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Institute for Economic Research and Policy Consulting

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Reaching the point-of-no-return for Ukraine's gas sector

Georg Zachmann

Berlin/Kyiv, June 2016

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Reaching the point-of-no-return for Ukraine's gas sector

Executive Summary

Within only two years, Ukraine's gas sector was profoundly transformed from an inefficient, money-burning nightmare that perpetuated Ukraine's dependence on Russia to a sector with economic prospect that underpins Ukraine's energy independence. This was largely due to reversible factors such as low domestic gas consumption due to the economic recession and the ongoing conflict in the East as well as an unprecedented gas supply glut in international gas markets. In addition, the strong role of international donors and financiers, foremostly the IMF but also the World Bank, the EBRD and the EU that made gas sector reforms a condition for their support, pushed the country to undergo unprecedented reforms: Gas prices were adjusted to cost recovering levels, a gas sector legislation in line with EU gas market principles was enacted, the governance of Naftogaz was reformed and further reforms are under preparation.

However, there is a risk that the external factors that enabled Ukraine to wean itself off politicized gas imports from Russia might vanish relatively quickly. The European gas market might tighten, support from international donors might be shifted to new priorities and gas demand in Ukraine might rise again. This is dangerous as Ukraine's process to establish a sustainable and transparent market-based gas sector has not yet reached the point-of-no-return.

Ukraine should hence speed up its reform process before new interest could entrench. Our vision would be to split up Naftogaz in multiple gas production, multiple storage and a gas wholesale and a gas transmission company. The competitive segments should be quickly privatised in a transparent process. The transmission company should be pre-privatised, i.e., a controlling equity share should be sold to an international financial institution, with the aim of future full privatisation. This would enable true competition in the production, storage and wholesale segment of the gas sector.

Investments in the gas sector (especially foreign ones) require reliable institutions. The relevant institutions in Ukraine - including the energy regulator, the legal system and the antimonopoly commission – are still weak. To overcome this issue in the short-run we suggest to explore the possibility to temporarily grant parties the right to appeal any gas-sector related decision under Ukrainian law to international court or mediator. During this intermediate period of up to five years – the corresponding Ukrainian institutions can develop sufficient reputation.

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Acknowledgement

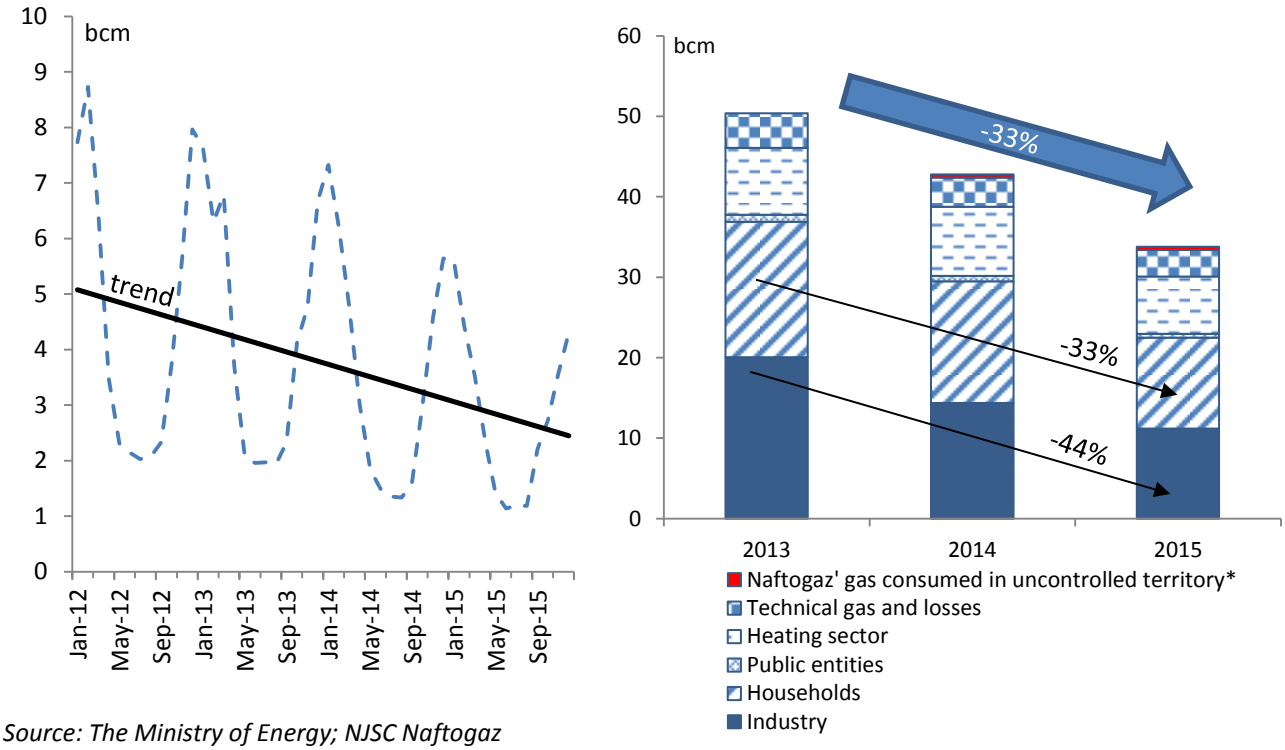
Very helpful comments by the Ukrainian energy reform NGO DiXi Group are gratefully acknowledged. All remaining errors are the author's sole responsibility.

Contents

1 Demand

Figure 1

Gas consumption (*left chart*: monthly; and *right chart*: by consumer group)



Source: The Ministry of Energy; NJSC Naftogaz

**Most of the uncontrolled territory is allegedly supplied from Russia while flows from the controlled territory were mainly stopped. Only the minor flows - reported here - were kept up, possibly for technical reasons*

Natural gas demand has been falling at increasing speed from 59.3 bcm in 2011 to 33.7 bcm in 2015. The substantial decline by 33% between 2013 and 2015 is due to a combination of factors. Donetsk, Luhansk and Crimea contributed about 14%, 7% and 4% of Ukraine gas consumption – so the conflict in parts of Donetsk and Luhansk oblasts and the annexation of Crimea might have cut about 15% of Ukraine's pre-conflict gas consumption[1]. This is slightly less than half the decline in Ukraine's gas consumption 2013-2015.[2] The other half of the decline in Ukraine's gas consumption is due to

(i) An effect of lower residential gas and heating consumption due to increasing gas and heating tariffs (see Figure 2), the decrease of consumption standards for households without metering[3] as well as some rationing.

[1] Note that we talk about gross consumption of the regions, i.e., we do not account for the significant gas production in Crimea that is discussed under the production section.

[2] The size of the loss of gas demand due to the loss of control over Crimea and parts of the Donbas is not officially reported. Our numbers represent an own estimate that relates to the uncontrolled territories gas consumption in 2013. For lack of data, we cannot assess the fall in demand in uncontrolled territories.

[3] See: http://voxukraine.org/2016/05/19/a-drop-in-gas-consumption-in-ukraine-peremoha-or-statistics/

(ii) A result of the economic downturn. Industrial output fell by 27.4%. Summer demand has fallen more sharply (about -40%) than winter demand (-30%) indicating the above-proportionate contribution of the drop in industrial activity.

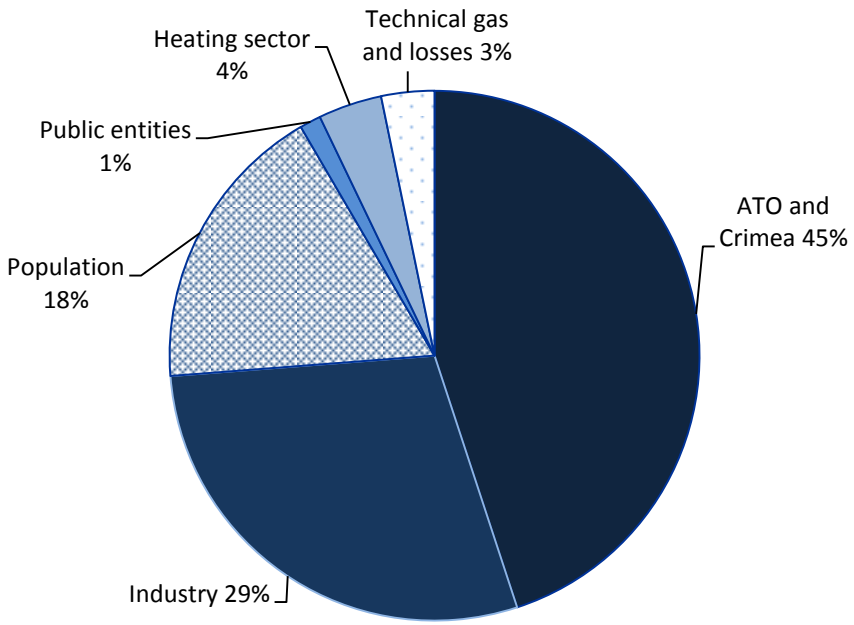
(iii) Lower technical losses due to less gas transit (-22.1%) and transmission (-33%) and possibly improved monitoring.

(iv) Winter temperatures since 2013/14 have been above average (see Figure 4)

The estimated contribution of the different drivers is reported in Figure 3.

Figure 2

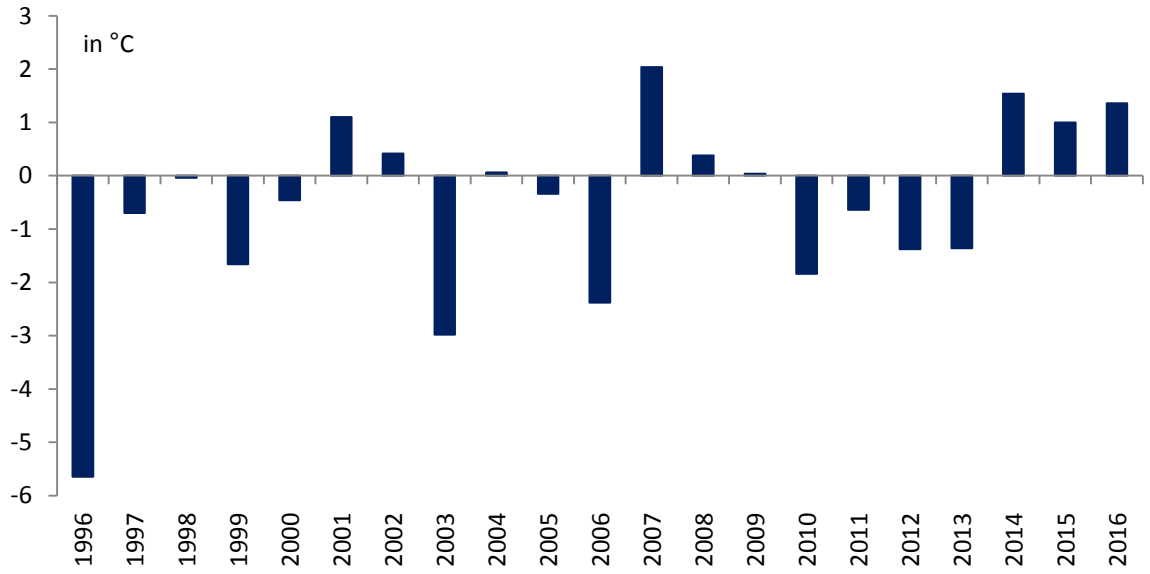
Drivers of gas demand reduction



Source: Own calculation

Figure 3

Average temperature in Kyiv Oct-Mar



Source: own calculation based on http://data.giss.nasa.gov/

Note: Oct-Dec of the previous year

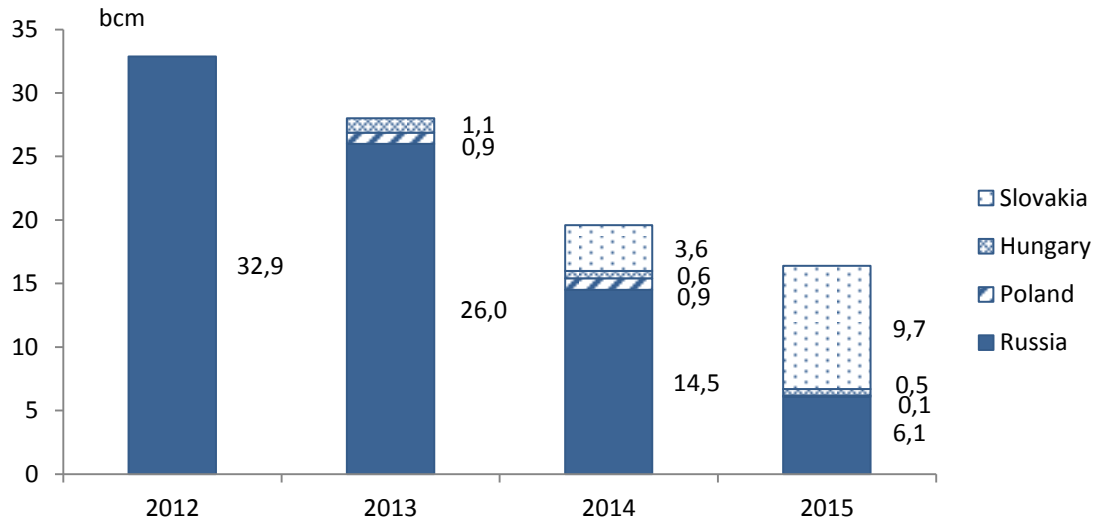
For 2016 it is expected that Ukraine's economy will stagnate or slowly recover (IMF 2015, estimates 2% yoy growth). Thus, industrial gas consumption might slightly recover. Residential gas consumption will see further downward pressure through gas tariff increase to cost-covering level made in May this year. In addition, numerous energy efficiency measures are being discussed and partly implemented with support from Western donors. This could bring down gas consumption of district heating companies and households. The technical potential for savings is still significant. It is estimated that in the medium term (3-5 years) investments into boilers, pipelines and heat-regulators could reduce annual gas demand by more than 5 bcm. In the longer term (10 years) a further decrease in annual demand by 9 bcm is feasible through thermo-modernisation of public and private buildings.

2 Imports

Ukraine has seen, both, a 50% decrease in gas imports and a profound change in its gas import structure. While imports directly from Russia fell by 80% from 33 bcm in 2012 to 6 bcm in 2015, imports from West were stepped up from zero to 10 bcm in 2015. Between November 2015 and June 2016 Ukraine did not buy any gas from Gazprom. At the same time, imports from the EU slightly decreased. Hence gas storage levels dropped from 12.0 bcm on June, 30th 2015 to 9.7 bcm on June, 30th 2016.

Figure 4

Gas imports



Source: NJSC Naftogaz

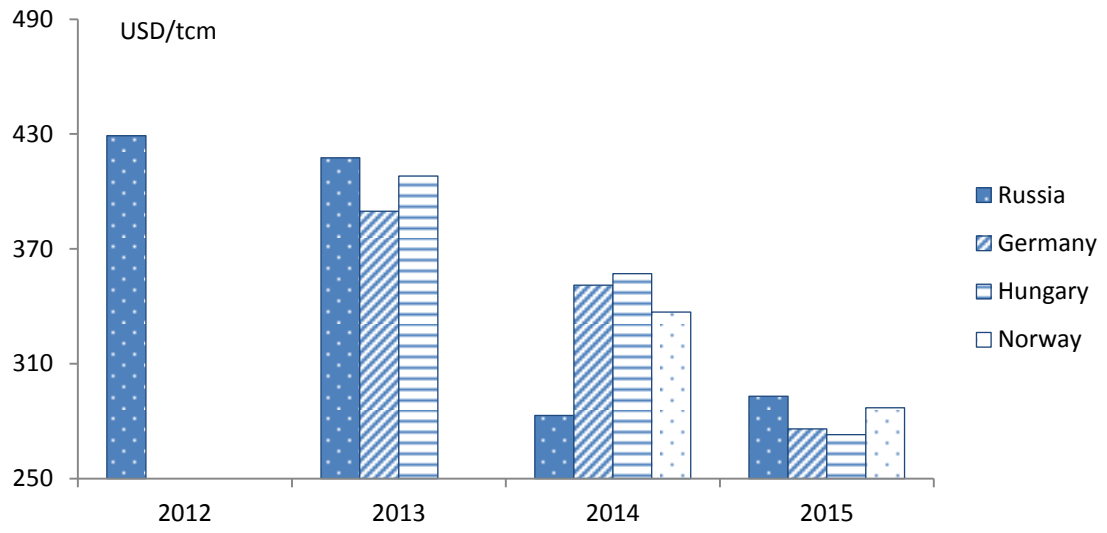
Technically, this was possible due to a massive increase in reverse flow capacities. As initial attempts to conduct substantial reverse flows in the existing pipelines or 'virtual reverse flows' [financial swaps of Russian gas in Ukraine with gas in the EU] were blocked by Gazprom referring to existing contracts, Ukraine and Slovakia agreed to establish a by-passing pipeline. At full capacity all proven reverse flow connections together allow Ukraine to import about 22 bcm/y [HU: 16.8 mcm/d; PL: 4.3 mcm/d; SK: 40 mcm/d]. Hence, direct supplies from Russia are no more pivotal for Ukraine's gas supply security. This, however, would require a constant use of these capacities even during summer in order to fill the storages, which involves substantial pre-financing as gas needs to be paid in advance by the importer.

This issue was partly addressed by a USD 300 m three-year revolving facility from the EBRD to Naftogaz that is earmarked as working capital to purchase natural gas in reverse flow mode. This allowed Naftogaz to tender for purchases of about 1.7 bcm of gas in 2015, and the company managed to pay the loan and interest back to EBRD in full. So it will be granted again in 2016. The loan agreement includes conditions on the transparent tendering of the gas as well as on a corporate governance reform of Naftogaz. The later has been subject to some political dispute in Ukraine, as it involved the Ministry of Energy losing control over Naftogaz, which is now subordinated to the Ministry of Economy. In addition to the EBRD facility, Naftogaz aims to attract a similar USD 500 m facility from the World Bank.

So far, most of the gas imports are conducted by Naftogaz (2015: around 95%[4]) whose supply arm enjoys preferential treatment. In contrast to private suppliers it does not have to pay VAT when buying foreign gas and it is not required to pre-purchase and store half of the monthly gas consumption in Ukrainian storages and to provide financial guarantees[5]. But first evidence[6] suggests that in 2016 private importers will play a larger role.

Figure 5

Annual average import gas price by owner country 2012-2015



Source: Ukrstat

Table 1

Weighted average price of gas imports by Naftogaz, USD/tcm

Period of gas delivery	From all directions, including cost of transmission to the Ukrainian border	From Europe, including cost of transmission to the Ukrainian border	From Europe, at the delivery point
Q1 2016	**198**	**198**	**191**
Q4 2015	228	232	224
Q3 2015	266	266	258
Q2 2015	268	275	267

Source: NJSC Naftogaz

Reverse flows, lower import requirements and low gas prices in the EU - gas prices at TTF halved from 27 EUR/MWh in January 2013 to 14 EUR/MWh in December 2015 - allowed Ukraine to obtain a much better gas import deal. This was also helped by the fact that Naftogaz brought its trading

[4] According to http://biz.censor.net.ua/resonance/13/kto_prodaval_gaz_ukraine_v_2015_godu_infografika the largest buyers of privately imported gas in 2015 where ERA Trading (427 mcm) and ArcelorMittal (121 mcm).

[5] http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245075916&cat_id=35109

[6] http://biz.liga.net/all/tek/stati/3271195-novyy-trend-chastnyy-biznes-osvaivaet-import-gaza-iz-es.htm, http://zn.ua/ECONOMICS/bolshe-poloviny-reversnogo-gaza-iz-evropy-v-ukrainu-importiruyut-chastnye-kompanii-209406_.html

relations in line with EU standards (e.g., through the use of the standard EFET contract) which allowed to rely on competing European suppliers such as Engie, Statoil, Trailstone and RWE[7]. Overall gas import cost dropped from about USD 11 bn in 2013 to about USD 4.5 bn in 2015. Compared to GDP – which according to IMF (2015) fell by 16% from 2013 to 2015, the share of gas imports fell from 2.8% to 1.3%.

The unusually relaxed gas market situation in the EU was a lucky coincidence for Ukraine. EU companies did not need all the gas they had committed to buy from Gazprom and due to the oversupplied European market; Gazprom was unable to effectively punish those companies that resold gas to Ukraine. Hence several EU gas companies competed to bring gas to Ukraine - resulting in a very moderate price for these reverse flows. In the future there are several risks to reverse flows that should not be ignored:

(i) Nord Stream II might enable Gazprom to largely circumvent Ukraine's and hence Slovakia's gas transit system. This might enable Gazprom to make reverse flows to Ukraine more expensive (as Ukraine would move from the centre to the end of the pipeline).

(ii) A currently difficult to conceive tightening of the gas supply situation in the EU would make EU gas companies preferring to cater for their own customers before engaging into selling redundant gas to Ukraine.

(iii) Any disruption of gas supplies through Ukraine (for example in the stand-off between Naftogaz and Gazprom with regards to their contractual obligations) would mean that less gas arrives in the East of the EU, which will then be very unlikely to provide full reverse flows.

[7] According to http://biz.censor.net.ua/resonance/13/kto_prodaval_gaz_ukraine_v_2015_godu_infografika their 2015 sales to Naftogaz were: 2.9 bcm of Engie, 2.4 bcm of Statoil, 2.0 bcm of Trailstone, 1.4 bcm of Gazprom and 1 bcm of RWE.

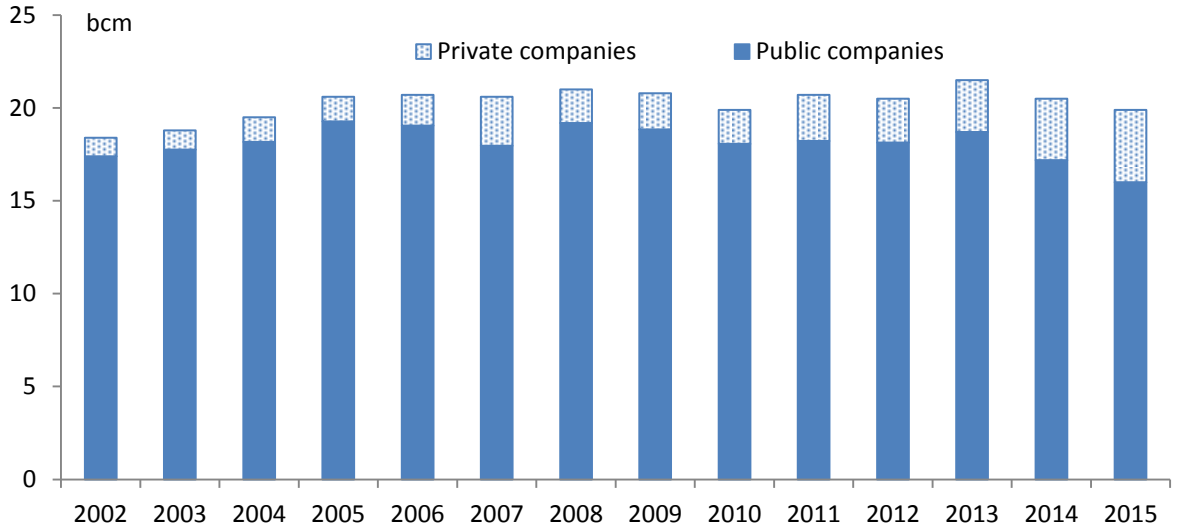
3 Production

Gas production in Ukraine has fluctuated around 20 bcm/y for more than a decade. Most of the gas is still produced by public companies – most notably UkrGasVydobuvannya (UGV)[8], a subsidiary of Naftogaz. Gas production by the state-owned Chornomornaftogaz in the Black Sea around Crimea (1.7 bcm in 2013) is excluded from the statistics as it is currently not controlled by Ukraine. The company was seized by the Crimean regional parliament in early 2014.

Production in mainland Ukraine in 2015 slightly declined compared to 2013. One reason was the decision of the parliament in summer 2014 to increase royalties from 14%/29% (for conventional and deep wells, respectively) to 55%/28% and 70% for gas produced under joint activity agreements (JAAs).

Figure 6

Gas production in Ukraine by public and private companies



Source: Ukrstat; Naftogaz; Energobusiness

It is expected that Ukraine could substantially increase its gas production when the regulatory framework becomes more permissive. The main regulatory bottlenecks are the unfavourable conditions for the access of private companies (obtaining licenses, access to network, rule of law, taxation) and the low gas prices paid to public companies. There has been some improvements on both fronts. The taxes hikes from 2014 were partly undone at the beginning of 2016 and temporary obligations to sell gas to Naftogaz ran out. Probably due to the politicised environment, currently only smaller private companies with some oligarchic interests[9] are able to successfully operate in Ukraine. Two major oil and gas companies - Shell and Chevron - ceased gas extraction projects in Ukraine and Exxon had to stop its Black Sea projects due to the annexation of Crimea. The near

[8] UGV is the largest gas production company in Ukraine. It extracted 14,528 billion cubic meters of gas in 2015.

[9] Poltava Petroleum Company / JKX Oil&Gas (I.Kolomoyskyi), Naftogazvydobuvannya / DTEK (R.Akhmetov), Geo Alliance (V.Pinchuk), Burisma and KUB-Gas (O.Zlochevsky), Karpatygaz / Misen Energy (presumably Boyko, Firtash), Regal Petroleum / Smart Energy (V.Novinskiy).

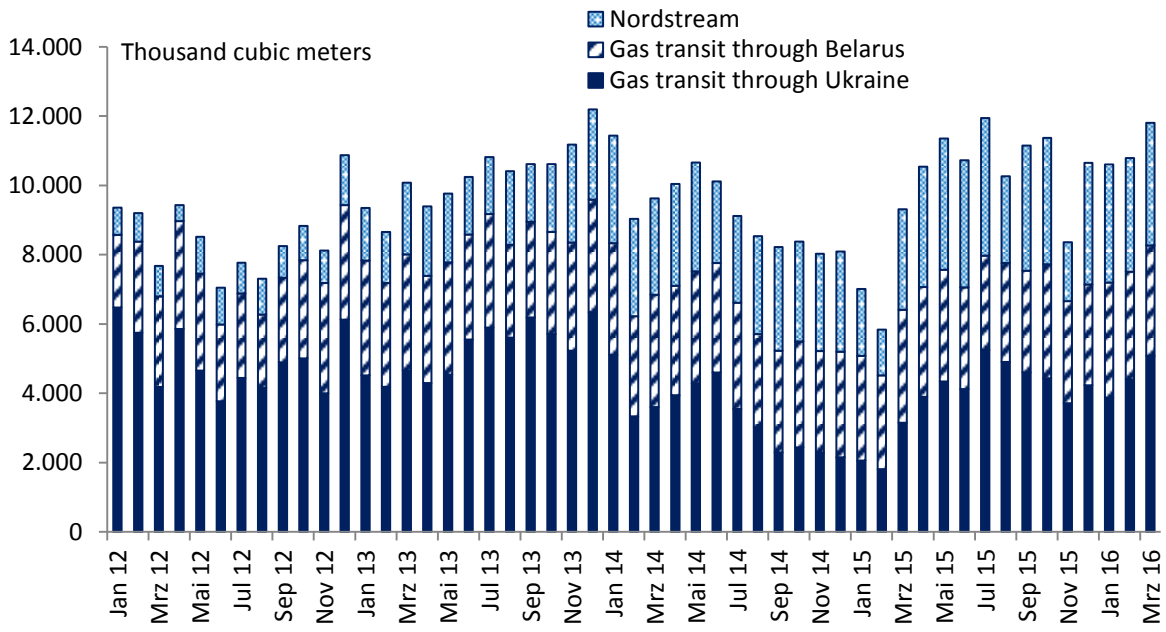
future might, however, see a complete sea-change. Due to the recent price increase UGV now sells gas to Naftogaz at a regulated price of 4849 UAH/tcm, which is 3 times higher than before. This price of around 185 USD/tcm is in line with import prices and should enable UGV to invest and ramp up its output. Furthermore, the government is discussing the restructuring of Naftogaz and one of the considered options is to privatise UGV to a western investor.

4 Transit

Gas transit through Ukraine has been falling massively in the past decade amid the construction of Nord Stream 1 (that is used by Russia to send gas directly to Germany), the full usage of the Belarus transit-route and the falling EU gas demand. After a strong drop in 2014, it started to stabilise in 2015. From April 2015 to March 2016 41% of Russian gas transit was sent through Ukraine, 28% through Belarus and 31% through Nord Stream.

Figure 7

Share of individual routes in gas from the East in January 2016



Source: IEA

Naftogaz states that in 2014 the gas transit revenues amounted to about USD 2 bn, based on the existing gas transit contract from 2009. At the end of 2015 the Ukrainian Energy Regulator (NERC) came up with a new gas transmission tariff structure that would also have affected gas transit tariffs. It was supposed to replace the current gas transit contract with Russia by a non-discriminatory regulated tariff as applicable in EU gas legislation. But this tariff-scheme was tailored to increase gas transit tariffs significantly, unless Gazprom commits to significant gas-transits beyond 2019 –the year at which Gazprom plans to inaugurate Nord Stream II. As Nord Stream II is planned to largely circumvent Ukraine – Gazprom is not interested in committing beyond 2019 and insists that Ukraine applies the existing gas transit contract that expires in 2019. Naftogaz argues that the transit contract is not in line with EU legislation – which Ukraine has to adopt due to its membership in the energy Community. Inter alia Naftogaz would like to make Ukrtransgaz the formal counterpart of Gazprom (which currently is Naftogaz) - so that Ukrtransgaz can develop into a fully unbundled transmission

system operator meeting the requirements of the third energy package. It hence seeks a verdict from the Stockholm Court of Arbitration on the transit contract.[10]

Until a settlement in Stockholm that will not materialize before 2017, the current transit contract will remain in place.

5 Reforms

"*Ukraine managed to achieve an impressive record in transposing the Third Energy Package, thus becoming the first Contracting Party of the Energy Community with a significantly developed regulatory framework of the natural gas market.*" [Energy Community Country Brief, Spotlight on Ukraine Issue 3, 9 March 2016]

Through the IMF programme, the membership in the European Energy Community and the Association Agreement with the EU, Ukraine has pledged itself to open the gas sector, restructure the state-owned vertically integrated gas-monopolist Naftogaz and make gas tariffs cost-reflective. This has already resulted in important reforms – but crucial steps still remain to be taken. The Energy Community Secretariat reports that of 23 main actions to reform the gas sector that the Ukrainian Cabinet of Ministers agreed with the World Bank and the Energy Community Secretariat (ECS), by June 2016, six were/are significantly delayed.[11]

Table 2

Key gas sector reforms

Reform	Based on international commitment
Gas tariff increase	IMF Program (and linked funding from the EU and IFI's)
Gas sector reform	Energy Community Membership, World Bank loan and IMF Program
Naftogaz governance reform	USD 300 m EBRD loan

Source: own research

[10] A good discussion on key-issues of the Russian-Ukrainian gas disputes in the Stockholm court can be found at: http://www.energyworldmag.com/20/03/2015/ukraine-ukrainian-russian-gas-war-in-stockholm-arbitration/

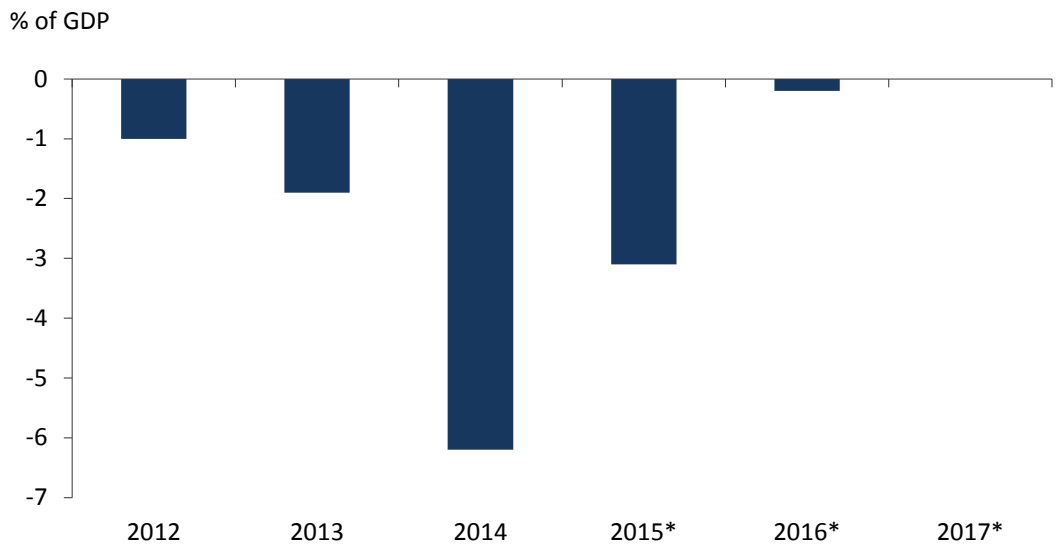
[11] www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/4204380/35EEC5A192E3640BE053C92FA8C01AA6.pdf

5.1 Price adjustment

In 2014 gas prices for households were five times lower than the actual market price so that the government needed to compensate Naftogaz from the national budget. In 2014 the subsidy reached 5.7 percent of GDP. The wide differentiation in gas tariffs for different consumers encouraged massive corruption and discouraged efficient energy use. Since 2014 household gas tariffs have increased six fold from 1,048 UAH/tcm to 6,870 UAH/tcm. On the one hand, this increase in tariffs certainly helped to stabilise the financial situation of Naftogaz and thereby positively contributed to the stabilisation of the state budget. On the other hand, it obviously contributed to the contraction of domestic gas demand and triggered incentives for long-term oriented efficiency enhancing investments.

Figure 8

Naftogaz Deficit

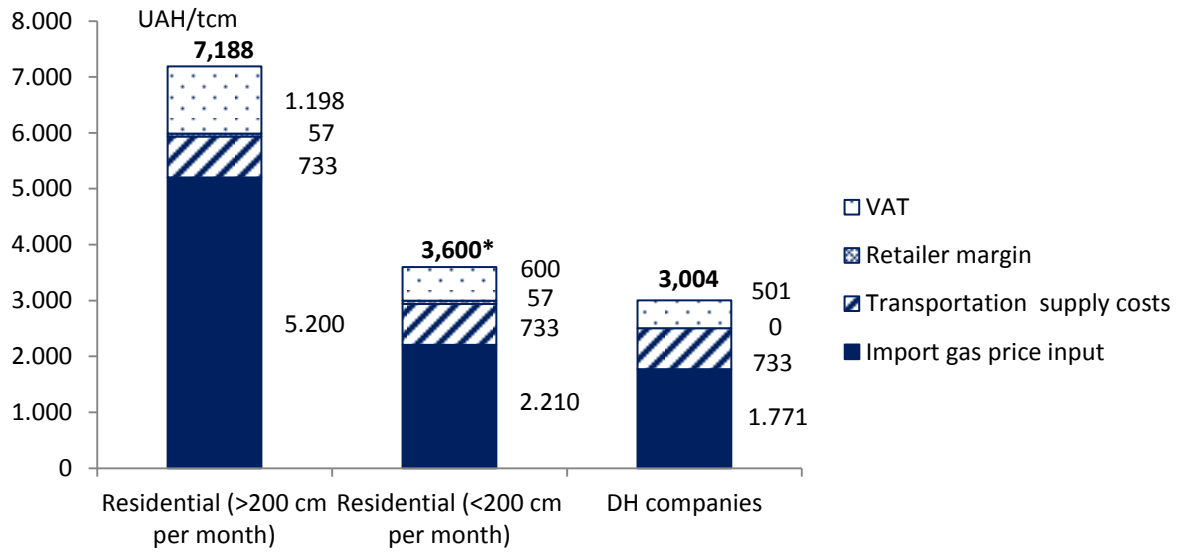


*Source: IMF, *forecast*

The latest price step was in May 2016. Somewhat unexpectedly – and faster than previously agreed with the IMF – the new government of Ukraine increased gas and heating tariffs arguably to restore the IMF program. It decided to abolish the existing discounts for residential consumers and district heating companies and set a unified tariff that is linked to the price of gas imports.

Figure 9

Residential prices, prior to 2016 decision

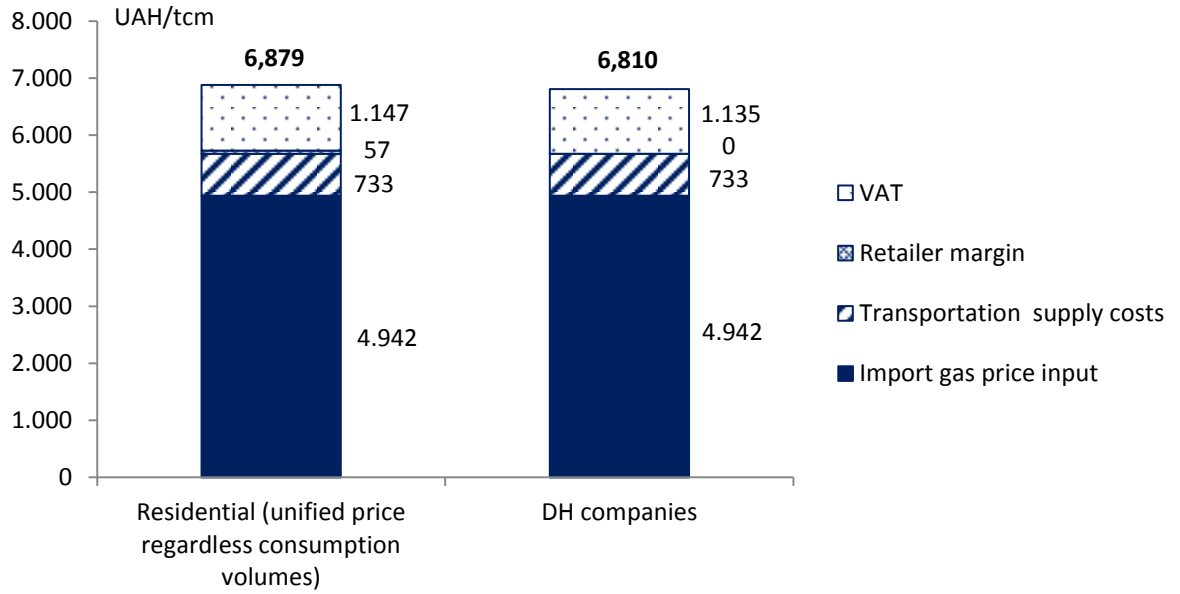


Source: Own display

*Note: * only during the heating season 2015/16*

Figure 10

Residential prices, after April 2017, 2016 decision



Source: Own display

Note: Difference is due to retailer margin (for residential) and corresponding difference in VAT

As a consequence, the weighted average gas tariffs for residential consumers have been raised from UAH 5035 per tcm to UAH 6870 per tcm or by 37%. The district heating gas prices have jumped by 127% from UAH 3004 tcm to UAH 6810 per tcm. In addition, the Government decreased the social

norms used to calculate the housing and utilities subsidies for households with gas meters from 7 m^3 to 5.5 m^3 per m^2 of space floor during the heating season.

Consequently, gas tariffs are now about cost-reflective.

5.2 Gas market reform

The Ukrainian gas sector in 2014 was characterized by state-owned companies and regulated tariffs. Only gas distribution was privatized – mainly to Dmytro Firtash's Group DF and large consumers were allowed to buy gas at market conditions (if they managed to get access to gas transmission, which was notoriously intransparent). The presence of major oligarchs interest made (and makes) reforming the sector difficult.

But Ukraine's international commitments provided the momentum to initiate a substantial reform process that should make Ukraine's gas sector legislation compliant with the EU Third Energy Package. The Gas Market Law of October 2015 provided the legal basis for "unbundling" (that is, separating gas transmission from gas production and supply) and opening to suppliers' free access to the gas infrastructure. It also liberalized the gas market so that all customers are free to choose gas suppliers and cost-reflective prices will ensure competition.

By early 2016, Ukraine – with the support from the Energy Community and other partners – has adopted over 50 secondary acts and by-laws required to ensure full enforcement of the law, including network codes, standard agreements, new licensing conditions, methodologies for tariff calculation, settlement and review procedures, reporting forms, compliance programs.[12] Several important elements of the Ukrainian gas market design are, however, still under discussion. Rules on gas balancing and trading need, for example, still to be adapted. One question is, for example, whether and if yes which type of gas trading platform wants to develop in order to create a transparent, liquid and competitive market[13].

In the past the energy regulator had close political links that were used to set important tariffs (for coal, electricity generation, electricity consumption, etc.) along political preferences. To enable a competitive market with cost-reflective prices, Ukraine plans to increase the independence of the regulator. A law on the independent energy regulator was delayed to in-fights about the selection of the members of the regulatory board – passed the first reading and might be adopted in summer 2016.

5.3 Naftogaz restructuring

The state-owned gas sector incumbent Naftogaz employs about 80,000 people and controls gas transmission, gas storage as well as large parts of gas imports and domestic production of gas and oil. It used to be a synonym for wastage, corruption and opacity. Oligarchs with access to the Naftogaz management were able to extract substantial assets and rents from the Ukrainian gas business (note that when consumption was 50 bcm and international prices at 400 USD/tcm, the implicit gas wholesale turnover was up to 20 bn USD).

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[12] Quoted from Dixi(2016).

[13] This inter alia results in the lack of a clear gas price signal for the Ukrainian market. Hence, retail prices for housholds are linked to German hub futures prices (for a critical assesment by the consultancy NGBI see http://ngbi.com.ua/FB/315%20pravki1706.pdf).

Hence, reforming Naftogaz is not only a prerequisite for developing a functioning gas market, but also for combating political corruption. First, thanks to the increased tariffs, falling demand also for subsidized gas, strict requirements to encourage financial discipline, consumers' obligation to pay Naftogaz in advance and tools to recover debts Naftogaz substantially reduced its deficit. Naftogaz's reduced its loss from 5.7 bn € in 2014 to 1 bn € in 2015. Second, a new management team was introduced that strived to improve management, substantially increased transparency (in 2014 Naftogaz for the first time published a comprehensive Annual Report) and improved interaction with domestic and international stakeholders. The procurement system was improved and especially the new head of the production subsidiary UkrGasVydobuvannya (UGV) Oleg Prokhorenko conducted a somewhat successful battle against internal corruption. In 2015 the control over Naftogaz was transferred from the Minister of Energy to the Ministry of Economy. And in spring 2016 a new supervisory board for Naftogaz was selected, whose five members include three senior Western gas sector people.

A key question is the restructuring of Naftogaz. To increase efficiency (and to be in line with the Third Energy Package) the vertically integrated company needs to be effectively unbundled. Different models are still being discussed. At the beginning of July, the Cabinet of Ministers of Ukraine approved the plan to create two new entities: JSC Main Gas Pipelines of Ukraine (MGU) and JSC Underground Gas Storage Facilities of Ukraine (UGSF). They will take over the respective assets of Ukrtransgaz. The gas transmission assets will be transferred to the new TSO only after the final arbitration award on the claims between Naftogaz and Gazprom currently considered by the Arbitration Institute of the Stockholm Chamber of Commerce. It is envisaged that Ukrtransgaz will stay under Naftogaz control until the divestment of its non-core assets and resolution of all outstanding matters of dispute related to the company and that underground gas storage assets are transferred from Ukrtransgaz to the new operator not earlier than an in-depth economic and technical analysis is conducted, aiming to work out the most effective model for their use and management.

So the decision on a new structure of Naftogaz is essentially postponed.

6 Policy Recommendations

Gas oversupply in Europe, falling gas demand in Ukraine, the impossibility to circumvent Ukrainian gas transit for Gazprom and the political support by the West allowed Ukraine to wean itself off politicized gas imports from Russia. This independence enabled Ukraine to embark disregarding Gazprom. But it was only the strong push by external supporters (IMF, EU, …), which made their significant financial help conditional on a deep reform of the inefficient and corrupt Ukrainian gas sector, that shifted the internal political balance inside Ukraine and allowed the country to reform.

But several of these external factors that allowed reforms might vanish relatively quickly. The European gas market might tighten, reverse flows might become more expensive due to Nord Stream II, support from international donors might be shifted to new priorities and gas demand in Ukraine might rise again. This is dangerous as Ukraine's process to establish a sustainable and transparent market-based gas sector has not yet reached the point-of-no-return. Ukraine should hence speed up its reform process before momentum is lost and resistance to reforms by interest groups could entrench.

6.1 Naftogaz restructuring

As laid out previously there are different visions for restructuring Naftogaz. Good business and legal arguments could be brought up for keeping different branches of Naftogaz together. However, we think that only breaking up Naftogaz could create true competition and overcome the obstructive incumbent-government nexus. Our vision would be to split up Naftogaz in multiple gas production, multiple storage and a gas wholesale and a gas transmission company. The competitive segments should be quickly (within 1-2 years) privatised in a transparent process. This would enable competition to develop. And we would expect that – in contrast to a national gas production incumbent with strong political leverage - competition between different medium-sized producers would stimulate efficient investment in gas production. This would help reducing Ukraine's gas import dependency. The transmission company should be pre-privatised, i.e., a significant equity stake (that allows to name some board members and influence strategic decisions of the company) should be sold to an international financial institution, with the aim of future full privatisation. This would better ensure the non-discriminatory treatment of gas imported and produced from different players – which is a prerequisite of functioning competition – than a purely state-controlled company.

6.2 Institution building

One big issue in Ukraine is the institutional quality, and the trust of the actors in Ukrainian institutions. There is a vicious cycle of market players not trusting the institutions and thus not getting active, hence only leaving the sector to state-owned companies or companies which enjoy special political protection. Lack of market players reduces the pressure to reform the key institutions in the sector: the legal system, the antimonopoly commission and the energy regulator.

To overcome this chicken-and-egg problem we suggest a time-limited phase of external supervision for Ukrainian gas-sector institutions. For an intermediate period – during which appropriate legal institutions including an independent energy regulator and antimonopoly commission can develop sufficient reputation – parties could be provided with the right to appeal any gas-sector related decision of a Ukrainian legal institution at a specified international court or mediator (e.g., a foreign energy regulator or antimonopoly committee, the energy community secretariat or a court).

So Ukrainian institutions would be in charge to implement Ukrainian legislation, and only if a party can reasonably claim an undue decision (or delay) the Ukrainian institution can be overruled. As being overruled by the external appeal body is not good for the reputation of the Ukrainian institution – it should have a strong incentive to quickly improve the quality of its decisions.

References

DiXi Group (2016) A swot analysis of the models of restructuring of the group NJSC Naftogaz of Ukraine, April 2016

DiXi Group (2016) Ukraine's Gas Sector Reform: A Future Win-Win for Ukraine and Europe

Energy Community Secretariat (2016) Conditional Approval of the unbundling model for the transmission system operator of natural gas in Ukraine, 6 May 2016

Energy Community Secretariat (2016) Energy Community Country Brief Spotlight on Ukraine Issue 3, 9 March 2016

Ukraine's Gas Market Reform: Green Light to Investments in Natural Gas Transmission, Production and Energy Efficiency, presentation by Andriy Kobolyev, CEO, Naftogaz of Ukraine, July 2015 http://www.naftogaz.com/files/Information/2015-07-13%20UA-US%20Naftogaz%20Forum%20Presentation.pdf

STAT: Gas consumption 2015 http://www.epravda.com.ua/news/2016/01/15/576715/ http://newsru.ua/finance/15jan2016/na_21_procent.html

STAT: Gas, electricity and coal, the informational briefing from MinEnergo http://mpe.kmu.gov.ua/minugol/doccatalog/document?id=245079340

EIR article for coal imports for Ukrainian TPPs // http://eircenter.com/ua-analiitika/import-vugillya-dlya-tes-problemi-ta-perspektivi-1/

Naftogaz Annual Report 2014 // http://www.naftogaz.com/files/Zvity/Naftogaz_Annual_Report_2014_engl.pdf

Quarterly average gas import prices // http://tsn.ua/groshi/demchishin-nazvav-vartist-yevropeyskogo-gazu-dlya-ukrayini-571930.html

The estimate of state-owned Naftogazvydobuvannya losses of extraction in Donbas due to ATO // http://www.naftogaz.com/www/3/nakweb.nsf/0/956937E95620D3A3C2257F1C0050157E?OpenDocument&Expand=1.1&

Gas imports in 2015, Uktransgas press-release // http://economics.unian.net/energetics/1230175-ukraina-v-2015-godu-udvoila-import-gaza-iz-evrosoyuza.html

Gas imports in 2013 // http://www.epravda.com.ua/news/2014/01/3/413075/

EBRD gas loans – Bloomberg article // http://www.bloomberg.com/news/articles/2015-09-30/ebrd-approves-300-million-loan-for-ukraine-winter-gas-purchase

Gas production analytical note by MinEnergo // http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245073540&cat_id=245070661

Gas production analysis in 2013 (historical series) // http://news.finance.ua/ua/news/-/318979/pryvatnyj-gazovydobutok-pishov-v-minus-povernutysya-ne-obitsyav

The analysis of gas production in 2015 (estimations) // http://finbalance.com.ua/news/Naskilki-mozhe-zrosti-vidobutok-hazu-v-Ukrani-pislya-znizhennya-rentnikh-platezhiv

IMF (2015) World Economic Outlook Database, October 2015 // https://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx

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