CASE Network E-briefs



No. 06/2010 May 2010

Oil Money vs. Economic Crisis: The Case of Azerbaijan*

By Alexander Chubrik and Mateusz Walewski

Introduction

The affect of the global financial crisis on Azerbaijan's economy is an interesting case study, particularly because it is a small CIS (Commonwealth of Independent States) transition country strongly dependent on oil exports. In fact, oil constitutes about half of the country's GDP. Therefore, the channels by which the recent economic crisis influenced the local economy are slightly different to those experienced by other economies in the region. For example, other transition economies were hit badly due to massive outflows of foreign capital, leading to serious currency depreciation. Additionally, decreasing demand and falling prices for export products, mostly raw and simple manufactured goods, accompanied by reduced investment demand led to serious GDP reductions.

Although Azerbaijan's economy also experienced these negative trends they were not the most important factors. Instead, the economy was mostly affected by a drop in oil prices. As a result, there were three direct channels by which the global crises influenced the Azerbaijani economy:

- Fall in oil prices;
- Fall in external demand for Azeri non-oil products;
- Outflow of foreign capital.

Fall in oil prices

The fall in oil prices and resulting reductions in income from oil exports is the most obvious and most visible sign of the implications that the economic crisis has had on Azerbaijan's economy. The average 37% drop in oil prices between 2008 and 2009 indicates that Azerbaijan's Terms of Trade (ToT) fell by almost the same magnitude that led to the serious deterioration of the current account surplus – from 33.7% of GDP in 2008 to only 23.6% of GDP in 2009.

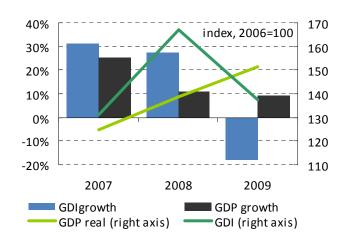
It also leads to a serious reduction of "purchasing power". By taking this into account and following the World Bank methodology¹, it is possible to calculate the growth of GDI (Gross Domestic Income = GDP corrected for ToT changes) in 2009 using the following formula:

$$GDI_r = GDP_r + (X/P^M - X/P^X),$$

where GDI_r stands for real Gross Domestic Income, GDP_r stands for real Gross Domestic Product, X for nominal exports and P^M and P^X are import and export price indexes.

Assuming that P^M change equals the change of Real Effective Exchange Rate and that P^X is equal to the price of crude oil, one can conclude that in 2009 Azerbaijan's real GDI actually fell by 18% (with GDP increasing by 9.3%). In contrast, in 2008 the GDI increased by 34% whereas the GDP increased by "only" 10.8% (see Figure 1).

Figure 1: GDP and GDI real changes in Azerbaijan in 2007-2009



Source: Own calculations based on data from Macroeconomic Framework of the Department of Economic Analysis and Forecasting of MoED, version 12th of October 2009.

^{*} E-brief has been prepared within the Advisory Service for Macroeconomic Management and Institutional Reform project.

¹ See: http://go.worldbank.org/S5QO930T20.

This suggests that the actual "strength" of Azerbaijan's economy depends not only on GDP dynamics but largely on oil prices. For instance, oil prices have important direct consequences on the budget, as transfers from the State Oil Fund (SOFAZ) constitute a significant share of its revenues. The fall in prices led to serious reductions of the SOFAZ's revenues – from AZN 11.8 billion (actual) in 2008 to only AZN 8.2 billion in 2009. On top of this, the actual savings (increase in government assets) in 2009 amounted to only AZN 2.9 billion compared to AZN 6.7 billion in 2008. In spite of the reduction in revenues, transfers to the state budget increased from AZN 3.8 billion in 2008 to AZN 4.9 billion in 2009².

In 2009, Azerbaijan's state budget revenues amounted to AZN 10.6 billion, which is 4.1% lower than in 2008. However, budget revenues "cleaned" from Oil Fund transfers fell by 22.3% yoy (year-on-year); 14.2 percentage points of this decrease was due to a reduction of profit tax revenues. The decline of oil prices was the main reason behind a fall in profits: in 2008, the oil and gas sector's share of profit tax exceeded 85%, while in 2009 it fell to 70%.

take-away is that in 2009 oil transfers were directed to increase non-investment budget spending, and not only those that were necessary to tackle consequences of the crisis. In the long run, however, these developments are quite dangerous for fiscal sustainability.

Public investment cuts manifested themselves in serious investment reduction, hence, GDP slowdown. In 2009, total investment fell by 18.7% yoy; 12.5 percentage points of this decrease was due to a reduction in public investment. Another source of decline was foreign investment (-4.4 percentage points). Domestic private investment also fell. Only bank loans became one of the few sources of investment increase. However, their increase was achieved only thanks to two big loans from the Central Bank (CBA) to the state-owned International Bank of Azerbaijan.

The reduction in public investment was directed mainly towards serious cuts in construction. This sector experienced an 8.2% contraction in 2009 and contributed to a -1.5 percentage point decline in the overall growth rate of the non-oil sector.

Table 1: Financial performance of the State Oil Fund of Azerbaijan, AZN millions*

Date:	ASSETS	Year:	TOTAL	EXPENDITURES		SAVINGS	Savings minus
			REVENUES	TOTAL	incl. transfer to the state budget	_	expenditures
	(1)		(2)	(3)	(3.1)	(4)	(4)-(3)
Jan 1, 2001	248.2						
Jan 1, 2002	470.0	2001	225.2	3.4	0.0	221.8	218.4
Jan 1, 2003	677.8	2002	294.9	87.1	0.0	207.8	120.8
Jan 1, 2004	805.0	2003	364.1	236.9	100.0	127.2	-109.8
Jan 1, 2005	950.3	2004	316.5	171.2	133.0	145.3	-25.9
Jan 1, 2006	1280.5	2005	660.1	329.9	150.0	330.2	0.3
Jan 1, 2007	1267.4	2006	985.9	999.0	585.0	-13.0	-1012.0
Jan 1, 2008	2092.4	2007	1886.2	1061.2	585.0	825.0	-236.2
Jan 1, 2009	8986.7	2008	11864.6	4970.4	3800.0	6894.3	1923.9
Jan 1, 2010	11868.9	2009	8176.7	5294.5	4915.0	2882.2	-2412.3
Jan 1, 2011	12562.9	2010 (b)**	5963.1	5428.4	4915.0	534.7	-4893.7
TOTAL, 2001–2010			30737.4	18582.0	15183.0	12155.4	-6426.6

^{*} Data for 2001–2004 is presented in new manats (in 2005, denomination of 1:5000 took place).

Source: SOFAZ, see http://www.oilfund.az/en/account.

Thanks to SOFAZ transfers, expenditure cuts were quite negligible – in 2009, they fell by 1.9% yoy. However, this cut was uneven: 6.7 percentage points of expenditure reduction was due to outlays in "mining, manufacturing and construction" (almost 100% of which is public investment), while expenditures on education, social protection, public order and safety, general government services and other programs increased. Actually, only four budget items faced expenditure cuts (total contribution is -9.5 percentage points). The important

This suggests that reductions in oil prices did not only have direct effects on reducing the national income (GDI) and future wealth (increased transfers from SOFAZ) but also had the strong indirect negative influence on the non-oil economy through lower public investments.

Fall of external demand for non-oil products

Apart from falling oil prices Azerbaijan's economy has also been directly affected by the strong decline in (non-

^{** (}b) states for budgeted amount.

² Transfer from SOFAZ is the only item which is already executed precisely at the budgeted level.

oil) exports. Balance of payments data shows that in 2009 the total drop in Azerbaijan's non-oil exports reached 21.9% yoy and it seems to have been driven mainly by GDP decline or considerable growth slowdown among its major trading partners. In 2009, GDP in Russia fell by 7.9% yoy, in Turkey – by 4.7% yoy, and in Georgia – by 4% (estimates).

According to estimates, the strength of the *manat* real exchange rate also played some role, but it was both weaker and less statistically significant³. Finally, *manat* appreciation that began in 2005 stopped on March 2009. On top of this, by late 2009 the real effective exchange rate decreased in annual terms, both because of lower inflation and the absence of nominal appreciation of the *manat* against the US dollar.

The structure of export decline also supports the conclusion that it was mainly driven by the fall of industrial production among Azerbaijan's main trading partners. The export of metals and chemical products lost on average about two-thirds of its 2008 value. The main positive contribution came from "transport vehicles" – but this can be attributed to one deal with Russia⁴. The amount of the transaction was equal to 10.7% of total non-oil exports.

According to our estimates, in 2009, the fall of non-oil merchandise exports resulted in an 1 percentage point decrease of Azerbaijan's non-oil GDP (taking into account increase of non-oil GDP by 3.2%, this means positive contribution of domestic demand for non-oil products). Most likely, it also had severe negative economic and social effects regionally, particularly in localities where metallurgical and chemical factories are located. Exports constituted almost 50% of total production of these industries in 2008.

Foreign capital outflow

The deterioration of the current account and falling SOFAZ savings (accompanied by a general lack of confidence for emerging markets) led to serious capital outflows resulting (due to fixed exchange rate policy) in diminished international reserves (by \$1.2 billion in the 1Q2009). Although the decline stopped in Q2 of 2009, this could explain why commercial banks decided to follow a stricter credit policy, particularly as they are strongly indebted in foreign currencies.

Large capital outflows also resulted in a temporary crisis of confidence towards the local currency. This was

manifested by the changing proportions between foreign currency and *manat* deposits. In December 2008, almost 50% of household time deposits were held in *manats*. Half a year later, this share fell to 29% and then started to increase slowly reaching 34% in December 2009. However, low confidence in the national currency explained the outflow of *manat* deposits only partially. At the beginning of 2009, banks increased interest rates on foreign currency deposits almost to the level of *manat* interest rates, making savings in foreign currency more attractive and taking into account devaluation expectations. It lowered the efficiency of the CBA's policy of stable *manat* and required larger interventions at the domestic currency market.

Additional evidence demonstrating capital outflow was the negative balance on "other investment". In 2009, it reached \$6 billion compared to \$2.7 billion in 2008. Most of this outflow (\$4.8 billion) occurred via non-oil sectors and in the form of deposits and cash outflows. Moreover, despite a restoration of confidence in the *manat*, capital outflows remained significant during the whole year.

Recent changes and the main short-term challenges

In early 2010, economic recovery among its main trading partners, as well as higher oil prices contributed to the recovery of Azerbaijan's non-oil sector. First, non-oil exports had been recovering since December 2009, mainly due to growth in the chemical and food products industries. Second, non-public investment started to grow as early as January 2010 – both in oil and non-oil sectors. However, household income growth decelerated (mainly because of accelerated inflation), which led to slower services growth.

At the moment, inflation is becoming the main short-term challenge for Azerbaijan's economy. Despite the increase of liquidity via net foreign assets, the CBA did not implement any measures aimed at restricting liquidity (for instance, it kept reserve requirements at 0.5% level). This led to significant acceleration of the money supply. In March 2010 the monetary base went up by more than 30% yoy (in December 2009 it fell by 1.1% yoy). As a result, inflation increased from 0.7% in December 2009 to 5.8% in March 2010.

Another important challenge relates to fiscal policy. After a sharp decline in oil prices at the end of 2008 – beginning of 2009, the government planned 2010's budget based on the assumption that oil prices would be

³ See Walewski, M. 'Crisis, exchange rates and competitiveness of Azerbaijani non-oil products', report of the ASMMIR Project, CASE, July 2009.

⁴ Sale of one unit of 'Light-vessels, fire -floats, dredgers, floating cranes and other vessels the navigability of which is subsidiary to their main function; floating docks; floating or submersible drilling or production platforms (other)', code 890590 of Harmonized Commodity Description and Coding System.

\$45 per barrel. Higher-than-planned revenues from profit tax (because of much higher actual oil prices) may lead to a revision of public expenditures in the second half of 2010, however, an increase in public spending could aggravate inflation pressure.

A rise in inflation has already led to appreciation of the real effective exchange rate – it is still lower than the beginning of 2009, but higher compared to November 2009 (the lowest value of REER). Azerbaijan's economy faces two major threats from real appreciation. First, it may undermine a recovery in Azerbaijan's non-oil exports and second, it may contribute to both an increase of imports as well as a non-oil external trade deficit.

Alexander Chubrik is a CASE
Fellow, the Vice President of CASEBelarus, and an economist at the
IPM-CASE Research Center in
Minsk. He has worked on several
international research projects. His
research interests include
economic growth, social and
economic status of households,
labor markets, macroeconomic



modeling, applied econometrics and transition economic development. He holds an honors degree in economic theory from the Belarusian State University.

Mateusz Walewski is a CASE
Fellow. He specializes in issues
related to labour market,
employment, social policy and
economics of transition. He has
led and worked on numerous
international research projects as
well as technical assistance
projects in Romania, Georgia,



Armenia, Moldova and Ukraine. He obtained an MA in international economics (1997) from the University of Sussex, an MA in economics (1998) from Warsaw University, as well as a BA in economics from both Columbia and Warsaw Universities.

The opinions expressed in this publication are solely the author's; they do not necessarily reflect the views of CASE - Center for Social and Economic Research, nor any of its partner organizations in the CASE Network.

CASE E-Brief Editor: Ewa Błaszczynska