

AN ECONOMIC ANALYSIS OF MILITARY EXPENDITURE LEVELS IN CENTRAL ASIA AND TRANSCAUCASIA

Chris Hill: MOD London

Peter Sutcliffe: NATO Economics Directorate

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An Overview of Transition Progress

Table 1 below extracts selected data from the 2000 EBRD Transition Report, which should be consulted for a fuller description of the classification system used to assemble the transition indicators. Basically, a value of **1** represents little or no progress with structural reform, whereas a score of **4+** suggests a standard or level of performance consistent with advanced industrial economies. Figures in **bold** represent a change from the 1999 rating, with normal type depicting an improvement in performance whilst *italics* reveal a deterioration. The 2000 CPI corruption index relates to perceptions of corruption as seen by business people, risk analysts and the general public. Scores range between 10 (highly clean) and 0 (totally corrupt). For reference, of the 90 countries listed in the index, Finland leads with a perfect score of 10, Japan is awarded 6.4, Brazil 3.9, whilst Nigeria comes in last at 1.2.

Table 1 : Transition Progress in Transcaucasia and Central Asia

COUNTRY	PopIn Million (mid- 2000) (mid 2000)	Private sector %age share in GDP (mid 2000)	Enterprises			Markets and Trade			Financial Institutions	
			Large- scale privati- sation	Small- scale privati- sation	Governance and entreprise restructuring	Price liberal- isation	Trade and forex system	Com- petition policy	Banking reform and interest rate liberalisation	Securities markets and non-bank financial institutions
Armenia 2.5	3.8	60	3	3+	2	3	4	1	2+	2
Azerbaijan 1.5	8.1	45	2-	3+	2	3	3+	2	2	2-
Georgia 2.3 (in 1999)	5.4	60	3+	4	2	3+	4+	2	2+	2-
Kazakhstan 3.0	14.8	60	3	4	2	3	3+	2	2+	2+
Kyrgyzstan 2.2 (in 1999)	4.7	60	3	4	2	3	4	2	2+	2
Tajikistan (no rating)	6.3	40	2+	3+	2-	3	3+	2-	1	1
Turkmenistan (no rating)	5.1	25	2-	2	1	2	1	1	1	1
Uzbekistan 2.4	24.9	45	3-	3	2-	2	1	2	2-	2

Sources: EBRD Transition Reports for 1999 and 2000; pages 24 and 14 respectively. 1999 and 2000 CPI from Transparency International/Göttingen University, www.gwdg.de/~uwww/2000Data.html

The data reveals widely varying performance between states, with Georgia, Kazakhstan and Kyrgyzstan emerging as clear leaders whilst Turkmenistan and to a lesser extent Uzbekistan bring up the rear. It is also evident that much more progress has been made in releasing enterprises from state control than in liberalising markets and trade. Least progress of all, not surprisingly, has been made in creating honest and transparent financial institutions. Corporate governance is another area where ratings are universally low and in some cases getting worse. Although examples of an improvement in performance over the past year outnumber examples of regression, overall transition progress appears to be very modest with some states (Uzbekistan, Turkmenistan and Armenia) now heading marginally back towards an even more oppressive level of state control over the economy. It should be added that some of the very positive scores (such as for the Georgian trade and forex system) appear to reflect liberal laws on paper rather than reality on the ground.

An Overview of Macro-Economic Trends

To the limited extent that official statistics reveal true levels of economic activity, the data in **Table 2** below reveals an overall picture of modest - and in a few cases robust - recovery from rock-bottom levels over the past two years. Russia's recovery from the 1998 crisis has aided most economies in the region, as have high prices on global markets for energy, raw materials, and other commodities. Official growth rates could, however, be more than usually suspect given the severe and prolonged drought that afflicted most of these countries for much of the year. Agriculture and related industries comprise a significant proportion of GDP and must have been adversely affected. As in Russia, most states are on course to register a marginally worse macro-economic record in 2001 featuring lower growth and higher inflation, although the picture is mixed. Encouragingly, those FSU states that score higher ratings with transition progress (see again **Table 1**) could experience less of a downturn - or even a slight improvement - in GDP than the reform laggards.

The World Bank per capita GDP figures at Purchasing Power Parity (PPP) in the first column are listed because they give a more accurate appraisal of relative living standards than the GDP data at market exchange rates in column 4, which do not account for the under-valuation - in terms of domestic purchasing power - of local

currencies against the US dollar. The data can be compared with PPP per capita GDP figures of US\$6,339 for Russia and about US\$25,000 on average in the G7.

Table 2 : Selected Macro-Economic Data for Transcaucasia and Central Asia - 1998-2001

FSU Per Capita GDP at PPP World Bank 1999	YEAR	GDP (% growth)	GDP (per cap - US\$ at market ex.rate)	GDP (% agri culture)	Unemp- loyment (% year- end)*	CPI (% year- end)	General Govmt Balance (% of GDP)	Current Account (US\$m)	Trade Balance (US\$m)	External Debt Stock (US\$m)
ARMENIA US\$2,210	1998	7.2	498	34	8.9	-1.3	-3.7	-403	-578	828
	1999	3.3	486	31	11.6	2.0	-5.9	-307	-474	855
	2000	6.0	504		10.7	0.4	-6.3	-278	-469	863
	2001	5.0				2.5	-4.7	-302	-516	
AZERBAIJAN US\$2,322	1998	10.0	526	20	12.9	-7.6	-4.2	-1,363	-1,046	717
	1999	7.4	499	22	13.9	-0.5	-5.4	-600	-408	1,031
	2000	10.5	507			2.2	-2.6	-64	465	1,190
	2001	8.5				3.7	-2.5	-435	-100	
GEORGIA US\$3,606	1998	2.9	644	31	14.7	7.2	-6.5	-389	-685	1,636
	1999	3.0	517	28	14.9	10.9	-6.7	-219	-541	1,754
	2000	2.0	555			7.0	-4.6	-250	-684	1,729
	2001	3.5				9.3	-3.5	-240	-599	
KAZAKHSTAN US\$4,408	1998	-1.9	1,452	9	6.6	1.9	-7.7	-1,236	-801	9,932
	1999	1.7	1,123	11	6.3	17.8	-5.3	-233	344	12,051
	2000	9.6	1,225			9.8	-0.8	960	2,641	12,328
	2001	6.0					410	2,200		
KYRGYZSTAN US\$2,223	1998	2.1	350	36	4.3	18.4	-11.2	-328	-170	1,473
	1999	3.7	264	39	5.4	39.9	-12.8	-200	-84	1,682
	2000	5.1	275			9.5	-7.2	-120	3	1,739
	2001	4.0				12.6	-6.4	-131	-17	
TAJIKISTAN US\$981	1998	5.3	218	20	2.9	2.7	-3.8	-120	-139	1,213
	1999	3.7	178	17	2.8	30.1	-3.1	-36	-27	1,214
	2000	8.3	158	17	2.5	60.8	-0.6	-61	-57	1,205
	2001	4.5				16.5	-0.7	-62	-40	
TURKMEN- ISTAN US\$3,099	1998	5.0	511	25		19.8	-2.7	-935	-523	1,750
	1999	16.0	374			21.2	0.9	-527	-166	2,050
	2000	17.6	415			7.4	0.4	20	630	2,400
	2001	6.0				23.1	-1.0	-150	500	
UZBEKISTAN US\$2,092	1998	4.4	433	26	0.5	26.1	-3.0	-38	171	3,484
	1999	4.1	321	28	0.5	25.2	-2.8	-88	191	4,289
	2000	1.5	298	27	0.6	40.0	-1.2	72	391	4,150
	2001	1.0				40.0	-3.2	241	567	

Sources: *EBRD Transition Report Update 2001*. Data for 2001 are projections.

World Development Report 2000/2001; World Bank - Table 1, pp274 and 275.

* Kazakhstan and Tajikistan are annual average. Official unemployment in Turkmenistan is zero.

Overall, we would assess that sustained regional economic renaissance is unlikely to materialise in the medium and longer terms, although better than average regional performance can ultimately be expected in those states that have made the most progress with structural and economic reform. The presence of rich energy reserves in some of these states may boost economies in the short- to medium-term, but whether this wealth is spent wisely or equitably remains to be seen. Moreover, future cycles of economic boom and bust in Russia are likely to be reflected in the macro-economic data for Transcaucasian and Central Asian states as well.

An Overview of Defence Spending Trends

Defence Spending in 2000

The countries of Transcaucasia and Central Asia provide only limited information on their defence spending. Some, indeed, do not offer even a figure for (supposed) total outlays while most of those that do give no meaningful explanation as to how it has been calculated. Inevitably, there is a suspicion that some items which in the West would be considered part of defence expenditure have been omitted and that the valuation attached to others bears no clear relationship to their true cost. In any case, all of the data is in a currency which is little understood outside the country concerned and cannot be freely converted into western money.¹ Moreover, there can be substantial differences between defence spending in a western context - i.e. the provision of security as a public good - and defence spending in a Central Asian context, where troops can spend a good deal of their time picking cotton, building roads or protecting the commercial interests of their commanders.

It is therefore highly likely that the nominal strength of armed forces in many of these states is substantially larger than the number of combat-ready troops able to counter any military threat. In this respect, military spending in these regions is more a matter of political priority than of affordability. The official budget can play only a small

role in military financing, with much larger sums being raised from other, often illegal, activities to fund both the state military apparatus and various ad hoc paramilitary or other armed groups.

We have therefore made our own estimates of defence spending. These are calculated in US dollars,² using NATO definitions of what properly constitutes a defence outlay and adjusting for the undervaluation of domestic currencies vis a vis the US dollar. Given both the lack of data and the non-structured nature of armed forces in many of these states, an element of uncertainty in the results is unavoidable. Nonetheless, we are confident that this approach yields more worthwhile data than can be derived through the conventional technique of accepting published defence budgets (where given) as a reliable expression of total defence outlays and then converting these to western currency using the market exchange rate.

Our calculations indicate that, for every country, the traditional procedure understates dramatically the dollar cost of defence spending. (See Table 3 below). For most states true defence outlays are, when measured in dollars, ten times or more the level usually quoted in assessments. Across the whole area, defence spending in 2000 amounted to some US\$5.46bn, a rise since 1998 of over 3% in nominal terms but essentially the same once US\$ inflation over this period is taken into account. There was some variation between regions. In Central Asia, where Islamic militants continued to pose severe security concerns, the real level of outlays rose sharply in 2000. However, since this followed a reduction in 1999, the growth in Central Asian military outlays over the full two years was, after inflation, less than 4%. In the Transcaucasus, however, spending has declined both in nominal and real terms since 1998 despite the fact that no state has suffered an absolute fall in GDP. Except when unavoidable, governments in the region generally remain reluctant to raise the financial priority of defence, preferring instead to use any additional resources that growth may produce to support standards of living or invest in the civilian economy.

**Table 3 : Defence Spending in Central Asia
and Transcaucasia - 1998, 1999, 2000³**

COUNTRY	DEFENCE BUDGET ⁴ In US\$ million - current prices - at official exchange rates (mid year)			DEFENCE EXPENDITURE (NATO definition) In US\$ million - current prices - via direct costing		
	1998	1999	2000	1998	1999	2000
Uzbekistan	170	134	n.a.	1,670	1,600	1,750
Kazakhstan	258	133	83	1,180	1,050	1,250
Kyrgyzstan	30	23	19	170	200	230
Tajikistan	18	13	13	120	120	130
Turkmenistan	102	112	n.a.	250	230	290
Total Central Asia	578	415	n.a.	3,390	3,200	3,650
Armenia	94	74	69	680	710	690
Azerbaijan	194	119	113	820	790	830
Georgia	61	28	22	400	350	290
Total Caucasus	349	221	204	1,900	1,850	1,810

This revised data goes some way towards solving one of the greatest puzzles over the region's defence outlays, namely how in many cases quite large armed forces - in terms of the number of troops - could be maintained on what appeared to be minimal dollar-equivalent spending. It does not, however, mean that the countries' military capabilities are any larger than we had previously thought - on the contrary, they have exactly the same number of men, aircraft, tanks and so forth - nor that they spend more in their domestic currency to secure those capabilities. The real purpose of the dollar cost estimate is to permit reliable defence spending comparisons between nations, thus providing a key input into assessments of the size and scale of any military build-up. The bottom line is that, even with the revised data, outlays are in all states relatively small by international standards. We assess that in 2000 the eight countries of Transcaucasia and Central Asia together spent on defence less than a sixth as much as the United Kingdom or, put another way, sufficient to support the United States' military effort for less than a week.⁵

Table 4 below shows defence spending in 2000 per serviceman (including paramilitaries) and per head of population on NATO definitions. These figures reveal wide differences between countries. In terms of outlays per serviceman, Uzbekistan, determined not only to defend itself from external threat but also to be a leading military power in Central Asia, tops the list. In terms of outlays per head of population, Armenia is the highest followed - a considerable distance behind - by Azerbaijan, two countries still in dispute over Nagorno-Karabakh. Defence outlays per capita in Central Asia and Georgia are by comparison quite low.⁶

Table 4 : Defence Expenditure per Serviceman and per Head of Population in 2000 (NATO definition - in \$US at current prices - via direct costing)

COUNTRY	Defence Expenditure per Serviceman (US dollars)	Defence Expenditure per Head of Population (US dollars)
Uzbekistan	22,400	71
Kazakhstan	15,300	84
Kyrgyzstan	16,400	48
Tajikistan	7,900	21
Turkmenistan	10,000	62
Average Central Asia	16,600	66
Armenia	13,500	181
Azerbaijan	9,600	103
Georgia	8,700	54
Average Caucasus	10,800	104

Defence Burden Estimates for 2000

Across the entire region, defence spending last year accounted for a little over 2.5% of GDP, about the same as in NATO and only half that for Russia. There were, as Table 5 below demonstrates, substantial differences between countries but only in Armenia do

defence outlays generally seem likely to impinge significantly on the level of funding available for other purposes. Elsewhere, sustainability is probably more a question of the governments' ability to raise revenue than of the overall strength of the economies. Indeed, compared to 1998 the defence burden has fallen in all countries except Kyrgyzstan.

Table 5 : Defence Burdens in 2000 (Milex as % of GDP)

Under 2%	2 - 3%	3 - 4%	4 - 5%	Over 5%
Kazakhstan	Kyrgyzstan	Uzbekistan	Turkmenistan	Armenia
Moldova	Tajikistan		Azerbaijan	

Note: For comparison, Russia and NATO (average) defence burdens in 2000 were roughly 5% and 2.5% respectively.

Military Spending in Central Asia

Kazakhstan

After lengthy debate and the discussion of sums varying between 8 and 16.5 billion tenge, Kazakhstan's defence budget for 2000 was finally set at 11.896 billion tenge. In cash terms this was about the same amount as had been spent the previous year but after inflation represented a marked reduction. The military outcry was strong and within two months President Nazarbayev had agreed to increase funding for the second half of the year by 20%. Then, over the summer, as the security situation in Central Asia deteriorated, the Kazakhs decided to bolster their forces by calling up significant numbers of reservists, particularly specialists in areas such as engineering and telecommunications. The budget allocation for the year eventually topped 17 billion tenge. If price rises for the military sector were the same as for consumer goods, outlays of this magnitude would have been worth around a quarter more in real terms than those for 1999.

Some defence spending falls outside the official defence budget. For example, the science budget, which in 2000 was increased by 260 million tenge to around 1.3 billion tenge, funds most of Kazakhstan's limited military R&D programmes. Internal security forces are also not

paid from the defence budget. In 2000 it was agreed that the maritime border guards needed strengthening, but with the Ministry of Finance ill-placed to find any additional funding, businesses were asked to contribute on a voluntary basis. Enterprises are in fact a significant source of funds for the military; in November 2000, the commander of the Atyrau border detachment in western Kazakhstan spoke freely of the assistance given to his unit by companies such as Kazakhoil-Emba, Irbis-Servis and Ofis-Servis.

International barter can provide a significant boost to defence funding. Under an agreement signed in February 2000, Kazakhstan was to receive Russian defence equipment, including transport aircraft and helicopters, rather than hard currency as payment for Moscow's lease of the space facilities at Baykonur.⁷ It is also getting large numbers of aircraft (mainly Su-27, L-39 and Tu-154) and two SA-10 air defence systems to replace material taken by Russian troops when they left Kazakhstan after the break-up of the Soviet Union. Overall, we judge that on western definitions of military spending, outlays in 2000 were probably around 40 billion tenge, just under 2% of GDP.

This sum was inadequate to meet all of the requirements of the armed forces. One general, lamenting the poor conditions in the Kazakh army compared to those in the Chinese military(!), claimed that because the 2000 budget provided only 250 million of the 750 million tenge needed to purchase personal accessories, the typical lieutenant could spend up to one third of his wages on such things. Self provision of shoulder straps, long-service stripes, cap badges and the like seems to have become standard in the Kazakh army and there have even been references to soldiers having to buy their own footwear. Efforts underway since early 1999 to increase the proportion of contract servicemen in the forces appear, temporarily at least, almost to have stalled due to lack of funds; the latest figures suggest that there are still only 10,000 such individuals.⁸ Despite a fall in the number of desertions in 2000, the life of conscripts remains unenviable. The Ministry of Defence also regularly complains about their quality and motivation. Legislation is apparently now being prepared under which individuals wishing to avoid conscription will be able to do so in return for a fixed payment.

The defence budget for 2001 has been set at 25 billion tenge, an increase after inflation on the sum finally spent in 2000 of about a third. There is, of course, no guarantee that all of the promised extra cash

will materialise although the 2001 defence budget was confirmed at a meeting of the National Security Council in March 2001. Whatever actual outlays turn out to be, we assess that their real level will show some significant growth in 2001. There is little detailed information on how this will be spent. The government has, however, said that training will be enhanced and that there is a requirement for more mobile forces. Servicemen's salaries were supposed to be raised by around 30% from the start of the year though for many no extra money had been received by the end of March.⁹ There is so far no evidence of negotiations to buy new or upgraded weapons though these are probably taking place. In February 2001 deputy defence minister Gosman Amrin said that he hoped new military equipment would begin to arrive with the forces from 2002; deployment of a modern air defence system is apparently planned for 2005.

There are also plans to increase other parts of the state budget where defence spending is located. Outlays on public order and security have been fixed at 30 billion tenge, a substantial rise on 2000. However, because this allocation also includes money for the police and judiciary, it is difficult to assess exactly how the paramilitaries will fare. The science budget is scheduled to rise from 1.3 to 1.5 billion tenge, though most, if not all, of this is likely to be needed to fund the 30% pay boost given to all budget funded civilian staff from 1 January 2001. Not surprisingly, there have been calls for a further increase in resources, perhaps to 2.3 billion tenge.

Uzbekistan

Uzbekistan's armed forces are the strongest in former Soviet Central Asia. The government last released information on the defence spending needed to support these forces in 1999 and even then the figure (34.9 billion som) had to be treated with caution. All outlays on troops belonging to the Ministry of Internal Affairs, the State Border Service, the Ministry of Emergency Services and the National Security Service were excluded because they were met from outside the defence budget. Expenditure on the research, development and testing of weapons was also omitted as were any subsidies to defence industries. Until the end of last year military pensions were probably paid by the Ministry of Social Security; since then responsibility has been transferred to a non-budgetary pensions fund. Finally, many transactions were completed by barter and it was unclear how, if at all, the value of these was reflected in expenditure figures.

We judge that, if all of these items together with Ministry of Defence debts incurred during the year were included, total defence spending in Uzbekistan in 2000 was probably around 65 billion som, equivalent to just over 3% of GDP. Of the nine-tenths of outlays which are allocable to particular branches of services we assess that about two thirds went to the ground forces with the remainder split roughly equally between, on the one hand, the air and air defence forces and, on the other, the various paramilitaries.

In real terms outlays appear to have risen quite significantly last year, primarily in response to incursions by the militant IMU whose stated aim is the overthrow of the government in Tashkent. Significant numbers of troops had to be deployed to the mountainous border region where fighting was often fairly intense. Substantial quantities of small arms and ammunition were purchased, where possible by barter, and there seem to have been efforts to service and renovate some larger equipment. The importance of the latter can be seen in the comment by Air Force commander Kashimov last November that 90% of the Mi-8 (Hip) helicopter fleet was then in need of repair, that only a third of Mi-24 (Hind) helicopters were operational and that all 12 Su-27 (Flanker) fighters at Chirchik airbase required depot-level work. The authorities also appear to be pressing ahead with plans for a new military airport at Uchkuduk.

"Reinforcing the country's military potential" has been named as one of the priority sectors for budget outlays in 2001 and it seems likely that, despite a relatively gloomy economic prognosis, a further rise in defence spending is planned. We expect part of this extra money to be devoted to modernising the helicopter fleet; in March 2001 Uzbek Defence Minister Qodir Ghulomov reportedly reached an accord with a visiting Russian military delegation for the delivery of an unspecified number of Ka-50 (Black Shark). In May 2001, according to Russian press reports, President Putin agreed to supply substantial quantities of weaponry in exchange for cotton, gas, fruit and vegetables. Beyond that, even if the fundamentalists are suppressed, military outlays may continue to grow as attempts are made to progress President Karimov's vision of a better paid, better organised, all-professional force, albeit with smaller numbers than at present.

Turkmenistan

The Turkmenistan defence budget for 2000 was not published, though it probably provided for a large increase in funds over the

582 billion manats approved for 1999. Salaries for regulars were, for example, typically doubled from the start of the year, a rise several times that needed to match inflation. Plans announced at the end of 1998 to cut the size of the armed forces also appear to have been implemented only slowly and, because of the redundancy package, may not in any case have saved much money in the short term. There is, however, no evidence of any upsurge in arms imports: in May 2000 President Niyazov said the forces already had enough equipment for the next 10-15 years.

The published budget probably includes most outlays on border and internal security troops as well as those on the regular services. Nevertheless, its coverage is still unlikely to be as comprehensive as those of NATO countries. For example, Georgia, which is currently refurbishing 46 Su-25 (FROGFOOT) aircraft for the Turkmen air force, will probably not be paid for this out of the defence budget but rather will have the debts it has incurred for natural gas supplies reduced. According to the press, the cost of the work being undertaken in Georgia is around US\$1m per plane, a significant sum even if spread over more than one year when the total published defence and law enforcement budget for 1999 was worth only US\$112m at market exchange rates. Turkmenistan is also not always prompt in settling bills that should be paid in cash. For instance, as of October 2000 it owed Russia R5.7m, the most of any former Soviet state, for training its citizens at higher education establishments of the Russian Federal Border Guard Service. Part of the debt apparently dated back to 1996. Allowing for these and other likely omissions (e.g. military pensions and housing benefits for discharged servicemen) we assess that in 2000 total defence spending on NATO definitions was in the region of 1,100 billion manats, some 4.5% of GNP.

No figures for defence spending in 2001 have yet been announced. However, all military pay and pensions rose by 50% on 1 March. But since most salaries across the economy were doubled on that date it seems likely that inflation will rapidly eliminate the benefits to the military of their pay hike and, indeed, real standards of living could fall. The forces will also be required to make themselves fully self-sufficient in certain types of food in 2001. Although no further cuts in personnel numbers are planned for this year, President Niyazov has announced that contract service will eventually be abolished. He said that this was being done with the aim both of cutting costs and rooting out fraud.

Kyrgyzstan

The Kyrgyz defence and security budget is not comparable in coverage to a western defence budget. On the one hand, it is believed to fund not only the Ministry of Defence and internal security forces but also perhaps the police and judiciary. On the other, it probably excludes military pensions and a number of other defence-related items. Furthermore, it is doubtful if an accurate - or perhaps any - allowance is made for goods obtained by barter, either from domestic or overseas sources, while the price attached to many other products probably does not reflect their true cost. Nonetheless, it is worth noting that the budget for 2000 was (probably) initially fixed at 900 million som, a cut of just over 5% in cash terms compared to the previous year. Out of this sum around 460 million som appears to have been directed to the Ministry of Defence.¹⁰

It was soon apparent that such sums were not enough to meet military requirements. In the first six months of last year the Ministry of Defence received 300 million som, well above the planned amount, and other parts of the security apparatus probably also obtained substantial additional funding. A major incursion by Islamic extremists into southern Kyrgyzstan over the summer - similar to one that took place in 1999 - dramatically added to the problem, with large numbers of troops being once again despatched to fight them. In August alone the Defence Ministry and other security organs received an extra 100 million som while late the following month Marat Sultanov, chairman of the Parliamentary Committee on Budget and Finances, claimed that the total additional cost to the budget of military operations since the start of the fighting had been 400 million som. The money, he said disarmingly, had been found from sums originally set aside to meet Kyrgyzstan's foreign debts.

With military engagements continuing in earnest into October before the militants were finally declared beaten, the financial cost to Kyrgyzstan was doubtless eventually well beyond that figure. Various sources suggest that the Ministry of defence received some 810-830 million som for the year as a whole while relatively substantial extra resources also went to the Ministry of Internal Affairs, the National Security Ministry and the National Guard. Overall, we estimate that on NATO definitions total defence outlays in 2000 might have been in the region of 1,500 million som, that is about 2.5% of GDP.

Despite the increased defence spending and help from abroad Kyrgyz forces remained weak. One report claimed that in early 2001 the air force had only 3 fully operational aircraft (2 subsonic L-39 trainers and an obsolete Mig-21 fighter) and 2 military pilots! The ongoing crisis with Islamic extremism has now pushed the authorities into drafting better mobilisation regulations and a new operations plan. The latter envisages major changes, including the establishment of a Southern Group of Forces with a number of battalion sized sub-divisions. Negotiations have started with Russia for the purchase of Mi-8 helicopter gunships and a defence co-operation agreement has been signed with Kazakhstan. The government has also decided to speed up the process of replacing conscripts with contract personnel but, as with the other developments, the financial consequences will be significant. Contract servicemen are said already to receive salaries on average twice the national average and further increases have been mooted.

The official defence budget for 2001 has been set at 535 million som, a rise in nominal terms of around 16% compared to the allocation initially approved for last year. If inflation in the defence sector is comparable to that in the rest of the economy, the real increase should be around 5%. However, as in 2000, it is doubtful whether the planned sums will be sufficient. Figures for first quarter outlays imply that the Ministry of Defence is already heading for an overspend of 20-25% and this is certain to worsen dramatically if, as expected, the militants renew their attacks. Both the Ministry of Defence and the Kyrgyz parliament have demanded extra funds for the armed forces though, as of mid-April, the Ministry of Finance was still resisting this.

Tajikistan

On the basis of limited information we estimate that, on NATO definitions, total defence outlays in 2000 were probably in the region of 35-40 million somoni and accounted for about 2% of GDP, significantly less than half that at the height of the civil war. Spending at this level was inadequate to overcome serious shortfalls in Tajik military capability. Moscow is, however, trying to help and in 2000 provided some 5.1 billion (Russian) roubles out of its own budget to restore Tajik air defences. Russia also deploys in Tajikistan a motorised rifle division and supplies many of the officers in the internal security forces. Tajikistan has no air force of its own and in a

conflict would be entirely dependent on Russia for aerial cover. In February 2001 Defence Minister Sherali Khairulloev visited Moscow where he discussed with the then Russian Defence Minister Igor Sergeev the possibility of securing for his country unspecified weapons and ammunition at reduced prices, but the outcome is unknown. China, also keen to promote its interests in the region, agreed in July 2000 to grant 5 million yuan (about US\$0.7m at the official exchange rate) to enable the Tajik Ministry of Defence to pay for language training for some of its officers in Shanghai and to obtain some minor equipment.

A key decision in 2000 was the axing of contract military service, a promise being made that some of the money saved would be used to increase the salary of remaining servicemen and to purchase new weapons. In August several thousand men apparently left the Defence Ministry, Internal Affairs Ministry, Presidential Guard, Emergency Situations Ministry and State Border Guard, each provided with at least five months' pay. Most allegedly went into farming. President Rahmonov tried to present the move as an attack on crime, claiming that contract servicemen were selling their weapons or using them to carry out robberies. It was probably designed more to rid the forces of former guerrillas who had been allowed to join on contract as part of the 1997 peace deal with the United Tajik Opposition. There is no evidence that the remaining servicemen have yet obtained their pay rise nor have there been any major equipment imports, though fighter aircraft are believed to top the Ministry of Defence's wish-list.

There is as yet no information on the amount of defence spending planned for 2001. However, Finance Minister Safarali Najmuddinov said last December that the major priority was to reduce poverty through a tripling of the minimum wage and salary increases of 40% for workers in education, health and government administration. If these aims are met, we believe that there will not be sufficient money in the state budget also to provide any major boost to the military.

Military Spending in Transcaucasia

Georgia

The armed forces in Georgia suffer from chronic and worsening underfunding. In 2000 the state budget included an allocation of 43.7 million lari for the Ministry of Defence. This was well under half the

sum originally requested and, even after allowance for the transfer of military pensions out of the defence budget, an estimated 15% less in real terms than had been approved for the previous year. By comparison with 1997, planned budget outlays had fallen after inflation by well over a half. The military were unsurprisingly adamant that it was impossible to operate efficiently on the promised level of funding, which was in fact equivalent to just 0.5% of GDP. However, the government, far from offering concessions, then decided that it could not fund the defence budget even as it stood. It therefore formally sequestered almost half of the vote, leaving the Ministry of Defence with just 23.5 million lari.

As in other countries in the region, significant amounts of what the West would call defence spending are met from outside the Defence Ministry budget. The State Border Guard appears initially to have been allocated 12.5 million lari (though some sources claim this was cut to 11.1 million lari) while the Internal Security troops were promised 10.1 million lari and the Government Guard Service 7 million lari. Spending on military pensions might, on our estimates, have been set at around 6-7 million lari. However, as with the Ministry of Defence, budget allocations are not necessarily a reliable guide to actual sums paid out and there have been many complaints of grossly inadequate funding.

The authorities argued that large amounts of money could be saved by cutting personnel numbers. In June 2000, at the insistence of President Shevardnadze, the Georgian parliament agreed to cut by year-end the number of Defence Ministry troops from 27,000 to 20,000, of Internal Security troops from 7,900 to 6,400 and of Border Guards from 9,500 to 8,700. The size of the Government Guard Service was, however, increased from 3,000 to 3,300 largely to provide increased protection for oil pipelines. As far as we can judge, the forces met or came fairly close to meeting these targets. Plans to move towards fully professional services were put on hold. The Ministry of Defence said that it alone would need an additional 20 million lari just to replace conscripts with contract staff. Senior officials talked of cutting short the autumn conscription round since many units could not find the resources to absorb more men.

Savings from force reductions were hopelessly inadequate to offset budget reductions, particularly since the law required dismissed servicemen to be given substantial redundancy payments and other benefits. As a result, military salaries were left unpaid for large parts of the year and, even when they did reach soldiers' pockets, were due to

inflation worth less in real terms than in the previous year. Allowances were also often left unpaid while most military pensions were months in arrears. Thirty per cent of officers were said to have taken outside jobs, usually menial ones, in an attempt to secure some cash while others were noted selling their blood. There were no uniforms for large numbers of new recruits and those with longer service came to look increasingly shabby. Food supplies fell to alarming levels, with the typical soldier in some units reportedly receiving on average only 1,500 calories a day.¹¹ In mid-November 2000 Colonel Akia Barbbakadze, head of the Main Rear Logistics Directorate, claimed gloomily that "starvation is beginning in the army".

Overall, we assess that, on NATO definitions and including the value of goods and services received but not paid for, the Georgian defence effort in 2000 cost around 90 million lari, still only 1% of GDP. Despite the likelihood of continued economic growth, the situation seems unlikely to improve this year. The Defence Ministry budget has been set at just 33.06 million lari, a reduction of about a quarter in real terms compared to that originally fixed for 2000. Within that sum, just over 7 million lari has been allocated for the purchase of food, little more than half the amount said by the Ministry of Defence to be necessary to meet requirements. The salary and equipment maintenance bids have also been cut sharply while there is no provision at all in the final budget for either new weapons procurement or for the maintenance of Ministry buildings. The Internal Security Troops, Border Guards and the Government Guard Service are also promised less money than last year. Moreover, as with previous years, it is doubtful whether the promised sums will ever materialise. During the first quarter, for example, the Border Guards received only 88% of the amount authorised for that period. Soldiers belonging to the Interior Ministry's Tqibuli battalion simply went on strike, declaring that they had not been paid for 13 months. Although friendly states are providing some assistance,¹² a further decline in capability seems inevitable.

Armenia

The Armenian defence effort continues to be driven by the as yet unresolved dispute with Azerbaijan over Nagorno-Karabakh. The budget allocation for 2000 was officially fixed at around 38 billion dram, less than 4% of GDP, but this omits a number of items which NATO countries would consider part of their military expenditure.

These include internal security, which last year was expected to cost 5 billion dram, military pensions, which we estimate to require outlays of about 6 billion dram per annum, and numerous smaller elements. Armenia also obtains financial aid from Russia, particularly for border protection. In our view total defence outlays in 2000 (including the value of unpaid bills) probably topped 60 billion dram. At almost 6% of GDP, this defence burden is the highest in the former Soviet Union.

Despite this, Armenia has not been able to meet the requirements of its forces. The number of conscripts called up in 2000 was, at 23,000, about 7% less than in the previous year. Moreover, almost half of those who were conscripted did not have a full secondary education and many were in poor physical shape. Once inducted, large numbers found conditions of service so bad that they routinely went absent without leave. Beginning in June 2000, the number of patrols despatched to apprehend offenders was virtually trebled. This situation is unlikely to improve in the short term. In 2001 the official defence budget is scheduled to decline to 37 billion dram. A pay rise for either servicemen or Ministry of Defence civilians has been ruled out even though inflation will probably be around 4-5%. There are also unlikely to be any major equipment purchases though Defence Minister Sarkisyan has promised to try and improve training, notably by holding in June 2001 the country's first all forces exercise.

Azerbaijan

The Azeri defence budget for 2000 was fixed at 494 billion manats, an increase of 4.8% in nominal terms and perhaps 3% after inflation compared to the previous year. This was not enough to pay off the large Ministry of Defence debt nor significantly to improve the very poor conditions of service prevalent within the forces. Money was, however, found to arm a coastal patrol craft. Corruption is widespread: a check on Defence Ministry spending, completed in October 2000, apparently found irregularities sufficiently serious to be reported to the President though no details as to their precise nature have yet been released. Critics have referred publicly to cases where senior officers have demanded money from soldiers who have completed their military service and, when this has not been paid, have extended their term in the forces.

Many items of defence spending are, as elsewhere in the former Soviet Union, met from outside the defence budget. These include

border guards and internal security forces, both of which report to the Ministry of the Interior. Ammunition acquired from Ukraine during 2000 appears to have been paid for, at least initially, in diesel fuel from central stocks rather than with money from the Ministry of Defence. Other goods have also been obtained internally by barter. However, the Azeris have so far been unable to secure payment from Russia of a bill for using the Gabala radar station. Overall, we assess that, on NATO definitions, Azerbaijan spent over 1,000 billion manats on defence in 2000, equivalent to almost 5% of GDP.

The defence budget for 2001 has been set at 539 billion manats, a 9% nominal increase over 2000 and well ahead of expected 3% annual inflation. The science budget, which probably provides most of the limited funding needed for military R&D projects, will grow by 13%. With its economy outperforming, and over the next few years expected to go on outperforming, that of Armenia, Azerbaijan seems likely to be the better placed of the two countries to fund any major build up of armed forces.

1. Further information on published defence budgets is given in the individual country sections.
2. The non-Russian FSU states do not, of course, normally "spend" dollars, except on imports. A more precise description of our measure might be "dollar-equivalent cost of the resources devoted to defence" but this is grammatically cumbersome and we have preferred to stick with a simpler, if slightly less accurate, term.
3. Russian defence expenditure in 2000, computed on a similar basis, is estimated at about \$50bn - fully nine times more than the Central Asian and Transcaucasian regions together.
4. As initially approved by the relevant parliament. The defence budgets in some countries were revised during the course of the year.
5. At official exchange rates, total Central Asian and Transcaucasian MILEX in 2000 would have funded US armed forces for less than one day.
6. By comparison in 2000 the United States spent c.US\$210,000 per serviceman and US\$1,060 per head of population. For Russia the estimated figures were US\$29,600 and US\$340 respectively.
7. Some press reporting suggests that, despite this agreement, Russia may eventually have paid the Baykonur rental fee in currency rather than goods. If so, this presumably reflects its much improved financial position following the rise in the international price of oil.

8. Defence Minister Sat Tokpabayev has said that he hopes that, over seven or eight years, the proportion of the armed forces made up by conscripts can be reduced to no more than a half. He has acknowledged, however, that this depends both on sufficient funding and on an adequate number of volunteers.
9. The MOD had, however, by then imposed extra accommodation charges on officers and abolished their free food rations.
10. Other sources suggest that the Defence Ministry was allocated either 212 or 350 million som. The MOD's own estimate of its requirement was apparently 674 million som.
11. Despite inflation, the official norm for spending on food has been fixed at 59 lari a month per serviceman since 1996.
12. Bulgaria has, for instance, agreed to supply two amphibious warfare ships free of charge.