

ECONOMIC COOPERATION IN THE SOUTH CAUCASUS AND CENTRAL ASIAN REGIONS WITH A PARTICULAR FOCUS ON ENERGY

Friedemann Müller

Senior Researcher, Stiftung Wissenschaft und Politik, Berlin

Neither Central Asia nor the South Caucasus, still less the two in combination, could be called a "region" when the Soviet Union dissolved. An infrastructure that linked the republics south of Russia with each other or with their neighbours to the south and west was almost totally lacking.

There is now, however, both a need and opportunity for regional cooperation, which may result in the development of some degree of regional identity. A total population of less than 70 million is divided among eight states. These markets are individually too small to be attractive to investors since both infrastructure and legal systems end at national borders, and the average per-capita income remains less than US\$1,000 per year. Another reason why regional cooperation is necessary is based on the fact that seven of the eight states are landlocked: any physical communication with the outside world requires transit routes through neighbour countries. Transportation routes, however, are extremely expensive, especially given the very low gross domestic product of the area. Infrastructure projects are vital for each of these relatively small states.

The resources, especially energy, are available for regional cooperation to support a self-financing infrastructure if the right framework conditions are there. Private investors, for example, usually finance pipelines. They require additional infrastructure like roads but also telecommunications or a functioning health system for which credits can be received if these measures are part of a general and successful development strategy. There are, however, many internal and external obstacles to cooperation which is itself the precondition for a credible development strategy, these being ethnic conflicts, the geopolitical interests of outside powers, a lack of tradition and understanding of the role of democracy and the rule of law, and finally the fact that political structures developed after the dissolution of the

Soviet Union tend to give national independence and domestic loyalty a higher priority than international networks. Nevertheless, the fact that there is no chance to gain prosperity without regional cooperation may influence the political class. It is, however, still an open question whether the political structure influenced by domestic and international powers gives room for a corresponding policy.

The Requirements for Cooperation Under the Rules of Globalisation

An important effect of globalisation is that capital now moves much easier across borders to where profitability is the highest than it used to. This does not necessarily mean that capital moves only to regions with the highest productivity. Productivity is only one factor that influences profitability, others being the wage level in combination with educational levels, the distance to larger markets, infrastructure, the level of security, and the quality of governance. All these factors are linked with costs that influence the calculation of potential investors. An obvious comparative advantage of the South Caucasus and Central Asian regions is the low wage level. The disadvantages are poor infrastructure, low levels of security (due to the many conflicts and crime) and poor governance (including insecurity regarding the implementation of laws, the competitive disadvantages for foreign capital, and of course corruption).

A special disadvantage is the smallness of the markets. As **Table 1** shows, the combined Gross National Product (GNP) of the three South Caucasus states is US\$11bn. This corresponds to the Gross Domestic Product (GDP) of a middle-sized city in Europe. The combined GNP of the whole of South Caucasus and Central Asia corresponds to the GDP of a large city in Europe. If the relatively big markets of Iran and Turkey are added, we have a total GDP still significantly less than in the Netherlands. The Netherlands, however, would never think that their market is large enough to be sufficiently competitive under conditions of globalisation.

Table 1: GNP of States and Regions in South West Asia - 1999 (US\$billion)

Armenia	1.9	
Azerbaijan	4.4	
Georgia	3.4	
South Caucasus		9.7
Kazakhstan	18.9	
Kyrgyz Rep	1.4	
Tajikistan	1.8	
Turkmenistan	3.2	
Uzbekistan	17.6	
Central Asia		42.9
Iran		110.5
Turkey		186.3
TOTAL REGION		349.4

Source: World Bank, World Development Report 2000/2001.

This means that major efforts need to be taken to open up markets in the South Caucasus. A free trade zone (no customs duties between the states) is the minimum requirement, with a customs union (equal customs towards third countries) being the next stage. It also means, of course, that harmonised rules, norms and standards need to be introduced at the same time. Otherwise one cannot talk about a common enlarged market. It took decades for the EU to create a single market. There was, however, a strong will to go into this direction. It is indispensable for this region to create an atmosphere of a strong will to become a single market. Otherwise even with assistance from outside prosperity cannot arrive in the region.

Energy - the Asset of the Region

The region to both the east and west of the Caspian Sea is in an absolutely unique position among developing countries. The relation between the wealth of the probable oil and natural gas reserves under the ground and the combined GDP of the South Caucasian states on

the western side and Kazakhstan and Turkmenistan to the east (approximately US\$36bn) is roughly sixty to one. Not even in the Gulf states there is there such a high wealth-income-relation. Of course, there are a number of uncertainties that makes this calculation volatile. One uncertainty is the oil price. The steady shift of world oil supply to OPEC countries makes it, however, probable that the price will not fall as an average below US\$25 per barrel again. This is the figure used for the above calculation. Another uncertainty is the amount of reserves. The proven oil reserves of the region are roughly 20 billion barrels. The assumption of 40 billion barrels as probable reserves is a rather conservative estimate, but still not confirmed due to the difficulties of exploring a region that is difficult to supply with oil drilling equipment due to the fact that it is landlocked. The natural gas reserves of the region might be in the same order of magnitude. Since Soviet times, this has been better investigated than the oil reserves.

While the Soviet empire as such was not landlocked and had a widespread transportation network serving first of all the industrial centres in the European Soviet Union, all Central Asian states like Azerbaijan and Armenia are landlocked. This fact forces cooperation with neighbours if the energy wealth is to be transported to the world market. During the Soviet period these countries were not used to cooperate with each other because the political and physical infrastructure excluded a horizontal network and permitted exclusively a centre-periphery relationship. The states of the Central Asian and South Caucasus regions now prefer not to depend on Russia, but they are also not used to cooperating with each other. Furthermore, many territorial conflicts between and within the states (Nagorny Karabakh, Fergana Valley, Abkhazia) and the lack of understanding of how to build up integration just after having reached national independence is a major obstacle to regional cooperation. Therefore, the region is still far from making efficient use of the option to transform energy development into the economic development of the whole region.

Nevertheless, the option for self-accelerating regional development exists. It requires, however, much more foreign investment because of the lack of capital and technology within the region. The most important impediments for attracting more foreign investment are the deficiencies in the implementation of the rule of law, as well as corruption. Both create an incalculable risk for investors that make other regions in the world more attractive. But the various regional conflicts also raise uncertainties about the ability of the region to create a larger market for economic growth. If, however, foreign

investors get the impression that over the medium term this region is in a position to solve its major conflicts, to provide framework conditions for a reliable infrastructure and to transport oil and natural gas without interruption, then chances for rapid development certainly exist.

European Energy Interests: An Opportunity for the Region

Europe's interest in Caspian crude oil has not been expressed very explicitly during the 1990s. The major reason might be that after the breakdown of the OPEC mechanism in 1986 to regulate the world market price by a production quota system among its members, the cartel as such stopped working. This held true until March 1999 when the system became effective again. For thirteen years the world crude oil market had been a true market, to some degree a precursor to globalisation. The spot markets in Rotterdam and Singapore had practically identical prices. If there is a truly competitive market the development of a special relationship between producer and consumer is unnecessary. Now, particularly after the reintroduction of the classical OPEC instruments, the EU has had second thoughts due to the changed picture on the crude oil market.

Since the late 1980s, the share of Middle East OPEC - the five Gulf States of Saudi Arabia, Iraq, Iran, Kuwait, and the United Arab Emirates - in the provision of world crude oil supply grew steadily. According to Table 2, this share was 26% in 1996 and will be 47% in 2010. The reason is the limitations on production in other regions. 64% of the proven world crude oil reserves are located in the Gulf region. Europe and North America own only 5.5% of proven world reserves, but have a share of 24% in world production. This indicates that in the medium term further shares in world production will be shifted to the Middle East OPEC.

**Table 2: World Crude Oil Production* 1996-2020
(Share of Middle East OPEC and Rest of World in Million Barrels
per Day (mbd) and %)**

	1996		2010		2020	
	Mbd	%	Mbd	%	mbd	%
Middle East OPEC	18.5	26	43.8	47	49.0	55
Rest of World	52.0	74	48.9	53	40.8	45
TOTAL	70.5		92.7		89.9	

* excluding unconventional oil and gas liquids.

Source: International Energy Agency, World Economic Outlook 1998, p. 101.

While OPEC realised during the mid 1980s that any production reduction meant a loss of market shares but no price increase, in 1999 the point was reached when OPEC could again reduce production quantities without losing market shares, with the effect of price increases that gave them more export income with less production. OPEC, of course, is aware that this is a short or medium term effect. To prevent the situation of losing cartel power as in the 1980s after the extreme price rises in the 1970s, OPEC decided to establish a window for the world market price in the range of US\$22-28 per barrel. Nevertheless, the very fact that all large regions in the world will lose market shares in the coming ten to twenty years (see **Table 3**), only the Gulf OPEC and to a much smaller degree the transition countries will gain and, considering an absolute market share which will be much higher than during the 1970s, will hand back an instrument to OPEC that can be used not only in a wise way but also as a short term blackmail instrument.

**Table 3: Crude Oil Demand,
Supply and Net Imports 1996 and 2010
(IEA Projection - Million Barrels per Day (mbd))**

	1996			2010		
	Demand	Supply	Net Import	Demand	Supply	Net Import
OECD North America	20.3	11.1	9.2	23.4	8.6	14.8
OECD Europe	14.4	6.7	7.7	17.0	4.5	12.5
OECD Pacific	6.7	0.7	6.0	7.7	0.3	7.4
Total OECD	41.4	18.5	22.9	48.1	13.4	34.7
Transition Countries	5.5	7.3	-1.8	7.2	10.2	-3.0
Africa	2.2	7.7	-5.5	3.3	7.8	-4.5
China	3.6	3.1	0.5	7.1	3.2	3.9
Other Asia	8.5	3.7	4.8	14.2	2.9	11.3
Latin America	6.3	9.8	-3.5	9.0	10.4	-1.4
Middle East	4.1	20.4	-16.3	4.9	44.7	-39.8
World	71.6	70.5	1.1	93.8	92.6	1.2

Source: IEA, World Energy Outlook 1998, p. 117

At the end of the 1990s it became obvious that the amount of Caspian crude oil reserves will be at the lower rather than at the upper end of the range given by the US State Department in a study released in 1997 (15.3 to 176 billion barrels). However, the discovery of the Kashagan field in the Caspian Shelf (in spring 2000), which still does not allow a precise estimate of its capacity, provides some evidence that the probable reserves can be assumed in the range of 30 to 40 billion barrels. According to an International Energy Agency (IEA) estimate, the transition countries are the only region besides OPEC with a growing net export potential (see Table 3). Within the transition countries, it is certainly most of all the Caspian region and not Russia that will provide this net export increase. The IEA further estimates that the share of Caspian crude oil production in world production could be 4-5% after 2015 (see Table 4).

Table 4: Crude Oil Production, Consumption and Net Export of the Caspian States (million tons)*

	1990	2000	2010	2020
Kazakhstan				
Production	25.5	42.5	87.5	145.0
Consumption	27.2	17.8	38.5	68.0
net export	-1.7	24.7	49.0	77.0
Azerbaijan				
production	12.3	14.0	57.5	105.0
consumption	8.6	10.2	14.9	23.9
net export	3.7	3.8	42.6	81.1
Turkmenistan				
production	3.4	8.0	9.5	11.0
consumption	4.8	6.5	7.0	8.0
net export	-1.4	1.5	2.5	3.0

* The given data are average values of the "high case" and the "low case" scenario.

Source: International Energy Agency, Caspian Oil and Gas 1998, p. 51.

Considering that already today two-thirds of Gulf crude oil goes to East, Southeast and South Asia and no more than 10% to Europe, the Caspian crude oil that will be available in the second decade of this century - roughly one tenth of Gulf production - could be relevant for the European market. If the infrastructure is there to transport the crude oil directly to Europe, this market would presumably be preferred by the producers. The regions to the North and South of the Caspian Sea are energy producers themselves, whereas the regions to the East and South East of the Caspian are either too remote to build a transportation infrastructure, or their reliability to make payments on their crude oil invoices cannot be assured. Therefore, Europe is the natural market for Caspian crude oil. Europe, on the other hand, must have an increasing interest in fostering any supply side competition during a time of overwhelming OPEC market domination.

World natural gas supplies generally get much less attention than the crude oil market. This applies in spite of the worldwide and longer term higher demand growth profiles for natural gas, its environmental advantages (less CO₂ emission per energy unit, no soil or water pollution), and the larger resources in comparison to current annual production. The reason for this lower attention lies in the regionalisation of the world gas market and in the long-term contracts between producers and buyers which lead to an inflexible market. This regionalisation is necessary because of the more expensive and less flexible transportation in comparison to crude oil. Practically all national and 80% of the international trade in natural gas is linked to pipeline transportation. This restricts transportation to the participants of a given infrastructure. Such transportation lines are limited to a maximum of 3,000 to 4,000 kilometres.

This explains, for instance, why the Clinton Administration did not much care about Caspian natural gas in the mid-1990s. Only when natural gas transportation from Turkmenistan to Turkey via Iran appeared on the agenda did the US government intervene, because of the inclusion of Iran. The US Administration, therefore, commissioned a feasibility study for a Trans Caspian Pipeline (TCP). This was certainly not driven by interest in the energy source, as such. The European position is quite different. Europe is by far the largest natural gas importing region in the world.

Table 5: Net Natural Gas Imports(+) and Exports (-) by World Regions (million tons of oil equivalents)

	1995	2010	2020
OECD North America	-2	-2	-2
OECD Europe	104	230	387
OECD Pacific	42	42	64
Africa	-35	-61	-93
Latin America	0	0	0
South and East Asia (excluding China)	-35	-2	33
China	0	0	0
Transition Countries	-74	-162	-281
Middle East	-5	-49	-114

Source: International Energy Agency, World Economic Outlook 1998, p. 134.

As Table 5 above shows, OECD Europe imported 104 million tons of crude oil equivalents (toe) more than it exported (net imports) in 1995. By comparison, the North American net export of 2 million tons is insignificant. OECD Pacific is the largest net import market behind Europe with only about 40% of the European import volume. The estimates for 2010 and especially for 2020 show that Europe's position as the largest importer will be further increased. While South East Asia as a net exporter will turn into a net importer, the world market will be supplied mainly by three regions: Transition countries (Russia and the Caspian states), Africa (Algeria etc.) and the Middle East (mainly Iran).

These three regions will have to compete on the European market for reasons of both demand and supply. First, due to the expected decline of European natural gas production, Europe is expecting an average import growth of no less than 5.4% annually until 2020. Secondly, the three big producer regions will have no alternative but to compete on the European market. All other region's import demand will be smaller than the export supply of the three big producer regions. This gives Europe a unique chance to establish the only truly competitive market in the world for natural gas. If the liberalisation of the European natural gas market is to be realised and the infrastructure linking Europe with these three regions is available, natural gas will be traded in Europe like a normal product. There will be no more need for a coupling of the natural gas price to the crude oil price. Demand and supply will fix the price.

Taking the political changes after the dissolution of the Soviet Union and geographic proximity into account, it makes sense to differentiate between the three major regions. Turkmenistan and Azerbaijan, the countries with the major Caspian natural gas resources and neighbours of Iran should be included in the South Caspian/ Middle East group, making this the region with the largest share in natural gas reserves with 39% of the world total followed by Russia with 33%. While Europe is linked with pipelines to Russia and North Africa, the only missing transportation line from the three big supplier regions to Europe is the one from South Caspian/Middle East, the region with the largest resources.

Before the discovery of the large off-shore natural gas fields in Azerbaijan and considering that Turkmenistan has no significant infrastructure to export natural gas outside the former Soviet network, the IEA provided in 1998 the following cautious estimate of the

Caspian natural gas production during the next 20 years (see **Table 6** below).

Table 6: Natural Gas Production, Consumption and Net Export of the Caspian States (billion cubic meters)*

	1990	2000	2005	2010	2020
Kazakhstan					
Production	7.0	8.9	13.5	22.0	27.0
Consumption	14.7	13.8	17.2	23.2	27.0
net export	-7.7	-4.9	-3.7	-1.2	0
Azerbaijan					
production	9.9	7.4	14.2	19.2	26.0
consumption	13.6	7.4	9.2	11.0	17.9
net export	-3.7	0	5.0	8.2	8.1
Turkmenistan					
production	84.3	39.8	55.1	80.8	123.7
consumption	14.5	9.5	10.7	12.9	17.0
net export	69.8	30.3	44.4	67.9	106.7

* The given data are average values of the "high case" and the "low case" scenario.

Source: International Energy Agency, Caspian Oil and Gas, Paris 1998, p. 52.

This expected production growth from 56 (in 2000) to 177 billion cubic meters (in 2020) is not limited by production capacities but by the assumed demand. The argument of demand restrictions, however, holds even more for Iran with its 16% share in proven world natural gas reserves.² It is obvious that this restrictive situation could change immediately if a large capacity pipeline were constructed from the South Caspian region supplied by natural gas from Turkmenistan, Iran and Azerbaijan.

The idea of providing access for natural gas from this region to the European market is not new. During the 1970s a triangular swap deal

Iran-Soviet Union-Germany was successfully negotiated. However, the Iranian revolution put an abrupt end to this deal. After the dissolution of the Soviet Union the construction of a large diameter pipeline from Turkmenistan via Iran to Turkey was started. However US sanctions against Iran and the option of the TCP favoured by the US Administration delayed this project. Private investors were also reluctant due to several political uncertainties. Nevertheless, the situation seems to demand further progress on this issue:

- The demand/supply dynamic seen in Table 5 makes it obvious to link the largest natural gas reserves to the largest market. The new discoveries of natural gas fields in Azerbaijan strengthen this argument;

- Russia is not equipped to compensate for the expected decline in European natural gas production and its demand growth with increased exports. Natural gas production in Russia is stagnating. Whether new investment will lead to a high export growth potential is doubtful;

- Turkey is growing into one of the largest markets for natural gas. Its increasing dependence on Russian deliveries - the Blue Stream project, one of the most ambitious, linking Russia directly with Turkey via the Black Sea is under construction - demands diversification which could be easily managed by linking Turkey with its Eastern neighbours. If, however, a pipeline is built from the South Caspian region to the centres of demand in Western Turkey, an extension of the pipeline to Europe would be much cheaper than a new pipeline from West Siberia to Europe.

While it makes economic sense to link the South Caspian/Middle East region with a large diameter pipeline via Turkey and South Eastern Europe to Central Europe, political obstacles like the ongoing sanctions imposed on Iran and domestic instabilities in Turkey contribute to the cautious behaviour of potential investors.

Energy is Not Everything - Perhaps Tourism as a Major Challenge

There is no doubt that energy production, transportation and maybe even processing provide an opportunity for major economic growth in the region as a whole. Nevertheless, as some OPEC countries show, this does not produce a sound economic structure if a

region is dependent on its oil or natural gas resources exclusively. This is especially relevant here since the Caucasus region never fully relied on energy production in Soviet times when it had a more diversified economic structure. In the age of globalisation, this region must carefully observe where its comparative advantages lie. It is, for instance, not clear whether cotton production in Uzbekistan or Turkmenistan is a comparative advantage considering the disastrous damage done to the water system of the whole region due to gigantic irrigation projects and the related waste of scarce water.

A project that definitely could be seen as a comparative advantage if rightly structured would be the promotion of tourism, at least in the South Caucasus region. Here we can find within a relatively limited space many cultural and natural spots of major interest. If an infrastructure would allow tourists to reach these places and to find there modest accommodation facilities (say similar to US national parks) which could be constructed and managed by local investors³, this could bring not only money into the region but also people who become acquainted with it. It would, however, require that all three South Caucasian states would accept a common visa treatment and transnational tourism management. This would, indeed, be a healthy experience for the region as a whole.

Conclusion

Among experts on the South Caucasus and Central Asian regions one will always find optimists and pessimists - those who do not believe that these regions can make use of their development options and those who believe they can. It is, however, undisputed that the region holds its future in its own hands. The opportunities are there and can be summarised as follows:

- regional cooperation is indispensable - otherwise the region will not become a bridge between Asia and Europe and will not be competitive in a globalising world because of its inability to attract foreign investors;
- Caspian energy reserves are an asset that puts the region into a unique position in comparison to other developing regions. If the preconditions of good governance are fulfilled, this asset can create a self-accelerating development process not only for the resource rich countries but also for the transit states;

- energy is important but certainly not the only comparative advantage to be employed; another one is tourism. This is especially important not only because it can be a major sector for development (like in Austria) but also because it is a challenge for regional cooperation in infrastructure, standard harmonisation, and administrative adjustment. Tourism would also contribute to the exchange of people and ideas.

The countries of the whole region must themselves take the initiative of gaining prosperity through regional cooperation. Unlike other developing regions without comparative advantages, this Caspian/Caucasian region has all the instruments in its own hands to create a framework within which a process of economic growth would be possible. The governance issue, however, is crucial. To put it into a nutshell, the alternatives are "Nigeria or Norway". Educational standards combined with its geographical and historic proximity to Europe should give this region the power to choose the "Norway" option.

1. Department of State, Caspian Region Energy Development Report, Washington D.C., April 1997, p.4
2. BP Amoco Statistical Review of World Energy 1999, p. 20
3. These facilities would need to have common standards under the control of an international authority that would not accept corruption and illegal activities.