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# **Kazakhstan**

## **Reforming Intergovernmental Fiscal Relations: Lessons from International Experience**

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Central Asia Country Unit  
Europe and Central Asia Region



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## **CURRENCY EQUIVALENTS**

Currency Unit – Tenge 1= . 0.0075 US\$

## **WEIGHTS AND MEASURES**

The Metric System is used throughout the report.

## **FISCAL YEAR**

January 1 to December 31

## **ABBREVIATIONS AND ACRONYMS**

CIT	Corporate Income Tax
DRG	Diagnosis related group
EU8	Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia
JERP	Joint Economic Research Program
MOEBP	Ministry of Economy and Budget Planning
PIT	Personal Income Tax
VAT	Value Added Tax

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## **FOREWORD**

This report is based on the findings of missions to Kazakhstan in August and December 2004. It was prepared by William Dillinger (Task Manager) with the assistance of Ilyas Sarsenov and Stepan Titov of the World Bank. The team wishes to acknowledge the valuable advice and information provided by Minister Kelimbetov and other officials of the Ministry of Economy and Budget Planning, the Department of Economic Policy of the President's Administration, staff of the oblasts of South Kazakhstan and Karaganda, and the Public Policy Research Center.

## EXECUTIVE SUMMARY

Kazakhstan's present system for allocating revenues to subnational governments is largely based on historical trends. These, in turn, have their origins in the Soviet-era practice of assigning jurisdictions fixed shares of the revenues collected within their boundaries. This has given rise to substantial disparities in per capita revenues among oblasts.

Such disparities are not inherently undesirable. Costs vary across jurisdictions. Different levels of spending are required to achieve equivalent outcomes. But the size of the current disparities may leave poorer jurisdictions unable to provide adequate levels of basic education and health. This has important implications for Kazakhstan's efforts to reduce poverty.

This report looks at ways to address this problem. It draws, in part, on the practices of large Western federations. It also draws on the experiences of the recent EU accession countries--all of which once had systems similar to Kazakhstan's.

The report makes two major recommendations. First, it recommends that the Government provide separate, earmarked funding for functions with critical distributional implications. This would include primary education and primary health. These services would be financed on a capitation basis (i.e., an equal amount per pupil and registered patient, respectively.) The remaining subnational functions would be financed from an annually-determined share of the budget. In principle, these funds could be distributed on a per capita basis. To ease the adjustment to the new system, part of the funding could continue to be distributed on the basis of origin.

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## INTRODUCTION

1. Kazakhstan is in the process of transforming the way it allocates public sector resources. The present system has its roots in the Soviet model, where the state allocated resources through annual negotiations over physical targets and resources within a single planning framework. The country is moving toward a system in which separate functions are assigned to separate tiers of government and some effort is made to provide a stable, transparent source of revenue to each tier. While some progress has been made on both fronts, much remains to be done. In particular, the Government has yet to derive a transparent, equitable basis for allocating resources among tiers of government.

2. The Government requested Bank advice on this issue as part of the ongoing Joint Economic Research Program (JERP). In particular, the Government sought the experience of relevant comparator countries. As agreed during discussions of the concept paper, these include the large scale federal systems of the West (including Canada, Germany and Australia). They also include a selected group of unitary countries from the former Socialist bloc: the eight Eastern European countries that recently joined the European Union. All eight began the 1990's with a Soviet-era intergovernmental structure, much like Kazakhstan's. Their efforts to conform to Western European models contain useful lessons for Kazakhstan.

## BACKGROUND

3. Kazakhstan is a unitary state. The President is directly elected for a 7-year term, (most recently in January 1999). The President serves as commander-in-chief, sets foreign policy, can initiate legislation, and appoints the Prime Minister, subject to Parliamentary approval. The legislative branch is comprised of a lower house (the Majlis) and upper house (the Senate). Sixty-seven of the 77 members of the Majlis are elected from single mandate districts. The other ten members are elected by party-list vote on the basis of proportional representation. The Senate has 39 members. Two senators are selected by each of the elected assemblies of the 16 first-tier subnational units (14 oblasts, plus Astana and Almaty). The President appoints the remaining seven senators. Although the legislature has the authority to initiate legislation, most is proposed by the Government.

4. Subnational administration is composed of two tiers of government. At the provincial level, there are 14 oblasts and two cities with oblast status, Almaty and Astana. Oblasts are further subdivided into 168 districts (rayons) and 39 towns with rayon status, yielding a total of 207 third-tier units of government. Both tiers of subnational administration government are headed by chairmen (*akims*). The President appoints the akims of the oblasts and Astana and Almaty. Akims of other administrative units may be appointed or elected to office, at the discretion of the President. Both tiers also have legislative bodies (maslikhats) whose members are elected by universal adult suffrage for four year terms. The powers of subnational maslikhats are severely circumscribed. Under the Constitution, the akims are an integral part of the central government executive

branch and function as representatives of the President. The role of maslikhats is largely limited to reviewing and approving actions initiated by the akims.

### Assignment of Functions

5. From independence until 1998, the division of functions between tiers of government largely reflected the practices of the previous Soviet era. Expenditure assignments were not formalized and were often subject to change. In 1998, new legislation explicitly distinguished the respective functions of the central government from those of subnational governments (a term which included both oblasts and rayons). Beginning in 2004, there have been attempts to distinguish the respective functional responsibilities of the two tiers of subnational governments, although some overlaps and ambiguities remain. (See Table 2.)

6. *Defense, justice and public security.* The current Budget Law (as amended through July 8, 2005) assigns the Republican budget exclusive responsibility for (inter alia) defense and operation of the judiciary and penal system. Although all three levels of government are responsible for ‘ensuring public order and public security’ and for military recruitment, the Republic level dominates this category of expenditure. As shown in Table 1, subnational governments account for only 17 percent of public expenditure on defense and 21 percent of public expenditure on police.

	as % total public sector spending on function	as % total subnational spending
admin	26%	4%
defense	17%	2%
police	21%	4%
education	88%	31%
health	82%	20%
social asst	15%	7%
utilities	98%	12%
transport	33%	6%
other	30%	14%
total	43%	100%

As shown in Table 1, subnational governments account for only 17 percent of public expenditure on defense and 21 percent of public expenditure on police.

7. *Education.* Education dominates the expenditures of subnational governments. As shown in Table 1, subnational governments account for nearly 90 percent of total public expenditure on education. By the same token, education spending consumes about one-third of subnational budgets.

8. Under the current budget code, the Republic’s role in education is limited to higher education and the development of textbooks and teaching materials. The role of oblasts is similarly limited. The current budget code confines oblasts’ responsibilities to vocational education. This is reiterated in sectoral legislation<sup>1</sup>, which limits the responsibilities of oblasts to ‘elementary and secondary vocational education, special education, general education under special educational programs (e.g. for the handicapped), and general education for talented children in specialized schools.’<sup>2</sup> Rayons therefore bear the legislative brunt of compulsory education. Under the budget code, they are exclusively responsible for the organization and provision of compulsory

<sup>1</sup> Law...on Education (No 389-1) as amended through December 20, 2004

<sup>2</sup> Local Government Law nevertheless assigns both oblasts and rayons overlapping responsibility for ‘ensuring implementation of civil right for free (secondary) education.’

education (grades 1-11). Sectoral legislation, similarly, requires them to ‘secure provision of citizens with compulsory secondary general education (i.e., grades 1-11.)

9. *Health Care.* Subnational governments also play a preeminent role in health care. Under the budget code, the Republic’s role is largely limited to the provision of specialized medical assistance and medical rehabilitation at ‘state-run public health institutions of Republic significance.’<sup>3</sup> Oblasts bear the brunt of health care responsibilities. The budget code assigns them responsibility for ensuring ‘healthy sanitary/epidemiological conditions for the population and for providing ‘other health services with the exception of those provided by the Republican budget’. This is further elaborated in the Local Government Law<sup>4</sup>, which requires oblasts to ensure that ‘citizens’ rights to guaranteed free medical care are implemented according to national standards’. Neither the budget code nor the local government law assigns any health care responsibilities to the rayon level.

10. *Social protection.* The Budget Code assigns the majority of social protection responsibilities to the Republic level. These include old-age pensions, state social allowances, and childbirth allowances. This is reiterated in sectoral legislation, which specifically assigns these functions to the Ministry of Labor and Social Protection. Oblasts are assigned responsibility for other vulnerable groups, including orphans and the disabled. Under the budget code, rayons are responsible for the *administration* of state targeted social assistance and social assistance to ‘some categories of indigent citizens at the discretion of the local akimat.’ Sectoral legislation further defines the latter to include housing assistance, social help provided at home and ‘social adaptation of homeless’. As noted in Table 2, the local government law is less explicit on the division of functions between oblasts and rayons. Oblasts are required to ‘develop and implement programs facilitating employment and poverty reduction, coordinate social assistance to socially vulnerable groups’. Rayons must ‘address issues of social assistance, protection of maternity and childhood, provide targeted assistance to socially vulnerable strata and coordinate charity assistance.’

11. *Other functions.* Taken together, social services—education, health, and social assistance—account for about sixty percent of total subnational expenditure. (In 2004, the proportion was 58 percent, down from 60 percent in 2003). Expenditures on housing, public utilities, and road transportations account for much of the rest. The budget code provides no direct role for the central government in the provision of housing and related utilities. The oblasts’ role is limited to the provision of gas. Rayons therefore bear the brunt of expenditures in these sectors. Under the budget code, their responsibilities include construction of public housing, construction and maintenance of water supply facilities, water treatment and draining systems, sewerage, heating and electricity networks (when owned by the municipalities); solid waste management, street lighting. (Note that in Almaty and Astana, the roles of rayons are performed by oblast level administrations.). Expenditures on housing and public utilities account for twelve percent

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<sup>3</sup> Unlike many former-Soviet-bloc countries, Kazakhstan has no extra-budgetary health insurance system. In 1998, the Compulsory Medical Insurance Fund (CMIF) was extinguished and its functions integrated into the respective budgets of the central and subnational governments.

<sup>4</sup> Law... No 148-II of January 2001, as amended through April 15, 2005

of subnational expenditures, and nearly all (98 percent) of public sector spending in this sector. Responsibility for road construction and maintenance is divided among the three levels of government according to the national system of road classification. Roads of international and Republic significance and assigned to the Republic level, and roads of oblast and rayon significance are assigned to their respective tiers.

12. It is not clear that the legally-mandated division of functions between levels of government is precisely observed in practice—particularly as regards to the respective responsibilities of oblasts and rayons. A recent report by the Center for Research and Development states that the “demarcation of functions between oblast and rayon levels in each oblast is established by oblast akims at their own discretion. For example, health services and education in certain oblasts are financed by oblast budgets, while in other oblasts they are financed by rayon and city budgets.” The report finds, for example, that in South Kazakhstan oblast, the oblast budget finances medical assistance to AIDS infected patients, campaigns against epidemics, and specialist medical assistance to cancer patients and those with drug abuse issues. Rayons finance rural medical attention and obstetrical centers.<sup>5</sup>

#### **Box 1 The Macroeconomic Context of Intergovernmental Fiscal Reform**

Kazakhstan’s current macroeconomic situation has several implications for intergovernmental fiscal reforms. Overall, it provides an supportive environment. GDP grew by over 9% in 2004. Rapid growth is expected to continue. As a result, the system for distributing revenues can altered without imposing substantial cuts on any one jurisdiction.

But growth has been fueled mainly by the oil sector, which attracts \$4-5 billion in FDI annually. This is widening economic disparities among oblasts. Rapid growth is concentrated in the oil-rich regions and the two largest cities where the bulk of private and public resources are spent. As these economic disparities increase, the urgency of redistributive transfers will grow as well.

Increases in oil and gas production and high world prices are also contributing to rapid increases in central government revenues. As a result, the country has run fiscal surpluses (averaging 2% of GDP) since 2001. Oil revenues are inherently volatile. These surpluses have therefore been set aside in a separate oil fund managed by the central government. As noted in the World Bank’ recent country economic memorandum, these reserves will have to be managed prudently. Any sudden increase in the total volume of public spending will require further adjustments in the division of revenues between tiers of government.

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<sup>5</sup> Center for Research and Development , 2004, *The Distribution of Governmental Budget Expenditures Between Central, Regional and Local Administrative Levels in the Republic of Kazakhstan*, Almaty

Table 2 Summary of Legislation Governing Division of Functional Responsibilities Between Tiers of Government

	Budget Code (as amended through July 8, 2005)			Local Government Law (as amended through April 15, 2005)	
	Republic	Oblasts	Rayons	Oblasts	Rayons
education	higher education and certain types of vocational, secondary education	vocational education	organization and provision of compulsory education (grades 1-11)	ensure implementation of civil right of free (grades 1-11) education	ensure implementation of civil right to free (grades 1-11) education
health	public health service*, provision of highly specialized medical assistance, medical rehabilitation at state run public health institutions of republic	provision of healthy sanitary epidemiological situation for the population; provision of other health services **		ensure that citizens rights for guaranteed free medical care are implemented according to national standards; ensure sanitary and epidemiological well being of community	
social assist	pensions, state social allowances, childbirth allowances	social welfare of orphans, aged and disabled people	housing subsidies, administration of state targeted social assistance and social assistance to 'some categories of indigent citizens at the discretion of the local akhimat.'	develop and implement programs facilitating employment and poverty reduction, coordinate social assistance to socially vulnerable groups	address issues of social assistance, protection of maternity and childhood, provide targeted assistance to socially vulnerable strata and coordinate charity assistance
housing, public utilities		provision of gas	construction of public housing, construction and maintenance of water supply facilities, water treatment and drainage systems, sewerage, heating and electricity networks solid waste management, street lighting	Almaty and Astana are specifically assigned rayon functions in this category	arrange construction of municipal public housing stock; arrange construction of water pipes, water purification facilities, heating and power networks and other transport and engineering infrastructure of rayon/city city of oblast significance.
transport	construction and repair of international and Republic roads	construction and repair of roads of oblast significance	construction and repair of roads of rayons significance	ensure oblast roads are constructed and maintained	arrange construction and maintenance of rayon/city roads

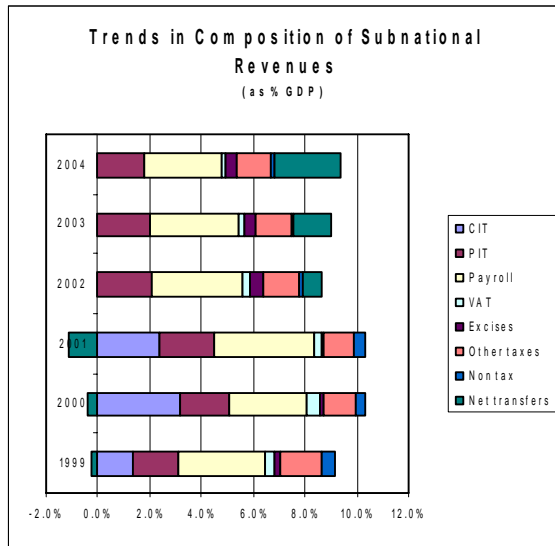
\* 'with the exception of costs funded by local budgets' \*\* 'with the exception of those funded by Republican budget'

## Assignment of Revenues

13. *Taxes.* Subnational governments derive the majority of their revenues from centrally-administered taxes collected within their boundaries. Prior to 2001, four major tax bases were shared with the oblasts: the personal income tax (PIT), the corporate income tax (CIT), certain excise taxes and (until 1997) the VAT. The proportion of revenues to be shared varied from oblast to oblast and from year to year, on a negotiated basis.

14. A 2001 reform introduced identical sharing rates for each tax for all oblasts. Local governments were assigned 100 percent of the PIT and 100 percent of the payroll tax (which had formerly supported various extra-budgetary social funds), and 100 percent of the excise tax on gambling, along with 50 percent of the CIT, 50 percent of the excise tax on alcoholic beverages, and 15 percent of excise tax on crude oil, including condensed gas. In addition, local governments were assigned 100 percent of the land tax, the property tax and the vehicle tax and the authority to impose fees for use of local roads, the registration of firms, other administrative fees and penalties. A subsequent reform (in 2002) eliminated the corporate income tax and the excise on crude oil from the pool of taxes subject to sharing. As shown in Figure 1, the majority of subnational tax revenues are now derived from the personal income tax and the payroll tax, with smaller contributions from excise taxes. In 2004, payroll taxes accounted for 45 percent of total tax revenues; the PIT accounted for 27 percent.

Figure 1



15. *Current Transfers.* Returning tax revenues strictly on the basis of origin would result in wide disparities in per capita revenues among oblasts. To reduce these disparities, the Government uses a system of gap filling subventions and withdrawals. This is based on system of revenue and expenditure projections made during the budget process. Oblasts whose projected expenditures exceed their projected revenues are allocated additional funds (subventions) to make up the part of the difference. Oblasts whose revenues are projected to exceed their expenditures are subject to withdrawals; i.e., a reduction in the percentage of the

centrally administered taxes they are allowed to retain.

16. In theory, the calculation of revenues is to be based on the ‘tax potential’ of each oblast.<sup>6</sup> Estimates of expenditures are to be based on service norms. The current Budget Code states that projected local expenditures shall be calculated “accounting for their distribution for current budget programs and development budget programs, budget provision/ security, and established norms...” Article 71 of the budget code states that ‘in-kind norms shall be mandatory in budget planning and execution’.

17. But in practice, both estimates are largely derived from historical trends. According to interviews conducted for this report, estimates of revenues and expenditure needs are largely determined through annual budget negotiations between oblast akims and the Ministry of Economy and Budget Planning (MOEBP). Each oblast akim submits a budget proposal slightly higher than the previous year’s, and this is whittled down by the MOEBP based on resource availability and presidential priorities. History is not the only factor. Projections of aggregate economic growth guide the calculation of revenues. Projections of expenditures reflect changes in the major expenditure drivers—particularly public sector wage increases—and the impact of specific Presidential initiatives (such as the construction of new schools).

18. This approach is, in effect, codified in the most recent Government resolution on the methodology for calculating general official transfers.<sup>7</sup> This specifies (in section 3.5) that the projection of expenditures will be ‘based on the level of expenditures in the year preceding the planning period’, adjusted according to the consumer price index (and further adjusted in light of resource availability), along with the impact of any laws or presidential decrees providing for increases or decreases in expenditures’. In the current (2005-2007) exercise, these include US\$ 111.1 million for guaranteed free medical aide, US\$ 20.2 million for teachers’ salaries, US\$ 21.3 million for the wage bills of rural districts and US\$17 million for the maintenance of newly commissioned education and health care institutions.

19. *Capital transfers* The Government also makes a variety of other transfers to subnational governments. The largest these, the targeted investment transfer, finances regional and local capital works. In 2003 and 2004, a large volume of such transfers were allocated to Astana. (These accounted for 28% and 45% of the city’s receipts in those years, respectively.) With this exception, capital transfers do not constitute a major source of subnational receipts. In 2003, they comprised 3.4% of total subnational net receipts (when Astana is excluded). In 2004, the figure was six percent.

### **Trends in Fiscal Performance**

20. As shown in Figure 1, total subnational revenues have remained roughly constant, as a percent of GDP, over the last six years. Total revenues (including net transfers) were equivalent to 10.8 percent of GDP in 1999 and again in 2004, despite the substantial changes in tax assignment which took effect in 2002. The elimination of the corporate income tax from the pool of taxes subject to sharing was largely compensated by an increase in net transfers from the Government budget. While withdrawals exceeded

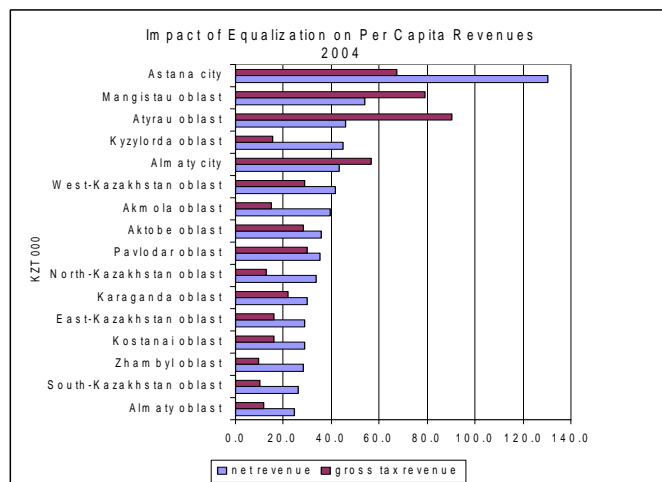
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<sup>6</sup> Budget Code, as amended through July 8, 2005

<sup>7</sup> Resolution of the Government No. 916 On the Methodology for Computation of General Official Transfers

subventions during the period 1999-2001, subventions exceeded withdrawals in 2002 and have continued to increase. In 2004, net transfers (subventions less withdrawals) totaled KZT 142. billion, or roughly a quarter of aggregate revenues.

**Figure 2**



21. Despite the system of subventions and withdrawals, substantial variations in revenues exist among oblasts. Figure 2 compares the per capita tax revenues of each oblast in 2004 prior to withdrawals, with its net per capita revenues after withdrawals and subventions. As shown, the principal impact of the transfer system is to reduce the revenues of the two oil-producing oblasts (Atyrau and Mangistau) and the city of Almaty to the benefit of

the remaining thirteen jurisdictions. Astana benefits disproportionately from the transfer system. While its pre-transfer tax revenues are the third highest in the country, the transfer system *increases* its revenues, to a level roughly 3.5 times the national average.<sup>8</sup> With this exception, the transfer system in general reduces the average variation in per capita resources. In 2004, it reduced the standard deviation in tax revenue among oblasts from KZT 25,000 to KZT 8,540 or 24 percent of the mean (excluding Astana). This leveling effect has persisted over several years, particularly since the elimination of the corporate income tax from the revenue sharing pool. As shown in Figure 3, the transfer system has roughly halved the standard deviation per capita revenues among oblasts in each of the past five years. Nevertheless, substantial variations in per capita remain. As shown in Figure 2, per capita revenues in 2004 ranged from KZT 130,000 in Astana to KZT 24,000 in the Almaty oblast. Even excluding Astana, the variations are significant. Per capita revenues in the richest jurisdiction (excluding Astana) are 2.2 times that of the poorest.

22. Under the terms of current Government policy, this pattern of regional disparities will persist. One of the innovations of the most recent decree on transfers<sup>9</sup> was to fix the level of subventions/withdrawals for each oblast in nominal terms for three year periods. As shown in Figure 3, the legislation provides for an abrupt decline in subventions in 2005, followed by a gradual rise thereafter.<sup>10</sup> The distributional impact of the proposed transfers is shown in Figure 4, which compares actual net revenues in 2004 with the proposed distribution of net revenues in 2005. As shown, the proposed distribution of

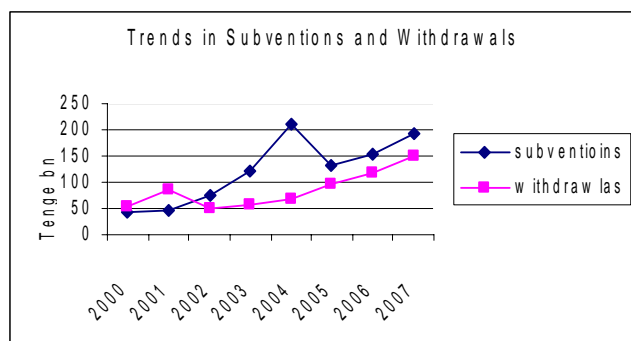
<sup>8</sup> This largely reflects the high volume of targeted investment grants allocated to Astana in 2004. If these are excluded, Astana's receipts are only twice the national average.

<sup>9</sup> Law on the amounts of general purpose transfers between the republic and oblast budgets, budget of cities under state jurisdiction and the capital for 2005-2007. (August 31, 2004)

<sup>10</sup> This largely reflects a substantial cut in transfers to Astana. Under the proposal, Astana would become a net donor to the transfer system, rather than a net recipient.

withdrawals and subventions would further widen the disparities in per capita net revenues among the oblasts, roughly doubling the standard deviation (from KZT 25,000 in 2004 to KZT 51,000 in 2005).<sup>11</sup>

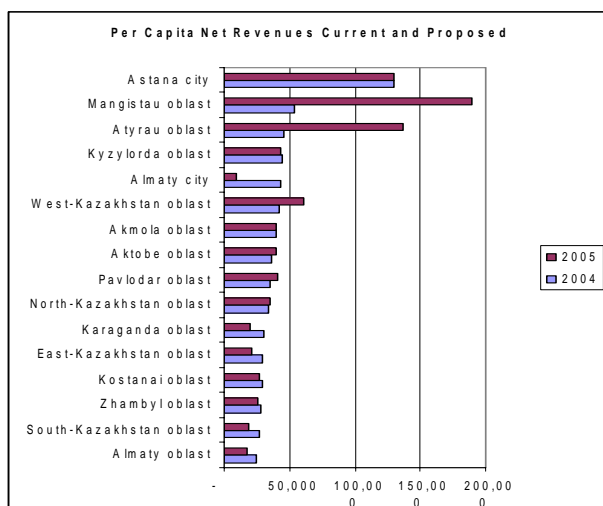
**Figure 3**



23. Variations in revenues are reflected in substantial variations in the level of spending on specific sectors. Table 3, below, shows the correlation between per capita revenues and per capita expenditures on each of the major functions. (The calculations exclude Astana.) As shown, the correlations are all positive, implying that the more revenue an oblast has, the more it

spends across the board. But the relationship between revenues and expenditures is complex. In 2004, the correlation between per capita revenues and per capita spending on education was fairly strong. ( $r=.73$ ). Least square regression analysis suggests that for every 1 tenge increase in revenues, spending on education increases by KZT 0.23. But the relationship is highly influenced by certain outliers. Spending on education in the two oil-producing oblasts is considerably higher than the national average. Removing Atyrau and Mangistau from the analysis would reduce the correlation to .47. In Almaty, per capita spending on education is far *below* the national average. Removing Almaty from the analysis would increase the correlation coefficient to .90. In the health sector, the impact of outliers is less pronounced. While health spending in Mangistau is considerably higher than the national average, spending in Atyrau is not. Removing the two oil oblasts from the analysis would have little impact on the relationship ( $r=.89$ ).

**Figure 4**



24. As shown in Table 3, the relationship between revenues and sectoral spending appears to be highly unstable over time. The correlation between revenues and education spending has declined sharply over the last three years, as has the correlation with housing and transport. The correlation with health care spending, on the other hand, has increased. Further research would be required to precisely define the relationship between revenues and the sectoral pattern of spending. What is unambiguous is that, despite the

<sup>11</sup> Estimates for 2005 are based on actual gross revenue collections in 2004, adjusted for withdrawals and subventions as proposed in the plan.

budgetary norms, spending on each sector varies considerably among the jurisdictions.

## ISSUES

25. The existence of regional spending disparities is not in itself a cause for concern.

	Year			avg. spending,**
	2002	2003	2004	
EXPENDITURES	0.99	0.99	0.91	\$307
Education	0.94	0.85	0.73	84
Health care	0.68	0.84	0.93	54
Social security	0.80	0.76	0.73	20
Housing, utilities	0.81	0.89	0.68	34
Transport	0.70	0.88	0.44	17
Culture, sport	0.89	0.83	0.89	14
Administration	0.72	0.07	0.35	11

\* Excludes Astana \*\*USD equivalent

Even in a unitary state such as Kazakhstan, where the priorities of the central government are intended to be observed throughout the hierarchy of subnational jurisdictions, there is reason to expect variations in the level and composition of subnational spending. Costs vary across

jurisdictions. Different levels of spending are required to achieve equivalent outcomes. Priorities also vary across jurisdictions. Housing and public utilities may be a priority in the rapidly growing republican cities, whereas education and health may be more important in the stagnant rural jurisdictions.

26. The problem lies instead with the method used to determine the net resources available to each jurisdiction. Because it is largely based on history, it does not provide a rational basis for implementing the spending priorities of the Government. Instead, spending patterns largely reflect the historical distribution of taxable activity. In theory, one solution would be to precisely calculate the level of spending required to meet national outcome standards for each function in each jurisdiction. Oblast akims would be required to allocate their budgets accordingly. Withdrawals and subventions would be calculated on the basis of the difference between these costs and the projected revenue of each jurisdiction. But this level of micromanagement is administratively infeasible. While outcomes in some sectors are relatively easy to define—student performance of standardized tests, levels of infant mortality—the level of spending required to achieve them is difficult to determine. In other sectors, desirable outcomes are themselves difficult to define. It is not clear what sort of outcomes the Government would wish to pursue under the heading of ‘culture and sports’, or ‘administration’ nor is it clear that there is an overriding national interest in ensuring that such outcomes are achieved uniformly.

27. The alternative is a system of subnational finance that ensures that overall government objectives are pursued, while leaving micro-allocation decisions to the oblast akims and their subordinates at the rayon level. In the Kazakh case, this might imply a relatively precise specification of the funding of education and health—where there is a clear national interest in uniform outcomes. For other, more discretionary functions, it would imply a financing formula that is not tied to specific sectors but instead reflects the Government’s interest in ensuring a minimal level of discretionary resources in each

jurisdiction. This approach--a combination of general revenue equalization with sector specific-financing for education and health--is, in fact, used in the majority of countries reviewed for this report.

### **Funding Discretionary Expenditures**

28. In mechanical terms, all transfer systems confront two basic design questions: how to determine the total amount to be transferred and how to distribute that amount among individual jurisdictions. Some countries address these questions simultaneously: by fixing a normative level of spending to be achieved in all jurisdictions, for example, and then providing a sufficient level of central government subsidies to achieve this result. Other countries address them independently, fixing the amount to be transferred on the basis of the yield of a particular tax, for example, and distributing the proceeds according proportionately. Countries also vary widely in terms of the aims of their transfer systems. Some attempt to equalize per capita revenues. Others attempt to take differing cost variables into account.

29. *Germany.* Of the three large federal revenue sharing systems, Germany has the most straightforward. The German system is essentially aimed at reducing disparities in per capita revenues among the states. The principal sources of state revenues in Germany are the personal income tax (PIT) and the VAT. While both taxes are administered by the states, they are imposed at nationally-uniform rates and are subject to federally-mandated sharing arrangements.

30. Revenues from the personal income tax are divided in three ways-- 42.5 percent to the federal government, 42.5 percent to the states, and 15 percent to the municipalities--and are distributed on the basis of origin. Revenues from the VAT are divided between the federal government and the states. (While the proportions are subject to change, the federal government currently retains approximately half of the revenues.) The remainder is distributed to the states. Seventy five percent of the states' share is distributed on the basis of population. The remaining 25 percent of the states' share is distributed to states whose per capita revenues from the PIT (as well as minor business taxes) fall below the national average.

31. The combined effect of distributing 75 percent of the states' share of the VAT on the basis of population and using the remainder to compensate states whose PIT revenues fall below the national average is a substantial flattening of inter-state revenue disparities. In 2001, the per capita revenues of the richest state were approximately six times those of the poorest. After redistribution, the ratio dropped to approximately 1.5:1. But because the system does not attempt to equalize total revenues, substantial disparities remain among jurisdictions.

32. *Canada.* The Canadian system of intergovernmental transfers is more complex, largely because provinces are permitted to set the rates of their major taxes. The principal sources of provincial revenue are the PIT, the payroll tax, the corporate income tax (CIT) and a VAT, termed the tax on goods and services. All these taxes (along with 29 other minor taxes) are administered by the provincial governments at rates determined by each province. Provinces retain 100 percent of the tax revenues collected in their jurisdictions.

33. The aim of the Canadian equalization system is to reduce disparities, not in tax revenues, but in tax bases. (Because each province can set its own tax rate, any attempt to equalize tax revenues would prompt the provinces to drop their tax rates to zero.) To accomplish this, the federal government first calculates a per capita provincial revenue standard applicable to the nation as a whole. This is determined by: (1) calculating the average per capita tax base of the five middle income provinces—Quebec, Ontario, Manitoba, Saskatchewan and British Columbia and then (2) applying the average of all provincial tax rates to it. For each of the poorer provinces, the Government then calculates the revenues that would result from applying the average tax rate to the actual tax base of the province. The amount of the transfer is then based on the difference between the two figures.

34. Canada's equalization transfers are funded from general federal government revenues. Until recently, the amount of funding was subject to annual budget negotiations. As a result, the level of funding for equalization varied from year to year. (Allocations in the current FY 2004/2005 budget year were sufficient to bring all provinces up to 95 percent of the five province standard--C\$6217). According to a policy paper adopted in 2004, now intends to fix the Government aggregate amount of the equalization transfer on the basis of a formula. In 2005-06, funding levels will be set at C\$10.9 billion and are to be increased by 3.5 percent per year thereafter.<sup>12</sup>

35. *Australia.* The Australian system is yet more complicated, as it attempts to equalize not merely tax revenues but service outcomes. The Federal government monopolizes all but one of the principal tax bases in Australia: the PIT, the CIT, excise taxes and (as of 2000) the newly created VAT. The only major revenue source allocated to the states is the payroll tax. Both rich and poor states are therefore dependent upon transfers from the federal government.

36. The aim of the Australian transfer system is ostensibly to bridge the gap between the own-source revenues of each state and its expenditure requirements. This is determined by calculating, first, the *relative* revenue raising capacity and expenditure needs of each jurisdiction. The revenue capacity of each state is determined largely on the basis of the yields of the payroll tax. (Because the payroll tax is imposed at nationally uniform rates, the complex revenue-base equalization procedure required in Canada is not needed.) Expenditure needs are calculated on the basis of separate sets of indicators for each of 41 expenditure categories. The relative costs of general medical services, for example, are based on population adjusted for age and sex composition, indices of health statistics (e.g. infant mortality) and social composition (i.e., percent aboriginal population). Each of these service indicators is assigned a weight, which is then used to aggregate the relative expenditure needs of each state. The indicator of expenditure needs, less the indicator of revenue raising capacity, determines the relative expenditure gap of each jurisdiction.

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<sup>12</sup> Government of Canada, Ministry of Finance 'Equalization Program' [www.fin.gc.ca/FEDPROV/eqpe.html](http://www.fin.gc.ca/FEDPROV/eqpe.html). Note that the equalization transfer is not the largest form of Federal transfer to provinces. The largest is Canada Health and Social Transfer, which is earmarked for health care and social assistance, including early childhood development. (The allocation for the CHT/CST was C\$ 21.8 in 2003/4, as opposed to C\$ 8.7 billion for equalization transfers.)

37. The amount of funding for equalization is determined through a separate exercise. In essence, it is based on the yield of the VAT. Total VAT yields (net of administration costs) multiplied by each state's share of the total expenditure gap equals the amount of the transfer to each jurisdiction. As a result, the Australian system makes no pretence of achieving any specific level of per capita revenues in each state or any standardized level of spending. The complex system for calculating revenue capacity and expenditure needs is merely a mechanism for distributing an exogenously determined level of resources: the annual yield of the VAT.

38. *The EU8.* Prior to 1991, intergovernmental fiscal relations in the eight recent European entrants the EU<sup>13</sup> were based on the Soviet model. The territorial units of administration derived revenue from four major revenue sources. The first was profits on enterprises. If an enterprise were directly subordinate to a municipality, that municipality

Country	Basis of Distributable Pool	Distribution Objective
Germany	25 percent of VAT	equalize per capita revenues
Canada	annual budget appropriation	equalize per capita tax bases
Australia	100percent of VAT	reduce gap between estimated revenues and estimated expenditures

would derive revenue directly from its profits. If the enterprise were subordinate to a higher tier of government, the municipality would receive revenue from profit tax on it. In addition, the local government would receive revenues from shares of

the turnover tax (on consumer goods, foods and certain extractive and light industries) and from the personal income tax. As a result, a municipality's revenues were partly dictated by the number and scale of enterprises within its territory, and by their ownership. But not entirely. Local budgets were also subject to a complex subventions and withdrawals. Budgets could be supplemented from higher levels of government and by contributions from large enterprises within their boundaries. Thus the level of resources available depended upon the ability of the local party secretary to remain on good terms with the party bosses at higher levels and with the managers of state farms or factories.

39. All eight of the EU accession countries began to dismantle the Soviet era structure in the early 1990s. In economic terms, the dismantling of the Soviet-era structure took the form of privatization. This had two important implications for local governments. First, it eliminated an important provider of public services. Second, it drastically altered the revenue base, as profits from local-government-owned enterprises were no longer a source of revenue. In political terms, this took the form of an end to the Communist Party's monopoly on political power and the rise of competing parties at both the national local level. This, in turn, increased pressure for local fiscal autonomy while raising the risk that local governments would use that autonomy to thwart central government fiscal and equity objectives

40. In response, all the EU8 countries have radically reorganized the structure of intergovernmental fiscal relations. While many retain the system of subventions and

<sup>13</sup> The Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovakia, and Slovenia.

withdrawals, the scope for bargaining has been considerably reduced. At the same time, the allocation of transfers has become considerably more transparent and more effective in achieving specific equity objectives.

41. The primary source of subnational revenue in all the EU8 countries is the PIT.<sup>14</sup> In all the EU8 countries, the PIT is administered by the central government at nationally uniform rates. Fixed shares of the revenues are then assigned to local government. The percentage of the PIT that is shared with municipalities varies among the EU8, ranging from 30 percent in the Czech Republic and Poland to 73 percent in Latvia and 94 percent in Slovakia.

42. Distributing the PIT solely on the basis of origin would result in extremely wide variations in revenues among local jurisdictions. As shown in Table 5, all the EU8 countries employ some form of formula to reduce these variations. Three techniques are used. The first is to distribute the PIT on the basis of origin and provide additional funding to poorer jurisdictions from general central government revenues. In Estonia, for example, the local share of the PIT is distributed solely on the basis of origin. The central government then provides additional funding to poorer jurisdictions until they reach a fixed percentage of the national per capita average. In Slovenia, similarly, local governments receive 35 percent of the PIT, distributed on the basis of origin. The Government then uses a complex formula to supplement the revenues of poorer jurisdictions. The aim of the Slovenian system is to ensure an equal level of ‘relevant’ spending’ in all jurisdictions. In principle, relevant spending is defined as the amount needed to comply with local government tasks as provided in legislation. In practice, it is nationally uniform per capita figure fixed annually by the Parliament. To calculate the amount of subsidy to a given municipality, this figure is first multiplied by the population of the municipality and four adjustment factors (favoring municipalities with lengthy road networks, large territories, and disproportionately large numbers of children and people over 65). The expected tax revenues of the jurisdiction (including revenue from the PIT and various local taxes) are then subtracted from this figure. Municipalities whose relevant expenditures exceed their projected revenues receive a subsidy covering the difference. Municipalities whose expenditure falls below estimated revenues are allowed to keep the surplus.

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<sup>14</sup> The only exception is the Czech Republic, where the PIT, the VAT and the corporate income tax are all subject to sharing. As discussed later in the report, subnational governments also receive significant funding earmarked transfers for education and (indirectly) health in most of the EU8 countries.

Country	Basis of Distributable Pool	Distribution Criteria
Czech Rep.	shares of PIT, VAT, CIT	population
Estonia	share of PIT, plus annual appropriation	origin, adjusted to equalize per capita revenues
Hungary	share of PIT plus annual appropriation	origin, plus 'normative criteria'
Latvia	share of PIT	origin, adjusted to reduce expenditure gaps
Lithuania	share of PIT	origin, adjusted to equalize per capita revenues
Poland	share of PIT	origin, adjusted to equalize per capita revenues
Slovakia	share of PIT	population
Slovenia	share of PIT, plus annual appropriation	origin, adjusted to reduce expenditure gaps

43. The second technique is to distribute the PIT entirely on an origin base and then require richer jurisdictions to share part of their PIT revenues with poorer ones. This so-called fraternal equalization method is used in Lithuania and Latvia. In Lithuania municipalities with per capita revenues over 165 percent of national average must transfer all of the surplus to an equalization fund. The fund is then used to bring poorer jurisdictions to 65 percent of the national average. Any funds that remain once this target is achieved are transferred to municipalities on the basis of need indicators, the most important of which is school enrollment.

44. Latvia uses a more complicated technique. The process begins with a calculation of expenditure needs. Aggregate expenditure needs are first calculated on the basis of total municipal expenditures in the preceding year, adjusted for inflation. (The figure is further refined during negotiations with the Union of Local Governments.) The projection of aggregate spending is then divided between republic cities and other local governments on a 45/55 basis. Within each of these two groups, the relative expenditure needs of each municipality are then calculated on the basis of six criteria: population, number of children ages 0-6; number of children ages 7-18, population above retirement age, number of children in orphanages and number of elderly in retirement homes. If a given municipality's projected revenues exceed its projected expenditure needs by more than 10 percent, the municipality is subject to a revenue cap. Forty-five percent of the surplus is taken away and allocated to an equalization fund. If projected tax revenues are less than 90 percent of estimated expenditures needs, the gap is fully met, using proceeds from the equalization fund. Any shortfall between contributions into the equalization fund and payments out of it are to be covered by the Government.

45. The third technique is to distribute the PIT on a basis other than origin. The Czech Republic, for example, distributes the municipal share of the PIT (as well as the VAT and CIT) on a per capita basis, weighted to favor larger jurisdictions. (A separate, more complicated, formula is used to distribute the PIT to regional government.) In Slovakia, similarly, the municipal share of the PIT is distributed on a per capita basis.

46. Poland uses a combination of the first and second methods. Municipalities are entitled to 27.6 percent of the PIT. (Intermediate levels of subnational government

receive another 2.5 percent.) Municipalities whose per capita revenues exceed 150 percent of the average are required to contribute to an equalization fund. These contributions, plus additional funding from the central budget equal to at least one percent of state budget receipts, are used to bring poorer jurisdictions up to 85 percent of the national average.

47. All of these approaches produce a largely similar result: the disparities that would result from distributing the PIT on the basis of origin are substantially flattened. Using general government revenues to top up the PIT receipts of poorer jurisdictions has much the same effect as requiring richer municipalities to transfer some of their PIT revenues to poorer ones, or distributing the PIT on a per capita basis. (The degree of flattening depends, of course, on the specific parameters of the formula.)

### **Implications for Kazakhstan**

48. The characteristic that distinguishes all these systems from the current system in Kazakhstan is the use of formulas to determine level of resources at subnational level. Rather than relying on annual negotiations and historic trends, the large Western federal systems and the EU8 countries allocate resources on the basis of objective criteria. These clearly vary in terms of objectives and complexity. The system for determining the total amount to be transferred varies from the simple--a fixed percentage of a designated tax base--to the highly complex, where the amount is determined on the basis of equalization targets. The criteria used for distribution also range from the simple—an equal amount per capita—to the highly complex formulas aimed at factoring in various determinants of costs. Some are more relevant to Kazakhstan than others. The complex system used to equalize tax bases in Canada, for example, would not be required in Kazakhstan, as oblasts have no control over tax rates.

49. *Determining the amount to be distributed.* In principle, international experience would suggest that the amount to be distributed should be based on a fixed share of a designated tax base. Other things being equal, transparency and predictability are desirable characteristics in a system of intergovernmental fiscal relations. Designating a fixed source of revenue is one means of achieving this.

50. As noted earlier, this is the practice in Germany, Australia, and most of the EU8

#### **Box 2 Previous Attempts at Formula Based Criteria**

Formula based distribution criteria have already been considered in Kazakhstan. Resolution 529 of 1999 would have grouped oblasts into three categories based on natural conditions (temperature, level of desertification, salinization) and other indicators of need (incidence of contagious diseases and length of roads) and then forced convergence in per capita expenditures within each group over several years. Revenues would have been based on 1999 revenues. Aggregate subnational expenditures would have remained fixed in real terms through 2001. This proposal was never implemented. The World Bank's previous public expenditure review\* reported that 'the reality is that Resolution 529/99 is not being implemented anymore, and because the level of transfers still varies from year to year in a non-transparent way, uncertainty of financial flows to and from local budgets still exists.'

\* World Bank Kazakhstan Public Expenditure Review 2000

countries. But it is not clear that this would be the best approach in Kazakhstan. There are two reasons. First, given Kazakhstan's extremely high growth rates, the yield of any particular tax is itself unpredictable. Tying subnational revenues to a particular tax base would therefore not ensure stability. Second, the political and institutional conditions that give rise to this approach in the Western countries do not exist, to the same extent, in Kazakhstan. Western countries rely on designated tax bases in order to limit intergovernmental conflicts over resources. Once an agreement on the revenue base is reached, annual conflicts over central government support can be avoided. In Kazakhstan's more centralized political system, this is not so important a consideration.

51. Instead, there is a good case for allowing the Government to set the overall level for subnational spending as part of the budget process. Stability could be achieved by fixing the level on a multi-year basis, either by allowing for adjustments on the basis of population growth and inflation or by tying the overall level to increases in aggregate public sector revenues.

52. With respect to distribution criteria, transparency would argue for a limited number of readily measurable variables. Provided that the Government institutes separate, more precise mechanisms for financing key social sectors (as recommended earlier), there would appear to be little justification for fine tuning the distribution of funding for administration, culture, transport, housing or other discretionary expenditures. One attractive approach would be to simply equalize revenues per capita. Such a radical change may not be feasible in the short term. But the level of equalization need not be 100 percent. In line with the Canadian, German and Latvian examples, equalization could be aimed at simply reducing the variance among oblasts, ensuring for example, that no jurisdiction falls below a fixed percentage of the national average level of per capita revenues.

## **Education**

53. With respect to key social sectors, however, there is a strong case for ensuring a standard minimum level of spending. In theory, the existing budget process already incorporates a mechanism for ensuring adequate, uniform financing for compulsory education (grades 1-11). Budget norms specify standard classroom sizes (which should permit numbers of pupils to be converted into numbers of classrooms); teaching loads (which should permit numbers of classrooms to be converted into hours of teacher time) and salaries for various levels of teachers (which should permit hours of teacher time to be converted into a wage bill). Similar norms exist for the non-wage components of compulsory education. In principle, this should yield a uniform level of per education spending, per pupil, in every jurisdiction. (Salary scales for teachers are uniform across the country.<sup>15</sup>) Figures on education spending, noted earlier, suggest that this is not the case. Per capita spending on education in Atyrau oblast, for example, is nearly twice the level in Kostanai oblast.

54. There are a variety of solutions to this problem. One would be to implement the norms and provide earmarked funding to cover the resulting costs. Given the scale of

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<sup>15</sup> IBRD 2005 Kazakhstan: Reforming the Public Sector Wage System Policy Paper

Kazakhstan and the variety of environment and socio-economic conditions within it, this approach is likely to be both practically and administratively infeasible. Monitoring and enforcing standard classroom sizes, teacher loads and teacher remuneration (including ad hoc salary supplements) may be beyond the capability of the central administration. An alternative solution would be to shift to a capitation-based financing system, with allocations to each jurisdiction based on enrollment. This would permit the oblast akims to allocate funding to individual rayons—and rayon akims to allocate funds to individual schools—in light of local conditions, while ensuring an adequate overall level of funding for this function.

55. Five of the EU8 countries—Poland, Hungary, Lithuania, the Czech Republic, and Slovakia—now employ some form of capitation-based financing for primary education. None of them employs a single, nationally uniform amount, however. In all five countries, capitation rates are adjusted to reflect ostensible differences in the costs providing education. In Poland, for example, rural schools receive a 33 percent supplement over the basic per capita amount. Town with populations under 5,000 receive an 18 percent supplement. In Lithuania, the capitation amount is determined according to a complex formula that differentiates among both school characteristics and grade levels. (For students in grades 1-4, rural elementary schools receive roughly twice as much funding per student as those in municipal capitals and big cities. Schools with fewer than 150 children receive 50 percent more than those in the 150-299 student bracket and nearly twice as much as those with 300 or more students.) In the Czech Republic, capitation figures distinguish among different levels and forms of education as well as among regions. Regional variations are intended to reflect variations in labor costs, and therefore favor, rather than discriminate against, Prague.

### **Box 3 Efficiency Benefits of Capitation-Based Education Financing**

One of the major attractions of capitation-based financing in Europe is that it decentralizes the political onus of closing schools in jurisdictions where enrollment is declining. This is a common problem in Eastern Europe, where the population of school age children is declining. Keeping under-enrolled schools open is costly. Shifting to capitation-based financing cuts the funds available to schools with declining enrollments, forcing local governments to reduce teaching loads and in some cases, close schools.

The same demographic conditions appear to exist in Kazakhstan. A recent report by the Asian Development Bank\* predicts that Kazakhstan's school age population will decrease by 32 percent by 2015. It also found that teacher: pupil ratios are already low. As a result, the ADB advocated a shift to capitation-based financing, at least for general secondary education (grades 1-11). Under the ADB plan, the system would initially be used to allocate funding among oblasts. It would later be used to allocate funds directly to individual schools.

56. Capitation-based education financing has already received some consideration by the Government of Kazakhstan. The State Program for Education (Sept 2000) and the Strategic Plan of Development to 2010 both call for the introduction of capitation-based financing throughout the education system. The more recent National Program of Education Development, however, makes no reference to changes in the system for distributing education funding. It merely calls for an increase in spending at the republic and local level.

57. European experience suggests that two ancillary reforms are required for the successful implementation of capitation-based education financing. First, local governments must have some degree of control over the determinants of education costs. Where falling enrollment triggers a drop in funding, local governments must have the legal authority to reduce expenditures by a corresponding amount. The lack of expenditure autonomy has hampered capitation-based financing in several of the EU8 countries. In Poland, for example, school directors are, in theory, free to make their own decisions about staffing levels. But regulations constrain dismissals. Although a teacher may be dismissed when a school is totally or partially liquidated, local government must provide six month's severance pay and re-employ the teacher at the first opportunity. Similar constraints on downsizing exist in Lithuania and Hungary.

58. Second, the central government must be willing to increase the level of capitation financing to reflect centrally-mandated increases in costs. In Europe, as in Kazakhstan, local government typically have little control over wage rates. The principal determinant of costs—wage levels—is largely determined by the central Government. In Lithuania, for example, the national civil service laws sets out a structure of pay scales for municipal employees, based on grade, years of employment and size-class of municipality (and in the case of teachers, number of classes taught). In Poland, similarly, teachers' salaries are determined on the basis of the Teacher's Charter and annual ministerial regulations on the remuneration of teachers. Legislation in some of the EU8 countries requires the Government to increase capitation grants in line with annual salary adjustments. The legislation enabling Slovakia' recent shift to capitation-based financing, for example, requires the capitation amount to be based on annual salary negotiations.<sup>16</sup>

59. Neither of these problems presents an insuperable obstacle to the introduction of capitation-based school financing in Kazakhstan. Subnational governments already have considerable legal discretion to dismiss redundant teaching staff. (Teachers do not have civil service protection.) The Government, for its part, is legally obligated to provide additional funds to cover the costs of any new expenditures it imposes on subnational governments. As a result, subnational governments have the means to adjust to declining enrollments and an assurance that any centrally-mandated increases in costs will be covered by increases in transfers.

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<sup>16</sup> European Commission (Eurydice Education Data Base). 2003. *The Education System in Slovakia 2001/2002*.

## Health

60. In principle, a similar approach could be used in financing some aspects of health care. One of the major sources of inefficiency in the Soviet model of health care was its excessive use of secondary and tertiary facilities. Primary physicians were trained in a narrow range of fields, requiring referrals to more expensive secondary and tertiary facilities. Performance incentives were also weak. Compensation to medical staff was not linked to the volume of services they provided. To varying degrees the EU8 countries have addressed the excessive use of secondary and tertiary by introducing the so-called family medicine model of primary care. Under this approach, patients register with an individual doctor of their choice who becomes the primary point of contact in the health care system. These doctors receive training in a broad range of primary health care fields, limiting the need for referrals. To encourage physicians to register patients, the Government health system pays providers a standard rate for each patient on their roster. To encourage physicians to actually serve these clients, they often provide additional funding on a fee for service basis.

61. To an extent, the Kazakh Government appears to be considering the same approach. The proposed National Program of Health Sector Reform<sup>17</sup> would consolidate all subnational spending on health at the oblast level. Primary health care would be separated from hospital care and would be financed on a per capita basis. The Program would not, however, incorporate performance incentives. According to the Program document, the per capita norm for primary health care facilities (w)ould be determined 'taking into account the required volume of health care at this level, sex and age of members covered, and geographical area of the territory serviced'. It would not, however, provide additional funding to providers on the basis of the volume of services they perform.

62. The recent experience of the EU8 countries suggest that this may be the wisest approach, at least in the short term. Performance incentives have proven incompatible with cost containment due to the tendency of providers to respond to payment-for-service forms of compensation by increasing the volume of services they ostensibly provide. Slovakia, for example, introduced a capitation-based for primary care system in 1994. To reward performance, it replaced it with a mixed system (60 percent capitation, 40 percent payment-for-service) in the following year. The resulting explosion in the number of claims forced the Government to revert to an exclusively capitation-based system in 1998. It has now reintroduced a payment-for service element but limited it to specific preventive procedures.

63. The Czech Republic arrived at a similar system by a different route. The Czech Republic initially attempted to control primary care costs by fixing an overall spending ceiling for primary care and allocated it among individual physicians on a fee for service basis. Physicians responded by inflating the number of treatments they claimed. Because the spending ceiling was fixed, more services meant smaller reimbursements per treatment. This prompted physicians to further inflate the number of treatments they

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<sup>17</sup> National Program of Health sector Reform and Development in the Republic of Kazakhstan for 2005, 2010; para 5.1.1

claimed. The Czech Republic eventually brought an end to this vicious circle by introducing a strict capitation-based system in 1997. Under the current system, primary physicians receive a fixed amount per registered patient, differentiated by age group. (Zero-to four-year olds, for example, are worth 4.2 times as much as patients in the 20-24 year old range.) Hungary, similarly, now reimburses primary care solely on a capitation basis, using a points system that distinguishes among patients in five different age groups.

64. Shifting to a purely capitation-based system for financing primary care does have one clear risk. It gives primary providers an incentive to immediately refer patients to higher level health care facilities, rather than treating patients on site. European countries have addressed this problem in several ways. Some continue to reimburse providers on a fee-for-service basis for priority items, such as immunizations and screenings. Some set up administrative procedures to restrict referrals. Others rely on individual health care institutions to limit referrals. In Lithuania, for example, the HIF reimburses health *facilities* on the basis of the number of patients registered with it. Each facility, in turn, is allowed to reimburse individual physicians on a fee-for-service or capitation basis.<sup>18</sup>

65. Rationing secondary and tertiary care has been even more difficult. For secondary and tertiary care, EU8 countries have attempted to shift the basis for financing from one based on inputs (salaries, equipment, supplies, etc.) to one based on outputs (treatments provided) Again, this approach is endorsed in the Kazakh national health Program. Hospital care would be provided through contracts with individual health care institutions, and would be financed on the basis of treatment-specific reimbursements (diagnosis related groups--DRG's). The treatments eligible for reimbursement would be defined in general package of health care benefits (GPFHC).

66. In principle, this would have the same salutary effect as the proposed reforms in primary health care. Fiscal flows would become more transparent. Funds would be allocated more efficiently. By providing funding on the basis of outputs rather than inputs, it would encourage the efficient use of staff and facilities. And by forcing health providers to compete for patients, it would encourage client-responsiveness—at least in theory.

67. Experience in the EU8 suggests that this approach should be implemented with caution. All the EU8 countries have experimented some form of output based compensation, generally following the model used in Germany—the so called 'German points system'. Under the German points system, each treatment eligible for reimbursement is assigned a number of points, based on its complexity and cost. A total budget (in monetary terms) for eligible health care is then agreed between individual health insurance funds and regional physicians associations. Individual physicians report the number of points they have accumulated to the physicians' association, which calculates the value of a point by dividing the agreed budget by the total number of points reported. Individual physicians are reimbursed according to the number of points they have billed and the value of an individual point. In effect, this system encourages the

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<sup>18</sup> Salaries, however, remain the predominant form of compensation.

physicians' association to ration the supply of health services, as more points for one physician means lower reimbursements for all.

68. Hungary experimented with this approach during the 1990's. Between 1993 and 1997, separate points systems were introduced for outpatient services, acute inpatient services and chronic inpatient services. The amount of funding for each category of service was fixed in the yearly budget of the Hungarian health insurance fund. Points were added up nationally and the monetary value of one point was calculated by dividing the predetermined budget by the total number of points. But the Hungarian health insurance fund proved less adept at restraining performance inflation than the German physicians' associations. Claims increased and the value of a point dropped. In 2000, the health insurance fund abandoned this approach. For outpatient care, the value of a point is now fixed in advance. To control the supply of services, fiscal penalties are imposed on individual providers. As of 2004, providers receive 100 percent reimbursements only for the level of services provided in the previous year—or more precisely for 98 percent of that level. The excess, up to five percent, is reimbursed at 60 percent; between five and ten percent, 30 percent; and above that level, at only ten percent. Individual providers therefore have a strong incentive to turn away patients once their quota has been filled.

69. The Czech Republic has largely abandoned the points system altogether. The Czech Republic experimented with points system 1993-97. A total of 4,500 distinct procedures were reimbursable, with points based on the amount of time required to carry out a given procedure. Hospitals also billed points for each day spent in the hospital. Under the Czech system of regional sickness funds, each fund calculated the value of a point separately, by dividing its revenues from contributions by the total number of points billed to it. But, as in Hungary, the volume of claims exploded. In 1997, the Ministry of Health published a new list of procedures with new point numbers. This met with criticism both from providers, who believed that the new point numbers were insufficient to cover the costs of services, and from insurers who argued that their revenues from contributions would be insufficient to pay the providers even the stipulated amounts. The points system was therefore largely abandoned. Sickness funds now reimburse individual hospitals on the basis of aggregate budgets, which are largely based on expenditure in the preceding year. The points system is merely used to determine whether each hospital has delivered an equivalent volume of services.

70. Poland now rations the supply of secondary and tertiary care thorough individual contracts with health care facilities. The number of cases to be treated (under separate diagnostic-related groups) is agreed in advance and specified in the annual contracts between the sickness funds and individual health care providers. Similar methods are used in most Western European countries (excluding Germany). Such an approach bears consideration in Kazakhstan.

## CONCLUSIONS

71. The current system for financing subnational governments in Kazakhstan is in need of reform. Because it is largely based on history, it does not provide a rational basis for implementing the spending priorities of the Government. Experience in the large

Western federal countries and in the more recent, Eastern European, members of the European Union illustrate how the system might be reformed.

72. First, it suggests that the current system of historically-based subventions and withdrawals be replaced by one that explicitly reflects Government objectives in the form a transparent, readily measurable, formula. One such objective is clearly the reduction of interregional resource disparities. International experience suggests a variety of means of doing so. One promising approach would have the Government fixing a minimum per-capita floor for subnational spending for all oblasts. Oblasts exceeding the floor would be required to contribute a percentage of the surplus to the Government—although not necessarily 100%. Oblasts falling below the floor would receive a subsidy to bring them up to the minimum. Stability could be achieved by fixing the minimum level on a multi-year basis, either in real per capita terms or as a percentage of aggregate public sector revenues.

73. Separate, sector specific formulas may be required to achieve the Government's equity and efficiency objectives in the social sectors. With respect to primary education, there is a strong case for providing financing on a per-pupil basis. This would not only ensure an adequate level of spending for this function, but also provide an incentive for subnational governments to close under-enrolled schools and shift resources to more crowded facilities. Ancillary reforms are required to achieve this result, however. Subnational governments must have some degree of control over the determinants of costs, particularly including the authority to dismiss excess staff. And the Government must be willing to increase the level of capitation-financing to reflect any centrally-mandated increases in salaries.

74. There is a similar case for capitation based financing for primary health care. This would again ensure an adequate level of funding for this function and encourage treatment at the primary—as opposed to secondary and tertiary level. Some countries have attempted to include performance incentives into their system of primary health financing. Kazakhstan should not follow suit. Until Kazakhstan has the means to closely monitor the validity of claims, performance incentives are likely to encourage fraud and drive up costs.

#### **Box 4 Financing Capital Investment**

As noted earlier, capital grants constitute a relatively small proportion of subnational receipts. Access to credit is also limited—as it should be. This suggests that most subnational capital expenditures are financed from current account savings, i.e., the surplus of taxes and general subventions over recurrent expenditures. Such surpluses financed about two-thirds of subnational capital expenditures in 2002 and 2003. In 2004, the figure fell to 43%, due to the growth of targeted capital transfers to Astana. Financing capital investment involves a distinct set of issues and is therefore not addressed in this report. It would be a worthwhile subject of future joint economic research.

75. Reforms in the financing of secondary and tertiary health care should be similarly modest. While performance-based financing (in this case on the basis of DRGs) would, in

principle, reward efficiency, in practice such systems have been difficult to administer. Kazakhstan would do well to follow the example of most European countries, and ration secondary and tertiary health on the basis of service contracts with individual institutions.

76. There is one larger lesson to be drawn from international experience—particularly the experience of the recent EU accession countries: reforms along the lines of those recommended here can be implemented in a relative short period of time. Fifteen years ago, most of EU8 countries had intergovernmental structure very similar to Kazakhstan's. All of them have now largely completed the transition to Western style-system. Adaptations would clearly be required to fit the country's particular political and economic circumstances. Detailed design issues would also have to be addressed. These include the level of equalization to be attempted in the funding of discretionary expenditures and the specific formulas to be used for capitation-based financing in the social sectors. Such issues could be addressed in follow-on work by the World Bank.