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Central Asia:
Problems of External Debt and Its Sustainability

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CENTRAL ASIA: PROBLEMS OF EXTERNAL DEBT AND ITS SUSTAINABILITY

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Abstract

This paper is devoted to one of the most urgent problems of Central Asian economies in transition, i.e. external debt and its sustainability within systemic transformation process. On the basis of vast current statistical data the problems of structure and dynamics of external debt are analysed and some policy recommendations are made. Basic transfer equations and two-gap models are used as tools to measure external debt. The paper attempts to find solutions considering both specific causes of the external debt itself and debt problems via related balance of payments issues. In conlcusion, it emphasized the necessity to deal with external debt through policies in all spheres of debt management, foreign trade and the flow of international financial resources implemented simultaneously. It proves that only the cumulative effect of all measures will allow the rather complex and persistent character of external debt to be overcome.

Keywords: Central Asian Independent States, External Debt, Indebtedness Indicators, Debt Sustainability.

JEL codes: F34, O57

1. Introduction

The debt problem has been emerging rather rapidly in all FSU countries. The Russian financial crisis and its default in August 1998 alarmed creditors about a new debt situation and appeared not only in that country, but other NIS as well. What is the real debt of the Central Asian states, whether it is sustainable? To answer the questions one needs to study thoroughly respective data available on each particular country.

The IMF, World Bank, the Organization for Economic Cooperation and Development (OECD), the European Bank for Reconstruction and Development (EBRD) data on total debt and its distribution, as well as the Bank for International Settlements (BIS) and especially Joint BIS-OECD-World Bank statistics on external private debt are among the most reliable sources. However, even in publications of these authoritative international financial organizations the data bear some discrepancies, and in certain cases rather tangible ones. One of the main causes is the methodology. The OECD debt figures, e.g., differ from other international and national sources, because its debt concept includes total gross long- and short-term debt owed by all borrowers in a country to all non-resident creditors. Other sources may limit coverage to particular categories of debt, such as bank and trade creditors' claims as in the BIS semi-annual survey or public sector debt only for most countries in the World Bank Debtor Reporting System [OECD, External Debt Statistics (1998) p.35].

The dicrepancies are also connected with the fact that coverage, quality and timeliness of primary national debt data vary across the Central Asian countries. Reporting agencies in these newly independent states differ in their capacity to monitor debt, and they are, as a rule, lacking the necessary experience and skills. As a result, data not only on private non-guaranteed debt, but even public and public guaranteed debt are not always accurately reported. Variations in reporting of rescheduled debt also affect the cross-country comparability. Other areas of inconsistency include country differences in the treatment of arrears and of non-resident national deposits denominated in foreign currency. Multiple exchange rates in some Central Asian states contribute also to some uncertainties in recalculations of past debts and projections of their dynamics in mid-term. Considering all these factors one should be very cautious about figures and use

comparable time series from available sources. This can permit us to identify better the main dimensions and trends of external debt in the states of the region under consideration.

Despite the existing disparities in the data of IMF, World Bank, EBRD and OECD, one thing has already become obvious: all sources witness the rapid accumulation of the total debt stock in absolute and relative terms compared to GDP and exports in all five Central Asian states. According to IMF data, in the end of 1998, their public external debt was about USD 14.6 billion. It had increased rather fast – 9.6 times in less than seven years (compared to 1992). The World Bank, OECD and EBRD data for the total debt stock also indicates a rapid growth between 1992 and 1998. In some of these countries, ratios of debts to GDP and to exports have been accelerating and approaching critical levels very fast, especially within the last 2-3 years (see Tables 1-3).

One can put justified questions whether the states of the region have been using borrowed funds efficiently and whether they could sustain the rapidly growing external debt without proper management. Even a bird's eye view on the dynamics of the total debt stocks and their ratios to GDP and exports indicates that each country in the region could soon be faced with a heavy and unsustainable burden, if it continues its recent borrowing policies. But the important thing about external debt analysis is not only its total amount, but also from what sources they have been borrowed, at what conditions and for what purposes, as well as how efficiently it is used. To identify the direct causes of the high rates and country-by-country specific features of external debt growth in the region and to determine what policies to pursue, the structure and dynamics of the total debt stock and its components need to be carefully examined first of all.

2. Total External Debt, its Structure and Dynamics

The overall picture of external debt accumulated by five Central Asian states since their independence could be easily drawn from Tables 1-3. They contain the data on total debt stocks, as well as their ratios to GDP and total exports of the respective countries, collected from four major sources: the IMF, World Bank, EBRD and OECD publications. It is clear that to get a

more in depth and consistent view a researcher needs to pick up one source series at a time, and not to mix up figures compiled on differing methodological concepts.

Table 1. Total Debt Stocks, 1992-1999 (USD million)

	1992	1993	1994	1995	1996	1997	1998	1999
Kazakhstan								
IMF	1,244	1,848	2,717	3,428	5,489	7,257	7,331	
World Bank	35	1,728	2,790	3,695	2,920	4,278	5,714	
EBRD	1,478	1,848	3,494	4,965	6,224	7,893	7,860*	
OECD		1,723	2,679	3,401	2,948	3,604		
Kyrgyzstan								
IMF	5	292	414	585	733	957*	1,123*	
World Bank	4	298	453	616	746	928	1,148	
EBRD		290	414	585	753	935	1,123*	
OECD		290	421	634	865	999		
Tajikistan								
IMF	217	509	760	817	867	1,104	1,178	776
World Bank	10	389	566	605	672	901	1,070	
EBRD		509	760	817	868	1,180	1,319*	
OECD		322	498	563	621	663		
Turkmenistan								
IMF		168	418	550	667	1,356	1,749	1,860**
World Bank		276	431	392	825	1,771	2,266	
EBRD		168	418	550	667	1,360	1,749*	
OECD		177	423	346	879	1496		
Uzbekistan								
IMF***	62	1,038	1,107	1,781	2,376	2,568	3,236	3,752
World Bank	60	1,032	1,244	1,782	2,319	2,761	3,162	
EBRD	65	948	1,101	1,782	2,331	2,568	3,223****	
OECD		993	1,077	1,885	2,176	2,892		

*estimates; **as of June 1, 1999; ***Public and public-Guaranteed debt with data for 1999 as of October 1,*** Non-Guaranteed private debt (USD 400 mln.) not included
Sources: IMF Staff Country Papers – Recent Economic Developments: Republic of Kazakhstan, August 1998, No. 98/84, p. 64 and March 2000, No. 00/29 p.131; Kyrgyz Republic, April 1999, No.99/31, p.125; Republic of Tajikistan, March 2000, No. 00/27, p. 42, 96; Turkmenistan, August 1998, No.98/81, p.49 and December 1999, No. 99/140, p. 125; Republic of Uzbekistan, October 1997, No. 97/98 p. 51 and March 2000, No. 00/36, p.76; Global Development Finance 1998, Country Tables Finance, World Bank, Washington D.C.,p.300-303, 308, 524, 556, 572; GDF 1999 and 2000 (homepage of the Word Bank); Transition Report, 1999, EBRD, November 1999, p. 233, 237, 273, 277, 285; External Debt Statistics, Supplement, Resource Flows, Debt Stocks and Debt Service, 1987-1998, OECD, Paris, 1999, p.111, 117, 180, 188, 194.

Table 2. Total Debt Ratio to GDP, 1992-1999 (%)

	1992	1993	1994	1995	1996	1997	1998	1999
Kazakhstan								
IMF**	43.2	39.6	25.7	20.7	18.7	20.6	17.3*	
World Bank	0.1	7.0	14.4	19.4	15.2	19.5	26	
EBRD	29.6	11.9	29.7	29.9	30.0	35.1	35.1*	
Kyrgyzstan								
IMF**	0.6	23.8	37.4	36.4	41.5	54.1		
World Bank	0.2	11.4	17.8	18.5	28.5	42.8	65.8*	
EBRD		33	37.5	39.1	41.5	53.0	65.9	
Tajikistan								
IMF	74.4	129	157	230	141	155	134	
World Bank	0.3	13.1	28.6	32.2	35.2	44.6	49	
EBRD		73.3	93.8	170.1	83.9	98.4	101.4*	
Turkmenistan	…							
IMF		3.3	26.1	20.7	28.1	50.6	64.6	
World Bank		4.8	9.9	9.4	18.7	63.4	88	
EBRD		3.6	18.7	21.9	34.4	74.1	85.8*	
Uzbekistan								
IMF**	3.1	18.9	19.5	17.5	17.9	23.0	25.3	
World Bank	0.3	4.7	5.9	8.0	10.0	11.2	16	
EBRD***		18.6	19.3	17.8	20.4	26.4	36.4*	

*preliminary; **Public and public-Guaranteed debt ratio to GDP; since 1996 GDP in USD calculated using weighed official and curb market exchange rates

Sources: IMF Staff Country Papers – Recent Economic Developments: Republic of Kazakhstan, August 1998, No. 98/84, p. 64 and March 2000, No. 00/29 p.131; Kyrgyz Republic, April 1999, No.99/31, p.125; Republic of Tajikistan, March 2000, No. 00/27, p. 42, 96; Turkmenistan, August 1998, No.98/81, p.49 and December 1999, No. 99/140, p. 125; Republic of Uzbekistan, October 1997, No. 97/98 p. 51 and March 2000, No. 00/36, p.76; Global Development Finance 1998 (1999), Country Tables Finance, World Bank, Washington D.C.,p.300, 308 (312), 524, 556, 572; Transition Report, 1999, EBRD, November 1999, p. 233, 237, 273, 277, 285;

Table 3. Total Debt Ratio to Exports, 1992-1999 (%)

	1992	1993	1994	1995	1996	1997	1998	1999
Kazakhstan								
IMF	43.2	39.6	25.7	20.7	18.7	20.6	17.3*	
World Bank	0.6	40.7	65.7	65.2	44.4	55.6	79	
EBRD	41.1	38.5	106.4	96.1	98.9	116.6	136.1*	
Kyrgyzstan								
IMF**	0.6	23.8	37.4	36.4	41.5	54.1	65.8*	
World Bank	1.3	83.0	119.6	134.4	134.4	135.7	184	
EBRD		86.5	121.7	143.0	141.7	148.2	202.7	
Tajikistan								
IMF	74.4	160	196	185	158	217	286	
World Bank		84.5	104	74.2	90.6	112.1	151	
EBRD		111.6	136	104.9	112.7	158.2	207.0*	
Turkmenistan	…							
IMF		3.3	26.1	20.7	31.5	63.9	67.4*	
World Bank		12	20	19	44.4	233.4	197	
EBRD		6.2	19.2	26.4	39.4	179.2	248.9*	
Uzbekistan								
IMF**	3.1	18.9	19.5	17.8	17.1	17.6	16.8*	
World Bank	4	35.7	41.5	45.9	56.3	69.4	85	
EBRD	4.6	33.0	37.4	51.3	66.0	69.5	111.6*	

Notes and Sources are the same as for Table 2

In this part, the analysis is based on a consistent methodology and comprehensive data on the total debt stock and its composition provided by the World Bank. The total external debt (EDT) determined as debt owed to non-residents repayable in foreign currency, goods or services, includes usually long-term (LDOD) and short-term debt, as well as use of IMF credit (1).

Total External Debt (EDT)	Long-term Debt (LDOD)	Short-term Debt	IMF Credits

Short-term debt comprises all debt with an original one year or less maturity and interest in arrears on long-term debt. Use of the IMF credits includes repurchase of obligations to the IMF for various uses of IMF resources (except those connected with drawings on the reserve tranche). Long-term debt, by debtor, subdivided into public, publicly guaranteed debt, and private non-guaranteed debt, which has an original or extended maturity of more than one year. Public and publicly guaranteed debt includes liabilities of the national government and its agencies, as well as obligations of private debtors guaranteed for repayment by a public entity. Private non-guaranteed debt is the sum of liabilities of private debtors, which are not guaranteed by a public entity (2).

Long-term Debt (LDOD)	Public and Publicly Guaranteed Debt	Private non-Guaranteed Debt

Public and publicly guaranteed debt could be originated by official and private credits and divided into two respective groups by creditor. In their turn, official credits could have been received from bilateral and multilateral sources at market or concessionary rates. For instance, the World Bank lends long –term loans via the International Bank for Reconstruction and Development (IBRD) at market rates and through the International Development Association (IDA) renders credits at concessionary rates. Private credits could consist of loans given from commercial banks, bonds and other credits (from manufacturers, exporters, and other suppliers of goods, as well as bank credits covered by the guarantee of an export credit agency) (3).

Public and Publicly guaranteed debt	Official Credits (Multilateral and Bilateral)	Private Credits (Commercial Banks, Bonds and Other)

These equations are necessary to bear in mind while examining available statistics on external debt, because not all their elements could be found in publications. The most intriguing data, for instance on short-term debt, is not widely available from debtors and not always possible to look at directly in statistical publications. But in the light of recent regional crises, in emerging markets and countries in transition, it is especially important to check its level and share to be on the safe side and not permit a sudden default. To discover lacking indexes on short-term debt of Central Asian states, f. i., one can pick up the most recent data [World Development Indicators, 1999, p.255-256] on total external debt, long-term debt, IMF credits and use the equation (1). The residual shows, that in 1997 short-term external debts were the following in Kazakhstan – USD 349 million, Kyrgyzstan – USD 33 million, Tajikistan – USD 30 million, Turkmenistan – USD 529 million, Uzbekistan – USD 419 million. So, that year, the total Central Asian states' short-term debt was USD 1.36 billion, with the largest amount borrowed by Turkmenistan – about 40 percent of the total debt of this kind accumulated by all five countries.

To evaluate the weight of short-term debt in the total external debt, country-by-country distribution of the latter on the basis of equation (1), is helpful too. It is easy to see from Table 4, that in the structure of the total external debt stock, the share of long-term debt remains high in all of Central Asian states throughout 1990s, although the share of the non- long-term debt in the total debt had been growing in

almost all Central Asian states (with one exception, Kazakhstan) from 0 in 1992 to 12-23 percent in 1998, with the largest shares in Tajikistan and Turkmenistan and the lowest in Uzbekistan. Kyrgyzstan, has been receiving the biggest, in relative term, IMF credits, while Turkmenistan has been accumulating rather large share of short-term debt in recent years.

Table 4. Distribution of Total Debt Stock, 1992-1998 (%)

	1992	1993	1994	1995	1996	1997	1998
Kazakhstan							
Long-term/EDT	74	94	81	78	74	80	81
Short-term/EDT	26	1	8	10	7	8	
IMF credits/EDT	0	5	11	12	19	12	
Kyrgyzstan							
Long-term/EDT	100	79	80	78	84	79	82
Short-term/EDT	0	0	3	2	1	4	
IMF credits/EDT	0	21	17	20	15	17	
Tajikistan							
Long-term/EDT	100	100	97	93	96	88	77
Short-term/EDT	0	0	3	7	3	8	
IMF credits/EDT	0	0	0	0	1	4	
Turkmenistan	…						
Long-term/EDT		100	80	96	62	70	77
Short-term/EDT		0	20	4	38	30	
IMF credits/EDT		0	0	0	0	0	
Uzbekistan							
Long-term/EDT	100	91	77	79	86	77	88
Short-term/EDT	0	9	23	12	4	15	
IMF credits/EDT	0	0	0	9	10	8	

Sources: Global Development Finance 1999, Country Tables, World Bank, Washington D.C., p.300, 312, 524, 556, 572; GDF 2000 (homepage of the World Bank)

There is not enough data on the private non-guaranteed debt in the loan-by-loan format for the Central Asian states. And they are not among 43 countries for which this type of debt is known to be significant and estimates are made relying on financial surveys and balance of payments data. The latter could be useful to build a time series for private non-guaranteed debt on the basis of equation (2) treating it as residual between total long-term debt (LDOD) and public and publicly guaranteed debt. Meanwhile, estimates for 1997 show, that the share of private non-guaranteed debt in the total long-term debt of some of Central Asian states started to grow (Kazakhstan --17 percent, Tajikistan –16 percent, Uzbekistan –4 percent) [World Development Indicators, 1999, p.255-256]. In Kazakhstan, it became rather tangible even compared with total debt stock – 14 percent in 1997. Data on Central Asian states on distribution of LDOD by debtors since 1992 adapted from Global Development Finance shows that shares of public and publicly guaranteed debt in total debt has decreased but not only because of the growth of private non-guaranteed

debt. Actually the latter remained at zero level in Kyrgyzstan and Turkmenistan within the period under consideration (see Table 5).

Table 5. Distribution of Long-term Debt as Share of Total External Debt, 1992-1997 (%)

	Public and publicly guaranteed debt						Private non-guaranteed debt					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
Kazakhstan	74	94	80	76	65	66	0	0	1	2	9	14
Kyrgyzstan	100	79	80	78	84	79	0	0	0	0	0	0
Tajikistan	100	100	99	99	97	81	0	0	0	0	0	7
Turkmenistan	…	100	81	96	65	70	…	0	0	0	0	0
Uzbekistan	100	91	77	79	84	74	0	0	0	0	2	3

Sources: estimates based on World Development Indicators, 1999, W. B., Washington D.C., p. 255-256; World Development Indicators, 1998, W. B., Washington D.C., p. 239-240; World Development Indicators, 1997, W. B., Washington D.C., p. 219-220; Global Development Finance 1999, Country Tables, World Bank, Washington D.C., p.300, 312, 524, 556, 572.

All long-term debts in Kyrgyzstan and Turkmenistan for the whole period up to 1998, Tajikistan up to 1997, in Uzbekistan up to 1996 and Kazakhstan up to 1994, have been public or publicly guaranteed. Besides, commercial banks constituted the only source of private non-guaranteed borrowing in the latter three countries and started to contribute to faster accumulation of external debt in them. The cases of Kazakhstan, Tajikistan and Uzbekistan illustrate the necessity to consider private non-guaranteed debt as well, because it is growing not only as a share of the long-term debt but of the total debt stock as well.

It is more meaningful in the case of Central Asian states to examine data on the structure of long-term debt by creditors according to (3). Data related to public and publicly guaranteed debt are available from debtor-countries and multinational creditors (IMF, World Bank, EBRD, ADB and other) as well as the OECD and the Bank of International Settlements (BIS). The World Bank data shows that the distribution of long-term public and publicly guaranteed debt, the ratio between official credits, on the one hand, and credits from private sources, on the other hand, had changed dramatically by 1999.

Table 6. Structure of Long-Term Public and Publicly Guaranteed Debt by Creditors, 1993, 1996, 1997 and 1998 (%)

	Multilateral				Bilateral				Private			
	1993	1996	1997	1998	1993	1996	1997	1998	1993	1996	1997	1998
Kazakhstan	2	27	24	27	86	33	23	18	12	40	53	55
Kyrgyzstan	21	45	55	58	79	50	45	38	0	**5**	0	4
Tajikistan	0	4	6	13	82	85	69	65	18	11	25	21
Turkmenistan	9	1	2	2	44	24	11	14	47	75	87	84
Uzbekistan	0	15	10	10	84	47	45	39	16	38	45	51

Source: Global Development Finance 1998, 1999, 2000, Vol. II, p. 11-12

Private borrowings in Kazakhstan started in 1996 were not only from commercial banks and other sources, but increasingly by bonds as well. In Turkmenistan, Tajikistan and Uzbekistan private debt was accumulated through export credits. In addition, the former in 1997 and the latter in 1996-1997 were forced to use commercial credits as well. As a result of excessive private borrowings in Turkmenistan, those were 87-84 percent of the total public and publicly guaranteed debt and their ratio to debt from official sources was more than 6 to 1 in 1997 and 1998. In some other Central Asian states (Kazakhstan, and Uzbekistan), the share of private credits exceeded the sum of official multilateral and bilateral loans. While Kyrgyzstan had the largest share of official multilateral debt, and Tajikistan relied on official bilateral credits most of all (see Table 6).

Geographic Structure and Central Asian States - Traditional Partners' External Debt Arrangements

As for the geographic structure of bilateral long-term debt, it has also been changing rapidly towards diversification from traditional partners to an increased share with OECD countries, as well as other foreign states. According to the OECD external debt statistics, starting with 1996, the OECD states and capital markets became one of most important sources for borrowing to all Central Asian states, except Tajikistan which has still been relying more on the NIS and other non-OECD countries (Table 7).

The countries of the region, notably Uzbekistan, Kazakhstan and Kyrgyzstan, benefited from low-interest bilateral official credits from Japan and some other OECD countries. A large part of bilateral trade credits received by Turkmenistan in recent years were from Germany and the USA. Among official creditors of Tajikistan, around 90 percent of debts were owed to Russia, Uzbekistan, China, India, Pakistan, Turkey and the USA. Kazakhstan is the first and so far the only recipient of three sovereign Eurobonds, that permit enterprises from the country to borrow in the private capital market abroad. It also received the largest amount of FDI in the region, especially from the USA, Republic of Korea and China, mainly to the oil and metal producing sectors of its economy.

Turkmenistan and Uzbekistan attracted approximately the same amount of FDI from OECD states, both have a good potential that could be better used with further progress of economic reforms. Kyrgyzstan's single largest joint venture, Kumtor in gold mining, is financed by private sector loans and FDI supplied by a Canadian company. Tajikistan received the smallest amount of foreign investments in

the region mainly because of political instability within period under consideration. Although in the northern part of the country, there has been some FDI from Korea, India, and the UK.

Table 7. Geographic Distribution of Long-term Bilateral Debt Stock, 1992-1998 (USD mln.)

	1992	1993	1994	1995	1996	1997	1998
Kazakhstan							
NIS/CEECs		1250	1250	1250	5	8	
OECD countries and capital markets		330	763	1112	1443	1738	
Other countries		32	114	125	142	174	
Kyrgyzstan							
NIS/CEECs		117	125	125	151	151	
OECD countries and capital markets			42	116	201	162	
Other countries		64	86	81	78	76	
Tajikistan							
NIS/CEECs		80	249	259	288	288	
OECD countries and capital markets		25	24	61	24	24	
Other countries		217	225	242	250	234	
Turkmenistan							
NIS/CEECs							
OECD countries and capital markets		38	169	143	502	857	
Other countries		114	139	137	102	101	
Uzbekistan							
NIS/CEECs		508	508	504	501	501	
OECD countries and capital markets		15	70	457	694	1181	
Other countries		298	305	302	378	360	

Sources: External Debt Statistics, Supplement, Resource Flows, Debt Stocks and Debt Service, 1987-1998, OECD, Paris, 1999, p.111, 117, 180, 188, 194.

Besides, to understand better the geographic distribution Central Asian states' external debt, two things are important to emphasize: the "zero option" and the peculiarities of the arrangements on debt and credit among the NIS. Both are solely connected with the NIS and nothing to do with Central and East European countries (CEEC) although Table 7 contains an aggregated index for this group.

After the disruption of the FSU, there were two attempts made to find proper solution regarding the inherited Soviet debt to foreign countries. The first was to have joint responsibilities for the debt, sharing it in accordance with the weight of each republic identified on the basis of the main macro-economic indicators. Formally there were two documents (the Memorandum of Understanding and the Interstate Treaty) signed on this matter in October and December 1991. (According to the Interstate Treaty, e.g., Kazakhstan was allocated USD 2.6 billion or 3.9 percent of the total debt of the FSU, Uzbekistan became responsible of about USD 2.2 billion or 3.3 percent of the total Soviet liabilities then worth USD 67 billion). But they had not worked out and were soon disrupted. In April 1993, the Agreement on an alternative, "zero option," was concluded, according to which Russia took the responsibilities both for all

outstanding debt of the FSU and all its foreign assets. As a result, the NIS, including all Central Asian states, in reality started their existence with no foreign liabilities. All external debt appeared solely after their independence.

For several of the first few years after the break-up of the FSU, there was a huge deficit in all Central Asian states' balances of payments with Russia. It was caused by the worsened terms of trade due to the transition from preferential interstate trade prices to new prices moving towards the world level, as well as a significant reduction and change in the nature of the interstate transfers. In 1992, the transfers were made in the form of technical credits to cover the deficit in bilateral payments. Their scales were very large varying from 10.9 percent in Kyrgyzstan and 14.8 percent in Kazakhstan, to 28.1 percent in Uzbekistan, 34.4 percent in Turkmenistan, and 42.5 percent in Tajikistan compared to the GDP of respective Central Asian states [IMF (1994), Financial Relations Among Countries of the Former Soviet Union, p.26].

In 1993, on the eve of the disruption of the ruble zone, the total sum of technical credits received through bilateral correspondent accounts were turned into state debt with respective interests agreed upon between Russia and Central Asian states. The amounts of the debt later became matter of disputes because it was not clear at what exchange they should be valued. They were frozen for a while and then bilateral agreements on restructuring outstanding debts accumulated in 1992-1993 were signed between Russia and the Central Asian states.

The controversy was also connected with arrears in payments between enterprises, because some of them occurred in transactions guaranteed by the governments. There is no reliable data on the non-guaranteed inter-enterprise arrears, but enough evidence of disputes around them aimed at their transformation into government debt or at least considering them equal to state debt while identifying mutual claims. These kinds of disputes took place in official negotiations, e.g., between Turkmenistan and Russia in 1997. On the other hand, Turkmenistan itself accumulated a huge stock of outstanding claims, exceeding USD 1 billion by the end of 1997, against its gas importers such as Ukraine, Georgia and Armenia. Before 1996, the gas was exported on the basis of government guarantees from importing countries, after which it was more inter-enterprise arrears. Regardless of origin, the servicing of these trade

credits was not smooth and in many cases the repayment was made in goods and debt rescheduling often took place.

The largest impact of debt connected with transfers and inter-enterprise was in Tajikistan, which had continued to receive transfers from Russia up to October 1995, or about two and half years more than other Central Asian states. This part of foreign debt still constitutes a rather big share in the total external debt of Tajikistan. By 1996 the outstanding total external debt of the country was more than USD 860 million (84 percent of its GDP). Russia and Uzbekistan were among the largest creditors to which Tajikistan owed about two thirds of its debt. Unable to service the debt, it reached agreements on rescheduling of outstanding claims to Russia (USD 288 million as of October 1996) and Uzbekistan (USD 200 million in January 1997) at concessionary interest rates with larger amortization periods [Gurgen, IMF (1999), p. 51].

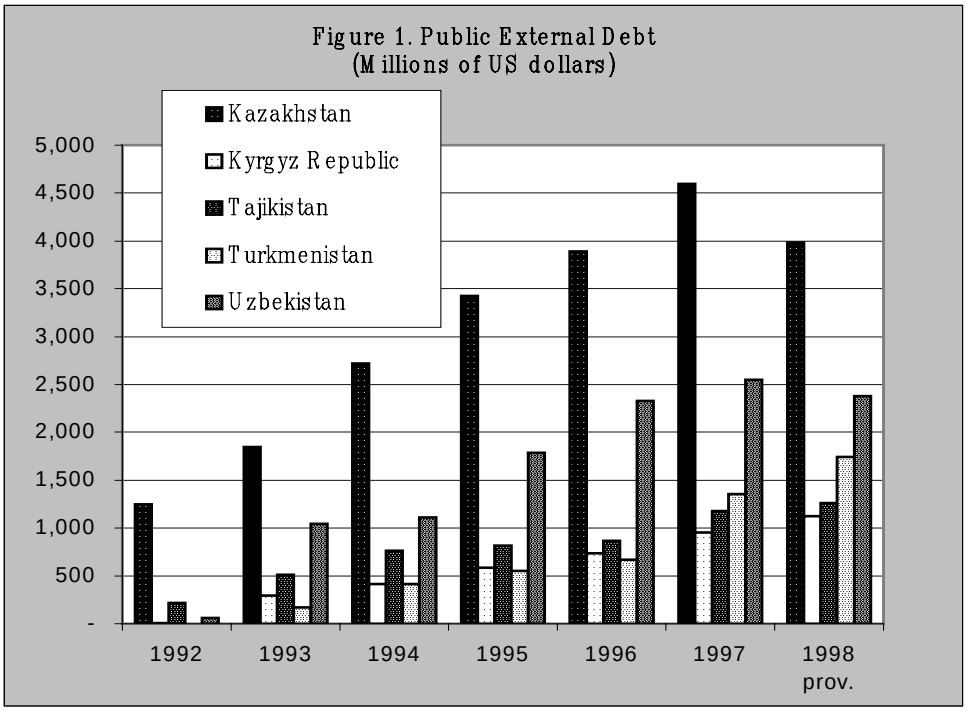
Kyrgyzstan also had chronic debts to Russia, Kazakhstan and Uzbekistan. The debt agreement on rescheduling of the USD 132.8 million with amortization during 2000-2009 was concluded with Russia on December 1996. Due to inaccurate debt servicing and new Russian credits, in 1997-1998 it accumulated a further USD 20 million as debt. Kyrgyzstan's suggestions on "equity for debt" were not accepted, because Russia was interested in the stocks of enterprises (in mining, electric energy, military objects) that had not been included into the proposed list. The payment for trade credits from Uzbekistan, mainly against gas imports, was also delayed many times and repeatedly made in commodities (grain and some other consumer goods). Uzbekistan signed an agreement with Russia on restructuring its debt on March 14, 1997. The amount rescheduled was USD 500.6 million with a twelve-year grace period and interest rate for its servicing Libor + 0.5 percent [Delovoy mir-Prime-TASS (1997), 04. 12.].

According to the data of the Russian Central Bank, by 1st of March, 1998 out of USD 5.432 billion total CIS countries' debt, Kazakhstan's debt was equal to USD 1.250 billion. And all other Central Asian states together owed USD 1.144 billion to Russia (Kyrgyzstan --USD 154 million, Tajikistan USD 301million, Turkmenistan USD 150, million and Uzbekistan USD 539 million). In the second half of 1998, Kazakhstan reached special agreement with Russia on mutual clearing of all claims during 1991-1997, including technical and other Russian credits against Russian liabilities as rent for the use of the Baikonur space complex, four military testing fields and ecological damages connected with them.

So, the Central Asian NIS managed to reschedule or settle their debts with Russia. In some of them the amounts still tended to grow, but now more in forms that are similar to the external debt from OECD and other foreign countries, quantitatively yielding to them in absolute and relative forms.

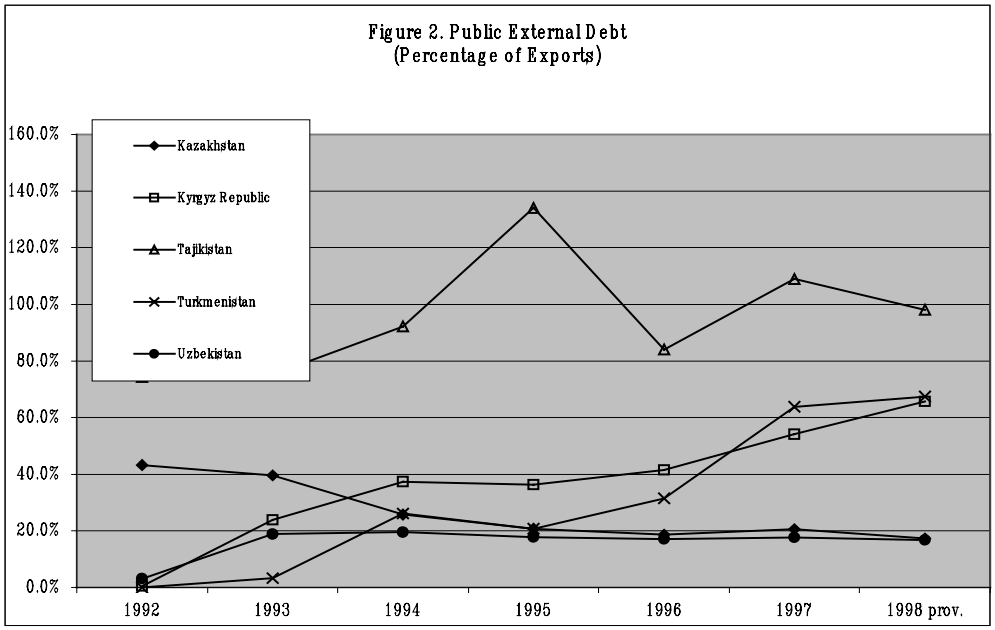
Dynamics of Public External Debt and its Service

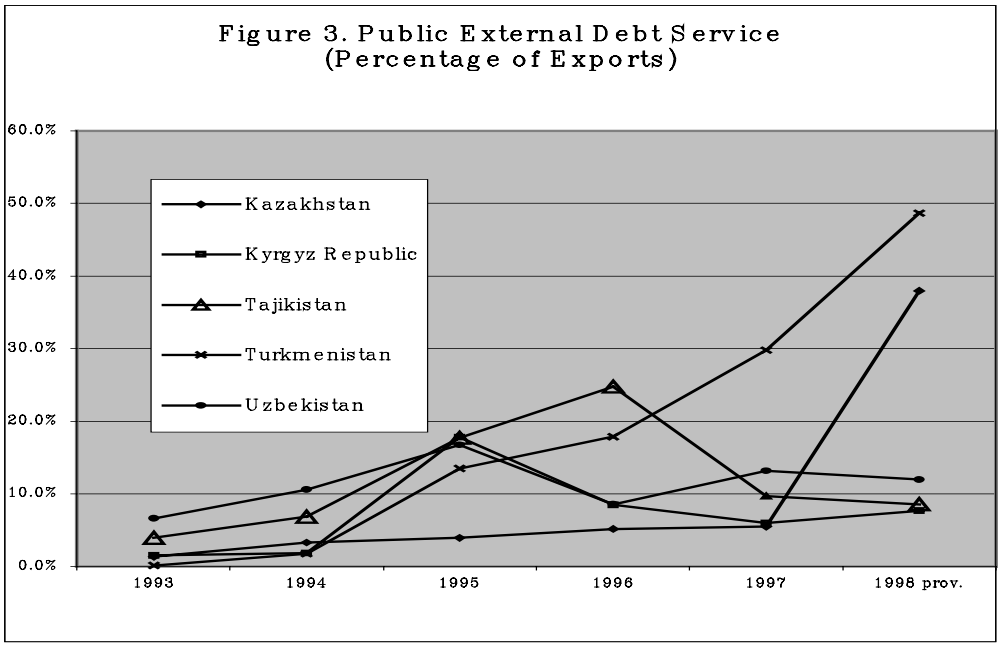
Public external debt has been rapidly accumulated by Central Asian states from all sources traditional and non-traditional sources. The latter gathered a rather fast momentum especially during 1994-1997, with the largest debt in Kazakhstan in absolute terms and in Tajikistan in relative terms. As of end 1997, according to IMF data, the public external debt in the former was more than USD 4.6 billion, and in the latter it far exceeded its annual total exports in 1995 and 1997 (see Figures 1 and 2) [1].



In 1998 under the impact of the Russian currency crisis all Central Asian states experienced rather strong trade and financial shocks [see, more in Islamov B. and Parpiev Z., (2000)]. They coincided with a sharp increase in the scheduled payments for debt servicing in Kazakhstan, the amount of which increased more than seven times and reached USD 2.362 billion or 38 percent of the sum of all exports from the country in 1998. In relative terms it was second only after Turkmenistan, the public external debt of which

was 48 percent compared to its total exports of that year (see Figure 3 and 4). Although this index in Kyrgyzstan and Tajikistan is not so high, the debt service burden in the latter is much heavier. In 2000, external public debt service is projected at 44 and 32.4 percent of the budgetary expenditures in the respective countries [IMF, (2000) p.42-43].

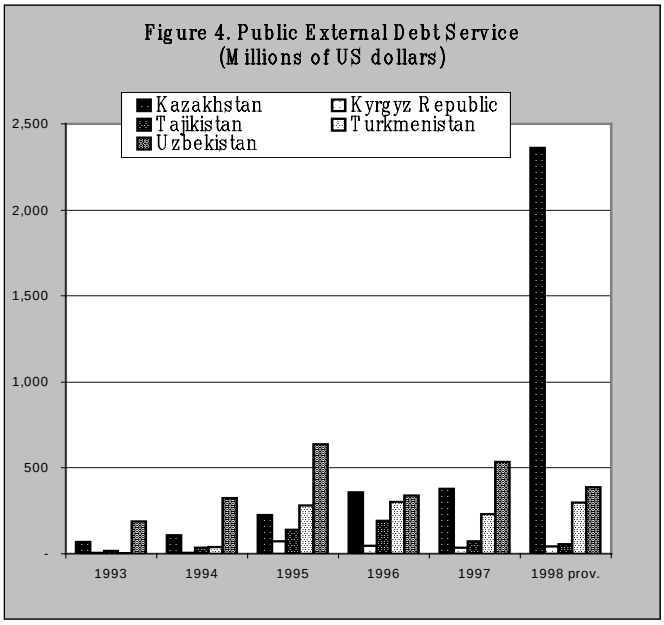




[1] Figures 1-6 based on IMF data

In Uzbekistan the dynamics of public external debt, both in absolute and relative terms, were relatively even according to the official exchange rate. But a sharp increase of disparities in the latter compared to the curb market rate and its possible rapid devaluation were real grounds for serious concerns.

So the analysis of Central Asian states' total external debt, its structure and dynamics shows that there are three clearly distinguished stages in accumulation of foreign debt in the region. First is 1992-1993, when debt was gathered largely within the ruble zone through Russian credits to cover rather significant current account deficits. They occurred mainly due to imbalances in bilateral trade after the liberalization of prices for energy, grain and almost all other capital and consumer goods. Second is 1994-1997, when borrowing initially began from official multilateral and bilateral sources and then relied more and more on private credits, i.e. financial flows in the most of Central Asian states started to obtain the forms typical for



developing countries. Third is 1998 and after, when the direct and indirect influences of global and regional financial crises triggered a worsening of terms of trade and a significant devaluation of official exchange rates, which resulted in a sharp increase of private debt in total debt and difficulties in their servicing. All these factors contributed to a rapid increase of external debts in almost every country in the region and require accurate measurement of indebtedness and urgent steps to provide debt sustainability.

3. Indebtedness Indicators and Debt Sustainability

Indebtedness Indicators

To identify debt sustainability and work out the strategy for external debt management it is necessary to measure the indebtedness of the countries under consideration. According to the methodology, introduced by the World Bank, the relative burden of servicing external debt is measured by special indicators. Among them the ratios of the present value of the total debt service to GNP and the present value of the total debt service to total exports are considered now as key ones.

The present value of debt service (PV) is the sum of short-term external debt plus the discounted sum of total debt service payments due on public, publicly guaranteed, and private non-guaranteed long-term external debt over the life of existing loans. This indicator provides a measure of future debt service obligations that can be compared with the current value of GNP and total exports. Total debt service (TDS) includes the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long term debt, plus interest paid on short-term debt and repayments (repurchases and charges) to the IMF. The ratio of TDS to total exports is also an important indicator measuring the actual burden of debt servicing and complementing the first two indicators.

Table 8. Indebtedness Indicators in 1997 and 1998 (%)

	1	2	3	4	5	6
Kazakhstan						
1997	19	54	7	2	8	
1998	25	74	12			4
Kyrgyzstan						
1997	39	97	6.3	2.5	3.6	
1998	48	133	9			4
Tajikistan						
1997	34	86	4.6	1.8	8.2	
1998	42	122	12			3
Turkmenistan						
1997	59	219	34.7	9.3	30	
1998	67	186	27			8
Uzbekistan						
1997	11	65	13	2	15	
1998	13	81	12			4

1- Ratio of Present Value Debt Service to GNP -- (PV/GNP)
2- Ratio of Present Value Debt Service to Total Exports -- (PV/XGS)
3- Ratio of Total Debt Service to Total Exports – (TDS/XGS)
4- Ratio of Total Debt Service to GNP – (TDS/GNP)
5- Ratio of Short-Term Debt to Total Debt – (STD/TDS)
6- Ratio of Total Interest Payments, including IMF charges to Total Exports – (INT/XGS)
Sources: World Development Indicators, 1999, World Bank, Washington D.C., p. 259-260; Global Development Finance, 2000, World Bank, Washington D.C., Volume I, p. 106-107

Table 8 (see columns 1-3) shows the dynamics of these three indicators related to all five Central Asian States in 1997 and 1998 both as a percentage of average GNP and exports in the three-year period (1995-1997 and 1996-1998 respectively). The ratios give an opportunity to compare total debt service

liabilities with the overall size of the economy and its ability to obtain foreign exchange through exports, permitting us to evaluate quantitatively the sustainability of debt service liabilities. There are some additional indicators: the ratio of total debt service to GNP, the ratio of short-term debt to total debt and the ratio of total interest payments to total exports (see columns 4-6 of Table 8) - that also help to identify a comparative level of indebtedness of any country in the region within each period. The latter were introduced three years ago to enlarge the indebtedness indicators estimated before as average of the first two ratios for the last three years. The previous methodology did not fully reflect the current situation when a country benefitted from debt relief, rescheduling or mutual clearance. However, the indicators under consideration also are not sufficient as well. The missing aspects are the fiscal indicators showing actual budget constraints and the capacity of a country to service adequately its external debts. Therefore, these indicators are also to be complemented by a country specific economic analysis of debt sustainability.

The indebtedness of a country, according to the World Bank, in 1997 and 1998 was assessed on a three-grade scale. A country was considered as severely (S) indebted – when the ratio of present value debt service to GNP exceeds 80 percent and the ratio of present value debt service to exports more than 220 percent. The next group of states are called moderately (M) indebted if present value of debt service ratios to GNP and total exports are three-fifths or more than critical value or 48 percent and 132 percent respectively. And all other states classified as less indebted (L).

In conformity with this classification and the debt indicators as of end 1997, the World Bank included all Central Asian states to the group of less indebted countries (L). Turkmenistan, that had indicators 59 and 219 percent, i.e. at the level of M, was given status L for 1997 as well [World Development Indicators, 1999, World Bank, Washington D.C., p. 260]. But within this status L, it is clearly seen that various countries of the region had different performances. It looks like Kazakhstan and Uzbekistan had enjoyed the least debt problems. While Turkmenistan gathered rather large debt service liabilities, especially compared to its exports in 1997, Kyrgyzstan and Tajikistan seemed, according to these indicators, in a much better position than Turkmenistan. But in reality the external debt situation in all countries of the region was much worse, and, especially in Kyrgyzstan and Tajikistan, it was fraught with rather big potential complications.

All these three countries in 1998 were classified as low-income states with GNP per capita less than USD 760, while Kazakhstan and Uzbekistan were among middle-income states with GNP more than USD 785 but less than USD 9,360. Moreover, Turkmenistan and Kyrgyzstan joined in 1998 the group of severely indebted low-income countries, while Tajikistan was close to this threshold but considered still as less indebted low-income. Despite of a fairly rapidly worsening of the main debt indicators under the direct and indirect impacts of regional and global crises for Kazakhstan and Uzbekistan, they maintained their status of less indebted middle-income countries [Global Development Finance, 2000, World Bank, Washington D.C., Volume I, p. 106-107].

The series of indicators for 1997 and 1998 reflect that crucial changes occurred in reality within this short but dramatic period of their transition and integration into global economy, giving formal grounds for comparing the degree of worsening of their indebtedness. But to understand better whether the debt burden is sustainable or not, empirical analysis of the economic performance compared to their debt service abilities based on country-by-country experience is needed.

Additional Facets of Indebtedness among Central Asian states

In Kyrgyzstan, external debt has been rapidly increasing in the last three-four years. The total foreign debt, according to the Kyrgyz government, of USD 1.4 billion was equal to GDP in 1999. It is more than double compared to 1996 in USD terms, and about two times up from 52 percent of GDP at the end of 1997 in relative terms. Most of the country's debt was contracted at highly concessionary terms from multilateral and bilateral sources. Based solely on official borrowing up to 1998, with the low interest rate, long maturity, grace periods and a grant element of more than 50 percent in recent years (see Table 9), it was considered not too worrisome. In fact, in net present value, the stock of external debt in 1997 was equivalent to about USD 720 million (around 40 percent of GDP) compared to USD 928-958 million (54 percent of GDP) in nominal terms. However, over-reliance on foreign financing of the budget and low export potential with increased sensitivity to exchange rate movements and price fluctuations of a few tradable goods put into question the sustainability of this type of external borrowing policy as well. The devaluation of the national currency in itself increased debt stock in som terms by almost 70 percent during 1998 [IMF, (1999, p. 43)]. The government reportedly was able to pay only half of the USD 50 million foreign debt service obligations scheduled in 1999, and has budgeted around USD 84 million in its 2000

budget proposal [EIU, (2000) p. 21]. That is more than 44 percent of the proposed budget expenditures for the year [RFE/RL, January 28, 2000]. So, this case proves that a country in transition needs to be very careful in its external borrowing not only about the terms and sources of credits, but its amount in relation to its fiscal and export revenues, as well as the potential sharp exchange rate fluctuations.

Tajikistan also had one of the most favorable terms of credits (see Table 9). But because of political instability and economic hardships, it was forced to rely heavily on foreign borrowing. At the beginning it got credits from traditional bilateral partners and now the share of multilateral official development assistance has been increasing. Its total debt stock is estimated at more than USD 1 billion. The net present value of public and publicly guaranteed debt has increased sharply in recent years and its ratios to total exports and to state revenues were more than 83 and 443 percent respectively as of end 1999 [IMF (March 2000), p.43]. The latter is much higher than the formal threshold of 250 percent to be eligible for even the Heavily Indebted Poor Countries (HIPC) initiative. The country has one of the lowest income per capita and revenue-to-GDP ratios in the FSU, and potentially could become one of the first countries among the NIS eligible to HIPC assistance and special debt relief programs. So, both the cases of Kyrgyzstan and Tajikistan prove that to evaluate real capability to sustain debt, it is important to complement the indicators given above in the Table 7.7 with a net present value debt-to-revenue ratio index to assess fully the debt servicing capacity of the government.

Turkmenistan's total stock of debt increased from over USD 1.3 billion in 1997, to more than USD 1.7 billion in 1998, and to over USD 1.8 billion in June 1999. Virtually all of the debt is public or guaranteed by the government. Most of it is in the form of short-term loans to finance cotton production that replaced forwards contracts beginning in 1997. As of June 1999 the outstanding debt of this kind reached USD 442 million. Loans related to energy projects also increased and accumulated arrears of USD 92 million at the end of 1998, up from USD11 million at the end of 1997. Due to rescheduling agreements of some credits, outstanding official arrears were reduced to USD42 million by June 1999. On the other hand, it still has claims on importer FSU countries remaining from balances in correspondent accounts from 1992-1994 totalling USD 169 million. In addition, there are outstanding claims on rescheduled gas debt accumulated afterwards, the total sum of which was almost USD 1.3 billion in January 1998 [IMF (December 1999), p.51]. But the value of its assets is not as impressive as it could be, if one considers that

they are not always repaid in hard currency, while the rapidly increasing liabilities are mostly hard currency denominated. However, the situation in Turkmenistan is rather different compared to Tajikistan or Kyrgyzstan. Its gross international reserves were relatively large and have been increasing despite some payments difficulties. In 1998 it added USD 94 million and was USD 1.4 billion at the end of that year or 15 months of imports. The main sources of inflows are surrender requirements on gas exports, restructured gas debts, allocations of cotton quotas (about one third of the harvest), and interest payments on reserves. It is also worth noting that the proposed increase of gas exports to Russia and other countries through its pipelines could change the situation radically. So in a nutshell, Turkmenistan's indebtedness was not as grave as one can judge relying only on data given in the Table 7 and it has, perhaps, better prospects for sustaining its external debts than some of other, above-mentioned countries of the region.

Kazakhstan, despite a sharp deterioration in the external environment during global and regional crises, as well as rather big debt service liabilities for 1998, tried as much as possible not to increase its total debt stock and short-term commercial borrowing. But, in fact, the total external debt remained in 1999 at the same level, mainly due to the agreement with Russia in the second half of 1998, when its debt of USD 1.25 billion to Russia accumulated in 1992-1997 was offset against Kazakh claims to Russia for the same period. The current account deficit was entirely financed from foreign direct investment and medium and long-term loans. Due to the large scale of privatization, FDI totaled USD 1.1 billion in 1998, a figure slightly below the level reached in 1997. Net disbursements of medium and long-term loans remained at the same level in 1998 as in 1997. However, taking into account migrants' capital transfers, outflows of short-term capital, and errors and omissions, the overall balance of payments was negative. Net international reserves fell by USD 420 million during 1998 [IMF (2000), p. 12, 131]. With sovereign and sovereign-guaranteed debt obligations of USD 860 million (5.5 percent of GDP) in 1999, the government was forced to increase its already expensive borrowing on the international capital markets to meet its liabilities and avoid the default. In September 27, 1999, the government succeeded in raising USD 200 million in Eurobonds, but it was enough just to repay the 1996 Eurobonds, which were due in December 1999 [E.U.I. Country report, (4^{th} quarter 1999, p. 35)].

In Uzbekistan, the stock of public and publicly guaranteed external debt as well as external debt service has also increased significantly over the past two years. Between end- 1997 and end- September 1999, it enlarged by USD 1.2 billion to about USD 3.8 billion. Of the total debt stock, USD 1.7 billion (44 percent) was channeled through commercial banks (mainly the National Bank for Foreign Economic

Activity). External sources were used primarily to finance imports of capital equipment for investment projects supported by the government. The mixture of external trade and financial shocks affected the balance of payments with the government's vast industrial policy forced to expand foreign borrowing recently, which led to a worsening of the aggregate debt indices. Within this period the debt service-export ratio increased from 9 percent to 18.7 percent, while external debt-GDP ratio (at the official exchange rate) rose from 18 percent to 25 percent [IMF (2000), p. 31]. The share of private commercial loans at the market rate has been increasing quickly. At the end of June 1999 total assets of BIS-reporting banks in Uzbekistan reached USD 721 million, up by 76.3 percent year on year. In 2000 the government plans to invest USD 4.8 billion, of which USD 941 million will come from drawing on credit lines [EIU, (2000), p. 17, 37]. The practice to rely more on foreign debt than foreign direct investment to finance the current account deficit and industrial policy could further increase the rapid build up of external debt stock to a higher level. A country with more than 95 percent of liabilities denominated in hard currency and only about 60 percent of exports marketed in hard currency countries, needs to be very careful about external borrowing. Moreover, planned unification of exchange rates with a subsequent devaluation of the official exchange rate could sharply aggravate the situation. So far, the country has been able to meet its liabilities better than its neighbors. But a rapid increase of external debt in the last 2-3 years and the factors connected with the denomination of assets and liabilities as well as multiple exchange rates problem will require much better debt management to avoid extreme repayment problems and maintain its external debt at a sustainable level. [2].

[2] The government is aware of this problem. The Deputy Prime-minister and Minister of Finance of Uzbekistan Rustam Azimov, when asked whether Uzbekistan had run down its hard currency reserves, reduced imports and borrowed heavily to ease pressure on the balance of payments, he answered that there was "no danger that Uzbekistan would default on its debts." Reminding that "Uzbekistan is one of the most disciplined borrowers -- never had delayed or restructured debt repayments," he added that the country would exercise caution in borrowing in the future concentrating not on loans to finance the balance of payments but investment credits to modernize production and finance import substitution." He also said that Uzbekistan would end 2000 with a foreign debt of $4.15 billion, which would drop to $3.90 billion by end-2001and that the country had enough hard currency reserves to cover five months of imports. [Reuters, September 29,2000].

Terms of Debt and Contractual Obligations

To evaluate the peculiarities of the comparative indebtedness of the Central Asian states two more indexes are important to consider, i.e., average terms of new debt commitments and contractual obligations on outstanding debt. The data on average terms of new commitments on public and publicly guaranteed debt permit us to follow changes in the total new debt contracted in each year since independence and to identify their factors because it is divided between loans from official and private creditors.

The average terms of borrowing (interest, maturity, grace period and grant component) were worse at the beginning of the period in almost every Central Asian states 1992 and 1993 than in 1997, except Turkmenistan for 1994-1997, and Uzbekistan for 1997. Especially they were favorable in Kyrgyzstan and Tajikistan that avoided in 1993-1997 borrowing from private sources and received debts from official multilateral and bilateral sources at concessionary terms. Kazakhstan had a mixed performance: it has recently improved the terms of its borrowing but they still worse than any other country of the region (Table 9).

But the paradox is that the countries with the most favorable average terms of commitments for the whole period since their independence have become in reality the most indebted states of the region. The key to understanding this situation is not the better borrowing policies of Kyrgyzstan and Tajikistan, but the differentiated attitudes of creditors to the countries of the region. These two countries because of economic and political reasons became recepients of mainly concessionary loans with a grant element of 25 percent or more. Economically stronger countries like Kazakhstan, Uzbekistan and Turkmenistan were given less favorable terms, especially with regard to interest and maturity. The recent global recession and regional financial crises worsened the terms of credit tangibly, especially for those that used to borrow more and more from private sources. Respectively, the average terms of new commitments for them after 1997 were much worse than before it.

Table 9. Average Terms of New Debt Commitments, 1992-1997

	Interest (%)			Maturity (years)			Grace Period (years)			Grant Element (%)		
	Creditors			Creditors			Creditors			Creditors		
	Official	Private	All	Official	Private	All	Official	Private	All	Official	Private	All
Kaz.*												
1992	8.4	7.1	8.0	11.0	8.6	10.3	4.4	2.9	4.0	5.1	12.5	7.2
1993	6.9	5.8	6.3	13.4	7.7	10.2	4.5	2.4	3.3	13.5	14.2	13.9
1994	5.6	6.1	5.6	14.0	6.6	13.3	5.3	2.1	5.0	23.5	12.2	22.4
1995	5.5	6.4	5.5	14.2	5.7	13.3	4.5	2.3	4.3	23.7	10.0	22.3
1996	6.5	9.0	7.5	17.4	3.3	11.5	4.7	2.8	3.9	19.9	2.8	12.7
1997	5.2	7.6	6.5	22.2	5.8	13.9	6.9	4.6	5.7	34.7	10.1	22.2
Kyr.*												
1992	3.5	0.0	3.5	4.2	0.0	4.2	3.5	0.0	3.5	19.7	0.0	19.7
1993	4.5	0.0	4.5	21.8	0.0	21.8	6.9	0.0	6.9	38.4	0.0	38.4
1994	2.1	0.0	2.1	34.3	0.0	34.3	10.0	0.0	10.0	66.5	0.0	66.5
1995	3.7	0.0	3.7	28.8	0.0	28.8	8.1	0.0	8.1	50.3	0.0	50.3
1996	2.6	0.0	2.6	31.6	0.0	31.6	9.2	0.0	9.2	60.2	0.0	60.2
1997	3.4	0.0	3.4	26.9	0.0	26.9	7.6	0.0	7.6	50.8	0.0	50.8
Taj.*												
1992	2.0	4.4	3.9	29.9	4.5	9.3	6.9	3.5	4.2	63.0	17.8	26.4
1993	3.9	0.0	3.9	16.6	0.0	16.6	5.3	0.0	5.3	34.4	0.0	34.4
1994	7.3	0.0	7.3	7.2	0.0	7.2	2.1	0.0	2.1	9.6	0.0	9.6
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.8	0.0	0.8	39.8	0.0	39.8	10.3	0.0	10.3	80.7	0.0	80.7
1997	0.5	0.0	0.5	37.9	0.0	37.9	9.9	0.0	9.9	81.5	0.0	81.5
Tur.*												
1992												
1993	3.4	0.5	1.2	18.4	3.0	6.6	5.6	2.2	3.0	36.6	20.5	24.3
1994	6.2	6.7	6.3	12.1	5.3	10.3	4.0	1.0	3.2	17.2	7.5	14.7
1995	3.9	6.8	6.6	13.9	7.6	8.1	2.8	1.8	1.9	26.3	10.6	11.8
1996	3.8	6.5	5.9	11.8	9.0	9.6	3.4	2.6	2.8	31.3	12.8	16.7
1997	4.2	6.3	5.8	15.7	5.4	7.6	4.4	1.6	2.2	32.5	8.9	14.0
Uzb.*												
1992	5.9	4.4	5.8	5.5	5.5	5.5	1.7	0.9	1.7	11.0	14.8	11.2
1993	3.9	6.3	4.4	9.1	11.7	9.6	2.7	0.9	2.4	25.2	14.3	23.0
1994	6.7	7.7	7.3	7.7	10.5	9.5	2.0	3.5	2.9	12.1	9.4	10.4
1995	5.2	5.9	5.4	18.0	8.6	15.2	5.1	2.4	4.3	28.9	14.7	24.7
1996	4.0	6.0	4.9	20.6	9.5	15.6	6.5	0.9	4.0	41.3	14.1	29.0
1997	6.0	6.3	6.2	15.6	6.0	10.7	4.0	1.5	2.7	22.8	10.3	16.4

*Kaz.- Kazakhstan; Kyr.- Kyrgyzstan; Taj.- Tajikistan; Tur.- Turkmenistan; Uzb.- Uzbekistan
Source: Global Development Finance 1999, Country Tables, World Bank, Washington D.C., p.303, 315, 527, 559, 575;

As for the contractual obligations on outstanding long-term debt, they are worsening in almost all of the countries. Interest payment is becoming larger than disbursements in Kazakhstan starting in 2000, Turkmenistan and Uzbekistan – 2001. In Tajikistan, it has already happened, from 1998, while in Kyrgyzstan it is forecasted for 2003. But in the latter the sum of principal and interest payments is increasingly going to exceed disbursements from 2000 (Table 10).

Table 10. Contractual Obligations on Outstanding Long-Term Debt (million USD)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Kazakhstan											
Disbursements	381	338	290	124	94	66	38	28	14	9	6
Principal	415	371	769	316	397	663	253	234	169	167	151
Interest	128	252	248	196	177	157	111	95	71	71	59
Kyrgyzstan											
Disbursements	103	122	121	76	47	26	15	8	3	1	0
Principal	31	32	36	51	44	32	35	38	43	43	46
Interest	26	26	28	27	25	22	21	19	18	18	18
Tajikistan											
Disbursements	48	9	9	6	4	3	1	1	0	0	0
Principal	55	45	76	76	76	76	75	46	46	46	47
Interest	4	9	16	14	12	11	9	7	5	4	2
Turkmenistan											
Disbursements	202	475	284	145	59	32	18	11	6	4	3
Principal	139	583	165	200	242	203	171	114	102	95	75
Interest	31	69	46	51	67	54	41	33	27	21	16
Uzbekistan											
Disbursements	412	359	288	171	90	54	35	19	9	7	4
Principal	458	296	359	377	345	295	269	196	196	190	92
Interest	106	146	143	130	111	93	75	35	47	35	25

Sources: Global Development Finance 1998 and 1999, Country Tables, World Bank, Washington D.C., p.303, 311 (315), 527, 559, 575;

So, both indebtedness and outstanding obligations indicators as well as brief empirical analysis of the performance of Central Asian states in transition, has revealed that the worsening of its structure was aggravated by fiscal and foreign trade revenue problems that led to debt service difficulties. All countries of the region, regardless of their current status, which may change very fast, cannot but improve their borrowing policies and debt management capacities. They are now fully aware that sharp changes in the exchange rate can further aggravate debt service problems in many of them. But little progress has been made to avoid foreign currency fluctuations and other risks. Current debt management practices are not based on thorough estimates and projections of the balance of payments, debt servicing requirements and future debt disbursements.

Thus, foreign borrowing not only has its benefits but certain costs as well. The accumulation of large external debts and the heavy burden of their servicing in many countries require one to look at their costs and measure their scales more accurately and thoroughly. To assess the sustainability of external debt and make necessary projections the analytical tools need to be upgraded as well. For instance, basic transfer equations and two gap models could be used for the purposes mentioned above.

Basic Transfer Equations and Two-Gap Models as Tools to Measure Debt

Why external debt tends to increase rapidly? Debt service charges can be covered only by foreign exchange via net export earnings, use of official gold and currency reserves or further external borrowing. When the size of the debt increases or interest rates grow, the debt service charges rise. Under the existing balance of payments' (current and cash accounts') constraints the latter often become the only option. Net external borrowing (positive or negative depending on the balance between foreign exchange inflow and its outflow) is known as the basic transfer. Quantitatively it is measured as the difference between the net capital inflow (gross capital inflow minus the amortization on past debt) and interest payments of remaining accumulated foreign debt.

The basic transfer (BT) can be mathematically expressed by a following simple equation.

$$BT = d\,D - r\,D \quad (1) \qquad \text{or} \qquad BT = (d - r)\,D \quad (2)$$

Where D –total accumulated foreign debt

d – the percentage rate of increase in total debt

dD --net capital inflow or the rate of increase in total external debt

r –average annual interest rate

rD – total annual interest rate payments

According to equation (2), the basic transfer indicates losses or gains of foreign exchange from international capital flows by a country within each year. BT is positive, if $d > r$, then a country is gaining, but if $d < r$, then the economy is losing foreign exchange. In other words, if borrowing is linked with productive use when rates of return exceeding r and BT is positive, rising external debt will not damage the immediate interests of the recipient country or impede its development prospects in the long run.

The main idea of basic transfer is founded on the concept of the inter -- temporal budget constraint, i.e. that a country needs to balance its accounts not year-by-year basis but within longer period of time through its whole life. However it does not mean that a country may neglect the levels of debt servicing within each specific period. Moreover, inference about solvency and a country's ability to serve its debts in

the long run is based on the information about current money flow, or in the sum of different periods with available temporal data. Therefore, analysis of the period-to-period flow is needed. For that, the following equation could be helpful.

$$(D_t - D_{t+1}) = Y_t - rD_t - C_t - I_t -- G_t \quad (3)$$

$(D_t - D_{t+1})$ net change in debt from a period t to a period t + 1

Y_t: GNP in period t (net remittance is included)

rD_t: total interest payments in period t

C_t: consumption in period t

I_t: domestic investment in period t

G_t: government expenditure in period t

It is clear from equation (3), that the size of the debt could be decreased within a certain period of time by an increase in a country's output and a reduction of consumption, domestic investment and government expenditure. But if a country fails to do it from period to period and reaches the level where the sum of output, consumption, domestic investment and government expenditure is less than the basic transfer (4), then a country will face a debt crisis.

$$C_t + I_t + G_t -- Y_t < d\,D_t - rD_t \quad (4)$$

$d\,D_t$: gross foreign exchange flow into a country in period t

rD_t: gross foreign exchange outflow from a country in period t in order to pay interest

$d\,D_t - rD_t$: BT in period t

Various complex external and internal factors influence d and r that could lead to debt problems. The most typical trends for d and r are as follows. First, at the beginning when a country has a rather small total debt the rates of its increase, d, tends to be high, but when D becomes large then d starts declining because debt service increase compares to rates of additional gross inflows. Second, on the other side, at the initial stages of debt accumulation r is relatively low (as a rule much less than d) due to its official sources based origin (mainly foreign aid at concessional terms). But later r could grow very fast being linked with short-term commercial banks lending at market rates.

These trends could be reinforced much more by a series of processes that are mainly beyond the control of developing countries. Firstly, there are global and regional crises, as well as other external trade and financial shocks. Secondly, deterioration of the external environment and the terms of trade subsequently worsen current account problems. Thirdly, loss in confidence and ability to repay debt by emerging and transitional markets (it could be contagious and infective) lead to more difficult and more expensive additional borrowing for almost all countries in the region. And, finally, regional and domestic recession, expectations of currency devaluation combined with some other reasons increasing country risk might not only discourage foreign investors but also trigger a huge resident capital outflow. (The recent capital flight from Russia could be comparable with Mexico or Brazil in the first half of 1980. Its size could be less in other developing and transitional economies but always connected with enormous adverse effects on the economic and social development of the countries involved).

All these factors, cumulatively could result in a rapid lowering of d and an increasing r, and bring together a chain reaction ending in an increasingly negative basic transfer and transforming a debt problem into a debt crisis, and impeding both growth and development objectives. To avoid defaulting a country needs to observe rigidly the sustainability of its external debts. The basic transfer concept and respective equations (1) through (4) could be an even more useful tool for measuring the quantitative dimensions, identifying the main causes and choosing the respective policy options if they are complimented with two-gap models.

Two-gap models are often used in country analysis concerning official development assistance for defining relative need and ability to use foreign aid effectively. In the author's opinion, they are also good for measuring sustainability of external debt. The main arguments of the model are that most of countries in debt have two major constraints: a shortage of domestic savings compared to investment opportunities (savings gap) and a shortage of foreign exchange to finance capital and intermediate commodity imports (foreign exchange gap).

To overcome these constraints a country attracts additional foreign exchange and subsequently increases its foreign debt. The increase of the debt can be expressed in following equations:

$$dD/dt = iD + M - E \qquad (5)$$

dD/dt: the change in stock of debt (first derivative)

i: average interest rate

M: import

E: export

If a country let E and M grow at the same exponential rate gE to find the long-run equilibrium conditions for sustainable foreign borrowing. The stock of debt will also grow at gE and in the long-run the ratio of debt to exports will settle at:

$$D/E = a\,(gE - i) \quad (6)$$

a: ratio of foreign exchange gap to exports, (M- E)/E, a constant under assumption of the above condition

If gE is greater than i, the gap remains positive, i.e. the country can continue borrowing and servicing its debt without increasing the ratio between its debt and exports.

If the country manages to increase growth rates of exports above growth rates of its imports then debt ratio (dD/dt) would fall, the debt stock would be decreasing.

Investment – saving (I – S) gap:

$$dD/dt = iD + I - Sd = iD + vY - vS = iD + (v - s)\,Y \quad (7) \text{ differential equation}$$

Y: GNP

v: investment share of GNP,

s: propensity to save out of GNP

If we assume that both debt and GNP growth at the same exponential rate gY, the long-run equilibrium ratio of debt to GNP is $D/Y = (v - s) / (gY - i)$

As long as the debt to GNP ratio is not larger than ratio between the difference of the investment share of GNP and the propensity to save out of GNP to the difference between GNP growth rates and the average interest rate, then debt could be considered at a sustainable level.

4. Foreign Debt and Balance of Payments

To understand the origin of foreign debt it is necessary to study the international flow of financial resources or changes in all three components of the balance of payments of a country on a year-by-year basis within the period of time when debt has been accumulated. In our case, starting with the time when

the post-factum zero option among the FSU was accepted, since the independence of the Central Asian states.

The current account balance in addition to the foreign trade balance, investment incomes, net remittance and transfers, as a rule, includes in almost all developing states also debt interest payments. The latter proved to be one of the factors increasingly contributing to the current account deficit of the majority of Central Asian economies too. It is growing steadily, but persistently in Kazakhstan, Kyrgyzstan and Uzbekistan (see Table 11, column 4). In the latter, which is known as a double land-locked state with long distances of transportation of foreign trade goods, it has become almost as sizeable as shipment and transit fees. Both items made net external services negative for the whole period 1993-1999. They also adversely affected the current account balance as a whole, more than offsetting a positive merchandise balance in 1995 and 1998, and increasing the negative imbalances in all other years within this period, except 1994, which was the only year with an overall positive current account balance.

Table 11. Foreign Debt Service and Capital Flows, 1992-1999 (USD mln.)

	Current Account			Capital Account				Official Reserves		
	Balance	% of GDP	**Interest repayment, net**	Balance	FDI	Loans	**Debt Amortization**	Gross	Change	Months of Imports
Kazakhstan										
1992	-1,479	-51.4		-105	100			83		0.0
1993	-438	-9.4		1,172	473			541	-458	1.0
1994	-905	-8.6	**-47**	1,194	635	-298	**-61**	1,345	-326	3.2
1995	-518	-3.1	**-65**	1,160	964	-156	**-48**	1,730	-375	3.2
1996	-750	-3.6	**-78**	1,374	1,137	-55	**-210**	1,980	-250	3.1
1997	-803	-3.6	**-133**	1,594	1,320	-490	**-173**	2,252	-490	3.1
1998	-801	-5.7		930	1,132			1,967		3.1
Kyrgyzstan										
1992	-98.0	-10.6		-3	0.0			24		1
1993	-162.0	-16.4		73	10.0			63	-39	2
1994	-124.2	-11.2	**-17.4**	158.3	44.9	108.6	**0.6**	98	-32.1	3
1995	-242.2	-16.2	**-28.6**	248.5	96.1	200.0	**72.2**	115	0.3	3
1996	-424.7	-23.2	**-34.3**	347.2	46.3	309.7	**50.5**	118	-18.1	2
1997	-139.1	-7.9	**-56.8**	258.9	83.0	151.7	**15.4**	200	-82.6	3
1998**	-228.5	-5.6	**-44.4**	153.7	36.8	97.8	**15.8**	189	15.0	2
Tajikistan										
1992	-53	-18.0		52	0					-
1993	-208	-30.7		-29	9	-2	**15**	2	-2	0
1994	-170	-20.5		-52	12	-7	**19**	1	1	0
1995	-89	-14.6		-81	20	7	**102**	4	-3	0.1
1996	-70	-6.8		-90	25	7	**125**	14	-10	0.3
1997	-56	-5.2		-17	30	72	**40**	30	-16	0.6
1998	-107	-8.3		28	24		**23**	65	-36	1.5
Turkmenistan										
1992	926	54.7		-204	11					
1993	775.7	20.0	**22.5**	-550*	79	297	**-2**	818	-446	6
1994	84.2	2.0	**91.4**	-208*	103	236	**-32**	927	-135	7
1995	23.5	1.0	**112.4**	-51*	233	-22	**-246**	1,170	-239	9
1996	1.8	0.1	**74.4**	-42.8	108.1		**-213.6**	1,172	-2.0	10.1
1997	-579.9	-21.6	**78.6**	871.8	102.4		**-224.1**	1,285	-113.0	15.3
1998	-934.5	-34.5	**44.9**	870.3	64.1		**-84.5**	1,379	-94.0	14.6
Uzbekistan										
1992	-236	-11.7		224	9			82	-940	1
1993	-429	-7.8	**-19**	858	48	548	**-166**	1,022	-492	3.8
1994	119	2.1	**-22**	-64	73	326	**-276**	1,330	-309	5.9
1995	-21	-0.2	**-26**	255	-24	1,054	**-563**	1,867	-578	6.9
1996	-980	-7.2	**-73**	634	90	679	**-214**	1,901	-33	5.4
1997	-584	-4.0	**-175**	103	167	558	**-362**	1,167	480	3.7
1998	-39	-0.3	**-101**	40	176	915	**-249**	1,168	-1	5.2
1999**	-265	-2.5	**-140**	250	138	748	**-217**	1,139	29	

* capital and finance account balance; **-for the first three quarters of the year

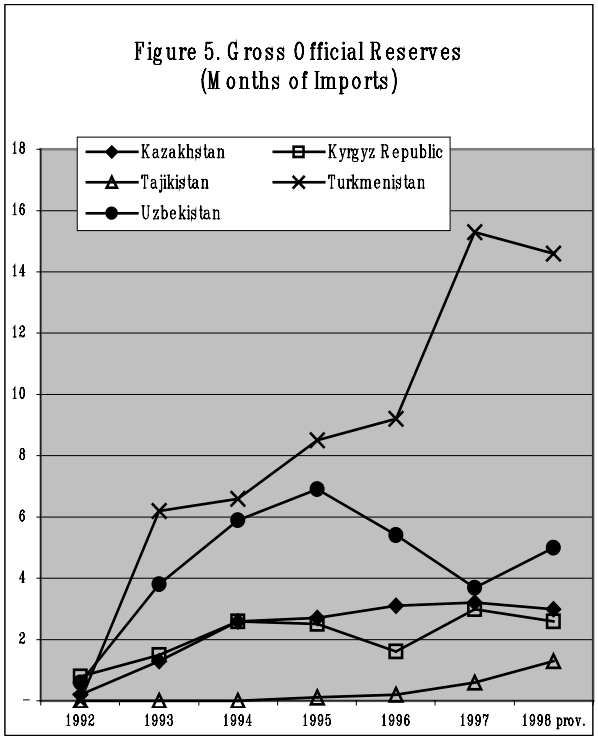
Source: IMF country papers. Recent Economic Developments. Kazakhstan (Aug.1998, No 98/84 p. 56 and Mar. 2000, No 00/29, p. V), Kyrgyzstan (Apr.1999, No 99/31, p.115), Tajikistan (Mar. 2000, No 00/27, p.90), Turkmenistan (Aug.1998, No 98/81, p.49, 110,116 and Dec. 1999, No 99/ 140, p.115), Uzbekistan (Mar. 2000, No 00/36, p. 71); Economic Reforms in Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan / Emine Gurgen…[et al], IMF Occassional Paper, No 183, 1999 p. 36, 45, 53, 55

The capital account balance comprises of not only foreign direct investments (FDI), private loans and portfolio investments, bilateral and multilateral official development assistance (ODA) or foreign aid (grants and loans), resident capital outflow but also debt amortization (part-by-part repayment of the principal on the former loans). It is important to serve growing debt amortization in time as in Kazakhstan, Turkmenistan and Uzbekistan. Otherwise, it could become an additional factor further increasing of external debt due to accumulation of non-serviced debt as in Kyrgyzstan and Tajikistan (see Table 11, column 8).

It is clear that to avoid facing creeping debt problems a government needs to avoid chronic deficits on the combined current and capital accounts to provide a build up of international reserves. Respectively measures that deal with the debt problem have to rely on a sound balance of payments policy; i.e. total receipts on both accounts need to exceed their total disbursements. However, for various reasons and different durations, but within the period under consideration, almost all the countries of the region have experienced balance of payments problems. The most severe imbalances were observed in Tajikistan, which had a negative combined balance for all years within 1992-1998. Kyrgyzstan also struggled hard to make both ends meet, but nevertheless it could not escape negative net balances in 1996 and 1998. Turkmenistan had the most uneven sum of balances with large fluctuations of both accounts with a big positive current account at the beginning that has been changing by each year for the worse. Its huge negative current accounts in 1997 and 1998 were not easy to offset - only by expensive borrowing of large amounts of commercial credits that were still not sufficient in 1998. Uzbekistan also faced some balance of payments difficulties in 1996-1997 mainly because of a current account deficit due to sharp changes in world prices for its main exports (cotton and gold). During the first year after the break-up of the FSU, Kazakhstan experienced the strongest blow in the region because of the simultaneous disruption of its traditional trade and financial flows. Afterwards it has managed to offset a rather big and chronic current account deficit by a larger surplus on its capital account to which FDI contributed a lot. It attracted about three quarters of total FDI flows to the region in 1992-1998 (see Table 11, columns 2, 5, and 6).

And, finally, changes in the account of international reserves (gold, hard currency and special drawing rights (SDRs) issued by IMF) reflect not only accumulated surpluses or deficits in current and capital accounts for number of years. They also permit us to judge whether a country could service its

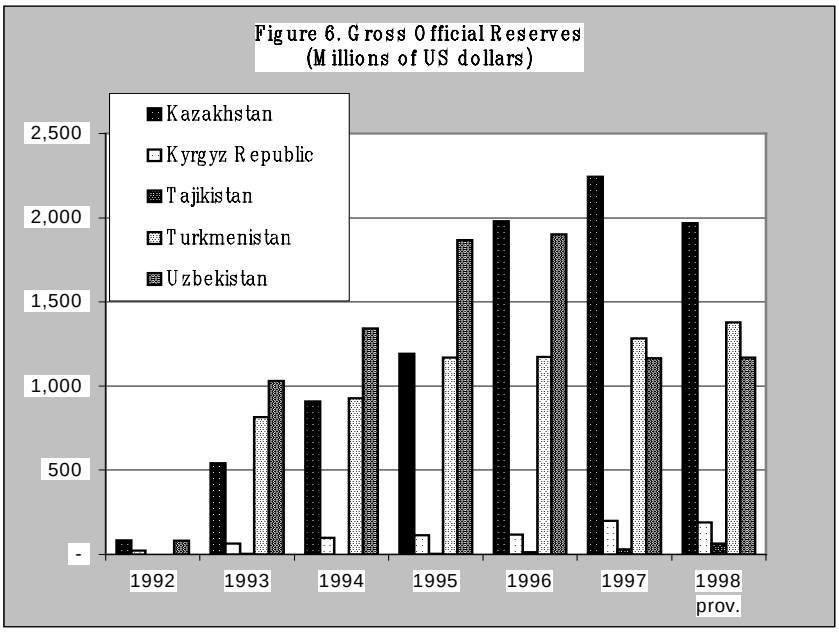
foreign debt or not, as well as its ability to borrow additional reserves (assets) serving as collateral. The external debts of the Central Asian countries affected currency reserves, but not as badly as they might have. Even Tajikistan had been slowly building up its official reserves from 0 in 1993-1994 up to 1.5



months in 1998 and Kyrgyzstan and Kazakhstan's reserves were around 2-3 months of imports within this period.

Due to policies directed towards compression of imports, the ratio of official reserves to imports was much more under control in Uzbekistan (about 5 months as of end of September 2000). While Turkmenistan maintained it at as high a level as 14.6-15.3 months in 1997-1998 to hedge against sharp external shocks connected with the marketing of its main export commodity – natural gas (see Table 11, column 11, as well as Figures 5 and 6).

Thus, borrowing and debt service (payment of amortization of the principal and accumulated net interest) directly and indirectly involves all accounts of the balance of payments. And, therefore, this interconnection is important to consider when studying both the roots of the debt problem and looking for policy options to treat it.



5 Conclusion: Recent Trends in a Nutshell and the Main Policy Options

At present accumulation of external debt by the Central Asian states, like in many other countries in transition, has been obtaining more and more common features with the majority of developing economies. All of them, including in recent years Turkmenistan, have been trying to cover their sizable current account deficit via large resource transfers in their capital accounts. But surpluses of the latter were not always larger than deficits of the former. Nevertheless their international reserves generally had positive dynamics. But recently their economies have faced a significant worsening in both capital and current accounts. A substantial deterioration of the terms of trade (with sharp falls of prices for raw materials, including oil, cotton, gold and other tradable commodities), global recession and regional financial crises, rising protectionism in industrial countries and falling competitiveness in traditional markets contributed to chronic and large current account deficits. A sharp decline in lending by

international banks, higher interest rates and volatile movements of short-term speculative capital in the second half of 1990s as well as capital flight redoubled the payments imbalances and led to a rapid increase of their external debts.

The Central Asian states had different capacities to deal with these problems. But the search for effective solutions to the problem in any particular country has had at least two main directions. It is necessary to find how: (1) to cure specific causes of the external debt itself and provide its sustainability, and (2) to address debt problem via related balance of payments issues.

First issues were discussed in previous sections in detail. And the analysis witnessed once again the necessity in all countries of the region of establishing proper debt management institutions in order to provide sound external borrowing policies. All varieties of policy options to deal with debt through balance of payment could be divided into three groups of measures aiming at improvement of current account and capital account balances as well as maintaining certain level of official international reserves.

First, it is necessary to reduce the current account deficit by encouraging exports and/or limiting imports of goods and services. Attempts to increase exports need to be realistically oriented towards those sectors of the economy in which a country can employ better its comparative advantages and achieve competitiveness in respective markets. The second target, depending on the level of domestic industries, can be reached by import substitution encouraging the production of certain goods by concessionary credits and other temporally established privileges and/or by providing protection using import tariffs, quotas and bans for chosen products. Both goals could be taken simultaneously with currency depreciation or rigid structural adjustments and stabilization policies. But in these cases, the improvement of the current account will be accompanied not by a decrease of the external debt but with its further sharp increase, because devaluation based policies make foreign currency more expensive. It also immediately affects international currency reserves and could provoke a capital flight, and then its impact on the overall balance of payments could be extremely negative, deeply affecting economic growth prospects.

Second, it is important to avoid negative imbalances in the capital account attracting FDI, private and official credits to build effective production able to substitute expensive imports and promote export-oriented industries. The benefits hosting of foreign physical and financial capital in terms of economic growth and development need to be larger than the costs of the future transfer of profits and the repayments

of principal and interest. If the import-substituting sectors save and export-oriented industries earn more then no serious external debt problem would appear. In fact, the East Asian newly industrialized economies, especially Korea, borrowed heavily in the period of its dynamic growth 1965-1990. Nevertheless, the debt-export ratio on average did not rise for East Asia and decreased for Korea. This happened not so much due to a decrease in outstanding debt, but more because exports increased faster than debt accumulation [Hayami, Yujiro, (1998), Development Economics: from the Poverty to the Wealth of Nations, Clarendon Press, Oxford, p. 39]. In many other developing countries in Latin America and Africa, rapidly growing debt and the costs of its servicing largely outweighed the benefits.

Third, a sufficient amount of official international reserves must be maintained to avoid default if both accounts faced a negative imbalance under unexpected external shocks. In addition to keeping positive combined current and capital accounts over time, domestically prudent fiscal policies with efficient tax collection and a well-balanced state budget, external expansion of SDR's quota is a possible source to cure liquidity problems which might emerge from time to time without over-spending gold and currency reserves. Another possibility is for the Central bank to intervene in domestic foreign exchange markets to purchase hard currency in order to prevent over-appreciation of national money. For the resource-rich Central Asian republics after overcoming macro-economic instability and achieving sustainable economic growth this option would potentially become available to promote and keep competitive their exports of manufactured goods. But it is not the case now. At present, it is more important not to permit a sharp and destructive devaluation.

Thus, to deal with external debt, policies in all spheres of debt management, foreign trade and the flow of international financial resources are to be implemented simultaneously. Only the cumulative effect of all measures allow the rather complex and persistent character of external debt to be overcome.

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