

CIS Macro View

Untangling the gas supply chains

- **Ukraine has been renegotiating the gas contract with Russia** — It is hoping to achieve a lower price and reduce the required import volumes.
- **Now Ukraine is in search for alternatives** — The Ukrainian government has been active in negotiations with the UK's RWE, China, Azerbaijan, Qatar and Turkmenistan.
- **The alternative channels might tap most of Ukraine's gas requirements** — We estimate that the currently discussed projects may supply up to 25bcm of gas to Ukraine starting from 2018, which is close to the 27bcm target import volumes Ukraine intends to get from Russia. Still, 25bcm is the max estimate and the real output should be lower.
- **However, each project is a risk** — We see political, financing and agency risks in all of the projects Ukraine is willing to implement.
- **We expect further Russia-Ukraine negotiations to depend on the success of Ukraine's projects** — Should Ukraine not be able to attract financing and/or the gas output volumes from the projects turn out to be lower, Russia would gain greater negotiating power.

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Is there an alternative to Russian gas?

Gas issue has been casting a shadow on the relationships between Russia and Ukraine since 2005. After accusations of the illegal gas imports, Ukraine signed a contract with Russia that set the volumes and prices of gas until 2019. The contract obliges Ukraine to import gas in excess of its needs with no right to export.

Gas pricing has become a painful domestic issue as well. After a rapid rise of gas prices, household tariffs have doubled and tariffs charged to the enterprises more than tripled. According to the polls, some 2/3 of enterprises name energy as the main cost factor that may even lead to the halt of production (Kommersant.ua, 9 Aug). Furthermore, budget subsidies to the gas importing and storing monopolist Naftogaz should reach 0.8% of GDP in 2012.

Ukraine has stated plans to achieve independence from Russian gas. Ukraine is trying to find alternatives to Russian gas through:

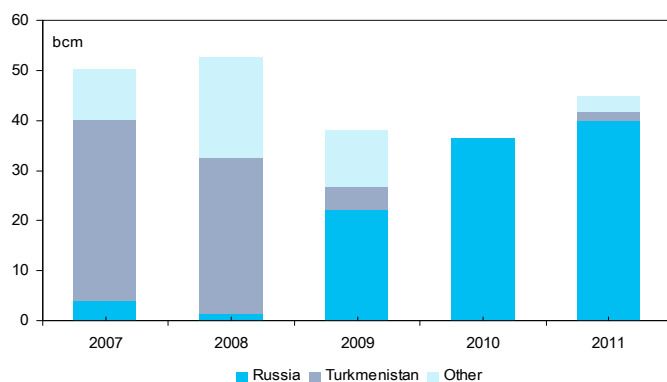
- Developing shale gas in the Black sea
- Increasing the use of coal under the support of China
- Arranging gas imports from the UK's RWE
- Reaching agreements with Qatar and Azerbaijan to import gas into the ports.

Under the positive scenario, the alternatives may cap most of the gas needs.

- The estimates of the annual gas extraction from Black sea cited by the press reach 4bcm (NG, 19 June)
- The agreement with China implies a US\$3.6 loan to Ukraine to build a coal gasification plant. The analogues in China may turn coal into up to 4bcm of gas annually, but Ukraine's plant capacity will be 6bcm (Kommersant.ua, 16 July)
- The press reports that RWE contract could provide some 5bcm annually
- In order to use Qatari or Azerbaijani gas, Ukraine intends to construct an LNG terminal processing 10bcm of gas annually by 2018.

The shale gas and coal that RWE, Qatar and Azerbaijan will be able to provide will reach at most 25bcm annually starting from 2018. Given that Ukraine wants to get a reduction of the gas import volumes from 50 to 27bcm, we set 27bcm as the benchmark external requirement of gas in 2012.

Figure 1. Switching gas import from Turkmenistan to Russia...



Source: UkrStat, Citi Research

Figure 2. ...was under unfavorable conditions



Source: CBR, UkrStat, Citi Research

Unless Ukraine increases energy efficiency, the country will likely be falling short some 5-10bcm of gas annually (assuming a 3% GDP growth). We also note that the deficit estimate is based on the assumption of the full capacity utilization.

Rebuilding partnership with Turkmenistan could make most of the projects unnecessary – unless it did not require Russia's consent. The import of Turkmen gas is being hindered by Russia, which controls the pipeline. We deem an alternative pipeline construction unfeasible given large financial requirements.

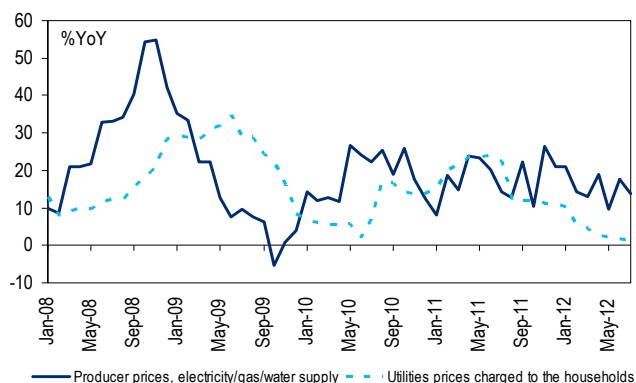
The risks are high.

- The shale gas development tender might be won by a Russian company, and the long-term implementation of the contract becomes uncertain
- Increasing coal extraction for gasification may require additional investments. The government plans to privatise some coal mines under the condition that the mines will be renovated, but this may result in higher prices for coal
- The construction of the LNG terminal implies private investments that in the current environment may be requiring a high rate of return
- RWE is a partner of Gazprom and, hence, there may be pressure from Russia to hinder the agreement between RWE and Ukraine.

Russia's response and Ukraine's progress are crucial. Should Russia resist the revisions of the gas contract, Ukraine may be more decisive in all the aforementioned projects. On the other hand, marginal revisions to the contract may make some of the projects unprofitable. However, we do not expect steps from the Russian side as long as the project financing conditions for Ukraine remain unclear.

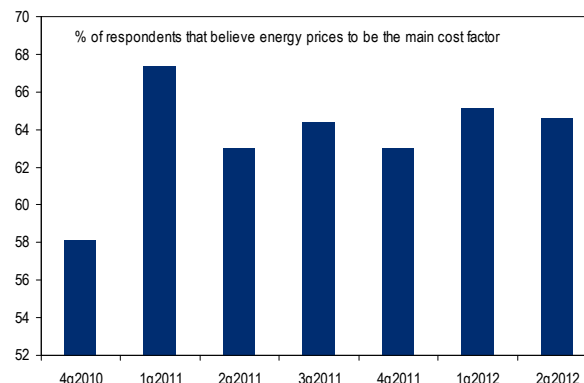
In the base case, we expect Russia to resist gas contract revisions as long as Ukraine opposes the gas transit system (GTS) privatization. Russia is still reluctant to grant discounts to Ukraine, indicating that after elections there would be only marginal changes to contract if any. Moreover, despite the ratification of the CIS free trade zone agreement, Russia has only decided to use 'a special formula' for gas export duties to Ukraine, thus signaling that it waits for the GTS negotiations. Whether or not Ukraine will change the GTS ownership structure will depend on the success in the gas-related projects, which, as we noted, are uncertain.

Figure 3. Producers subsidize households...



Source: UkrStat, Haver, Citi Research

Figure 4. ...and name energy as the main cost factor



Source: NBU, Citi Research

Appendix A-1

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