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Jan Herczyński

**Key Issues of Governance and Finance
of Kyrgyz Education**

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Key words: **education reform, education finance.**

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Abstract

We analyze the governance structure and the financing of Kyrgyz education, with special emphasis on the general secondary education system. General secondary schools are under the authority of oblasts and rayons. Our main findings are as follows:

1. The oblast and rayon authorities in Kyrgyzstan are in fact delegated offices of the central administration, with highly non-transparent reporting lines, very little budgetary independence, diffused political responsibility and politicized control over financial flows to lower levels of government.

2. The principle that funds from the central budget for specific functions should be transferred directly (without any intermediaries) to the level of government responsible for those functions is not observed in Kyrgyzstan. In particular, the categorical grants for education are determined and negotiated in a very non-transparent way.

3. The Kyrgyz education sector is fragmented, and the divided responsibilities for management and for finances make rationalization and reform very difficult to accomplish. Moreover, the situation is compounded by the fact that education decentralization has a formal character, and is not accompanied by real delegation of authority and responsibility.

4. The general secondary education system in Kyrgyzstan, although managed according to the rules and procedures common to other post Soviet republics, displays a remarkable degree of regional and ethnic differentiation. The financing levels also vary significantly among oblasts.

5. Parental contributions make up at least 30% of the school budgets in Bishkek. Their collection and use vary greatly among schools, but in all cases are beyond the effective control of either parents or the central and local authorities. Moreover, the emerging system of entrance fees for first grade students is unconstitutional and violates human rights and pedagogical principles.

In order to deal with these issues, the Kyrgyz Republic needs to correct the present non-transparent and dysfunctional governance structure of Kyrgyz education, because otherwise any efforts to improve the delivery of educational services or their financing may remain ineffective.

The Kyrgyz Republic also needs to define education standards that it will be able to enforce and finance in all schools. Finally, it needs to implement a regulatory system governing parental contributions, which would serve the schools and at the same time allow for transparent and well-monitored use of private funds in public schools.

Introduction

Kyrgyzstan's emergence as an independent state after the implosion of the Soviet Union can be characterized as rather lucky. The country did not experience any armed conflict¹, and the presidential elections following independence brought to power a new leader, and not the former first secretary of the communist party, in contrast to the majority of other post-Soviet republics. President Askar Akaev was able to steer the country towards a rather liberal and market oriented regime, and Kyrgyzstan remains the most stable and open society in the region.

Nevertheless challenges facing this small country, locked in the middle of Central Asia, are formidable. Lacking major resources apart from water² and gold³, and dependent on trade with other countries, especially with the former Soviet republics, Kyrgyzstan urgently needs to develop its human resources. This means that the priority investment for the future of Kyrgyzstan is education.

This priority is clearly understood by the Kyrgyz authorities. Indeed, Kyrgyzstan was maybe the first former Soviet Union country, which tried to introduce serious reforms of education finance, when in 1999 it implemented a system of per student financing of education at the oblast level. We review below the fate of this early brave attempt and the reasons for its failure.

However, despite many reform initiatives and many innovative projects at the local level, too little has been done to rid Kyrgyz education of the rigidities inherited from the Soviet Union. The outside observer is struck by repeated references within the Kyrgyz education community to the "common educational space", especially referring to the education system of the Russian Federation. This would not be a matter of concern if those references were related to adoption of new projects and standards. It seems, however, that they are mainly used, instead, to justify the slow progress of reforms. Instead of forever looking to Russia for examples and leadership, Kyrgyz education should rethink its basic problems and begin serious, far-reaching reforms. One step in this direction, taken recently, is the publication of *The Concept of Reforming Education in the Kyrgyz Republic* by the Ministry of Education⁴.

¹ There have been serious incidents on the Uzbek border, as well as recent unrest and demonstrations leading to five deaths and to a government crisis.

² Through channels and rivers, Kyrgyzstan supplies its neighbors, particularly the large Uzbekistan, with much needed water, as well as hydroelectric power. Because of this, the country is able to negotiate relatively good trading terms for imported oil. In a similar arrangement it receives cheap coal from Kazakhstan.

³ The Kumtor gold mine produces about 9% of the national GDP (National Statistical Committee, 2001).

⁴ Ministry of Education 2002.

The aim of the present report is to highlight some key issues of Kyrgyz education finance in the view of current debate on education reform. Those key issues, in our opinion, are the following:

1. Governance structure, described in Section 2, which strongly influences how the funds for education are allocated and used (analyzed in Section 4).

2. Parental contributions (both formal and informal) to schools, described in Section 5.

The structure of the paper is as follows. In the first section we describe the fiscal situation of local state administrations. In Section 2 we analyze the governance of Kyrgyz education. The system of general secondary schools is described in Section 3. The early attempt at introducing per student formula in education finance and the consequent retraction is discussed in Section 4. The following section is devoted to the collection and use of non-governmental funds in public schools. In the final section we discuss the two key issues mentioned above and provide some very preliminary recommendations.

The author thanks the team of CASE Kyrgyzstan for great hospitality and for many useful discussions: Roman Mogilevsky, Irina Makenbaeva, Julia Mironova, Robert Brudzynski, and Aziz Atamanov. Bakytnur Dosaliev helped me organize meetings and interviews⁵, and as a knowledgeable guide seemed to know nearly every Kyrgyz in the country. Natalia Pisareva of the World Bank, Geoffrey Howse working for the Asian Development Bank, Bill Kugler of Urban Institute, Bishkek, and Roman Mogilevsky read earlier versions of the report, contributed many critical remarks, and saved me from some embarrassing blunders. All the remaining errors, as well as some opinions not fully supported by the available evidence, are my own responsibility.

I. Local State Administration in Kyrgyzstan

Kyrgyzstan is divided into 7 oblast⁶ and the capital city of Bishkek. The oblast are further divided into rayons (39 in the country) and ail okmotu, of which there are 430 in the whole country⁷. The oblasts and rayons are effectively local state administrative offices, with oblasts subordinated to the central government, and rayons subordinated to oblasts⁸. Only the ail okmotu can be considered to have some measure of independence as local self-governments (see description below).

⁵ The list of people interviewed is given in Appendix C.

⁶ Until 1999 there were 6 oblast. In 2000, Batken oblast was created out of a part of Osh oblast.

⁷ Unfortunately, we do not have either financial nor school enrollment and staff data for the rayons and the ail okmotu. Therefore we can provide selected data only for the oblasts.

⁸ We stress this point again below, because many outside observers think that Kyrgyz education is highly decentralized to LSA's such as rayons, see for instance World Bank 2001. In our opinion this is quite mistaken.

Table 1. Basic data about administrative structure

	Population		% urban	% poor	Ail	av.size	Rayon	av.size
Kyrgyz Republic	4 850 734	100.00%	35.33%	56.2%	430	9 449	39	104 179
Batken	380 142	7.84%	19.62%	65.7%	29	13 108	3	126 714
Jalal-Abad	869 539	17.93%	23.38%	73.0%	68	12 787	8	108 692
Issyk-Kul	415 513	8.57%	30.59%	64.5%	58	7 164	5	83 103
Narin	248 699	5.13%	18.47%	90,5%	56	4 441	5	49 740
Osh	1 176 646	24.26%	23.50%	65.7%	79	14 894	7	168 092
Talas	200 269	4.13%	16.90%	67.0%	35	5 722	4	50 067
Chui	772 188	15.92%	21.92%	26.6%	105	7 354	7	110 313
Bishkek	787 738	16.24%	99.43%	6.0%	average sizes without Bishkek			

Sources⁹: NSC 2001.

The columns with percent of the poor is taken from Gallagher 2000 (Osh value is given for Batken oblast, because it was still part of Osh oblast). We note that the poorest oblasts are Narin, Jalal-Abad and Talas, and the richest Bishkek and Chui.

The oblasts and the rayon form a single administrative structure, whose main characteristics have been inherited from the Soviet Union. In particular, there are many cases of double reporting lines. This means that heads of particular divisions at oblast level, such as finance division or education division¹⁰ are appointed not by the head of oblast or the oblast kenesh¹¹, but by their superiors in the Ministry. Similarly, the head of rayon divisions are appointed not by rayon chiefs, but by the oblast. In the cases of conflict of interest, which of course necessarily arise, the loyalty lies with the higher body, not the local kenesh¹². No litigation between rayons and oblasts, or oblast and the central government, is imaginable, and officials at all levels see themselves as parts of one state apparatus. The Ministry of Finance controls in effect all the oblast and rayon finance divisions, which makes them not local governments, but de-concentrated state administration¹³. We will refer to them as local state administrations (or LSA's).

The double reporting lines are especially apparent and harmful in the budgeting process. Although lower tiers of administration prepare their draft budgets, they are

⁹ Sources of data for the tables are given in Appendix D.

¹⁰ The oblast and rayon education divisions are called respectively OblONO and RayONO, the acronyms which we shall freely use in the present report. The finance divisions are called OblFU and RayFU.

¹¹ The keneshes are the oblast, rayon and ail okmotu elected councils.

¹² Based on a number of interviews with local administration officials. For the list of interviews see Appendix B.

¹³ This view is confirmed by Gallagher 2000.

vetoed by higher levels and new budgets are imposed, often through informal channels (with various budget numbers dictated in telephone conversations). Those budgets are then voted on and accepted by the kenesh. This dilutes political responsibility for the budgets (both approval and execution) and makes the whole system highly non transparent¹⁴. The funds for specific functions served by LSA's is directed from the republican budget to the oblasts, who then distribute them to the rayons, and so on, making the whole process subject to negotiations and favoritism. Also the exact responsibilities of oblasts have been quite unstable in the last decades, subjected to many changes¹⁵. Besides that, service delivery responsibility between different levels of government varies considerably across and within oblasts/rayons and very often changes depending on the level of revenue available in previous budgeting period.

In contrast, the ail kenesh at the lowest level seem to be slightly more independent. Their budgets are also dictated them by the rayon RayFU, and the rayons seem to be able to manipulate the tax sharing system in such a way that even the revenues from the land tax (by law, ail should receive 90% of that tax) can be appropriated by higher levels of administration. Nevertheless their members have been recently elected in what appears to be relatively free elections, and they already begin to take issues with the central governments¹⁶. Similar relative independence is enjoyed by the cities (Bishkek, oblast subordinated and rayon subordinated cities). We will refer to them collectively as local self governments (or LSG's).

This situation makes clear analysis of local state administration finances, including the education spending, rather difficult to perform. Those budgets reflect not local policy goals, but rather overall fiscal constraints. In Appendix A we discuss the fiscal situation of Kyrgyz oblasts (we limit ourselves to a general picture of oblast revenues and expenditures, with the aim of drawing attention to some problematic issues).

The main conclusions of this analysis are that half of the overall LSA income comes from direct transfers from the central budget (including categorical and equalization grants), one fourth from shared taxes (mainly the personal income tax, excise and retail sale tax), and from non tax revenues (special means and administrative fees). The categorical grants are transfers supposed to pay teacher and doctor salaries (see Section 4). However only Bishkek receives substantial funding from taxes, and almost no grants. Other, poorer oblasts rely to a great extent on categorical grants, and have little tax income.

¹⁴ Ukraine with its new budget code in operation since 2002 is an example of an FSU country where this Soviet inheritance was overcome.

¹⁵ See Ivanov 2001 and Verheijen 2001. The non-transparent role of oblast in the education sector is discussed in the following section.

¹⁶ See discussion below on page 14.

On the expenditure side, education accounts for over 45% of LSA spending. In the city of Bishkek it is financed from general income (mainly shared taxes). In other oblasts the main sources of funds for education are the categorical grants.

2. The Structure and Management of Kyrgyz Education

The education system of the Kyrgyz Republic, excluding higher education, consists of five types of schools:

- 1) preschools,
- 2) general education secondary schools¹⁷,
- 3) professional-technical schools (PTU's),
- 4) special secondary schools (technikums, training colleges),
- 5) schools for handicapped children.

The main data about those types of schools at the beginning and end of the last decade are summarized in Table 2.

Table 2. Enrollment change by school type

	1992-93		1999-00	
	schools	students	schools	students
preschools	1 380	143 235	420	45 005
general schools	1 800	939 510	1 966	1 100 113
professional-technical	115	49 193	113	25 588
special secondary schools	50	40 922	53	26 585
schools for handicapped	25	5 117	19	3 504

Source: NSC 2000.

We see that as in many post-communist countries, the numbers of preschools and the population of their student fell dramatically. Similarly the number of students of professional schools and of special secondary schools is now about half of its previous levels, although the number of institutions remained stable. There is a worrying decline of about 31% in the number of students of schools for handicapped. This may indicate that special needs students do not receive sufficient help. Indeed, there is virtually no

¹⁷ We note in Kyrgyzstan, as the throughout the former Soviet Union, the basic school, attended by children from the age of 7, is confusingly called secondary. There are no primary schools.

integration of handicapped students in general schools, and we must assume that increasing number of handicapped children do not receive schooling¹⁸. It is also clear from the table that the main contingent of students attends the secondary schools. However, unlike in many other transition countries, Kyrgyzstan experiences not demographic decline in its student population, but a growth¹⁹. The result is that the students of secondary schools in Kyrgyzstan now account for over 91% of all students (excluding university), whereas in 1992 they accounted for less than 80% of all students.

Below we focus our analysis on those mainstream schools not only because they are the dominant form of Kyrgyz education, but also because they constitute a very significant part of local budgets and their financing through the rayons and oblasts raises most concerns. The professional-technical schools (PTU's) are vocational schools directly subordinated to the Ministry of Labor and Social Protection. The Ministry finances them and determines the number of students. The education level offered there is not very high. Many of them have been originally attached to large Soviet enterprises, which have since disappeared, and they find it difficult now both to attract students and to teach them skills relevant for the market economy.

Special secondary schools are another feature of the education system inherited from the Soviet period. Those institutions are in fact located in-between the secondary and higher vocational schools²⁰ and offer much better training than PTU's. They are subordinated to Ministry of Education and other line ministries, who determine the numbers of so called *budget students* and *contract students*, that is students who do not pay or who pay tuition fees. The budget students are financed by the relevant ministry. The tuition fees range from 7 to 14 thousand Som per year²¹. Moreover the school directors enjoy a degree of managerial autonomy, which makes those schools in effect almost completely marketized. We have not been able to analyze the budgets of any of those schools, but it seems rather clear that they already operate on a competitive education market as autonomous enterprises, not subject to serious control. Therefore their position within the system of public Kyrgyz education is at best problematic. Moreover, it seems that consensus is growing towards the acceptance of some form of privatization of those institutions²².

¹⁸ This is an important subject deserving separate treatment. However we are not able to provide any comments or detailed analysis of the treatment of handicapped children in Kyrgyzstan.

¹⁹ Higher education also experienced dramatic growth, from 13 institutions serving 53,6 thousand students in 1992 to 39 institutions with over 159 thousand students in 1999.

²⁰ In fact, in the Ukraine they have been incorporated fully into higher education system.

²¹ The current exchange rate is about 48 Kyrgyz Som to US Dollar.

²² This of course raises difficult legal and political issues, which fall outside the scope of the present report. We stress nevertheless that de facto these schools in a meaningful sense are no longer public.

The responsibility for the Kyrgyz education is highly fragmented. Maybe the most serious and harmful division exists at the highest level of the Kyrgyz government. Indeed, the managerial responsibility for the education sector, including the nomination of the school directors, rests with the Ministry of Education (through the RayONO offices). The Ministry is also responsible for curricula, the pedagogical content, the work conditions of teachers and so on. At the same time the responsibility for financing of public education lies with the Ministry of Finance²³. This includes the influence on the budgeting process of the rayons and oblasts, the determination of budget transfers for education (including the calculation of the so called *categorical grants*, to which we turn below), and the negotiations with particular jurisdictions over additional funds for education. We can call this situation the functional fragmentation. The Ministry of Education does not monitor the spending on general secondary schools in the country, and it does not take part in the formation of secondary education budget on the national level, the oblast level or the rayon level. Its budgetary responsibilities are limited to the schools it directly manages. Moreover the Ministry of Education has access to only limited school level enrollment and teacher data²⁴. And finally, the teacher salaries, the dominant part of school finances, are set by the Ministry of labor and Social Protection.

This situation plainly makes it very difficult to plan any serious sectoral reforms. For instance, recent attempts of the Ministry of Education to increase the length of general secondary education from 11 grades to 12 grades met with scathing criticism of the Ministry of Finance, who argued that there are no sufficient resources to finance such an ambitious move. Of course, the fact that the Ministry of Education could not conduct sufficiently convincing cost calculations means that the reform was not well prepared in the first place. On the other hand, it is also clear that increasing the length of obligatory schooling²⁵ in the absence of demographic decline can only be achieved at additional cost to the central budget. The lack of cooperation between the two ministries leading to disagreements on such key issues is not good for the sector.

Similarly, an attempt to alter the curricula would raise problems of teacher retraining, teacher work load and teacher remuneration. Those very closely connected issues crucially impact education financing and Ministry of Education, not being involved in this sphere, is not well prepared to propose new solutions or discuss plans for reforms.

²³ Officials of both Ministries complained about inadequate cooperation between them, and duly blamed the other side. On the other hand, it seems that everybody understands that this situation is not really sustainable.

²⁴ The statistical data collection process is performed by the administrative structure of rayon and oblast, with each level just summing the received reports and sending to higher authorities only aggregated data. In this way the individual school data remain at the rayon level (and are of course available only in hard copy).

²⁵ This would also bring the Kyrgyz system closer into line with the education systems of developed countries.

The second source of fragmentation comes from different lines of responsibility for different sub-sectors of education (vertical fragmentation). While general education schools are administered by ail okmotu and the rayons, professional-technical and specialized secondary are managed by the Ministry of Education and by some other line ministries²⁶. The financing of those schools is quite separate from the financing of the general secondary schools, and is usually a part of the budgeting of the particular ministry controlling the schools in question. This makes resource reallocation between the sub-sectors very difficult, and helps preserve inherited inequalities of the staffing and financing levels. It also inhibits rationalization of the vocational schools and the mobility of workforce within the sector.

The third source of fragmentation comes from the fact that all levels of state administration as described above, namely the central level, the oblasts and the rayons have some responsibilities in the sector, although these are not very clearly delineated (horizontal fragmentation). In particular, the role of the oblast is rather doubtful and unclear. The nomination of school directors is the function of the ObIONO, but has to be agreed with RayONO and with the Ministry of Education. ObIONO directly manage only teacher retraining centers and student competitions, but influences the management of the whole sector. ObIFU allocate the funds to the rayons, but do it as dictated by the Ministry of Finance. Therefore the oblasts are really only intermediaries in both the financial and managerial functions. This intermediary function, with its political influence and room for corruption, is what makes the oblasts politically difficult to dispense with altogether. Not surprisingly, there are many proposals to eliminate them altogether²⁷. It seems that at least in the education sector such a move would not cause significant problems, if the teacher retraining and student competitions were to be reallocated, for instance to the Ministerial level. RayONO role is also not very clear, though it raises fewer issues than ObIONO. Rayons are responsible for finding teachers for their schools, and maintain the list of vacancies, but in the end it is usually the school directors who go to pedagogical universities to search for future teachers. Main value added of the RayONO is in the managerial and accounting services to the schools.

Finally, the ownership and maintenance of the buildings and school facilities are said to have been formally taken over by ail okmotu, but it is not very clear what this means

²⁶ These include: Ministries of Labor and Social Protection, Health, Agriculture, Transport, Interior, as well as some state committees, see World Bank 2001. In fact, all rows of Table 2 above refer to separate parts of the education system, with preschools managed locally and schools for the handicapped subordinated to the Ministry of Education.

²⁷ See for instance Verheijen 2001. One should note that some post-Soviet republics, such as the Ukraine, were able to radically reduce the influence of oblasts in the sector.

in practice²⁸. Thus a school director finds himself in a difficult position, with many masters and no one fully responsible for taking final decisions concerning the school. There are conflicting demand made on school directors, in part related to the need to raise additional income²⁹ (through so called *special means*).

Moreover, the nominal transfer of ownership and maintenance of the school facilities to ail okmotu was not accompanied by adequate funding mechanism and managerial autonomy. As indicated above the newly elected members of ail okmotu already begin to discuss their responsibilities and the financing they receive with the central government³⁰. They argue that if they are to perform a significant function, such as maintenance and operation of facilities, they need adequate funding. In some instances they even refuse to take school facilities over. These first instances of a serious dialogue between the central and local self governments point to a possible way forward towards a decentralization of the education system in Kyrgyzstan. We will discuss those options in the final section of the report.

3. General Secondary Schools in Kyrgyzstan

The general secondary schools, to which we now turn, cover essentially 11 grades, from age 7 to 18. The obligatory school age ends at 16 years, and many students leave the school after the 9th grade, either leaving the education system altogether, or to continue education in vocational schools. The general schools are divided according to the number of grades actually served, namely:

- 1) initial schools, with grades 1 to 4,
- 2) basic schools, with grades 1 to 9,
- 3) full secondary schools, with grades 1 to 11.

The initial and basic schools are usually in the countryside, while the cities have mainly full secondary schools. The following table shows the growth patterns of those three types of general secondary schools.

²⁸ The school director does not see the complete school budget, only its salaries part. The utilities, and sometimes even the salaries, are paid for directly by ail okmotu or the city. See Section 5.

²⁹ An example of such a demand is discussed at the end of Section 3.

³⁰ Based on interview with Akhmat Madeyuev.

Table 3. Structure of the secondary school system in Kyrgyzstan

	1992-93			1999-00		
	schools	students	school size	schools	students	school size
initial	108	5 626	52	123	12 108	98
basic	220	43 988	200	214	45 144	211
full secondary	1 472	889 896	605	1 629	1 042 861	640
total	1 800	939 510	522	1 966	1 100 113	560

Source: NSC 2000.

We can see that although the number of students in basic schools has remained at previous level, the number of students of full secondary schools increased by about 17% and the number of students of initial schools more than doubled! Also the sizes of those schools increased, in particular the smallest initial schools increased their average size from 52 students to over 98 students³¹.

A slightly deeper insight into the dynamics of enrollment can be obtained when we look at student numbers divided by age groups (by grades), as the following table testifies.

Table 4. Enrollment in general schools by grades (thous.)

Grades	1992/93	1999/00	Change
Grades 1 to 4	367.0	466.2	27.03%
Grades 5 to 9	458.5	479.5	4.58%
Grades 10 to 11	114.0	154.4	35.44%
Total	939.5	1 100.1	17.09%

Source: NSC 2000.

We see that the overall increase of 17% is rather unevenly distributed, with lowest grades experiencing 27% growth and middle grades only 5% growth. The significant growth of 35% in the last two grades probably reflects increased scholarization rate at those age groups and a migration of students from vocational to general education³², so is not merely a reflection of demographic changes. We can hope that this migration means that more student receive quality general education rather than narrow vocational training.

³¹ The problem of small rural schools, haunting many European transition countries, is thus absent in Kyrgyz education, where an increase of students numbers alone was sufficient to make the use of school networks and resources in rural areas more rational.

³² For instance, between 1996 and 1998 the share of graduates of 9th grade continuing study in the 10th grade grew from 62.8% to 75.8%, see Rysaliev and Ibraeva 1999.

The significant increase in initial grades, due mainly to demographic changes, implies that in the coming years we can expect further growth of student population in Kyrgyzstan. We cannot expect that the current shortages of textbooks and teachers will disappear or ease soon.

In 1998 a school mapping survey was conducted in Kyrgyzstan, under the auspices of the Asian Development Bank³³. We can use the data for individual schools from this database to obtain some more detailed understanding of the structure of the school system. The overall data on secondary schools are given in Table 5, separately for rural and urban schools (the last column gives student teacher ratio).

Table 5. Basic data about secondary schools by oblast (1997)

	Schools	Students	Teachers	Classes	School size	Class size	S-T ratio
<i>rural schools</i>							
Kyrgyz Republic	1 597	761 634	50 902	32 147	477	23.69	14.96
Jalal-Abad	372	179 580	11 397	7 465	483	24.06	15.76
Issyk-Kul	133	58 445	4 304	2 581	439	22.64	13.58
Narin	97	44 449	3 456	1 889	458	23.53	12.86
Osh	623	305 816	21 020	12 628	491	24.22	14.55
Talas	98	42 265	3 114	1 970	431	21.45	13.57
Chui	274	131 079	7 611	5 614	478	23.35	17.22
<i>urban schools</i>							
Kyrgyz Republic	377	291 745	16 242	10 850	774	26.89	17.96
Jalal-Abad	45	32 598	1 723	1 249	724	26.10	18.92
Issyk-Kul	57	35 558	2 107	1 351	624	26.32	16.88
Narin	42	20 444	1 511	830	487	24.63	13.53
Osh	74	73 717	3 886	2 631	996	28.02	18.97
Talas	10	7 871	430	271	787	29.04	18.30
Chui	42	22 419	1 195	903	534	24.83	18.76
Bishkek	107	99 138	5 390	3 615	927	27.42	18.39

Source: SMS 1977.

³³ See Howse, Wicks, Stackpole 2000. Data for 1997/98 school year. I thank Geoff Howse for making this database available to this research. The database includes only 6 oblasts, because Batken oblast was not yet created.

As expected, the rural schools are both smaller and have smaller classes. However, the difference between rural and urban schools is not very significant and it confirms what we have seen already in Table 3, namely that upward demographic trends increased the average size of smaller schools. Most importantly, the average class size varies little between urban and rural schools. There are little discrepancies between the school and class sizes of rural schools between oblasts. In contrast and quite surprisingly, the urban schools vary significantly between oblasts. Narin urban schools are in fact very similar to rural schools. Even discounting this strange fact, we see that average urban school in Osh oblast is nearly twice the size of the average urban school in Chui, and has larger classes. And this is not due to the existence of small urban secondary schools, but to the relatively small size of large schools, as the following table with data for urban schools with over 200 students testifies.

Table 6. Urban schools with over 200 students by oblast (1997)

	Schools	School size	Class size
Kyrgyz Republic	315	901.10	27.47
Jalal-Abad	39	814.62	26.30
Issyk-Kul	50	692.20	26.62
Narin	31	613.61	26.06
Osh	66	1 097.45	28.36
Talas	9	854.44	29.13
Chui	32	669.94	25.46
Bishkek	88	1 100.95	28.20

Source: SMS 1977.

We can see that even among larger urban schools there are significant differences between the oblasts in terms of school size, but less so in terms of class size.

We now use the data on weekly teaching time as organized in schools. We recall that as unit of learning, a class for a given grade should receive similar level of weekly teaching time, as dictated by the curriculum. The following table gives the average weekly teaching load of teachers (TL), the average number of teachers per class (TC) and most importantly the average number of weekly teaching hours a class receives (HC). The teaching hour lasts 45 minutes.

Table 7. Teaching load, teachers per class and teaching hours per class (1997)

	rural schools			urban schools		
	TL	TC	HC	TL	TC	HC
Kyrgyz Republic	19.18	1.58	30.36	22.13	1.50	33.12
Jalal-Abad	19.70	1.53	30.07	23.33	1.38	32.18
Issyk-Kul	18.36	1.67	30.61	20.31	1.56	31.68
Narin	16.69	1.83	30.54	17.41	1.82	31.70
Osh	18.32	1.66	30.49	22.09	1.48	32.62
Talas	19.17	1.58	30.31	21.58	1.59	34.25
Chui	22.37	1.36	30.32	24.08	1.32	31.86
Bishkek				23.42	1.49	34.91

Source: SMS 1977.

The first thing to observe in this table is that although on average in rural schools there are more teachers per class, they work almost 3 hours per week less and as a result rural class receives on average almost three lessons per week less than the urban class³⁴. If we discount the special case of Bishkek, the difference is about 2 hours per week. This difference, with varying intensity, is true also for each oblast. Within rural schools we see that the average teaching time is virtually the same across oblasts, although this is achieved in quite different ways. For instance, in Chui there are relatively few teachers per class who work much more, while in Narin we see much more teachers per class, but their average teaching load is less than 75% of that of Chui teachers (difference of over 5 hours of teaching load per week!). The differences between the urban schools are much greater, as already noted in Table 5. Indeed, again we see that Narin urban schools resemble rural schools, and again that Chui teachers work longest hours. However the greatest teaching time are received by Bishkek schools, over 4 hours of teaching per week more than in rural schools.

Those systematic differences are quite surprising given the high degree of aggregation used in the tables above³⁵. It seems for instance that the Chui oblast has a clear policy of employing fewer teachers and of making them work more. This policy seems to apply in equal measure to urban and rural schools. In contrast, Narin oblast

³⁴ This finding is in agreement with data from a school survey, showing that there are more vacancies in urban than in rural schools. See National Statistical Committee 2000.

³⁵ Data aggregated for such large units as oblast show greater degree of uniformity than rayon averages or individual school data.

tends to employ many teachers, but with a low weekly teaching load, again both in urban and rural schools. The resulting similar level of teaching time received by students is thus achieved through differing strategies³⁶. Although deeper analysis is required, we might presume that Chui strategy is better for the students (who have more constant contact with their teachers), while Narin strategy favors teachers (and keeps more of them at work).

The existence of such policy differences in post-Soviet countries on a local level was observed already in an Ukrainian city³⁷. Their appearance on oblast level is therefore interesting. We do not know whether those differences are due to genuine conscious policy choices or are a reflection of some cultural tradition. The cultural tradition here may be the ethnic background of the population (see Appendix B). Indeed, Table B.1 shows that Narin is almost exclusively inhabited by the Kyrgyz, while Chui has among the oblasts the lowest share of Kyrgyz population. Similarly, Table B.2 shows that in Narin 89% percent of students use Kyrgyz as instruction language, while in Chui 60% learn in Russian. The cultural differences may be also due to poverty indexes: Narin has the highest, and Chui the lowest percentage of the poor population among the oblasts (see Table 1). Maybe in poorer regions teachers agree to work shorter hours and receive lower salaries, in return for greater job security. Another explanation may be that in Bishkek and Chui larger proportions of students continue on to the 10th and 11th grades, with longer teaching programs. Thus many independent factors may work here.

It is also important to understand that these differences arise despite a universal application of the same teaching standards and the same procedures for assigning teachers to classes (called complectation). We will return to this issue below.

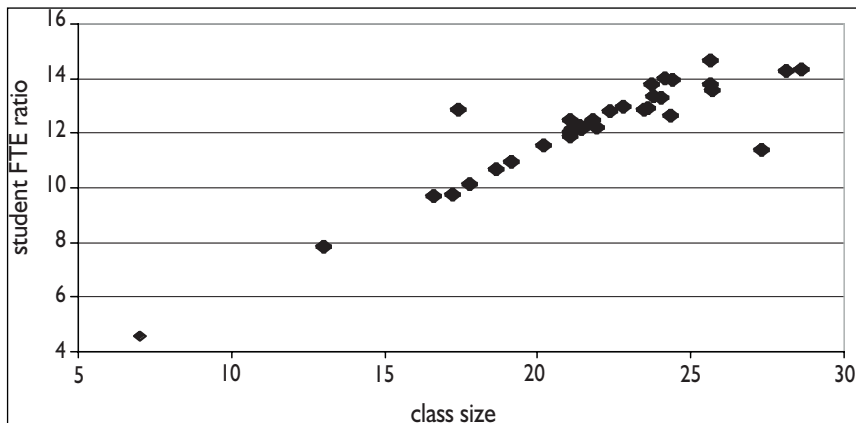
Unfortunately, neither the statistical data collected by the National Statistical Committee, nor the school mapping database contain data about full-time teacher equivalent FTE³⁸. Those data are available for the 36 schools in Ak-Sui rayon of Issyk-Kul oblast. We display them on the following graphs, with each dot representing a single school. Our first observation that the student FTE ratio (number of students for each FTE) very strongly depends on the class size (correlation coefficient $R=0.90$). The two schools with small classes are small initial schools.

³⁶ Recall moreover from Table 5 that Chui and Narin schools are quite similar in structure.

³⁷ The study was performed on general secondary schools data in Lviv. More detailed data were used there, including split hours and detailed school budgets. See Levitas, Herczyński 2001.

³⁸ Described as *stavki* in Russian. FTE is a much better measure of teaching effort of a school than the number of teachers, and the salaries and payroll taxes are more related to FTE than to teacher numbers.

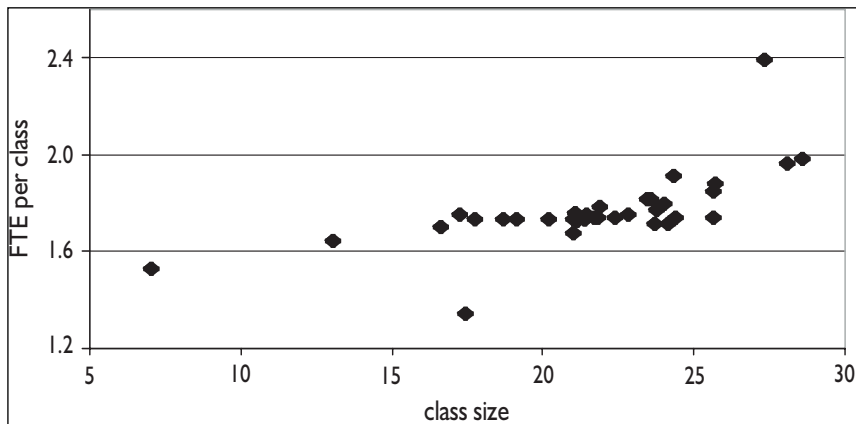
Graph 1. Class size and student FTE ratio in Ak-Sui rayon.



Source: AS 2002.

However a closer look reveals that for smaller classes, the number of FTE per class is also lower. The relationship is much weaker, of course, but still significant (correlation coefficient $R=0.66$).

Graph 2. Class size and FTE per class ratio in Ak-Sui rayon



Source: AS 2002.

We interpret these findings as follows. The main factor responsible for student FTE ratio is of course the class size. However, the actual teaching received by the students, as measured by FTE per class, is smaller for schools with smaller classes. In other words,

the school system tries to compensate for increasing per student costs of small schools by reducing the teaching provided. This is a worrying, though understandable reaction to financial scarcity facing Kyrgyz schools³⁹.

We conclude this section with some remarks about the rural schools. These schools are much poorer and rely more on in kind help rather than on financial contributions from the parents. The rural school students perform worse than urban kids in literacy and mathematical tests⁴⁰. They also receive much shorter instruction (see Table 7). Moreover, the school directors complained that there are periods when less than 50% of students attend, due to demand for their labor in the fields. It is often difficult to convince the parents of the value of attending the school and of continuing education. The textbook provision in the rural schools is much worse, their equipment in poorer conditions and teaching aids in shorter supply than in the cities.

One of the peculiar features of the rural schools is the practice of allotting them pieces of land, usually between 5 and 10 hectares, and making the school director responsible for organizing agricultural production using students as a work force. The school is also supposed to sell the produce, often in school facilities. The rural school directors we talked to resent this very much, and the usual story is of a commercial failure, sometimes of tragic-comic proportions. On the other hand, some of the RayONO officials proudly described this process as their achievement.

4. The Financing of Kyrgyz General Secondary Education

Kyrgyzstan was maybe the first post-Soviet republic which tried to introduce per student formula for financing of education⁴¹ in the form of *categorical grants*. In preparing the 1998 budget the Ministry of Finance issued a document describing a capitation formula to be used to calculate the education transfers to oblasts⁴². Further distribution to rayons and schools was not covered by the formula and was supposed to be accomplished locally. This brave attempt, however, encountered problems and was discontinued, as we discuss below.

³⁹ Similar trend was observed for rural Georgian schools, see Herczyński 2002.

⁴⁰ See Monitoring Learning Achievements 2001, where provision of textbooks and school equipment is also discussed.

⁴¹ The following discussion is based on interview with Natalia Pisareva, who was involved in this work.

⁴² See Ministry of Finance 1997. This document described not only categorical grants for education, but also for health as well as equalizing grants.

The formula used a system of weights for different classes of students. Main weights are as follows:

- 1) for students aged 7 to 13: weight 1,
- 2) for students aged 14 to 15: weight 1.2,
- 3) for students aged 16 to 17: weight 2.3,
- 4) for students in schools with boarding houses: additional weight 2,
- 5) additional weights for students in rural and mountain areas (not specified).

We have to emphasize here that moving towards a per student formula is a non-trivial task, because the students, even taken with the weights such as listed above, are not costs carriers in education. The costs are associated with teachers, and the number of employed teachers in a school depends on many local factors (for instance, it depends on the number of classes, not of students). It is therefore not surprising that the use of the formula even for the oblasts met with serious initial difficulties, as the calculated sums of categorical grants were very different from the historical spending patterns⁴³, and from the very beginning the formula had to be manually adjusted. There was also the initial ambiguity as to whether the grants were supposed to finance some minimum educational needs (standards), or simply the teacher salaries. These discrepancies led to the situation when in some oblasts the grants covered all salaries and some other expenditures, while in others not even the teacher salaries.

In 2000, following serious problems with teacher pay arrears, the Kyrgyz Parliament adopted a law on teacher status, guaranteeing the teacher salaries from the republican budget (as so called *protected articles*, that is a priority part of the budget). Thus the per student formula had to be discontinued in favor of a per teacher calculation, better adjusted to satisfying the requirements on the new law. Categorical grants are now supposed to cover salaries and social fund deductions in education and health⁴⁴.

This calculation, however, requires not the knowledge of the number of students, a relatively stable and reliable part of the school statistics, but the number of teachers, with their special features influencing the salaries. Those additional features include the education level of the teacher, seniority in the school system, full time equivalent, teaching time above the basic teaching load, additional responsibilities in the school and so on. Those data are not available fully in the aggregated database maintained by the National Statistical

⁴³ This is called *adjustment shock* in the literature. Before, the oblasts received non specific subsidies and used them as they thought expedient. As a result, significant arrears in teachers' and doctors' salaries arose. In some measure the categorical grants improved this situation.

⁴⁴ However the exact legal nature of this priority is not clear. Budgetary law is quite vague on this point. Budgetary data as well as interviews with oblast and rayon officials show that categorical grants do not cover full costs of salaries and social fund deductions. Moreover Bishkek, receive very little categorical grants.

Committee⁴⁵. This means that at present the calculation of categorical grants in education must be to a large measure based on historical spending on salaries, not on statistical data about the teachers⁴⁶. Moreover as Gallagher⁴⁷ discusses, the system of categorical grants is very unstable, in that the actual funds delivered to the oblast usually fall short of the amounts planned in the budget. This is very worrying, because as we discussed in Appendix A, categorical transfers are a substantial part of local government revenues (29% of consolidated local revenues) and play an important equalizing role in the system.

Moreover, the principle of allocating the education funds indirectly, that is through the oblasts, remains in force. Their role in dividing the received funding among the rayons seems to be one of the sources of political power of the oblast administrations. They do not use any guidelines in this process and are not held accountable by either the rayons or the Ministry. The same may be said about the relationship between the rayons and the ail okmotu. We have to conclude that the distribution of education funds from the central budget, through oblast budgets and rayon budgets to ail okmotu and the schools is non-transparent and leaves much room for politically motivated pressures and favoritism.

This process of allocation of scarce *funds from above* coexists with another process, based on planning of work and budgets in individual schools and influencing the local budgets *from below*. This second process, called complectation (determination of classes and assignment of teaching hours) and tarification (determination of salaries on the basis of teaching assignments) is prepared by the school directors and verified and controlled by the RayONO offices. The control is based on last years complectation, and any incremental *upward* changes have to be justified and defended⁴⁸. RayONO, or more precisely RayFU, try to enforce rather strict discipline, demanding that classes should be larger, in an attempt to limit expenditures and to fit into the allocation provided from the central budget through the oblasts. In other words, it is the RayFU which are responsible for aligning the actual expenditures of the schools with the local education budgets as determined in negotiations with higher authorities. This is not an enviable task⁴⁹.

⁴⁵ This serious limitations of school statistical data are common not only to post-Soviet republics, but arise also in other post-Communist countries such as Poland. Incidentally, NSC does not collect the financial data at all.

⁴⁶ We have been informed at the Ministry of Finance that they do have access to teacher data and use a formula to calculate the categorical grants. We have not seen the formula or any statistical forms collecting the required data. It seems to be unnecessary duplication of data collection effort.

⁴⁷ See Gallagher 2000.

⁴⁸ In fact, many school directors do not even try to increase the teaching time or to add supportive staff, because they do not believe they will succeed.

⁴⁹ The rayons also determine other parts of the school budgets, mostly utilities, almost exclusively on the basis of a system of quite archaic norms such as square meters of space or cubic meters of volume for some functions. The people who used these norms within the RayONO system were for the most part satisfied that they corresponded to actual use of resources and did not question them. This is a clear example of financing the institutions and their facilities rather than education functions they serve.

Complectation is governed by a number of pedagogical rules and procedures, largely inherited from the Soviet era. They describe the acceptable class sizes, the number of lessons for each class according to curricula, when the class can be split into groups for specific lessons, and so on. Those rules are uniformly valid across Kyrgyzstan, but their application varies considerably. We have already seen significant differences between the oblast in the number of lessons an average class receives, and between the rural and urban schools. Those differences show that in fact the complectation is a subtle process, in which a lot will depend on the will of the RayFU and on the determination of the school director.

The next step, tarification, is more mechanical and consists of the calculation of teacher salaries on the basis of their workload, their seniority and so on. It is those salaries (and related taxes and social funds deductions) which the categorical grants are supposed to provide for. However, in none of the visited oblast or rayon have the grants been in fact sufficient to pay for the salaries. In other words, the categorical grants system is not only non-transparent and unstable, but also fails to reach its primary objective.

Turning now to actual expenses for secondary schools within the oblast consolidated budgets, we begin by noting a strange convention of distinguishing, on the expenditure side, between the income derived from so called *state budget* and from *special means*⁵⁰. In what follows we suppress this difference⁵¹.

Table 8. Expenses on secondary schools by oblast (thous. Som), 2000

	Total	Salaries	Social Fund	Utilities	Other
Kyrgyz Republic	1 123 991	664 935	211 976	212 220	34 859
Batken	92 029	61 763	18 261	9 512	2 493
Jalal-Abad	182 884	122 943	37 957	18 492	3 492
Issyk-Kul	96 660	58 413	19 402	15 947	2 898
Naryn	84 397	54 743	16 868	9 490	3 295
Osh	242 012	157 209	50 796	30 083	3 924
Talas	62 197	30 906	10 159	20 061	1 071
Chui	203 612	103 808	35 268	56 621	7 915
Bishkek	160 200	75 149	23 265	52 015	9 771

Source: MF Ed 2000.

⁵⁰ This accounting practice expresses the desire to control *special means*, see Section 5 below.

⁵¹ Special means account for about 5% of the secondary schools budgets. The data we have do not divide this sum between expenditure items. We assume that special means are distributed across the budget lines in the same proportion as *budgetary funds*. This may lead to underestimating the salaries part of the expenditures.

The first step in understanding the above table is to convert it to shares of expenditures.

Table 9. Structure of expenses on secondary schools by oblast

	Salaries	Social Fund	Utilities	Other
Kyrgyz Republic	59.16%	18.86%	18.88%	3.10%
Batken	67.11%	19.84%	10.34%	2.71%
Jalal-Abad	67.22%	20.75%	10.11%	1.91%
Issyk-Kul	60.43%	20.07%	16.50%	3.00%
Naryn	64.86%	19.99%	11.24%	3.90%
Osh	64.96%	20.99%	12.43%	1.62%
Talas	49.69%	16.33%	32.25%	1.72%
Chui	50.98%	17.32%	27.81%	3.89%
Bishkek	46.91%	14.52%	32.47%	6.10%

It seems that data for Chui, Talas and Bishkek are doubtful (it is difficult to see why the schools should be paying so much for utilities, despite relatively high costs of heating in Bishkek and Chui). It is interesting to note, nevertheless, that only in Bishkek there remain some funds at the school beyond mere necessities (teachers and utilities).

Finally we calculate the per student spending and average teacher monthly salary. We provide in the following table the student and teacher numbers for the school year 1999/2000, to be used together with financial data for 2000⁵².

Table 10. Student teacher numbers, per student expenses, teacher salaries (Som)

	Students	Teachers	Per student	Teacher salary
Kyrgyz Republic	1 100 113	71 581	1 022	645
Batken	101 262	7 474	909	574
Jalal-Abad	221 569	14 105	825	605
Issyk-Kul	98 226	7 471	984	543
Naryn	66 700	5 245	1 265	725
Osh	301 384	18 847	803	579
Talas	50 997	3 696	1 220	581
Chui	157 058	9 173	1 296	786
Bishkek	102 917	5 570	1 557	937

⁵² Salaries in Table 8 include non teachers. Assuming teachers earn on average 25%, more than non-teachers and knowing from school mapping survey that on average there are 0.5 non teaching staff per teacher, we divide the salaries of Table 8 by 1.2 times the number of teachers in Table 8. The result of these calculations is, of course, a rough estimate of actual monthly teacher salary.

Not surprisingly, the highest expenses per student can be observed for Bishkek. They are nearly double those of Osh oblast. This clearly reflects per capita revenues of the oblasts (compare with Table A.3). One can only assume that discrepancies in per student spending are even more dramatic at the level of rayons and individual schools. This differentiation appears unjust and should be examined more closely. We conclude that the system of transfers does not perform adequately its equalizing role. On the other hand, we see that the poor Narin oblast is sufficiently compensated by the transfers. This means that the effects of transfers are felt very unequally, maybe reflecting their political nature.

Similar observation can be made when we analyze the average monthly teacher salaries. Teachers in Bishkek earn the most, teachers in Issyk-Kul earn just above half the Bishkek teacher salary. It is also interesting to compare the results of Table 10 with Table 7. We recall from that table that Chui employed fewer teachers per class than Narin, but let them work much longer hours. We see now that Chui teachers also on average earn more than Narin teacher⁵³. However they work 38% longer but earn only 8% more. It is difficult to say to what extent this reflects actual situation, and to what extent is marred by data unreliability. One explanation is that according to the law on high mountain areas, all salaries and other benefits in high mountains⁵⁴ are increased by a specified coefficient.

We conclude our discussion of Table 10 by comparing it to poverty data (Table I) and per capita oblast revenue data (Table A.3). We note that correlation coefficient of the share of non-poor population with the average per student spending is $R=0.63^{55}$, and with the average teacher salaries is $R=0.75$. Moreover total per capita revenues are very closely correlated with average per student spending, $R=0.98$, and slightly less so with average teacher salaries, $R=0.82$. This is not surprising. Per student spending depends more on available per capita revenues at local levels (including the categorical grants), while teacher salaries depend not only on revenues, but also on how much the teachers need to be paid to stay in the sector, that is on the availability of alternative income. This is indirectly measured by the percentage of non-poor inhabitants. Finally, the two dependent variables, per student spending and teacher salaries, are also very well correlated, with correlation coefficient $R=0.85$.

⁵³ Table 7 was based on data from 1997, while Tables 8, 10 use data from 2000. We assume that during those 3 years basic situation remained unchanged. This assumption needs to be verified.

⁵⁴ All Narin rayons are in this category.

⁵⁵ We expect this and the following relations to be much closer at the rayon level, due to lower level of aggregation, but we have no data to support this hypothesis.

5. Parental Contributions to Public Schools

The constitution of the Kyrgyz Republic guarantees all children free and compulsory education. The right to education is guaranteed through the system of general secondary schools, which are organized so that their catchment areas, called *uchastok* or *micro-rayon*, cover all settlements. In other words, every child resides in some micro-rayon and can attend the secondary school there, free of charge.

Nevertheless, at least in the cities⁵⁶, there are significant parental contributions to the school budgets. We will discuss them in two steps. First we will describe the situation from the point of view of the school, based on a number of interviews with the school directors, and we will analyze a sample school budget. Then we will look at the situation from the point of view of the parents, based on a number of anonymous interviews.

The school budgets, as seen by the school directors, consist of two quite distinct parts, with different levels of managerial autonomy. The first is based on the budgetary funds, received from the local government, and covering salaries, utilities and a handful of other expenses. The director can control this part of the budget only partially, and subject to extensive external control. We have already described, for instance, the completion procedure, which effectively determines the salaries part of the budget, and which is strictly controlled by the RayONO. On the other hand, the utilities are paid for by the *ail okmotu* (or the city). They do try to impose some limits on utilities spending, but if the school overspends they will cover the costs, and if the school saves money, they will keep the savings. There is thus very little which the director can or wants to do with this part of the budget.

The second part consists of the *special means*, that is of extra-budgetary contributions. This is the part of the budget over which the director has much greater control⁵⁷. The accounting practice described earlier, in which this income category is recorded on the expenditure side of the budgets, reflects a desire to control how non-budgetary funds are used. The special means can be used to buy needed teaching materials, school equipment, or pay for small repairs. However it seems that their major aim is to supplement low teacher salaries.

The special means collected by the school come in different forms:

- 1) payments for additional paid education services,

⁵⁶ Our analysis is based only on Bishkek experience, which in no way is representative of the whole country. In the rural schools, the parental contributions are limited to item 2 on the list below.

⁵⁷ Part of these funds are not reported at all, giving the school director almost complete control.

- 2) once a year voluntary payment urged by the governmental decree⁵⁸,
- 3) money from the rent of school textbooks by students (passed on to the Ministry of Education),
- 4) money from the rent of parts of the school building,
- 5) voluntary contributions by parents of first grade students accepted by the school,
- 6) other parental contributions,
- 7) sponsors, international organizations and similar.

Of special interest is the first item on the list. The additional, paid education services are legal in the Kyrgyz public schools. They usually cover what is called *school component* of the curriculum⁵⁹, and are in fact additional lessons, incorporated into the school teaching plan and conducted by the same teachers. The prices for those services are subject to external control. However, neither the Ministry of Education nor the Ministry of Finance want to take responsibility for this practice. Therefore the solution adopted is rather strange: the office controlling the prices of additional education services is the State Anti-Monopoly Committee⁶⁰. This institutional arrangement reflects the desire to control this important economic and pedagogical activity of the schools, and at the same time the unwillingness to openly involve the main organs of the government.

There are some rules concerning the use of these funds. For instance, at most 70% of the fees for additional education services can be used to pay teachers, the remaining sum must be used for general school purposes. In one of the schools we visited, the norm was for the teacher to have two such additional classes a week, with payment of 30 Som per lesson, as opposed to 8 Som a lesson for regular teaching. Assuming the average teaching load of 18 regular hours, we see that a teacher earns 630 Som a month for regular teaching, and 260 Som a month for additional teaching, a salary increase of over 40%. In other words, about 30% of teacher salaries are financed by the parents. Incidentally, the resulting monthly salary of 890 Som agrees neatly with estimates of Table 10.

Another set of rules concerns children from poor families or orphans. In every school we visited there were some procedures for allowing those students to participate in the additional lessons either free of charge or at a reduced charges. Those procedures are

⁵⁸ That decree requested that all parents once a year pay a fixed sum for the maintenance of technical infrastructure of the school. The payment is 160 Som in the city and 100 Som in rural areas. The precise legal obligation on the parents is not clear, but all parents comply.

⁵⁹ The remaining components of the curriculum, *republican component* and *regional component*, are paid for by the state funds.

⁶⁰ We have not been able to visit this office and discuss their methodology in controlling and approving the prices.

very different for different schools and most likely are maintained by the school director without any guidance from the RayONO.

A sample budget of a secondary school in Bishkek, with about 880 students and 85 staff, is given below (only major recurrent revenue items are included).

Table 11. Sample budget of a Bishkek school

	Item	Source	Sum	Share
1	Salaries	state budget	1 020 000	34.99%
2	Taxes and SF deductions, 43%	state budget	438 600	15.05%
3	Additional education services	parents	719 000	24.66%
4	Electricity	state budget	46 800	1.61%
5	Water	state budget	79 700	2.73%
6	Heating	state budget	378 000	12.97%
7	Telephone	state budget	1 100	0.04%
8	Repair contribution	parents	112 000	3.84%
9	First grade contribution	parents	120 000	4.12%
	Total		2 915 200	100.00%

We first note that, as seen from the point of view of the school director, some of those revenue items are at the same time expenditure items, they just flow through the school budget.

Observe now that the yearly per student cost of this school is about 3,310 Som, a very high cost when compared with average data from Table 10 (twice the Bishkek average). This reflects the fact that this is a good school, able to attract students whose parents contribute a lot to the school. Indeed, special means revenues of the school (items 3, 8 and 9 above) comprise 951 thousand Som, or 33% of the school budget. This is much more than the national average of 5%, and than the Bishkek average of 20%. Moreover on average students pay 82 Som a month for the additional teaching services. We discuss below to what extent those payments are voluntary.

This school allocates 50% of fees from additional education services to supplement teacher salaries. Therefore we can calculate that the average salaries are about 1,350 Som, which is 40% above the average salary for Bishkek in Table 10 (in this rough calculation we ignore the fact that not all employees are teachers, and the possible use of first grade and repair contributions for salaries). Moreover we note that this school can afford to spend a relatively large part of the budget on items other than salaries (with payroll taxes) and utilities. This again testifies to a relatively good financial condition of the school.

Of course, analysis of more school budgets is needed before firm conclusions can be made, but some issues are apparent. We see that about one third of Bishkek school budget is financed by parental contributions, an essential and largely unregulated support. The financing from the state budget is not sufficient to guarantee normal daily operation of the schools.

We now turn to take a look at parental contributions from the point of view of the parents. An informal survey was conducted in Bishkek among the parents of secondary school students⁶¹, who were asked about the private expenses for education (not only contributions to school, although these dominate). We discuss below the picture which emerges from those interviews.

There are two type of expenditures, once a year payments, usually in September or as need arises, and monthly payments. The once-a-year payments include:

- 1) textbooks bought or taken in lease from the school,
- 2) learning materials (copybooks, exercise books and so on) and school dress,
- 3) general and specific contributions for repair,
- 4) theatre, circus or excursions,
- 5) gifts for teachers,
- 6) temporary additional teaching by the school teachers.

In addition there are once-a-lifetime payments when the student enters the school (first grade contributions), which will be discussed separately later.

The monthly payments are smaller and include (1) additional teaching, (2) security, and (3) class and toilet cleaning.

Table 12. Private out-of-school education expenditures (Som per student)

	Average cost	% of cost
Textbooks	262	38.62%
Copybooks	106	15.63%
Exercise booklets	65	9.63%
Minor equipment	122	17.99%
School uniform and dress	123	18.13%
Total	678	100.00%

Source: IPS 2002.

⁶¹ 15 mothers and one father were anonymously interviewed without a third party present, almost all of them Kyrgyz (their children attend about 7 schools). They were asked the same questions concerning their contributions to the schools of their children. Some mothers refused to be interviewed. I thank all the parents contacted for their time and openness in answering my sometimes probing questions. Of course, the survey does not make any claim to obtain representative data, and the numbers quoted below are at best an indication of actual private spending on education in Bishkek. Parents of rural schools students with whom I talked do not report payments beyond the 100 Som a year (see footnote 58).

We first briefly discuss the teaching aids (textbooks, copybooks, uniforms etc.) which the parents buy, but the money does not reach the school. The findings are summarized in Table 12. In fact, very few of the parents bought textbooks for their children, because they are so expensive. The dresses, which include school uniforms and sport dresses as well, at least partially will be used not only in the school.

We turn to the funds which flow to or through the school. The following table summarizes the average parental contributions:

Table 13. Private expenses for education (Som per student)

	monthly costs	yearly costs	share
Single payments			
Temporary additional teaching		164.33	11.08%
Textbook taken in lease		79.00	5.33%
Repair (general, specific, class)		230.67	15.55%
General school needs		28.00	1.89%
Theater, circus, excursions		109.67	7.39%
Gifts to teachers		49.33	3.33%
Monthly payments			
Regular additional teaching	73.27	732.70	49.41%
Cleaning (class, toilet)	4.60	46.00	3.10%
Security	4.33	43.33	2.92%
Total			
Single payments		661.00	44.57%
Monthly payments	92.27	822.03	55.43%
Total		1 483.03	100.00%

Source: IPS 2002.

We see from this table that the major contribution to school is in fact additional teaching costs, which comprises 60% of total parental contributions (of this 49% is on a monthly basis). The next important item are contributions towards maintenance of school facilities (repair, cleaning), which comprise 19%. The third item is contribution towards out of school activities, such as visits to circus, to theatre or excursions.

Overall, the average monthly payment for additional teaching is equal to 92 Som, which is remarkably close to the figure of 82 Som per month derived from Table 11. Given the methodological weaknesses of our approach, this agreement is very good.

We note also that each school had developed a separate system of parental contributions. Some preferred to collect the money for repair only in September, other as

needs arose. Some collected the money for additional education services on the basis of the number additional lessons attended (but usually the teachers decided which students should attend additional lessons), some imposed a single tuition fee equal for all students. Each school had a system of exemptions for poor parents, although non poor students who did not pay were sometimes expelled from the schools⁶². And in one case, all the students paid tuition fee, but only those needing additional lessons received them. In this school the tuition fee was more like an insurance premium in case a student might encounter problems learning some subjects. It seems that the main person responsible for the actual system in practice was the school director, largely uncontrolled by the city authorities.

The parents often did not understand the differences between different payments requested by the school. In particular, none of them considered payments for additional teaching services any different from contributions towards repair. From the point of view of the parents all contributions seem obligatory.

It is clear that the yearly parental contribution of over 1,480 Som per student to schools are not compatible with the data of Table 10, stating that total spending per student, including the budgetary funds, is about 1,560 Som per student. A more thorough analysis is needed, based on representative sampling procedure. Even if we account for inflation⁶³, which means that in 2002 Som the per student spending was about 1,770 Som, we see that parental contributions become a very large proportion of the school budgets. One way to understand this is that the data from the informal survey are exaggerated. However one can also suspect that the official data underestimate the parental contributions.

The reason for this is quite simple. The parents uniformly maintained that they have received no or almost no formal receipts for their payments. Most of it was collected by the teacher, in a number of cases even by one of the students, who then passed the money on to the school director. One of the interviewed students did this work for one year herself. She said that she maintained a copybook with all the payments registered, but that nobody had ever asked her to show this book or otherwise check what she did with the collected funds. If we assume that the school director did roughly the same, we conclude that most of the parental contributions are not registered in any way, and therefore do not become a part of the reported budget data.

This situation clearly makes it very difficult to make rational estimates of actual informal revenue of the schools from parental contributions. Moreover, the whole system

⁶² Or so at least thought some of the interviewed parents. From the point of view of enforcing timely payment, this perception is of course sufficient.

⁶³ Table 8 gives costs in 2000 Som, Table 13 in 2002 Som. The compound inflation for 2000 and 2001 is 13.6% (it was 9.6% in 2000 and 3.7% in 2001).

is built on parents' trust. The schools almost never explain to the parents what happened with their money. We cannot exclude that at least some portion of the parental contribution end up in the pockets of selected teachers and school directors, and maybe also the city officials controlling the schools.

Thus while we have no direct indication that the system is corrupt, it is very clear that there is much room for corruption. The parents, when asked if they trusted the school, almost unanimously responded positively. Similarly, they confirmed when asked if they think that their contributions are used properly by the school. The behavior of the schools, even if strictly speaking informal (or verging on the illegal), meets with social acceptance. With this acceptance the school directors enjoy a significant freedom in managing their schools⁶⁴.

One area, in which the acceptance of the parents is not so apparent, concerns the first grade contributions, or the donations from parents of students accepted to the school. From the point of view of the parents this are not donations, but entry fees, exacted by the school directors. This seems to be a recent phenomenon: parents said that a few years ago it was absent, and that three years ago the entry fees were much lower, of the order of 250 Som. Of the parents interviewed, two paid entry fees for their seven year old children, one 500 Som and one 5,000 Som. Another parent informed me that the entry fee of his local school depended on whether the child lived in the micro-rayon: for children from the micro-rayons, the fee was 500 Som, for those from outside it was 2,500 Som. I have also been told by a number of parents that many schools organized entrance exams for 7 years olds, and special preparation courses to better prepare the candidates. Of course, those were paid courses.

This shows that like overall payment system, also the entry fees depend on the school, and presumably on the school director. However here we see that the system contradicts not only the right to free education, but the right to education as such. If the school in the micro-rayon does not accept the student, he has to find another schools, maybe in a completely different part of the city, and maybe a very bad school. Indeed, it was generally reported by the parents that besides a handful of "good" schools, where the parental contributions were pretty high, there were a number of schools of much lower quality, where it was easier to get into and where the contributions expected from the parents were much lower. It may be another possible explanation of the incompatibility of our Tables 13 and 10, namely that Table 13

⁶⁴ We stress that all directors we talked to were people genuinely trying to provide their students with best possible education, and to this end were using both formal and informal means available. What we are worried is not that the school directors are corrupt, but that there is no mechanism for detecting and correcting possible misuses of considerable power of the directors.

describes mainly the students from "good" Bishkek schools, and in this sense is not representative⁶⁵.

Thus the system of parental contributions to the schools, which from the point of view of the schools looks like a benign way of enlisting parents in helping run and maintain the school, from the point of view of the parents becomes a somewhat sinister enforcement of additional payments, unaccounted for and carrying the risk of student expulsion. And the problems are especially acute with entrance fees, which not only are immoral and illegal, but also verge on the unconstitutional.

6. Conclusions and Recommendations

The discussion of the preceding sections gives us grounds to draw the following conclusions:

1. The oblast and rayon authorities in Kyrgyzstan are in fact delegated offices of the central administration, with highly non-transparent reporting lines, very little budgetary independence, diffused political responsibility and politicized control over financial flows to lower levels of government (Section 1).

2. The principle that funds from the central budget for specific functions should be transferred directly to the level of government responsible for those functions, without any intermediaries, is not observed in Kyrgyzstan. In particular, the categorical grants for education are determined and negotiated in a very non-transparent way (Section 1 and 4).

3. The Kyrgyz education sector is fragmented, and the divided responsibilities for management and for finances make rationalization and reform very difficult to accomplish. Moreover, the situation is compounded by the fact that education decentralization remains a mere formality, not implemented in practice (Section 2).

4. The general secondary education system in Kyrgyzstan, although managed according to the rules and procedures common to other post Soviet republics, displays a remarkable degree of regional differentiation (Section 3) and ethnic differentiation (Appendix B). The financing levels also vary significantly among oblasts (Section 4).

5. Parental contributions make up at least 30% of the school budgets in Bishkek. Their collection and use vary greatly among schools, but in all cases are beyond the effective control of either parents or the central and local authorities. Moreover, the

⁶⁵ In the sample there is a dramatic variation between the families in the overall level of parental contributions. A few of the mothers interviewed paid very little for their children's education.

emerging system of entrance fees for first grade students is unconstitutional and violates human rights and pedagogical principles (Section 5).

In the remainder of this section we concentrate on two key issues: the governance structure and parental contributions. Although reforming the education finance mechanisms is clearly a very important priority, it must be preceded by the establishment of a more rational and transparent management system. With a different sequencing, any efficiency gains will be lost between the rayons and oblasts and will not fully reach and benefit the students.

The non-transparent and dysfunctional governance structure of Kyrgyz education not only makes it very nearly impossible to assess the present use of resources in the sector, but also makes the system very difficult to steer and reform. Radical improvements in the delivery of educational services will, in our view, be very difficult to achieve with this structure left intact.

Kyrgyzstan is a small nation, and it does not need such a complicated education management system. Indeed, it may function well even if education were to be completely recentralized. Introducing an efficient centralized management, subordinated directly to the Ministry of Education, may be the simplest way to cut out local corruption and prepare for the necessary structural changes needed by the sector: restructuring of vocational education, introduction of external monitoring, introducing curricular reforms, cutting down the class time of the Kyrgyz students, and maybe extending the schooling period to 12 years. This would have to be accompanied by a transfer from the Ministry of Finance to the Ministry of Education of the capacities and responsibilities for financing education.

Of course, there are many good reasons to decentralize education, some of them spelled out in the Government document *Concept of Reforming Education in the Kyrgyz Republic*⁶⁶. But all of them presuppose the existence of independent, democratically elected and fiscally stable local governments, a condition which in Kyrgyzstan is unfortunately not satisfied. Only the local self-governments (the cities and the ail okmotu), seem to be willing to speak up for their schools. The ail okmotu are very small, however, and their political and fiscal situation is still very unstable. Their further development is certainly in the best interest of the country. However, taking the schools away from them may deprive them of one of their most important functions. This seems to be a key issue facing serious education reformers, and we have no good recommendations to offer. Perhaps a way may be found to reduce the role of the oblast and the rayons in the education sector, and let only the Ministry and the local self-governments manage the schools.

If that can be achieved, the next step would be to introduce a funding mechanism which would supply the education grants directly to the cities and the ail okmotu. In a well, organized public finance system, the funds for specific services like education

⁶⁵ See Ministry of Education, 2002.

should flow directly to the levels of government actually delivering the services, without intermediaries. Of course, this would be a very serious change from the present system, necessitating an overall reform of the local budgeting system in Kyrgyzstan. We thus see that reforming education finance must be a part of a more general political agenda.

The second issue which we discuss is the un-regulated system of parental contributions. These raise a completely different set of problems, from equity and access to questions of possible corruption and mismanagement. Those issues are very difficult to deal with in any country, and Kyrgyzstan is no exception, of course. Nevertheless it seems that open discussion of these problems is necessary for any reform plans to be realistic and realizable.

Simply put, the Kyrgyz state is not fulfilling its obligation to provide free adequate education for all children. The very high share of parental contributions in city schools budgets means that in the near future the state will not be able to forbid the use of private funds in public schools and to replace them with additional public funds. Those additional public funds are not available. Therefore the state needs to regulate the system of parental contributions. This will not be easy.

Here we have to consider two related but independent difficulties. The first is related to the fact that if the state will openly acknowledge that it is not able to fully financially support the present education offer of the schools, it has to specify very clearly what it can and will support. In other words, the Kyrgyz republic needs to define education standards that it is willing and able to ensure for all the students in the country. A possible mechanism to achieve this is the already functioning division of school programs into the republican, regional and school components.

Such a project would require a certain reduction of the republican component and a clear and enforceable guarantee that the state will fully financially support this component. Of course, a reduction of the republican component is not easy to admit politically, and even less so to define in programmatic and pedagogical terms, but without it no effective regulation seems to be possible. On the other hand, open definition of standards and introduction of a system of monitoring them may in fact have greatest positive impact on rural schools.

The second difficulty related to regulation of parental contributions is the question of how to organize the system of collecting, accounting and spending them. Since a fair amount of this money is not registered now, there is a justifiable fear that once effective regulation is introduced, some of the financial flows may dry up⁶⁷. Also, regulation means

⁶⁷ On the other hand, maybe the first flows to dry up will be precisely those corrupt ones, which end up in somebody's pockets, so little harm would be done to the education process itself.

not only rules and procedures, but also accountability and control. It is not easy to design a control system which will contribute to transparency rather than to additional bribes paid to the controllers. One option would be to use local self-governments, giving them the right to impose some form of local *school tax*, and forbidding direct payments to the school itself. In place of a myriad of different small charges we would have one regular payment. This would create a clear system of financial flows to the school, and clear accountability of school directors for the use of those funds. Another option would be to empower the custodian councils⁶⁸ to collect and distribute those fees. However, the custodian councils have yet to be organized throughout Kyrgyzstan, and their capacities to manage these complex issues would have to be strengthened.

We do not feel competent to offer clear and far reaching recommendations to either the governance structure problem or the problem of parental contributions in Kyrgyz education. We believe however that those are two crucial problems which need to be discussed openly within the education community in Kyrgyzstan and among wider public as well. Also, much better empirical evidence is needed before concrete strategies can be formulated.

In the end, both key issues identified in the present report touch on one central issue, that of the limits and the form of responsibility of the Kyrgyz Republic for its education system, and especially for its financing. This responsibility is now quite fragmented and diffused and, for the benefit of all Kyrgyz children, needs to be reasserted with energy and vision.

⁶⁸ See Ministry of Education 2002.

Appendix A. Fiscal Position of Kyrgyz Oblasts

A detailed analysis of fiscal structure of Kyrgyz public finances was performed by M. Gallagher⁶⁹, who used 1999 data. For the purposes of this Appendix, we use Ministry of Finance data for fiscal year 2000, which shows some variation to results of Gallagher⁷⁰.

The main sources of revenues of LSA's are as follows:

- transfers from the central budget (49% of local revenues), including categorical grants (29%) and equalization grants (6%), and reciprocal accounts clearing⁷¹ (14%),
- shared taxes (25%), mainly the personal income tax (8%), profit tax (6%), retail sale tax (7%) and excise (11%),
- local taxes (7%), mainly the land tax (5%),
- non tax revenues (13%), mainly special means (7%) and administrative fees and charges (6%).

Those revenues streams are however very unequally distributed between the oblast⁷².

Table A.1. Main revenue streams of LSA's (thous. Som)

	Total	Shared taxes	Local taxes	Non-tax	Transfers
Kyrgyz Republic	3 339 160	1 064 553	222 009	427 187	1 625 411
Batken	239 769	25 167	8 921	15 688	189 992
Jalal-Abad	489 579	121 221	25 588	35 060	307 710
Issyk-Kul	252 735	66 053	28 783	22 627	135 272
Narin	210 043	8 700	9 905	5 051	186 387
Osh	636 157	105 893	33 939	62 042	434 282
Talas	158 904	8 346	18 362	6 293	125 903
Chui	594 392	254 235	64 556	85 072	190 529
Bishkek	757 582	474 937	31 956	195 353	55 336

Source: MF 2000.

⁶⁹ See Gallagher 2000.

⁷⁰ For instance, as regards main revenues streams, we report greater income from shared taxes and much smaller income from the land tax. Data obtained from the Ministry of Finance, recalculated. Oblast data are consolidated all okmotu, rayon and oblast budgets, as are expenditures data below.

⁷¹ Categorical grants are discussed in Section 4. Reciprocal accounts clearing is a budgetary classification used mainly to record additional transfers to LSA's during the budget year due to some unforeseen changes, such as increase of teacher salaries.

⁷² Gallagher provides data by rayon, but our newer data are aggregated to oblast level.

⁷³ However, the distribution of transfers from the oblasts to the rayons is more political and does not follow the poverty distribution. See Gallagher 2000.

We can see that Bishkek collects nearly half of shared taxes and of non-tax revenues, and receives very few transfers. In general, transfers are directed to poorer regions of Kyrgyzstan . A better insight into the fiscal structure of public finance of LSA's is obtained by looking at the role of each source of income for each of the oblasts, as demonstrated in table below.

Table A.2. Structure of revenues of LSA's

	Shared taxes	Local taxes	Non-tax	Transfers
Kyrgyz Republic	31.88%	6.65%	12.79%	48.68%
Batken	10.50%	3.72%	6.54%	79.24%
Jalal-Abad	24.76%	5.23%	7.16%	62.85%
Issyk-Kul	26.14%	11.39%	8.95%	53.52%
Narin	4.14%	4.72%	2.40%	88.74%
Osh	16.65%	5.33%	9.75%	68.27%
Talas	5.25%	11.56%	3.96%	79.23%
Chui	42.77%	10.86%	14.31%	32.05%
Bishkek	62.69%	4.22%	25.79%	7.30%

Table A.2 shows that although the transfers account for a half of local government income, in some oblast it is as high as 90%, while in Chui it is 32% and in Bishkek only 7%. On the other hand, Bishkek is the only jurisdiction which relies heavily on shared taxes, while Narin derives only 4% of its income from shared taxes⁷⁴. Another useful way of looking at those data is to consider per capita oblast revenues.

Table A.3. Per capita revenues of LSA's (Som)

	Total	Shared taxes	Local taxes	Non-tax	Transfers
Kyrgyz Republic	688.38	219.46	45.77	88.07	335.09
Batken	630.73	66.20	23.47	41.27	499.79
Jalal-Abad	563.03	139.41	29.43	40.32	353.88
Issyk-Kul	608.25	158.97	69.27	54.45	325.55
Narin	844.57	34.98	39.83	20.31	749.45
Osh	540.65	90.00	28.84	52.73	369.09
Talas	793.45	41.68	91.68	31.42	628.67
Chui	769.75	329.24	83.60	110.17	246.74
Bishkek	961.72	602.91	40.57	247.99	70.25

⁷⁴ The share of national taxes retained at local level, that is 35%, is uniform across the country.

We first compare the results of Table A.3 with the oblast poverty index (see Table 1). Percentage of non-poor population is well correlated with the shared taxes per capita and with non-tax revenue per capita (both correlation coefficients $R=0.93$). It is also very strongly negatively correlated with transfers per capita (correlation coefficient $R=-0.84$). This means that transfers perform an equalizing role in the Kyrgyz fiscal system.

As expected, the largest per capita revenue is in Bishkek, by far the richest city in Kyrgyzstan. However, we notice (following Gallagher) that the small poor Narin oblast also has very high per capita revenues, due to extremely high per capita transfers. The lowest per capita revenues are in the poor southern oblasts of Osh and Jalal-Abad, where not very high income from the shared taxes is not accompanied by sufficient per capita transfers. Thus the transfers only partially equalize the poverty of the oblasts (the per capita income of Osh is about half that of Bishkek). Another expression of this fact is that total per capita revenues are positively, though moderately correlated with the percentage of non-poor population (correlation coefficient $R=0.51$).

Turning now to the expenditure side of the local budgets, we first provide total spending and spending on education, on health, and on housing and utilities.

Table A.4. Consolidated expenditures by oblast (thous. Som)

	Total	Education	Health	Housing	Other
Kyrgyz Republic	3 382 156	1 550 869	866 746	255 352	709 190
Batken	239 733	113 835	52 977	1 962	70 959
Jalal-Abad	517 242	258 248	143 040	7 265	108 689
Issyk Kul	257 583	129 849	74 281	4 161	49 291
Narin	209 926	109 390	56 468	1 075	42 994
Osh	666 763	343 275	185 532	25 640	112 317
Talas	159 148	84 050	40 974	1 324	32 801
Chui	568 030	260 060	152 458	17 632	137 880
Bishkek	763 731	252 162	161 016	196 293	154 260

Source: MF 2000.

We can see, comparing with Table A.1, that the consolidated oblast budgets are in deficit, but it is not very large⁷⁵. Bishkek accounts of 23% of total local expenditures, and for 77% of all expenditures on housing and utilities. As for the revenues side, it is instructive to look at structure of expenditures.

⁷⁵ The deficits are financed by non-used funds from previous year or by subsidies from the republican budget.

Table A.5. Structure of consolidated expenditures by oblast

	Education	Health	Housing	Other
Kyrgyz Republic	45.85%	25.63%	7.55%	20.97%
Batken	47.48%	22.10%	0.82%	29.60%
Jalal-Abad	49.93%	27.65%	1.40%	21.01%
Issyk Kul	50.41%	28.84%	1.62%	19.14%
Narin	52.11%	26.90%	0.51%	20.48%
Osh	51.48%	27.83%	3.85%	16.85%
Talas	52.81%	25.75%	0.83%	20.61%
Chui	45.78%	26.84%	3.10%	24.27%
Bishkek	33.02%	21.08%	25.70%	20.20%

Source: MF 2000.

Education is the lion share of local expenditures, varying from 33% in Bishkek to 53% in Talas oblast. Only in Bishkek is housing and utilities a major expenditure item. Otherwise, the expenditure structure is rather similar across oblast.

Our final way of looking at expenditures is to consider per capita expenditures, given in Table A.6.

Table A.6. Per capita consolidated expenditures by oblast (Som)

	Education	Health	Housing	Other
Kyrgyz Republic	319.72	178.68	52.64	146.20
Batken	299.45	139.36	5.16	186.66
Jalal-Abad	296.99	164.50	8.36	125.00
Issyk Kul	312.50	178.77	10.01	118.63
Narin	439.85	227.05	4.32	172.87
Osh	291.74	157.68	21.79	95.45
Talas	419.68	204.60	6.61	163.78
Chui	336.78	197.44	22.83	178.56
Bishkek	320.11	204.40	249.19	195.83

We note that poor oblasts of Narin and Talas have the highest per capita spending for education and for health. This spending is financed mostly through the transfer (see Table A.3). The lowest expenditures on education and on health are in three south oblasts: Batken, Jalal-Abad and Osh. We note finally that due to different age compositions of local

populations, education spending per capita is not very relevant, one should think of spending per student. We discuss this issue in Section 4.

Since categorical grants are used primarily to finance salaries in education and health, it is useful to compare them with the expenditures in those two sectors. Overall, transfers make up over 67% of combined education and health expenditures. However this amounts to only 16% in Bishkek and 46% in Chui, and to over 100% in Batken, Narin and Talas. We conclude that in Bishkek education is financed mostly from own revenues (such as shared taxes), while in other oblasts mostly from the categorical grants.

Appendix B. Ethnic Issues in Kyrgyz Education

Kyrgyzstan is a multiethnic society, with the majority Kyrgyz population living together with two significant minorities, the Uzbek (14% of the total population) and the Russians (12% of the total population), and a large number of smaller ethnic groups (together 9% of the population). The following table shows the geographical distribution of the ethnic groups.

Table B.1⁷⁶. Distribution of ethnic groups in Kyrgyzstan (1999)

	Population	% urban	Kyrgyz	Uzbek	Russian	Other
Kyrgyz Republic	4 850 734	35.3%	64.5%	13.7%	12.4%	9.4%
Batken	380 142	19.6%	74.7%	14.5%	2.2%	8.6%
Jalal-Abad	869 539	23.4%	69.8%	24.4%	2.1%	3.7%
Issyk-Kul	415 513	30.6%	79.0%	0.8%	13.1%	7.1%
Narin	248 699	18.5%	98.9%			0.5%
Osh	1 176 646	23.5%	63.8%	31.1%	1.3%	3.8%
Talas	200 269	16,9%	88.4%	0.9%	4.0%	6.8%
Chui	772 188	21.9%	43.7%	1.6%	31.8%	22.9%
Bishkek	787 738	99.4%	50.5%	1.6%	32.1%	15.8%

Source: NSC 2001.

The Russians are significantly present only in the North, comprising 32% of population of Chui oblast and of Bishkek, and in fact 83% of all Russians are concentrated there. The Uzbeks are significantly present only in the southern oblasts of Jalal-Abad and Osh, and in fact 87% of all Uzbeks are concentrated there. Thus we see that virtually all oblasts of Kyrgyzstan have mixed ethnic population, and only the small Narin oblast can be considered ethnically "pure". This distribution has of course impact on the education system, as we discuss below.

The ethnic composition of the Kyrgyz society has undergone radical changes in the last ten years. Indeed, in 1989, the Kyrgyz constituted 52.4% of the total population, with the Russians as the largest minority of 21.5% and the Uzbeks at 12.9%. By 1994, there were 64.9% of Kyrgyz and only 13.8% of Russians. There was a very significant Russian emigration to Russia, which reduced the Russian population in Kyrgyzstan by one third⁷⁷. Moreover higher fertility rates in rural areas increased the Kyrgyz and Uzbek populations.

⁷⁶ Based on Statistical Yearbook, *The population of Kyrgyzstan*, Bishkek 2002.

⁷⁷ Overall, emigration had more economic than ethnic character. However it seems that ethnic Russians found it easier to relocate, in part due to the immigration policies of the Russian Federation.

Before we take a look at general secondary education from the point of view of instruction language, it is useful to make the following general comment. The ethnic issues have not become a significant source of tension within the Kyrgyz education system, with possible exception of Uzbek schools in the South, and some Kyrgyz observers do not think that raising these problems is useful or relevant. However the experience of some other post communist countries (such as former Yugoslavia) shows that potential conflicts may suddenly become very painful. It is therefore important, in our view, to look carefully at the present situation, to analyze the present inequalities and to begin to deal with them before they become too difficult.

The teaching in Kyrgyzstan's schools is conducted in four languages, Kyrgyz, Uzbek⁷⁸, Russian and Tajik⁷⁹. We know already from Table B.1 that ethnic composition varies significantly by oblast. Therefore the following data are also broken by oblast.

Table B.2. General school students by instruction language

	Kyrgyz	Uzbek	Russian	Tajik
Kyrgyz Republic	63.63%	13.39%	22.68%	0.30%
Batken	74.49%	15.21%	7.18%	3.12%
Jalal-Abad	71.36%	20.21%	8.43%	
Issyk-Kul	72.71%		27.29%	
Narin	88.17%		11.83%	
Osh	63.80%	28.75%	7.39%	0.06%
Talas	88.23%		11.77%	
Chui	39.86%	0.14%	60.00%	
Bishkek	34.83%		65.17%	

Source: NSC 2000.

We need to compare this table with Table B.1. When looking only at data for the whole republic, we may conclude all Kyrgyz and Uzbek children learn in mother tongue, while Russian and other minorities learn in Russian. This may be true of some southern oblasts, however in general it is mistaken. Even in the "purest" Narin oblast we see 12% students receiving instruction in Russian. Those are very clearly Kyrgyz children. Similarly for Bishkek and Chui, we see a proportion of Kyrgyz children attending Russian language schools. When we look at historical data, we notice that decline in the share of Russians in

⁷⁸ We have not had the chance to analyze the situation in Uzbek schools. It seems, however, that it is far from good. In particular, Kyrgyzstan seems not to be providing textbooks in Uzbek, only in Kyrgyz and Russian languages.

⁷⁹ The last one is really minor, as there are only about 3,3 thousand students attending Tajik classes (most of them in Batken oblast).

the overall population from 21% to 12% has been accompanied by a decline of the share of students in Russian language schools from 35% to 23%. Clearly, a steady or even slightly increasing proportion of Kyrgyz students have been receiving instruction in Russian, and this at precisely the time when the newly independent Kyrgyz Republic was establishing the Kyrgyz as "titular nation". This trend is rather strange when looked at from European post-communist perspective⁸⁰ and needs to be explained.

The explanation seems to be related to teaching quality⁸¹. A recent study of primary school teaching achievements shows very clearly that students in Russian language schools perform better in linguistic and mathematical tests than students in Kyrgyz language schools⁸². As an illustration, we collect some data of that study in the following table, which gives the percentage of students who passed tests in identified skills, in three broader categories (language skills, numerical skills, life skills), by the instruction language.

Table B.3. Success rate in skills, by instruction language

	Kyrgyz	Russian	Uzbek	Total
Literacy skills				
Writing and expressing thoughts	90.4%	98.1%	75.7%	90.0%
Grammar and spelling	78.1%	79.3%	85.3%	81.0%
Vocabulary	84.0%	84.6%	80.2%	83.0%
Reading and understanding	57.9%	62.1%	24.1%	48.0%
Numerical skills				
Arithmetic and numeracy	93.4%	95.7%	94.1%	94.4%
Measuring and geometry	81.9%	86.2%	85.7%	84.6%
Logical thinking	78.3%	83.2%	83.3%	81.6%
Life skills				
Hygiene and healthy lifestyles	84.8%	90.8%	89.5%	84.4%
Everyday skills	90.7%	92.0%	91.0%	91.2%
Social skills	85.7%	87.2%	89.5%	87.5%

Source: MLA 2000.

The parents think, and are right to think, that Russian language offers their children better life chances. Moreover the same study found that although the provision of textbooks

⁸⁰ Of course, while Russians may be a minority, the Russian language is still and is likely to remain the dominant language of culture, technology and higher education.

⁸¹ This view is also supported by the informal survey of Bishkek students' mothers, described in Section 5.

⁸² See Monitoring Learning Achievements, Bishkek 2001. The students learning in Uzbek are only slightly behind their colleagues learning in Russian.

is insufficient overall, Russian language textbooks seem to more easily available. Anecdotal evidence suggests that the language in which the Kyrgyz textbooks are written is often very poor. Moreover many parents commented that Russian language schools were better equipped (this may be however due to the fact that they are often located in the cities).

Two main reasons may be offered to explain the results of Table B.3. One is that their are due to the differences between urban and rural schools. Table B.4 shows that Russian language instruction is more an urban phenomenon than Kyrgyz language instruction. The other is related to higher overall level of education of the Russian population. International evidence clearly shows the importance of parental educational achievements on test results. Both reasons indicate that when given a choice of school for their children, Kyrgyz parents should think twice before choosing the Kyrgyz language instruction.

Another important source of data for schools which can be used to analyze education inputs is the school mapping survey. Of greatest interest is the data presented in Table 7, broken by instruction language. Our first table gives the number of schools and students by instruction language, broken by the schools providing instruction in different languages.

Table B.4. Schools and students by instruction language, 1977

Schools providing instruction in:	Students learning in:					% rural students
	Schools	all	Kyrgyz	Russian	Uzbek	
Total	1 974	1 053 379	680 873	230 741	141 765	72.30%
Kyrgyz	1 301	531 800	531 800			84.03%
Kyrgyz and Russian	293	242 391	123 012	119 379		58.78%
Uzbek	143	111 628			111 628	67.55%
Russian	154	100 791		100 791		45.52%
Kyrgyz and Uzbek	63	39 620	21 288		18 332	89.67%
Kyrgyz, Russian and Uzbek	12	15 397	4 773	4 672	5 952	61.92%
Russian and Uzbek	8	11 752		5 899	5 853	50.41%

Source: SMS 1977.

We see that of the schools providing teaching in more than one language, only the Kyrgyz and Russian schools teach significant number of students. We will therefore aggregate the three last categories into one category, other multi-language schools (denoted ONLS in table below). This category comprises 86 schools teaching 66 thousand students, 76% of whom are rural students.

The following table provides the average class size (CS), teachers per class (TC), weekly teaching time in hours received by a class (HC) and the number of lessons a teacher gives (TL), by instruction language and for urban and rural schools.

Table B.5. Education inputs by instruction language and school location, 1977

			Rural			Urban		
	CS	TC	HC	TL	CS	TC	HC	TL
Kyrgyz	22.87	1.65	30.08	18.25	25.31	1.63	33.40	20.46
Kyrgyz and Russian	24.29	1.44	30.99	21.48	27.41	1.38	31.58	22.92
Russian	25.49	1.37	30.77	22.45	27.33	1.58	37.00	23.39
Uzbek	26.52	1.63	31.14	19.12	28.79	1.42	31.77	22.43
OMLS	24.29	1.50	29.89	19.97	27.08	1.34	30.79	22.89

Source: SMS 1977.

As noted already in Table 7, we see a significant difference between the rural and urban schools. Within rural schools, the teaching time a class receives (HC) is the same for all instruction languages. However, it is achieved in different ways. Kyrgyz schools have the largest number of teachers per class, and the lowest teacher load (TL), while Russian schools have the lowest number of teachers per class, but the teachers work longest hours. The same general characteristics are true for urban schools as well, with one very important exception: the urban Russian language schools have large number of teachers per class, and in consequence provide their children with a very high teaching time, on average 37 hours per week!

The results of Table B.5 show that there is indeed a cultural difference between Kyrgyz and Russian language schools. This may be behind the observed differences between the Chui and Narin oblast, noted in Table 7.

Appendix C. List of Persons Interviewed

The interviews with the following persons contributed to the present report:

- Abdulaeva Gulkhumar, Social Sphere Department, National Statistical Committee
- Abdyrasheva Begaim Ozgorusheva, Deputy Head of RayFU, Ak-Suy Rayon
- Alygunova Mastura Abdykerimovna, Social Sector Department, Ministry of Finance
- Tracy Atwood, USAID Representative, Bishkek
- Bazarkulov Mukasz Bazarkulovich, Head of OblONO, Chui Oblast, former Minister of Education
- Davletova Dinara Kurbanovna, Deputy Head of OblONO, Issyk-Kul Oblast
- Evseeva Olga Evgenevna, Social Sector Department, Ministry of Finance
- Chedomir Flego, Project Director, International Foundation for Election Systems
- Geoff Howse, Project Evaluation Economist, Academy for Educational Development
- Imanbekov Tylek Usekeevich, Head of RayFU, Ak-Suy Rayon
- Jamankulova Aigul Zhumakanovna, Head of Economic Department, Ministry of Education
- Jeentaev Suyumbek Rakymzhanovich, Director, Secondary School in Tepke Village, Ak-Suy Rayon
- Simon Jenkins, Civic Education Curriculum Advisor, International Foundation for Election Systems,
- Kozhoshev Arzybek Orozbekovitch, Head of Department of Local Budgets, Ministry of Finance
- Deborah Klepp, Deputy Chief of Mission, US Embassy in Bishkek
- Koychumanova Aigul Jumashevna, Head of Social Sphere Department, National Statistical Committee
- William Kugler, Resident Advisor, Urban Institute, Bishkek,
- Madeyuev Akhmat Nizamivitch, Director, Center of Policy Studies
- Makarova Tatiana Mikhailovna, Director, Gymnasium 70, Bishkek
- Okumbek uluu Bektur, Local Government Program Coordinator, Coalition for Democracy and Civil Society
- Oruntaev Namatbek Oruntaevich, Director, Bishkek Automotor College
- Rtishcheva Svetlana Genadievna, Accountant, Gymnasium 23, Bishkek
- Rysaliev Imankadyr Zarlykovich, First Deputy President, National Statistical Committee
- Sabyrova Zhymparkul Zhumadylovna, Head of Social Sector Department, Ministry of Finance
- Satkeev Kamyt Tolonbaevich, Deputy Minister, Ministry of Education
- Sitolenko Andrei Vladimirovich, Director, Gymnasium 23, Bishkek
- Temiraliev Malik Urkadyrovich, Head of RayONO, Ak-Suy Rayon
- Toromyrzaev Emirlan Toromyrzaevich, First Deputy Minister, Ministry of Finance
- Charles Undeland, Advisor, Urban Institute, Bishkek

Appendix D. Sources of Statistical Data

The following sources of statistical data were used in the present report:

1. School Mapping Survey 1977
Data about individual schools, including enrollment by instruction language, number of teacher, administration and other staff, number of classes and of weekly teaching hours as organized by school teaching plan. Abbreviation: SMS 1977.
2. Ministry of Finance 2000
Revenues of LSA's by revenue source, and expenditures by sector of the economy, aggregated to oblast level. We use only actual revenues and expenditures, not the planed ones. Abbreviation: MF 2000.
3. Ministry of Finance Education 2000
Expenditures of LSA's by budgetary classification, aggregated to oblast level. We use only data for secondary schools, budgetary classification 4.21.1 (we thus ignore the remaining articles in the general education, 4.21, which account for about 8% of general education expenditures). We use only actual revenues and expenditures, not the planed ones. Abbreviation: MF Ed 2000.
4. Monitoring Learning Achievements 2000
Published report on the results of a survey of 3,400 students and 3,400 parents from 150 schools, as well as teachers and school directors. Abbreviation: MLA 2000.
5. National Statistical Committee 2000
Published data on the education sector, Education in the Kyrgyz Republic, Bishkek 2000. Abbreviation: NSC 2000.
6. National Statistical Committee 2001,
Published demographic data, Demographic Yearbook of the Kyrgyz Republic, Bishkek 2001. Abbreviation: NSC 2001.
7. Informal Survey of Parents 2002
Results of a survey on private education expenditures of 16 parents of Bishkek schoolchildren. Abbreviation: ISP 2002.
8. Ak Sui rayon data 2002.
Data on individual schools from Ak Sui Rayon, Issyk-Kul oblast, obtained from RayFU. Abbreviation: AS 2002.

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