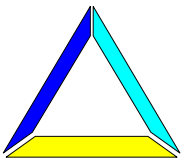
INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING IN UKRAINE
GERMAN ADVISORY GROUP ON ECONOMIC REFORM

Reytarska 8/5-A, 01034 Kyiv, Tel. (+38044) 228-6342, 228-6360,
Fax 228-6336
E-mail: institute@ier.kiev.ua, http://www.ier.kiev.ua



T16

Multi-Utilities: Panacea or barrier to competition?

- an assessment for the case of Kyiv -

Executive summary

The present study discusses the question whether horizontal integration of different utility providers into one joint holding can be seen as a panacea for solving their substantial problems, or whether it even deteriorates their perspective for competition-oriented development in the future. Our conclusions are as follows:

1. Merging e.g. suppliers of central heating, electricity, gas and water into one single holding will make it easier for the holding to reduce the scope for interfuel competition in e.g. heating and hot water, the only type of competition that so far prevails on Ukraine's utility markets.
2. Insufficient and inappropriate regulatory policy remains to be the main obstacle for development of competition. Against this background, merging the four monopolists bears the substantial risk of creating a strong, non-transparent formation of vested and not necessarily competition-oriented interests, which might prove to be very difficult to overrule in the future when further advances towards competition are intended.
3. At the same time, no significant economic gains are expected from such a merger. While problems of mutual indebtedness of the four utilities could be solved and payment discipline might be improved, the potential for significant efficiency gains is rather limited.

Thus, joint Multi Utility holdings are unlikely to be a panacea for solving the substantial problems of utility provision in Ukraine. Instead, it limits the already low level of currently existing competition and makes it more difficult to advance towards more sophisticated modes of competition in the future. Finally, even if the merger allows realizing some moderate economic benefits, this only amounts to ease present problems of Kyiv's utilities while the real cause underlying the poor performance – weak regulation – is not solved and might than be even more difficult to be solved in the future.

Outline

Introduction

1. What forms of competition are possible in utility sector?

2. What is the level of competition in utility sector of Ukraine?

2.1 Current level of competition

2.2 Factors limiting further development of competition

3. Will the merger stimulate or limit development towards more competition?

3.1 The impact of the merger on competition in the current situation

3.2 Limits to future development towards more competition

4. Economic effects of the merger

4.1 Payment enforcement

4.2 Efficiency gains

4.3 Investments

4.4 Management capacity

5. Our assessment

Introduction

Recently, Kyiv City State Administration proposed to merge the public utilities Kyivenergo, Kyivgas, Kyivvodokanal and Kyivcitylight into one joint holding company. Initially, the Antimonopoly Committee of Ukraine (AMC) prohibited the merger of the two utilities, Kyivenergo and Kyivgas. Although this decision was overruled in court, the initiators refrained from the idea of merging only two companies and asked the AMC for the approval of the creation of a multi-utility holding, which would consist of the four utilities mentioned above.

According to Kyiv City State Administration, the merger will stabilize service provision, improve quality of services and raise production efficiency of the utilities. The plan also refers to positive international experience in the sector, however without further specification. In contrast, the AMC argues that without potential competitors and appropriate regulation the merger will increase monopoly power of the utilities, and thereby reduce incentives to cut costs of operation and to improve the quality of service.

The present study assesses the economic outcomes of merging activities of utilities in Ukraine, with a particular focus on the pioneering case of Kyiv's utility provider. Our starting point is the fact that competition in utility sectors is limited by strong entry barriers due to the typical reliance on infrastructure networks, which are costly to install and impossible to divide. Against this background, assessing the impact of a merger of four utilities – each operating as a monopolist on a respective market – on the level of competition development on each of those markets appears to be a needless task. However, since an 'appropriate' mixture of external regulation and incentive settings can still create an environment that simulates competitive pressure (with positive impacts on tariff levels and service quality), the current monopoly position of the four utilities should not be understood as

unavoidable. Accordingly, assessing the impact of the proposed merger on competition in the respective sectors is necessary.

Our assessment provides answers to the following three questions:

1. What forms of competition (or conditions fostering competition) are possible in the utility sector?
2. What is the level of competition in the sector in Ukraine and in particular in Kyiv?
3. Will the merger stimulate or limit the development towards more competition?

1. What forms of competition are possible in utility sector?

Even if a single or only a few players dominate a market, economists and policy makers around the world increasingly recognize that efficiency gains induced by competitive pressure can still be realized through 'simulation' of competition and creation of 'conditions conducive to competition'. For the case of utility sectors, advantages from competition can be introduced through the following four modes, sorted by the increasing degree of competition:

- Interfuel competition where consumers choose between different energy sources (e.g. power or gas) for the same purpose (e.g. heating or hot water). This type of competition is natural and stimulates efficiency improvements by power generating and supplying enterprises.
- Incentive regulation of utilities, which provide stimuli for targeted activities. A regulator can use a 'price cap' approach and fix an upper bound for a utility's price to motivate operators to reduce costs and improve efficiency in order to receive higher profit. In contrast the 'profit cap' approach limits the maximum rate of return on assets providing a strong incentive for operators to invest (maintain and rehabilitate the system). Incentive regulation can incorporate a benchmark to evaluate the performance of the utility on the basis of the performance of the same utility over time, or through the use of an index or a control group of comparable utilities.
- Public Private Partnership. Another way of simulating competition is to replace competition **on** a market by competition **for** a market. Therefore, the right of operating a utility service is offered to private companies through a competitive bidding procedure that selects the bidder who submits the most efficient offer (e.g. the lowest tariff at given quality level). Typically, the selected bidder will be given the right to operate the service jointly with public/municipal entities, while an appropriate type of incentive regulation guarantees high quality of services to consumers as well as profitability to the operators
- Network/third party access is the permission for any company to use a distribution network for a non-discriminatory user fee in order to compete with other utility providers. In principle, this can be achieved

either by separating network and generation into different entities, or by regulating network access for third parties.

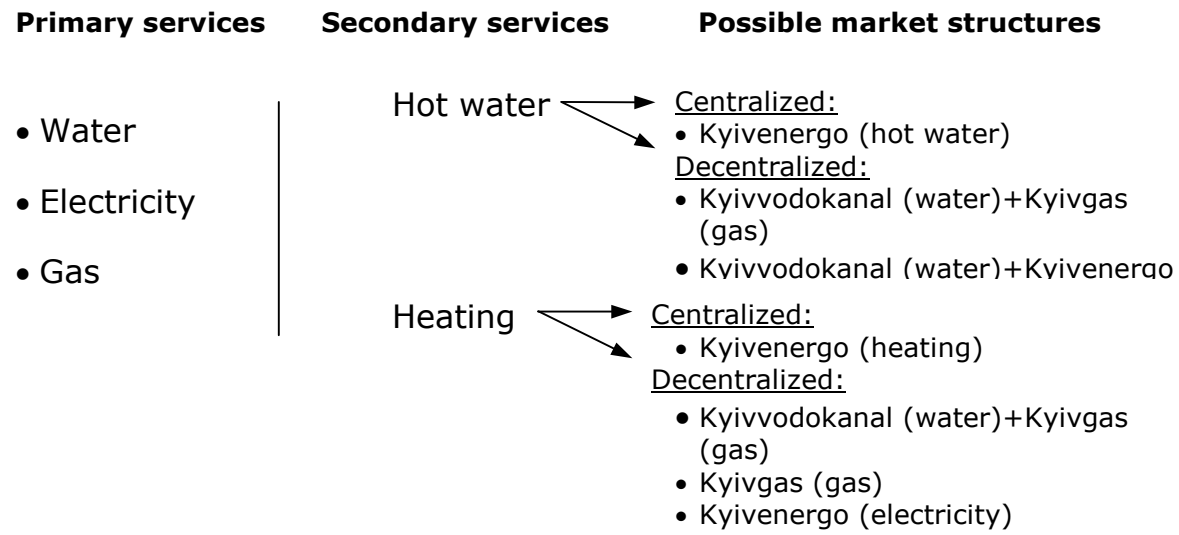
A combination of those four means is in principle capable to create efficient results. But in contrast to a 'regular' competitive market with a large number of operators there is no self-enforcing mechanism, which guarantees the desired outcome (increasing efficiency of the operators performance). Consequently, stimulating competitive conditions through any of the four alternatives mentioned above requires public regulation that levels the interests of agents involved, in particular by ensuring high quality of services for consumers and sufficient cost coverage for suppliers while preventing price discrimination and monopoly rents.

2. What is the level of competition in utility sector of Ukraine?

2.1 Current level of competition

In Ukraine the degree of competition on utility markets is rather low. Essentially, there is only some possibility for interfuel competition, e.g. through using autonomous boiler systems instead of the centrally provided heat and hot water, which is especially interesting for industrial customers such as service providers, construction firms etc.

Figure 1. Potential for interfuel competition



Interfuel competition on utility markets concentrates on provision of 'secondary' services like hot water and heating. In general, the provision of these services can either be centralized (i.e. supplied by Kyivenergo) or decentralized as presented in Figure 1. Ideally, every consumer has heating and hot water metered separately and can thus freely choose the provider for

secondary services without having to pay for unused options. However, in Ukraine and in particular in Kyiv, the scope for such competition is technically and even administratively limited. First, there is no independent regulator who enforces installation of meters. Second, there is no clear legal basis to guarantee that the respective commissions, which approve and regulate installation and maintenance of boiler and heating systems, are free from political interference. On the contrary, members of such commissions are often employees of utility providing companies. While this is justified by the technical qualification of such experts, it clearly enables their companies to influence the decisions of such commissions.

2.2 Factors limiting further development of competition

The further stimulation of competition on utility markets is at the moment rather limited, mainly due to **poor regulation**. On the respective markets, the problems are as follows:

- Electricity and gas:

  The National Electricity Regulatory Commission of Ukraine (NERC) has a mandate to regulate the power industry and the distribution of gas to final consumers. The NERC uses a cost-plus approach to tariff setting that ensures normative profits for operators, but fails to provide efficiency-stimulating incentives. As a result, regulated firms do little to improve their performance (e.g. through increased energy efficiency or reduction of losses), since any cost reduction achieved will translate into lower consumer tariffs. On the contrary, guaranteed cost coverage stimulates misuses by generating higher costs than necessary.

- Heating, water supply and wastewater treatment:

  Tariffs for these services are not set by an independent regulator. Instead, this is done through negotiation between a local administration and the management of a utility. Such a procedure is not free from political interference and suffers from conflict of interests because the local administration is almost always simultaneously owner and tariff regulator of enterprises. Consequently, negotiations often result in inappropriate tariffs that do not cover costs of operation (for instance, on average tariffs of water supply cover only 65% of costs, heating tariffs cover 83%[1]). At the same time, there are no hard budget constraints on the utility company and losses are not compensated by public budgets.[2]

The consequences of those insufficient schemes of regulation are generally the non-transparency of utility providers, often not even organized as corporatized public enterprises, and various types of cross subsidization,

[1] The State Committee on Housing and Municipal Economy.

[2] Recently Verkhovna Rada of Ukraine returned for the repeated first reading the law that would enforce local administrations to compensate the losses of utilities from below-cost tariffs set by the administrations.

either politically motivated (from industry or public budgets to households) or simply as a result of combined and non-transparent operations (e.g. for power and heat generation).

Furthermore, in the absence of clear regulatory responsibility and legal means of contract enforcement, many consumers of utility providers have refused to pay for consumed services, forming a vicious circle, as low payment discipline limits funds for investment, which worsens service quality, which even lowers payment discipline etc. This in turn causes a number of problems, which by now have also become additional impediments for a future introduction of competition on utility markets:

- The rate of payment collection for all utility services is fairly low, e.g. 83% for the period from January to July 2003. Although the debt of Ukraine's population for the housing-communal services fell by 0.7% between July and August 2003, remaining debt still stands at UAH 7,42 bn.[3] The problem arises mainly for a sector where cutting non-paying customers from supply is either problematic (power), or technically and politically impossible (water).
- Mutual indebtedness between different utility providers has become a serious problem. For instance, power and heating providers drastically decreased their payment to gas providers for consumed natural gas from December 2002 to June 2003. By the end of 2001 the total debt for gas of public utility companies was UAH 760 m.[4] Mutual indebtedness between water and energy supply enterprises also continues to increase. Since the cost of electricity is more than 30% of the total cost of water supply, water supply companies are the major debtors to electricity distribution companies while heating utilities (like Kyivenergo) are not eager to pay for water they use to the supplying companies (like Kyivvodokanal).
- The state often grants privileges for numerous consumers without compensation from public budgets for it, which reduces the revenues of the utilities despite the legal obligations.
- The current technical state of utilities' assets is characterised with obsolete technology, deteriorated equipment and infrastructure with correspondingly low level of energy efficiency. The estimated costs of rehabilitation and renovation of the equipment and technology of Ukrainian network industries are estimated at around UAH 34,3 bn.[5] For example, a

[3] The State Statistics Committee.
[4] For example, total debts of Kyivenergo to "Gas of Ukraine" are UAH 96.8 m (UAH 46.2 m have been accumulated in 2003), in response to which "Gas of Ukraine" two times decreased the gas supply to the enterprise in October 2003.
[5] National program for reforms and development in the housing and municipal economy, registered 10.07.2003, No 4235.

complete overhauling is required for 25-40% of the assets of Ukraine's water providers (first-level pumping equipment).[6]

3. Will the merger stimulate or limit development towards more competition?

We found the current level of competition in the utility sector to be rather low. Present **weak regulation** is a major barrier towards higher levels of competition. In fact, only two utility sectors have a public regulator (gas and electricity); others suffer from an absence of proper regulation. While assessing the impact of the proposed merger of the four utilities on competition we focus on two aspects, namely the impact of the merger on the current level of competition as well as on potential development towards more sophisticated types of competition.

3.1 The impact of the merger on competition in the current situation

In Kyiv, and in Ukraine in general, the only type of competition that so far prevails on utility markets is interfuel competition between providers of secondary services (heating and hot water). Naturally, merging the supply of gas, electricity, water and central heating into one single company will reduce the scope for such competition. In particular, while financial operations of different utility services can also be monitored through obligatory auditing, only an independent regulator can fully evaluate costs and quality of provided services and – if necessary – enforce relevant changes. Thus, even with mandatory auditing the possibility for cross-subsidization between different services cannot be ruled out in a decisive manner and given the current level of regulation on Ukraine's utility markets, it is unlikely that a sufficient regulatory scheme can be established.

Other factors possibly limiting the scope of interfuel competition are synchronized representation of the joint holding in relevant commissions and expert groups (e.g. those issuing licences and construction permits), and the control of utility companies over other services such as street advertisement. In Kyiv for example, Kyivcitylight provides light to advertisement installations while Kyivenergo and the city administration jointly set the rates for consumed power. Clearly, combining all utilities under a joint holding enables them to limit access to or to increase prices for using street advertisement for potential competitors.

3.2 Limits to future development towards more competition

As discussed above, insufficient regulation is the main obstacle for a further enhancement of the competition status in utility sectors in Ukraine, and definitely also in Kyiv. Thus, regulatory reform will be crucial for the successful introduction of new modes of competition. At the moment there is no single regulatory authority in place with a mandate to regulate all activities of such a utility holding. So substantial conflicts of interest between central

[6] 'Development of Domestic Markets in Ukraine. Welfare through Competition', IERPC, Kyiv, May 2003 (http://www.ier.kiev.ua/English/books/dev_of_dom_eng.pdf)

and local authorities, the management of utilities and investors about the distribution of privileges, rents and obligations are likely to occur, just as it happened in other countries where utility markets and services have been gradually liberalized (e.g. in Germany or France). Against this background, merging Kyivgas, Kyivenergo, Kyivvodokanal and Kyiv city light, all monopolists on their respective markets, bears the substantial risk of creating a strong formation of vested and not necessarily competition-oriented interests, which might prove very difficult to overrule in the future when further advances towards competition are intended.

4. Economic effects of the merger

Further development of competition between utilities is hampered not only by weak regulatory schemes, but also by concrete operational problems such as deteriorated equipment and low payment discipline. Naturally, the initiators of the merger might argue that merging Kyiv's utilities might even be conducive to competition because it will lead to significant improvements of the current situation. Therefore, approval or disapproval of the merger should also depend on the answer to this question. In this section, we briefly discuss the expected economic effects of the proposed formation of a multi-utility holding.

4.1 Payment enforcement

Merging the four utilities could of course help solving problems of mutual indebtedness between the four companies. Furthermore, it might contribute to improved payment enforcement as a multi-utility holding typically has greater leverage to lower its payment risk. For example, for the case of Kyiv this could be possible to ensure payment of water bills by a threat of withholding other services that are easier to disconnect.

4.2 Efficiency gains

Among the most ponderable argument in favour of a joint utility are efficiency gains. However, in Kyiv as well as in Ukraine in general, economies of scale and scope, which lead to the reduction of costs and improvement of efficiency, are unlikely to play an important role for the development of the utility sector in the nearest future. This is based on the following reasons:

- The first question is how significant efficiency gains can be. A reduction of administrative costs – the typical result of synergy effects from merging companies – will not significantly cut total costs since they are simply not the main cost driver[7]. Rather, maintenance/replacement of outdated equipment account for the major part of total costs.
- Second, efficiency gains will not automatically be realized by merging the four utilities. Rather, substantial efforts toward the integration of the companies have to de made to achieve those gains. Accordingly, also

[7] Administrative costs account only for small parts in total expenses. For Kyivenergo, for example, the share of administrative costs in total costs is less than two percent. (Statements of financial results of Kyivenergo, 2002).

international experience is rather mixed. During the last 15 years or so, multi utility strategies driven by mergers and acquisitions (M&A) in various local markets were developed by private companies such as EDF and Suez (France), or RWE and E.ON (Germany) in order to increase market share and operational efficiency. In response, local authorities formed city-specific multi utility holdings in order to also increase efficiency. But, the assessment of both strategies is mixed. The M&A strategy of private companies has proven to be rather risky and can only be evaluated on the firm level. For public Multi Utilities, experiences have been rather negative as higher efficiency levels have proven to be very difficult to achieve. As a result, several Multi Utility holdings have even been unbundled back to their initial organizational structure. For example, in Germany's capital Berlin the previously existing multi-utility was split into different providers of water, gas and electricity after the joint holding failed to realize any improvements in efficiency.[8]

- Third, even when some moderate cost reduction through lower administrative costs and joint marketing could be realized, there is no guarantee that it will be forwarded to consumers (through lower tariffs and/or higher service quality) or used for investment/ replacement, as the appropriate regulation with proper incentives is lacking at the moment. Instead, in the absence of appropriate regulation the new institutional organization would allow for various forms of mismanagement and cross-subsidisation of services.
- Finally, substantial cost reduction in the long run can only be achieved by improving energy efficiency and renovation and rehabilitation of equipment, which needs investments.

Thus, the scope of efficiency gains does not appear to be very significant.

4.3 Investments

The possibility of attracting external investments, which is said to be a further advantage of the merger, appears to be questionable as well. One reason is that the holding activities would be asymmetrically regulated (in case regulatory environment does not change) and cross subsidization might occur. So typically, attracting investments would require the unbundling rather than the integration of activities in order to provide the highest possible degree of transparency. Furthermore, for the case of utilities, attracting private funds to ensure a sustainable service quality at sufficiently low prices requires introduction of well-designed regulation.

4.4 Management capacity

In general higher management level and better performance of one or another utility may not justify an administrative decision to give other utilities

[8] For more on international experience see IER Analysis A2/2003.

under the management of the more efficient provider in order to improve the financial and technical state of poorly operated public enterprises. The management capacities should rather be improved through hiring of respective human capital. According to representatives of Kyivenergo, one of the promoters of the merger in the City of Kyiv, their management has much more superior capacity and a broader experience in overcoming problems of utility providers. Thus, they are well suited for reanimating other utilities, which face similar problems.

This is might be true or not, but it can of course not be understood as the reason for changing the corporate and organizational structure of Kyiv's market for utility services. Rather, such superior skills can be transferred through personal changes in the management.

5. Our assessment

Competition in network industries like utility provision is not a natural outcome of market activities. Utility services rely on access to networks, which creates substantial entry barriers. Nevertheless, the current monopolistic structure of such markets in Ukraine is not a natural consequence. Rather, an appropriate mix of external regulation and incentive settings can form a market environment conducive to competition, where efficiency gains from competitive pressure can still be realised.

Currently the public utilities sector of Ukraine, and Kyiv in particular, is in a neglected state and characterized by insufficient regulation and legal protection. As a consequence, utility providers suffer from low payment discipline; mutual indebtedness of enterprises while non-transparent performance substantially reduces the interest of private investors. Against this background, the Kyiv city state administration as the owner of the four large utility providers intends to improve the situation by merging them within a single holding.

In the present study we have discussed the impact of such a merger on competition. Based on this assessment we conclude the following:

1. Merging e.g. suppliers of central heating, electricity, gas and water into one single holding will make it easier for the holding to reduce the scope for interfuel competition in e.g. heating and hot water, the only type of competition that so far prevails on Kyiv's utility markets.
2. Insufficient and inappropriate regulatory policy remains to be the main obstacle for development of competition. Against this background, merging the four monopolists bears the substantial risk of creating a strong, non-transparent formation of vested and not necessarily competition-oriented interests, which might prove to be very difficult to overrule in the future when further advances towards competition are intended.
3. At the same time, no significant economic gains are expected from such a merger. While problems of mutual indebtedness of the four utilities

could be solved and payment discipline might be improved, the potential for significant efficiency gains is rather limited.

Thus, we recommend to AMC not to approve the merger since it not only limits the already low level of currently existing interfuel competition, but it will also makes it even more difficult to advance towards more sophisticated modes of competition in the future. Finally, even if the merger allows realizing some moderate economic benefits, this only amounts to ease present problems of Kyiv's utilities while the real cause underlying the poor performance – weak regulation – is not solved and might than be even more difficult to be solved in the future.

A.C., F.P. Lektor: L.Ha. Kyiv, December 2003