

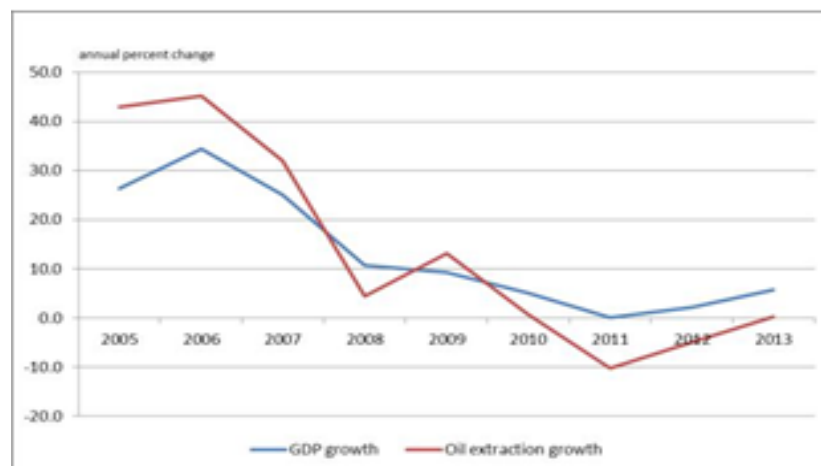
Oil and Gas Industry of Azerbaijan

Azerbaijan is one of the world's oldest oil producers and the city of Baku and the Absheron Peninsula have long been known as historic sites for oil. The first oil well in the world was drilled in Absheron, Bibiheybat in 1847 using a primitive percussion drilling mechanism. The first oil refinery was also built in Baku in 1878. By the end of the 19th century Baku had become a center for world-scale industrial investment. In the time of the Russian Empire, Baku was the main oil provider, providing 97.7 % of Russia's oil in 1890 and half the world's output in 1901. In World War II, during the Soviet era, Azerbaijan supplied 23.5 million (hereafter, mln) tons in 1941, and accounted for approximately 75% of the total oil output of the former Soviet Union. However, oil production subsequently declined sharply to 39.15% in 1950, 5.7% in 1970 and 2.4% in 1980.

Successful oil and gas strategy implemented by the Azerbaijan government with the signing of the "Contract of the Century" in 1994 followed by a deal on the Shah Deniz gas field in 1996 led to an extraordinary amount of international investment flowing into the oil and gas sector. Azerbaijan has received \$ 60 billion in foreign investment in its oil and gas sector over the past 16 years .The country's oil and gas revenues are expected to reach \$200 billion by 2024.

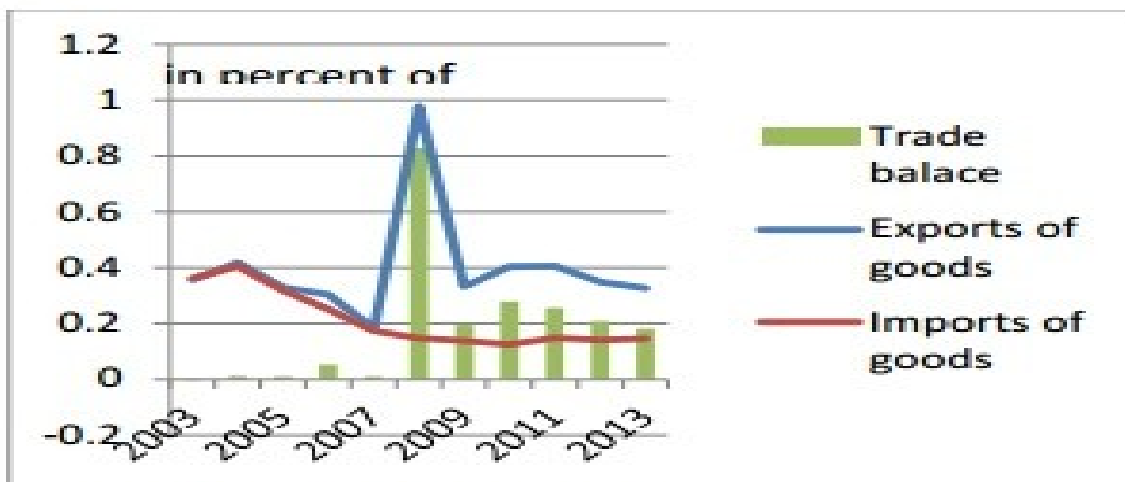
GDP growth picked up in 2013, aided by a renewed increase in oil production and the continued strong performance of the non-oil economy. Economic output expanded by 5.8 percent in 2013 (Figure 1). The impressive performance of the non-oil sector continued, with a growth of 9.9 percent in the same year. With technological upgrades and extraction process optimization, oil production finally rebounded after two consecutive years of decline. Oil production grew by 0.9 percent in 2013 while gas production grew by 14.4 percent (Figure 1). The stabilization of oil production came as a result of measures undertaken by British Petroleum after a series of negotiations with the State Oil Company of Azerbaijan Republic (SOCAR), which led to technological upgrades and optimization of the extraction process and a subsequent increase in output.

Figure 1. Growth picked up in the first half of 2013 (annual percent change)



An increase in imported machinery by the oil sector reduced the trade surplus to 18 percent of GDP in 2013 compared with 20.7 percent in 2012. Oil exports were at the same level as 2012, while gas exports increased by 8.4 percent in 2013. Non-oil exports continued to be marginal and grew by 6 percent in 2013, led by fats and oils, sugar, and tea. Total imports, however, grew by 11 percent in 2013, thus worsening the trade balance (figure 2). Growth in imports was led by machineries, which grew by 7.5 percent, and was used as inputs in the oil sector. In addition, cereal imports expanded by 16 percent. The non-oil trade deficit stayed at 21 percent in 2013, almost the same as in 2012. The current account surplus narrowed to 15 percent of GDP in the third quarter of 2013 from 19 percent in the third quarter of 2012, driven by the surge in oil sector service imports and the reduced trade balance. The deficit in services trade widened from 3.4 percent of GDP in the third quarter of 2012 to 4 percent of GDP in the third quarter 2013. Import of services increased by 11 percent during the period, driven mostly by the oil sector. Service exports are dominated by traditional services, which include travel and transport. There was also a deficit in the net income from abroad, essentially because of profit repatriation by foreign oil companies. Oil- and gas-related foreign direct investment (FDI) inflows narrowed the deficit on the capital account by 5 percent in the third quarter of 2013 compared with the same period in 2012. The ongoing investments to halt the decline in oil production, along with new investments in the Shah Deniz gas field, increased FDI inflows. Capital outflows were led by trade credits, which accounted for 56 percent of the total along with deposits and loans, resulting in a deficit of US\$6.5 billion in the capital account. By the end of the year, Azerbaijan's official reserves were at US\$14.1 billion, an increase of 17 percent from last year and covering 11 months of imports. In addition, the assets of the Oil Fund were at US\$35.8 billion, accounting for 50 percent of GDP and providing further cushion on the external front.

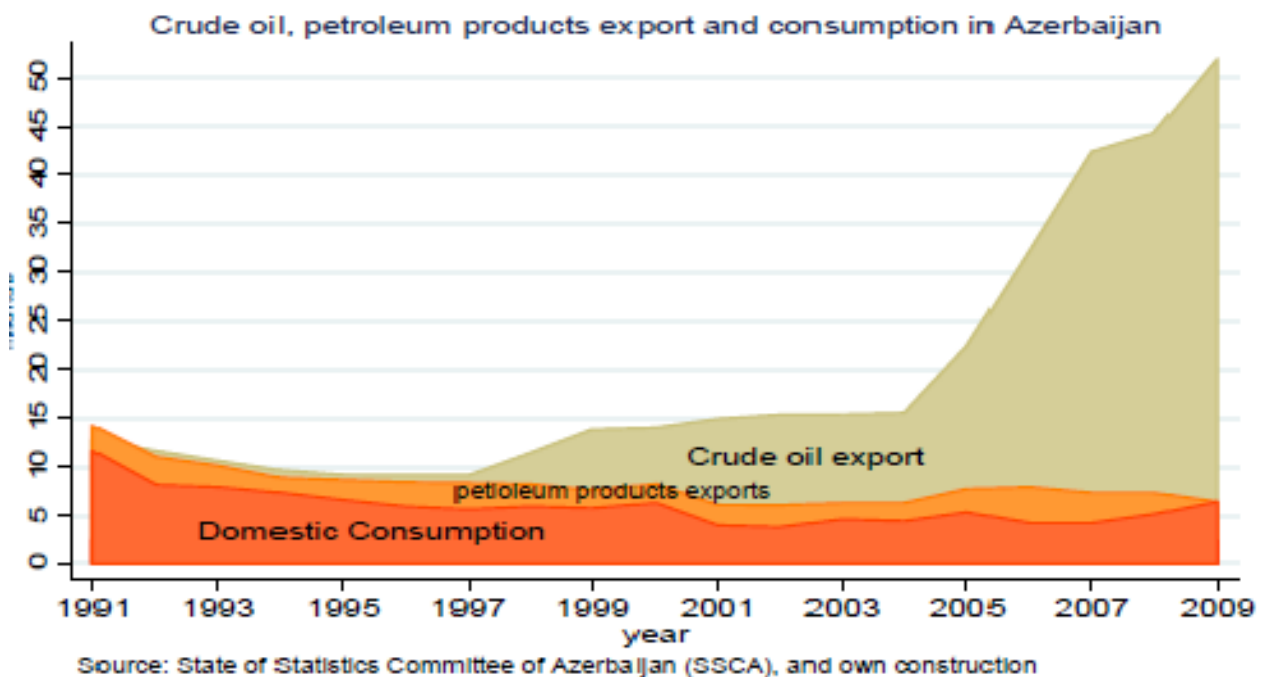
Figure 2. The trade balance declined further



Source: Azstat and Customs Committee.

After independence, oil production in Azerbaijan fell sharply between 1992 and 1997, bottoming out at 9.1 mln tons in 1997. By 2000, production had recovered to 14 mln tons, then to 22.4 mln tons in 2005 and 44.3 mln tons in 2008. Oil production exceeded 50 mln tons in 2009 for the first time in the country’s history, with an increase of 14 percent on 2008. (See, Figure3). 83.3% of Azerbaijan's total oil output over this period was provided by higher production levels with an average of 847,500b/d from the Azeri-Chirag-Guneshli (ACG) field (SSCA, 2009). Oil production in 2009 averaged 1.02mn barrels per day (b/d) for the first time. After the collapse of the Soviet Union, domestic crude oil consumption decreased from 12 mln tons in 1991 to 4.2 mln tons in 2007. However the figure then rose to 7.8 mln in 2008 and 6.4 mln in 2009 (See, Figure 3). This shows just how much oil is available for export

Figure 3



Azerbaijan’s proven gas reserves are estimated at about 30 trillion cubic feet (hereafter, TCF), and the potential for changes is expected to be between 100 and 200 TCF ([Oil and Gas Journal, 2009](#)). Virtually all natural gas is produced from offshore fields. After independence, production declined steadily to 4.5 billion cubic meters (hereby, BCM) in 2005, compared to 8 BCM in 1991. Due to gas storage, Azerbaijan imported gas from Russia up to 2007 to meet domestic consumption. After increases in its own gas production, Azerbaijan stopped buying gas from Russia and instead became a gas exporter in the region. In 2009, gas production increased to 23.3 BCM and was expected to reach 28.5 BCM in 2010. About 66 % of total production is used to meet domestic demand and 34 % exported mainly to Russia, Georgia and Turkey.

Conclusion

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 oil legislation, pipeline legislation, and environmental legislation for the administering of oil and gas operations. These issues remain the main challenges facing Azerbaijan in developing its oil and gas industry in the future.

The oil and gas sector is the powerhouse of Azerbaijan's economy and its already excessive dependence on this sector is increasing. The government needs to diversify the economy by strengthening services and the non-oil sector, to raise agricultural productivity, to invest in the electricity sector, to increase the effectiveness of public expenditure planning and, in a word, to implement a master plan to translate oil revenues into better lives for its citizens.

References

- 1 State Statistical Committee of the Republic of Azerbaijan
<http://www.azstat.org/indexen.php>
- 2 State Oil Company, SOCAR, www.socar.az
- 3 Nasibli, N., "The Independent Azerbaijan's Oil Policy", Lecture at the University of California at Berkeley, April 15, 1998.
- 4 Hamilton, M., 1998. The last great race for oil reserves? Companies scramble to tap up to 200 billion barrels in the Caspian Sea region." The Washington Post: H.01, April 26.
- 5 International Energy Agency. 2008. Perspectives on Caspian Oil and Gas Development

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