Impact of Azerbaijan's Energy Policy on the Development of theOil Sector

By Aitor Ciarreta and Shahriyar Nasirov*

Azerbaijan is richly endowed with oil and gas resources and has recently experienced a temporary oil production boom. Azeri oil production reached 23.5 million (mln) tons in 1991 and accounted for 71.4 % percent of total oil output in the former Soviet Union. However, after the break-up of the Soviet Union, production fell significantly between 1991-1997, due to outdated technology, poor planning and lack of investment in new drilling and rehabilitation of existing wells. Since passage of the "Contract of the Century" in 1994, 29 "Production Sharing Agreement" contracts have been signed between the Azerbaijan government and the Azerbaijan International Operating Company (AIOC). According to the Trend Agency, in the 14 years since the signing of the contract, Azerbaijan has received $40 billion in foreign investment in this sector. The oil and gas sector share in total foreign investment today accounts for 80-90 %. Oil production peaked at 45.5 mln tons with record capacity in Azerbaijan in 2008. State oil fund revenues reached $ 11.4 billion and the State Budget received $ 6 billion at the end of 2008. The oil and gas revenues of the country are expected to be $ 200 billion by 2024.

Over recent years, Azerbaijan has signed several very important energy contracts in accordance with Production Sharing Agreements (PSAs) that helped the inflow of foreign investment into the oil sector. As an outcome of the successful energy policy, Azerbaijan is currently enjoying huge oil revenues. However, uncertainty over the legal status of the Caspian Sea and the lack of basic modern rules and procedures to regulate oil and gas operations still remain a significant challenge for the development of the oil sector. In addition, the Nagorno-Karabakh conflict, high levels of bureaucracy, regulatory burden, corruption and the rapid pace of change in the economy continues to threaten business operations in the country. This article reviews the oil industry in Azerbaijan and describes the main policy incentives provided by the government to attract foreign investment in the oil industry.

Background

Azerbaijan is located in the South Caucasus region, bordering on Russia, Iran, Georgia, Armenia and Turkey. It covers an area of 86.6 thousand square kilometers. According to the International Monetary Fund, GDP per capita on PPP was around $ 9,500 in 2009. Its strategic location on the Caspian Sea provides great potential regarding oil and natural gas resources. Azerbaijan is an important oil exporter, abundant with fertile agriculture lands and a well educated labor force. It acts as a transport corridor between Europe and Central Asia.

After independence, the conflict with Armenia over Nagorno-Karabakh and fighting in neighboring Chechnya led to the decline of oil exports and domestic output and to high inflation. GDP decreased by about 63 % in total due to agriculture output falling by about 43% and industrial output by about 60 % during 1989–1994.

Since 1994, thanks to the contracts entered into with oil companies, the country has welcomed a huge amount of foreign investment to the oil and gas sector. The GDP subsequently rose by 6% in 1997, 11% in 2000, 34.5 % in 2006, 25 % in 2007 and 10.8% in 2008. The government started to implement economic programs with World Bank and IMF backing. Inflation fell from 1,664 % to 1 % by the end of 1997 and 2008 saw 20-22 % inflation.

Oil Industry

Sector Organization

The State Oil Company of the Azerbaijan Republic (SOCAR) is a state owned oil and gas company and is responsible for all aspects of offshore and onshore exploration of oil and gas fields in the country, the pipeline system, oil and gas imports and exports, processing, refining and sale of oil and gas products. SOCAR was founded on 13th September 1992 following the merger of two state oil companies, Azerneft and Azneftkimiya.

Since 1994, SOCAR has signed a total of 29 Production Sharing Agreements, including contacts to explore the Azeri-Chirag-Guneshli fields. The most recent contract in 2009 envisages exploring the Bahar and Gum Deniz offshore oil fields. Thanks to these agreements, the Azerbaijani government will reap approximately 80% of the total profits from a combination of royalties and SOCAR's share. The remaining 20% of profits will be divided among the Azerbaijan In-

* Aitor Ciarreta and Shahriyar Nasirov are with the Universidad del País Vasco, Bilbao, Spain. The former may be reached at Aitor.ciarreta@ehu.es and the latter at Nasirov.shahriyar@ehu.es Financial support for this paper was given by the Universidades e Investigacion del Gobierno Vasco.
See footnotes at end of text.

ternational Operating Company (AIOC): BP (operator – 34.1%), Chevron (10.2%), SOCAR (10%), INPEX (10%), Statoil (8.6%), ExxonMobil (8%), TPAO (6.8%), Devon (5.6%), ITOCHU (3.9%) and Hess (2.7%) (www.bp.com/caspian).

BP is the largest foreign investor among them and it has been a single AIOC operator since June 1997.

Oil Production and Consumption

Azerbaijan is recognized as one of the oldest oil producers in the world. The first oil wells in the world were drilled in Baku in 1847. In 1910, Azerbaijan became the number one oil producer in the world with production of 11.5 mln tons of oil.

In 2008, Azerbaijan had an estimated 7 billion barrels of crude oil and 1.37 trillion cubic metres of gas reserves[1] . The main oil reserves are located offshore in the Caspian Sea, particularly the Azeri-Chirag-Guneshli (ACG) field which is estimated to have accounted for over 80 percent of total oil output in Azerbaijan in 2008. The joint development of these three biggest oil deposits; ¨Azeri ¨, ¨Chirag¨ and ¨Guneshli¨ began on September 20 1994, when the "Contract of the Century¨ was signed with major oil companies representing eight countries. This contract is considered to have been of exceptional importance in the protection and development of Azerbaijan.

After independence, oil production in Azerbaijan fell sharply between 1992 and 1997. Production hit a low of 9.1 mln tons in 1997. By 2000, production had reached 14 mln tons per year. It stood at 22.4 mln tons per year in 2005 and had almost reached 44.3 mln tons by 2008.

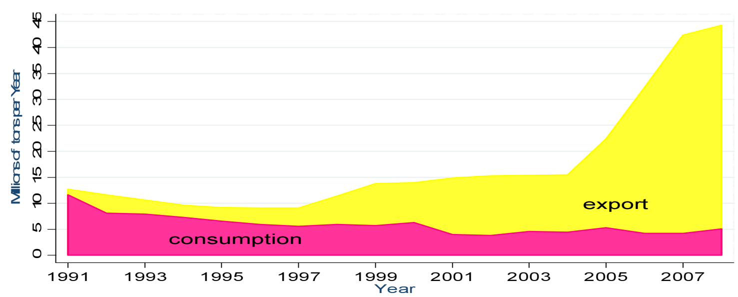

Figure 1 Azerbaijan Oil Exports and Consumption, 1991-2008
Source: EIA and own construction

Figure 1 plots crude oil and natural gas production and oil demand from 1991 to 2007.

Oil demand is mainly driven by economic activity, consumer preferences and conservation factors. After the break-up of the Soviet Union, demand for oil in Azerbaijan fell from 12 mln tons in 1991 to 5.07 mln tons in 2007 (Figure 1). This shows that significant amounts of oil were available for export. According to the Energy Information Agency, Azerbaijan exported a net of about 749,000 bbl/d of oil in 2008.

Refined Petroleum Production and Consumption

After 1991, production of oil products in the country decreased significantly. For instance, refinery gross output was 14.2 mln tons in 1991 but fell by almost a half to 7.3 mln tons in 2008. Several factors were behind this decline in production: failure to replace worn and outdated technology, a falling domestic market in the country, a breakdown in consumer relations and, in particular, the lack of capital investment which the government estimates will cost between $600 million and $700 million. Figure 2 plots refinery and exports of petroleum products for the same period.

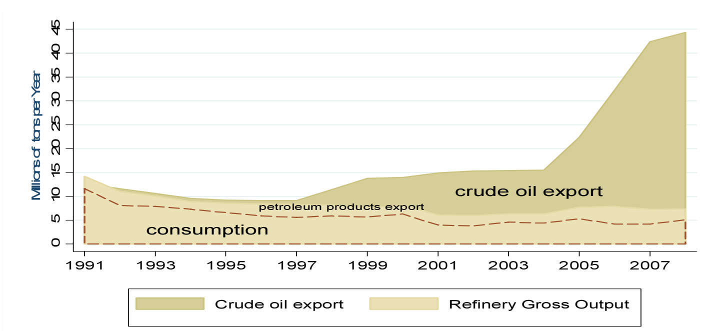

Figure 2 Crude and Refinery Exports
Source: EIA and own contruction

Azerbaijan has two oil refineries: the Baku Oil and Azerneftyagh refineries located in Baku. Both are run by SOCAR. The Azerineftyag refinery was established with a capacity of 230,000 bpd and the Baku Oil refinery with a capacity of 212,000 bpd. In total, both refinery plants produced approximately 25 mln tons of oil products. See Figure 3.

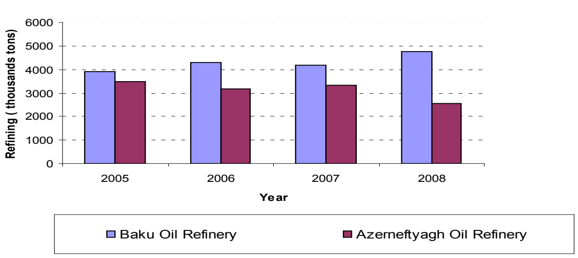

Figure 3 Oil Refining in Azerbaijan (2005-2008)
Source: SOCAR and own construction

In 2008, 7.3 mln tons refinery oil products were produced: 4.8 mln tons by Baku Oil refinery and the other 2.5 mln tons by the Azerineftyag refinery. This shows that the two refineries were operating well below capacity and with overall utilization rates as low as 40%.

Consumption of oil products changes between the countries or regions depending on the use of oil as transportation fuel, such as gasoline or diesel, or as fuel oil for residential consumption and industry. Figure 4 shows the output of the major oil products (gasoline, fuel oil and diesel) produced in the country.

Transportation Infrastructure

Most of Azerbaijan's oil is exported via pipeline. However, small amounts are shipped by railway and truck. Azerbaijan has 3 main pipelines to export its oil: Baku-Tbilisi-Ceyhan (BTC), Baku-Novorossiysk and Baku-Supsa. See Table 1.

The majority of Azeri oil exports are shipped via the Baku-Tbilisi-Ceyhan (BTC) pipeline which was designed to deliver up to one million barrels per day of crude oil and runs 1055 miles from the Sangachal terminal near Baku in Azerbaijan, via Georgia, to the Ceyhan Terminal in Turkey. The oil is then shipped by tankers to European markets. The pipeline started operations in July 2006. According to EIA, 653,300 bbl/d of oil were exported in 2008. The pipeline is run by BP and owned by AIOC members.

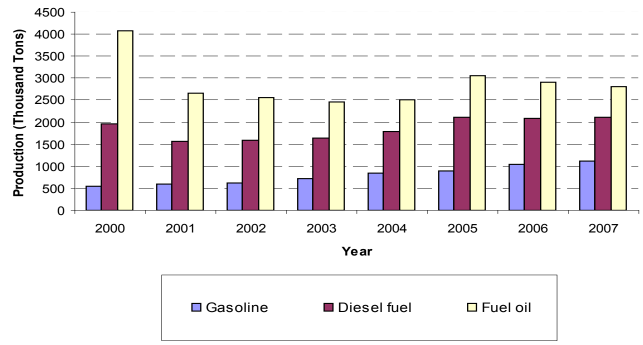

Figure 4 Refined Product Output by Fuel Type (2000-2007)
Source: SSCA, State of Statistics Committee of Azerbaijan and own construction

On October 2, 2009 the Azerbaijan and Kazakhstan governments signed various contracts to increase Kazakh oil exports via BTC. According to EIA, 100, 000 bbl/d of Kazakh oil is currently shipped via BTC and by rail.

	Operator	Length (miles)	Capacity mb/d	Market
The Baku–Novorossiysk	SOCAR Transneft	830	0.10	European
Baku – Supsa	BP	518	0.15	European
Baku-Tbilisi-Ceyhan	BP	1055	1.00	European

Table 1 Azerbaijan"s Export Routes

The Baku-Novorossiysk oil pipeline is 830 miles long and starts from the Sangachal Terminal near Baku and finishes at the Novorossiysk terminal on the Black Sea coast in Russia. The Azerbaijan part of the pipeline is operated by SOCAR and the Russian part is operated by Transneft. The pipeline capacity is 100,000 bbl/d and 29.000 bbl/d and 45,000 bbl/d of Azeri oil was shipped via this pipeline in 2008 and 2009, respectively.

The Baku-Supsa pipeline runs 518 miles from the Sangachal Terminal (Baku) to Supsa (Georgia). The pipeline transports oil from the Azeri-Chirag-Guneshly field and is run by BP. It has a total capacity of 145,000 bbl/d. According to of the Argus report, only 13,000 bbl/d were transported via this pipeline in 2008.

Government Policy to Attract Foreign Investment

The oil and gas sector has dominated the economy of Azerbaijan for several years and still continues to grow. Table 2 summarizes the importance of the oil and gas sector in Azerbaijan between 2003 and 2008.

Table 2 shows that in 2008 the oil sector accounted for 54.14% of total GDP, for 93.1% of total gross exports and for 83.9% of total foreign investment. In 2008, the gross exports of goods in the country amounted to $30.6 billion, and petroleum products accounted for 93.1% of that total. Out of total exported petroleum products ($28.5 billion), the export of petroleum products accounted for $2.2 billion and crude oil exports for $26.3 billion. In the same year, foreign direct investment was close to $4 billion which was mainly used to finance large scale oil and gas projects, such as the BP exploration (Shakhdeniz) project and operations at the Azeri-Chirag-Guneshly field.

	2003	**2004**	**2005**	**2006**	**2007**	**2008**
GDP growth rate (%)	11.2	10.2	26.4	34.	25	10.8
Share of oil & gas sector in GDP (%)	30.1	31.3	44.1	53.8	55.9	54.1
Share of oil & gas sector in industrial output (%)	62.1	61.6	75	82.8	85.7	89
Share of petroleum in gross export (%)	85.7	82.7	86.5	92.2	94.2	93.1
Share of oil & gas sector in FDI (%)	98.5	97.5	94.2	90.3	90.1	83.9

Table 2 The Oil and Gas Sector in Azerbaijan, 2003-2008
Source: IMF, Central Bank of Azerbaijan and SSCA

Pursuant to the Protection of Foreign Investment legislation, foreign investors can be involved in any activity open to national investors with exception of prohibited areas such as national security and defense. In order to encourage foreign investment, the President of Azerbaijan signed several treaties to protect the rights of foreign investors. The privatization law was ratified by parliament (Milli Meclis) and two thirds of state assets were sold off in 2000. The government introduced several laws to regulate real property rights, including the Mortgage Law (2005), Land Code of the Republic of Azerbaijan (1999), Land Reform Law (1996), Land Leasing Law (1999) and Land Market Law (1999).

After the policy change regarding the development of the oil sector, investors started to work through Production Sharing Contracts (PSCs) and traditional joint ventures (JVs). According to the JV agreement, a foreign company can hold a maximum share of 49 % and has to pay eight different taxes. However, in comparison to a JV, a PSC allows an investor to have a greater share than SOCAR and only has to pay tax on profits.

Azerbaijan has created a new model to attract foreign investment in the oil and gas sector by providing Production Sharing Agreements (PSA). PSAs are a common type of contractual arrangements signed between SOCAR as a government agency and the foreign partner, AIOC. Each PSA contract passes through different processes before coming into force. The first foreign partner, AIOC, negotiates the PSA terms with SOCAR. The latter then submits the contract to several government departments who may make some amendments. The contract then has to be ratified by parliament and the final step is its being confirmed by the president.

Its structure is to keep the PSC benefits and principles and it allows an investor to avoid the unfavorable taxes of a joint venture. The following key features make a PSA more attractive to foreign investors: exemption from Value Added Tax, non-taxable dividends, elimination of restrictions on banking issues including no restriction on foreign bank accounts, payroll currency and dollar withdrawals, implementation of the international accounting system, elimination of various governmental audits and application of international practices on labor laws.

Under PSA agreements, the AIOC does not make royalty payments, but it is required to pay taxes on profits. The AIOC assumes all the exploitation risks and, therefore, does not receive any compensation if no oil is found. The Azerbaijani government owns the resource and the entire installation. The main features of a PSA are: 1) before any profit distribution, repayment of all loan and costs by all contract partners to the operator, 2) after repayment of all loans and costs, the profits are distributed among contract partners based on the PSA agreement, 3) with regard to new capital, the PSA is a flexible agreement whereby if the Azerbaijani and international partners mutually agree, a new participant can enter the PSA, 4) the PSA provides investors with protection against changes in laws (CEE[2]).

In short, the regulatory reforms in the energy sector, the promotion of PSA agreements in oil contracts, the materialization of the "Contract of the Century" project and the Baku-Tbilisi-Ceyhan (BTC) pipeline have been among the biggest achievement of the Azerbaijani government regarding its strategy to develop the oil and gas sector. Thanks to these achievements, Azerbaijan is currently enjoying huge oil revenues (expected to reach $ 200 billion in 2024).

Despite the signing of several oil and gas contracts and the general foreign investment protection laws and regulations introduced by the government, Azerbaijan still lacks independent regulatory institutions, rehabilitation of petroleum refinery plants, resolution of the legal status of the Caspian Sea, laws and regulations such as petroleum law, pipeline law, environmental law to administer oil and gas operations. These issues are now the main challenges facing Azerbaijan in order to develop its oil industry in the future.

Footnotes

[1] Energy Information Agency.

[2] "Oil Monetization in Azerbaijan" by Center for Energy Economics, The University of Texas at Austin.

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