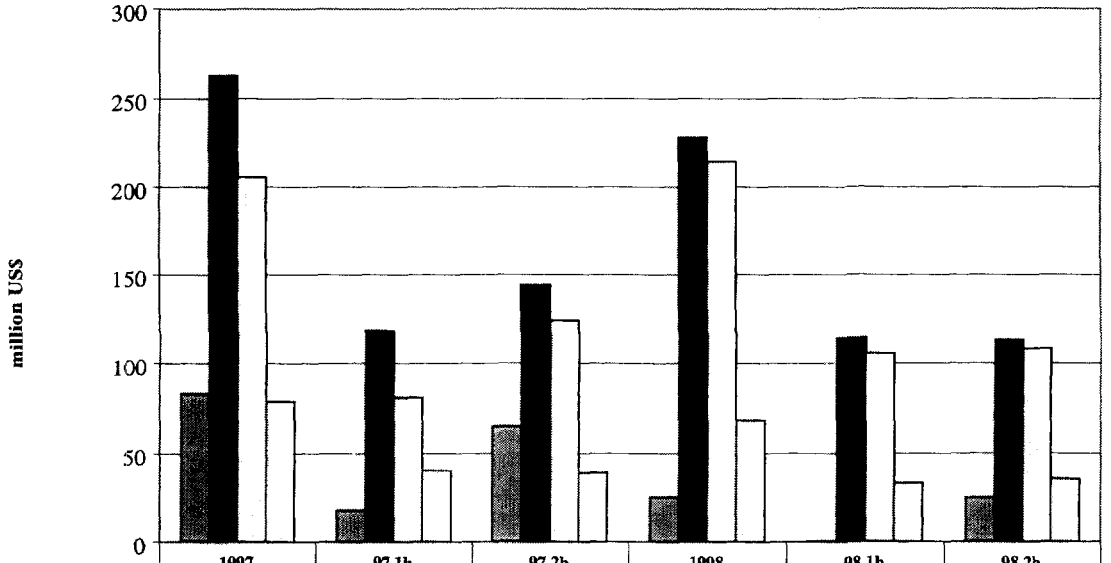


	1997	97 1h	97 2h	1998	98 1h	98 2h
Consumption	242	80	162	284	146	138
Energy	200	77	123	203	103	100
Intermediate	160	65	95	202	88	113
Investment and transport	123	63	60	173	58	115

Figure 1.4: Exports by Region 1997-1998



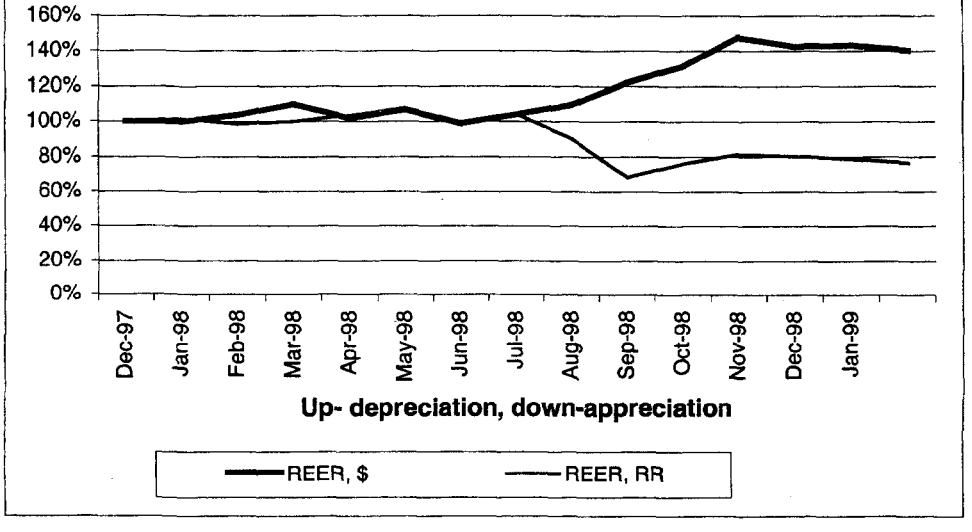
	1997	97 1h	97 2h	1998	98 1h	98 2h
Power to FSU	83	18	65	26	1	25
Other to FSU	263	119	144	228	115	113
Non-ferrous to non-FSU	206	81	124	214	106	109
Other to non-FSU	79	40	39	69	33	35

1.10 There are several transmission channels through which Russia's problems reach the Kyrgyz Republic. *First* of all a very direct link: economic activity, that was hesitantly turning upwards in Russia in early 1998, turned decisively negative after the *de facto* default on internal and external debt announced in August 1998. A growth rate of minus 5 percent of GDP was recorded for 1998 in Russia. This has a major direct and indirect impact (see Table 1.2). Besides the fall in electricity exports, other exports to the FSU fell in the third and fourth quarters by 17 percent and 25 percent respectively over the same period in 1997 (see Figure 1.4).

Table 1.2:

Trade with Russia: Kyrgyz and its main CIS Trading Partners, 1997 (exports as percent of total)		
Kyrgyz to	Russia	20.3
	Kazakhstan	16.9
	Uzbekistan	21.8
Kazakhstan to	Russia	42.5
	Kyrgyz	1.7
	Uzbekistan	7.0
Uzbekistan to	Russia	31.2
	Kazakhstan	5.4
	Kyrgyz	4.0

Figure 1.5: Real exchange rate index, Dec97=100



1.11 A *second* transmission channel works through prices: while the currency collapse in Russia was followed by renewed high inflation, the net effect was nevertheless a major real depreciation of the Russian rouble. This had once again a major direct and indirect impact. The som appreciated sharply in real terms immediately after the crisis but started to slide down from August onwards (see Figure 1.5). Since most neighbouring countries did not follow the Som (until later), Kazakhstan actually imposed quotas and doubled the tariffs on Kyrgyz goods (see Figures 1.8 and 1.9).

1.12 Interest rates immediately reflected the market's expectation that the som would follow suite and shot up to triple digit levels on an annualized basis (see Figure 1.6). Obviously at such interest rates the fiscal situation became explosive very rapidly even though domestic debt is as yet at a very low level, and a change of policy became unavoidable. The som was let go within months, after which interest rates returned to more reasonable levels. However, the general lack of stability in the neighboring economies added to doubts about Kyrgyzstan's own fiscal situation, and required substantial risk premia, and correspondingly high ex post real interest rates (see Figure 1.7).

1.13 The real exchange rate channel works through in several ways. First, through external competitiveness and commodity trade. Without matching adjustment, Kyrgyzstan's goods would have been priced out of the market in places like Russia; but the unavoidable real depreciation hits import prices and from there real incomes in most of the country. A second channel of the real depreciation works through the very large capital loss on external debt resulting from the real depreciation. The debt-output ratio measures the debt in terms of home goods; if their relative value falls, as it does after a real depreciation, the debt-output ratio necessarily rises. At a real depreciation of 43 percent in 1998 this loss amounts to close to 30 percent of GDP.

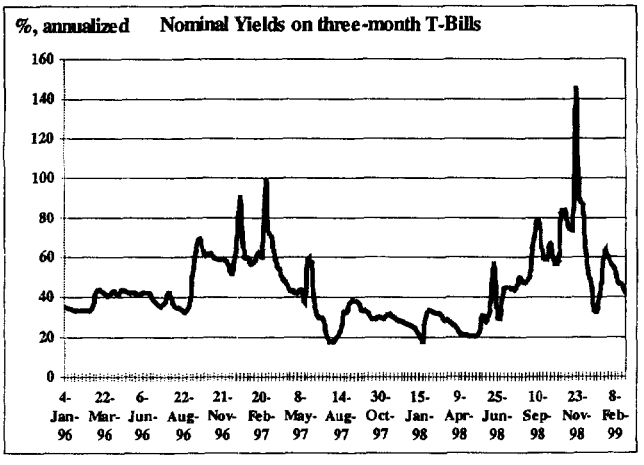


Figure 1.6:

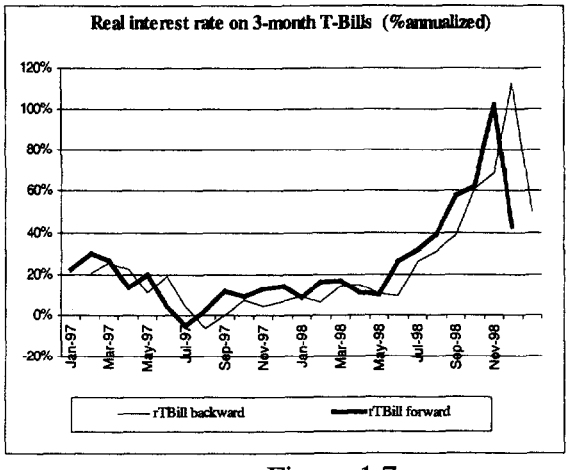


Figure 1.7:

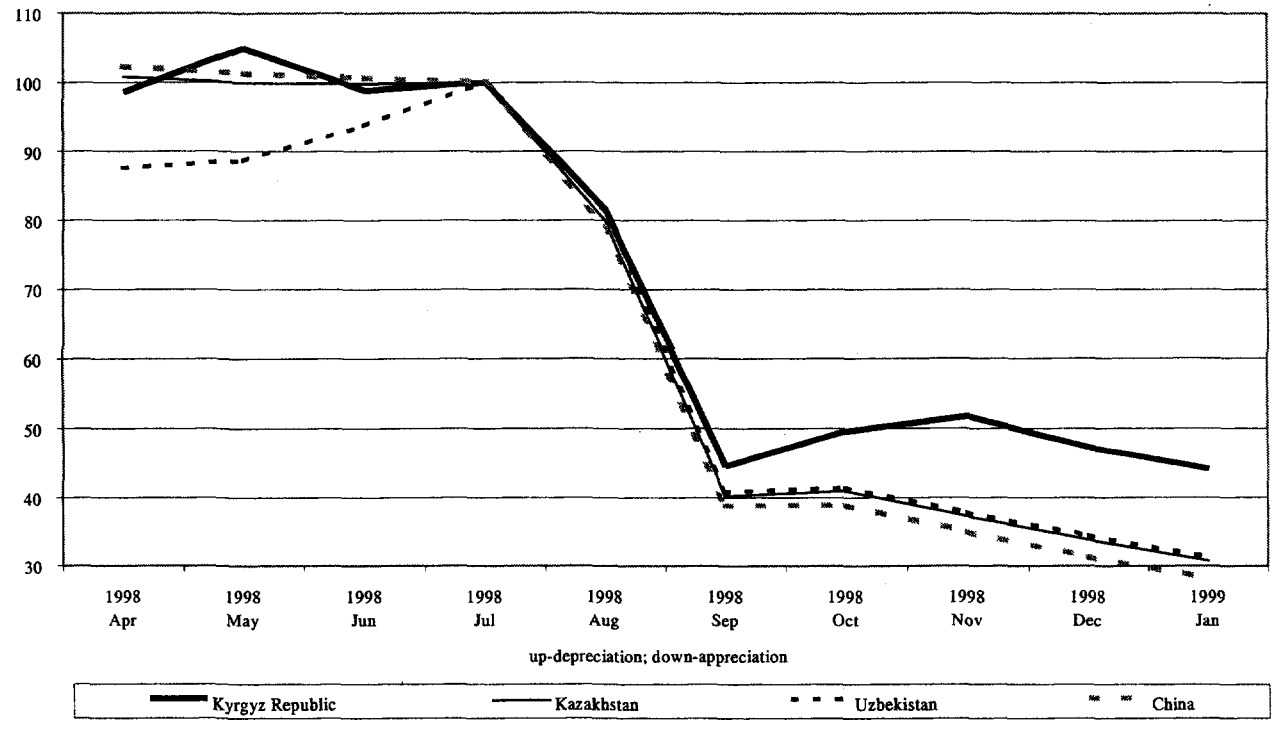
1.14 A second effect of the exchange rate works through the commercial banks and is familiar from all earlier crises. In the period of currency stability leading up to the Russian crisis, commercial banks built up large foreign exchange exposures by borrowing in foreign exchange or taking deposits in foreign exchange, but lending the funds on at higher interest rates in home currency. As long as the exchange rate stayed stable, the interest differential translated in a profitable cash flow but as this process progressed, the exchange rate exposure of the banks grew rapidly. When the exchange rate started to slide, however, the risks became apparent. Also, where exposure seemed to be covered through foreign exchange lending, the exchange risk was transformed into exchange rate related commercial risk: firms, when faced with higher borrowing costs and larger debts because of the exchange rate effects on their dollar loans, started to slip behind in debt servicing. Over 1998, recorded bad loans increased from 9 percent to 21 percent of the total lending portfolio.

1.15 But a *third* transmission channel, through international capital markets, has largely left the Kyrgyz Republic unscathed, huge as the impact has been internationally, for the simple reason that Kyrgyzstan did not really have access to commercial markets to begin with. The Kumtor project was an exception due to the easily collateralisable output of the project (gold exports). However, it may become an issue if the concessional financing sources open sofar to Kyrgyzstan start to dry up without matching internal adjustment taking place in Kyrgyzstan.

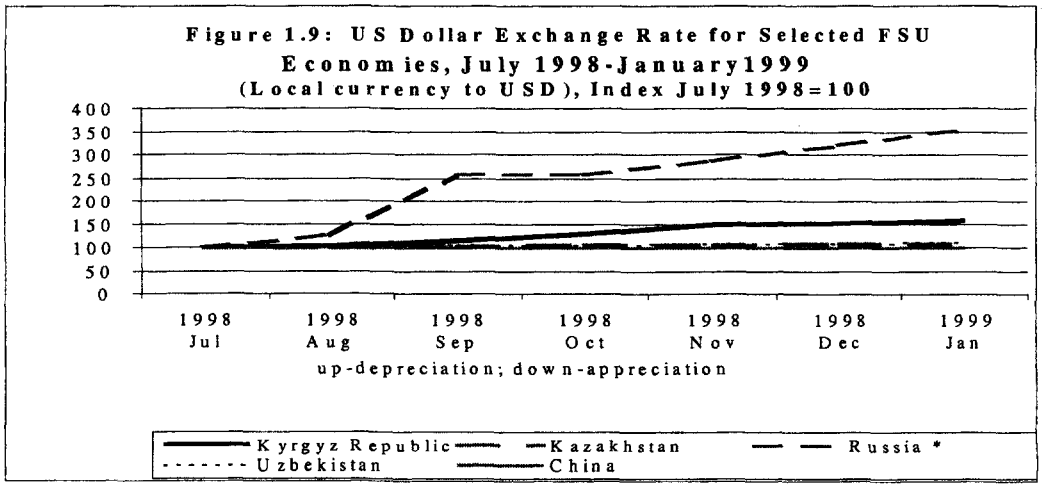
1.16 On balance, the Kyrgyz Republic looks in considerably worse shape than prior to the regional financial crisis. This means that both external activity and competitors' prices will keep exercising a downward pressure on the economy. And all this is coming at a time when Kyrgyzstan actually faces high refinancing needs.

1.17 The external environment lends new urgency to the lingering question of sustainability of fiscal policy targets. There was a clear shift away from domestic money in the latter half of

Figure 1.8:
Russian Ruble Exchange Rates for Selected FSU economies, Jan 1997-Jan 1998
(local currency to Russian ruble), Index July 1998=100



1998, the high interest rates notwithstanding, undermining the admittedly large base for the inflation tax. Moreover, structural measures aimed at creating an effective banking system, while clearly necessary from a national economic point of view, will further undermine that basis. Against this rather worrisome background, an analysis of the sustainability of Kyrgyzstan's internal and external debt processes is clearly timely. In the next Chapter, fiscal adjustment needs are analyzed. One conclusion will be that foreign debt reduction would considerably ease that process. And even without those fiscal imperatives, external debt still seems at least in need of rescheduling and possibly of actual reduction. This is discussed in Chapter 3.



CHAPTER 2

FISCAL SUSTAINABILITY

2.1 Kyrgyzstan's fiscal policy stance is sustainable **if** public expenditures are in line with available financing sources without needing recourse to explosive rates of debt issue. In addition, sustainability requires that this situation is achieved with expenditure levels and tax parameters that meet minimum social needs and allow room for private sector activity. This chapter concerns itself with the first requirement. To assess the sustainability issue, we first survey fiscal developments since the collapse of the FSU in 1991 culminating in the current fiscal stance and then assess compatibility of current deficits with available financing sources and requirements of stable rates of debt issue.

A. Fiscal Adjustment So Far

2.2 The collapse of the FSU in 1991 required a massive fiscal adjustment in Kyrgyzstan. In addition to the plunge in tax revenues between 1990 and 1992 of 7.5 percentage points of GDP (excluding social security contributions), and the loss of implicit transfers from the Union through low energy prices, the Government had to adjust to the loss of direct budgetary support from the Union which was almost 13 percent of GDP in 1991, the last year that Russia provided such transfers (see Table 2.1).[1]

2.3 As in other FSU countries, tax revenues declined sharply after the collapse of the Soviet Union. Tax revenues (excluding social security contributions, which were part of the Budget in 1990) fell from 22 percent of GDP in 1990 to 14.5 percent in 1992 and further to 12.5 percent of GDP in 1997. In 1998 tax revenues increased somewhat, to 14.4 percent of GDP, partly due to the buoyancy of indirect taxes but also due to a significant effort in arrears collection. Direct taxes are, however, now down to 3.5 percent of GDP in 1998 (if the presumptive land tax is included), down from a more reasonable 7.7 percent of GDP in 1991. Most significantly, the profits tax has fallen to barely over 1 percent in 1998, down from over 5 percent of GDP.

2.4 In response to the loss of revenues, the Government began reducing social expenditures and budgetary transfers to enterprises and agriculture. In 1994, significant expenditure cuts were made but the deficit remained high as tax revenues continued to fall and public investment, hitherto negligible, was increased (through concessional foreign finance). Further reductions in transfers to enterprises and agriculture (through reduced net lending), in allowances to the poor and a reduction in the wage bill contributed to a cut in expenditures of 8 percentage points of GDP in 1996. The policy of reducing budget support to enterprises and agriculture continued, so that by 1998 subsidies to state enterprises comprises only 0.6 percent of GDP (mostly to public utilities). Also, budgetary lending has been reduced to a minimal amount and is being phased out.

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[1] The Government's finances, after the inclusion of transfers from the Union, recorded small surpluses in the period 1987-91. As expenditures grew more than revenues, the difference was financed by increased transfers from the Union and, in 1991, from the Russian Federation. Between 1987-91, net external budgetary support increased from 6 percent of GDP to 13 percent of GDP.

Table 2.1: General Government Finances, 1990-1998 (as % of GDP)									
	1990	1991	1992	1993	1994	1995	1996	1997	1998
Revenues	**38.5**	**35.6**	**16.5**	**24.6**	**20.7**	**16.7**	**16**	**16.4**	**18.1**
Tax[1/]	26.3	17.5	14.5	14.5	13.6	15	12.7	12.5	14.4
Non-tax	1.4	5.4	2	1.5	4.6	1.4	2.4	2.8	2.9
Grants and Capital Revenue	10.9	12.7	--	8.6	2.5	0.3	0.9	1.1	0.8
Expenditures	**38.3**	**31.1**	**33.9**	**39.3**	**32.4**	**33.7**	**25.3**	**25.6**	**26.6**
Current	32.6	29.8	23.7	30	22.8	25.5	21	21.8	21.5
Wages	6.4	7.3	6.2	5.2	8.7	9.5	7.5	6.7	6.8
Transfers & subsidies	16.1	13.3	9.5	16.9	6.8	6.9	4.7	3.4	3.2
Social Fund subsidy	0	0	0	0	0.6	0.6	1.3	1.5	1.0
Interest	0	0	0.5	0.7	0.2	0.4	1.2	1.9	1.9
Other	10.1	9.2	7.5	7.2	6.5	8.1	6.3	8.3	8.6
o.w. Operns & Maint.	3.1	2.9	na	na	Na	1.4	1.0	0.7	0.7
Net lending			7.8	8.8	4.7	3.4	0.4	0.1	-0.5
Capital investment	5.7	1.3	2.4	0.5	4.9	4.8	3.9	3.8	5.6
Domestic-financed inv.		1.3	2.4	0.5	1	1	0.7	0.7	0.9
Foreign-financed inv.					3.9	3.8	3.2	3.1	4.7
Fiscal Balance	**0.3**	**4.5**	**-17.4**	**-14.7**	**-11.7**	**-17**	**-9.3**	**-9.2**	**-8.5**
Budgetary Arrears				**0.75**	**2.5**	**--**	**--**	**--**	**2.5**
Social Fund[1/]									
Revenues (w/o govt. subsidy)					5.3	7.4	6.7	6.3	6.0
Govt. subsidy					0.6	0.6	1.3	1.5	1.0
Expenditures					6.2	8.3	8.3	7.5	7.3
Social Fund Arrears					**0.2**	**0.2**	**0.3**	**-0.3**	**0.3**

1/ For 1990, social security was included in the government budget and social security contributions, which were 4.4 percent of GDP, were included in tax revenues. It became an extra-budgetary fund in 1991.

2.5 Particularly hard hit have been social expenditures, which were high in 1991 when Russia still provided large transfers. Social expenditures (excluding the Social Fund) fell by as much as 8 percentage points of GDP between 1991 and 1998 (see Table 2.2) and are 40 percent of State Budget expenditures, down from 65 percent in 1991. The Government eliminated most direct food and non-food subsidies, but continued to target milk and food through institutions such as health care centers, schools and kindergartens. In early 1993, the Government took the major decision to reduce the level of, and to redefine the eligibility criteria for, family allowances. And in 1995, the Government further streamlined the complex system of cash benefits and income support by replacing four general cash transfer payments (the bread compensation, child allowances, childbirth grant and the non-contributory social pensions, although the latter were reinstated a few months later) into a single general social welfare payment based on income, the Unified Cash Benefit. This allowance is down to 0.7 percent of GDP in 1998 from 4 percent in 1995.

Table 2.2: Social Expenditures, 1995-1998 (as percent of GDP)					
	1991	1995	1996	1997	1998
Family Allowances to Poor	6.7	4.0	1.8	1.0	0.7
Food Programs[1/]	3.7	1.4	1.2	1.1	1.1
Other[2/]	n.a.	0.6	0.6	0.5	0.6
Health Services	3.3	3.7	3.2	2.9	2.8
Education	6.3	6.5	5.2	4.8	4.8
Privileges	n.a	n.a	n.a	n.a	1.0
Social Fund Subsidy	0	0.6	1.3	1.5	1.0
State Budget Social Expenditures	**20.0**	**16.8**	**13.3**	**11.8**	**12.0**
Social Fund Expenditures	**7.0**	**8.3**	**8.3**	**7.5**	**7.3**

1/ Food for hospitals, kindergartens, and other subsidiary social units attached to the ministries and other public agencies.

2/ Includes military pensions, stipends and allowances to disabled.

2.6 Government expenditures in the education and health sectors have also fallen (by 2 percentage points of GDP since 1991) and in 1998 jointly comprised almost 8 percent of GDP with two-thirds of this on education. The reduction in expenditures, though, has not been accompanied by an overall rationalization of facilities and adjustment in sector policies. Health expenditures have fallen precipitously with a consequent deterioration in the quality of services. Public spending on health care is an estimated $10 per capita in 1998, below the WDR 1993 recommended minimum of $12 for basic health care programs in low income countries. Yet, as in other FSU countries, the system is highly specialized and the bulk of resources flow to costly inpatient care rather than to outpatient primary care. The number of physicians has increased to 3.3 physicians per 1000 population in 1997, well above the OECD average of 2.5. And there is a high share of specialists relative to generalists. While the number of hospital beds has declined to 8.8 in 1997, hospital occupancy has also declined clearly indicating excess capacity. Structural reforms are needed to orient the health system towards the main health problems of the country and to ensure efficient service, whilst considering the financing of health service. The education sector also needs to be strengthened and rationalized to adjust to the present fiscal realities and to the new economic and social context.

2.7 Although almost all social expenditures have fallen, pension expenditures have risen, and in fact, by more than the payroll tax collections on which their revenues are based (see Table 2.3). As a result, the pension fund (part of the Social Fund, an extra-budgetary fund) started incurring a rising deficit which the State Budget finances. By 1997, the deficit of the pension fund financed by the government budget had risen to 1.5 percent of GDP.[2] Despite a high payroll tax rate (of 32 percent) and favorable demographics, pension contributions are insufficient to cover benefit payments (of the PAYG system). Reform of the pension system is therefore a priority. In 1998, the government initiated pension reform, supported by the SOSAC program. Notably, these measures include an increase in the retirement age by a total of three years (over a period of nine years); elimination of the non-contributory earning periods from the base of the pension benefit and incorporation of the appropriate life expectancy for the part of the

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2 In 1998, the deficit of the pension fund had fallen to 1 percent of GDP primarily because of the once-off effect of a deferral of benefit payments by one month so that payments are made at the end of the month as is normal practice.

benefits related to individual contributions. These measures would eliminate the deficit and permit a reduction in the payroll tax rate over time.

Table 2.3: Social Fund Finances, 1994-1998 (as percent of GDP)

	1994	1995	1996	1997	1998 est.
Pension Fund					
Contributions[1/]	4.0	5.6	5.1	4.9	4.8
Mandatory transfer[2/]	0	0	0.4	0.4	0.5
Expenditures	5.2	7.4	7.6	7.0	6.3
Balance	**-1.2**	**-1.8**	**-2.1**	**-1.7**	**-1.0**
Govt. Subsidy	0.3	0.7	1.3	1.5	1.0
Balance after Govt. Subsidy	-0.9	-1.1	-0.8	-0.3	0.0
Social Insurance Fund					
Revenues	0.7	1	0.9	0.6	0.4
Expenditures	0.9	0.7	0.5	0.4	0.4
Balance	-0.2	0.3	0.4	0.2	0.0
Employment Fund					
Contributions	0.2	0.3	0.3	0.3	0.3
Expenditures	0.1	0.2	0.3	0.2	0.3
Balance	0.1	0.1	0	0.1	0.0
Govt. Subsidy	0.6	0.6	0	0	0
Balance after Govt. Subsidy	0.7	0.7	0.0	0.1	0.0
Medical Fund					
Revenues	0	0	0	0.1	0.3
Expenditures	0	0	0	0	0.1
Balance	0	0	0	0.1	0.2
Overall Balance	-0.4	-0.1	-0.4	0.1	0.3

1/ Includes carried-over balance and arrears collection.

2/ Transfer from State Budget to give additional privilege payments.

2.8 In spite of the drastic measures taken, the authorities have in addition had to rely on a general compression of expenditures with a build-up of arrears as a consequence. Education and health expenditures have been squeezed, as indicated above, but because commitments were not cut commensurately, these sectors now have the largest wage arrears. Moreover, budgetary allocations have been severely cut across-the-board. Operations and maintenance expenditures have fallen to a mere 0.7 percent, down from 3 percent of GDP. And, as a result of reduced tax income, government departments started relying on non-tax sources such as levying fees and charges. These have grown to almost 2 percent of GDP from zero in 1995. While these are not off-budget, there is less transparency in how the resources are used compared with general budget funding (as the expenditures are classified as "other") and the revenues are collected in an inefficient manner, creating a 'nuisance' value to firms.

2.9 These special resources have also enabled an increase in state administration. General public services, defense and public order and security together amount to 5.5 percent of GDP. Expenditures on general public services have grown from 2.2 percent of GDP in 1994 to 2.9 percent in 1998, of which expenditures from the special resources were 0.5 percent of GDP in 1998. While a staff cut of 12 percent in all central ministries and government agencies has recently been approved, there is a need for broader administrative and civil service reform.

2.10 The large decline in transfers to enterprises and agriculture as well as in social expenditures has been partly offset by an increase in public investment. Foreign financing, most

of it at concessional terms, has enabled public investment of almost 5 percent of GDP in 1998. About two-thirds of this investment is on infrastructure and utilities, with the rest on agriculture and social sectors. Infrastructure investment is important for sustainable growth and the investment needs are large (see Table 2.4). But there are constraints on the amount of debt the government can accumulate (see Chapter 3). It is important therefore, first, to prioritize, and to invest in areas where there are high pay-offs such as in rehabilitating existing infrastructure and in reducing technical losses and waste. Second, adequate maintenance is necessary to avoid the need for costly new investments and, for all new investments as well, additional provision should be made for funding maintenance.

Table 2.4: Infrastructure and Utilities in the Foreign-Financed Public Investment Program

	1998	1999	1998	1999	1998
	Est.	Proj.	Est.	Proj.	Est.
	US$ million		Percent of GDP		Percent of total
Public investment program, o/w 1/	76	104	4.7	8.6	100
Power and heating	17	27	1.1	2.2	23
Airport	6	7	0.4	0.6	8
Telecommunications	8	6	0.5	0.5	10
Roads	19	19	1.2	1.6	25
Social 2/	10	18	0.6	1.5	13
Agriculture 3/	13	17	0.8	1.4	17
Others	3	9	0.2	0.8	3
Memo: GDP in US$ million	1,615	1,208			

1/ Excludes investments in the airline. It also excludes short-term borrowing or investments financed with domestic resources such as some of the gas metering.
2/ Includes health, other social services and education.
3/ Includes, among others, KAFC, irrigation and extension services.
Source: Ministry of Finance, National Bank of the Kyrgyz Republic and World Bank staff estimates.

2.11 A key issue is that although direct subsidies and budgetary transfers have been reduced, there are still large indirect subsidies and transfers to households, enterprises and the agricultural sector. These implicit transfers are provided mainly through low prices of energy and other utilities and additional discounts given to a wide range of privileged categories of persons. The implicit subsidies on electricity, heating and gas alone are estimated at almost 9 percent of GDP (see Chapter 5) yet the Government compensated the utilities for only 1.6 percent of GDP in 1998. The implications of this are clear: the utilities build up payment arrears to suppliers, are not able to maintain assets, and will be unable to improve or expand services Already, the infrastructure and utility companies are facing problems in paying their suppliers and creditors. The electricity company is illiquid and unable to pay suppliers fully. The gas company has large payment arrears on imports of gas which periodically result in gas cut-off by Uzbekistan, and recently it has incurred large short-term debts that it is unable to service. The airline was unable to pay for airbuses for which it had entered into a contract. Thus, although the direct budget expenditures on utilities is less than 4 percent of GDP at present (see Table 2.5), in the future the Government might be forced to bail out the utilities, either directly or by having to restructure those banks that hold the non-performing loans of utilities – thus, these implicit transfers

constitute a contingent deferred deficit of the government.[3] Failure to carry out thorough going structural reforms will lead to growing deficits accruing in the public utilities.

Table 2.5: Budget Expenditures and Implicit Subsidies on Utilities, 1998 (as percent of GDP)

	Budget Expenditures	Implicit Subsidies 1/
Compensation for price regulation	0.6	8.9
Privileges	1.0	
Public Investment 2/	2.0	
TOTAL	3.6	

1/ Implicit subsidies are estimated only for electricity, heating and gas based on the difference between a conservative cost-recovery price and the average unit prices for 1998 calculated on billed sales. To the extent that there were arrears, this is an underestimate. See Chapter 5.

2/ This comprises foreign-financed investment on utilities (energy and telecommunications) and airport. Public investment on these is expected to grow to 3.4 percent of GDP in 1999 and 2.8 percent of GDP in 2000. Urban transport, roads, and irrigation are not included here.

2.12 Finally the large deficits have resulted in a growing debt burden; interest expenses are growing and are starting to threaten to crowd out public investment on critical infrastructure and its maintenance. All this adds up to a picture of fiscal adjustment that, major as it may have been, may very well not have gone far enough. In the next section we quantify how far the Government has come in bringing expenses in line with sustainable revenues.

B. Can the Fiscal Deficit be Sustained?

2.13 In 1998, the total deficit inclusive of social fund and budgetary arrears amounted to slightly over 11 percent of GDP (see Table 2.1). Without interest payments, the so called non-interest deficit was close to 9 percent of GDP. Even at Kyrgyzstan's very low average interest rate on external debt, this deficit will lead to explosive debt behavior: at a 5 percent US dollar growth rate, even a 1 percent dollar interest rate indicated the non-interest deficit should not exceed 5.6 percent of GDP if debt/output ratios are to be stable at the level projected to prevail at the end of 1999.[4] And this is under the optimistic assumption that the entire deficit can be financed at a concessional 1 percent in dollar terms.

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[3] Already in 1995-1996 a major bank restructuring took place since some of the banks had become insolvent as a result of quasi-fiscal activities – directed lending to enterprises and agriculture -- that had continued until early 1994. By March 1995, the combined non-performing loans of the former Big Four banks (Agroprombank, Elbank, AKB Kyrgyzstan Bank, and Promstroi Bank) were estimated at 1.4 billion som. This represented 92 percent of their gross loans and 9 percent of GDP. The poor quality of the banks' loan portfolios was largely a legacy of the directed lending to enterprises and agriculture, which continued until early 1994. Most of this lending was to cover losses or maintain employment. Reforms were undertaken with the support of the Bank's FINSAC. The Government's strategy involved *inter alia:* (i) liquidating the two dominant and insolvent state-owned banks, Agroprombank and Elbank (the Savings bank); (ii) downsizing and financial restructuring through private recapitalization of two large and insolvent former state banks, Promstroi and AKB Kyrgyzstan Banks; and (iii) creation of a Debt Resolution Agency (DEBRA) to help collect, restructure, sell or write-off the old non-performing loans, and thus accelerate enterprise restructuring or liquidation in the process.

[4] The face value of the debt is projected to be 140 percent of GDP at the end of 1999, so (i$-n)b = (0.01 .05)*1.40=5.6 percent, where i$ is interest rate on foreign financing, n is GDP growth rate and b is the debt-output ratio.

2.14 Of course this quick calculation is just that, a quick calculation. A more serious analysis has to also incorporate money financing and its interaction with the existing financial infrastructure and domestic debt issue. Money financing is in fact still important: Kyrgyzstan has a high money to GDP ratio and correspondingly high seigniorage revenues. This is partially a reflection of its small domestic banking system. In what follows, we will first discuss the relation between inflation, money financing of deficits and financial structure; then we will give a full-fledged analysis of Kyrgyzstan's financing possibilities and its corresponding need to adjust.

An Evaluation of the Fiscal Stance in 1998

2.15 The key question to be answered in this section is whether at reasonable inflation targets, Kyrgyzstan's fiscal deficits can be financed without having to issue debt at an increasingly explosive rate. To answer that question, we assess how much Kyrgyzstan can expect from its three main financing sources, money issue, domestic debt finance and foreign debt issue, under targeted inflation and output growth rates. *Money financing* consistent with given inflation and growth targets will depend on the financial structure. Domestic and foreign debt issue is supposed to be possible at a rate that will not increase debt-output ratios further. Since in particular the relation between money financing, inflation and growth requires information about the structure of money demand in Kyrgyzstan, an explicit model is necessary to assess the consistency of deficits, inflation and output growth targets and the inherited debt stock.[5]

2.16 Table 2.6 analyzes the fiscal stance of the Kyrgyz economy as of 1998. Inputs in the analysis are: a real interest rate of 13.4 percent on domestic debt,[6] 2.8 percent real interest rate on foreign debt[7], net foreign debt to GDP ratio of 76 percent (i.e., gross foreign liabilities of the Government and the NBK less NBK foreign assets), 6 percent domestic debt to GDP ratio, and 9.9 percent real consolidated public sector deficit. We also assume a 2 percent real output growth and a crawling peg consistent with zero real foreign exchange rate depreciation. This assumption is based on the view that there was a once-off real exchange rate adjustment after the Russian crisis; the implications of a more pessimistic exchange rate outlook are explored below.

2.17 Table 2.6 gives the actual real deficit and compares it with available financing sources. Foreign financing is assumed to be forthcoming at a rate designed to keep the debt-output ratio from growing further. The same assumption is made on domestic debt financing. The procedure on revenue from money creation is more elaborate. Based on estimates of demand functions of the various components of money demand, the overall level of base money can be estimated at the beginning and the end of the year for different inflation rates. For a given inflation rate, the

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[5] See Background Paper "An Assessment of Fiscal Sustainability in the Kyrgyz Republic" by Budina and van Wijnbergen for a discussion of the methodology used, assumptions for the base year data and estimates of seigniorage or money creation revenues for various inflation rates.

[6] The real interest rate on domestic debt is the rate that prevailed in 1997, which is taken for the steady-state analysis since the real interest rates in 1998 were very volatile in the aftermath of the Russian crisis.

[7] The actual nominal interest rate is 4.8 percent and if we assume 2 percent foreign inflation, we get a real foreign rate of 2.8 percent.

difference between end-of-year and beginning-of-year base money equals income from money creation, in economists' jargon seigniorage. Total available financing, in the table listed under the heading "financeable deficit", thus depends on the inflation rate, since that influences the rate of seigniorage the Government will be able to extract from its citizens. Finally, the table lists the difference between the financeable and the actual deficit (called the RDR, for Required Deficit Reduction) as a measure of the adjustment required.

Table 2.6: Financeable Deficit and Required Deficit Reduction with GDP Growth at 2% (as percent of GDP)

Inflation	Financeable Deficit	Actual deficit	Required Deficit Reduction
0%	3.36	9.90	6.54
10%	4.25	9.90	5.65
15%	4.60	9.90	5.30
20%	4.90	9.90	5.00
30%	5.40	9.90	4.50
50%	6.06	9.90	3.84
100%	6.78	9.90	3.12
140%	6.95	9.90	2.95
200%	7.00	9.90	2.90
600%	6.56	9.90	3.34

Table 2.7 breaks down the financeable deficit at 15 percent inflation in its main sources.

Table 2.7: Components of Financeable Deficit under Base Case Assumptions

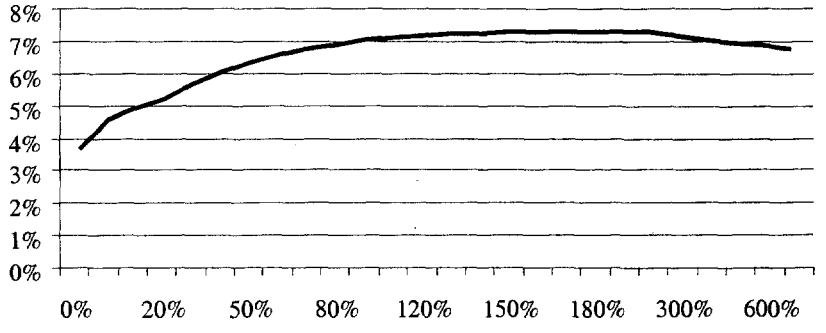
	Percent of GDP	Percent of total
Financeable deficit	4.60	100
Allowable domestic borrowing	0.12	3
Seigniorage revenue	1.47	32
Allowable foreign borrowing	1.49	32
Foreign debt erosion[1/]	1.52	33

1/ This term is equal to the additional foreign borrowing that will not increase the real value of the debt and equals to the foreign inflation times foreign debt/output ratio.

2.18 Domestic borrowing (i.e., additional borrowing consistent with keeping the domestic debt-output ratio constant) yields only 0.12 percent of GDP, a consequence of the relatively low ratio of domestic debt to GDP. Seigniorage, or revenue from money creation, can be expected to yield about a percentage point and a half once panic shifts into foreign currency have stabilized; and foreign borrowing will allow another 3 percent of GDP before debt/output ratios start to increase again. The latter is made up of two components; the first one indicates the increases in the real value of the debt consistent with keeping the debt-to-output ratio constant; and the second one, labeled foreign debt erosion, indicates the amount of borrowing possible without increasing the real value of the foreign debt. The sum of these sources of financing determines *the financeable deficit*. Figure 2.1 depicts this financeable deficit for various inflation rates for the Kyrgyz economy.

2.19 The results very clearly show that the actual deficit is far out of line with the requirements of stable debt-output ratios for all inflation rates considered. For all inflation rates, the deficit exceeds what can be financed by 3 percent of GDP or more. The maximum revenue

Figure 2.1: Financeable Deficit for Various Inflation Rates



from money financing is achieved at an inflation rate of about 200 percent; at the rates observable now, revenues are lower and necessary adjustment is correspondingly higher. For example, to bring inflation down to 5 percent on a sustainable basis, the deficit needs to be brought down by a full 6 percentage points of GDP at current debt levels!

2.20 Because of Kyrgyzstan's high debt-output ratio, output growth has a big impact on the financeable deficit. Since the requirement is stable debt-output ratios, higher growth leads to more available financing under this criterion. Table 2.8 shows the implications of this at a 3 percent growth rate instead of 2 percent. This adds about a percentage point to the financeable deficit; or equivalently, subtracts about a percentage point from the necessary adjustment burden. This points to the fact that Kyrgyzstan is in a real vicious circle: the high debt burden threatens to reduce growth, which in turn makes this debt burden harder to bear. It is this type of vicious circle that debt relief is designed to break through.

Table 2.8: Financeable Deficit and Required Deficit Reduction GDP Growth at 3% (as percent of GDP)

Inflation	Financeable deficit	Actual deficit	Required Deficit Reduction
0%	4.25	9.90	5.65
10%	5.14	9.90	4.76
15%	5.49	9.90	4.41
20%	5.79	9.90	4.11
30%	6.27	9.90	3.63
50%	6.93	9.90	2.97
100%	7.64	9.90	2.26
140%	7.81	9.90	2.09
200%	7.84	9.90	2.06
600%	7.39	9.90	2.51

Switching to Market Rates on Foreign Debt

2.21 We next show how changes in the external parameters facing the Government affect the fiscal adjustment burden. Consider first the interest rate on foreign debt. Table 2.9 lists the impact of a switch to market rates on the fiscal sustainability issue, where we took 12 percent as a currently reasonable estimate of the market rate. The Kumtor project was able to borrow at 500 basis points above LIBOR, but in current circumstances, a further 500 basis points markup is not unreasonable given experiences elsewhere, for example in Latin America. Not surprisingly, the impact is major; this is a consequence of Kyrgyzstan's high debt-to-output ratio. For all inflation rates, such a switch would eventually make the situation even more explosive than it already is.

Table 2.9: The Impact of Higher External Debt Interest Rate on RDR (as percent of GDP)

Inflation rate	*Required Deficit Reduction*	
	r=2.8%*	*r*=10%*
0%	6.54	12.01
10%	5.65	11.12
15%	5.30	10.77
20%	5.00	10.47
40%	4.13	9.60

Effect of Various Real Output Growth Rates and Delayed Fiscal Adjustment on the RDR

2.22 This section analyzes the vicious circle because of the deadly interaction between high debt and low growth. Table 2.10 below lists the required deficit reduction for various inflation targets under a high and under a low growth scenario. The results highlight two negative effects of low growth. Compare the RDR for the currently projected growth rate of 2 percent and for the longer term rate of 5 percent. The difference is substantial: for exactly the same fiscal policy stance, the required adjustment is a full 3 percentage points LOWER under the high growth rate scenario. High growth creates more room for debt issue and therefore lowers the required fiscal adjustment for any given inflation rate.

Table 2.10: The Impact of Real Growth Rate and Delayed Fiscal Adjustment on RDR (as percent of GDP)

	GDP growth at 2%		*GDP growth at 5%*	
Inflation rate	RDR now	RDR after 6 years	RDR now	RDR after 6 years
0%	12.01	22.96	9.38	15.21
10%	11.12	21.26	8.50	13.80
15%	10.77	20.59	8.16	13.24
20%	10.47	20.01	7.86	12.76
40%	9.60	18.35	7.02	11.39
100%	8.60	16.43	6.06	9.83
140%	8.42	16.09	5.90	9.58
200%	8.37	16.00	5.88	9.53
600%	8.82	16.85	6.36	10.32

2.23 The table also shows a second effect of low growth, the negative impact of low growth on debt dynamics. Since the autonomous impact of old debt on new debt issue is proportional to

the difference between the interest rate and the growth rate, higher growth rates lower the impact of delayed adjustment. At 2 percent growth, delaying adjustment by 6 years raises the adjustment burden by a crippling 11 percentage points; at 5 percent, there is a still punishing but more manageable 6 percentage points impact of delaying adjustment.
This example points at the key argument for debt relief: high debt impedes growth which in turn makes the debt burden harder to bear

The Effect of Real Exchange Rate Depreciation on RDR

2.24 The next simulation indicates the crucial impact of the real exchange rate on the burden of the debt. With an external debt ratio around 100 percent, changes in the real exchange rate have a major impact on fiscal consistency calculations. A macroeconomic policy with sustained real depreciations raises the fiscal adjustment burden in a major way by continuously increasing the relative value of foreign debt obligations in terms of domestic tax revenues. Table 2.11 illustrates that point: it lists the RDR for the real appreciation that took place in 1997 and several rates of real depreciation. The table speaks for itself: a stable macroeconomic policy that is compatible with a stable real exchange rate has a huge pay-off in terms of a reduced adjustment burden.

Table 2.11: The Impact of Real Exchange Rate Depreciation on RDR (as percent of GDP)

Inflation rate	*Required Deficit Reduction*			
	e=-8.6%	e=0, Base case	e=5%	e=10%
0%	5.61	12.01	15.74	19.47
10%	4.72	11.12	14.85	18.57
15%	4.36	10.77	14.50	18.22
20%	4.06	10.47	14.19	17.92
40%	3.19	9.60	13.33	17.05
100%	2.19	8.60	12.32	16.05
140%	2.01	8.42	12.14	15.87
200%	1.97	8.37	12.10	15.82
600%	2.41	8.82	12.54	16.27

2.25 Here too there is a vicious circle at play: a high external transfer to be made because of a high external debt will lower domestic expenditure and thus expenditure on domestic goods. This in turn puts downward pressure on the real exchange rate (i.e. pushes towards real depreciation), which in turn increases the burden of the debt, and so on. Once again, debt relief will allow Kyrgyzstan to break out of such vicious circles. Both the low-growth trap and the real exchange rate/debt nexus strongly suggest a serious look at debt relief as a solution that will in the end be beneficiary for both creditors and Kyrgyzstan alike; continued stagnation will in the end make everybody worse off. We therefore analyze the fiscal impact of a debt reduction that is large, but not out of line with what was granted other countries in similar circumstances (see Chapter 3 for more details).

The Impact of Debt Reduction

2.26 Under the constant debt-to-output scenario of foreign finance availability and for given growth rates, debt reduction at low interest rates actually has a counterintuitive impact. Since

allowable financing goes down by nb*, the growth rate times the debt-output ratio, and the interest rate burden by r*b*, the situation actually worsens if the growth rate is higher than the real interest rate (n is larger than r*). Nevertheless, three points argue in favor of debt reduction. One is that the qualification "for given growth rates" does not apply: with its external debt burden reduced to manageable proportions, Kyrgyzstan is expected to achieve a 5 percent growth rate instead of 2 percent, our base case scenario under the high debt assumption. Second, in the long run Kyrgyzstan cannot expect to maintain access to concessional financing so it will have to consider the impact of debt reduction at full market interest rates. And third, the counterintuitive impact hinges on the assumption that foreign creditors will in fact allow Kyrgyzstan to borrow up to what is compatible with sustaining the high debt-to-output ratios, a highly questionable assumption.

2.27 Consider the first point. Table 2.12 looks at the fiscal deficit reduction required if debt is reduced by about 50 percent, the case for which is argued in Chapter 3. We also assume that in that case 5 percent growth is achieved. This is not an unreasonable assumption; at a capital-output ratio of three, a reasonable number, 4.6 percent of GDP extra room for investment should yield about 1.5 percent extra growth, the rest should come from the structural reforms recommended in this report and that become part of a debt reduction package. Similar responses came eventually in Mexico although it took a couple of years.

Table 2.12: Impact of Debt Relief on RDR (as percent of GDP)

Inflation (%)	RDR Base Case b*=76% n=2%	RDR Debt Relief b*=38% n=5%
10	6.5	4.7
15	5.7	3.8
20	5.3	3.4
30	5.0	3.1
40	4.5	2.7
50	4.1	2.3
60	3.8	2.0
70	3.6	1.8
80	3.4	1.6
100	3.3	1.5

b* = net external debt-to-GDP; n = GDP growth rate

2.28 The table indicates substantial impact of debt relief, although not enough to completely bring expenditures in line with revenue sources; the RDR falls by almost 2 percentage points of GDP as a consequence of the debt reduction.[8] While this is not enough to close the fiscal gap, it now brings it in the range of measures recommended elsewhere in this report.

[8] Of course, if the debt eventually would have to be refinanced at commercial rates, debt relief would bring more; at a 10 percent real interest rate, the debt package would deliver close to 5 percentage points of GDP. But then the need for fiscal adjustment would be much larger to begin with. Anyhow, full commercial rates on Kyrgyzstan's total external debt is not a very likely prospect, so this scenario presumably does not deserve much more attention.

2.29 The conclusion seems clear enough; debt relief will make a significant contribution to bringing fiscal adjustment within reach of the Kyrgyz authorities, although it will in itself not be enough to restore balance to the fiscal situation. Debt relief should be part of a package, but the package should contain more.

C. Structural Measures for Fiscal Adjustment

2.30 So the deficit needs to be cut: an inflation target of 10 percent and expected growth of 2 percent is shown to require, for consistency, a cut in the deficit by 5.65 percent of GDP. These cuts will have to come from both cuts in expenditure as well as improvements in revenue collection. But rationalization of expenditures will require structural reforms and changes in sector policies if the cuts are to be sustainable, key services maintained and enhanced, and adequate protection given to the poor and other vulnerable groups. It is not sufficient to cut budgetary allocations if the expenditures cut out are just shifted elsewhere. A case in point is the reduction in budget subsidies to public utilities without however reforming tariff rates and restructuring the public utilities in such a way that they can do without the subsidies. For example, although the compensation to *Kyrgyzgas* necessary because of low user prices of gas was estimated at 150 million som, only 40 million som was to be paid from the budget – the rest would have to be borne by *Kyrgyzgas* or its suppliers. Such a measure merely re-routed the subsidy provision from the budget to the state enterprise without dealing with the fundamental problems of the sector. Naturally, the financing of these losses will come back to the budget after a certain time: arrears to Uzbekistan for gas imports have to be paid off.

2.31 To achieve a sustainable fiscal adjustment Kyrgyzstan will need: (i) to pursue pension reform; (ii) reforms in health and education; (iii) civil service reform; (iv) to accelerate the transformation of the public infrastructure and utility companies, while moving to a more transparent and targeted system for providing basic services to the poor; and (v) improvements in the tax system. The first three areas for reform are outside the scope of this report. Pension reform, which is being supported by the SOSAC, will enable an elimination of the pension fund deficit of 1-1.5 percent of GDP and, eventually, permit lower payroll taxes. A review of the health and education sector policies with a view to assessing the public expenditure implications is being undertaken. Administrative and civil service reform is being supported by EU TACIS.

2.32 Reform of the infrastructure and public utility companies is critical for fiscal sustainability. These companies are a large and growing liability to the Government. Their poor performance reflects the lack of cost-reflective tariffs, an extensive system of 'privileges' that give additional discounts to several categories of persons, and poor incentives to improve efficiency. Action is required at two levels. First, immediate action is needed to improve the financial situation of the companies by reducing their losses through improved pricing policies, metering, billing and collection, and technical and operational efficiency. The potential for cost reduction and conservation, in particular, is high (see Chapter 5).

2.33 Second, at the same time it is essential to reform the competition and regulatory frameworks of these sectors so as to increase efficiency, improve service and bring in new sources of finance, which will help relieve government budget constraints. This requires dismantling legal barriers to entry of new firms and, where necessary, restructuring the companies, horizontally or vertically, to ensure effective competition. Bringing in the private sector and changing the role of government is essential, given the problems faced by the utilities

in the Kyrgyz Republic. Privatization can remove from public sector responsibility the need to undertake expensive modernization programs in areas such as telecommunications. In this way, it is possible to take "off the books" a significant amount of the current public investment program. For instance, the planned privatization of Kyrgyztelecom should have precluded government borrowing for it in early 1999, even though the loan is concessional. In addition, the financing and construction of certain public infrastructure works, such as transport investments, can be transferred to private investors through concessions and other similar arrangements.

2.34 However, the private sector will not be attracted unless pricing policies are such that there is a return on their investment. This means raising prices sufficiently to recover costs. The poor would need to be protected from the increase in utility tariffs, but there would be savings from removing the current general subsidy and the privileges, which could be used to help the poor pay their utility bills.

2.35 Finally, revenue mobilization through taxes needs to be strengthened, while considering the efficiency of the tax structure. Significant tax reforms in recent years have resulted in a Kyrgyz tax system that is consistent with a modern market economy. However, although the legal basis for the tax system is the Tax Code of 1996, some taxes or taxpayers are covered by other legislation. These taxes often impose heavy burdens on specific bases and exempt others. For instance, the turnover taxes on enterprises for the road and emergency funds and the numerous fees and charges to which ministries have resorted. On the other hand, wide exemptions are provided by the Free Economic Zones. Tax revenues come from a few as yet un-restructured enterprises, notably the energy and airline companies. Bringing the private sector into the tax net is going to be essential to avoid a vicious circle of lower revenues, higher taxes and higher evasion. Part II of this report examines in detail key reform issues in taxation and the public utilities.

CHAPTER 3

DEBT SUSTAINABILITY

A. Conceptual Issues

3.1 Most of the foreign debt of the Kyrgyz Republic is incurred by the Government, and the part that is not has been run up by a company that is two-thirds state owned (Kumtor). So is the question of fiscal sustainability the same as the question of whether there is a case for external debt relief? From a pure solvency point of view, the questions are of course narrowly related, since both questions turn around the issue of whether the Government is likely to be able to command sufficient resources in the future to service debts incurred in the past.

3.2 Solvency requires that the current value[1] of expenditure flows plus net debt does not exceed the current value of future revenues under the current tax structure.[2] If this condition is satisfied, all debt, external or internal, can be serviced. A wedge between the two questions (fiscal sustainability and external creditworthiness, even in the absence of private foreign debt) can be driven when there is insolvency but external debt is considered senior to (loosely spoken, more important than) internal debt. In that case even a situation of fiscal unsustainability could be compatible with external creditworthiness. The possibility of default on internal debt would explain the difference. However, since at less than 6 percent of GDP in 1998 Kyrgyzstan's internal debt is relatively low, this particular configuration is of no practical interest in the Kyrgyz Republic.

3.3 A bigger wedge between the answers to the two questions appears when willingness to pay is introduced. A government may be able to raise sufficient resources to finance its debt service, but may simply not be willing to do so. This is clearly a bigger issue in the case of external debt than in the case of internal debt: the government will not meet external creditors at the ballot box.

3.4 A third issue has to do with foreign exchange availability. The Government may be able to produce sufficiently high surpluses but might not be able to transform the internal surplus in externally usable assets; foreigners will insist on payments in dollars, yen or whatever, but not in Soms. This is however an exchange rate issue; the problem will only arise if there is a fixed or at least not market determined exchange rate without sufficient reserve availability to meet all funding requirements in foreign currency; in other words an inconvertible exchange rate. This too is not an issue in the Kyrgyz Republic because the exchange rate is managed in a flexible way, practically speaking the Som is floating. Thus imbalances in demand and supply translate into exchange rate movements rather than foreign exchange shortages. Whenever the temptation

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[1] The current value of a stream of expenditures is the sum of current and discounted future values of these expenditures. Future values are discounted (i.e. a value 5 years from now is divided by [(1 plus the interest rate) to the power 5], etc.) to take into account that money today is worth more than the same amount of money in the future because it can earn interest in the mean time.

[2] A country does not need to reduce the balance of its debt to remain solvent. Strictly speaking, solvency requires that the debt grows at a rate less than the rate of interest.

to intervene dominates, and especially if convertibility is suspended, the foreign exchange shortage problem as a source of external debt servicing trouble will emerge.

3.5The arguments made so far justify separate discussions of the possible need for external debt relief and the requirements of fiscal sustainability. A particular problem is that the Kyrgyz Republic's debt structure (with relatively little bilateral and commercial debt) makes traditional approaches to debt relief difficult to apply. Therefore this chapter highlights the debt burden problem and explores a variety of approaches and illustrates, through specific examples, their implications for burden sharing, provision of liquidity and adequacy of implied debt relief.

B. External Debt Profile

3.6 Since the break-up of the Soviet Union in 1991, the Kyrgyz Republic has accumulated a large portfolio of external liabilities, which as of the end of 1998 totaled an estimated US$1.5 billion or 96 percent of GDP. Fifty percent of this debt is owed to multilaterals, 26 percent to bilaterals (of which the CIS countries account for 11 percent), and the remaining 24 percent to commercial lenders (the bulk of which is on account of the Kumtor gold mine project).

3.7 Servicing this debt has been difficult but, until recently, manageable partly due to a number of short-term debt rollovers granted by Russia and Turkey. Debt service levels have so far been relatively low given a large amount of concessional external financing that came with long grace periods. The debt service burden, however, is expected to surge substantially in 2000-2005, when practically all non-concessional debt (equivalent to 50 percent of the total) will need to be repaid and grace periods for concessional loans end. This debt profile does not come as a surprise (repayment terms for Russian loans as well as the Kumtor debt have been well known), but the country's underlying capacity to repay has been substantially weakened by recent developments.[3] For instance, the IBRD creditworthiness assessment concluded that debt service from the budget could require 20 percent of revenues after the year 2000, but a number of downside risks could bring the ratio to the 25-30 percent range, including the possibility of lower dividends from Kumtor to the budget and lower than expected tax to GDP ratios. These risks materialized and, further, the country experienced a large real exchange depreciation and a slow down of production that has substantially reduced the dollar value of taxes. The budget has also taken over greater debt than initially envisaged on guarantees. We estimate budget debt service to revenue ratio to be in the 40-50 percent range after the year 2000.

How did the debt rise so fast?

3.8 The Kyrgyz Republic entered independence with zero public debt: like all ex-Soviet countries, it accepted the zero option on the Soviet debt[4]. However, already by the end of 1993 it

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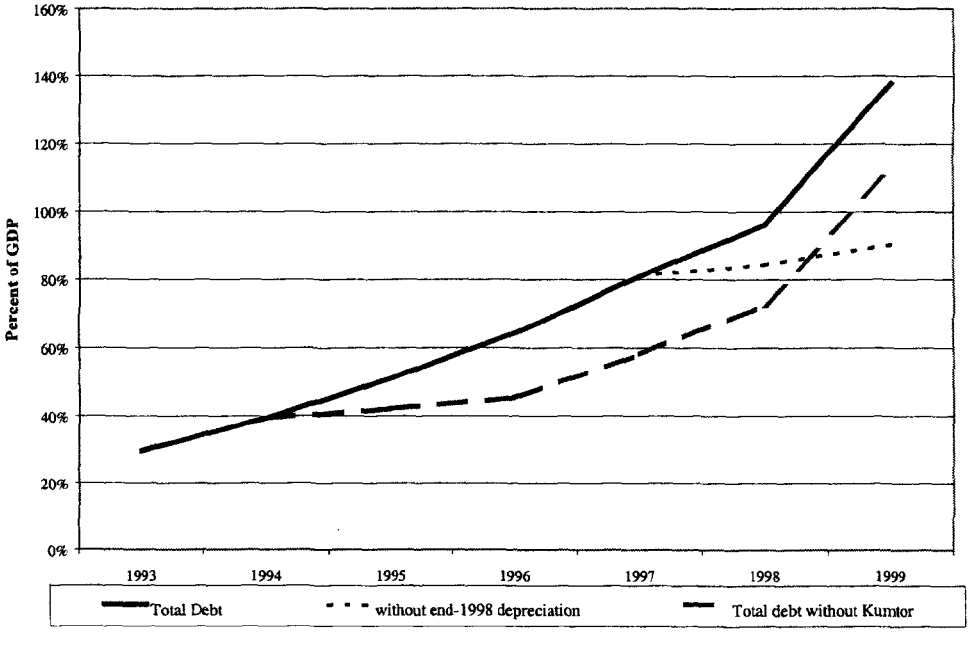
[3] For an earlier debt sustainability analysis see "*Kyrgyz Republic: Creditworthiness for IBRD lending*," World Bank, Restricted Document, July 18, 1997.

[4] Under the zero option, Russia, acting in agreement with the international creditors of the former Soviet Union (FSU), had offered to other FSU states to assume their part of the Soviet debt. In 1992, the Kyrgyz Republic had signed with the Russian Federation a Protocol under which it accepted the zero option. All CIS states have signed such protocols. Russia, therefore, had assumed the entirety of the external debt and external assets of the FSU.

had a debt-to-GDP ratio of 29 percent. About half of this debt was due to the conversion of large outstanding balances on correspondent accounts with other CIS countries, in particular Russia, Kazakhstan and Turkmenistan, into state debts.[5] Over 1992-1993, these outstanding bilateral balances were converted into US$-denominated state loans. In principle, in each case bilateral payments' arrears were netted out, but the process was not very transparent, and some CIS countries have never accepted their arrears owed to other CIS states. Such was the case with payment arrears owed to Kyrgyz Republic by Belarus and Ukraine. Since then, the Kyrgyz Republic has fully repaid Kazakhstan and Turkmenistan ($33million total) through barter arrangements. However, the magnitude of Kyrgyzstan's debts to Russia ($157 million at end-1998) has made it difficult to service them. Debts to Russia and Uzbekistan continued to grow over 1994-1998, driven mainly by the accumulation of debt payment arrears and the capitalization of interest due and, to a smaller extent, gas payments arrears. (The Kyrgyz Republic rescheduled in 1993 and 1996 substantial amounts of its debt with CIS countries which increased the debt stocks since little or no debt relief was obtained).

3.9 Much of the increase in its non-concessional debt between 1995 and 1997 was due to the Kumtor gold mine which, as mentioned above accounts for 24 percent of the total debt as of end-1998 (see Figure 3.1 for debt without Kumtor). Concessional debt increased in parallel, generally tied to the public investment program or balance of payments support on agreed programs of structural reforms.

Figure 3.1: External Debt



3.10 Finally, the impact of exchange rate depreciation on the debt-output ratio has been particularly drastic in 1998. Pressures on the exchange rate emerged in March 1998, but the

[5] These arrears' settlements originated from the outstanding balances on correspondent accounts in the republican branches of the USSR Central Bank (Gosbank) vis-a-vis each other.

exchange rate depreciated very sharply after the Russian financial crisis in August 1998. Overall, between September and December 1998 the Som depreciated by about 50 percent. Without the end-1998 depreciation of the Som, the 1998 debt-to-GDP ratio would have been 84 percent instead of the actual 96 percent, and in 1999 it would be 90 percent instead of close to 140 percent (see Figure 3.1).[6]

Concessionality of the foreign debt

3.11 For the last four to five years, the Kyrgyz Republic's public sector has substantially restricted borrowing on non-concessional terms. As a result, about 50 percent of the foreign debt is concessional. In particular, ADB, IDA, OPEC and IFAD lend at highly concessional terms (with grant element at 79 percent or higher[7]). These multilaterals account for 31 percent of the outstanding debt at end-1998. Many bilateral creditors (e.g., Japan, Germany, Switzerland, France and Norway) match the concessionality of ADB or IDA, and often complement loans with technical assistance grants that increase the effective rate of concessionality further. Concessional bilateral credits account for 11 percent of the outstanding debt at end-1998 (the share of these bilateral creditors in existing commitments is similar at 12 percent, and is only slightly larger in terms of existing and expected new commitments at 14 percent).[8] Finally, the IMF ESAF programs (9 percent of total debt) have a grant element of about 37 percent[9], but the IMF Standby and other earlier facilities (accounting for 3 percent of total debt) have a grant element of only 10 percent.

Box 3.1: Net Present Value of Debt

The face value of the external debt stock is not a good measure of a country's debt burden if a significant part of the external debt is contracted on concessional terms with an interest rate below the prevailing market rate. The net present value (NPV) of debt is a measure that takes into account the degree of concessionality. It is defined as the sum of all future debt-service obligations (interest and principal) on existing debt, discounted at the market interest rate. Whenever the interest rate on a loan is lower than the market rate, the resulting NPV of debt is smaller than its face value, with the difference reflecting the grant element.

3.12 However, the remaining half of the external debt is non-concessional, which explains a level of NPV (see Box 3.1) that is not substantially different to the face value of the debt at end-1998 (75 percent and 96 percent of GDP, respectively. See Table 3.1). Creditors like the EBRD, Islamic Development Bank, India, Pakistan, Turkey, China, Russia, Uzbekistan, Kuwait and the Central Asian Development Bank have lent to the Kyrgyz Republic on non-concessional terms.

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[6] The end-year exchange rate impact is fully realized on 1999 GDP.

[7] The grant element is computed as one minus the ratio of the NPV to the face value at the date of commitment. The discount rate for calculating the NPV in this formula is 10 percent as is the case with the OECD DAC formula.

[8] The Kyrgyz Republic has not consistently applied a policy of applying commercial terms to all on-lending in order that the concessionality of the external assistance benefits the country as a whole and avoids subsidizing commercial activities.

[9] This grant element is calculated using IMF specific methodology.

Further, the commercial bank debt of Kumtor is non-concessional, although the participation of IFC and EBRD substantially reduced the project risk premium that would have been imposed to a country like the Kyrgyz Republic otherwise. The vast majority of non-concessional debt is due between now and the year 2005.

Table 3.1: Nominal and NPV of Debt Outstanding, End-December 1998

	Nominal Debt			NPV Debt @ 6.23%		
	US$ million	Percent of total debt	Percent of GDP	US$ million	Percent of total debt	Percent of GDP
Total by Debtor, of which	1550	100.0	96.0	1212	100.0	75.0
1. Budget	976	63.0	60.4	590	48.7	36.5
Old debts, Guarantees called 1/	272	17.6	16.8	259	21.3	16.0
Budget support	471	30.4	29.2	187	15.5	11.6
Public Investment Program	232	15.0	14.4	144	11.9	8.9
2. NBK 2/	190	12.3	11.8	149	12.3	9.2
3. Kumtor 3/	377	24.3	23.3	464	38.3	28.7
4. Other to private enterprises	7	0.5	0.4	9	0.7	0.5
Total by Creditor, of which	1550	100.0	96.0	1212	100.0	75.0
1. Multilateral	778	50.2	48.1	444	36.6	27.4
IDA	333	21.5	20.6	119	9.8	7.3
ADB	143	9.2	8.9	55	4.5	3.4
EBRD 4/	116	7.5	7.2	128	10.6	7.9
OPEC	0	0.0	0.0	0	0.0	0.0
IsDB	5	0.3	0.3	4	0.3	0.2
IFAD	1	0.1	0.1	0	0.0	0.0
IMF	180	11.6	11.1	138	11.4	8.5
2. Bilateral	406	26.2	25.2	330	27.3	20.4
Russia and Uzbekistan	173	11.2	10.7	161	13.3	10.0
Japan	110	7.1	6.8	68	5.6	4.2
Germany	28	1.8	1.7	17	1.4	1.1
France	4	0.3	0.3	3	0.3	0.2
Switzerland	20	1.3	1.2	20	1.6	1.2
Denmark	2	0.1	0.1	1	0.1	0.0
Nordic Development Fund	1	0.0	0.0	0	0.0	0.0
Turkey	46	3.0	2.8	40	3.3	2.5
Other 5/	21	1.4	1.3	20	1.7	1.2
3. Other	366	23.6	22.7	438	36.1	27.1
IFC	39	2.5	2.4	47	3.9	2.9
Commercial (Chase and Cameco)	300	19.3	18.6	363	29.9	22.4
Central Asia Bank and Fund	4	0.3	0.3	5	0.4	0.3
Swiss NBC	23	1.5	1.4	23	1.9	1.4

1/ Includes loans from Russia, Turkey, China, Uzbekistan and Central Asian Bank.
2/ Includes IMF loans and a line of credit from EBRD.
3/ Includes loans to Kumtor and a small amount to private enterprises.
4/ Includes commercial banks, EBRD and IFC.
5/ Includes Finland, Pakistan, China, Kuwait and Korea.

How has the external financing been used?

3.13 Debt outstanding can be divided according to its use in, inter alia, settlement of bilateral accounts with other CIS countries and guarantees issued for enterprise loans (18 percent), budget and balance of payments support loans (42 percent), the public investment program (PIP) (15 percent), and the investments made to bring the Kumtor gold mine on-stream in mid-1997 (24 percent) (see Table 3.1).

3.14 CIS debt (incurred as a result of settlement of bilateral accounts) still accounted for 11 percent of the total external debt in 1998. The Russia loan includes an initial principal (US$132 million), the rescheduling of interest due on this principal between 1992 and 1997 (US$19 million) and a partial use of a US$43 million line of credit (disbursements from which amounted to a mere US$6 million). The main loan is due in 2000-10, although rescheduling negotiations are now under way. The capitalization of interest was to be paid in eight quarterly installments of 2¼ million each beginning in March 1999, but these have been rescheduled over a 12 to 18 month period—at a 6 percent annual interest rate. Long-term debt to Uzbekistan totals US$21 million, mostly due to the bilateral settlements back in 1992 (US$17 million)[10].

3.15 Government Guarantees account for about 7 percent of the debt. They include guarantees issued to the Turkish Eximbank (US$43 million) and other bilateral governments which are being serviced from the budget due to failure or extensive delay in project implementation. In addition, the MOF currently tracks 12 guarantees amounting to US$34 million, most of which are already being serviced by the budget. Recently, the two largest projects covered by guarantees failed: (i) AO Zhybek Zholy, covered by a US$23 million guarantee to a Swiss Bank) and (ii) a US$6.4 million loan from EBRD to a Kyrgyz private agro-industrial firm which the budget has agreed to take over, but the dialogue for its restructuring is under way. The fiscal burden of these guarantees is substantial and the guarantee management procedures, which are based on the MoF Regulation of 14 May 1997, are clearly not robust enough to prevent further accumulation of losses on guarantees. The extent to which line ministries are still authorized to issue guarantees is not clear. A Law on External Debt is being drafted to address these issues.

3.16 Balance of payments loans, received by MoF (for budget support) and NBK (build-up of reserves), account for 42 percent of the total stock of debt (WB, ADB and Japan account for 30 percent, and the IMF for 12 percent).

3.17 Public Investment Program. The foreign-financed PIP accounts for 15 percent of the debt (US$243 million), but its level is growing very fast. (Signed commitments totaled US$723 million by end-1998, and additional commitments are at various stages of development.) Outstanding debt is allocated between: (i) power, roads, air transportation and telecommunications (60 percent); (ii) social sectors, particularly health (16 percent); (iii) lines of credits or investments in private enterprises, including pharmaceutical industry (10 percent); and (iv) agriculture and rural sectors (7 percent).

3.18 About half of the PIP is on-lent to public enterprises (Kyrgyzenergo, Kyrgyztelecom and to Kyrgyz Airlines), private enterprises (lines of credits from Germany and the World Bank) or

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[10] Includes gas payment arrears of US$6 million which were capitalized in 1996. Further short-term debts for gas to foreign commercial banks and suppliers are not included in the debt figures.

farms (World Bank line of credit to Kyrgyz Agricultural Financial Corporation). The risk to the budget is not evaluated when authorizing the loans, and there is little oversight of the solvency ratios of the implementing enterprises. Since all the public enterprises benefiting from the PIP are experiencing financial difficulties, the only manner in which the MoF can minimize the risk of taking over their debts is by enforcing key restructuring stages before authorizing or releasing credits. (A recent loan from the Government of Korea was on-lent to Kyrgyztelecom without either pricing the risk imposed on the State budget, which guarantees repayments, or the transaction costs of the MoF.)

3.19 Kumtor accounts for most of the remaining debt (24 percent out of 25 percent). This project, with proven gold reserves of 9.3 million ounces when the initial feasibility study was made, was expected to generate gross revenues of about US$1.7 billion dollars in NPV terms, which is almost 4 times as large as the NPV of the debt assuming the price of gold would increase from US$310 per oz to $360 by the year 2015 (gold price would be constant at 1999 expected dollar prices). However, according to earlier calculations of profit margins this price would yield little, if any, revenue to the budget from Kumtor.[11]

C. Sustainability of the External Debt: a Case for Rescheduling, Debt Relief...or Additional Adjustment?

3.20 Debt problems may arise because of *liquidity problems* or because of more fundamental *solvency problems*. A *liquidity problem* arises if the Government has sufficient resources available in the future to eventually service its debt adequately, but cannot raise them at the time they are needed for current debt service. Liquidity problems can be solved by providing bridge financing towards the future periods where resources are available or by rescheduling debts to shift debt service towards those future periods. In a perfectly functioning capital market, liquidity problems would never arise.

3.21 Solvency problems in a strict sense exist when a country's discounted NET future revenues (or NET foreign exchange earnings[12]) fall short of the current net debt (debt minus foreign assets) of the country. In practice problems may arise earlier, because a country may not be *willing* to pay before it is actually *unable* to pay. This could happen if the price of paying would be such a large cutback in growth that the political and/or social support for such an adjustment strategy is simply absent. We will first consider the liquidity aspect before turning to the more fundamental question of whether the Kyrgyz Republic actually needs debt relief.

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[11] See *Kyrgyz Republic Creditworthiness Review* (ibid), which calculated the vulnerability of lower gold prices on government's long-term debt service capacity. At a price of $350 in constant dollars Kumtor was expected to bring about $60 million per year to the budget in both taxes and dividends. At a price of $300, which reflects better current most likely scenarios, the budget would receive only one-third of the above revenue stream (mainly taxes, few if any dividends). This is due to the production sharing nature of the concession agreement under which all scheduled amortization is made prior to declaring any dividends. Most recent estimations of the reserves (end-1999) suggest these are even smaller than earlier expected.

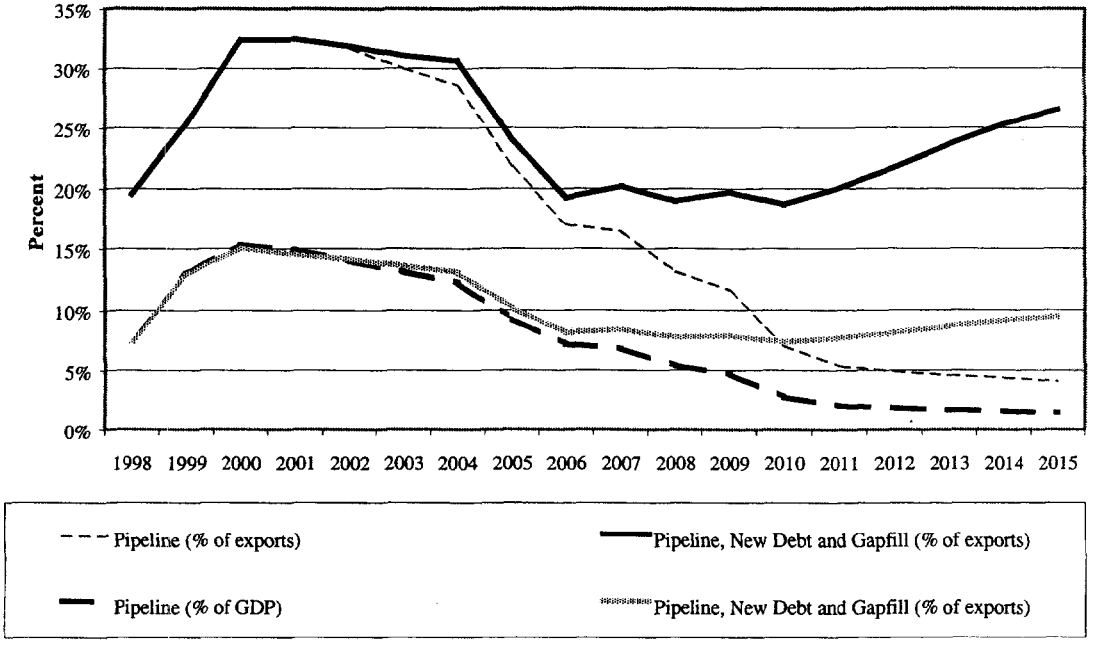
[12] NET foreign exchange earnings equal the non-interest current account surplus, the surplus on the current account of the balance of payments before paying interest expenses.

The Case for Debt Rescheduling: Is There a Liquidity Problem?

3.22 Rescheduling is called for when the overall level of external debt is not out of line with repayment capacity but the time schedule of debt service is not consistent with an efficient investment and recovery program. Clearly rescheduling is necessary only if access to capital markets is limited, otherwise refinancing would be possible without the need to reschedule. However, there is little doubt that Kyrgyzstan has no such capital market access: almost all debt has been extended by IFIs or bilateral creditors. There is only one exception, related to the financing of the Kumtor gold mine project, but in this case private financing was tied to a specific project that has been completed by now. Country risk is such that private capital markets are de facto closed for the Kyrgyz Republic. Thus the rescheduling question can be brought up legitimately to the extent that IFIs cannot play the role of private capital markets through provision of bridge loans.

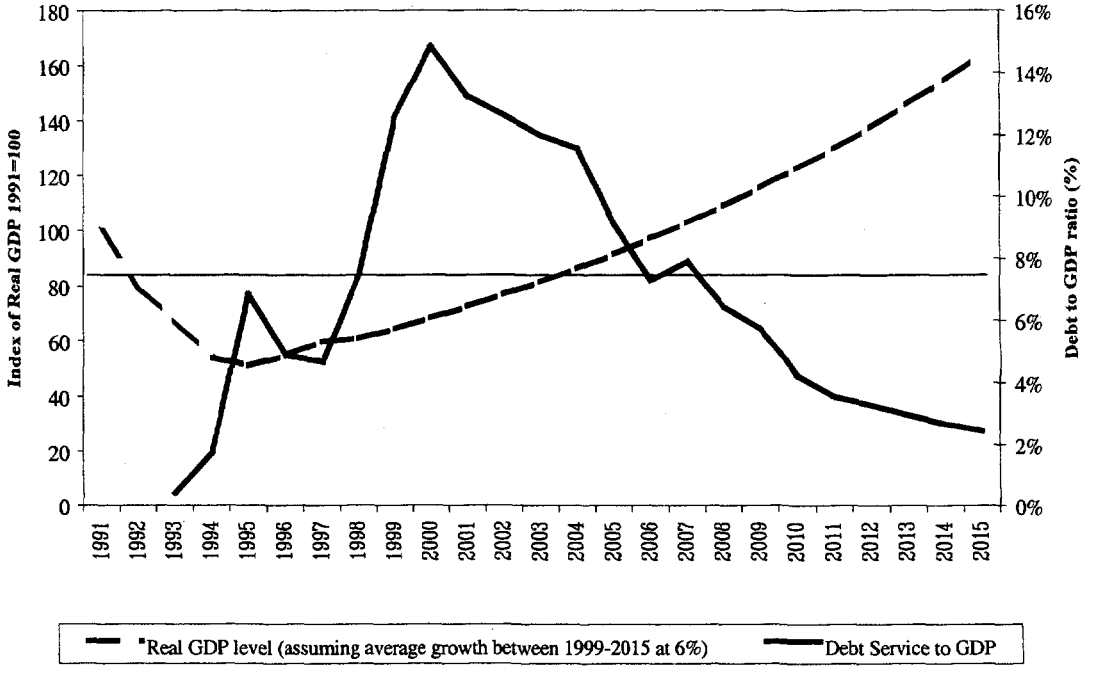
3.23 Even a visual inspection of Kyrgyzstan's debt service profile indicates that there is a mismatch between the projected pattern of debt service and the financing requirements of an efficient growth recovery program. The Kyrgyz Republic's debt service is sloping downward over time: the average debt service is US$180 million (13 percent of GDP) over the 1999-2004 period, but falls down to US$107 million (7 percent of GDP) over the five years after that. Over the period 2011-2015 currently contracted debt service falls even further, down to US$52 million or 2 percent of GDP (see Figure 3.2). This pattern of debt service obligations does not fit well at all with Kyrgyzstan's ability to pay on a year-to-year basis. A similar pattern, though not so marked, arises if currently anticipated amounts of new debt are added, in particular those in advanced stage of negotiation under the MoF's 1999-2001 public investment program (see Figure 3.2).

Figure 3.2: Total and Pipeline Debt Service



3.24 Even before the Russian crisis of 1998, the Kyrgyz Republic had only just begun its recovery process, with many years of high growth and matching investment still needed to just restore pre-1991 output levels. The impact of the Russian crisis has put the Kyrgyz Republic further back, hopefully temporarily, but even assuming a recovery will be staged, years with

Figure 3.3: Real GDP level and Debt Service
(Actual 1991-1998; projections 1999-2015)

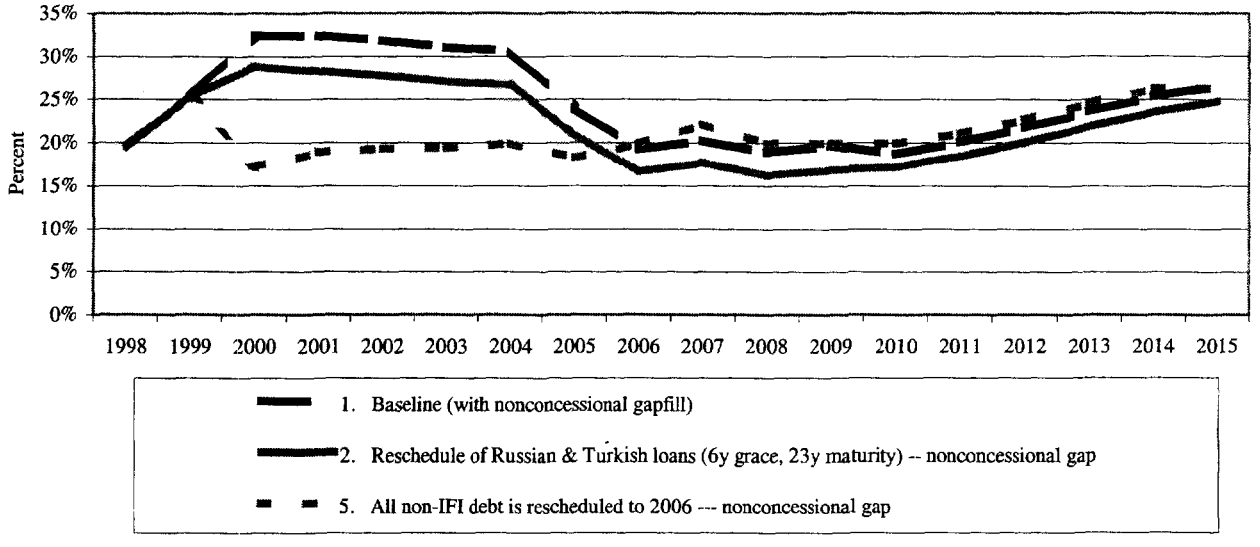


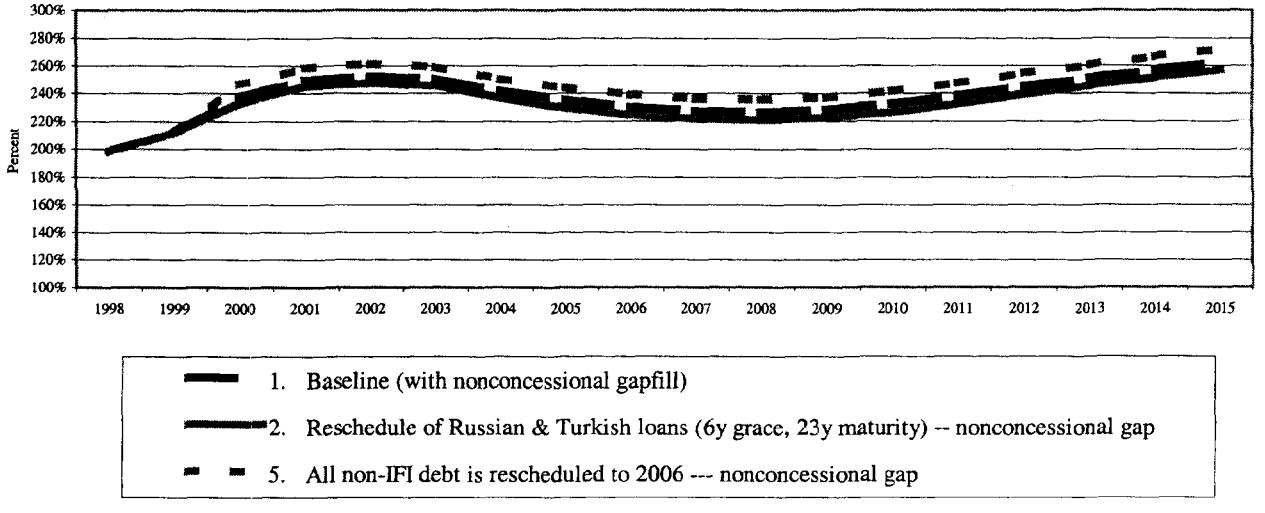
higher growth are in the future. Even at an optimistic projection of 6 percent annual growth from 2000 onwards, the 1991 level of output will not be reached until the second half of the next decade (see Figure 3.3). Thus debt service capacity at that time will be higher than it is now. This in turn means an efficient debt service schedule should be sloping upwards over time, not downwards. But as Figure 3.3 indicates, current reality is different: the current schedule concentrates the highest repayments in the years where they will be most difficult to make. Thus a very strong case for a debt rescheduling can be made just on the basis of the Kyrgyz Republic's likely output trajectory on the one hand and its current profile of debt service payments on the other. The Kyrgyz Republic's debt service should be lower in the next five to ten years to come and higher thereafter, not the other way around.

3.25 Figure 3.4 indicates the extent of the problem and its possible remedies. The broadly slotted line is the baseline scenario debt service-to-exports ratio projected forward over time. The graph clearly indicates that Kyrgyzstan's debt service will be much higher between now and 2004 than in the years after that, by about 10 percentage points. Rescheduling the debt owed to Turkey and to Russia provides some help, but does not change the basic pattern (cf the solid line in Figure 3.4): the debt service in the coming 5 years remains above 25 percent of exports and about 10 percentage points above the debt service in the years following 2004, albeit at a slightly lower level. Other components of debt need to be shifted also from the period 2000-07 out to the period 2006-2015. This would yield both a lower debt service in the years ahead but also a schedule that rises over time, in line with the Kyrgyz Republic's projected output growth path (see Figure 3.4, finely slotted line). One should note, however, as Figure 3.4 demonstrates, that

rescheduling of a loan that carries market rates does not change the NPV to export ratio. Also, the budget debt service to revenues will remain high, above 30 percent (all basic indicators are presented in cases 1, 2 and 5 of Annex Table 1).

Figure 3.4: Debt Service and NPV to Export Ratio after Rescheduling





The Case for Debt Relief

3.26 At current deficit levels there is little doubt that Kyrgyzstan's debt is developing in an explosive way, without or with rescheduling. The debt-output ratio quadrupled in the period 1993-98, to reach a very high level of around 96 percent in 1998 (see Table 3.2). In NPV terms,

the debt-to-GDP ratio reached 75 percent at the end of 1998 and is projected to reach 108 percent at the end of 1999, over four times the level end of 1993. By comparison, the debt-output level in Mexico in the years preceding the external crisis that triggered what has since become known as the debt crisis had "only" doubled, and over more years than it took Kyrgyzstan to quadruple the debt-output ratio (increasing from 21 percent in 1976 to 55 percent in 1983).

Table 3.2: External Debt Indicators With and Without Kumtor

	1998	1999	2000	2001-2005	2006-2010	2011-2015
Percent of Exports of GS						
NPV of Total Debt	198	214	234	234	221	246
Non Kumtor NPV	122	144	173	207	221	246
Total Debt Service	20	26	33	32	21	18
Non Kumtor Debt Service	8	10	18	21	20	18
Percent of Non-Gold Exports of GS						
Non Kumtor Debt	239	315	376	429	409	383
Non Kumtor NPV	152	202	244	274	271	288
Non Kumtor Debt Service	10	14	25	28	24	21
Percent of Government Revenue						
Non Kumtor NPV	269	433	485	495	467	462
Non Kumtor Debt Service	17	27	43	42	39	43

3.27 There are also examples more in line with the Kyrgyz Republic's per capita income. Uganda's long-term external debt, for example, stood at 85 percent of GDP in 1992, less than two-thirds of Kyrgyz Republic's estimated 1999 debt-output ratio. This was considered sufficient for IDA to support a buyback of $149 million of commercial debt at a discount of 88 percent in 1993.[13] Not responding promptly to mounting debt problems may have very high costs as Mozambique's case illustrates. Mozambique's long-term debt grew from almost zero to 106 percent of GDP ($2.7 billion) during the five years between 1980 and 1985, an experience very similar to Kyrgyzstan's debt history since the collapse of the Soviet Union. But the Mozambique authorities' response to this fast pace of debt growth, as well as the level of external debt, was slow. As a consequence, the debt to GDP multiplied by 3 to reach 295 percent of GDP ($4.3 billion) between 1985 and 1990.[14] [15] In the end both countries qualified

[13] Uganda has made efforts to settle arrears with Abu Dhabi Fund, China, India, Iraq, Pakistan, Korea and other creditors and was granted assistance from all creditors under the HIPC initiative in April 1997 that could amount to $350 million in NPV terms (which translates in about twice as much in nominal terms). At the end of 1996 Uganda's debt stood at 52 percent of GDP and has further declined since then.

[14] The majority of the debt was due to borrowing by the electricity conglomerate from commercial banks and debts to Russia (mainly military). Debt reduction operations were carried out in 1990 (a reduction of $231 million) and 1991 (a reduction of $237 million). Also in 1991 there was a debt buyback of $124 million of commercial debt at a discount of 90 percent that was supported by IDA. These operations were not enough and to date this country is pursuing further options for debt relief. Mozambique obtained a relief of more than 80 percent from Russia and signed a Paris Club agreement in November 1996. More recently, in March 1998, the country agreed on a program for debt relief under the HIPC initiative which could amount to $526 million in NPV terms.

[15] Debt statistics for Mexico, Mozambique and Uganda are taken from the World Bank Global Development Finance of 1997. This source also includes a summary of debt rescheduling, debt reduction and debt forgiveness for each country prior to the HIPC initiative (see Country Notes).

for HIPC debt reduction schemes, in 1997 and 1998 respectively. Admittedly the debt-to-export ratios were much higher in those two countries as exports, already low to begin with, had practically disintegrated during the periods mentioned in both countries. Civil war, (in Mozambique) and low commodity prices depressing exports (in both countries) clearly had something to do with these low export ratios, making both countries to some extent, a special case.

3.28 The years of accelerating growth provided the Kyrgyz Republic no relief: the debt-output ratio continued to climb even in the high growth years 1996 and 1997. And developments since the regional financial crisis are even more worrisome with the debt ratio at a clearly unsustainable level of around 140 percent of GDP by the end of 1999. Even when reconverted to NPV terms using a rate of 6.23 percent as a benchmark,[16] the net present value of debt by then still is 108 percent of GDP and averages 240 percent of exports over the next 15 years, with no decline in sight.

3.29 The ability of countries to carry debt varies considerably, but broadly speaking, for less developed and less diversified economies, thresholds are lower than for mature economies because they have higher investment needs and therefore cannot generate current account surpluses as easily as more developed countries can.[17] Some indicators of what is considered a sustainable debt threshold for low income countries are shown in Table 3.3. By this yardstick, in 1999 the Kyrgyz Republic could be considered as having an unsustainable debt situation. The NPV of debt to exports is above 200 percent and debt service to exports rises to 25 percent. Moreover, Kyrgyz exports are highly concentrated (gold and electricity) and volatile; and the country will need to make an extraordinary fiscal adjustment (primary deficit) to be able to meet debt service commitments. This situation has been exacerbated by the negative effect of the regional financial crisis on exports, financial stability and overall economic activity.

3.30 Also, the Kyrgyz economy is relatively open, with exports to GDP ratio of about 40 percent. But this measure misses the essentially fiscal nature of the problem. The external debt is mostly public and thus translates directly into fiscal pressure. Even Kumtor's debt can be seen as a contingent liability of the Government, which is, after all, a 66 percent shareholder in the project. Table 3.2 (above) shows the increased burden that under current commitments the non-Kumtor debt will impose on the budget. The NPV of non-Kumtor debt to government revenues will reach 495 percent from 2000-2005, almost double the sustainable threshold of 280 percent shown in Table 3.3. The public debt service to government revenues ratio will surpass 40 percent from the year 2000 onwards (up from only 17 percent in 1998). This clearly indicates that debt service as scheduled will lead to unmanageable problems for the Government. Adjusting to such a high debt service schedule would leave no room for necessary social expenditure and might thus lead to severe problems in adequately addressing the Kyrgyz Republic's poverty problem.

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[16] This is the Commercial Interest Reference Rates (CIRR), calculated as the minimum interest rates that apply to officially supported export credits of OECD countries. The rate used here is that on US$ loans for the last six months of 1998.

[17] The EU had established in 1992 a debt-to-GDP threshold of 60 percent beyond which public debt is considered to begin exerting a significant stifling influence on growth and investment.

Table 3.3: Debt Burden Indicators, Kyrgyz Republic and Other Heavily Indebted Developing Countries

	Kyrgyz Republic		Sustainable	Guyana	Cote D'Ivoire
	1998	1999	Threshold	1996	1996
Percent of GDP					
Debt at face value	96	142		222	151
Net present value of debt[1/]	75	108		161	145
Debt service (paid)	7	13			
Percent of Exports[2/]					
Debt at face value	253	280			
Net present value of debt[1/]	198	212	200	180	353
Debt service (paid)	20	25	20-25	15	25
Percent of Government Revenues and Grants					
Public debt[3/]	388	647			
Net present value of public debt[1/ 3/]	269	433	280[4/]	469	587
Public debt service	17	27		42	52

1/ Preliminary estimates for the Kyrgyz Republic using 6.23 percent discount rate.

2/ Exports are defined as simple historical three-year average of exports of goods and non-factor services, excluding workers' remittances, based on the current and two preceding years.

3/ In principle, Kumtor debt should be included as well as two-thirds of its profits as government revenues. However, due to lack of reliable profit forecasts, the indicator here excludes the debt of the Kumtor gold mine.

4/ For very open economies where exclusive reliance on external indicators may not adequately reflect the fiscal burden of debt, the NPV of debt-to-revenue is considered as the key threshold indicator (for example, under the HIPC initiative the threshold for this indicator is 250 percent as of mid-1999).

3.31 Rescheduling could ease the immediate liquidity problem, but would postpone rather than reduce the debt burden. The NPV to exports ratio would remain very high, well above the threshold referred to earlier. More importantly, the unmanageably high NPV-to-government revenue ratios would not be significantly reduced under such a strategy. While rescheduling the below market rate Turkish and Russian debt would lower the NPV, rescheduling Kumtor, while providing liquidity relief, would actually raise the NPV because Kumtor carries above market interest rates. In a debt relief situation, there are three options: (a) debt reduction; (b) additional concessional finance, which really is a form of debt relief but implemented gradually; and (c) a larger adjustment of the Kyrgyz economy, i.e. lower non-interest current account deficits. These three options and their implications are discussed below. The result of simulations are presented in Annex Table 1.

3.32 How much relief is required to make the debt burden sustainable? In estimating the minimum amount of debt relief required we take two steps. First we show how much the NPV of the debt needs to be reduced to bring the NPV of debt-to-exports ratio down to 200 percent considered a critical threshold. In the baseline scenario without rescheduling, the NPV ratio peaks at about 250 percent in 2001-2002. The approximate amount of debt relief is thus estimated at 50 percent of the country's average exports in the years 1999-2001 (250 percent – 200 percent), or about US$315 million.

3.33 But more important is the restoration of a feasible debt-to-fiscal revenues ratio. In Chapter 2, a feasible reform scenario is outlined presuming 50 percent debt reduction. Another benchmark would be a reduction large enough to get Kyrgyzstan on the borderline of what is

considered reasonable threshold, an NPV of debt-to-government revenues at 280 percent. Both benchmarks give similar results, since the NPV debt-to-fiscal-revenues ratio is at almost twice the critical value of 280 percent; the latter threshold is at 58 percent of the actual value of 485%. Thus these two benchmarks call for debt relief in the order of $700 million in NPV terms.

(a) Debt Reduction

3.34 Debt service during the 2000-05 period is mainly on: (i) bilateral non-concessional debt (mostly to Russia, Uzbekistan, Turkey, Pakistan and India); and (ii) private debt. A relief, hence, could come from a flow and stock reduction for the bilateral non-concessional debt, for example matching Naples terms for low income countries. This simulation (and others presented elsewhere in this Chapter) should be viewed as illustrative. Further work needs to be undertaken to assess: (i) the amount of debt relief that is required under socially acceptable levels of adjustment; (ii) the set of realistic (in terms of timing and amount) vehicles that may be used; and (iii) possible transaction costs or disruption in the flow of financing[18].

3.35 As an example to illustrate the possible effects of a debt reduction, we run a simulation by assuming Naples terms treatment[19] of all bilateral debt of Kyrgyz Republic and a roll-over of other debt as described in the rescheduling scenario above (para. 3.25). This type of relief, which takes place in two steps, does help, but only to a significant degree after the stock reduction is achieved; the PV then goes down to 210 percent in 2003. If new gapfill financing is on non-concessional terms (i.e., if the Kyrgyz Republic does not have access to fresh concessional resources) the PV ratio would bottom out at about 195 percent in 2008 and then climb back to unsustainable levels thereafter (see Figure 3.5).

3.36 Because the hump in debt service payments begins in 2000, it makes sense to consider the case where the stock and flow adjustment is done in the same year instead of over three years. Under this scenario of *up front* relief, a real reduction in PV debt-to-exports is achieved as the ratio goes down to 201 percent in 2001, although some of the gains are eroded as it climbs back up if the gap-fill is non-concessional (see Figure 3.5).

3.37 Further analysis is needed to assess if an NPV reduction to 200 percent of exports is sufficient from the fiscal point of view. Since the Kyrgyz Republic is a very open economy with a high export-to-GDP ratio, adjusting to the Naples-threshold could still imply an undue fiscal burden inconsistent with the restoration of growth, since taxes would have to be too high for private sector growth. Preliminary scenario runs suggest this amount of debt reduction is not sufficient unless additional highly concessional resources are made available. If no such additional concessional financing is available, the debt service and NPV to revenue ratios would jump back to fiscally unsustainable levels (see case 7 in Annex Table 1).

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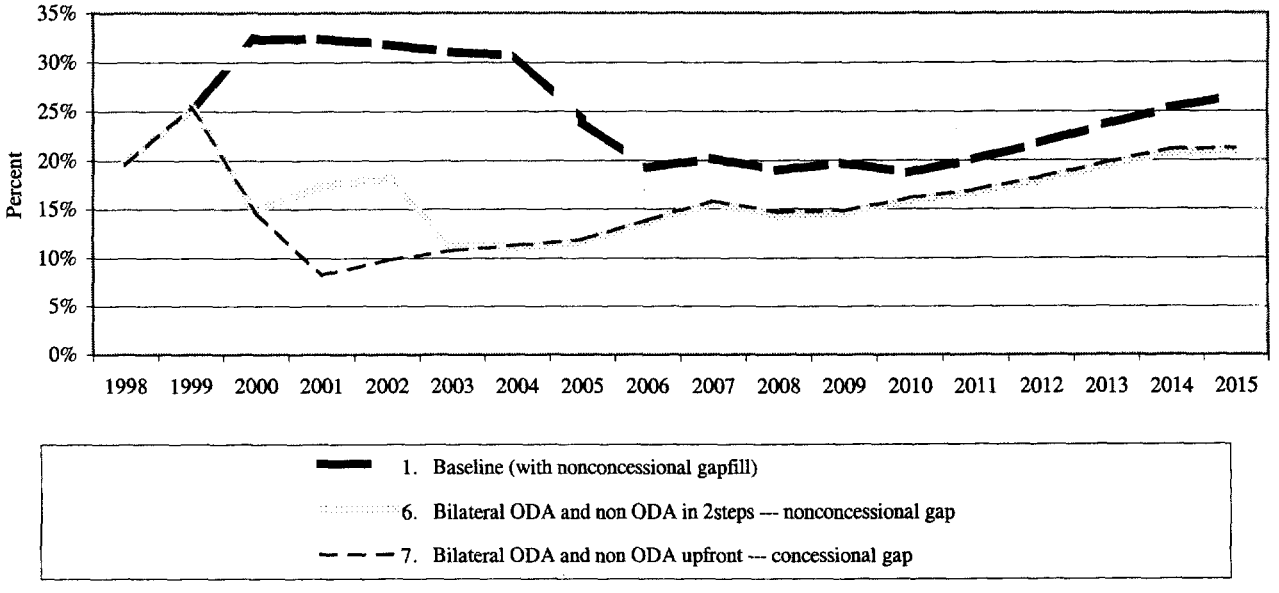
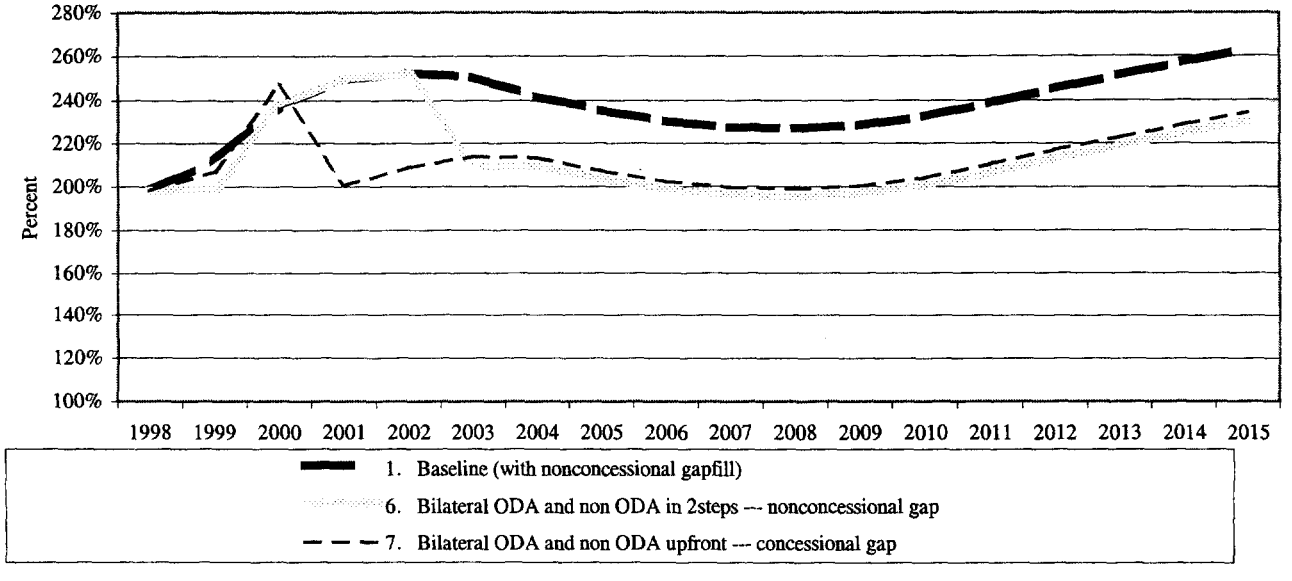
[18] Work on debt sustainability is expected to be prepared by the Ministry of Finance, in close cooperation with the Bank and the IMF.

[19] Naples terms is a procedure for Paris Club members under which a debtor country should first seek rescheduling of 67 percent of its debt service flows (over a three year period) and after that – provided the debt situation remains unsustainable and provided it had performed in a satisfactory way under an IMF-led adjustment program – it can seek debt stock reduction, also of 67 percent in PV terms. Concessional debt is reduced, in NPV terms, by extending new grace periods of 16 years and new maturities of 40 years (some Paris Club members may consider a reduction in interest rates).

3.38 Thus even the upfront Naples debt relief package plus rescheduling, while necessary, seems insufficient: the scenarios presented here suggest that the debt burden will remain a barrier blocking renewed growth if all the debt that would remain on the books is seriously to be serviced. The debt situation is unlikely to be stabilized unless there is additional relief, or equivalently, the bulk of new money is provided on highly concessional terms.

Figure 3.5: Debt Service and NPV to Export Ratio, Relief Scenarios





*Scenarios 6 and 7 assume, in addition to treatment of official debt, a hypothetical rescheduling of private debt at the same interest rate as originally contracted.

(b) New Financing on Concessional Terms

3.39 Of course debt relief, instead of being granted upfront, can also be granted gradually by providing ample refinancing at highly concessional terms. If no relief is granted on the existing stock of debt, and assuming all new money comes on IDA terms, Kyrgyzstan will need over US$765 million (US$70 million per year) in 1999-2010 (down from US$1.2 million if gap is financed on nonconcessional terms).[20] It could be argued that part of this gap needs to be financed through substantial rescheduling of Russian and Turkish debt, as these debt obligations are a significant part of the hump in the coming period for the government budget. In this case, the concessional financing requirements would be US$636 million between 2000-10 (or US$58 million a year). Both gaps are measured after considering disbursement of existing loan commitments as well as reasonable amounts of new lending from IDA and the ADB.

3.40 The questions then are whether these amounts of support are feasible and whether they would come in time? Moreover, these amounts cannot come exclusively from multilateral institutions, because this would quickly drive the preferred creditors' ratio beyond the exposure limit of 35 percent. Also, the debt structure would become very rigid with 82 percent owed to IFIs by 2010. This would be a matter of considerable concern because multilateral debt service cannot be rescheduled and because high levels of multilateral debt service reduce the room for maneuver in the event of external shocks. Part of this amount must then come from bilaterals on similar concessional terms (including possible additional resources from neighboring countries that could benefit from economic stability in the Kyrgyz Republic).

(c) Larger Adjustment for the Kyrgyz Republic

3.41 Finally if no debt relief will be forthcoming, because up front relief is not in the cards and concessional financing is not available in sufficient amounts, more extensive adjustment will be required in the country itself. The non-interest current account balance (NICA) can be interpreted as the amount of net transfers available to a country to carry out investment and pay interest on its external debt. Under this perspective, if the Kyrgyz Republic has to adjust its NICA substantially, growth would fall because Kyrgyzstan would devote resources to debt service rather than to productive investment. Key questions then are whether this would reduce growth below socially acceptable levels, or whether growth would be so much lower that debt carrying capacity would fall faster than the debt burden, miring the country ever deeper in a debt trap.

3.42 Imposing the entire burden on domestic adjustment would in fact require very extensive adjustment in addition to what is already assumed in the base run. A simple benchmark can be set by inspecting the amount of "gapfiller" loans required in the base case scenario. After all, this gapfiller loan flow is nothing but the amount of uncovered financing needs.[21] Requiring the NICA to adjust instead of assuming an inflow of "gapfiller loans" to come forward would, as inspection of the base case scenario makes clear, require a substantial reduction in the NICA, *of*

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[20] These estimates are based on an adjustment of the non interest current account balance (NICA) which would provide sufficient room for growth (i.e., NICA remains in a 4 percent deficit for the next few years). This assumption is examined in the next section.

[21] Of course the interest on gapfiller loans is netted out since there is no prior gapfiller disbursement over which interest would have to be paid under this scenario.

close to five percentage points of GDP. This is a major package, especially given that it would have to come on top of the adjustments already envisaged in the plan.

3.43 On average, the base case requires NICA adjustment of about 5 percent of GDP to avoid any need for additional financing. This benchmark sets a formidable hurdle. Assuming it comes all out of investment (not unreasonable given the extensive adjustment in private consumption already assumed in the base line case, and the relatively small size of government in the Kyrgyz Republic), this will lead to a slowdown in economic growth of between 2 and 3 percent of GDP over the medium term.[22] A 2-3 percentage points slowdown in growth brings per capita growth close to zero. Moreover, bringing such an adjustment about would doubtlessly lead to even sharper cutbacks in growth in the short run, right at a time when the regional crisis is further adding downward pressure on growth.[23] This means that *under this full domestic adjustment scenario per capita growth may well be zero or turn negative for the foreseeable future*. And low or even zero per capita growth will not only directly increase poverty of those already under the poverty line but will also lead to more people slipping under that line. This process could be further accelerated if debt service as scheduled leads to so much fiscal pressure that poverty reduction programs will be even more starved for cash than they are now already.

D. Conclusion

3.44 The analysis presented above suggests that the Kyrgyz Republic faces potentially serious external debt problems. Rescheduling may well be necessary to accommodate an efficient recovery program, but the analysis suggests that rescheduling alone is unlikely to be enough to allow Kyrgyzstan to resume growth. The three options outlined, debt relief up-front, gradual debt relief through provision of extensive concessional financing or full domestic adjustment through further adjustment in the NICA, all have their problems. Premature debt relief will jeopardize future capital market access; a flood of concessional moneys may not be forthcoming and anyhow would place the entire adjustment burden on the IFIs; and full domestic adjustment would put the entire adjustment burden on domestic consumers and investors. Thus in practice elements of all three will be used; what this chapter has pointed out is that refinancing or domestic adjustment alone are not going to be enough to accommodate restoration of economic growth in the Kyrgyz Republic.

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[22] This presumes an incremental capital-output ratio of between 3 and 4.

[23] Prior to the regional crisis, it was still plausible to conceive a growth scenario for the Kyrgyz Republic that would average 4-5 percent.

Box 3.2: Assumptions Underlying the Debt Sustainability Analysis[24]

- An annual GDP growth of 2 percent for the 1999-2003 period, and 5.5 percent thereafter. Nominal per capita GDP (calculated at average exchange rates) recovers from US$255 in 1998 to US$445 in 2010.
- Dollar GDP falls 1.5 percent in average during the 1999-2003 period, and grows between 7-8 percent thereafter. A constant som/dollar RER would bring the dollar GDP back to its 1998 level only after the year 2004.
- US dollar exports growth rates of 3.2 percent a year through 2003 until the effects of the regional financial crisis in potential markets is over (particularly in neighboring countries) and some of the supply related constraints are eased (low productivity of industry and agriculture, infrastructure bottlenecks, and institutional barriers to investment). Exports would growth 5 percent thereafter
- Gold exports of close to 600,000 oz troy per year through 2003 and 515,000 thereafter, with prices reaching 350 by the year 2010. Renewed interest in the smaller gold mines by foreign investors is expected to mature after 2010.
- A positive trend (although not a steep one) for the recovery of electricity exports, which would grow from US$26 million to US$100 million between 1998 and 2010. This trend is expected to reflect a number of 'dry' years in which exports would be on or about US$26 million like in 1998; and a number of 'wet' years in which exports would be on or about US$75 million like in 1996.
- Given the unusually high level of 1998 imports, the growth of imports is expected to be 0 percent during 1999-03 and 6 percent thereafter. Due to the time needed to reform the energy sector (phasing in cost reflective prices in gas, coal and electricity, introducing metering, implementing policies to reduce commercial losses), energy imports are expected to fall only after the year 2001.
- Continue inflow of project loans through mid 2005, based on most recent country assistance strategy from major donors through 2001-2 and reasonable assumptions for 2003-5. All balance of payments support is assumed to be eliminated by 2001 in accordance to current external debt management policies.
- The vast majority of new borrowing (about [90] percent) is assumed to be on the historic concessional terms of the donors. Financing gaps are expected to cost 5 percent interest and have 8 years grace and 18 years maturity period.

[24] Some of these assumptions may be modified in the context of the Debt Sustainability Analysis that would be carried out by the Government in close cooperation with the IMF and the World Bank.

Annex Table 1: Selected Illustrative Scenarios of Debt Sustainability

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Baseline (with nonconcessional gapfill)																		
debt / GDP	96%	142%	151%	157%	160%	160%	154%	148%	143%	138%	132%	128%	124%	120%	117%	114%	112%	110%
NPV / GDP	75%	108%	110%	112%	112%	110%	104%	100%	97%	95%	93%	92%	91%	92%	92%	92%	93%	94%
debt service / GDP	7%	13%	15%	15%	14%	14%	13%	10%	8%	8%	8%	8%	7%	8%	8%	9%	9%	9%
debt / XGS	253%	280%	325%	351%	361%	364%	358%	351%	341%	331%	323%	317%	314%	313%	312%	311%	310%	309%
NPV / XGS	198%	212%	237%	249%	252%	250%	242%	235%	230%	228%	227%	228%	232%	238%	245%	251%	257%	263%
Debt Service / XGS	20%	25%	32%	32%	32%	31%	31%	24%	19%	20%	19%	20%	19%	20%	22%	24%	25%	27%
NonKumtor DS/Taxes	17%	27%	43%	40%	42%	43%	44%	41%	39%	41%	38%	39%	37%	39%	41%	43%	46%	47%
NPV NonKumtor/ Taxes	269%	433%	485%	470%	497%	511%	504%	493%	482%	471%	464%	459%	457%	458%	460%	462%	465%	468%
2. Reschedule of Russian & Turkish loans (6y grace, 23y maturity) -- nonconcessional gap																		
debt / GDP	96%	142%	150%	155%	158%	157%	151%	147%	142%	136%	130%	126%	122%	119%	116%	113%	110%	108%
NPV / GDP	75%	108%	108%	110%	110%	107%	101%	97%	95%	92%	91%	90%	89%	89%	90%	90%	91%	92%
debt service / GDP	7%	13%	13%	13%	12%	12%	11%	9%	7%	7%	7%	7%	7%	7%	8%	8%	9%	9%
debt / XGS	253%	280%	322%	346%	356%	359%	353%	347%	336%	327%	318%	314%	310%	309%	308%	306%	305%	304%
NPV / XGS	198%	212%	233%	245%	247%	245%	236%	230%	225%	222%	221%	223%	227%	233%	239%	245%	251%	257%
Debt Service / XGS	20%	25%	29%	28%	28%	27%	27%	21%	17%	18%	16%	17%	17%	19%	20%	22%	24%	25%
Budget DS/Taxes	17%	27%	34%	31%	33%	34%	36%	34%	34%	35%	32%	33%	34%	36%	38%	40%	43%	44%
NPV NonKumtor/ Taxes	269%	433%	474%	460%	486%	500%	492%	482%	470%	460%	453%	448%	446%	447%	449%	451%	454%	458%
3. Reschedule of Russian & Turkish loans -- concessional gap																		
debt / GDP	96%	142%	149%	154%	156%	155%	148%	142%	136%	129%	123%	118%	112%	107%	103%	98%	94%	90%
NPV / GDP	75%	105%	102%	100%	96%	92%	85%	79%	75%	70%	66%	62%	58%	55%	52%	49%	46%	43%
debt service / GDP	7%	13%	13%	12%	12%	11%	10%	7%	5%	5%	4%	4%	3%	4%	4%	4%	4%	4%
debt / XGS	253%	280%	321%	344%	352%	354%	345%	336%	324%	311%	300%	292%	285%	279%	274%	267%	260%	254%
NPV / XGS	198%	206%	219%	223%	217%	210%	198%	188%	178%	168%	160%	153%	148%	143%	138%	132%	126%	119%
Debt Service / XGS	20%	25%	28%	27%	26%	25%	24%	17%	12%	12%	9%	9%	9%	9%	9%	10%	10%	10%
Budget DS/Taxes	17%	27%	32%	28%	29%	29%	30%	26%	24%	23%	18%	18%	17%	18%	18%	18%	18%	18%
NPV NonKumtor/ Taxes	269%	416%	438%	410%	420%	423%	409%	392%	372%	348%	327%	308%	291%	275%	259%	243%	228%	213%
4. Reschedule of Russian & Turkish loans -- gap is 50% concessional and 50% nonconcessional																		
Debt / GDP	96%	142%	150%	155%	157%	156%	150%	144%	139%	132%	126%	122%	117%	112%	108%	105%	101%	98%
NPV / GDP	75%	107%	106%	107%	105%	103%	96%	91%	88%	85%	82%	80%	78%	77%	76%	74%	73%	73%
Debt service / GDP	7%	13%	13%	12%	12%	11%	11%	8%	6%	7%	6%	6%	6%	6%	6%	6%	7%	7%
Debt / XGS	253%	280%	321%	345%	354%	356%	349%	341%	330%	318%	308%	302%	297%	292%	289%	285%	280%	276%
NPV / XGS	198%	210%	229%	238%	238%	234%	224%	216%	209%	203%	200%	198%	198%	199%	201%	202%	203%	204%
Debt Service / XGS	20%	25%	28%	28%	27%	26%	25%	19%	15%	16%	14%	14%	14%	15%	16%	17%	18%	19%
Budget DS/Taxes	17%	27%	33%	30%	31%	32%	33%	31%	30%	31%	28%	28%	28%	29%	30%	32%	33%	34%
NPV NonKumtor/ Taxes	269%	428%	463%	444%	466%	476%	466%	452%	437%	421%	408%	398%	389%	383%	378%	372%	367%	363%

Annex Table 1 (continued)

5. All non IFI debt is Rescheduled to 2006 --- nonconcessional gap																		
Debt / GDP	96%	142%	146%	151%	154%	154%	149%	149%	145%	139%	135%	131%	127%	124%	121%	118%	116%	114%
NPV / GDP	75%	108%	115%	116%	116%	114%	108%	103%	101%	98%	97%	95%	95%	95%	95%	96%	96%	97%
Debt service / GDP	7%	13%	8%	8%	9%	8%	9%	8%	8%	9%	8%	8%	8%	8%	9%	9%	9%	9%
Debt / XGS	253%	280%	313%	336%	347%	352%	348%	352%	344%	336%	329%	326%	324%	323%	323%	322%	321%	320%
NPV / XGS	198%	212%	246%	259%	261%	259%	251%	244%	239%	236%	236%	237%	241%	247%	254%	261%	267%	272%
Debt Service / XGS	20%	25%	17%	19%	19%	19%	20%	18%	20%	22%	20%	20%	20%	21%	23%	25%	26%	26%
Budget DS/Taxes	17%	27%	28%	26%	27%	28%	30%	28%	28%	31%	27%	29%	30%	33%	36%	39%	43%	45%
NPV NonKumtor/ Taxes	269%	433%	460%	431%	444%	446%	431%	421%	422%	427%	433%	439%	447%	455%	464%	472%	480%	485%
6. Bilateral ODA and non ODA in 2steps plus private debt Rescheduled --- nonconcessional gap																		
Debt / GDP	96%	142%	146%	149%	150%	133%	132%	133%	129%	124%	119%	117%	113%	110%	107%	104%	102%	100%
NPV / GDP	75%	101%	111%	112%	112%	92%	90%	86%	84%	81%	80%	79%	79%	79%	80%	80%	81%	82%
Debt service / GDP	7%	13%	7%	8%	8%	5%	5%	5%	6%	6%	6%	6%	6%	6%	7%	7%	8%	7%
Debt / XGS	253%	280%	313%	332%	338%	303%	308%	314%	306%	298%	291%	290%	287%	286%	285%	284%	283%	282%
NPV / XGS	198%	199%	238%	250%	252%	210%	210%	204%	199%	196%	195%	197%	201%	206%	213%	219%	225%	230%
Debt Service / XGS	20%	25%	15%	17%	18%	11%	11%	12%	14%	16%	14%	15%	16%	17%	18%	19%	21%	21%
Budget DS/Taxes	17%	27%	21%	22%	25%	10%	11%	14%	16%	17%	16%	18%	22%	24%	27%	30%	33%	35%
NPV NonKumtor/ Taxes	269%	395%	438%	411%	424%	339%	342%	336%	338%	343%	350%	358%	366%	376%	386%	395%	404%	411%
7. Bilateral ODA and non ODA upfront plus private debt Rescheduled --- concessional gap																		
Debt / GDP	96%	142%	146%	124%	130%	134%	134%	134%	130%	126%	121%	118%	115%	111%	108%	106%	104%	102%
NPV / GDP	75%	105%	115%	90%	93%	94%	92%	88%	85%	83%	82%	81%	80%	81%	81%	82%	83%	83%
Debt service / GDP	7%	13%	7%	4%	4%	5%	5%	5%	6%	7%	6%	6%	6%	7%	7%	7%	8%	8%
Debt / XGS	253%	280%	313%	277%	294%	307%	312%	318%	309%	302%	295%	294%	291%	290%	289%	288%	287%	285%
NPV / XGS	198%	207%	247%	201%	209%	214%	213%	208%	203%	200%	199%	201%	204%	210%	217%	223%	228%	234%
Debt Service / XGS	20%	25%	15%	8%	10%	11%	11%	12%	14%	16%	15%	15%	16%	17%	18%	20%	21%	21%
Budget DS/Taxes	17%	27%	21%	2%	6%	9%	11%	14%	16%	18%	17%	19%	23%	25%	27%	31%	33%	36%
NPV NonKumtor/ Taxes	269%	418%	462%	302%	328%	347%	351%	344%	345%	351%	358%	365%	374%	383%	394%	402%	411%	417%
Memo lines:																		
Nominal GDP in US$	1615	1208	1251	1301	1360	1429	1531	1640	1756	1898	2053	2219	2400	2594	2805	3033	3279	3545
Exports GNFS (3-year avg)	613	614	582	583	602	626	657	694	740	789	841	893	944	997	1053	1115	1186	1264
Tax Revenues/GDP	18%	18%	18%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Tax collections in dollars	289	216	224	260	272	286	306	328	351	380	411	444	480	519	561	607	656	709

Annex Table 2: Baseline Scenario for External Debt

(in thousands)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2015
A. INTEREST PAYMENTS														
1. Interest Due Per DRS Pipeline [a]	69,388	65,144	57,897	49,350	40,989	32,787	24,583	16,311	12,756	10,668	8,562	6,697	5,463	3,759
2. Adjustments to DRS Pipeline														
3. Less Interest Saved through Debt Reduction														
4. Plus Interest on Arrears/ Restruction/DDSR														
5. Plus Interest on New LT Debt [a]	2,061	7,357	14,859	23,161	31,347	39,129	45,859	51,849	57,735	64,594	72,600	81,308	90,510	157,413
6. Plus Interest on ST Debt														
7. Plus IMF Charges	1,983	1,668	1,414	1,059	720	465	322	193	107	46				
8. Total Interest Due per BOP	73,432	74,169	74,170	73,570	73,056	72,381	70,764	68,353	70,597	75,308	81,161	88,004	95,972	161,172
9. Adjustments to Scheduled Interest														
10. a. Interest Not Paid														
11. *Arrears Accumulation*														
12. Interest Rescheduled														
13. Interest Forgiven														
14. b. Arrears Reduction (-)														
15. Interest Paid (=A8-A9)	73,432	74,169	74,170	73,570	73,056	72,381	70,764	68,353	70,597	75,308	81,161	88,004	95,972	161,172
B. DISBURSEMENTS														
1. Disbursements Per Pipeline [a]														
2. Adjustments to DRS Pipeline (if any)														
3. Plus Disbursements on New LT Debt [a]	150,551	208,256	258,026	251,490	247,680	229,995	210,252	192,241	176,931	196,349	201,954	218,239	218,952	408,121
4. (of which): Disb. for Debt Reduction														
5. Sub-Total: LT Disbursements per BOP [a]	150,551	208,256	258,026	251,490	247,680	229,995	210,252	192,241	176,931	196,349	201,954	218,239	218,952	408,121
6. Plus Net Short-Term Capital														
7. Plus IMF Purchases	15,050	42,532	30,100	15,048										
8. Total Disbursements	165,601	250,788	288,126	266,538	247,680	229,995	210,252	192,241	176,931	196,349	201,954	218,239	218,952	408,121
C. PRINCIPAL REPAYMENTS														
1. Principal Due Per Pipeline [a]	34,267	74,063	102,021	96,728	92,930	92,751	99,730	70,222	42,025	45,024	41,328	38,596	18,575	20,700
2. Adjustments to DRS Pipeline (if any)														
3. Less Prin Saved thru Debt Reduction														
4. Plus Prin on Arrears/Restruct./DDSR														
5. Plus Principal on New LT Debt				25	240	430	2,832	9,063	17,451	26,697	37,147	49,126	62,017	153,606
6. Sub-Total LT Repayments Due per BOP	34,267	74,063	102,021	96,753	93,170	93,181	102,563	79,285	59,476	71,721	78,475	87,722	80,593	174,306
7. Plus IMF Repurchases	11,981	7,569	12,242	18,623	25,706	28,943	27,927	19,041	12,204	12,204				
8. Total Repayments Due	46,249	81,632	114,263	115,376	118,876	122,123	130,490	98,326	71,680	83,925	78,475	87,722	80,593	174,306
9. Adjustments to Scheduled Principal														
10. a. Principal Not Paid														
11. Arrears Accumulation														
12. Principal Rescheduled														
13. Principal Forgiven														
14. b. Arrears Reduction (-)														
15. Principal Paid (=C8-C9)	46,249	81,632	114,263	115,376	118,876	122,123	130,490	98,326	71,680	83,925	78,475	87,722	80,593	174,306

nnex Table 2 (continued)

. DEBT OUTSTANDING (end-period)														
Long-Term DOD Per Pipeline [a]	1,221,113	1,147,050	1,045,029	948,301	855,371	762,620	662,890	592,668	550,643	505,619	464,291	425,695	407,120	312,461
of which: Existing Prin. Arrears														
Adjustments to DRS Pipeline (if any)														
Less Reduction From Forgiveness/ DDSR														
Plus Consolidations From Restruct/DDSR														
Plus New Prin. Arrears (+acc/-red)														
Plus New LT Debt [a]	150,551	358,807	616,833	868,298	1,115,738	1,345,304	1,552,723	1,735,902	1,895,381	2,065,033	2,229,840	2,398,953	2,555,887	3,595,107
Plus Short-Term Debt														
Plus Interest Arrears not yet Capit														
). Plus Use of IMF Credit	179,510	214,472	232,330	228,755	203,049	172,602	137,412	103,844	72,599	39,848	20,807	7,524	1,505	
l. Exchange Rate Impacts on DOD														
2. Total Debt Outstanding & Disbursed	1,551,173	1,720,330	1,894,192	2,045,354	2,174,158	2,280,526	2,353,025	2,432,414	2,518,623	2,610,500	2,714,938	2,832,173	2,964,512	3,907,568
3. of which: Total Arrears (Int/Prin)														
emo: Adjust. Due to Debt-Write-Offs														

otes: a: Pipeline debt corresponds to that disbursed as of December 1997, new disbursements on pipeline and new commitments are presented as new debt.

Annex Table 3: Kyrgyz Republic – External Financing Requirements

(in million USD)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2015
FINANCING NEEDS															
A. Total	246.1	409.8	305.8	308.1	291.5	272.7	255.0	245.3	227.2	211.9	236.3	242.0	258.2	259.0	458.1
1. Current Account Balance	138.4	357.4	224.2	205.9	191.2	168.8	146.4	132.5	134.4	141.2	151.9	164.4	177.2	192.3	303.8
a. Non-Interest Current Account	81.7	284.0	149.8	131.3	117.1	95.2	73.5	61.2	65.6	70.2	76.3	83.1	89.1	96.3	142.6
b. Interest Payments Due	-56.7	73.5	74.4	74.5	74.0	73.6	72.9	71.3	68.8	71.0	75.6	81.3	88.1	96.0	161.2
Multilaterals including IMF		10.9	13.1	15.3	17.1	18.1	19.0	19.9	20.3	20.4	20.2	19.9	19.5	19.2	17.0
Bilaterals		17.8	18.9	19.5	18.7	17.9	17.3	16.5	15.5	14.8	13.9	12.9	12.0	11.1	8.6
Commercial Banks		44.8	42.3	39.7	38.3	37.7	36.6	34.9	33.0	35.9	41.5	48.5	56.6	65.7	135.6
2. Principal Repayments Due	25.1	46.2	81.6	114.3	115.4	118.9	123.6	137.8	112.9	90.7	104.5	97.5	101.0	86.6	174.3
Multilaterals including IMF		12.3	8.8	18.1	24.5	31.8	37.5	44.6	46.7	46.4	49.8	37.8	34.5	26.4	44.5
Bilaterals		7.8	16.8	38.2	34.8	31.0	30.1	34.8	27.6	23.7	25.2	22.0	23.7	12.2	19.1
Commercial Banks and Gap Fill		26.2	56.1	57.9	56.1	56.1	56.1	58.4	38.5	20.7	29.5	37.7	42.8	48.0	110.8
Other Private		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Other Reserve Changes excluding IMF	82.6	-6.1	0.0	12.0	15.0	15.0	15.0	25.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
FINANCING SOURCES															
B. Total	243.1	409.8	305.8	308.1	291.5	272.7	255.0	245.3	227.2	211.9	236.3	242.0	258.2	259.0	458.1
1. Inflows From Disbursements	217.1	165.6	250.8	288.1	266.5	247.7	230.0	210.3	192.2	176.9	196.3	202.0	218.2	219.0	408.1
Multilaterals including IMF	0.0	135.3	147.4	185.5	146.1	120.9	121.0	117.7	94.7	69.1	52.5	39.5	34.0	22.0	0.0
Bilaterals	0.0	30.3	56.6	28.5	33.1	37.9	34.2	24.1	21.0	12.5	6.8	3.0	0.0	0.0	0.0
Gapfill	0.0	0.0	46.9	74.1	87.3	88.8	74.8	68.5	76.6	95.4	137.0	159.5	184.2	197.0	408.1
2. Net FDI & short term capital (97 and 98)	95.5	160.6	55.0	20.0	25.0	25.0	25.0	35.0	35.0	35.0	40.0	40.0	40.0	40.0	50.0
3. Capital Flows n.i.e.	-57.0	83.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FINANCING GAP															
Memo Items:															
Total Debt Stocks	1431.8	1551.2	1720.3	1894.2	2045.4	2174.2	2280.5	2353.0	2432.4	2518.6	2610.5	2714.9	2832.2	2964.5	3907.6
Gap Loans: Debt Outstanding	0.0	0.0	46.9	121.0	208.3	297.2	372.0	438.1	506.3	585.3	697.0	823.0	966.7	1115.7	2295.8
Gap Loans: Disbursements	0.0	0.0	46.9	74.1	87.3	88.8	74.8	68.5	76.6	95.4	137.0	159.5	184.2	197.0	408.1
Gap Loans: Principal Repayments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	8.4	16.5	25.3	33.5	40.6	47.9	110.8
Gap Loans: Interest Payments	0.0	0.0	1.5	5.2	10.3	15.7	20.8	25.3	29.6	34.3	40.4	47.9	56.4	65.7	135.6
Current account deficit % GDP	7.8%	22.1%	18.6%	16.5%	14.7%	12.4%	10.2%	8.7%	8.2%	8.0%	8.0%	8.0%	8.0%	8.0%	8.6%
Non interest CA deficit % GDP	4.6%	17.6%	12.4%	10.5%	9.0%	7.0%	5.1%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

PART II

KEY STRUCTURAL ISSUES

CHAPTER 4

THE TAX SYSTEM

A. Introduction

4.1 Revenue mobilization, and thus taxes, is of importance in its contribution to the required fiscal adjustment. At the same time, the Kyrgyz Republic is in the process of restructuring its economy towards a model where the role of the state, through taxes or otherwise, is much reduced. It is also aiming to have a more competitive economy, conducive to investment. Since taxes influence private incentives, it is important to consider the efficiency of the tax structure.

4.2 Significant tax reforms in recent years have resulted in a Kyrgyz tax system that is consistent with a modern market-oriented economy. The major output of the reform, the Tax Code of July 1, 1996, is a large step towards establishing a tax system that can last in Kyrgyzstan for many years. The major goals for any tax reform are normally improvements in economic efficiency, simplicity, fairness, and stability and buoyancy of revenue. The Tax Code enhanced all of these goals. The danger is that further changes in the tax structure in misguided pursuit of economic stimulus could ultimately harm rather than improve the economic and the tax environments. Instead, implementation and enhanced administration must now be a major focus.

4.3 Over the past few years there has been a sharp decline in the tax ratio, as in most transition countries, due to the contraction of state enterprises and the inability to tax new private enterprises. The ratio of tax revenue to GDP, excluding payroll taxes for the Social Fund, has fallen from 18 percent in 1991 to 12.5 percent in 1996 and 1997. Payroll taxes for social security add another 6 percent of GDP. In 1998, tax revenues excluding social security were estimated at 14.4 percent of GDP with the increase largely due to increased indirect tax revenues and collection of tax arrears (see Table 4.1). This is a relatively low level of tax revenue collection in comparison with countries with similar economic characteristics and stage of development, which suggest, that revenue-to-GDP ratios of 20 to 30 percent are achievable.[1] Moreover, tax rates imposed through the Tax Code are in line with international practice. The low collection level is strong evidence that compliance and administration is not as strong as the legislated system. One likely reason is that the tax structure is relatively new and has been subject to considerable proposed or accepted amendments.

4.4 The potential tax yield as a share of GDP, based on tax collections in other transition countries and/or reasonable levels in other countries, is shown in Table 4.1 for several taxes. In each case, collections in Kyrgyzstan are well below capacity. The combination of income and profits taxes, equal to only 2.6 percent of GDP in Kyrgyzstan, can reach 4 to 5 percent of GDP. Direct taxes can be difficult to collect in transition countries, but better administration and greater use of presumptive taxes can generate significantly more revenues. Around the world, countries are able to raise 0.4 percent of GDP in VAT revenues for each one percent rate,

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[1] "Progress with Fiscal Reform in Countries in Transition", IMF 1998 and Luca Barbone and Hana Polackova, "Public Finances and Economic Transition" MOCT-MOST: *Economic Policy for Transitional Economies*, Vol. 6 (No.3, 1996), pp.35-61.

suggesting collections near 8 percent.[2] Kyrgyzstan can raise its VAT share to 7 percent of GDP, in line with other countries, by collecting the VAT entirely on a destination basis and providing the VAT rebates that are prescribed in the Tax Code. Excise taxes offer many advantages in terms of low administrative costs and limited economic distortions and should be used more intensively through somewhat higher rates and improved administrative practices. Customs revenues are very low relative to what is expected given the share of imports in the economy and the extent of imports that are duty free because they originate in CIS countries.

Table 4.1: Tax Revenues in the Kyrgyz Republic (% of GDP)

	1996	1997	1998	Potential Tax Yield
Direct Taxes				4-5
Income Tax	1.2	1.1	1.3	
Profit Tax	1.6	1.1	1.3	
Land Tax	0.5	0.9	0.9	
Indirect Taxes				
VAT	5.8	5.6	5.8	7-8
Excise	1.1	1.5	2.1	3-4
Local Turnover	0.0	0.0	0.4	
Road Fund	0.3	0.3	0.4	
Emergency Fund	0.7	0.7	0.9	
Customs	0.8	0.8	1.1	2
Other Taxes[1/]	0.6	0.4	0.1	
Sate Budget Taxes Total	12.6	12.5	14.4	
Social Security Taxes	6.3	5.8	5.8	
Total Taxes	18.9	18.3	20.2	
Non-Tax Revenues	1.1	2.8	2.9	

1/ Includes other taxes on goods and services and proceeds for development and production of mineral base in 1997 and 1998.

4.5 Since its enactment there has been a tendency to consider many changes in the Tax Code. Every major tax law, including the Tax Code, requires clean up legislation to correct errors in the initial structure, but the degree of proposed changes goes well beyond clean up. Parliamentary actions to consider and revise several amendments (in the order of 85-88 proposed revisions in the Tax Code) that would significantly alter the tax structure were ongoing during late 1998 and some were passed in July 1999. The likelihood is that continued amendments of this magnitude will distort the integrity of an initially good tax structure, even if some of the ideas taken alone are good. Perhaps the biggest problem with so many changes is that taxpayers and collectors are not allowed the time to develop an understanding of the system. The tax system remains in a constant state of transition making it difficult to develop processes. A volatile structure is surely a significant deterrent to the collection of revenues, and a consensus exists among economists that evasion is easier when the tax system is continually changing. Equally important, an erratic

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[2] Sijbren Cnossen "Global Trends and Issues in Value Added Taxation," International Tax and Public Finance, Vol. 5, (1998), pp. 399-428.

structure will discourage investment. Thus, any *necessary* changes should be made quickly and then the administrative and compliance process should be allowed to develop with no further changes for several years.

4.6 There are problems with the tax system, the recent reforms notwithstanding. *First*, although the legal basis for the Kyrgyz tax system is housed in the Tax Code, some taxes or taxpayers are covered by other legislation, working to the disadvantage of the overall system. The legislation specifies that only taxes listed in the Code can be levied, though in practice this apparently applies only to taxes for the governments' general fund. Taxes and fees that are earmarked for special funds are levied through various special legislative acts. These taxes often impose heavy burdens on specific bases. Special gross receipts (turnover) taxes, not mentioned in the Code, are earmarked for the emergency and road funds. The emergency fund is contained in a 1995 law and the road fund in the 1991 Law on Enterprise Fees. In addition, contributions for health, pensions, and unemployment are levied as percentage taxes on wages. Many ministries impose fees and charges that also are off-budget, with the revenues frequently earmarked for operating costs. The use of numerous off budget revenue sources increases the likelihood that government revenues are used inefficiently and that revenues are collected in an inefficient, confusing fashion, creating a 'nuisance' value to firms. Finally, tax exemptions are also accorded by special legislation outside the scope of the Tax Code, such as the Law on Free Economic Zones.

4.7 *Second*, tax revenues come predominantly from a few and as yet un-restructured enterprises. The eleven largest taxpayers accounted for almost one-quarter of total tax payments, during the first half of 1998. Significant among these are the key infrastructure companies, Kyrgyzenergo and Kyrgyz Airlines. Bringing the private sector into the tax net is going to be essential if a vicious circle of lower revenues, higher taxes, more evasion and less revenue is to be avoided. In particular, careful analysis of loopholes is essential. This chapter focuses on necessary reforms. It presents a description and evaluation per tax (including comments on proposed amendments to the tax structure), and ensuing recommendations, where possible accompanied by revenue estimates.

B. Discussion of Individual Taxes

B.1 Indirect Taxes

Value Added Tax

4.8 The VAT, responsible for 45 percent of 1997 receipts, dominates tax collections. The trade, food, communications, and construction sectors remit the largest shares of domestic VAT revenues. The VAT has a flat 20 percent rate and a credit invoice structure. The single rate enhances ease of tax compliance, though it limits progressivity of the tax structure. Exempt activities include residential housing and leases, most land, agricultural and processed agricultural products, financial services, life insurance, municipal transport, public utilities, goods and services provided by non – profit organizations, gambling, purchase of fixed assets by a taxable firm, and certain imports. Taxpayers are permitted one month after the end of the VAT tax period to remit the revenues. The VAT is paid on an accrual basis, and taxpayers often argue that they do not receive payment until after the tax revenues must be remitted to the government.

4.9 To help keep administrative costs low (by limiting the number of taxpayers), a minimum threshold for VAT registration has been established. The threshold was initially set at 30,000 som in annual sales, was increased to 100,000 som beginning January 1998, and raised to 300,000 som in January 2000. Sales by organizations below the threshold are exempt (not zero rated), so the tax is collected on inputs and sales for resale by the small vendors to larger firms.

4.10 VAT revenues are collected by the STI on domestic production and by the Customs Service on imports. One proposed change in the Tax Code would have each collecting agency develop its own rules for administration of the tax. This is not advisable because it raises considerable potential for inconsistencies in practice. A taxpayer involved in both importing goods and domestic production would find the system particularly difficult for compliance because it would need to comply with both agencies' rules. A consistent set of administrative practices and compliance expectations should be developed through cooperation between the two agencies.

4.11 Destination Basis. The tax is levied on a destination basis (rebated for exports and imposed on imports) with respect to all non-CIS and some CIS countries.. The tax is levied on an origination basis (not rebated for exports and not levied on imports) with respect toRussia, Azerbaijan, and Turkmenistan. Kyrgyzstan is a net importer from the origin based CIS countries. As a result, the Kyrgyz budget was expected to lose 465 million som in 1998, of which 379 million som was on imports from Russia, because of failure to collect tax on imports and rebate tax on exports.[3] The revenue consequences are greater than would arise solely from failure to tax imports since credits are allowed for VAT paid on inputs that are imported from other CIS countries. Rebates or credits are even allowed when goods are re-exported, [4] meaning the Kyrgyz Republic is giving tax credits for revenues it never received.

4.12 The VAT should be moved to a destination basis with all CIS countries as rapidly as possible to increase revenues and reduce administrative burdens (by establishing a uniform tax structure). The other countries may have little incentive to change because they are gaining revenues at Kyrgyzstan's expense. Kyrgyzstan could make a decision to use a destination approach, though this must be made in the context of the overall political relationship with other countries. This would raise the cost of imports from countries that remain on an origination basis (VAT would be imposed by both countries) and reduce the cost of Kyrgyzstan's exports (no VAT would be imposed by either country). The effect would be greater revenues for Kyrgyzstan, more attractive exports, and a shift away from the origination basis country's imports. Ultimately the other countries would move to a destination basis.

4.13 VAT Refunds. The Tax Code requires most vendors to take credits against future VAT or other tax liabilities rather than receive refunds in those cases where excess VAT credits exist. During the first nine months of 1998, a total of 497.6 million som in rebates on zero rated sales were taken as reductions in arrears or payments of other taxes. This system is allowing some

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[3] The estimate is based on the assumptions of annualization of the $70.7 million trade deficit for the first 9 months of 1998, an average 24 som per dollar exchange rate for 1998, rebates of the VAT on exports, and ability to administer the VAT on all imports.

[4] As noted below, the refunds are not in fact being made.

rebating and also reducing outstanding arrears. However, according to the Tax Code, firms that regularly export are permitted to obtain rebates because their VAT credits will normally exceed their liabilities from other taxes. The rebates are necessary to achieve the destination structure. However, the government has not been giving rebates to exporters. The failure to give rebates means the overall system works as a destination VAT plus a 20 percent (at the margin) export tax on those firms where credits for exports exceed their tax liability. The export tax discourages production for export sales. Also, failure of the government to honor the Tax Code creates an environment where it is acceptable to not follow the law. Indeed, firms are given an additional incentive to evade taxes, since they know that revenues given to the government will not be seen again, even when refunds are due.

4.14 The STI has estimated that VAT on zero rated exports was 127 million som in 1998. The cost of providing rebates would be lower because some VAT on zero rated goods is taken as a credit against other tax liabilities. The justifications given for not following the Tax Code have been that there is no allowance in the budget for these payments and no administrative mechanism exists within the STI for making the payments. After discussions of the draft Fiscal Sustainability Study recommendations, a line item of 573.5 million som has been included in the 2000 State budget to allow for rebates. Rebates began gradually in the first quarter of 2000, as the procedures were just being developed to make rebates.

Excise Taxes

4.15 Excise taxes are the second largest tax source, generating 12 percent of tax revenues in 1997. Excisable commodities include alcohol and beer, tobacco products, jewelry, furs and coats, firearms, petroleum products, rugs, and coffee and cocoa. About 60 percent of excise revenues come from domestic commodities and the other 40 percent from imported goods. Much of the tax on imported goods is on petroleum products. Taxes on domestic liquor and beer products provide about one-third of total excise receipts. Domestic cigarettes are a very small percentage of the total.

4.16 Ad valorem rates levied on the wholesale price are used for some commodities including jewelry, coats and furs, and firearms. Unit tax rates are used for petroleum, tobacco products, and alcohol. Tax rates have tended to be lower for domestic than for imported products, though some of the rates were unified in 1998. The new 1999 rate structure adopted as law in early February unifies all rates, with oil and alcohol taxes raised significantly, but some rates were reduced as domestic and foreign excise rates were harmonized. These changes were estimated to raise 0.25 percent of GDP, still leaving excise tax revenues well below most transition countries.

4.17 Excise taxes could be doubled as a share of GDP and still be lower than in most transition countries. We propose a combination of better excise tax administration and higher rates to raise an additional 0.5 percent of GDP over the next several years. Given the high level of evasion, improved administrative practices must be the first step to a greater contribution from excise taxes. Then, rate increases can follow once the administrative structure is able to provide sufficient support. Excise taxes are excellent choices for generating additional revenue. Consumption of many excisable commodities is relatively price insensitive, meaning the economic efficiency effects of using these taxes more intensely would be modest. In most cases, excise taxes can also be administered easily (oil, cigarettes, and alcohol are examples), though the current system needs considerable tightening, particularly along the borders. The STI

believes there is significant evasion of excise taxes through contraband.[5] Additional evasion can occur through under-evaluation of products subject to ad valorem rates. Significant strides must be taken to lessen the evasion because it reduces revenues, harms compliant taxpayers and lessens confidence in the tax structure.

Road and Emergency Taxes

4.18 Taxes are earmarked for roads and national emergencies. Both are turnover taxes, with the road tax levied at 0.8 percent and the emergency tax at 1.5 percent. These taxes are subject to the negative features of turnover taxes that include creating incentives for vertical integration and the cascading of taxes on products that go through many levels in their production chain. The greatest impact of turnover taxes is on small firms that are least able to avoid the taxes and are most likely to be hurt by larger firms that choose not to outsource. Further, these turnover taxes raise costs of selling in export markets since the taxes are imposed on an origin basis.

4.19 The turnover taxes should be eliminated as soon as possible and replaced by alternative sources to offset the revenue loss. The recent creation of a Road Fund provides an obvious opportunity to replace the road tax. Fuel and automobile taxes are used for this purpose in most countries and would be appropriate, particularly since fuel tax rates are currently low. It appears that the road fund revenues could be replaced with a 1 som per liter tax on fuel sold at retail, a doubling of the current tax on automobiles and transportation vehicles or an appropriate combination of the two. However, on July 1, 1999 a large increase was enacted in taxes on personal automobiles, and this appears to reduce the current leeway for increasing automobile taxes on households. Any broad based tax could replace the emergency tax, if the expenditures it finances cannot be cut. A slightly higher VAT or higher land taxes appear to be good options.

Local Taxes

4.20 A total of 16 taxes and charges are listed in the Tax Code for local governments. The largest local tax, the turnover tax, provided 85 million som in 1997. The tax is levied at 2 percent. The turnover tax is on final sales not all turnover, so it does not suffer the negative incentive effects of the turnover taxes described above. However, it is difficult to define final sales, so tax collection is difficult and probably very uneven. The very low revenues compared with the combined emergency and road fund illustrates the effect of a smaller tax base. Most of the other local taxes are very small and together generated only 67 million som in 1997. The limited revenues from these many small taxes raise the specter that the administrative costs could exceed the revenues collected. The effectiveness of these small taxes should be reviewed and they should be eliminated unless they provide sufficient revenues relative to their collection costs.

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[5] For example, an estimated 25 million som in cigarette excise taxes went unpaid in 1998, while collections were only 12 million som.

B.2 Direct Taxes

Profits Tax

4.21 The profits tax share of revenue to GDP has been declining and is now as low as 1 percent of GDP.[6] The electric power (17 percent), communications (11 percent) and food industries (9 percent) are all large profits taxpayers. Profits are taxed at a 30 percent rate.[7] The rate is in the middle of those imposed by transition countries. Losses in the transfer of securities can only be taken against gains.

4.22 Equity and Debt Capital. As is generally true with profits taxes, equity capital is taxed more heavily than debt capital, though the difference is not as large as in some countries. Payments for debt capital are deductible, though the extent of deduction is limited to an interest rate that is 50 percent above the National Bank Rate and by an upper limit to the share of revenues that can be reduced by interest deductions. Unused interest deductions can be carried forward for one year. Dividends on the other hand are not deductible. Interest is subject to a 5 percent withholding tax. The 5 percent withholding tax on dividends was eliminated in July 1999.[8]

4.23 Deductions. Little detail is included in the Tax Code on permissible deductions for expenses incurred in deriving income. Expenses associated with employees are deductible and most other costs are covered under a statement that deduction is allowed for, "all other operational expenses in connection with the production of the income." There is considerable disagreement between taxpayers and tax collectors about the specific set of allowable deductions. These should be specified clearly.

4.24 Depreciation. Depreciation is deductible at historical cost. In relatively high inflation environments, a significant difference can develop between the real value of depreciation and the asset's cost, with the tax cost rising with inflation. This bias reduces the incentive to invest. Indexing depreciation for inflation is one alternative for reducing the inflation bias, though it can be expensive and cumbersome. Another alternative is to accelerate depreciation. The Tax Code accelerates depreciation for some assets. For example, manufacturing equipment is currently depreciated over four years, though U.S. evidence suggests the lives are closer to 10 to 12 years. The current acceleration of depreciation implicit in the shortened asset lives probably offsets much of the inflation bias.

4.25 Current reform ideas include provisions for accelerating depreciation, usually by allowing significant expensing (full depreciation) in the year of investment. A recently adopted

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[6] A possible explanation for the low share is that limited economic activity takes place inside legal entities. However, this does not seem to be an important explanation because the combination of taxes on physical and legal entities is very low.

[7] The tax rate for banks was reduced from 50 to 30 percent in 1997, and this is one reason why profits tax revenues have been falling.

[8] Interest and dividends paid to non-residents are subject to a 10 percent withholding tax, down from 15 percent.

amendment to the Tax Code allows expensing of 15 percent of investment, which encourages investment in long term assets.

4.26 If stimulation of investment is a goal, investment tax credits and expensing of new investments, which could have similar effects on investment, are preferred alternatives to reducing the corporate tax rate, as the latter grants capital gains to existing investment. Further, expensing, which is immediate first year write-off, is administratively easier than depreciating capital. The benefits of expensing will generally accrue to existing companies that are able to use the deduction to reduce profits earned on other investments. Neither investment tax credits nor expensing offers much benefit to new firms, which seldom earn profits in their early years of operation. There are two obvious problems with expensing, and these also apply to varying degrees to investment tax credits. First, immediate expensing results in significant revenue losses in the early years. Second, expensing makes it very easy for firms to engage in tax avoidance. Firms can buy assets in profitable years and sell assets in unprofitable years to benefit from the tax savings. Limiting expensing to the proposed 15 percent would significantly lessen the revenue losses and the avoidance incentives, so this is the best alternative for creating modest stimulation of investment.

4.27 Loss Carry-Forwards. Losses can be carried-forward for up to five years. Until July 1999, no more than 20 percent of the loss could be used in each year, but the new rules allow a loss carry-forward to be used in any pattern across the five subsequent years. The new rule is much less restrictive for firms. Newly established firms, which tend to experience losses in their early years, and firms with volatile income are most likely to benefit from the new system. It would be appropriate to allow the carry-forward to be extended to ten years, with no constraint on the amount taken each year. However, the ten year carry-forward should be limited to losses incurred from the date of passage forward.

4.28 Accrual versus Cash Basis. Firms have the option of whether to pay profits tax on a cash or an accrual basis. Given the difficulties that firms are having in collecting revenues from customers, most opt for the cash approach. This provision conflicts with the VAT, which must be paid on an accrual basis. Administration would be eased if companies were expected to file in a consistent fashion for the two taxes, using an accrual basis.

4.29 Estimated Payments. Estimated payments offer the benefits of requiring tax payments as firms earn profit and maintaining the government's cash flow. Until July 1, 1999, the Tax Code required firms to make monthly estimated payments based on *actual* activity of the previous month. This required firms to calculate their tax liability on a monthly basis, thereby creating significant compliance burdens for taxpayers. The preferred method, which was adopted in July 1999, is to make estimated payments based on the previous year's liability, potentially adjusted for inflation and significant increases in profitability. Allowance is made for increasing or decreasing the payments based on the actual performance of firms during the year. The change was made after the recommendations proposed in preparation of this report. The simplified system offers the major benefits of the existing structure with much lower administration and compliance burdens.

4.30 Taxation of Foreign Investment. The Government has actively sought to attract foreign investment by granting tax holidays in the past, which were eliminated with the adoption of the Tax Code, and by tax exemptions if located in a FEZ (see paras. 4.36 – 4.41). However,

proposed Amendments and Addenda to the "Law on Foreign Investments in the Kyrgyz Republic" have implications for tax treatment of foreign firms, the most important relating to the re-introduction of tax holidays. A general conclusion is that the proposed changes are ill advised. Moreover, for simplicity and transparency, the tax treatment of all types of business is best retained only within the Tax Code. At this point, the proposed changes have not been adopted.

4.31 The primary factors for foreign investment decisions relate to macroeconomic and political stability in the country, the availability, quality and cost of labor and infrastructure, and access to markets. Overall tax levels are of lesser importance unless the structure is very poorly designed. Research from around the world indicates that tax differentials have a minor effect on the location of investment. An important reason is that taxes (and particularly profits taxes) are a very small portion of the total business costs. Nonetheless, stability and predictability in the tax structure can be key business location factors and in many cases are more important than low taxes because firms do not want to be surprised or taken advantage of after they have made significant investments at a location. All firms want stability, but foreign firms have the greatest concerns because of their limited understanding of the Kyrgyz economy.

4.32 The use of tax holidays and concessions distorts neutral taxation by placing domestic firms at a competitive disadvantage, and is an ineffective policy for attracting investment, while causing revenue losses. Further, tax treatment in the home country of foreign firms lessens the importance of concessions to foreign firms. The tax legislation of most countries provides rules to prevent double taxation. Many countries grant their domiciled businesses a credit for taxes paid in other countries. Thus, a reduction in the tax liability of a foreign firm that is operating in Kyrgyzstan would cost the Kyrgyz Treasury, but the firm would not have any net saving as it would lose a tax credit at home for an equal amount. As a result the Treasury of the foreign firm's home country is enriched at the Kyrgyz Treasury's expense (see Box 4.1 for example).[9]

Box 4.1: Example of Tax Holidays and Foreign Tax Credits:			
Tax Consequences without a Tax Holiday for a Foreign Investor			
Kyrgyzstan		**Home country for foreign investor**	
Profits	1000	Profits in Kyrgyzstan	1000
Tax in KR	**300**	Other Profits	10000
		Total Profits	11000
		Tax @30%	3300
		Credit Kyrgyzstan Tax	300
		Tax due in foreign country	**3000**
Tax Consequences with a Tax Holiday in Kyrgyzstan			
Kyrgyzstan		**Home country for foreign investor**	
Profits	1000	Profits in Kyrgyzstan	1000
Tax in KR	**0**	Other Profits	10000
		Total Profits	11000
		Tax @30% in foreign country	**3300**
		No tax credit because no tax in Kyrgyzstan	

[9] The specific corporate structure selected by the company determines the timing of taxation at home, and therefore the present value of any tax liability or tax credits. The income would be taxable in the home country upon distribution of the dividends if the firm in Kyrgyzstan is a subsidiary company. The income is immediately taxable in the home country if the firm is a permanent establishment of the foreign company.

4.33 Finally, a tax structure offering tax holidays to foreign firms is open to abuse and can result in tax holidays being granted to firms where no foreign investment has occurred. For example, a Kyrgyz company could establish a foreign subsidiary, which could in turn establish another Kyrgyz subsidiary. Tax treatment of the new subsidiary could allow the original company to be free from taxation in Kyrgyzstan. Alternatively, a domestic company could choose to operate as a subsidiary of a foreign firm to take advantage of the tax exempt status.

4.34 Alternative Recommendations. Firms will generally be advantaged more by a change in the way that loss carry forwards are treated in calculation of profits than through tax holidays, since firms tend to operate at a loss in the early years of their operation. The current structure for loss carry-forwards precludes many firms from being able to fully deduct these costs against future income. A preferred system would be to lengthen the period of carry forward of losses (for at least 10 years) for the initial setup costs (say during the first 3 years of operation) for new businesses and not place any limitation on the losses that can be used to offset profits during any year.[10]

4.35 Several specific features of the Tax Code treated foreign firms differently from domestic firms but efforts were made to remove these from the Code in July 1999. For example, the payment of dividends from a subsidiary company to its domestic parent was taxed at 5 percent, but the transfer of profits to a foreign parent company was taxed at 15 percent. In part due to the recommendations made during the preparation of this report to reduce and align the withholding tax on transfers of profit for foreign companies with that for domestic companies, the tax on payment of dividends was eliminated for both foreign resident and domestic companies in July 1999. The legislation reduces revenues but results in neutral treatment for transfers by resident companies to their domestic or foreign parent companies. With the new provision it is unlikely that taxes paid to Kyrgyzstan exceed credits that foreign companies can use at home.[11] However, non-resident companies continue to pay a 10 percent tax on dividends on transfers to their parent company (reduced from 15 percent).[12]

4.36 Free Economic Zones Arguably the largest loophole in the tax system is through the Free Economic Zones (FEZ). Six FEZ were established (although two were subsequently closed) with the major purposes being to encourage foreign investment and exports. The Bishkek FEZ is the largest, with 305 registered businesses in its borders (out of a total of 501 in all FEZ combined). The entire Naryn Oblast has been designated as a FEZ, so it is geographically very big.

4.37 Production in the FEZ is afforded special tax treatment. For example, no taxes (including profits and VAT) are due on any activity occurring within the territory.[13] [A fee equal to 2

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[10] Since this recommendation was made, amendments to the Tax Code were passed that make loss carry forwards much less restrictive (see para 4.27)

[11] The effective tax rate on foreign capital was earlier at 40.5 percent for foreign companies that repatriate all earnings. The amendment has reduced the effective tax rate to 30 percent.

[12] The effective tax rate for non-resident companies is 37 percent when all earnings are repatriated to the foreign parent company.

[13] A 0.15 percent customs registration fee is levied on imports.

percent of sales is assessed on the firms to finance the FEZ operations]. No VAT or turnover taxes are due when goods or services pass from the FEZ into Kyrgyzstan.[14] An estimate of the IMF puts the revenue loss in 1998 at 105 million som. Of course these revenues losses are bound to grow. In accordance with WTO, customs duties are collected on the imported content of goods transferred into Kyrgyzstan. VAT is collected on the markup that occurs inside Kyrgyzstan.

4.38 Operators of the FEZ and the STI disagree on what tax legislation applies to the FEZ. The FEZ officials believe that legislation and regulations establishing them (based on Government Resolution 576) apply and the STI believes the Tax Code is operative. Whether the VAT is imposed on the entire value of a sale (based on the Tax Code), or only on the value added outside the FEZ (as argued by the FEZ) is a significant difference between the two. The FEZ legislation, not the Tax Code, is currently being implemented.

4.39 In addition to the intended special tax treatment, the FEZ create a number of tax evasion and avoidance opportunities. Individuals can purchase items in the FEZ and take them into Kyrgyzstan without paying tax. Customs duty is not imposed on commodities that are deemed to be of Kyrgyz origin, even though imports may provide significant component parts, again allowing the customs tax to be avoided. Further, even in cases where the VAT applies, it is not due on Kyrgyz goods until the sale occurs. Goods could be taken into Kyrgyzstan by the producer and sold to entrepreneurs operating under the VAT registration threshold. This would make it easy to avoid VAT at each level.

4.40 Given such easy opportunities for evasion, it is not surprising that the FEZ have been abused. Most FEZ have no fences or other means to control movement of goods in and out of their borders. A number of firms are said to have closed and reopened inside of a FEZ simply to take advantage of the tax treatment, without any new economic activity having been stimulated. Automobiles are registered in the FEZ to avoid the tax imposed on them. A considerable amount of retailing has developed inside of the FEZ as well. Some steps are being taken to reduce these abuses. For example, the FEZ are to be limited to only 30 percent trading activity, though it is unclear how this could be administered or controlled. The geographic area of several FEZ is being reduced and there is a plan to fence in the FEZ. However, these steps are insufficient to offset the existing abuses and to allow FEZ to be used in an effective manner.

4.41 The main advantage of the FEZ is in terms of lessening the regulatory constraints imposed on the startup and operation of business. Though lessened regulatory constraints will not cause locations, they facilitate startup for firms that are already interested in a Kyrgyz location. Lessening regulatory burdens across the country would be a significant step in improving the overall business climate. In the interim, the FEZ reduce regulatory concerns for some firms. However, it should be made clear that the Tax Code is the source of tax legislation for all activity, whatever the location. VAT would be due on all sales for consumption in Kyrgyzstan, though credits need to be granted for VAT paid on imports from origination based CIS countries until the VAT becomes fully destination based. The profits tax should also be imposed on firms in the FEZ.

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[14] Customs duties on the imported content, according to WTO rules, plus any excise taxes are due.

4.42 Minimum Assets Tax (MAT). Declining profit tax collections suggest that there is evasion arising because of overstated costs or understated revenues or because of proliferation of tax preferences, such as the FEZ. The imposition of a minimum assets tax for businesses should therefore be given serious consideration. Other advantages to a minimum tax include: imposing a benefit tax on businesses, since all firms pay the tax and not just profitable firms; and increasing equity across industries because of differential capacity to take advantage of avoidance opportunities. Further, assets taxes do not tax income at the margin (since the tax is on assets and not profits), and thereby provide strong incentives to earn profits. The assets tax would be creditable against the profits tax, effectively meaning that firms pay the higher of the profits tax or a percentage of their assets. Many countries, including the U.S., impose such taxes. Minimum assets taxes are used particularly heavily in Latin America. The tax base could be defined in terms other than assets, as is done in the US. However, the minimum tax set as a percentage of assets is generally preferred. A minimum tax based on revenues or costs is easier to evade. The rate can be set equal to the corporate profits rate times a presumed rate of return to the assets, so that the tax operates as a presumptive tax.

4.43 If the Government opts for introducing a MAT, some issues need to be considered. First, since major capital providing countries generally only allow their resident companies credits for income taxes paid in other countries, the tax could be defined as an income tax, even though it is actually levied on assets, and imposing the tax on a presumed rate of return to assets. Second, a possible avoidance mechanism for firms is to lease assets rather than acquire them. This problem is easily overcome by defining the tax in terms of use of assets, not legal ownership of assets.

4.44 Taxation of Small Legal Entities. Significant concern has been raised about taxation of small legal entities and proposals have been made for a simplified tax structure for small businesses. The proposed amendments to the Tax Code had proposed small firms to be taxed based on total revenues (rather than assets as proposed above). Production firms with up to 50 employees and non-production firms with up to 15 employees are defined as small in initial drafts of the small business tax. A revised draft version of the small business tax, developed after discussions undertaken in preparation of this report, determines small based on gross sales and allows the special tax treatment for fewer firms. Firms would be given the choice of whether to use the simplified system or the profits tax.

4.45 There are several problems with these proposals. First, is the broad definition used for small firms in the initial draft small business tax. The definition included firms that are relatively large for Kyrgyzstan. This broadly encompassing definition would provide large tax avoidance opportunities. Relatively few taxpayers would remain subject to either the profits or the income (except the wage tax) tax, given such a broad definition and the patent system described below. There were 21,296 firms with fewer than 50 employees during 1997. Barents has estimated a 1999 revenue loss of 90 million som. Defining small based on gross receipts is preferred and affects fewer firms. Second, by giving firms a choice the simplified system does not allow firms easier tax compliance so much as it permits them to pay the lower of two tax regimes. As a result, the simplified tax system would open a wide range for tax avoidance and would almost surely reduce tax revenues. Third, while better administration of taxes for small businesses is necessary, an additional tax structure should not be introduced for small legal entities. Introduction of the simplified system could result in four tax systems being employed: the legal entities' profits tax, a simplified business tax, a physical persons income tax, and a

patent system. This would require many decisions on which tax applies, when a taxpayer moves from one tax regime to another and so forth.

Personal Income Tax

4.46 The income tax is levied on a residence basis, taxing all domestic and foreign income for residents. Taxable income includes payments for employment, earnings of entrepreneurs, and interest and dividends that are not taxed at the source. Further, fringe benefits paid to employees in the form of life and health insurance premiums are taxable. Rates are progressive, ranging from 5 percent for taxable incomes less than 5 times the minimum annual income to 33 percent on incomes more than 100 times the minimum annual income. The maximum rate is similar to the maximum imposed in neighboring countries. Eighty percent of the income tax revenues during the first half of 1998 came through income taxes deducted by employers. Most of the rest comes through the patent system (see para 4.50).[15] Given the difficulties of administering an income tax, collection of most revenues through these mechanisms is appropriate.

4.47 Many exemptions and deductions are given for social policy purposes, thereby narrowing the tax base. Additional revenues could be gained by reducing or eliminating some of these tax expenditures. Exemptions are given for inheritances and gifts, life insurance, sales of agricultural commodities, interest on deposits in banks, Republican state treasury obligations, dividends on securities, and other purposes. Taxpayers are allowed personal deductions, plus deductions for the number of members in the household, and for special additional enumerated purposes. Taxpayers are allowed to deduct the expenses incurred in earning income, using terminology that is similar to that delineated for the legal persons' tax.

4.48 The Tax Code was amended on July 1, 1999 to reduce the number of rates from six to four, broaden the tax brackets, and reduce the maximum rate to 33 percent on incomes above 100 times the minimum annual income. This represented an important change but total taxation of wages is still very high.. In addition to the income tax, wages are taxed at a combined 39 percent on contributions for health and pensions. The wage tax plus contributions reach a maximum 72 percent marginal rate. The high rates create a strong incentive for labor to operate in the gray market by underreporting actual earnings or employment. Also, the high rates can discourage the use of labor relative to capital, with marginal rates much higher on labor. Rates for contributions must be reduced significantly to lessen the efficiency consequences. Options include identifying alternative ways to finance health (there is no economic reason to link finance of these services to a wage tax) and lessening the benefits. Pension reform is being supported by the Bank's SOSAC.

4.49 Patents. Small craftsmen, entrepreneurs and traders are taxed under a presumptive system. Taxpayers pay a monthly patent that varies in amount by region of the country. The average patent cost nearly 250 som, with the price reported to be 500 to 600 som in Bishkek. The fee is in lieu of income taxes and should approximate the income tax that payers would expect to owe if they were directly taxable through the income tax.

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[15] There are 77,000 individual entrepreneurs who could be taxable under the income tax or the patent system.

4.50 The patent system should operate as a presumptive system to reduce record keeping requirements and to collect taxes on businesses operating in the hard-to-tax sector. The rules for determining who should receive the patent and for setting the patent amount appear to be unclear, and must be carefully articulated by the STI. The patent system should continue to be used only for taxation of physical persons and should be only for those who receive income below a certain level, meaning a maximum amount for eligibility should be set. A cutoff consistent with the VAT threshold, currently 300,000 som, would be appropriate. A determination must be made regarding how taxpayers with erratic income, who are at times eligible and at other times ineligible, will be treated. Also, rules must be established to get businesses with rising income into the formal tax system. In some cases, the patent amount is calculated after requiring businesses to list their receipts and expenses. This limits much of the advantage of the patent system, though record keeping is necessary to allow auditing regarding whether firms should be moved from the patent system. Actual patent payments should be set as presumptive taxes, based on estimates of earnings in particular occupations and should be set the same for all small businesses of the particular type in a particular place.

4.51 The rapid growth of small scale economic activity generates considerable pressure to find ways to tax these groups that are often hard to reach through traditional tax systems. The patent and land tax structures are first steps in this direction. Nonetheless, these taxes are estimated to collect only about 400 million som in 1998, or about 9 percent of revenues. A greater amount of taxes from these sectors is essential, given their significant role in the economy. The rates on each tax could be increased. For example, an option for the patent system would be to set the rate to collect both the implicit income tax revenues and the implicit VAT revenues, but only if the firms are below the VAT threshold.

Land Tax

4.53 The land tax is levied as a Republic tax, but the revenues are transferred for local government budgets. Tax rates are set by the central government and approved by the Parliament. The rates vary according to the location and quality of land. For example, rates vary from a high of 504.5 som per hectare for irrigated land in one rayon in Osh Oblast, to 5.5 som per hectare for pastureland in another Osh Oblast rayon. In 1998 land tax rates were reduced by one-half. Reductions in the tax rates will surely create significant other funding difficulties for local governments, which recently lost their share of VAT revenues. Seventy-five percent of the tax is due in December of the current year, and 25 percent is payable during March of the following year. The land tax, levied in lieu of all other taxes on agriculture, works as a presumptive tax on this industry.

4.54 The land tax is levied on the use not the ownership of land, which is necessary since there is little private ownership. The proposed amendments to the Tax Code would levy the tax on the *right* to use the land. Such a change is appropriate to ensure the tax is levied even if the land is not currently employed.

4.55 Land taxes are relatively efficient, both in administrative and economic terms, and should be relied on more heavily, not less intensively. Thus, the rates should be raised, not lowered. Some fear exists that higher land taxes would harm subsistence farmers, but the imposition of higher rates on more fertile land reduces the equity concern. Land taxes in urban areas are good proxies for benefit taxes, because the value of land grows with access to infrastructure services.

Kyrgyzstan should examine the option of moving from land taxes to broader real and personal property taxes as a major source of tax revenues. Time would be necessary to develop the administrative apparatus to collect the tax, but planning should begin now if the tax is to become a real option during the next few years.

4.56 One general tax proposal that has been discussed is imposition of a tax on agriculture production, perhaps at a one percent rate. The tax is intended to raise additional revenue and to serve as a source of data on actual agriculture production. Some of the additional revenues might be used to reduce the land tax. This proposal appears to be inappropriate on administrative grounds. There is no effective means for auditing tax payments by the many small farmers who would be able to easily evade the tax by underreporting production. Adoption of the agricultural production tax is not being considered at this time.

C. New Financial Standards and the Tax Code

4.57 New financial standards based on international norms were to be implemented January 1, 1999. However, only some entities have switched to the new standards. The new regulations need not have a dramatic effect on tax liabilities, since the Tax Code establishes the accounting regulations for tax purposes. However, there are interactions between the Tax Code and the new regulations. One example is that the treatment of inventories for tax purposes is to be based on companies' accounting rules, which will be drawn from the new standards. The STI is likely to continue pushing for a clear distinction between tax accounting and financial accounting rules because the financial standards may allow firms to evade taxes as they set loan loss reserves and other deductions. Tax inspectors may also dislike the financial standards because the explicit rules would limit their ability to negotiate tax liabilities. Still, pressure for merging tax rules and financial standards will surely rise as the financial standards become routine. The ability to write off bad debts more quickly is one area where the pressure may develop. Receivables are currently written off for tax purposes after 3 years, but the financial standard will allow write-off in six months.

4.58 Though the financial rules will not cause major direct changes in tax filings, the new financial statements will be the basis for data used in preparing tax returns. While there is considerable training of enterprise accountants (under the auspices of USAID), relatively little training of tax inspectors has occurred. The imbalances will place tax inspectors at a disadvantage. Annual tax returns using new standards are expected to apply to the tax year 2000, but it is still important that the training be accelerated for inspectors.

D. Summary of Major Proposals and Estimated Revenue Effects *(Actions already taken are indicated in italics)*

Tax Code Implementation and Administration

- The Tax Code is a sound basis for the tax system, but the structure must be allowed to become a stable, predictable revenue system. This requires that the propensity to legislate and propose revisions in the Tax Code must be stopped. Both tax collectors and taxpayers, including foreign investors, will be strongly advantaged by allowing the system to become stable.

- There is strong evidence that tax administration is failing to raise the appropriate revenues. Thus, enhanced administration must be a major component of a fair, elastic, and buoyant tax system.
- Taxpayers feel a strong need for enhanced guidelines for tax compliance. Some steps have been taken to achieve this goal, but more detailed instructions and eased administrative practices must be developed.
- Strengthening Customs administration is important as tax evasion appears to be widespread, particularly on items being imported into Kyrgyzstan. This would benefit not just collection of customs duties, but also VAT and excises on imports. To address the problem of under-valuation of imported goods, the Government should consider, at least in the short term, contracting out the function of determining the customs value to one of the internationally recognized companies specializing in customs valuation. To address the problem of under-reporting of the quantity of imported goods, the Government should consider putting in place "flying squads" of specially-trained and equipped officers who would be responsible for spot checking shipments, both at the manned and unmanned crossings.

VAT

- The VAT must be structured on a destination basis with respect to all countries. This will generate significant revenues and result in a system that is easier for administration and compliance.
- The government must rebate VAT payments to firms that are very heavy exporters of goods and services. The rebates will significantly reduce net VAT revenues but will lower the tax on exports that is effectively imposed by the failure to make rebates, and will affirm compliance with the Tax Code. *The State Budget for 2000 includes a line item to allow for rebates. Rebates began gradually in the first quarter of 2000 as the procedures were just being developed.*

Excise

- In 1999 excise tax rates have been unified for domestic and foreign goods and raised particularly for oil products. However, rates and collections are generally still low on international standards. The government should begin with significant improvements in administrative practices and then consider further rate hikes once administration is tightened. A combination of better administration and higher rates could generate at least 0.5 percent more of GDP in tax revenues.

Profits Tax

- A more specific articulation of the expenses that are allowable for calculation of profits tax should be provided, at least by regulation, to ensure that taxpayers and tax collectors across the country have a clear understanding of the legal set.
- The carry forward of losses against future income is excessively limited for both legal and physical persons. The time for carry forwards should be extended to at least 10 years and no limitation should be placed on the amount that can be exercised during any year. This would promote fairness in the tax system and lower the tax burden for

new firms that often experience losses in their early years of operation. *In July 1999, the Tax Code was amended to remove the limitation on the amount of loss that could be claimed during any year of the 5 year loss carry forward permitted.*

- Estimated tax payments by legal entities should be based on the previous year's activity adjusted for inflation, or actual profits if a large increase is anticipated, rather than on the actual activity of the previous month. This would reduce the administrative and compliance burdens. *As of July 1, 1999, estimated payments are based on the previous year's liability. Allowance is made for increasing or decreasing the payments based on the actual performance of firms during the year.*
- A minimum assets tax should be developed as part of the profits tax. The tax, levied as a percentage of assets, would be creditable against the profits tax. It would be intended to offset business efforts to evade taxes by understating revenues and overstating expenses. The minimum would also allow the business tax structure to operate as a benefits tax, since it would be levied on all businesses.
- Consideration should be given to reducing the 15 percent withholding tax to 5 percent on the transfer of profits to a foreign parent corporation. The remaining 5 percent could be used as a tool during bilateral negotiations over tax and trade arrangements. *In July 1999, the Tax Code was amended to eliminate the tax on payment of dividends for both foreign resident and domestic companies. However, non-resident companies continue to pay a 10 percent tax on dividends on transfers to their parent company (reduced from 15 percent).*
- Businesses operating in the FEZ should be fully taxable under the profits and VAT structures.

Taxes on Wages

- Wage tax rates should be lowered to increase the incentive to employ labor, and in particular, the incentive through the formal sector. Reductions in income tax rates can only be one component of the decrease in taxation of labor. Social contribution rates must be significantly lowered as well. *In July 1999, the Tax Code was amended to reduce the number of income tax rates from six to four, broaden the tax brackets and reduce the maximum rate to 30 percent.*

Land Tax

- Land taxes should generate a greater portion of revenues. A twenty percent increase over 1998 revenues is proposed here. The current structure is relatively efficient from an economic and administrative perspective. Further, the land tax is a presumptive tax on agriculture. The positive relationship between the productivity of land and the tax rate should lessen the potential for adverse equity implications.

Other Taxes

- The Kyrgyz turnover taxes suffer from the negative consequences that caused most other countries to eliminate such taxes – the incentive to vertically integrate to avoid the tax, unclear equity implications, and harmful effects on small firms. The taxes should be phased out as quickly as feasible.

- A license tax on automobiles, with the payment linked to the value of the automobile (possibly based on a proxy such as engine size), and a tax on the retail sale of gasoline should be levied to replace the road turnover tax. The revenues should be deposited in the new road fund.
- The many fees and local taxes should be carefully evaluated and the number reduced, with the intent of lessening compliance and administrative costs and eliminating those that are nuisances.

4.59 Table 4.2 summarizes the revenue implications of the major proposals. The Table understates the net revenue gain because the proposals that could not be valued (for lack of available data) would be significantly positive overall. Also, revenue gains are understated on account of administrative improvements, including recommendations relating to the possible contracting out of certain customs and tax administration functions which would result in improved collections, even in the short-term.

Table 4.2: Revenue Effects of Proposed Reforms

	mn som	% of 1998 GDP
VAT		
Destination VAT	+ 465	+1.37
Payment of VAT refunds[1/]	- 100	-0.30
Tax firms in the FEZ[2/]	+ 105	+0.30
Net effect		+1.37
Excise Taxes		
Reduce excise tax evasion and raise rates[3/]	+ 170	+0.50
Profits Tax		
Extend loss carry-forwards[4/]	- 96	-0.28
Impose minimum assets tax	+	+
Reduce the withholding rate on transfers to foreign parents from 15 to 5 percent	-	-
Net Effect		+
Personal Income Tax		
Lessen wage tax rates by 20 percent[5/]	- 60	-0.18
Land Tax		
Raise land taxes 20 percent	+ 68	+0.20
Turnover Taxes		
Eliminate turnover taxes	- 423	-1.25
Impose automobile and fuel taxes	+ 138	+0.40
Net effect		-0.85
Total [6/]		+0.76

1. The annual cost was estimated as 40 percent of the unpaid refunds.
2. IMF's estimate of revenue losses in 1998. The losses could be expected to grow rapidly in the future.
3. Estimate based on the assumption that excise tax revenues could be increased by 0.25 percent of GDP.
4. Barents' estimate for 1999, but annual loss will decline over time.
5. Barents' estimates that proposed Tax Code Amendments would lower revenues 50 million som. Amount set to replace the road tax.
6. The overall revenue gain is understated because the net effect of the non-quantifiable factors would be a significant revenue increase.

Source: Staff estimates.

CHAPTER 5

TOWARDS A NEW ROLE FOR THE STATE IN INFRASTRUCTURE AND UTILITIES

A. Introduction

5.1 The state-owned infrastructure and utility companies pose a major problem for the fiscal position because all utility companies are either loss-making or are earning less than their opportunity cost of capital. Government borrowing for their investments, either directly or guaranteed, is substantial, as Chapter 2 indicated. Moreover, direct and indirect subsidies to households are placing a strain on the Government budget, partly because these are so poorly targeted. But explicit Budget support only partially reveals the extent of the liability to the Government. The utility companies have losses that are financed by: (a) banks and would be reflected as non-performing loans; or (b) suppliers in the form of non-payment or delayed payment; and (c) living off existing capital by failing to adequately maintain and replace the capital stock. All these losses will eventually have to be borne by the Government. Whether this is explicit or implicit does not change the end result: if the Government does not provide funds to replace assets or settle pending claims, then any future sale value from privatization will be correspondingly lower.

5.2 There are already signs that the public utilities are heading for a crisis. Kyrgyzenergo, the electricity and heat company, is illiquid and not able to pay suppliers fully. Its production losses in 1998 were 259 million som (0.8 percent of GDP or $8.6 million). Kyrgyzgas has payment arrears for imports of gas, resulting in periodic cuts in gas supply from Uzbekistan, in addition to arrears on short-term debt to the budget and commercial banks. Kyrgyz Airlines, also recording growing losses during 1998, had to repay a government loan of 40 million som before the end of 1998 and then meet a US$7 million payment to its leasing company in January 1999 for two new airbuses or face financial penalties.

5.3 This chapter reviews the financial position of the companies and the reasons for their poor performance. It outlines the components of a reform program and assesses the status of restructuring for the key infrastructure and utility companies. Chapter 6 discusses the provision of public utility services to the poor.

B. The Performance of the Infrastructure and Utility Companies

B.1 Financial Position of the Companies

5.4 Evaluating the economic profitability of the public utility companies from their financial statements is difficult for three reasons. First, most companies still employ Soviet accounting practices which do not reveal the true financial performance of the company. Second, accounting profits, even in accordance with international standards, generally overstate economic profits in an inflationary environment or when long lived assets are employed since they are based on historical cost accounting. Third, accounting practices do not incorporate notions relating to opportunity cost of capital and remuneration of capital invested. This means that any reported profits have to be compared to the level of profits required to meet the opportunity cost of capital. In the Kyrgyz Republic utilities are not earning sufficient profits than would be

needed if they were required to pay their shareholders the opportunity cost of capital or a market rate of return. We calculated the required profit by applying a 10 percent rate of return on the historic cost book value of shareholders' equity.[1] The estimates are very conservative since we have used only a 10 percent rate of return whereas loans to enterprises in Kyrgyzstan could cost up to 30 percent. Moreover, we have used historic costs of assets which are very low for companies with long-lived assets and/or when significant inflation occurs.[2] Our estimates of the corrected profits (losses) are shown in Table 5.1 for companies for which data were available. All companies show economic losses. The difference between reported and corrected losses is by far the largest in the case of the energy company, Kyrgyzenergo, (amongst those companies for which the corrections could be made) because of its higher asset value and greater reliance on equity financing. These 'hidden' losses cannot be sustained in the long run.

Table 5.1: Financial Results for Energy, Telecommunications, Water, and Airlines

Company	Profits (losses)		Corrected profits (losses)	
	Million Som	% of GDP	Million Som	% of GDP
Kyrgyzenergo (1996)1/	(159.58)	0.68	(796.60)	3.40
KyrgyzTelecom (1997)	(94.41)	0.31	(97.35)	0.32
BVK (1998)	11.33	0.03	(12.94)	0.04
BVK (1997)	4.67	0.02	(11.83)	0.04
KJKS (1998)	0.883	0.003	(22.74)	0.07
KJKS (1997)	0.551	0.002	(27.39)	0.09
KAJ (1997)	(36.0)	0.12		
KAJ (1998)	(96.0)	0.28		
Gas (1997)	(169.8)	0.55		
Gas (1998)	(433.2)	1.28		

Note: BVK is Bishkek Vodokanal, the Bishkek water company; KJKS is Kyrgyzjylkommunsoyuz, responsible for serving other major cities; KAJ is Kyrgyz Aba Jolduru, the airline company. Internationally audited financial results for power (KE) and telecommunications (KT), the rest are based on Soviet accounting.

1/ Kyryzenergo actually posted a loss of 241 million som but then received a special grant from the Swiss Government for almost 82 million som.

Source: World Bank staff estimates based on information provided by the authorities.

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[1] This rate is for illustrative purposes only. To determine the appropriate rate would involve employing a standard methodology such as the Capital Asset Pricing Model. This should be undertaken in any future full financial analysis. The rate is applied to equity as opposed to equity and debt since interest payments are already included in the operating cost figure. To avoid double counting, we have subtracted from the reported profits (losses) 3.5 percent of turnover, following the practice that energy companies are allowed to charge 3.5 percent on costs as a profit element.

[2] This issue was considered by the ADB-funded project for Kyrgyzenergo, which found that the replacement cost of assets is 42 billion som while the historic cost is only 8 billion som.

Why are these companies loss-making?

5.5 *Tariffs are not cost-reflective.* Public utilities are still charging very low prices for their services, well below cost-recovery levels. In fact, the prices charged in dollar terms have declined over the past few years, particularly for gas and heating, as domestic prices have not been raised in line with inflation or exchange rate depreciation (see Table 5.2 below on energy prices). For reasons of social policy, the Government maintains low tariffs to the population for public services. In addition, it has a complex system of privileges, inherited from the Soviet period, whereby a large number of categories of persons are entitled to additional discounts on tariffs. Agriculture is also subsidized by generally low prices and additional large discounts for certain uses for electricity as well as low charges for irrigation. The cross-subsidies within the utilities and the compensation payments from the government budget are not sufficient to cover the associated losses. KE estimated the cost of the discounts at 283 million som in 1998 (0.84 percent of GDP or US$13.5 million) but it was only compensated 27 million som by the Government. Roughly one-third of the total number of households supplied gas receive discounts which are on average 50 percent below the household tariff and the estimated cost of this is about 23 million som.

Table 5.2: Energy Prices

	Average Unit Prices of Energy				Cost Recovery[3/]	
	Som		*US Dollars*		*Som*	*US Dollars*
	1994 (end)	**1998 (year)**	**1994 (end)**	**1998 (year)[2/]**	**1994 (end)**	**1994 (end)**
Natural Gas (1000CM)						
Households & Others	997.9	1036	94	50	1280-1600	120-150
Industry	997.9	1493	94	72	-	-
Import (excl. trspn)			65	55		
Electricity (kWh)						
Domestic	0.09 (a) (b)	0.18	0.85[1/] (a)	0.87[1/]	0.25 (a)	2.35[1/]
- Households	0.06	0.14	0.57[1/]	0.67[1/]	0.32	3[1/]
- Industry	0.11	0.31	1.04[1/]	1.49[1/]	0.21	2[1/]
- Agriculture		0.13	-	0.63[1/]	-	-
- Budget & Others		0.3	-	1.44[1/]	-	-
Exports	-	0.54	-	2.60[1/]		
Heating (GCal)	73.6 (a)	101.3	6.90 (a)	4.88	255.84	24
- Households	30.2	65	2.83	3.13	255.84	24
- Industry & Others	124.7	251.5	11.7	12.11	255.84	24
Coal (ton)	280-400 (c)	550	26.3-37.5	26.48	-	-
Memo: Som/US$			10.66	20.77		10.66

1/ US cent/kWh (a) Consumption based weighted average. (b) Weighted average of households and industry prices only. (c) Data for September 1994. Prices include VAT.

2/ Tariff levels for end-1998 are much lower since tariffs were not increased pari passu with the depreciation of the som in the second half of 1998.

3/ Cost recovery assumed O & M expenses and depreciation to cover rehabilitation/replacement of assets in the medium term. It does not include a return on assets or a self-financing share.

Note: Electricity, heating and gas tariffs are calculated as the ratio of billed revenues and output.

Sources: For 1994 "Kyrgyz Republic Energy Sector Review", World Bank, May 1995; for 1998 Kyrgyzenergo; State Energy Agency, World Bank Staff estimates.

5.6 As a result, the implicit subsidies due to pricing of electricity and gas are estimated at 6.6 percent of GDP and 0.6 percent of GDP respectively at current production and consumption levels and assuming minimal investment for electricity and none for gas (see Figure 5.1)[3]. Implicit subsidies on heat would add 1.6 percent of GDP.

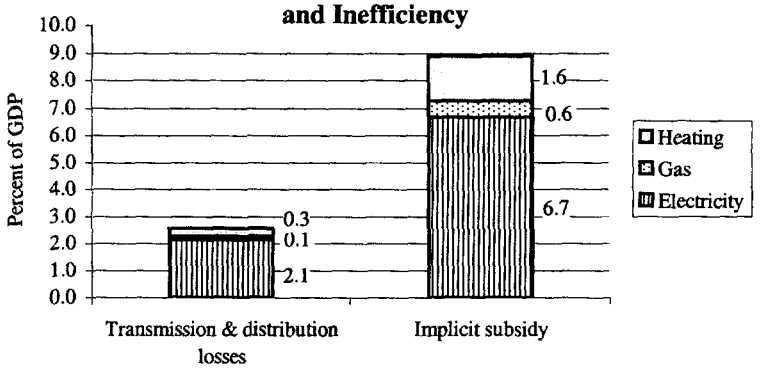
5.7 Moreover, low tariffs create distorted incentives for both consumption and production. A case in point is the market for electricity. Very low electricity tariffs for both residential and industrial consumers has in the past resulted in consumers substituting out of other fuels into electricity. This excessive demand has overloaded the system beyond capacity, with obvious severe adverse consequences for the quality of services and the profitability of Kyrgyzenergo. It is clearly more efficient to set tariffs to reflect costs and rely on the price system to reflect demand. This will also reduce waste. This does not mean that the poor are neglected. In fact, it may actually help the poor who do not benefit from the current subsidies because they are not connected to public service networks and have to pay higher prices for alternatives (see Chapter 6). International experience shows that the poor are willing to pay because they would pay less for public services than they are paying private providers. Concerns for the extreme poor can be met through a well-targeted social compensation scheme that helps the poor meet their utility bills while maintaining the right incentives for consumption and production.

Table 5.3: Accounts Receivable and Payable

Company	Accounts receivable (million som)		Accounts payable (million som)	
	Stock	*Flow*	*Stock*	*Flow*
Kyrgyzenergo (1998)	588.6	+57.1	1320.8	+747.0
KyrgyzTelecom (1997)	128.5	N/A	250.5	N/A
Kyrgyzgas (1998)	273.1	N/A	505.0	N/A
Kyrgyzkomurholding (coal, Nov 98)	61.5	+14.4	86.5	+37.8
Kyrgyz Aba Jolduru (airlines,1998)	119.6	+58.5	209.8	+99.5

5.8 *Lack of incentives to reduce costs.* In addition to the tariff structure not providing the right incentives for productive efficiency, managers do not have incentives to improve efficiency and productivity since they lack autonomy and accountability for the performance of their companies and do not face any competition. There is considerable scope to reduce waste. Losses in transmission and distribution of electricity are enormous at 33 percent of production. A reduction of such losses to 15 percent, which is an

Figure 5.1: Annual Gains from Eliminating Mispricing and Inefficiency



[3] The costs used are, for electricity 2.5 cents per kWh, for gas $78.8 per 1000 m^3 and for heating $16 per GCal. The average prices taken are those of 1998 shown in Table 5.2.

acceptable norm given other countries' experience, would yield potential savings as high as 2.1 percent of GDP (see Figure 5.1)[4]. Technical losses for gas are estimated to have increased from 4.6 percent to over 10 percent in 1998. In addition, there is wasteful consumption as gas consumption of two-thirds of households is not metered and not based on unit prices. Kyrgyzgas estimated savings of up to 50 percent once meters had been installed. Finally, the low rate of collections to billed sales reflects poor financial management.

B.2 Service Coverage and Quality

5.9 The degree of service coverage varies significantly across the utilities, with almost universal coverage of electricity, reasonable coverage of telecommunications, but much lower levels of access to water and sanitation services (see also Table 6.1 in Chapter 6). In general, though, service coverage is reasonable in the regional context and much higher than average for countries of similar income in the case of electricity and telecoms (see Table 5.4). Nevertheless, the quality of service is poor, and assets are in a very poor state of repair. Given the financial situation of the utilities and continuing poor incentives, there is little prospect for improved services in the coming years. In fact, the opposite may be true. Maintaining the present system implies that producers will not cover their costs and new investment will not be attracted. This will lead to a further deterioration in the service quality and consumption levels of those who have access to the existing infrastructure and an inability to expand service coverage. If this is to be avoided, resources are required and measures need to be taken to restructure the public utilities.

Table 5.4: Indicators of Comparative Activities

	Kyrgyz Republic	Low Income Countries	Transition Countries[1/]	Lower-Middle Income Countries
Telecoms				
Density of lines (lines per 100 inhabitants)	7.5	2.5	9.5	9.7
Tariff (Residential - monthly subscription, US$)	0.7	4.6	n/a	5.6
Tariff (Business – monthly subscription, US$)	1.4	5.7	n/a	9.2
Revenues (per main line, US$)	63	343		296
Revenues (per employee, US$)	3199	29691		24640
Main lines per employee	51	63		83
Faults (per 100 mainlines per year)[2/]	30	59	35	
Electricity				
Households with electricity (% of total)[3/]	99	21	85	61-62
Transmission and distribution losses (% of output)	33	23	14	15
Water and Sanitation				
% of population with access to safe water	81	69	95	78
% of population with access to sanitation		29-42		

Note: Economies are grouped by 1994 US$ income levels: low income countries are those where per capita GNP is less than $725; in lower-middle income countries, per capita GNP is between $726 and $2895.

1/ WDR, 1994.

2/ Refers to 1992.

3/ Refers to 1984, except for Kyrgyz which refers to 1998.

Sources: World Development Indicators, Jan. 1999. Data are for 1996. World Bank Competitiveness Database. World Telecommunications Development Report, 1998 (ITU).

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[4] For gas, the transmission loss is 10.3 percent of production whereas the normal loss is 3.8 percent and for heating the estimated network loss for 1998 was 18 percent whereas a normal loss would be about 8 percent.

C. A Strategy for Reform of the Public Utilities

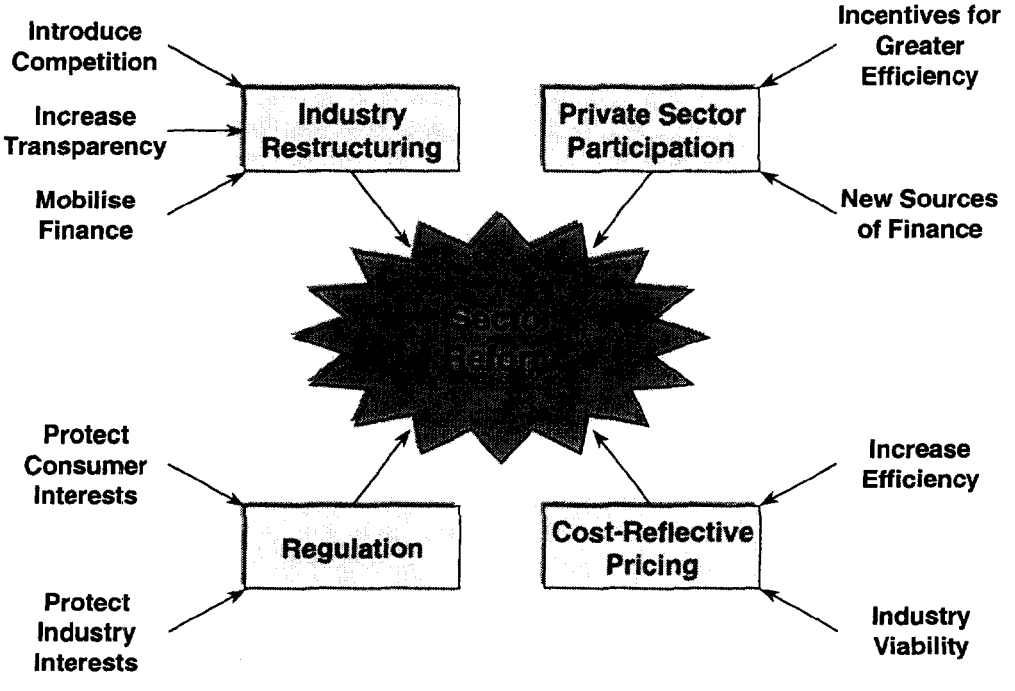
5.10 Immediate action is needed to improve the financial situation of the companies. Actions need to be taken immediately to reduce losses through improved metering, improved billing and collection including the application of realistic penalties for non-payment, reduction of technical losses and improved operational efficiency.

5.11 At the same time, it is essential to put in place a systematic program of sector reform to increase productive and allocative efficiency, improve the quality of service and bring in new sources of finance, which will help relieve government budget constraints. While there are aspects of sector reform that are industry specific, there are some elements common to all sectors. They are:

- restructuring to instill greater commercial orientation and introduce competition;
- designing an effective tariff system to provide the appropriate incentives to producers and consumers;
- creating an appropriate regulatory regime; and
- creating a favorable environment for the entry of private investors.

Figure 5.2 illustrates how the various components of sector reform relate to each other and the objectives they are meant to achieve.

Figure 5.2: Components of Sector Reform



5.12 ***Industry Restructuring***. Infrastructure must be conceived of as a "service industry". Such a commercial orientation requires well-focused performance objectives, financial and managerial autonomy (with a hard budget constraint), and clear accountability to both customers and to providers of capital. Corporatization is a first step and provides an organizational structure, but by itself it merely transforms the problem of official governance into the task of corporate governance. In many countries, performance has remained disappointing even after corporatization. International experience shows that market discipline and competition can help solve the problem of corporate governance by exerting pressure to promote efficiency and accountability.

5.13 Competition. One of the aims of restructuring public utilities is to make those sectors more competitive. Whilst at one time it was thought that most utility industries are "naturally" monopolistic, technological change and regulatory innovation have shown that areas of genuine "natural" monopoly in utilities are quite small, and that fostering unnecessary monopolies provides poor incentives for efficiency and customer responsiveness. Over the last 15-20 years pro-competitive reforms have become a central element of utility policy in all major utility sectors all over the world. These reforms may involve introducing competition in one or a combination of the following forms:

- *Competition In the Market or Product Market Competition*: where rival firms compete directly to supply consumers, with examples including power generation and cellular and long-distance telephony.
- *Competition For the Market*: which is discrete competition, such as franchising where time-bound monopoly franchises are awarded through a competitive process to firms offering the most advantageous terms to consumers, and re-bid at the end of the franchise period. This approach is most common in activities that remain naturally monopolistic, such as water supply.
- *Comparative or Yardstick Competition*: when no actual competition occurs but through comparisons of costs and quality a proxy is created; say, five local electricity distribution companies being compared.
- *Contestability*: which is a version of competition in the market based on potential competition for the market.

5.14 Realizing the benefits of competition in one or more of these forms requires that legal barriers to entry are dismantled to allow new firms to enter. In many cases, however, simple removal of regulatory barriers to entry may not be enough to ensure effective competition. Existing public enterprises may need to be restructured, horizontally or vertically, to facilitate effective competition. The Kyrgyz Republic has started addressing these issues through a De-Nationalization and Privatization Program, which is at various stages for each of the major utilities (see Section D).

5.15 Transparency. Improved transparency in the decision-making process of the companies and the regulator is particularly important in the case of public utilities whether they are set up as monopolies or some form of competition is allowed. There are various ways to achieve greater transparency, including:

- requiring that the financial accounts of the regulated companies be compiled according to common standards and audited by independent auditors (preferably international);
- creating a clear separation in the planning, operation and regulation functions;
- making the regulator's decision publicly available;
- minimizing the overlapping of responsibilities among different government levels; and
- publication of all non-confidential information on the sector, with strict guidelines on what can be treated as confidential.

5.16 ***Tariff Policies***. Tariff design is at the core of the sustainability of any utility service. Prices are the main instrument used by the regulator to protect consumers' interests while minimizing any distortion in consumption decisions; to ensure the financial viability of regulated companies while giving them the right incentives to pursue productive efficiency; and to make investment in the regulated industry attractive to private investors while ensuring that the right amount of risk is passed on to them. It is possible to achieve these objectives (to various degrees) by means of different regulatory regimes. While the price setting criteria vary from regime to regime, best practice requires that they all be characterized by the same underlying principles:

- Cost-reflective pricing. This includes charging efficient marginal operating costs to customers and remunerating assets at the cost of capital. Full cost reflection is where all assets are valued at their replacement cost (rather than historic book value), whereas in partial cost reflection only new assets are fully remunerated at the cost of capital, so providing the correct investment signals, but existing assets are either remunerated at a lower rate or their valuation is kept below the economically efficient level. To attract private investors, new investment at least must be properly remunerated through the tariff regime.
- Removal of cross-subsidies. The introduction of competition makes reform of cross-subsidies between different services and categories of users essential in most cases. Otherwise, consumers that are paying higher prices to subsidize others will defect to rival suppliers if they can, leaving insufficient funds to finance subsidies to intended beneficiaries. These cross-subsidies are still common in the Kyrgyz Republic. While most of these schemes were originally intended to assist the poor, limited transparency and inevitable political pressure leads to mistargeting of beneficiaries (see Chapter 6). The need to suppress cross-subsidies does not imply that there is no need to assist the poor. However, experience in other countries shows that this can normally be done in a manner consistent with competition.[5]
- Promote production efficiency -- the tariff adjustment formula should provide incentives to minimize production costs.

5.17 ***Regulatory Reform***. One of the most important tasks in sector restructuring is the establishment of a transparent, explicit and independent regulatory framework. This allows

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[5] As discussed in Box 5.2, it may actually be the case that cross-subsidies should be retained in the short-term because of problems with the alternative approach. This issue, should, however, be investigated and if cross-subsidies are retained, action must be taken to make them more focused and transparent.

nationally important companies to operate in a commercial way with no day-to-day political interference. Moreover, clear regulation is a prerequisite for private sector participation. Perhaps the most important function to be performed by the economic regulator in the utilities sector is price regulation and to set and enforce quality standards consistent with the prices that are set. Whether the utility sector is organized as a monopoly or whether some form of competition is introduced after restructuring, the role of the regulator will be to provide incentives to the regulated companies to operate efficiently while at the same time protecting the interests of consumers and producers.

5.18 ***Private Sector Participation.*** The final leg of sector reform is concerned with the reform of the ownership of the companies. This reform can take several, non-exclusive, forms. They include: the introduction of new private companies alongside the existing state-owned organizations; privatizing the existing state-owned companies; or a combination of both forms.

5.19 While the introduction of new privately-owned companies is conducive to the development of competition, by itself they need not solve the problems faced by the incumbent companies. To address the problems presented by the incumbent companies reform of the management, corporate governance and ownership of the companies needs to be advanced. Although in principle it is possible to reform companies through corporatization and the establishment of incentive based regimes, in reality in the majority of cases this does not provide enough of a solution. Australia was successful in introducing reforms and competition without privatizing the state-owned telecommunications enterprise, but the sustained success achieved by Australia is atypical and this is why most countries have turned away from this model.

Box 5.1: Risk

A key aspect of any reform program designed to introduce private sector participation is ensuring that risks are clearly understood and are allocated appropriately. This is important because:

- the private sector is best placed to handle certain risks, such as commercial risks, while there are some areas where the Government is better placed—or can at least mitigate the risks at a lower cost than possible for the private sector;
- a fair rate of return, demanded by the private sector to remunerate investment, is affected by the level of risk; and
- actions taken by the Government to mitigate risk are only useful if they are credible.

With respect to the third point, consider the issue of Government guarantees. It is vital that the Government know what level of guarantees have been provided and their likelihood of being called since there is a limit to the capacity of the Government to meet guarantees that are called. Guarantees will only have a positive impact on the willingness of the private sector to become involved if there is capacity to meet the guarantee if called. Since situations change, and sometimes very rapidly, it is important for an on-going assessment of the probability of guarantees being called and the subsequent impact on the capacity to provide new guarantees.

While it is possible for other Government actions to undermine investor confidence there are also actions that can have a positive impact. The choice of contract-based private sector participation, rather than license-based, potentially provides greater stability for the private sector and so removes some of the risks that investors would face.

5.20 Clearly, given the problems being faced by the utility and infrastructure industries in the Kyrgyz Republic, there is a definite need for the direct involvement of the private sector. However, a measured approach needs to be taken to decide what form of private sector participation is appropriate in the short term and long term given the problems of each of the companies and the legal position of each of the options. Bringing in the private sector does not mean that the needs of the poor will be ignored. Mechanisms can be designed to ensure an affordable minimum level and quality of service (see Box 5.2). In the next section we review briefly the major utility and infrastructure industries, the status of their restructuring plans and recommend next steps. In Chapter 6 we review the provision of public services to the poor.

Box 5.2: The Needs of the Poor in Infrastructure Privatization: The Role of Universal Service Obligations (USO)

The desire and the possibility to meet the social objectives should not disappear with the introduction of competition and the widespread privatization of infrastructure. It only requires new mechanisms to ensure the participation of the private operators the government wants to see compete for the right to deliver these services. USO can be defined as the obligations imposed on the provider of infrastructure services to ensure anyone in their service area the access to an affordable minimum level of a standard quality service bundle. For many developing countries the most effective way of clarifying USO may be to translate them into specific and transparent targets consistent with the government's overall social and economic objectives for the sector. The privatization contract would have to have a detailed appendix including some specific guidelines on the speed and location of investments, on the speed of cost recovery and on the transparency of subsidies required. The financial consequences of these guidelines should be assessed against the financial and pricing conditions proposed by the concessionaires in their bids to ensure their realism as discussed next.

How can affordable USO be financed fully? A key aspect of the general definition of USOs for potential private operators is that the rights created through USO are not to *free access* but rather to *paid access*. This does not guarantee, however, that the price will cover cost. The challenge resulting from the idea that access to an infrastructure service met through USO is a *paying yet affordable* right implies essentially that USO's coverage, quality, pricing and financing mechanisms have to be decided jointly. The specific targets suggested in the contractual arrangements are crucial in the determination of the financial viability of the service. This is particularly important for developing countries where often, when the concessionaires have an obligation to meet any reasonable demand, this obligation has to be translated into an investment plan with targets spread over time-- for as long as 10 years in some contracts--to allow a distribution of risks during that period. If a private company cannot rely on price discrimination and targeted subsidies, it will typically prefer to focus on narrower markets representing lower commercial risk. The excluded potential clients are most likely to be the neediest in the population. In sum, in countries in which the tax system cannot be relied on to finance well-targeted subsidies, *some degree of price differentiation or of cross-subsidies seems difficult to avoid.*

The first suggestion often made is to differentiate between new users and existing users so that only new users pay for the new connections. But this is often politically difficult and is unlikely to help much the poor in developing countries. They are likely to represent the largest share of new connections and the concessions contracts seldom recognize that this fact can influence the commercial risk faced by the investor. Many governments are also considering financing USO either through sector specific levies on users or on operators to avoid harsh demands on the poorest or distortions due to cross-subsidies. Some countries are also now discussing the possibility of introducing various types of sector specific funds. A recent report by Cremer, Gasmi and Laffont provides detailed examples from many OECD countries in all sectors. In Argentina, a sector specific levy finances the expansion needs in electricity distribution and transmission in the poorest provinces. The telecoms sector is the one in which USOs are most commonly

funded out of sector specific funds or fees. In Australia, the cost is divided among the participating carriers in proportion to the share of timed traffic. A similar fund has been under consideration in France.

To minimize the financing requirements, reformers are also trying to minimize the costs of USO from the beginning of the reform process. This means essentially that in regions in which government financing of USO costs will be as unavoidable as the need to rely on the private sector to deliver a service, the concessioning of the service must be *designed* to minimize USO costs. There are several ways of doing this. Sometimes focusing on the choice of technology to meet the obligations can provide affordable solutions. In the State of Sao Paulo in Brazil, shared water pumps are providing some of the poorest with access to water and is quite a cost effective solution. In Madagascar, new technologies are being used to meet the communications needs of rural areas.

Finally, working out alternative institutional arrangements can ease the financing constraint and improve access to networks. In Argentina, electricity is being supplied to local cooperatives responsible for paying a collective bill reducing the risks of non-payment for the distribution company. But technological alternatives are not always possible and alternative financing strategies need to be identified to ensure the financing of the USO without threatening the financial viability of the activity.

Source: The Needs of the Poor in Infrastructure Privatization: The Role of Universal Service Obligations, January 1998, O. Chisari, A. Estache and J.J. Laffont

D. Restructuring of the Kyrgyz Republic's Major Utilities

D.1 Electricity

5.21 *Current State of the Sector.* The electricity sector represents 14 percent of GDP and is a net exporter. The power industry has been facing enormous financial difficulties over the last few years because of low electricity tariffs, a fall in industrial demand, the expenditure increase in domestic demand for electricity as a substitute energy source, and rapid deterioration of the asset base. It has been estimated that a total $380 million is needed to repair the existing assets, let alone investing in additional capacity.[6] In 1998, the financial situation became critical as its poor financial management was compounded by a fall in export demand which cross-subsidizes domestic consumption. Kyrgyzenergo (KE) collected only 24 percent of its revenues in cash mainly from households and Kumtor; industry, agriculture, budgetary institutions and exports pay less than 10 percent in cash. KE is illiquid and unable to pay suppliers fully, with its accounts payables shooting up by 747 million som (2.2 percent of GDP or $35.5 million), of which 85 percent is on account of gas.

5.22 *Restructuring Plans.* The distressing financial condition of KE requires prompt action towards its restructuring. Recognizing this, in March 1999, the Government adopted a two-year Action Plan, supported by ADB, EBRD and World Bank, to: (i) stem the losses of KE through cost control, improved commercial management, and tariff adjustments; and (ii) accelerate the process of restructuring and privatization. The urgent need to raise funds to finance improvements in the sector is among the main reasons behind the launch of the privatization program for KE, approved by Government Resolution in April 1997. The denationalization and privatization program involves the vertical separation of generation, transmission and distribution and the horizontal separation of distribution into a range of local distribution companies. Each of the separated companies will be eligible for privatization although it is envisaged that the generation and transmission companies will stay in state ownership for the

[6] USAID, 1996.

foreseeable future. Up to 70 percent of the shares of the companies are to be sold to strategic investors. The EBRD is supporting the privatization of at least one distribution company. The reformed electricity sector is to be regulated by the State Energy Agency (SEA) which was established by the Energy Law of October 17, 1996. The concept paper for restructuring and privatization of KE has been approved by both Chambers of Parliament – but with conflicting views on matters such as the number of distribution companies and whether the transmission sector should be separated from generation.[7] The privatization of KE is seen as one of the most significant privatizations likely to occur in the Kyrgyz Republic. The focus is clearly on the privatization of the distribution companies. There are, however, some key issues that need to be addressed. These include: (a) enabling actions for the successful privatization of the distribution companies, such as the arrangements for generation and transmission, requisite contracts and the commitment from the Government to allow the disconnection of consumers that do not pay; (b) a contingency plan to address the problems in distribution if not all the distribution companies are offered or bid for sale;[8] and (c) a clear statement on the plans for transmission and generation since many, but not all, the problems will be addressed with distribution. There are also some medium-term issues that need to be addressed immediately. Key among these are the issue of higher level metering marking the boundary between transmission and distribution, and a more detailed tariff policy along with willingness and ability to pay assessments.

Proposed Actions:

- Implement Action Plan, which includes loss reduction and disconnection measures, as agreed with the EBRD, WB and ADB.
- Finalize decisions on the future industry structure (e.g. role of small supply companies, form of contractual arrangements for power supply).
- Begin the process of unbundling by enforcing the split of operational, accounting and management aspects of Kyrgyzenergo.
- Determine appropriate tariff increases on quarterly basis based on SEA's initial assessment (according to Action Plan) – and develop a work program for a more detailed tariff study to establish the efficient price of electricity at each of the levels of the industry (to be supported by KHF).
- Increase independence of regulatory agency by ensuring adequate sources of funding, independent from the budget.

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[7] This need not slow down the process of privatizing the distribution businesses since the approval by Parliament in 1997 of the EBRD Talas transmission project covenants, which included a commitment to privatize at least one of the distribution companies by May 1999 and as such, the privatization process for distribution has legal status.

[8] Some flexibility in the bidding system may bring about the best solution. For example, allowing bidders to bid for more than one distribution company, although giving preference to single bids, would allow any perceived economies of scale and scope to be valued and captured by the Government. Of course, any reduction in the level of comparative competition that would occur from multiple ownership, even if accounting separation and transfer pricing rules are enforced, would need to be countered by more intrusive conduct regulation. Another area of flexibility to be considered is allowing bidders to propose management contracts etc. even though preference would be given to bidders proposing a concession.

D.2 District Heating

5.23 District heating is provided by two combined heat and power plants (CHPs) owned by KE for Osh and Bishkek and by heat-only boilers in Karakol, Karakul and Kyzil Kuya, while a number of municipal boiler houses supply heat to local networks.[9] The operation of those plants requires coal and natural gas, which are imported from Uzbekistan and Kazakhstan in exchange for electricity. *The high relative prices of natural gas compared to electricity and the very low tariffs charged to customers have translated into an unsustainable financial situation for this subsector.*

Reform Plans. The distribution network of KE will be a separate company that is eligible for privatization.

D.3 Gas

5.24 *Current State of the Sector.* The situation in the gas industry is unsustainable. Financial losses are large and result in the inability to pay for imported gas.[10] As a result, payment arrears to Uzbekistan periodically result in the supply of gas being cut off. Further, shocks to costs (such as exchange rate depreciation) have not been fully passed on to consumers. Underlying these problems is the fact that metering covers at best a third of the 240,000 households that consume gas. Consumption for about two-thirds of households is still unrelated to unit prices, with payments based on a per person charge. The lack of metering creates a range of perverse incentives for gas use and payment that create problems for the company and the Government is financially constrained as it tries to provide financing so that meters can be installed for households.

5.25 *Restructuring Plans.* The sector is dominated by a vertically integrated joint stock company, Kyrgyzgas, that merged with the petroleum products company, Kyrgyzmunaizat, in 1997 to form Kyrgyzgasmunaizat . The initial concept for restructuring was based on the same principles as those applied to Kyrgyzenergo, i.e. the company should be split into a number of distribution companies and one or more transmission companies. It had originally been planned to carry out the restructuring program in three stages. The first stage was to create three joint stock companies separating fuel products, gas, and condensed (bottled) gas. The second stage (due to have begun in the first six months of 1998) was to initiate a program of asset sales of the petroleum products company and to split Kyrgyzgas into a number of smaller joint stock companies, operating at a regional level. In the third stage (1998-99), privatization of the new companies would be taken a step further. For the companies formed from Kyrgyzgas, 28 percent of shares would be sold by competitive bidding and the remaining 51 percent of shares would be reserved for strategic investors. The asset sale of Kyrgyzmunaizat would continue and 79 percent of the shares of Gazkhoz, dealing with condensed gas, would be sold by competitive bidding.

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[9] Therefore, much of what has been said above about ownership and industry restructuring is of direct relevance here.

[10] About 1 billion cubic meters of gas is imported each year, split roughly 50:50 between Kyrgyzgas (mainly for cooking) and kyrgyzenergo (mainly for heating). Imported gas is paid for on the basis of a 50:50 cash-barter arrangement. While the company is able to meet its barter payment, it has difficulty meeting the cash payment.

5.26 This original concept plan appears to have been basically sound although several aspects needed to be developed. For instance, it was unclear as to whether a national transmission company was to be left while regional distribution companies were to be formed. The number of distribution companies and the split between distribution and retail was also unclear. This plan, however, had not yet gone through the process of government approval. Plans for restructuring became further confused with developments since September 1998 when a Presidential Decree split Kyrgyzgas from Kyrgyzgasmunaizat and established that Kyrgyzgas would be transferred under the management of Kyrgyzenergo, leaving Kyrygzgasmunaizat with the gas debts. Subsequent amendments in February 1999, however, have made Kyrygzygas an independent company.

5.27 During February 1999, another Presidential Decree brought further uncertainty to the oil and gas sector. A new company, Munai, has been formed to establish a monopoly over the import of petroleum and petroleum related products—potentially a step backwards from the existing position of a competitive market. Some of the uncertainty arose from the lack of clarity as to whether Munai will import the goods itself or license the existing competitive companies to undertake this activity. The right to certify oil products by Munai was subsequently eliminated. Further, assets from Kyrgyzmunaizat were being transferred to Munai without any corresponding actions on the liabilities—this appears to be the root cause of a recent run on some of the banks that has already led to a closure of one. The oil and gas sector is one that is at the heart of the Kyrgyz economy and so it is vital that these concerns are immediately addressed.

5.28 *Proposed Actions:* There is a clear need to restructure the industry and bring about a greater commercial orientation in its operations.

- Develop an action plan for Kyrgyzgas, similar to that of KE, which would include clear benchmarks for bringing the company into solvency, while initiating the implementation of restructuring plans.
- Fluctuations in external prices should be passed to all consumers and a realistic tariff structure determined (including mechanisms for automatic adjustment of prices and an assessment of who will be most affected and how the poor are going to be protected).
- Metering of all households and government institutions needs to be completed. This involves the preparation of a comprehensive plan and determination of the funding source for meters, which could include donor support and oversight of the procurement process.
- A restructuring plan needs to be submitted for government approval, determining a feasible structure for the Kyrgyz gas industry based on vertical and horizontal separation of the industry, as contained in the original concept paper, and checking that it has the potential to be financially viable.
- The necessary regulatory actions need to be determined as well as a feasible timetable to implement restructuring.

D.4 Telecommunications

5.29 *Current State of the Sector.* The coverage of infrastructure is quite satisfactory; the quality of service is, however, poor. International access is also limited, with damaging effects

for businesses. Households have unlimited access to local calls for a fixed rental rate. The financial position of the vertically integrated joint stock company, KyrgyzTelecom (KT), indicates a loss for 1997 according to international accounting and audit practices. The company also had a large stock of accounts payable, double its accounts receivable. The telecom sector is undergoing a process of modernization of its existing infrastructure and an upgrading of its long-distance and international communication technology, with the financing of foreign countries and development agencies. KT is subject to the regulations of the newly established National Communications Agency (NCA) which is responsible for licensing telecom companies, setting tariffs and monitoring quality.

5.30 *Restructuring Plans*. The plan for telecom is the most advanced amongst all the utilities as it has been approved by Parliament and it is likely to be the first major utility privatization. The declared objectives of the restructuring of the telecom sector are to improve the quality of service and to encourage access to new technologies and the rapid growth of the sector. These are to be achieved by means of a privatization and denationalization program currently under way that would bring private investors into the telecom sector. The reform program adopted involves an initial sale of 35-40 percent of the state-owned shares to a strategic private investor, initially planned for early in 1999, followed by the sale of the remaining government shares at a later date (not yet decided). No other major restructuring is envisaged, given KT's exclusive license to provide long-distance and international voice telephone services until the year 2008 (although recently the Government issued a decree limiting KT's exclusivity to 2003 in accordance with its agreements on WTO accession). There is limited competition in local services as some mobile operators have entered the market (some are partly owned by KT) but they can compete only on the quality of services, not on prices because of the low tariff offered by KT (sustained by cross-subsidization from long-distance services).

5.31 The privatization of KT is apparently proceeding -- a privatization agent has been contracted and the process of tendering has started -- but there is a clear lack of transparency in the process that is being followed and concerns have been raised about the selection process for the Merchant Bank adviser. While the process of privatization must continue to move forward, this lack of transparency cannot be allowed for the selection of the strategic investor. The Government needs to exert oversight on the overall process ensuring transparency, fair treatment for all interested bidders and due accountability of actions and decisions of officials. In addition, future management rights and control should be clarified at the outset.

5.32 Despite the creation of a regulatory agency, independent in funding, there is still a lack of transparency in the industry and regulatory policies and concern that there is some degree of capture of NCA by KT. It is also unclear what measures are being taken to reduce losses and what incentive, if any, there is in the tariff policies to reduce losses. Finally, the introduction of real competition at the local level will be facilitated by the gradual removal of the cross-subsidy and competition further enhanced by the eventual removal of KT's exclusivity.

Proposed Actions:

- Ensure transparency in the selection of strategic investor by application of appropriate procurement rules and clarification of future management rights.
- Increase independence of the regulator from the incumbent operators and establish provisions to appeal against NCA .

D.5 Aviation

5.33 *Current State of the Sector.* Kyrgyzstan Aba Joldoru (KAJ) is responsible for three main types of activity: the airline, airport infrastructure and airport services for airlines. The vast majority of the planes operated by the company are now starting to become obsolete, the only new plane was an Airbus on an operating lease arrangement. The contract for the Airbus stipulated that further planes must be taken, starting in 1999.[11] Overall, KAJ made a loss of 36 million som (US$1.5-2 million) in 1997 and for the first nine months of 1998 lost 76 million som (US$2-2.5 million). One of the main reasons for the losses is that domestic flights are under-priced and the cross-subsidy from international flights does not fully cover the losses. Average domestic tariffs are in the region of US$15 to US$20 per trip. These rates have been increased in January 1999 in an effort to stem the losses and to start to phase out the cross-subsidy. In addition, the company has to pay VAT on international flights and has a heavy tax burden arising from a range of other taxes. The Government did provide a 40 million som interest free short-term loan to help cover the costs of the Airbus. It had also promised to provide a direct payment of 84 million som to help cover these losses. This has not been paid and if no support is forthcoming the company will seek tax privileges to off-set the problems it faces.

5.34 *Restructuring Plans.* The company, which was corporatized in 1997, has already started to unbundle itself. Several subsidiaries, referred to as daughter companies, have been established. Further, some actions have been taken to rehabilitate some of the fixed assets: two joint ventures have been established to develop a cargo terminal at Manas (Bishkek) airport and to provide refueling services. A third joint venture appears to be under discussion for a new runway at Manas Airport. The government is committed to privatizing KAJ. The concept plan for restructuring and privatization was submitted to Government but has been sent back for further work. The State Property Fund (SPF) envisaged divestiture of the airports into separate businesses in 1999, and determination of the appropriate form of private sector participation in 2000 when the financial viability of the businesses has been established.

5.35 However, great divergences exist between what different parts of the government and the company expect to happen with the restructuring. It is not clear whether a single airline company would be created or whether it is to be split between a domestic and an international carrier. Also, the treatment of the airports is an issue, including the splitting of Manas airport from the main airline company.[12] It is also unclear what type of privatization will be permitted. Management contracts alone, as is the SPF thinking given the current restriction, are unlikely to meet the company's requirements. In principle, establishing a viable airline company (one that is divested from airport management) requires significant up-front investments before profits are generated. Without sufficient capital, it would be impossible to increase reliability and safety of flights. While in the 1950's and 1960's some governments subsidized the investment, it is clear that the Kyrgyz Republic cannot afford this approach. The authorities would gain by actively

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[11] However, KAJ was unable to make payments due and the contract was breached. So KAJ no longer has any airbus.

[12] A covenant in the OECF loan to KAJ prohibits the splitting of Manas airport from the main airline company before 2005.

pursuing a policy to attract foreign investors to KAJ, at least to finance the international unit of the airline.

5.36 Moreover, the current regulatory structure, whereby the Anti-Monopoly Committee is responsible for the regulation of airport tariffs and the Transport Department from the Ministry of Transport and Communications is responsible for other areas, needs to be reviewed. Further, the scope of regulation needs to be considered. Since domestic air travel is a vital form of transport in the country, even domestic airports should be treated as monopolies and regulated accordingly. The Transport Department relationship is too close and needs to be arms-length.

Proposed Action Plan:

- The concept for restructuring and privatization needs to be urgently finalized.
- The airports and airline need to be established as business units within the overall company structure and transparent transfer pricing introduced. If domestic transportation is considered a national priority (in light of the need to bridge the south with the north), consider separate concessions and/or management contracts.
- The future regulatory structure for the airports needs to be clarified.

D.6 Urban Transport

5.37 *Current State of the Sector.* There is much diversity in the organization and efficiency of urban transport in the main cities of the Kyrgyz Republic. While urban transport services are almost entirely provided by private enterprises in Osh and Jalal-Abad, state-owned enterprises are dominant in Bishkek. In general, assets are old and in poor condition, and the efficiency of operations is below what could be achieved. Service is poor, especially in Bishkek. Fares are often too low (it is estimated that in Bishkek, fares cover only 60 percent of costs) and, in addition, companies operating large vehicles are required to grant privileges to large segments of the population, which only in a few cases are compensated by the municipality. The institutions dealing with urban transport regulation and sector management are weak and, in some cases, not independent from the operators and contractors. Transport companies are often granted area monopolies with little transparency and no competition.

5.38 *Restructuring Plans.* The Government is in the process of formulating plans for restructuring the urban transport sector. Modernization of the system will require bringing in the private sector to the greatest possible extent within a competitive environment and under competent regulation. The large Bishkek State-owned bus company should be privatized. Main recommendations based on the World Bank Urban Transport Sector Review include the following:

- The sector should be set on a financially viable footing by increasing fares to cost recovery levels. Any existing privileges should be reconsidered and targeted to the most disadvantaged groups and to those activities for which urban transport is essential (schooling, for example). Transport companies should be fully compensated for the privileges. If fiscal constraints are such that the budget cannot provide for this, there should be a cross subsidy from full fare paying passengers.

- The provision of services should be reorganized on the basis of competitively tendered route franchises. This requires tendering out for a fixed period a small package of routes to urban transport companies or associations of small owner-operators. Clearly, this will require establishing stable and transparent rules for the bidding process and the supervision of the franchise holders. Some form of private sector participation should be considered for the Bishkek trolley bus company, with the various options evaluated and an assessment of the need for price regulation.
- City transport departments in the main cities will have to be made independent from the operators, considerably strengthened, and given an independent source of funding. They will have to assume the regulatory role and manage the franchising processes.
- Finally, the urban roads sector should also be reorganized. Urban road rehabilitation and maintenance should be carried out by private contractors and planning, management, contracting, and supervision carried out by an independent road department in the municipal administration. Considerable institutional strengthening is necessary. Planning/budgeting systems need to be established as well as procedures for the selection of the cheapest and most responsive contractors and for the supervision of works. Encouraging the road maintenance and construction industry is also necessary. It is proposed that funds be raised by means of a road tax on gasoline and diesel (see also Chapter 4).

D.7. Water

5.39 *Current State of Sector.* All the evidence seems to depict a sector in deep crisis. One-third of the population is still unserved by organized water supply, mostly in rural areas. Where connections exist, the physical state of the system is extremely poor and in urgent need of maintenance and rehabilitation. The quality of water supplied is unreliable and outbreaks of waterborne diseases have been on the increase. As seen in Table 5.1, the sector is in the middle of a financial crisis since the Government is no longer able to mobilize the resources required to provide the degree of subsidy historically enjoyed by the sector. Finally, responsibilities for quality monitoring, regulation, design and development of water resources, pollution monitoring, etc. are all scattered among different organizations with the inevitable co-ordination problems that follow.

5.40 The water sector is decentralized, with water being provided at the municipal level. There are three main state-owned companies: Bishkek Vodokanal (BVK), serving the capital; KJKS serving the other major cities; and KSRS (a division of the Ministry of Agriculture) serving rural areas. The Government has started to move in the right direction by decentralizing sector responsibility and introducing the principle of cost recovery. However, responsibilities are still diffused and overlapping. This points to the need for streamlining bureaucracy to reduce co-ordination and management costs.

5.41 *Restructuring Plans.* There do not appear to be any formal plans for restructuring the urban water sector. However, the following recommendations for restructuring the sector have been made in the World Bank's Water Sector Note:

- Strengthening the institutional/regulatory framework: decentralization needs to be pushed a step forward. There needs to be a clear division of responsibilities among the different authorities with the functions of regulation, policy setting and oversight kept

separate from operations and management. Also, there is a need for consolidating water supply and wastewater services as this can bring about significant economies of scale and better co-ordination in planning and resource allocation. The Government would still maintain a strong role in establishing a legal and regulatory environment for the sector and in providing targeted subsidies to the poor.

- For the larger cities of Bishkek and Osh, it is suggested to adopt a public utility model, with an autonomous water utility, almost entirely privately owned and operating commercially. The company would then enter a multi-year performance contract with the city authority establishing a clear division of responsibilities between the two parties. Finally, there would need to be a regulatory agency.
- For the other minor cities, two alternative models are proposed. In each case, the objectives are to increase community participation and transform KJKS into a number of autonomous public utilities at the Oblast level. The first model is the same as that for the Bishkek Vodokanal, applied this time to the different utilities at the regional level. The second model would have communities responsible for operations and maintenance, contracting out to the regional vodokanals those functions they could not perform efficiently.
- For rural areas, it is recommended that the Government implement a National Village Water Supply and Sanitation Program, to carry out reform of the rural water sector in a unified way across the country. Under this program, village communities would be made responsible for the maintenance and operation of water supply systems, with water tariffs collected at the village level. This would make it easier to set tariffs on a willingness-to-pay basis.

E. Summary Assessment of Restructuring Plans

5.42 Table 5.5 summarizes how the plans affect industry and ownership structure and how the restructured sectors will be regulated. An initial assessment of the restructuring plans indicate that the plans for electricity and heating go some way towards meeting the four key criteria – incentives for improved competition, appropriate tariff policies, transparency and loss reduction. Improvements in the degree of competition can be expected in the electricity and heating industries but not telecommunications. Tariffs in electricity and heating are also being improved through the imposition of a target level of losses. It is unclear how much of an incentive for control of losses is being created in telecommunications and there is no improvement in transparency, despite the establishment of a regulatory agency. The restructuring plans for gas and aviation are difficult to assess since it is not clear whether earlier versions are still valid. As for electricity, the preparation of their restructuring plans should be accompanied by an action plan to immediately address the short-term problems. For the water and urban transport sectors there are no formal plans for restructuring.

5.43 The Kyrgyz Republic has already achieved much in regulatory reform through the establishment of the SEA and NCA. Both agencies enshrine many of the 'best-practice' principles of regulatory design. There are, however, also many features that raise concern. In particular, the 'ideal' state of the agency as defined by the law is different to the 'real' state as encountered in the country. The reason for this is that both the Energy and Telecommunication Laws provide only general principles, leaving the implementation to subsequent legal provisions, which leaves open the question as to whether the principles of the law have been applied in practice. Other sectors have yet to benefit from similar actions. This is especially important for

water and transport where many of the regulatory functions are spread among a range of government bodies. This provides an opportunity to consider establishing multi-sector regulatory agencies, which many small and resource-constrained countries have done.

Table 5.5: Overview of Existing Restructuring Plans					
Key players	***Existing Structure***	***Planned Structure***	***Existing ownership***	***Planned Ownership***	***Regulation***
Electricity					
Kyrgyzenergo	Vertically integrated company. Some private supply activities (in excess of 100 suppliers).	Vertical separation of generation, transmission and distribution. Horizontal separation of distribution into a range of local discos (of between four and seven).	Majority state ownership through direct and indirect holdings (94.5 percent). Staff hold 1 percent, (and may have received a further 1 percent if efficiency targets were met by 1999) and 4.5 percent were sold at a coupon auction.	Each of the separated companies will be eligible for privatisation although it is envisaged that the generation and transmission companies will stay in state ownership for the foreseeable future. Distribution will either be privatised or passed into oblast ownership. Debate as to whether the cut-off point for distribution is 35kV or 110kV is ongoing.	The 'independent' State Energy Authority is responsible for regulation through a licensing system. It issues the licenses and sets tariffs.
District Heating					
Kyrgyzenergo	Primarily part of the electricity company, although a separate division. Some boiler houses have been passed to local authorities and other SOEs.	A separate business responsible for the distribution of heat will be established alongside the electricity distribution companies.	For aspects within the electricity company the shareholding is the same as for electricity. Other assets are owned by the state through SOEs or local authorities.	The distribution network will be a separate company that is eligible for privatization.	Covered by the State Energy Authority.
Gas					
Kyrgyzgas	The gas company is a vertically integrated company that was merged with the petroleum products company in 1997. This changed during September 1998 through a Presidential Decree.	Although plans for reforming KGM existed, their relevance now that KG has been transferred to KE is under review.	Originally, 10 percent of KGM was privately held after an auction of coupons. The remaining 90 percent is held by the state. Now that KG is a subsidiary of KE, compensation etc. is being discussed for the private shareholders.	Plans are based around the local distribution companies and it is unclear as to whether a national transmission company is envisaged. This is also under review.	Covered by the State Energy Authority.

Table 5.5: Overview of Existing Restructuring Plans

Key players	*Existing Structure*	*Planned Structure*	*Existing ownership*	*Planned Ownership*	*Regulation*
Telecommunications					
KyrgyzTelecom, mobile phone operators	KT, a vertically integrated company, is the dominant player. It holds an exclusive right to provide long-distance and international voice services until 2008. Some mobile operators have entered the market with limited success. Several are partly owned by KT. Licenses have been issued for at least 4 mobile operators.	The reform program has been adopted and included the merger of a microwave business with KT. This occurred earlier in the year. No other major restructuring is envisaged.	4 percent of the company is privately held after an auction of coupons. Staff hold 5 percent and the state, through direct and indirect means, holds the remaining 91 percent. 1 percent of the shares is available as an incentive to management and 8 percent of the shares are reserved for dividends for low income people and other identified groups.	An initial stage of restructuring involving the sale of a 35-40 percent stake in KT is planned. This will be to a strategic investor. An Austrian Merchant Bank has been appointed. A further sale of shares will then happen in the future – it has not been decided to whom the sale would be pitched.	The National Communications Authority was established as an 'independent' regulatory unit. It is responsible for licensing telecom companies, setting tariffs and monitoring quality.
Water					
Bishkek Vodokanal (BVK), KJKS and KSRS	Water supply is provided at a very decentralized level. BVK is responsible for supplying the capital, KJKS the other major cities and villages constituting rayon centers and KSRS the rural areas. In more than half the rural villages there is no organized water supply and village councils are responsible for managing their own water supplies.	Plans for industry restructuring are still in the form of World Bank recommendations. It is suggested that decentralization should be pushed further, encouraging countryside community-level participation.	BVK is owned by and reports to the Bishkek municipality. KJKS supports 24 independent enterprises including also a few enterprises providing electricity and heating. KJKS reports directly to the office of the President and not to any Ministry. KSRS is a division of the Ministry of Agriculture and Water Resources.	Plans for industry restructuring are still in the form of WB recommendations. It is suggested to adopt a public utility model for BVK and KJKS, the latter eventually made of independent water companies operating at the regional level. In rural areas, water and wastewater services to be provided at the community level with the participation of KSRS.	Responsibility for the regulation of the sector lie with a number of different agencies depending on the functions to be performed.

Table 5.5: Overview of Existing Restructuring Plans					
Key players	***Existing Structure***	***Planned Structure***	***Existing ownership***	***Planned Ownership***	***Regulation***
Urban Transport					
State-owned operators and small private operators	Urban transport is organized at the city level. To various degrees, in all the main cities state-owned operators co-exist with private operators. In general, private actors operate in conditions of high uncertainty compared to the dominating public sector companies.	Plans for industry restructuring are still in the form of World Bank recommendations. Key issues include increasing fares to cost-recovery levels and limiting privileges to the greatest possible extent. A reorganization based on competitively tendered route franchises is also proposed. A hypothecated tax system, with a road tax on fuel, is to be used to finance road maintenance.	Services are provided by both private and public operators. Public operators report to the city administration through the City Transport Department, which is also responsible for planning and regulation.	Plans for reform are still in the form of World Bank recommendations. It is suggested to push privatization further, trying to involve foreign investors, particularly for services in the capital.	In all three cities the regulatory functions are attributed to the City Transport Department, which is not independent from the regulated companies. The City Transport Departments should be made independent from the operators and focus exclusively on regulation.
Aviation					
Key players	***Existing Structure***	***Planned Structure***	***Existing ownership***	***Planned Ownership***	***Regulation***
Kyrgyzstan Aba Joldoru (Kyrgyzstan Airlines)	Vertically integrated monopoly, providing both aviation and airport services. The company has no competitors in the Kyrgyz Republic	There are plans to vertically separate the airport and airline businesses. Some other services are being moved out of the company to subsidiary 'daughter' companies.	State owns 90.41 percent of shares and 9.59 percent were sold at coupon auction.	Airport grounds and entities will be the object of a competitively let concession agreement. The shares of the Company will be sold, according to the Privatization Concept, in the years 2001-05, with the Government keeping the controlling block of shares.	Unclear.

CHAPTER 6

PROVISION OF PUBLIC UTILITY SERVICES TO THE POOR

6.1 A key concern of the Government in raising tariffs sufficiently to put the utilities on a sound economic footing is that it will adversely affect the poor. Given the already high rate of poverty – slightly more than half the population is poor –the result may be to increase poverty or to deprive households of access to basic services. An important input to evaluating the impact of tariff reform and other policies related to the utility system is information on the present levels of access to service, service quality and the costs to households of such services. This Chapter reviews the use of public utility services by the poor, using data from the recent Kyrgyz Poverty Monitoring Survey (KPMS).[1]

The costs of existing compensation schemes

6.2 A significant amount of income support is provided by the Government to utility consumers through low prices. The value of the implicit subsidy *to households* is estimated at 5.1 percent of GDP out of the total estimated subsidy of 7.3 percent of GDP for electricity, heating and gas alone (see Chapter 5). In addition to the generally low prices, there are a myriad of programs legislated for price discounts to specific categories of the population, generically called the "privileged". And the government budget, which is cash-strapped, provides compensation to the companies for only part of the costs. In 1998, an estimated 1.6 percent of GDP was provided by the general government budget to compensate utilities for all price subsidies and discounts.

Whom do the existing subsidies benefit?

6.3 Price subsidization of public services in its present form is overwhelmingly biased against the poor for three reasons: (a) they may not have access to the subsidized service; (b) even if they have access, they may not consume as much of the service; and (c) if the quality of service is lower and if they are charged flat rates they are probably paying more per unit of actual service.

6.4 *Access to Services.* Other than electricity, which is almost universal, there is considerable disparity in access among the different services with only 13 to 19 percent of the population having access to public services for central hot water, centralized gas for cooking and heating (see Table 6.1). Moreover, the level of access is consistently higher for all services in the urban

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[1] The data come from two rounds of a national household survey of the population of the country, the Kyrgyz Poverty Monitoring Survey from the Fall of 1996 and the Fall of 1997 (KMPS 1996 and KMPS 1997). The survey is based on a probability sample of 2000 households in 1996 and 2700 households in 1997. Data were collected from households during the fall of each year (Sept-December, 1996, and September-November, 1997) on housing, utilities, expenditures and consumption, as well as on labour, health, education, and economic activities. The welfare measure used here to categorize households as poor and non-poor as well as to specify who among the poor are extremely poor, is based on total consumption. A detailed description of how this measure was calculated can be found in the *Update on Poverty in the Kyrgyz Republic*, DECRG, World Bank, mimeo, June 1998.

areas.[2] With the exception of electricity, then, subsidies on utilities are skewed towards urban dwellers. And this represents a regressive distribution of resources given that the urban poverty rate (28.5 percent in 1997) is much lower than rural rates (64.5 percent) and sixty-five percent of the population live in rural areas. Indeed, the provision of subsidized services benefit the non-poor disproportionately. As may be seen from the table below, only 4-8 percent of the poor (barely 2-4 percent of the extreme poor) even have access to the subsidized public heating, gas and hot water services, whereas 22-30 percent of the non-poor gain from these energy subsidies.

Table 6.1: Percent of Population with Access to Infrastructure and Housing Services by Poverty Group and Urban/Rural Area, 1997

	Extreme Poor	All Poor	Non-poor	Rural	Urban	Total
Heating: Public, centrally supplied	4.4	7.7	30.3	2.9	45.5	18.9
Central Hot Water	1.7	3.6	22.4	1.7	31.5	12.9
Centralized Gas for cooking	4.2	5.6	29.8	4.4	39.4	17.6
Water: central public	52.4	59.7	75.8	56.8	85.8	67.7
Public Electricity	98.6	99.0	99.7	99.1	99.8	99.4
Private Telephone[1/]	34.5	33.8	46.3	23.8	66.8	40.0

1/ Telephone is either in own home or neighbor's dwelling.

Source: Kyrgyz Poverty Monitoring Survey (KPMS) 1997. More detailed information can be found in the Annex.

Note: Table refers to the percent of the population living in housing with the services listed. Poverty groups are based on per capita annual consumption. The extreme poor are a subset of all poor.

6.5 Poor households rely much more on coal and wood as the predominant source of heating (84 percent of the extreme poor), hot water (60 percent) and cooking (50 percent) although electricity has gained in usage for hot water (25 percent) and cooking (17 percent). And since coal prices have been liberalized, unlike the network energy prices, the poor do not benefit as much from general price subsidies.

6.6 Electricity is the only subsidized service to which the poor have the same access as the non-poor. However, the electricity consumption of the poor appears to be less than the rich as the average expenditure for electricity consistently rises with the level of total household income (even if arrears are added to actual payments). This suggests that the value of subsidies going to the rich is greater. Of course, since a larger percentage of poor households is in payment arrears with the electricity company, and to the extent these are not recoverable, they are *de facto* receiving these as a subsidy.

6.7 The additional price discounts also benefit the non-poor disproportionately. This may be expected since they are not targeted in terms of ability to pay, but rely on other factors to establish applicability, such as place of residence, degree of invalidity, participation in wars or to the armed forces or the police.[3] Table 6.2 also shows that for electricity the percentage of

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2 In addition, the quality of service in terms of continuous availability (or conversely, service interruptions) is also worse in the rural areas.

3 As of June 1, 1998 the privileged categories included 606,169 persons (about 13 percent of the population) disaggregated as follows: (i)poorest families receiving cash benefits from the budget (32 percent); (ii) pensioners with less than 400 som benefit (30 percent); (iii) highlanders (19 percent); (iv) veterans (10 percent); (v) invalids, disabled or their families (6 percent); (vi) families of the deceased (2 percent); and (vii) special persons, including Chernobyl victims (1 percent).

households receiving discounts is the highest for the top 20 percent income groups and the average discount is also higher than the lowest income group.

Table 6.2: Electricity Discounts and Household Expenditures

By Income Deciles	Average Annual payment (som)[1/]	Average[2/] discount (% of Tariff)	% of HHs who got discount	Avg. arrears (annual) in som[2/]	% of HHs in arrears
All	403.9	46.3	6.3	133.7	15.8
Lowest	217.4	39.1	6.5	113.1	30.0
Second	347.4	55.9	5.4	089.9	23.5
Third	367.3	48.1	5.2	132.8	17.5
Fourth	340.9	41.3	7.3	163.4	20.7
Fifth	386.3	52.5	5.2	146.8	14.8
Sixth	418.9	54.4	7.1	154.8	14.3
Seventh	407.4	32.2	5.2	110.8	16.9
Eighth	352.1	46.5	4.3	168.9	13.9
Ninth	482.9	49.6	8.1	153.3	11.8
Highest	715.2	45.1	8.2	110.7	06.0

1/ Average annual payments are derived as a product of what the households actually paid for electricity in the past month multiplied by 12. (i.e., not what they should have paid for the year's consumption).

2/ The average discounts are calculated for those households who have received discounts. Similarly, the average arrears are calculated for those households with unpaid debts for electricity.

Source: KPMS.

6.8 *Quality of Services.* The differences in access are further aggravated by the differences in the quality of the services received by the poor. As shown in Table 6.3, among those who use the different services, the poor receive, systematically, lower quality services than the non-poor. The poor have fewer hours of electricity, are much less likely to have a permanent source of electric power, water service is less frequent and quality is lower. It is also the poor who are suffering from a decline in water quality (or the greater perception of poor quality). And, the slight improvement seen in central heating provision seems to have benefited the non-poor: for the poor, service has declined.

Table 6.3: Quality of Services by Poverty Group, 1996 and 1997 (percent and mean)

	Extreme Poor	All Poor	Non-Poor	National
Electricity				
Hours of Electricity per day (average hours, 1996)[1/]	13.5	14.7	17.0	15.8
Electricity always available (percent of population, 1997)[1/]	18.1	23.9	40.3	32.1
Water				
Water always available (1997)[1/]	45.4	46.7	60.9	54.6
Quality of Water is Good				
1996	64.2	68.7	70.0	69.4
1997	56.9	53.2	68.7	61.8
Central Heating				
Average No. of months dwelling heated in last year (1996)	na	4.6	4.5	na
Average No. of months dwelling heated in last year (1997)	na	4.1	5.2	na
Months heat sufficient in last year (1996)	na	3.7	3.8	na
Months heat sufficient in last year (1997)	na	2.8	4.6	na

1/ Not all of the questions were asked in both 1996 and 1997 so comparisons are not possible .

Note: Table refers to the percent of the population living in housing with the services listed.

Source: KMPS 1996 and 1997.

6.9 The household level data illustrate two important facts. First, figures on access or connections to services overestimate the actual benefits received by households. Intermittent service, inadequate levels of service and/or poor service quality all lower the value of the service being provided. Second, the bias towards the non-poor is further aggravated by the uneven nature of service provision. If people are charged flat rates for services, the poor, who receive a much lower level of service, are probably paying more per unit of actual service than the non-poor.

The burden of utility expenditures on households

6.10 As a share of consumption, utilities represented almost six percent of total expenditures in 1997. There is not a large difference in the expenditure shares between the poor and non-poor. The poor spend 5 percent of total consumption on utilities, whereas the non-poor spend 6.5 percent (see Table 6.4). Although the poor have greater arrears in payment, rural populations have lower arrears than those in urban areas. This perhaps reflects the less extensive use of public services in rural areas and, hence, the lower ability to finance services through non-payment.

Table 6.4: Share of Consumption by Poverty Group and Area, 1997) (percent)

	Extreme Poor	All Poor	Non-poor	Rural	Urban	Total
Expenditures on utilities[1/]		5.0	6.5	5.4	6.4	5.8
Arrears in payments for service	7.8	4.5	2.6	2.1	6.5	3.7

1/ This is a broad category which includes payment for: central heating, central hot water, central water, electricity, gas from pipe, coal, wood, other fuels, telephone, radio, elevator, trash collection and janitorial services.

Note: Table refers to the percent of the population. Poverty groups are based on per capita annual consumption. The extreme poor are a subset of all poor.

Source: KPMS 1997.

6.11 It is not possible to assess how changes in tariffs might affect household behavior based on the available data in the survey.[4] A specially designed survey to assess willingness and ability to pay for various utility services is planned (and will be financed by the Know How Fund). Nevertheless, raising prices is likely to impact the poor significantly and there should be some means of providing support to them.

The design of a compensation system to protect the poor from utility tariff increases

6.12 Besides being costly, the current price subsidy system is neither efficient nor well-targeted in reaching the poor. The Government should seriously reconsider its policy of subsidies — in terms of which services are subsidized, to whom and to what extent, and how the subsidy should be provided. In the end, any program should be substantially simpler and more cost-effective to administer than the current schemes, it should ensure payment compliance and be exclusively for the poor.

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[4] This is due to lack of information on: (i) the quantity of the service used and thus, the unit prices; and (ii) for some services, payments are included together in a single bill and cost per type of service was not collected.

6.13 In principle, the best program is the unified cash benefit as it would allow low-income consumers to choose their consumption basket. However, given the non-payment rate, any compensation through the general cash benefit must be accompanied with the enforcement of an appropriate disconnection policy. If the companies have no effective sanction against non-payment (oblasts have reacted badly in some cases when disconnections occur), then the rational solution for the household is not to pay the bill. This is clearly not the intention of a proposed system but is a likely outcome. Thus, if an increase in cash benefit is used for other consumption by households, it would leave the state still facing a loss at the utility and having paid out cash.

6.14 Countries have opted for different programs that link the receipt of compensation to proof of payment. This can be implemented through a voucher system, much like the current coupons that some of the privileged receive now, or by requiring pre-payment or proof of payments of the utility. An advantage of a voucher based system is that it could overcome the problem of substitution between different fuels when the level of cost-recovery differs by being more focussed initially and then more general once all prices reach a cost-recovery level.

6.15 A relatively simple to administer alternative is a life line (generally applied to water and electricity), defined as a minimum level of consumption for which the price is lower for all consumers. (Current norms of consumption for electricity are not lifelines, but rather ceilings to the discounts. These norms make the implementation of the discount even more administratively demanding for the companies.) Progressive tariffs (with a lifeline rate) can discourage excessive consumption. An advantage of this method is that low consuming families, which are also usually low income families, pay less than high consuming families which are often richer. The effectiveness and relative costs of alternatives needs to be quantified, since these schemes already exist in some form in the Kyrgyz Republic.

Summary

- Besides being costly, the current system of price subsidies is neither efficient nor well-targeted in reaching the poor. The non-poor are benefiting disproportionately from the subsidies. Privileges in the form of utility price discounts to various categories of persons should be phased out and replaced by budgetary support for the few that may be retained. Discounts to pensioners should also be phased out for a more appropriate pension policy (such as a well-designed base pension policy).
- To increase access to services to the poor will cost a lot and the government cannot finance the investment costs on its own from tax revenue.
- Need to reduce costs as much as possible by reducing distribution losses and improving productivity. Bringing in the private sector will help in this and this should be designed to make sure it brings in some much needed resources for investment that provide access to the poor, in particular in the water and transport sectors.
- But the private sector will not be attracted unless there is a sufficient return. This means raising prices to levels that cover costs.
- Increasing prices will hit the poor. Their expenditures on utilities at present are between 5-12 percent of their total expenditures. The impact of price increases is likely to raise this share considerably.
- Some form of compensation to the poor will be required. Various options are possible and need to be assessed in terms of incentives and administrative costs.

- In the short run, the government may not be able to finance the costs of the compensation sufficiently through the tax reform and savings from eliminating the present untargeted subsidies.
- A transparent cross-subsidy scheme may therefore be required in the interim which must be built in the design of the commitments made by the government in compensation for service obligations to be requested from private operators.

Box 6.1 Raising Prices: The Polish Experience

In the early 1990's the countries of Central Europe needed to correct public sector prices and to use national policies and targeted allowances and subsidies to achieve their distributional aims. Continuing with socialist pricing policies, which made subsidies available to all, implied significant leakages to the non-poor and represented a major fiscal cost. Nonetheless, public sector pricing is one of the last areas that was reformed in Central European countries. Price reforms have liberalized the prices of most goods in the private sector, and in particular, much progress has been made in adjusting prices of tradable energy, for example oil, oil products, and hard coal. There were several reasons for governments' reluctance to raise household energy prices. First was a concern over the impacts - direct and second round -- of higher energy prices on the overall price level, which will be a function of the structure of the economy and its energy intensity. In addition, there was a reluctance to raise the household prices for fear of contributing to wage pressures and thus to inflation -- the counterpart of raising industrial prices for fear of the impact on production costs and in turn inflation. Ironically, if such price subsidies are significant in budgetary costs and if the resulting deficits are financed by money creation, then keeping prices too low may in fact be inflationary. Sometimes the overall level of energy prices may be kept low in an attempt to keep down surplus revenues flowing to the utilities. Since the utilities typically have very low debt/equity ratios (most investment was financed by the budget), higher prices quickly translate into larger corporate cash-flows, and, in the absence of strong corporate governance and financial controls, there is concern over how such additional resources would be used by energy enterprises, which may be powerful and have significant autonomy. Finally, there is presently excess energy capacity in the transition economies, as pointed out by Gray. In most countries there is a lack of serious supply crisis (for domestically-produced power, heat, gas and coal) and a lack of long-term enterprise debt problem. Politicians are not motivated by a supply crisis (i.e., the lights aren't going out). The excess capacity also means there is, apparently, little immediate need for foreign investment that might supply new capacity and thus results in little "demand" for typical western pricing policies and the regulatory framework that accompanies this.

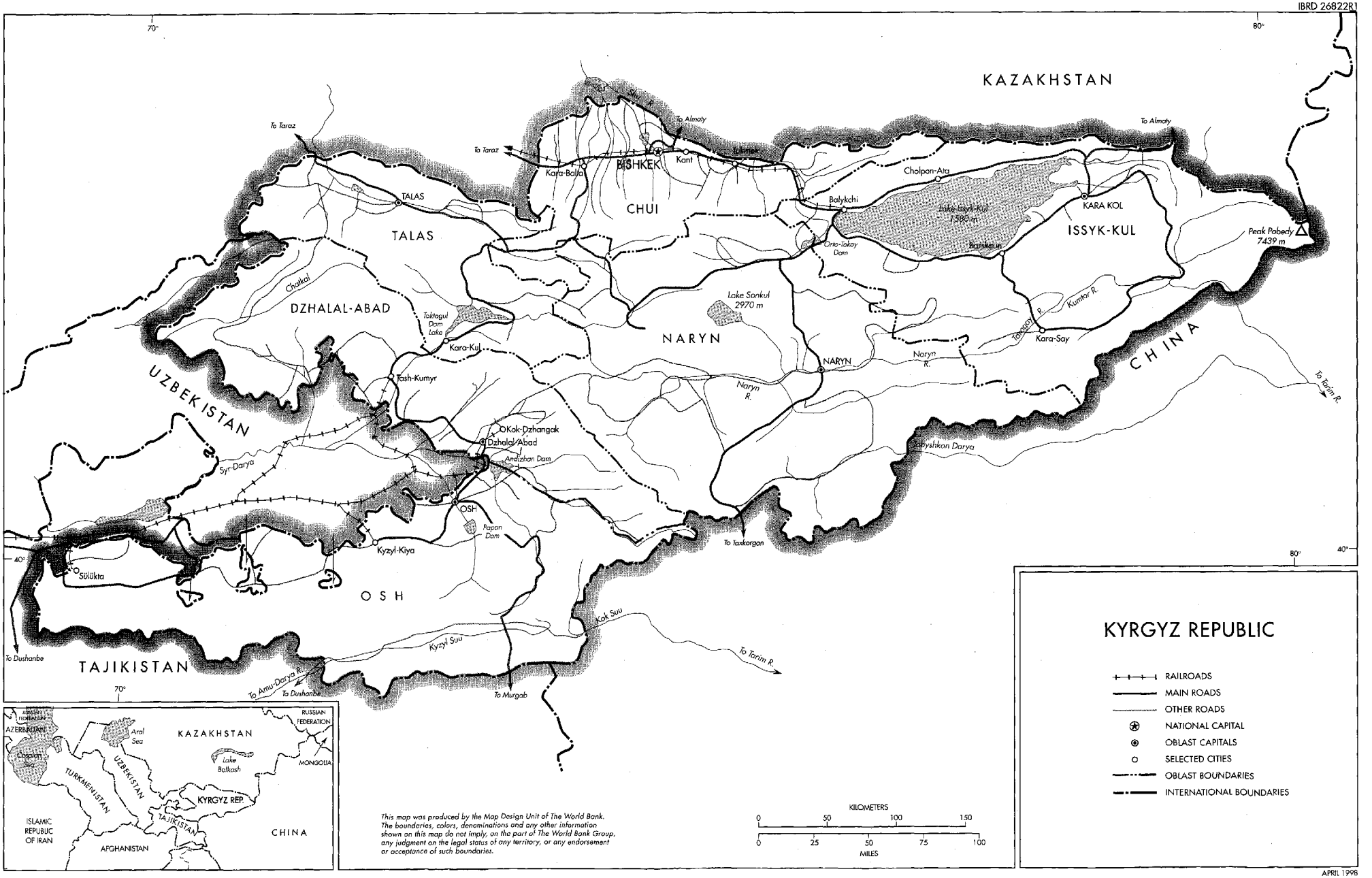
All central European countries had, by 1995, made progress in bringing prices closer to financial cost recovery levels. In Poland a significant effort was made towards increasing energy prices to more efficient levels. In the aftermath of the transition, in early 1990, a new pricing system for energy was introduced. Subsidies were to be eliminated over a four-year period and the residential price of electricity rose three-fold in 1990 and then increased sharply again in 1991. Household prices of gas rose by somewhat less. District heat prices rose about three-fold from 1990 to 1991. As a result, energy prices moved from a low level -- in some cases as low as 5 percent of economic levels' pre-transition -- to about 80 - 90 percent of economic costs for coal, and about 60 percent on average for network fuels, gas and heat as the transition took off.

Who hurts the most? The welfare loss of higher energy prices is greater for the non-poor than for the poor, since the share of energy consumption of the rich is larger than the poor. Assuming a zero elasticity of demand, the poor's welfare declines by 5.9 percent, while that of the richest quintile declines by 8.2 percent For all consumers taken together, the welfare loss associated with an 80 percent increase in prices is between 4.6 percent and 7.6 percent of their total budget, depending on the price elasticity of demand that is assumed --the more elastic the demand, the less the welfare loss. Among the types of energy, the budgetary impact of higher prices is the greatest for electricity. The impact of raising electricity prices is hardest on the poor. Amongst socio-economic categories, higher energy prices affect pensioners the most, increasing their energy expenditures by 9.3 percentage points, from 11.7 percent to 21.0 percent of their total spending.

Addressing the social consequences of price increases. Raising public sector prices and user charges to the appropriate levels may require special transitional approaches and pricing mechanisms to offset the social costs to low income households. If well-designed, such schemes would facilitate cost recovery by the utility and allocative efficiency while at the same time cushioning the impact on incomes, thereby facilitating the price rise. A number of approaches could be considered including: lifeline rates, vouchers, increasing social assistance payments, and general adjustments to wages and pensions.

Excerpt from: Wallich and Freund (1995) Raising Household Energy Prices in Poland; Who Gains? Who Loses? Policy Research Working Paper 1495, The World Bank.

MAP SECTION



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KILOMETERS 0 50 100 150
MILES 0 25 50 75 100

KYRGYZ REPUBLIC

- RAILROADS
- MAIN ROADS
- OTHER ROADS
- NATIONAL CAPITAL
- OBLAST CAPITALS
- SELECTED CITIES
- OBLAST BOUNDARIES
- INTERNATIONAL BOUNDARIES

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