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Turkey and the Turkic Republics in Eurasia

After the formal break-up of the USSR in December 1991, Turkey and the Turkish Republics have shown a growing interest for closer economic co-operation and cultural ties. A spate of high-level visits accompanied the extension of formal recognition to the republics and the consequent diplomatic manifestations. Since 1991 Turkey has worked on building infrastructural ties in transport and telecommunications, extending financial and business contacts, and reinforcing cultural relations by developing scholarships and student exchange programs. Turkish Eximbank credits have been used for financing Turkish exports to the region and Turkish contractors have been busy in the region.

The purpose of this paper is to consider the role of Turkey in the Turkish republics of Eurasia, where the term Eurasia is confined to Trans-Caucasus and Central Asia. After considering the trade issues in section 2 the paper reviews energy issues in section 3. Section 4 considers the future trade pattern. The paper concludes with the study of possibilities for co-operation.

1. Trade Performance

The Turkish and Eurasian economies differ from each other. Turkey is a middle income, free market economy with a relatively large public sector. On the other hand the Eurasian economies are, since the beginning of 1990's, in the process of transition from centrally planned to free market economies and they incur all the difficulties of transition and adjustment. Table 1 provides basic data on the economies under consideration. Per capita GNP figures obtained from the World Development Report 1997 reveal that among the countries considered, Azerbaijan is the poorest country, followed by Kyrgyz Republic, Turkmenistan, Uzbekistan and Kazakhstan. However purchasing power parity (PPP) per capita income figures reveals that this order has now changed. The poorest country is now Kyrgyz Republic followed by Azerbaijan. Thus according to per capita income the richest country within the group is Kazakhstan, and Turkish per capita income is twice that of Kazakhstan and is fifty percent higher than that of Kazakhstan on the basis of PPP per capita income levels. Foreign trade data shows that 1996 exports (imports) of the Turkish Republics amounts to \$ 10.68 (11.78) billion, and of Turkey to \$ 23.12 (42.73) billion. When we consider the structure of production, we see that agriculture in the Kyrgyz Republic (Kazakhstan) accounted for 47 (11.9) percent of GDP by 1996. The share of agriculture in Turkish GDP is 16.9 percent. During the period since the implementation of market oriented economic reforms, output in the region has sharply declined. Recently output has started to stabilise. During 1996 output increased in all of the Eurasian countries except Turkmenistan. 1996 inflation in Azerbaijan, the Kyrgyz Republic and Kazakhstan was below 40 percent. Inflation amounted to 79.4 percent in Turkey and 992 percent in Turkmenistan.

Table 1: Basic Data on Eurasian and Turkish Economies

	1995 Populati- on (million)	1995 GDP (\$ billion)	Surface Area (1000 km ²)	1996 GNP/POP (\$)	PPP Estimate of GNP/POP (1995, \$)	1996 Exports (\$ billion)	1996 Imports (\$ billion)	Share of Agricultural Value Added in GDP (%) 1996	Real GDP Growth Rate 1997	Inflation Rate 1997
Eurasian Countries										
Azerbaijan	7,51	3,47	87	451	1665	0,67	1,34	30,0	5,0	3,6
Kazakstan	16,61	21,41	2717	1278	3664	6,23	4,26	11,9	1,8	17,7
Kyrgyz Republic	4,52	3,05	199	379	1621	0,67	0,85	47,0	10,4	25,4
Turkmenistan	4,51	3,92	488	424	2345	0,70	0,84	17,5	-25,0	83,7
Uzbekistan	22,77	21,56	447	391	2370	2,41	4,49	22,5	2,4	59,0
<i>TOTAL</i>	<i>55,92</i>	<i>53,41</i>	<i>3.938</i>	<i>664</i>	<i>2597</i>	<i>10,68</i>	<i>11,78</i>			
Turkey	62,17	164,79	779	2944	5580	23,12	42,73	16,9	8,0	85,7

Source: 1997 World Development Indicators on CD ROM, World Bank; Transition Report Update 1997, EBRD; Direction of Foreign Trade, IMF

Table 2: Geographic Distribution of Exports and Imports (Percent)

	Azerbaijan		Kazakhstan		Kyrgyz Republic		Turkmenistan		Uzbekistan	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Russia	28,34	15,64	44,47	55,01	28,25	23,11	11,99	17,61	26,17	26,37
EU-15	8,86	17,38	18,63	13,01	2,89	10,23	12,47	22,47	25,28	21,48
US	2,44	4,43	0,96	1,56	2,03	3,98	5,43	29,96	6,22	8,62
Japan	0,03	2,73	1,40	0,42	0,18	1,33	0,48	0,96	2,33	2,01
Turkey	5,73	17,91	1,90	3,85	0,88	5,51	14,21	7,79	2,34	5,13
Korea	0,00	0,34	2,86	2,06	0,02	0,60	-	-	-	10,58
China	0,03	0,10	7,41	0,85	5,22	3,30	0,40	1,11	5,62	0,94

Source: "Direction of Foreign Trade Statistics", IMF

The purpose of this section is to study within a comparative framework the structure of foreign trade in the Turkish Republics and Turkey. Table 2 shows the main destination of exports and origin of imports in foreign trade during 1996 for the countries considered. From this table it follows that Russia is still very important in Eurasian trade, but the EU is rapidly increasing its share in Eurasian foreign trade. Furthermore the table reveals that Korea and Japan have also increased importance in the region. The share of Turkish imports (exports) from (to) Eurasia in Eurasian exports (imports) is 2.85 (6.34) percent.

At present, reliable trade statistics of Eurasian countries are not available. But comprehensive trade statistics can be obtained from EU and Turkish sources. We therefore concentrate our analysis to the trade of Eurasian countries with the EU and Turkey. The study is based on 2-digit SITC foreign trade data supplied by the Statistical Office of European Communities and by the Turkish State Institute of Statistics.

Table 3 shows the commodity composition of exports to and imports from EU by the Turkish Republics and Turkey. It has been prepared using the 2-digit SITC trade statistics which contain trade data for about 72 different commodities. In the table the 72 commodities have been aggregated to 16 commodity groups. This table reveals the following results:

- The share of energy exports from total exports is high in the cases of Azerbaijan, Kazakhstan, and Turkmenistan.
- The share of agricultural raw material exports from total exports is high in the cases of Azerbaijan, Turkmenistan and Uzbekistan.
- The share of "textiles and clothing" exports from total exports is high in the cases of Turkey and Turkmenistan.
- The share of "iron and steel" exports from total exports is high in the cases of Kazakhstan, the Kyrgyz Republic and Uzbekistan.
- The share of machinery exports is high in the case of Kazakhstan. On the other hand the share of machinery imports from total imports is high in the cases of Turkey and all the Turkish republics.
- The share of "chemicals and rubber products" imports from total imports is high in the cases of Turkey, the Kyrgyz Republic, Kazakhstan and Turkmenistan.
- The share of "miscellaneous manufactured articles" imports from total imports is high in the cases of Azerbaijan and Uzbekistan.

Table 4 (which uses 2-digit SITC trade data) shows the five SITC divisions with highest export and import shares to and from the EU. The table reveals that exports in Turkic republics are highly concentrated in a few products. The first five commodities with highest export shares make up 98.46 (95.26) percent of the total exports in the case of Uzbekistan (Turkmenistan). In the case of Kazakhstan (Kyrgyz Republic) the first five commodities with highest export shares account for 96.11 (98.94) percent of total exports. In the case of

Table 3: Commodity Composition of Exports and Imports from EU by Turkic Republics and Turkey during 1997 (Percent)

SITC		Azeri Exports to EU	Azeri Imports from EU	Kazak Exports to EU	Kazak Imports from EU	Kyrgyz Exports to EU	Kyrgyz Imports from EU
0-08+41+42	1 Food	8,26	14,34	0,78	4,91	1,10	7,58
1	2 Beverages and tobacco	0,10	2,59	0,01	5,20	0,00	5,52
08+22+43	3 Other food items	0,16	0,04	0,04	0,05	0,17	0,15
2-22-2728	4 Agricultural raw materials	25,41	0,32	0,83	0,26	6,74	0,38
27+28	5 Crude fertilizers and metallic ferrous ores	2,94	0,48	0,49	0,06	8,08	0,03
3	6 Energy	31,23	0,80	26,52	0,46	0,01	1,29
67+68	7 Iron and steel and Non-ferrous metals	0,16	8,84	23,85	1,35	33,58	1,21
65+84	8 Textiles and clothing	7,89	2,78	0,20	1,07	4,76	0,20
61+83+85	9 Hides and leather	0,00	1,29	0,02	0,39	0,31	1,19
63+82	10 Wood manufactures and furniture	0,12	1,94	0,00	2,23	0,00	2,12
64	11 Paper	0,00	0,28	0,00	2,08	0,00	0,78
66	12 Non-metallic mineral manufactures	0,00	1,05	0,00	0,76	0,00	0,61
5+62	13 Chemicals and rubber products	1,79	7,29	2,22	6,23	1,75	13,61
69	14 Manufactures of metal	1,27	4,44	0,11	2,30	0,01	6,07
7	15 Machinery and transport equipment	3,58	36,26	43,95	67,68	0,81	48,42
81+86+89+9	16 Miscellaneous manufactured products	17,08	17,25	0,97	4,98	42,68	10,82
<i>TOTAL</i>	<i>TRADE (1000 ECU)</i>	<i>67.856</i>	<i>249.338</i>	<i>1.431.764</i>	<i>1.379.951</i>	<i>46.263</i>	<i>72.564</i>
First Three Sectors with Highest Shares		6, 4, 16	15, 16, 1	15, 6, 7	15, 13, 2	16, 7, 5	15, 13, 16

Turkey the first five commodities with highest export share make up 66.91 percent of the total exports. Furthermore we note the following aspects:

- Petroleum and petroleum products (SITC 33) account for 31.22 (26.49) percent of total exports for Azerbaijan (Kazakhstan). This commodity accounts for 35.26 percent of total exports in the case of Turkmenistan.
- Textile fibres (SITC 26) account for 73.75 (41.02) percent of total exports in the case of Uzbekistan (Turkmenistan). This commodity accounts for 23.33 percent of total Azeri exports.
- Textiles (SITC 65) make up 15.3 (5.75) percent of total exports of Turkmenistan (Uzbekistan) This commodity accounts for 7.9 percent of Azeri exports. Turkey is an important importer of textiles.
- Non-ferrous metals (SITC 68) is an important export item for Kazakhstan, the Kyrgyz Republic and Uzbekistan.
- Iron and steel (SITC 67) is an important export item of Kazakhstan.
- Gold (SITC 97) accounts for 6.43 percent of Uzbek exports.
- Machinery specialised for particular industries (SITC 72) and general industrial machinery and equipment (SITC 74) are important import items of Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan and Turkey.
- Road vehicles (SITC 78) make up a high percentage of total imports for Azerbaijan, Kazakhstan, the Kyrgyz Republic, Turkmenistan, Uzbekistan and Turkey.

Tables 5 and 5a show the most successful export products of Azerbaijan, Kazakhstan and the Kyrgyz Republic, defined as those commodities with the highest average growth rate of exports over the period 1992-1997, for which the average share of the commodity over the years 1996-1997 is not less than 0.05 percent. The tables reveal the following results:

- The dynamic sectors of Azerbaijan include scientific instruments and optical goods, textiles, photographic apparatus and optical goods, and textile fibres.
- Transport equipment, petroleum and petroleum products, textiles, non-ferrous metals, iron and steel are the major dynamic sectors of Kazakhstan.
- The dynamic sectors of the Kyrgyz Republic include gold, non-ferrous metals, textiles, and textile fibres.
- Textiles, petroleum and petroleum products, crude fertilisers and crude minerals, and crude animal and vegetable material are the major dynamic sectors of Turkmenistan.
- The dynamic sectors of Uzbekistan include non-ferrous metals, textiles and textile fibres.

The dynamic sectors of Turkey include transport equipment, rubber manufactures, power generating machinery, manufactures of metal, telecommunications apparatus, electrical machinery, textiles, vegetables and fruit, and clothing.

Table 6 shows the value and commodity composition of trade between the Turkish Republics and Turkey during 1996. From this table it follows that Turkish exports (imports) to (from) the Turkish republics amounted to \$746.7 (294.2) million accounting for 3.2 (0.7) percent of the total Turkish exports (imports). The table reveals the following results:

- A major Turkish export item to the Turkish republics is food. Food accounts for 37.08 (36.51) percent of Turkish exports to Uzbekistan (Azerbaijan)
- The share of machinery and transport equipment in total Turkish exports is 32.73 (33.05) percent in the case of Kazakhstan (Kyrgyz Republic), and 24.45 (18.14) percent in the case of Turkmenistan (Azerbaijan).
- The share of textiles and clothing exports from total Turkish exports to respective countries is relatively high in the cases of the Kyrgyz Republic, Turkmenistan, Kazakhstan, and Uzbekistan.
- The share of agricultural raw materials imports from total Turkish imports, from the respective countries, is very high.
- The share of "iron and steel" imports from total Turkish imports, from the respective countries, is high in the cases of Kazakhstan and Uzbekistan.

Table 7 (which uses 2-digit SITC trade data) shows the five SITC divisions with the highest export and import shares. While Turkish exports to the region are relatively diversified, Turkish imports from the Eurasian countries are concentrated in a few products. The first five commodities with highest import shares account for 99.34 (98.83) percent of total imports in the case of Uzbekistan (Turkmenistan) and 97.24 percent in the case of Kazakhstan. The table reveals the following aspects:

- Textile fibres (SITC 26) make up 82.44 (62.35) percent of the total imports from Turkmenistan (Uzbekistan), and 19.74 percent of total imports from the Kyrgyz Republic.
- Hides, Skins and Furskins (SITC 21) are major import items from all Eurasian countries.
- Iron and steel (SITC 67) imports from Kazakhstan account for 12.37 percent of Turkish imports from the country under consideration.
- Non-ferrous metals (SITC 68) account for 61.87 (25.37) percent of Turkish imports from Kazakhstan (Uzbekistan)
- Cereals and cereal preparations (SITC 4) make up a relatively high percentage of Turkish exports to Azerbaijan, Kazakhstan and Uzbekistan.
- Road vehicles (SITC 78) account for a high percentage of Turkish exports to Kazakhstan, the Kyrgyz Republic and Turkmenistan.
- Textiles (SITC 65) are important export items of Turkey to Kazakhstan, Turkmenistan and Uzbekistan.

- Electrical machinery (SITC 77) is an important Turkish export item to the Kyrgyz Republic and Turkmenistan.
- Telecommunications apparatus (SITC 76) accounts for a high percentage of total Turkish exports to Azerbaijan, Kazakhstan, and the Kyrgyz Republic.
- Electrical machinery (SITC 77) is an important export item to Azerbaijan and the Kyrgyz Republic.

After having analysed the trade figures between the EU, Turkey and the Turkish Republics let us consider briefly the European trade arrangements and their relevance for the region. As we all know the future of the EU, about eight years ago seemed set: a gradual deepening towards an economic and monetary union. The breakdown of communism radically shifted the challenge from deepening to widening. First to come were the EFTA countries. Since January 1995 Austria, Finland and Sweden are members of the EU and the remaining EFTA countries, except Switzerland, have close ties with the EU through the "Agreement on the European Economic Area". Then we have the Eastern European and Baltic countries consisting of the Czech Republic, Hungary, Poland, Slovenia, Estonia, the Slovak Republic, Romania, Bulgaria, Latvia and Lithuania. The European Council meeting in Luxembourg on December 12-13, 1997 has decided to start the accession process with the ten Central and Eastern European (CEE) applicant states and Cyprus. Noting that all these countries are destined to join the European Union (EU) on the basis of the same criteria, the Council decided to begin negotiations with Hungary, Poland, Estonia, the Czech Republic and Slovenia, on the conditions upon their entry into the Union. The third group consists of Mediterranean countries. From these countries Turkey has signed the Customs Union Decision with the EU in 1995. Besides Turkey, the EU has signed Free Trade Agreements (FTA) with Israel, Tunisia, Morocco and Jordan. The EU is expected to sign FTA's with Algiers, Egypt, Lebanon and Syria over the coming years. The EU has signed the "Agreement on Partnership and Co-operation" with the Russian Federation. This agreement confirms the MFN status granted to Russia by the "Trade and Co-operation Agreement" of 1989. To pave the way for Russia's accession to the GATT, the Agreement includes the application of certain articles laid down in the GATT, and opens the possibility of a future free trade area between the EU and Russia. The "Agreement on Partnership and Co-operation" signed between EU and the Turkish republics confirms the MFN status granted to Soviet Union by the "Trade and Co-operation Agreement" of 1989. The conditions of the Agreement are in general similar to, but less demanding than those of the Agreement signed with Russian Federation. There is no mentioning of a formation of a future free trade area between EU and Kazakhstan.

The conclusion of FTA's between the EU on the one side and Russia, Ukraine, Belarus and Moldova on the other side will certainly be a most welcome addition to European integration. But the proposed system of trade agreements will put a group of CIS countries to a privileged position. The CIS countries are strongly interdependent. Recalling the fact that the vast bulk of Russian territory lies in the Asian continent and that enormous difficulties

Table 4: Five 2-digit SITC divisions with highest export and import shares in trade with EU during 1997

EXPORTS												
Rank	Azerbaijan		Kazakhstan		Kyrgyz Rep.		Turkmenistan		Uzbekistan		Turkey	
	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports
1	33	31,22	79	43,70	99	42,46	26	41,02	26	73,75	84	35,29
2	26	23,33	33	26,49	68	33,58	33	35,26	68	8,91	5	12,25
3	65	7,89	68	20,22	28	8,08	65	15,30	97	6,43	65	12,20
4	5	7,53	67	3,63	26	5,71	28	1,94	65	5,75	77	3,99
5	93	5,61	52	2,07	65	4,70	29	1,75	28	3,62	79	3,19
First "5"		75,58		96,11		94,53		95,26		98,46		66,91

IMPORTS												
Rank	Azerbaijan		Kazakhstan		Kyrgyz Rep.		Turkmenistan		Uzbekistan		Turkey	
	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports
1	74	9,81	79	45,75	76	16,00	72	16,96	72	12,06	78	14,10
2	78	8,63	74	5,62	78	11,54	77	11,27	99	9,69	72	10,75
3	67	8,32	78	4,38	72	9,26	75	7,85	71	8,95	77	6,62
4	72	6,43	72	4,12	54	6,41	78	7,74	74	7,41	74	6,44
5	87	5,60	77	2,90	69	6,07	76	6,96	76	5,70	65	4,60
First "5"		38,81		62,77		49,28		50,78		43,81		42,50

Note: For Classification Scheme of SITC see the Appendix.
Source: Own calculations

will be faced when trying to enforce the FTA's between the EU on the one side and Russia, Ukraine, Belarus and Moldova on the other, we support the view that the FTA's should be extended to all CIS countries. In that case the countries under consideration could aim for a horizontal economic integration between the CIS countries and the countries with which the EU maintains free trade and custom union agreements. If all goes well, then at the beginning of the upcoming century the European trade and investment opportunities should extend via the various FTA's and CUD over a region extending from Morocco to Siberia, from Sweden to Uzbekistan and from Finland to Egypt.

It should be emphasised that Turkey as of January 1, 1996 has formed a customs union with the EU. In addition Turkey has signed FTA's with Israel, Hungary, Romania, Lithuania, Estonia, Slovenia, the Czech Republic, and the Slovak Republic and is expected to sign FTA's with Poland, Bulgaria and Latvia. Finally Turkey is in the process of signing FTA's with the remaining Mediterranean countries such as Tunisia, Morocco, Egypt and Palestine. Turkey is keen in signing FTA's with all countries of the former Soviet Union. But for this to happen, the EU (because of the Customs Union Decision) has to sign the FTA's with those countries first. If this were to happen then European trade and investment opportunities would extend to the Turkish Republics and Turkey would be able to trade freely with those countries. Currently Turkey has to apply the common customs tariffs of the EU to imports from those republics.

2. Energy Issues

From the point of view of Turkey, energy security is of prime importance for achieving economic prosperity. The country has to meet a high percentage of its energy requirements from oil and gas imports, and these come mainly from countries of the Middle East and North Africa which are politically volatile. The possibility of external aggression and/ or internal upheaval there, - particularly in conservative monarchies - could put imports from these areas at serious risk. It is a risk likely to grow in the coming years as Turkey will have to increase its imports from the Middle East in the medium term. It is therefore in the interest of Turkey to diversify its energy supply sources. Similar problems are faced by the European Union (EU). The energy situation in the EU reveals that the latter is meeting about half of its energy requirements by imports. A major component of oil imports comes from Middle East, Libya and Algeria, and about 17 percent of natural gas imports come from Algeria alone. Since these regions are politically volatile areas of the world, the EU countries are concerned about the political security of their energy supply. Valuable lessons were derived from disturbances such as the Iran/Iraq war and the Gulf crisis of 1991. The EU realises that besides external aggression of that kind there is also the danger of internal upheaval. The socialist philosophy of Islamic fundamentalism represents a threat to the conservative monarchies of Arabia and the Gulf. The overthrow of these and the establishment of regimes similar to that of Iran would leave the EU without its main support in the area, support on which it is dependent for its oil supplies. A possible military take-over might also add to political instability in the region. Currently Turkey is consuming about 70 Mtoe of energy. Oil provides 46.3 percent and natural gas 10.4 percent of Turkey's

Table 5: Dynamic Exports of Azerbaijan, Kazakstan, Kyrgyz Republic and Turkmenistan in Trade with EU

SITC	COMMODITY	Share of Commodity in Exports 1996-97	Average Growth Rate of Exports 1992-97	SITC	COMMODITY
Azerbaijan				Kazakhstan	
03	Fish and fish preparations	0.72	75.71	03	Fish and fish preparations
05	Vegetables and fruit	7.12	123.26	04	Cereals and cereal preparations
11	Beverages	0.11	386.58	05	Vegetables and fruit
24	Cork and wood	0.64	118.60	08	Feeding stuff for animals
26	Textile fibres and their wastes	23.92	35.35	26	Textile fibres and their wastes
28	Metalliferous ores and metal scrap	4.18	43.77	29	Crude animal and vegetable materials
29	Crude animal and vegetable materials	1.41	116.42	33	Petroleum and petroleum products
55	Essential oils and perfume materials	0.38	52.06	52	Inorganic chemicals
65	Textiles	10.19	86.21	55	Essential oils and perfume materials
69	Manufactures of metal	1.88	50.67	65	Textiles
71	Power Generating Machinery and Equipment	0.65	46.42	67	Iron and steel
72	Machinery specialized for particular industries	0.98	68.74	68	Non-ferrous metals
73	Metalworking Machinery	0.77	11.45	69	Manufactures of metal
74	General industrial Machinery and Equipment	0.30	13.38	72	Machinery specialized for particular industries
76	Telecommunications Apparatus	0.35	25.60	74	General industrial Machinery and Equipment
77	Electrical Machinery	0.45	77.71	76	Telecommunications Apparatus
81	Sanitary, plumbing, heating	0.21	12.85	77	Electrical Machinery
82	Furniture	0.12	43.92	78	Road Vehicles
87	Scientific instruments and optical goods	5.07	163.61	79	Other Transport Equipment
88	Photographic Apparatus and Optical Goods	2.35	75.42	87	Scientific instruments and optical goods
89	Miscellaneous manufactured articles	3.05	111.86	89	Miscellaneous manufactured articles
93	Special Transactions	4.66	63.12	93	Special Transactions
Kyrgyz Republic				Turkmenistan	
05	Vegetables and fruit	1.72	25.48	07	Coffee, tea, cocoa, spices
26	Textile fibres and their wastes	5.42	44.85	27	Crude fertilizers and crude minerals
28	Metalliferous ores and metal scrap	8.51	45.13	28	Metalliferous ores and metal scrap
29	Crude animal and vegetable materials	0.67	10.48	29	Crude animal and vegetable materials
52	Inorganic chemicals	2.89	63.71	33	Petroleum and petroleum products
65	Textiles	6.21	51.97	52	Inorganic chemicals
68	Non-ferrous metals	45.05	86.62	65	Textiles
71	Power Generating Machinery and Equipment	0.14	49.09	69	Manufactures of metal
72	Machinery specialized for particular industries	0.98	28.63	72	Machinery specialized for particular industries
73	Metalworking Machinery	0.08	21.46	76	Telecommunications Apparatus
74	General industrial Machinery and Equipment	0.07	42.37	87	Scientific instruments and optical goods
78	Road Vehicles	0.17	21.24	93	Special Transactions
84	Clothing	0.06	22.79		
87	Scientific instruments and optical goods	0.12	12.68		
97	Gold, Non-monetary	2.863	534.31		

total energy requirements. The import dependency rate is approximately 62.6 percent of total consumption. The country is meeting 95 percent of its oil consumption and 98 percent of its natural gas consumption by imports. The major suppliers of crude oil are Saudi Arabia, Iran, UAE and Libya, and the major supplier of natural gas is Russia. On the other hand the EU has consumed about 1369.4 Mtoe energy during 1995. Oil has provided 42 percent and natural gas 20.2 percent of energy requirements, and the import dependency rate is about 48 percent. EU has met about 83 percent of its oil consumption and 41.4 percent of its natural gas consumption by imports. The major suppliers of crude oil to the EU are Saudi Arabia, Norway, Iran, Libya, Nigeria, Algeria and Kuwait, and the major suppliers of natural gas are the former USSR, Algeria and Norway.

Studies such as the European Commission's White Paper on Energy Policy (1996) reveal that demand for energy in the EU will continue to grow. Demand for natural gas is expected to double over the period 1995-2020, with annual growth averaging almost to 3 percent. On the other hand, oil consumption is expected to grow very slowly at the annual rate of 0.3-0.5 percent. Oil production in the EU is expected to decline after 2000 and gas production will be at its peak at the same time. As a result import dependence is expected to increase to 53-69 percent over time, and in the case of natural gas, the dependence is expected to increase to about 75 percent by the year 2020. Over the period 1995-2020 oil imports are expected to increase by 131 Mtoe and natural gas imports by about 300 Bcm. Besides the EU energy market, the developments in the Turkish market deserve special emphasis too. The energy demand in Turkey has been skyrocketing. Over the period 1990-1997, natural gas consumption in Turkey has increased at the annual rate of 18.7 percent and oil consumption at 4.4 percent. As a result of the increase in energy demand Turkish imports of crude oil are expected to rise to 28 Mtoe by the year 2000 and to reach 40 Mtoe in the year 2010. Demand for natural gas is expected to rise from 5.3 bcm in 1994 to about 10 bcm in the year 2000 and to 30 bcm in 2010.

Where will oil and natural gas come from, to meet the growing demand? Studies reveal that most of the projected increased net oil imports over the medium term are likely to be met by Middle East producing countries. But in the long-term the increased demand for oil could be met by imports from Eurasia. Similar considerations apply in the case of natural gas. Potential exists for a substantial increase of Eurasian gas exports to the EU and Turkey.

One of the most important characteristics of the Eurasian area are its rich natural resources. Eurasia has vast reserves of fuels. In the Eurasian world the Caspian Sea is likely to become an important world oil producer. Studies reveal that world oil reserves amount to 1,000 billion barrels. Currently Eurasia ranks seventh in the world in proven reserves – followed by Saudi Arabia, Iraq, Kuwait, Iran, Abu Dhabi, Venezuela and the former USSR, Mexico and the US. The six countries in the Gulf - Saudi Arabia, Iraq, Kuwait, the UAE, Iran and Qatar - account for almost two thirds of the world's proven oil reserves. Recent estimates of proven and probable crude oil reserves for Eurasia vary between 15-40 billion barrels, with about 150 billion barrels of additional reserves possible. As much as 50-60 percent of these reserves are in Kazakhstan, with 20-30 percent in Azerbaijan. The regions proven reserves represent some 1.5-4 percent of world proven reserves. Geologists expect more fields to be discovered in the area around the Caspian Sea and think that they

Table 5a: Dynamic Exports of Uzbekistan and Turkey in Trade with EU

SITC	COMMODITY	Share of Commodity in Exports 1996-97	Average Growth Rate of Exports 1992-1997	SITC	COMMODITY
	Turkey				Uzbekistan
03	Fish and fish preparations	0,72	17,32	05	Vegetables and fruit
04	Cereals and cereal preparations	0,11	6,69	08	Feeding stuff for animals
05	Vegetables and fruit	12,12	10,87	25	Pulp and waste paper
06	Sugar and sugar preparations	0,41	6,55	26	Textile fibres and their wastes
07	Coffee, tea, cocoa, spices	0,21	8,88	28	Metalliferous ores and metal scrap
09	Miscellaneous edible products	0,71	13,80	29	Crude animal and vegetable materials
11	Beverages	0,13	11,20	65	Textiles
22	Oil seeds and oleaginous fruit	0,12	17,96	68	Non-ferrous metals
26	Textile fibres and their wastes	1,16	13,41	69	Manufactures of metal
27	Crude fertilizers and crude minerals	1,29	10,74	72	Machinery specialized for particular industries
28	Metalliferous ores and metal scrap	0,65	16,66	76	Telecommunications Apparatus
42	Fixed vegetable oils and fats	0,45	-8,22	81	Sanitary, Plumbing, heating
51	Organic chemicals	0,49	9,58	82	Furniture
52	Inorganic chemicals	0,76	16,18	89	Miscellaneous manufactured articles
54	Medicinal and pharmaceutical products	0,19	24,77	93	Special Transactions
55	Essential oils and perfume materials	0,10	13,41		
58	Plastic materials	0,14	36,50		
61	Leather manufactures	0,12	32,81		
62	Rubber manufactures	1,45	2,419		
63	Cork and wood manufactures	0,10	35,56		
64	Paper	0,14	12,74		
65	Textiles	11,56	13,52		
66	Non-ferrous metal manufactures	3,04	12,77		
67	Iron and steel	2,72	27,65		
68	Non-ferrous metals	0,89	14,66		
69	Manufactures of metal	1,62	19,64		
71	Power Generating Machinery and Equipment	1,19	2,415		
72	Machinery specialized for particular industries	0,26	23,90		
73	Metalworking Machinery	0,17	19,84		
74	General industrial Machinery and Equipment	0,85	19,16		
76	Telecommunications Apparatus	2,63	17,19		
77	Electrical Machinery	3,99	17,03		
78	Road Vehicles	3,03	29,61		
79	Other Transport Equipment	4,25	52,13		
84	Clothing	35,61	7,80		
87	Scientific instruments and optical goods	0,27	19,45		
93	Special Transactions	0,26	6,78		
97	Gold, Non monetary	0,07	85,80		

will have to revise reserve estimates of the region upwards as results from ongoing or planned exploration programs start coming in. Annual world oil production is in the range of 3.3 billion tonnes. It is estimated that the annual oil production in the Eurasian region will increase from 75 million tonnes by the year 2000 to 143 million tonnes in the year 2010, provided investments continue to be attracted at the current pace and sufficient export outlets are developed. In terms of natural gas, Eurasia is the second largest producing region of the former Soviet Union. Estimates of proven natural gas reserves for the Eurasian region vary between 6.7 and 9.2 trillion cubic metres. The region's proven reserves represent some 6 percent of world proven reserves. Known reserves could increase as exploration continues. There are perhaps 8 trillion cubic metres of additional potential reserves. As much as 40-50 percent of these reserves are in Turkmenistan.

Central Asian Republics and Azerbaijan, with large oil and gas resources of their own, are, as emphasised by Forsythe (1996) and Roberts (1996), eager to find ways to move their oil and gas quickly and safely to world markets. They would like to become competitors in the international oil and gas markets, and this requires the construction of politically and commercially viable export pipelines. At present Eurasian oil and gas can be exported mainly via the Russian oil pipeline systems. But Russia is refusing to allow more Eurasian oil and gas into its pipelines as Russian oil and gas has priority. It seems that Russia has no desire to see Eurasia become a competitor in the international oil and gas markets. There are basically two schemes for the transportation of oil from the Caspian region to Europe. Russia is promoting a pipeline across the Caucasus to the Russian Black Sea port Novorossiysk, from where oil can be transported through Turkey's Bosphorus Straits or via a proposed pipeline from Bulgaria to Greece en route to Europe. Turkey on the other hand is pressing for a pipeline that would carry oil across Turkey to the Mediterranean. In addition there are the Iranian and the Eastern (via China) options. It should be emphasised that Turkey opposes increased oil shipments through the Straits. According to Turkey tankers would have to pass in large numbers through the Bosphorus narrow and an accident might lead to disaster. The Eurasians fear that Russia in the future might restrict Eurasian oil exports. The Iranian option is opposed by the US government. Although costly, China and Japan are keen towards the eastern option. Demand for energy is increasing rapidly in East Asia. Thus the Turkish option in the long-term seems to be the viable oil pipeline option to Europe. Similarly, Turkmenistan is considering alternative schemes for gas export pipelines to enable it to reduce its dependence on Russia for gas exports. The options include a pipeline to Europe via Turkey, a pipeline to the Persian Gulf via Iran and a pipeline to the Sea of Japan via Uzbekistan, the Kyrgyz Republic and China. Since the Iranian option will be blocked by the US government and the eastern option will be too costly, the viable long run one seems to be the Turkish option.

The above considerations reveal that the recent political changes have placed Turkey at the epicentre of a new economic and political reality in Eurasia. Turkey realises that the security of energy supply is of prime importance. The growing energy demand of Turkey has to be met from divergent sources. Turkey could reduce its dependence on Middle Eastern and North African oil through the construction of oil pipelines from the Caspian basin to Turkey, and its dependence on Russian natural gas through the construction of gas pipelines from Turkmenistan to Turkey. Since the Eurasian countries are eager to decrease their dependence on Russia, they are keen in constructing these pipelines. Hence co-operation

Table 6: Commodity Composition of Turkish Exports to and Imports from Turkic Republics during 1996 (Percent)

SITC	Turkish Exports to Azerbaijan	Turkish Imports from Azerbaijan	Turkish Exports to Kazakhstan	Turkish imports from Kazakhstan	Turkish Exports to Kyrgyz Rep.	
0-08+41+42	1 Food	36,51	2,03	13,50	0,16	16,99
1	2 Beverages and tobacco	4,34	0,00	6,94	0,00	0,35
08+22+43	3 Other food items	1,79	0,08	0,49	0,00	2,03
2-22-27-28	4 Agricultural raw materials	0,21	37,02	0,33	22,56	0,07
27+28	5 Crude fertilizers and metallic ferrous ores	0,53	6,85	0,25	0,86	0,02
3	6 Energy	5,04	11,49	0,10	0,09	0,03
67+68	7 Iron and steel and Non-ferrous metals	1,86	3,45	0,95	74,24	0,41
65+84	8 Textiles and clothing	4,68	14,41	14,57	0,98	28,70
61+83+85	9 Hides and leather	0,57	0,34	0,93	0,14	1,31
63+82	10 Wood manufactures and furniture	3,15	0,01	4,40	0,00	1,05
64	11 Paper	2,21	0,00	2,08	0,00	1,02
66	12 Non-metallic mineral manufactures	4,19	0,00	2,61	0,00	2,15
5+62	13 Chemicals and rubber products	8,03	22,84	10,53	0,09	2,55
69	14 Manufactures of metal	3,92	0,44	3,09	0,11	6,20
7	15 Machinery and transport equipment	18,14	0,60	32,73	0,59	33,05
81+86+89+9	16 Miscellaneous manufactured products	4,84	0,42	6,49	0,16	4,07
<i>TOTAL</i>	<i>TRADE (US DOLLAR)</i>	<i>238902636</i>	<i>39.163.001</i>	<i>164.043.537</i>	<i>100.595.245</i>	<i>47.099.903</i>
First Three Sectors with Highest Shares	1, 15, 13	4, 13, 8	15, 8, 1	7, 4, 8	15, 8, 1	

between the Eurasian countries and Turkey in the field of energy will be achieved sooner or later. If the EU could also increase its interest in Eurasian energy sources over time, the Eurasian world around the Caspian Sea could become a stable source of oil and natural gas for the EU too. In that case the pipeline route over Turkey will emerge as the most viable route and over time these developments will turn Turkey into an important energy terminal.

3. The Future Trade Pattern

As the Turkish Republics complete their transition to market economies and, hopefully, begin to increase their income levels, their trading patterns will change. A critical question is: What will their trade look like? For predicting trade flows between the Turkish republics, Turkey and the EU we consider the gravity model.

The gravity model shows a country's total purchases from foreign countries increase with income. Thus a particular country tends to import more from a large, rich partner. Finally, distance dampens trade since it is generally more convenient and cheaper to buy from nearby countries. Using bilateral trade data regarding trade between 20 industrial countries over the period 1990-1994, (data consisting of 2000 observations), we estimate the coefficients in the following equation:

$$\ln X_{ab} = \alpha + \alpha_1 \ln(GNP_a / POP_a) + \alpha_2 \ln(GNP_b / POP_b) + \alpha_3 \ln POP_a + \alpha_4 \ln POP_b + \alpha_5 \ln DIST_{ab}$$

where X_{ab} denotes the exports of country a to country b, GNP_a the income of country a, GNP_b the income of country b, POP_a population of country a, POP_b population of country b and $DIST_{ab}$ the distance between countries a and b. Estimation reveals that the coefficients are given by:

$$\begin{aligned} \ln X_{it} = & -26.16 + 0.99344 \ln(GNP_a / POP_a) + 0.4122 \ln(GNP_b / POP_b) - 0.8472 \ln DIST_{ab} \\ & (-49.41) (43.314) \qquad (11.822) \qquad (-63.754) \\ & + 0.8137 \ln POP_a + 0.815 \ln POP_b \\ & (56.997) \qquad (66.344) \\ n = 2000, R^2 = 0.879; R = 0.1636; DW = 2.055 \\ & (7.377) \end{aligned}$$

The equation shows that bilateral trade flows are increasing in total income and decreasing in distance.

The gravity model which was estimated on data that does not include the Turkish Republics, gives a relationship between GNP, distance and bilateral trade flows for a "normal" country, i.e. one that is integrated into the world trade system as the average of industrial countries sample. With this equation estimated we can predict the trade flow for the Turkish Republics once they become "normal" countries. That is to say, once they complete

Table 7: Five 2-digit SITC divisions with highest export and import shares in trade with Turkey during 1996

TURKISH EXPORTS										
Rank	Azerbaijan		Kazakhstan		Kyrgyz Rep.		Turkmenistan		Uzbekistan	
	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports	SITC	Share in Total Exports
1	4	10,61	78	14,53	65	25,62	65	11,17	4	16,76
2	9	10,20	65	11,80	76	12,27	69	9,66	55	10,97
3	76	8,03	4	7,60	78	8,29	77	6,78	6	9,23
4	35	4,96	12	6,55	77	8,00	66	5,92	65	8,16
5	7	4,28	55	6,51	9	6,51	78	5,41	7	7,80
First "5"		38,08		46,79		60,69		38,94		52,92

TURKISH IMPORTS										
Rank	Azerbaijan		Kazakhstan		Kyrgyz Rep.		Turkmenistan		Uzbekistan	
	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports	SITC	Share in Total Imports
1	21	20,80	68	61,87	21	65,95	26	82,44	26	62,35
2	26	14,65	21	20,79	26	19,74	21	7,38	68	25,37
3	65	14,39	67	12,37	28	6,68	65	7,08	65	9,06
4	57	14,21	26	1,34	65	2,70	28	1,60	21	2,09
5	35	11,49	28	0,86	29	1,82	78	0,34	69	0,46
First "5"		75,53		97,24		94,86		98,83		99,34

Note: For Classification Scheme of SITC see the Appendix.

Source: Own calculations

their transition to market economies and are integrated with the world trading system. The mechanics of the projection are simple. Estimates for the relevant countries' GNP and distance are plugged into the equation, and this together with the data for industrial countries and Turkey generate mechanics of the projection are simple. Estimates for the relevant countries' GNP and distance are plugged into the equation and this together with the data for industrial countries and Turkey generate import and export pattern for all the countries under consideration, with each of the EU countries and Turkey.

Table 8 shows estimates of potential exports and imports from the respective countries to Turkey. It is clear that potential trade with Turkey is much larger than the actual one. The potential Turkish exports into the region are 89 percent above their actual value. Similarly the potential Turkish imports from the region are 86 percent above their actual value.

Table 8: Actual and Potential Trade between Turkey and Turkic Republics

	Exports		Imports	
	Actual (Million \$)	Potential (Million \$)	Actual (Million \$)	Potential (Million \$)
Eurasian Countries				
Azerbaijan	240	401	39	135
Kazakhstan	164	389	101	240
Kyrgyz Republic	47	78	6	24
Turkmenistan	66	263	100	81
Uzbekistan	231	260	58	85
TOTAL	747	1391	304	565

The numbers in Table 8 estimate how much trade would have occurred if the Turkish Republics had never been under communist regime, but did have the same level of income as they did in 1996. These estimates ignore an important point. The old planning regime depressed incomes as well as trade. As trading partners get richer, bilateral trade flows tend to rise. The reason for this is apparent: As a country grows richer, it buys and sells more abroad. According to the gravity model, income growth in either trading partner will boost bilateral trade between them. In short, trade with the Turkish Republics will grow for two reasons: (i) as the respective countries become normal market economies, they will increase their income levels and will import more from Turkey, and (ii) as Turkish income will continue to grow during the transition period.

4. Possibilities for Co-operation

The Central Asian economy was an integrated part of the overall Soviet command system, primarily supplying raw materials for processing in the industrial centres of the European and Western Siberian parts of the Soviet Union. There was a high degree of trade dependence within the former Soviet Union. The Central Asian economies were dependent on

high levels of Union subsidies. Access to potential markets such as the EU, Turkey, China or the Middle East was practically non-existent due to the lack of road-systems, railways and pipelines. The Central Asian leaders of the new Republics realised that the Soviet economic dependencies could not be reversed overnight. To open up new markets they would need both to build a trading infrastructure with new countries and to produce goods which are competitive in the world markets. Neither of these conditions will be attainable in the short to medium term. The economic future would look bleak if the Central Asian region did not possess one vital economic advantage - a rich natural resource base. Its greatest economic promise lies in its immense energy resources: its gas, oil, coal and hydroelectric power potential. The three main beneficiaries of this resource base are Azerbaijan, Kazakhstan and Turkmenistan. But the mere possession of these resources is not in itself sufficient to secure economic independence. External investment and capital have to be attracted to the region to develop these resources and to create the infrastructure required for supplying the world markets. All Eurasian governments are eager to expand their trade options and transport links independent of Russia.

As Eurasian countries overcome their landlocked character by having access to the Persian Gulf and the Mediterranean they could increase their exports of natural resources. As Azerbaijan, Kazakhstan and Turkmenistan increase their income levels, trade will increase, and as a result exports of the EU and of Turkey will increase. But trade will also expand as these countries become normal market economies. The calculations presented in the previous section suggest that the Turkish Republics could provide important export market opportunities to Turkey and vice versa. It seems that co-operation between the Eurasian countries and Turkey in the field of energy will be achieved sooner or later. If in addition the EU could increase its interest in Eurasian energy sources, Turkey could emerge as the most viable pipeline route to Europe. Over time these developments could turn Turkey into an important energy terminal.

Turkey, located at the crossroads of Europe and Eurasia, has the potential to act as a major link between European and Eurasian markets. Since Turkey, owing to the customs union, is harmonising its commercial legislation with that of the Community, the EU companies will be able to use Turkey as a joint investment and export base for Eurasia. Istanbul is emerging as the city of headquarters for operations in the Caucasus and Central Asia by transnational companies. Finally it should be emphasised that after the break-up of the USSR, Turkish businessmen have been very active and have acquired significant experience in the region. Turkey and the Turkish republics will benefit from regional economic co-operation. Currently there are basically two regional economic organisations: The "Economic Co-operation Organisation" (ECO) and the "Black Sea Economic Co-operation" (BSEC).

ECO is the restructured form of the "Regional Co-operation for Development" founded on 24 June 1964 by Iran, Pakistan and Turkey. The countries decided to form a free trade area with the Izmir Agreement of 1976. But because of the political turmoil in the region, the free trade area could not be established. In 1985 the organisation was reshaped towards a "preferential tariff arrangement". The agreement, establishing a Tariff Preferential System amongst members of ECO was signed by Iran, Pakistan and Turkey on the 17th of February 1992 in Teheran, a Protocol establishing Preferential Tariff Arrangement on 23 May 1991, and an Additional Protocol on the 17th of February 1992. The agreement provides

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mechanics of the projection are simple. Estimates for the relevant countries' GNP and distance

for the liberalisation of trade among the member States for a period of four years, and is automatically renewable for a period of another two years. The coverage of Turkish concessions represents a 10 per cent reduction on statutory rates for a number of products covering 37 four-digit tariff lines. The Protocol has a safeguard clause for balance of payments reasons and an accession clause for developing countries. Following the dissolution of the former Soviet Union, the newly emerged republics of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) and Azerbaijan applied for ECO membership, which was granted in February 1992. ECO has currently ten members and it aims to enhance intraregional co-operation. An Investment Development Bank for ECO is intended to fund joint projects.

The idea of forming the BSEC 'community' emerged in the early 1990's, with an agreement signed in 1992 by nine participating countries (Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania, Russia, Turkey and Ukraine). Greece and Albania joined later. The final document on BSEC was signed by 11 countries on the 25th of June 1992 in Istanbul. Foreign ministers of the BSEC countries met in Antalya on the 10th of December 1992 and agreed to the establishment of a permanent secretariat for the BSEC which will be based in Istanbul. According to the provisions of the document, the BSEC countries commit themselves to a multilateral co-operation in the region based on the principles of market economy. The principal purpose of the BSEC is to improve political stability and economic welfare in the region through economic co-operation. The BSEC is regarded as a contribution to the shared aspiration of the members for integrating with the world economy. Articles V and VII of the Declaration of BSEC explicitly state that it is not an alternative to any existing integration project but it is a complementary process to achieve a higher degree of integration with the European and World economies. The economic co-operation will be promoted gradually, due to the economic conditions and the problems of the member countries that are in transition to a market economy. The co-operation among member countries is to take place in the fields of economics, including trade and industrial co-operation, science and technology and the environment. It covers a very wide range of sectors, such as transportation and communication, information technologies, exchange of economic and commercial information including statistics, standardisation and certification of products, energy, mining ores and processing of raw materials, tourism, farming and the agricultural industry, health system and pharmaceuticals. The BSEC Trade and Development Bank with headquarters in Thessaloniki will start operating in 1999.

The above considerations reveal that BSEC could be used as a platform for trade liberalisation in the region. Turkey already has signed a FTA with Romania and is expected to sign one with Bulgaria in the near future. Greece is a member of the EU. If the remaining members of BSEC together with the EU could be persuaded to establish a free trade area in the region, Turkey would be pleased with the outcome. On the other hand, the Central Asian Republics are members of the ECO but not of the BSEC. But among ECO members we find Iran, Pakistan and Afghanistan. Since these members are not expected to sign FTAs with the other members of the ECO in the near future, liberalisation of trade in Eurasia could be achieved at the beginning of the next century, by persuading the EU to sign FTAs with all members of the CIS.