

## Chapter 2 Socio-economic Framework up to the year 2020

### 2.1 Socio-economic Framework in Romania

The socio-economic framework applied forecasting cargo throughput in a port should be selected considering the character of the cargoes handed in the port and the major economic activities of the country by the target year, such as population, GDP and its shear by sectors, industrial production indicator, and so on.

In Romania, the National Medium-term Development Strategy of the Rumania Economy, which indicates the Government program until 2004, is only economic development plan approved by the Government and, the other information and data are not available officially, and therefore only population and GDP in target year are presumed in this Section.

#### (1) Population

The Romania General Transport Master Plan Study prepared by Ministry of Transport, Bucharest, and European Commission, DG IA (Phare), Brussels shows the population projection of Romania until 2015. World Development Indicators 2000 published by World Bank also shows the population projection until 2015

**Table 2.1.1 Population Projection in Romania**

(Unit as shown)

Year	1995	2000	2005	2010	2015
Index	100	98	96	94	92
Total Population (millions)	22.7	22.2	21.8	21.3	20.9

Source : Romania General Transport Master Plan Study

(Unit as shown)

Year	1980	1998	2015	2030
Total Population (millions)	22.2	22.5	21.3	20
Average Annual Growth Rate (%)	0.1		-0.4	-

Source : World Development Indicators 2000

The population of Romania increased until 1990 and then during past transition period, the number had been continually reduced. These figures also indicate that the population of Romania will continually decrease during the Study period. The ratio of population in the year 2020 to 1999 will be assumed around 93%.

(2) GDP

The National Medium-term Development Strategy of the Rumania Economy gives the estimation of GDP until 2004 and the Romania General Transport Master Plan Study also gives until 2015.

**Table 2.1.2 GDP Estimation in Romania**

(Unit : previous year = 100)

Year	2000	2001	2002	2003	2004
Index	101.3	103.0	105.0	105.0	106.0

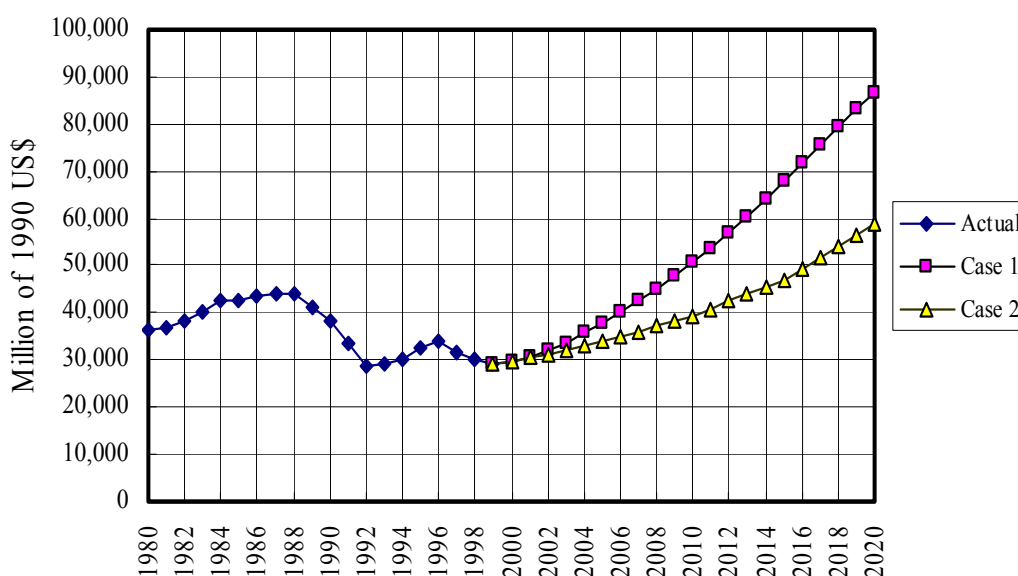
Source: National Medium-term Development Strategy of the Rumania Economy

Period	1995 - 2000	2001 - 2005	2006 - 2010	2011 - 2015
Annual Growth	0.3 %	2.7 %	3.1 %	3.6%.

Source : Romania General Transport Master Plan Study

According to the PRESS RELEASE No. 67 / 28.11.2000 by National Commission for Statistics, GDP from 1st Jan to 30th Sep 2000 amounted to Lei 509,833.7 billion in current prices, and increased 2.0% in real terms as against similar period of previous year. The monthly economic indicator by the Commission showed industrial production decreased by 14.5%, and exports FOB increased by 9.3% and imports CIF by 10.3% in December 2000 against previous month.

The sustainable growth of the GDP in Romania was presumed based on aforementioned estimation during the Study period, until 2020 for the purpose of forecasting cargo throughput in Constantza port.



**Fig. 2.1.1 Actual and Estimated GDP in Romania**

**Table 2.1.3 Annual Growth of GDP in Romania for Cargo Forecast**

(Unit : percent)

Year	Case 1	Case 2
2000	2.0	2.0
2001	3.0	2.7
2002	5.0	2.7
2003	5.0	2.7
2004	6.0	2.7
2005	6.0	2.7
2006	6.0	3.1
2007	6.0	3.1
2008	6.0	3.1
2009	6.0	3.1
2010	6.0	3.1
2011	6.0	3.6
2012	6.0	3.6
2013	6.0	3.6
2014	6.0	3.6
2015	6.0	3.6
2016	6.0	4.6
2017	5.5	4.6
2018	5.0	4.6
2019	4.5	4.6
2020	4.0	4.6

Note1: The figures from 2001 to 2004 in Case 1 were based on National Medium- term Development Strategy of the Rumania Economy and the figures from 2005 to 2020 were presumed by the Study Team.

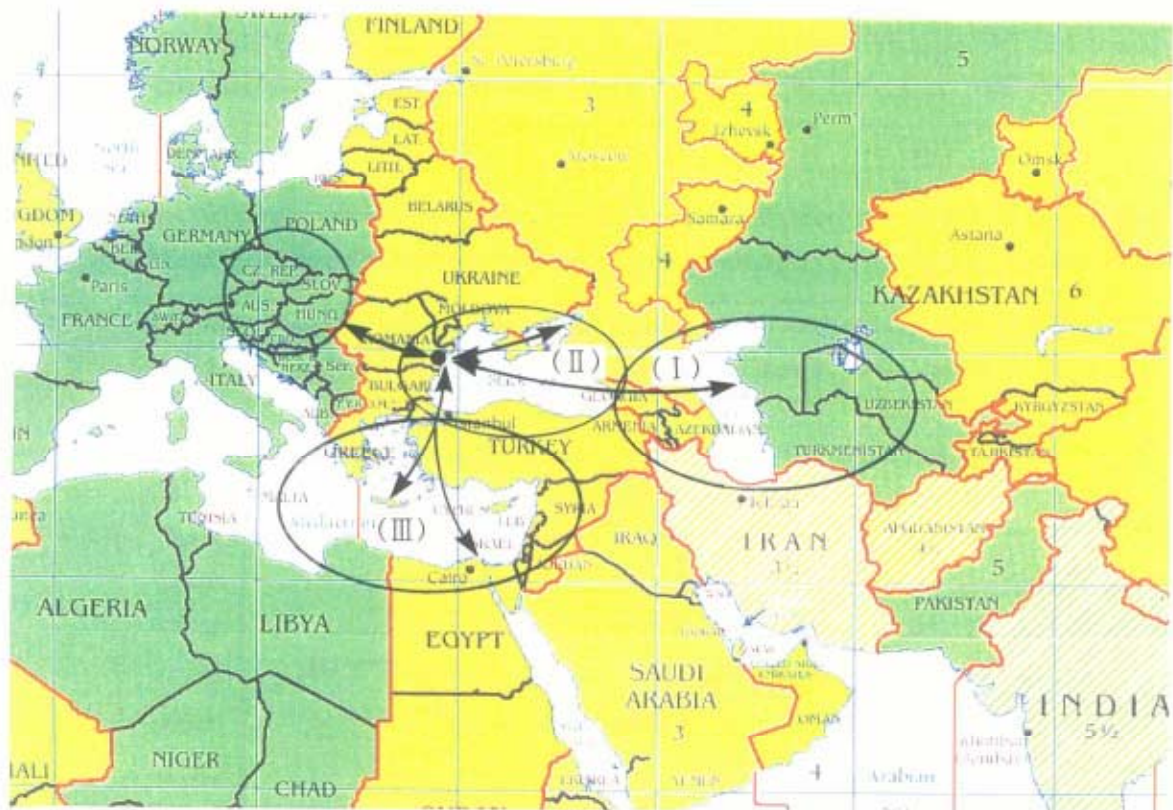
Note2: The figures from 2001 to 2015in Case 2 were based on Romania General Transport Master Plan Study and the figures from 2016 to 2020 were presumed by the Study Team.

## 2.2 Socioeconomic Framework of Surrounding Countries

### 2.2.1 General

Transit cargo transported via Constantza Port can be divided into three categories: cargo exported to countries in the Caucasus and Central Asia from Central and Eastern European countries (route I); cargo exported to countries near the Black Sea (route II); and cargo bound for the Mediterranean Sea via Bosphorus, and cargo exported to the Middle and Near East countries and South and East Asian countries via the Suez Canal (route III). There is also cargo being imported into Central and Eastern European countries from the aforementioned regions and countries, and this is transported via Constantza Port as well. (See Fig. 2.2.1.)

Fig 2.2.1 Origin and Destination of Transit Cargo via Constantza Port



In order to conduct a forecast demand for transit cargo traffic, it is important to forecast socioeconomic development in related regions and countries, including countries in Central and Eastern Europe, coastal countries of the Black Sea, and countries in the

Caucasus and Central Asia. The following are prospects for economic growth - an indicator closely related to the socioeconomic framework, particularly demand forecast - up to 2020.

### **2.2.2 Central and Eastern European Countries**

Countries considered to be within the hinterlands of Constantza Port include four (First Group) of the CETE-5\* countries (Hungary, Czech Republic, Slovakia and Poland) and three countries (the Second Group) of the SETE-7\* countries (Bulgaria, Yugoslavia, and Bosnia Herzegovina). In addition, Austria – an EU country - can be also included in the hinterlands in consideration of iron ore and other bulk cargoes. The orbit has eight countries if we include Austria.

**Note:** CETE-5: Central European Transition Economies including Hungary, Czech Republic, Slovakia, Poland, and Slovenia

SETE-7: South European Transition Economies including Bulgaria, Yugoslavia, Bosnia Herzegovina, Romania, Croatia, Albania and Macedonia

Table 2.2.1 and Fig.2.2.2 show economic scale and growth rate for these groups of countries. The most reliable and latest economic prospectus available today for Central and Eastern European countries can be found in the report of "Romania General Transport Master Plan Study," conducted by the Ministry of Transport of Romania and a European economic consultant, Prognos, as part of the EU's Phare Program in the period 1998 to 1999. The Study forecasts a GDP growth rate for these the countries up to 2015. We would like to use the figures of the study as a socioeconomic indicator under the JICA study. (See Table 2.2.2)

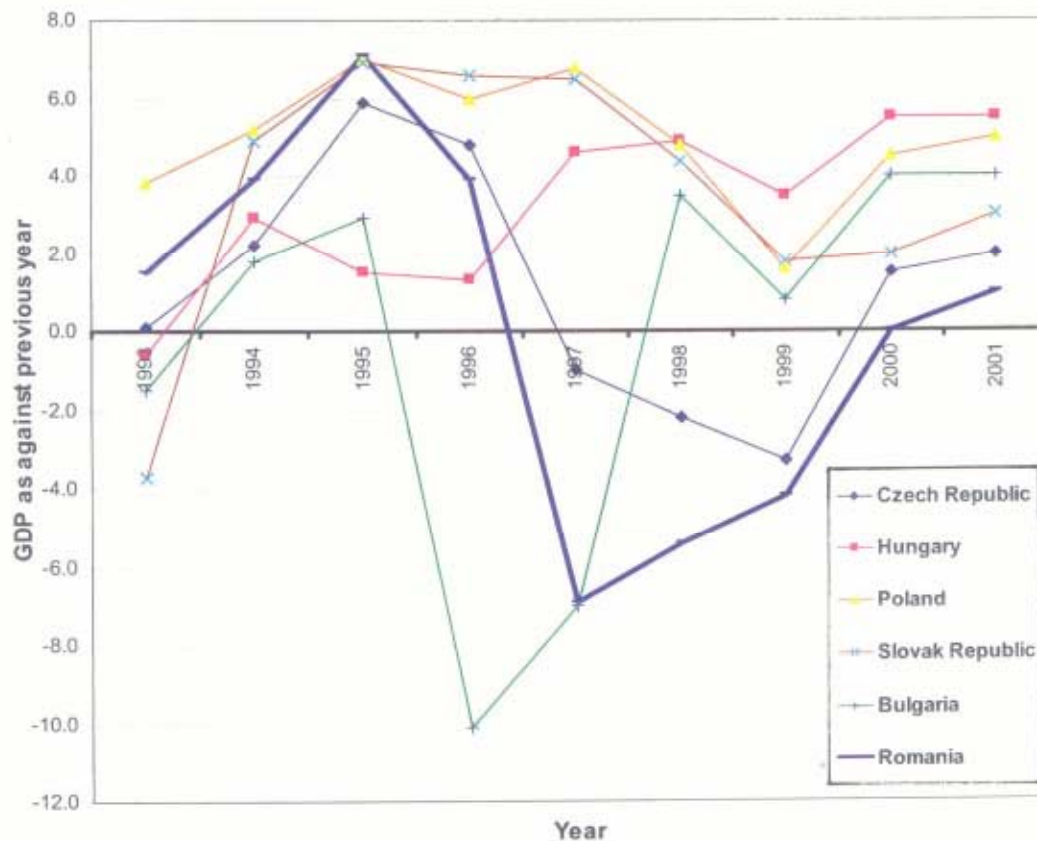
In these countries, "the First Group countries" are considered in the "Romania General Transport Master Study Report (June, 1999, Prognos)" to be the most advanced and prosperous among the countries at issue. Their average growth rate is expected to be about 5 percent per annum and will peak between 2005 and 2010. Meanwhile, it is expected that economic and political reforms will be implemented in the Second Group countries, but will not be completed by then.

**Table 2.2.1 Size of Economy (Central and Eastern European Countries)**

	Population	Surface area	Population density	GNP		GNP per capita	GDP	GDP per capita
	million 1998	thousand sq. km 1998	people per sq. km 1998	\$ billions 1998	Average annual growth % 1997-98	\$ 1998	\$ million 1998	per capita \$ 1998
Poland	39	323	127	151.3	4.4	3,910	158,574	4,101
Czech Republic	10	79	133	53.0	-2.2	5,150	56,379	5,476
Slovak Republic	5	49	112	19.9	4.2	3,700	20,362	3,777
Hungary	10	93	110	45.7	4.2	4,510	47,807	4,727
Slovenia	2	20	99	19.4	3.9	9,780	19,524	9,851
<b>Sub Total</b>	<b>66</b>	<b>564</b>	<b>118</b>	<b>289.3</b>		<b>4,354</b>	<b>302,646</b>	<b>4,555</b>
Bulgaria	8	111	75	10.1	3.5	1,220	12,258	1,485
Romania	23	238	98	30.6	-5.4	1,360	38,158	1,696
<b>Sub Total</b>	<b>31</b>	<b>349</b>	<b>88</b>	<b>40.7</b>		<b>1,323</b>	<b>50,415</b>	<b>1,639</b>
Croatia	5	57	80	20.8	1.8	4,620	21,752	4,833
Bosnia and Herzegovina	4	51	74	..	..	..	..	..
Macedonia, FYR	2	26	79	2.6	3.1	1,290	2,492	1,240
Yugoslavia, FR (Serb./Mont.)	11	102	104	..	..	..	..	..
<b>Sub Total</b>	<b>21</b>	<b>236</b>	<b>89</b>	<b>23.4</b>		<b>3,589</b>	<b>24,244</b>	<b>3,724</b>

World Development Indicators (World bank:2000)

**Fig. 2.2.2 Evolution of Gross Domestic Product (Central and Eastern European Countries)**



(Source: Transition Countries in early 2000 (June 2000, WIIW))

**Table 2.2.2 GDP Annual Growth Rate in Constant Prices (1995)**

	Forecast (%)				
	1995-2000	2001-2005	2006-2010	2011-2015	2016-2020
Hungary	4.2	5.3	5.8	5.5	5.2
Czech Republic	2.5	4.4	4.9	4.7	4.1
Slovakia	4.9	3.5	3.7	4.4	4.1
Poland	6.0	4.3	4.9	4.4	4.9
<b>CEEC-5</b>	<b>4.8</b>	<b>4.5</b>	<b>5.0</b>	<b>4.7</b>	<b>4.7</b>
Bosnia-Herzegovina	10.9	3.5	3.0	2.8	5.0
Bulgaria	-2.3	2.7	3.5	3.7	1.9
Yugoslavia	0.6	1.5	2.2	2.6	1.7
<b>CEEC-7</b>	<b>1.4</b>	<b>3.0</b>	<b>3.4</b>	<b>3.7</b>	<b>2.9</b>

**2.2.3 Black Sea Countries**

Countries lining the coast of the Black Sea and considered to be forelands of Constantza Port include three former CIS countries, namely, Ukraine, the Russian Federation and Moldova; Georgia, a Caucasus country; the Republic of Turkey, and Bulgaria. As we will discuss Georgia and Bulgaria in another group, the Black Sea countries we discuss here include Ukraine, the Russian Federation, Moldova, and the Republic of Turkey.

Table 2.2.5 and Fig. 2.2.4 show economic scale and growth rate for these groups of countries. A prospectus available today regarding the economic growth of the "Black Sea countries" is the World Bank's "Prospect for Development, 2001." The forecast covers a period up to 2010. In this study, figures forecasted by the World Bank are used as indicators of socioeconomic development for Black Sea countries. (See Table 2.2.5.)

**2.2.4 Caucasus and Central Asian Countries**

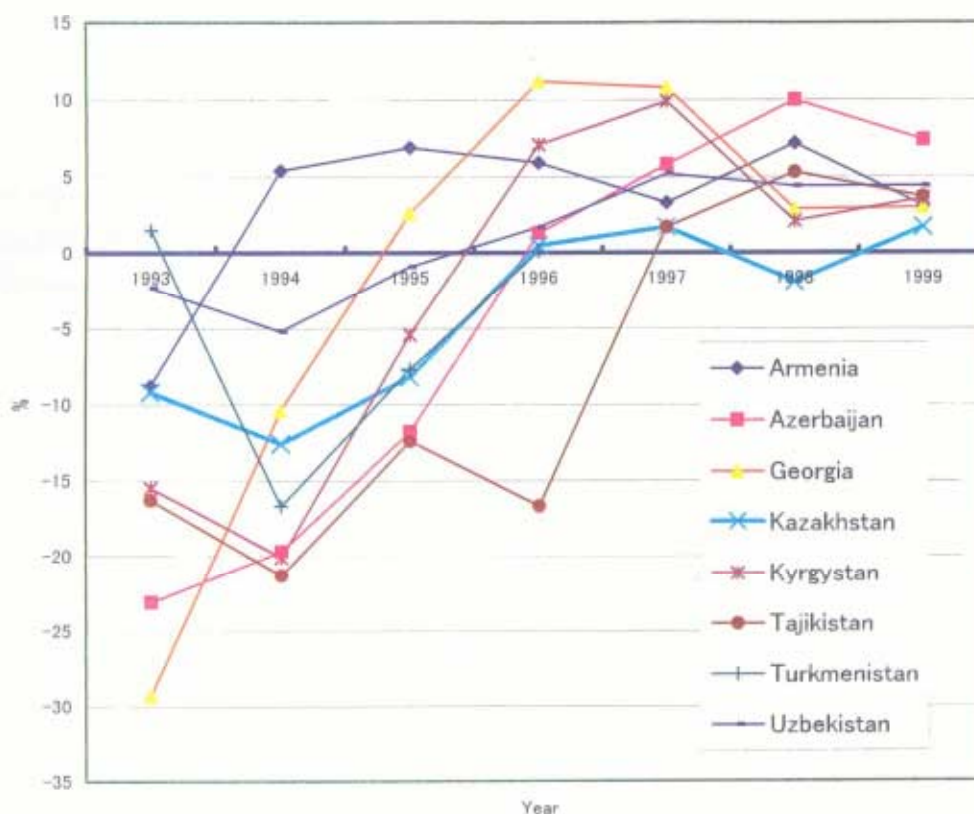
Caucasus and Central Asian countries considered to be forelands of Constantza Port include three Caucasus countries, namely, Georgia, Azerbaijan and Armenia, and five Central Asian countries considered to be hinterlands of the three Caucasus countries, namely, Kazakhstan, Uzbekistan, Tajikistan, Turkmenistan and Kyrgyz Republic. Whether or not the Central Asian countries can be forelands of Constantza Port could be a rather wide-open issue. The SAPROF Report (Special Assistance for Project Formation for the Poti Port Development Project in the Republic of Georgia, February

**Table 2.2.3 Size of Economy (Black Sea and former CIS Countries)**

	Population	Surface area	Population density	GNP		GNP per capita	GDP	GDP per capita
	million 1998	thousand sq. km 1998	people per sq. km 1998	\$ billions 1998	Average annual growth % 1997-98	\$ 1998	\$ million 1998	per capita \$ 1998
Russian Federation	147	17,075	9	331.8	-6.6	2,260	276,611	1,883
Ukraine	50	604	87	49.2	-2.4	980	43,615	867
Belarus	10	208	49	22.3	10.5	2,180	22,555	2,203
<b>Sub Total</b>	<b>207</b>	<b>17,887</b>	<b>12</b>	<b>403.3</b>		<b>1,944</b>	<b>342,781</b>	<b>1,652</b>
Georgia	5	70	78	5.3	2.7	970	5,129	942
Azerbaijan	8	87	91	3.8	9.9	480	3,926	496
Armenia	4	30	135	1.7	3.4	460	1,900	501
<b>CAUCASUS</b>	<b>17</b>	<b>186</b>	<b>92</b>	<b>10.8</b>		<b>632</b>	<b>10,955</b>	<b>639</b>
Kazakhstan	16	2,717	6	20.9	-2.2	1,340	21,979	1,409
Uzbekistan	24	447	58	22.9	5.2	950	20,384	848
Tajikistan	6	143	43	2.3	15.2	370	2,164	354
Turkmenistan	5	488	10	..	..	..	2,367	502
Kyrgyz Republic	5	199	24	1.8	4.2	380	1,704	363
<b>Central Asia</b>	<b>55</b>	<b>3,994</b>	<b>14</b>	<b>47.8</b>		<b>947</b>	<b>48,598</b>	<b>881</b>

World Development Indicators (World bank:2000)

**Fig. 2.2.3 Evolution of Gross Domestic Product (Black Sea and former CIS Countries)**



(Source: Transition Countries in early 2000 (June 2000, WIIW))



**Table 2.2.5 Growth of Gross Domestic Product in Ukraine, Russia and Turkey**

**1. Real change in % against preceding year**

	Reality							Forecast	
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Ukraine	-14.2	-22.9	-12.2	-10.0	-3.0	-1.7	-4.7	1.0	3.0
Russia	-8.7	-12.7	-4.1	-3.4	0.9	-4.9	-2.7	4.0	3.0
Turkey				7.0	7.5	2.8	-4.0		

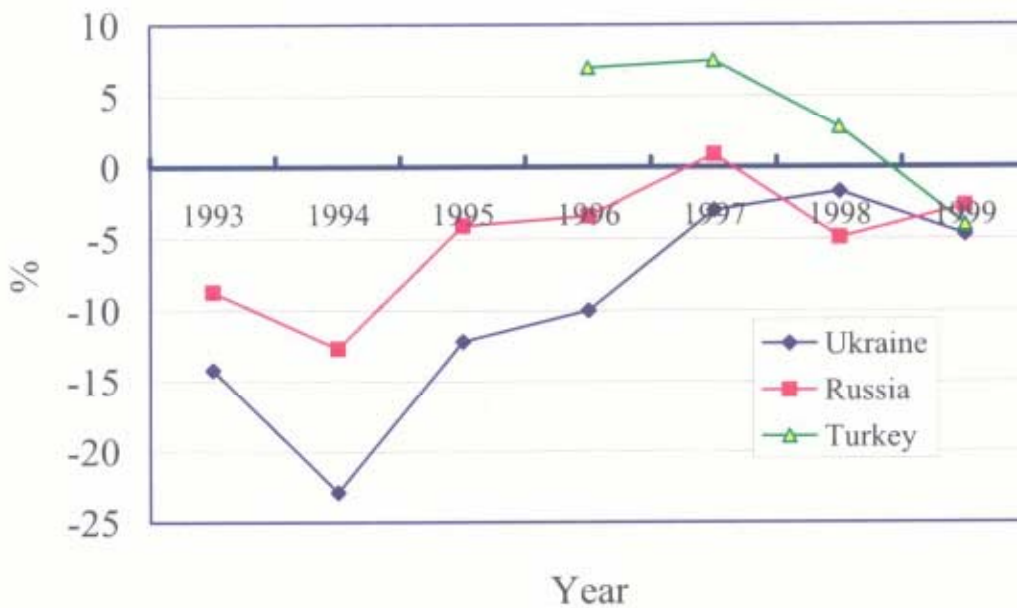
Source: WIIW Research Report (The Transition Countries in early 2000)

**2. GDP Forecast in % against preceding year**

	GDP 1998 (MUSD)	Forecast by WIIW		Forecast by WB		Forecast in this Study		Forecast in this Study	
		2000	2001	High Case	Low Case	Low Case	High Case	Low Case	High Case
				2000-2010		2000-2010		2011-2020	
Ukraine	43,615	1.0	3.0			1.0	3.0	2.0	4.0
Russia	276,611	4.0	3.0			3.0	4.0	3.0	4.0
Turkey	198,884					3.0	6.0	2.0	4.0
	519,110	3.6	5.6	4.1	3.0				

Source: World Bank (World Development Indicators 2000)

**Fig 2.2 4 Growth of GDP of Ukraine, Russia and Turkey**



1999), compiled in 1999 by JBIC, concluded that about 10 percent of the sea born cargo handled at Port of Poti would continue to originate from Central Asian countries.

The survey carried out this time shows that five to fifteen percent of the total cargoes handled the Port of Poti in 1999 are the trading cargoes between this area and Central and Eastern Europe including Germany. Trade statistic also indicates that five to fifteen percent (in terms of capital) of the cargo bound for or inbound from major Central Asian countries such as Kazakhstan and Uzbekistan is the trading cargoes between Germany, Austria, and Hungary. These cargoes will be considered to be potential cargoes via Constantza Port. (See Chapter 3 of Part 1)

Table 2.2.3 and Fig. 2.2.3 also show economic scale and growth rate for these groups of countries during past seven years. A prospectus available today regarding economic growth of the "Caucasus and Central Asian countries" is the World Bank's "Prospect for Development, 2001." The forecast covers a period up to 2010. In this study, figures forecasted by the World Bank are used as indicators of socioeconomic development for these Caucasus and Central Asian countries. (See Table 2.2.4.)

**Table 2.2 4 Growth of Gross Domestic Product in the Caucasus and Central Asian Countries**

**1. Real change in % against preceding year**

	Reality							Forecast	
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Armenia	-8.8	5.4	6.9	5.9	3.3	7.2	3.1	4.6	0.3
Azerbaijan	-23.1	-19.7	-11.8	1.3	5.8	10	7.4	6.2	6.5
Georgia	-29.3	-10.4	2.6	11.2	10.8	2.9	3	1.2	4.4
Kazakhstan	-9.2	-12.6	-8.2	0.5	1.7	-1.9	1.7	-3.8	9.1
Kyrgystan	-15.5	-20.1	-5.4	7.1	9.9	2.1	3.6	0.3	1
Tajikistan	-16.3	-21.3	-12.4	-16.7	1.7	5.3	3.7	2.4	3.8
Turkmenistan	1.5	-16.7	-7.7	0.1					
Uzbekistan	-2.3	-5.2	-0.9	1.7	5.2	4.4	4.4	2.9	3

Source: WIIW Research Report (The Transition Countries in early 2000)

**2. GDP Forecast in % against preceding year**

	GDP 1998 (MUSD)	Forecast by WIIW		Forecast by WB		Forecast in this Study			
		2000	2001	Low Case	High Case	Low Case	High Case		
				2000-2010		2000-2020			
Armenia	1,900	4.6	0.3			4.0	6.0		
Azerbaijan	3,926	6.2	6.5			4.0	6.0		
Georgia	5,129	1.2	4.4			2.0	4.0		
Kazakhstan	21,979	-3.8	9.1			4.0	6.0		
Kyrgystan	1,704	0.3	1			1.0	2.0		
Tajikistan	2,164	2.4	3.8			3.0	5.0		
Turkmenistan	2,367					0.0	2.0		
Uzbekistan	20,384	2.9	3			3.0	5.0		
	59,553	3.6	5.6	3.0	4.1				

Source: World Bank (World Development Indicators 2000)